

FCC Task Force to Prevent Digital Discrimination Public Listening Session

Thursday, September 14, 2023

Gallaudet University, Washington, DC

Transcript

D'wana Terry: Good morning. Good morning, everyone. We are ready to begin today's public listening session. We will have a stream text link, which is forthcoming and once we get that URL, I will share it. My name is D'wana Terry and I serve as a Special Advisor to FCC Chairwoman Jessica Rosenworcel and on the leadership team for the FCC Task Force to Prevent Digital Discrimination. I am an African American female of light brown complexion and slightly over 5 feet tall, with a brown colored bob hairstyle. My pronouns are she, her, and hers. I am wearing black framed glasses with a rose and pink inspired colors and a pink trimmed blue blazer.

We are pausing for one second.

I will just say I have a better understanding of when we tell children to stay still for a second. (LAUGHTER) It's harder than I remember.

Okay, someone is looking out for me and they're letting me know I can go ahead now.

So on behalf of the Task Force, I am pleased to welcome you to our third public listening session. I, along with Sanford Williams and Alejandro Roark, have had the opportunity to lead a cross-agency Task Force with representatives from 5 FCC bureaus and 2 offices.

Over the past year and a half, the Task Force has engaged with interested stakeholders including members of the public, representatives of state, local and tribal government, public interest advocates, academia and service providers, in furtherance of the FCC efforts to create

rules and policies to combat discrimination and promote equal access to broadband across the nation. These efforts stem from the directives given to the FCC in Section 60506 of the Infrastructure Investment and Jobs Act.

With this listening session, the Task Force builds upon its outreach efforts as we seek to gain additional information and understanding about broadband access experiences unique to persons with disabilities, including challenges, barriers and potential solutions.

We will begin today's session with opening remarks from FCC Chairwoman Jessica Rosenworcel. Interesting fact for today, it's the first time I have had the privilege of introducing her at a public event, so wish me well. Our Chairwoman works to promote greater opportunity, accessibility and affordability in our communication services, in order to ensure that Americans get a fair shot at 21st century success. From fighting to protect net neutrality to ensuring access to the internet for students caught in the homework gap, she has been a consistent champion for connecting all. From fighting to protect net neutrality to insuring access to the internet for students caught in the Homework Gap, she has been a consistent champion for connecting all. She is a leader in spectrum policy and is responsible for developing policies to help expand the reach of broadband to schools, libraries, hospitals and households across the country. Chairwoman Rosenworcel brings over two decades of communications policy experience and public service to the FCC. Prior to joining the agency, she served as Senior Communications Counsel for the United States Senate Committee on Commerce, Science and Transportation under the leadership of Senator John D. Rockefeller, IV and Senator Daniel Inouye I present to you Chairwoman Jessica Rosenworcel.

[Applause]

Chairwoman Jessical Rosenworcel: Good morning. It is great to be here. Or actually, I think I

should start by saying hello, neighbor, because as some of you might know, the Federal Communications moved into your neighborhood recently - we are in fact just seven blocks away. So, it really is great to be here at Gallaudet. I absolutely love that we are holding a listening session at the country's premiere university for the deaf and hard of hearing. So thank you to everyone here for welcoming us. Thank you to today's panelists. And I really want to offer a special thank you to the team who's been leading the Commission's Task Force to Prevent Digital Discrimination. You heard from one of them, D'wana Terry. Sitting next to her is Alejandro Roark, and in addition, they work with Sanford Williams who couldn't be here today. So it actually wouldn't be much of a listening session if the FCC did all the talking, so I would like to keep my remarks this morning brief, but I want to offer some context for today's discussion.

We know that too many people in too many places do not have the broadband connections they need to fully participate in modern, civic, and commercial life. Plus the pandemic brought home to all of us just how important those connections are. Access to broadband is no longer nice to have, it's need to have for everyone everywhere because when physical doors closed during the pandemic, virtual spaces opened up with video conferencing platforms that instantly became an essential way to connect for work, for school, for healthcare, and for just staying in touch with family and friends.

Yet, as you know, for far too many people with disabilities, making effective use of video conferencing can be a challenge. That's why in June, at the FCC, we clarified that what is called interoperable video conferencing services under the law and that's a fancy term for platforms like Zoom, Teams, and WebX, have to comply with disability law. And by that, I mean the 21st Century Video Accessibility Act. So we proposed new rules to make that the case and we're also going to continue to work on improving the accessibility of these video conferencing platforms, which we're all still using in day-to-day life outside of the pandemic. So, we are not done yet because I think we do have more work to do to reach those who are unconnected, underserved, and overlooked. And we want to make sure the people at this

University are not among them.

Alright, so one of the driving forces behind the bipartisan Infrastructure Law was to connect everyone in this country with broadband. In fact, Congress chose to spend \$65 billion on that task, that's \$65 billion with a 'B'. Even for people in Washington that's an awful lot of money and that commitment is already bearing fruit because today it is helping more than 20 million low-income households afford broadband through a program the FCC runs called the Affordable Connectivity Program. Now, we are going to have to continue the good work we have done with that program, the work we have done trying to get broadband to everyone everywhere. But we have got another task before us too, because that same law directed the FCC to create rules to prevent and eliminate digital discrimination. So we are going to have to think about these things in a new way and we started that in February of last year when we set up the Task Force to talk about preventing digital discrimination and to hold public fora to understand what it looks like. We also launched a formal rulemaking last year to complement the outreach sessions we have done and since we have begun that work in earnest, we have had all of these listening sessions and all of these communities come before us and it was really important to me that we hear directly from the communities that are affected, who understand what digital discrimination looks like on the ground, who understand when industry may not pay attention and might leave them behind. See, the only way we are going to create rules that prevent and eliminate digital discrimination is from hearing from people who understand what it feels like and how we can organize state, local, tribal governments, public advocates and policymakers to stop it in its tracks.

So our earlier listening sessions have made crystal clear that people with disabilities disproportionately find themselves on the wrong side of that digital divide. And any effort by the Commission to ensure communications for all is going to have to take that into account. That's why we chose to have this listening session here today and make it part of the FCC's formal record in this proceeding and there was no better place to hold that discussion than Gallaudet.

So that's what brings us here to your remarkable campus, that's why we are so grateful to have such an impressive group of experts here today. Listen, since the pandemic and its early days, we have come a long way, but I think we have more to go. I think we can do better to make sure we can reach everyone everywhere and we want to make sure when we do that, we don't think about the community with disabilities after the fact. We want them to be in our proceeding, in our rulemaking efforts from the very start and the very beginning.

So thank you to everyone for being here. Thank you so much to your University president for having us and it's a treat to know on top of all of this, you are now our neighbor. Thank you.

[Applause]

D'wana Terry: Thank you, Chairwoman Rosenworcel for your remarks and joining us today. We are excited, as the Chairwoman stated, that Gallaudet agreed to host today's listening session. Again, we say thank you for doing so and I have the opportunity to introduce Gallaudet President Roberta Bobbi Cordano. President Cordano, known as Bobbi, is a values-driven leader focused on sign language equity in education, economic opportunity, innovation and belonging as president of Gallaudet University - the only birth Ph.D. education entity in the world that uses American Sign Language in every aspect of its daily education and operations. Knowing that true transformation can only happen if a multitude of perspectives and experiences are welcomed, President Cordano is vigilant in infusing equity, diversity and inclusion into all aspects of Gallaudet. She is focused on creating a welcoming and engaging experience for all students and strengthening efforts to ensure they are active citizen at Gallaudet and in the community, nation, and world. With wide-ranging extensive experience from her roles as a Minnesota Assistant Attorney General, Vice President of the Amherst H. Wilder Foundation, educational administrator at the University of Minnesota and a founder of two charter schools, President Cordano knows the critical importance of education and access

to opportunities and systems, particularly for marginalized communities. She is honored to be the first deaf woman and openly LGBTQ president and excited for the continued transformation and impact Gallaudet will have on deaf lives throughout the nation and across the globe. I present to you Gallaudet President Roberta “Bobbi” Cordano.

[Applause]

President Bobbi Cordano: D'wana, if I could get your attention for a moment... I just want today say thank you for that lovely introduction and the lovely remarks. And to Chairwoman, I want to thank you as well for being here today.

So, I should first establish I am Bobbi Cordano. I'm wearing a blue jacket, I am a white woman with brown hair, glasses as well and my hair is becoming more and more gray than brown these days given my presidency as it is. So with that I wanted to welcome everyone here today.

(LAUGHTER)

Microphone is not needed. Sure, and if my hands are making noises, then maybe you'll just pick up a little bit of the wind that's being blown as I'm up here speaking, but again, thank you to everyone for being here. It's my honor as President to see events such as this take place on our campus. I mean, where else should these conversations happen but here at Gallaudet.

As Chairwoman Rosenworcel has mentioned, the pandemic has been a great teacher for all of us and we as a community in response actually adapted, I believe, more quickly as most people did elsewhere in the world when the pandemic hit. I actually think that Gallaudet was able to transform to providing virtual education more quickly and more adeptly than most other universities and colleges and peers in our nation and I'm very proud to say that's the case. As we look back we may wonder why that actually happened. I think it looks to our experiences with things like VRS, where for 20 years before the pandemic our partnership with the FCC, with other VRS providers allowed us the opportunity to use these platforms on a

daily basis over the course of 20 years. So when we experienced the pandemic here at Gallaudet, broadband was our first challenge. Once we decided to send our students home, we wanted to ensure that they had access to the internet. And at the same time, on the positive side of things, Congress gave Gallaudet the support it needed in order to cover the cost of making sure we could provide support during the pandemic. We could send different devices to the students, MiFi's, to make sure they were able to use the technologies but even with that we have with that a number of our students didn't have the access and there was nothing we could do to solve that issue for them. So instead of having them spend the pandemic at their homes with their families without access, we had about 45 students who remained on our campus in single dorm rooms by themselves isolated at that time but again that was a lesson for me in understanding how there are places where is people can't get access to the internet and to broadband services so the conversations we are having today are vitally important. I want to thank you for all of the advocates who work so hard every day to bring attention to the FCC and that partner with us, including our wonderful faculty here. So I want to thank the faculty who are here in the room for your ongoing support of this process and partnering with the FCC through your research, through the education that you provide and through policy awareness here.

So very often I like to talk about the experience of being deaf here at Gallaudet. You know, it's a tip of the arrow for the broader disability community that's represented here. And let me explain what I mean by that because we use a different language to communicate, not a spoken language, but a signed language, and because we rely on visual access to communication within our visual spaces, very often language barriers emerge very quickly for us. And the lessons that we learn through our advocacy, because think about it, most of the world is not built to accommodate us, and so as a result, we are often on the front lines advocating along with other disability groups. And the issues that we experience are very similar, but yet at the same time as a Deaf Community, very different. So I want to welcome and recognize our peers who are here, those who have other disabilities. We as a Deaf

Community experience very similar issues in having members of our community being what we refer to as Deaf Plus but we like to partner with other individuals who is have disabilities in this country to work together. So I want to let this conversation begin at this point and I hope that you have a robust morning full of great discussions and lots of robust ideas being shared. I welcome all of you, you'll see some of the students emerging from time to time throughout the day. Some of them are from my public policy class that I'm teaching this fall actually. So keep an eye out for the student who is may come from time to time during the day. It's hard for them to be here for a full two and a half block of time but I'm excited to see what happens from today. Thanks to all of you. Thanks to you, Chairwoman, and thank you to you as well, D'wana.

[Applause]

D'wana Terry: Thank you, President Cordano for those greetings and being with us here today. At the beginning I indicated that I would come back with the Streamtext URL. And so it is <https://www.streamtext.net/player?event=fcc>.

Next we will have a presentation by Alejandro Roark, my colleague member of the Task Force leadership team and also Chief of the FCC's Consumer and Governmental Affairs Bureau. His presentation will be about FCC digital equity initiatives. CGB, Consumer and Governmental Affairs Bureau, develops and implements the FCC's policies, including disability access. Prior to joining the FCC, Alejandro led a CEO roundtable of national Latino civil rights organizations working in partnership to promote access, adoption and the full utilization of technology and telecommunications resources by the Latino community across the United States. Without further adieu, I present Alejandro Roark.

[Applause]

Alejandro Roark: Hello, good morning. My name is Alejandro Roark, thank you for that introduction and I am the Chief of the Consumer and Governmental Affairs Bureau. I am a young presenting Latino man in my 40s or so I've been told. I'm wearing glasses and a striped tie and my pronouns are he, him. As you heard, digital equity is not just an important area focus for me, for the Chairwoman, for the Task Force, but it really is an agency-wide priority. And part of what that means in practice is that we are actively working to ensure that we develop maps with granular level data so that we know exactly where broadband is and isn't. It means we are working to close the broadband affordability gap thru the Affordable Connectivity Program and it also mean that is we as consumers have consistent and reliable information about what we can expect to pay without the fear of hidden junk fees through our new broadband nutrition labels which we will all see kind of hitting the streets early next year, I think.

And I think the purpose of our listening session today is, we are also tasked with establishing model rules and policies to prevent and eliminate digital discrimination. And I think personal to me in my role at the FCC is that we have inclusive and accessible consumer engagement processes that allow us to promote policies that bridge digital disparities and extend our country's telecommunications resources to everyone everywhere. So what is clear today more than ever is that bridging our country's digital divide is a team lift and it has taken focused leadership in Congress, across the federal government, within the public and private sectors and on the ground in the communities that we all call home. So I would like to take this moment to thank the team of our Disability Rights Office, many of whom are here today. So like the Chairwoman mentioned, we are here to listen, so I'm happy to turn the time over to our first panel led by CGB, Deputy Chief Diane Burstein. So, if I could please call up our first panel and let's give them a couple of minutes to set up. Thank you.

[Setup and Transition for Panel 1 Discussion]

D'wana Terry: We are now ready proceed with our first panel - Broadband Access to the Disability Community. The panel facilitated by Diane Burstein will discuss broadband access challenges faced with people with disabilities including issues surrounding broadband availability, broadband subscriptions and broadband use. Diane is our Deputy Bureau Chief of the FCC's Consumer and Governmental Affairs Bureau. As Deputy Bureau Chief, she helps to oversee the FCC's Disability Rights Office, which develops policies and programs to ensure access to communications for people with disabilities. She joined the FCC in 2019. Prior to that, she was Vice President and Deputy General Counsel for NCTA, the Internet and Television Association, where she represented association members on issues relating to the accessibilities offered by the cable television industry. I turn you over to the capable hands of Diane Burstein.

Diane Burstein : Thank you, D'wana. Thanks for that introduction. Can you all hear me? Can you hear me in the back? No? Okay, there we go. Thank you. As D'wana said, I'm Diane Burstein, Deputy Bureau Chief with the Consumer and Governmental Affairs Bureau and thank you all for being here. I would like to introduce our first panel, which will discuss the experiences of the disability community. We are very fortunate today to have a distinguished panel of experts bring a wealth of experience to bear on this critical policy matter. Our panel this morning will focus on issues related to access to broadband such as availability, awareness, and barriers to subscribing faced by people with disabilities.

With me on the panel this morning are experts representing a number of different organizations advancing the rights of people with disabilities who will share their perspectives on these issues. To my right is Henry Claypool. Henry is an independent consultant advising clients on matters relating to disability policy and he is here today representing the American Association of People With Disabilities - where he serves as Technology Policy Consultant working on a wide range of issues including data privacy, artificial intelligence, digital accessibility, and access to communication services.

Dr. Emilie Shea Tanis is sitting to my right as well. Shea is currently an Associate Research Professor at Kansas University Center on Developmental Disabilities, Lifespan Institute, University of Kansas. She's published articles and investigated the definition of intellectual disability, the measurement of adaptive behavior and support need, the construct of self-determination, federally funded supports and services for people with IDD and their families and self-directed employment strategies. She is nationally recognized for her expertise and applied technology solutions, technology for systems change, cognitive accessibility and advancing the rights of people with cognitive disabilities to technology and information services.

Ann Marie Killan is the Chief Executive Officer with TDI and a seasoned industry leader with 20 plus years of experience in the telecommunications sector. Ann Marie brings a wealth of knowledge and a passion for advocating for accessibility and inclusion for all.

Bob Williams who is at the end of the table here is a Policy Director and Co-founder of Communication First, which advocates for the human and civil rights of people with significant communication disabilities. Bob has advanced the rights, opportunities and supports for children, working age persons and older with significant disabilities for over 40 years. He's worked to improve community living services in D.C., helping to pass the Americans With Disabilities Act, among many other accomplishments.

And finally Stephanie Enyart is a disability rights leader advocating for people with disabilities. She currently serves as American Foundation for the Blind's Chief Public Policy Counsel.

So thank you very much, everyone, for being here. I'm sorry, for Stephanie, it was not counsel, she provides strategic leadership for the policy and research functions across the key focused areas of education, employment technology and transportation, and currently serves on the Access Board.

So with that, I'm very pleased to have everybody here this morning and look forward to a very interesting conversation with people who are quite well known and

experienced in this field. And with that, I'm going to start off with Henry Claypool. Henry, thanks for being with us here today and please take it away. Thank you.

Henry Claypool: Thank you, Diane. Again, I'm Henry Claypool. I use he/him pronouns. A white male with brown and gray hair, wearing a jacket and a collared shirt. First, I wanted to thank the FCC for creating an opportunity to highlight disability digital discrimination. And understanding the nature of this experience, we must look into communities with a history of being unable to access broadband. Structural racism and ableism combined with red lining practices deprive disabled people of color of the basic human need to communicate. It is essential that the FCC find new ways to support disabled people to think, dream, practice, and build their communication skills so that the Commission and the allied communities can hear, see, and understand the depth of the isolation that these folks are experiencing.

To be clear, the percentage of people experiencing disability in communities that have historically experienced redlining or digital discrimination are among the highest in the country. We are hopeful that the Commission can find way to address it in its forthcoming rule. Addressing these disability disparities will take thoughtful consideration by the Commission and its staff. Still, most likely it requires the continued leadership of Chairwoman Rosenworcel and the rest of the Commissioners to begin to remedy these disparities. The racial, cultural, economic and language access issues experienced by people in these communities require the Commission to consider all of its statutory authorities to leverage them where applicable to address these challenges.

The digital discrimination regulation may be the primary driver for convening the panel, still we must appreciate these communication access issues are rooted in assumptions and stereotypes about disability that are difficult for the FCC to dismantle - an important step in putting new mechanisms in place to better understand them so that we can begin to remove the barrier process. Unfortunately, the devices currently made available through the Affordable Connectivity Program don't support most or some of the communication needs of people living

in these communities. Desktop and mobile platforms don't come equipped with the assistive technology that some disabled people need to enjoy their right to effective communication. One tool available to the FCC in its search for a remedy to disability digital discrimination is Section 504 of the Rehabilitation Act, which might provide a mechanism to subsidize devices, to implement subscription fees, or other means of enabling access to devices used by disabled people so that they can enjoy their right to effective communication.

Another disability-related need that will emerge from this morning's panel is that some disabled people may rely on human assistance to facilitate their self-expression and communication. A better understanding of these supports needs is really important and I hope the Commission can take this to heart. Please don't let my naivety about how the Commission conducts its review or responses to generating to address the communication needs of disabled people. My point is extraordinary circumstances require an extraordinary response from the agency and its leadership. Given my limited exposure to the work of the Commission, I don't entirely understand and appreciate how and when the agency accesses the Universal Services Fund, but this may be an appropriate source for financing to address the issues that come up today. As we all know from look at this panel, we have yet to reach those most affected by the structural issue that is I mentioned in my opening. It likely requires it is FCC staff to spend more time in communities working directly with those most impacted by the low expectations society has for these people experiencing barriers to communication.

A systemic response may require the agency to request additional funding from Congress, perhaps even authority to better understand the needs of people with intellectual disabilities and developmental disabilities and those with speech disabilities. If the Commission is inclined to put together a legislative [inaudible], I urge the Commission to work with the people in these communities to inform that work. And with that, I can turn it back to Diane.

Diane Burstein: Thank you very much, Henry. We appreciate your comments. And next we'll

hear from Shea Tanis.

Shea Tanis: Thank you. Thank you so much for having me and just to start off describing myself, I am a white woman, brown hair wearing a navy blazer, and I would like to say brown hair with no gray, but there is a little there. It's a pleasure absolutely to be here and I want to start by applauding the FCC on their efforts to understand and address the digital discrimination and systemic barriers faced by people with cognitive disabilities. A community historically excluded and marginalized in our society. In making my remarks, it is necessary that while I am tasked with describing the experiences of people with cognitive disabilities in accessing broadband, I would be remiss if I didn't also mention the inequalities in healthcare, education, cultural and racial bias, and economic inequalities that are interconnected and often exacerbate broadband access.

The goal of ubiquitous broadband access is a promise that can transform the everyday lives of people with cognitive disabilities. It can improve social, emotional wellbeing, drive civic leadership, introduce learning and educational opportunities, address healthcare disparities, and promote economic self-sufficiency. Our daily experiences are influenced by that knowledge and information we gain through broadband access. But unfortunately, only a limited proportion of the population of people with cognitive disabilities can access the potential benefits of broadband access due to a barrage of challenges faced throughout the consumer journey. Access remains limited to those who have the resources and perseverance to navigate inaccessible systems, policies and programs.

In my remarks I want to focus on the points in time along the consumer path to obtain access to broadband and we'll highlight only a handful of the consistent barriers people with cognitive disabilities face. However, the complexity and diversity of the challenges are as complex and diverse as the community itself, and the challenges and changes to policies, infrastructure, design, and intent are needed to ensure access to reap the full benefits of a digital environment. While availability and awareness of the benefits of broadband are

continuing to be a challenge for the community, as well as in many rural and urban localities, more challenging are the entry barriers consumers face once convinced of the benefits of services identified. While societal progression and self-direction and self-determination has allowed individuals to advocate for their own needs, systems and programs still require many to rely upon allies, family members, caregivers, support professionals, service providers and others to gain access to technology solutions and broadband. This reliance upon others to have knowledge and information necessary to achieve access means that the systems, services, and programs have to support proxy engagement. They have to help in subscribing and maintaining those solutions for broadband use. Failure to address accessibility entry through online registration systems, elaborate and complex eligibility criteria, and obscured digital forms lead to people to withdraw efforts due to the frustration before even accessing a service.

There is also this unforeseen challenge of aligning the various public programs so many rely on with intricate rules and policies. To provide a concrete example, the pandemic led to the redesign and support of systems of people with intellectual and developmental disabilities across the nation, opening doors to remote support that is led to new opportunities for independence for people with cognitive disabilities. The effective use of these remote supports relies upon advanced broadband systems to deploy services in a timely fashion. Yet, access to broadband has been a challenge to embed and establish services funded through governmental systems. This lack of coordination across programs leads to limited access by providers and to people with cognitive disabilities. Even the benefits addressing affordability for broadband services and devices can often be difficult to enroll and address the qualifying criteria when relying upon others to provide information and complete detailed forms upon one's behalf. If one has the understandable information about enrolling in broadband services when looking to subscribe, consumers are often faced with inaccessible online platforms without recourse of communicating with customer service that are not automated. While automated supports and systems often lead to efficiencies, they can cause people with cognitive disabilities without opportunities for recourse to withdraw from sheer frustration of

access.

Further complicating the picture of the access to information, plans, and subscription caps and utility, there is often a need for translation and transparency for one to make an informed choice about the various service options. Informational resources are not built with cognitive access in mind and need to be addressed to drive language practices and best practices and knowledge translation.

While these are just a few of the entry barriers that people with cognitive disabilities may face, if they do find success in navigating the convoluted process of subscribing and realizing access after subscription is filled with pitfalls leading to abandonment. Bandwidth speed often conflict with best practices in accessibility leading to disenfranchisement, limitations in use with accessible programs, assistive technologies and simply the time needed to compensate for navigating inaccessible environments. Deployment in complex living environments also derail efforts - a shared living and alternative living residential services and environments lead to unique situations for utilization.

Finally are the challenges of ongoing maintenance or what can be considered the digital literacy and digital resilience of people with cognitive disabilities. The nature of cognitive disabilities makes the nature of upgrades, upkeeps and updates difficult. While we may see automated systems lead to corporate efficiencies, they often create barrier to access. Time-limited and responses, confusion and prompt meaning and inability to connect with human consumer service members that understand accessibility needs lead to further abandonment and disillusionment.

The FCC has begun the necessary step to achieve the ubiquitous act of access broadband but there are still many hurdles to overcome but it can only be addressed by and with the community. Without which we risk further isolation and denying societal engagement of approximately 12.8% of the U.S. adult population with cognitive disabilities. We want to thank you for starting this conversation and moving forward with you. Thank you.

Diane Burstein: Thank you very much, Shea, for your very interesting remarks and you bring up a lot of good point to consider. Next we'll turn it over to Bob Williams. Please, Bob...

Bob Williams: Good morning. I am Bob Williams, the Policy Director and Cofounder of Communication First, the nation's only organization led by and to secure the civil rights, including the telecommunication access and disability rights of people like me. The estimated 5 million children, youth, working age and older persons with over two dozen disabilities and conditions that occur at various points in life have little to no understandable speech most can comprehend. And as a result regarded as having less intellect, less to say and no need or right to do so all because others cannot understand them, many of our members still are subjected to lifetimes of being denied the tools and support necessary to effectively communicate. Segregated, institutionalized, completely isolated, denied literacy and quality healthcare and worse. Research suggests that due to health disparities, black, brown, non-English and other multi-marginalized individuals are more likely to need augmentative communication at some point in life, as well as experience greater disparities and discrimination because of it. What does any of this have to do with broadband access? It has everything to do with it. I am one of the relatively few people who uses a speech-generating device and has had if not complete at least some degree of access to the internet and other digital technologies since the '90s, and I know how transformative and liberating it can be. But the vast majority of people who need access to the type of device I use or other tools and support to express themselves and live their life are denied access to them and have absolutely no access to broadband or other technology that FCC regulates. For example, there used to be analog cell phones that some of us could use or at least make due with. I suspect the advent of touch screens and broadband have a lot to do with why these phones and the essential service they afforded us became obsolete overnight.

Broadband as well as other technologies like artificial intelligence are double-edged. They can liberate, but their deployment can just as well fortify and create even more horrendous forms of digital and further societal discrimination and exclusion, especially

when left unregulated and inaccessible. It is indisputable that digital discrimination on the basis of disability exists and will only metastasize leading to greater exclusion and social death the longer it is left unaddressed. The question not of whether, but how, and to what extent the Infrastructure Act can be used to address must be thoroughly probed and answered. The same is true with regard to the Commission's obligations under Section 504. It is urgent that the FCC answer these similar questions in a transparent and collaborative manner. We also strongly support AAC [Augmentative and Alternative Communication]. This recommendation that the FCC explore current, as well as future ways that it could help subsidize the purchase of augmentative devices like the one I use to access the internet, video conferencing platforms and other expressive purposes. Some of this technology is specifically designed for those who need AAC. Depending on someone's fine motor control, off the shelf devices and apps are also increasingly being used for the same purpose. Medicaid as well as other public and private plans purchase some of this technology, some of the time, in some states, for some people who can somehow navigate [inaudible] and often [inaudible] processes and requirements. [Inaudible] at Northeastern University has researched and written extensively about this, particularly harmful for kids from marginalized communities who need AAC. There is every reason to assume this is also true with respect to working age and older adults from these same communities as well as those who are institutionalized. The FCC could help to eliminate such digital gaps even by providing matching subsidies in ways that have [inaudible] in fact, after considered review, the Commission concludes that it lacks efficient authority to provide universal access to broadband by people with disabilities in a manner that enables us to subscribe, use, and benefit from an equally effective manner as others. The FCC should work with the Congress, administration, the disability and civil rights communities, industry, and others to obtain it. This will likely take years to do. But if this is something that is deemed necessary, the work must begin now. It has taken over 30 years to have DOJ propose rules requiring states and localities to have accessible websites. We must not do the same thing here. Thank you.

Diane Burstein: Thank you, Bob, very much for those powerful remarks. And now we are going to turn it over to Ann Marie.

Ann Marie Killian: Hello. I'm going to stand so people can see me signing. First of all, I would like to say thank you to the FCC and the Commission for establishing this listening session. This is such an important collaborative effort to really address this inequity of disabled people and their access to broadband. Recently, TDI hosted our conference in July, and the broadband issue was a very hot topic discussed in many different areas in terms of telehealth, in terms of inclusion of people of color and other marginalized communities, the digital divide of geographic areas, and it's equally important to add also those who are incarcerated accessing broadband. It's a prison within a prison.

Yesterday as we were preparing for this panel, I thought about what are we preparing to share, right? Many of us prepared to share similar things based on our similar experiences. But one thing that I thought was missing is that as humans, we like to use analogies, right, as humans we need water. We need water to survive, right? It's the same concept with broadband. We need broadband.

We are changing more rapidly into a digital era and in my experiences traveling one thing that I have seen is that access to broadband over this digital divide over different geographic areas included specific rural areas. I was in Idaho last month and deeply touched by the number of folks who were the only person with a disability living in a rural area that were not able to afford access to broadband. They were not able to afford. We know high-speed access costs money, and we rely heavily in the Deaf community on visual communication and visual phone communication. We rely on high-speed internet but these folks cannot afford it. So this is something we really want to share. We noticed this, it became much more obvious during the pandemic. As President Cordano already shared that students were sent home from universities, they didn't have access and we are talking about at a university level. What about

elementary, middle school and high school students whose parents cannot afford broadband access who had no access to education during the pandemic? We need to look at affordability. This is critical. Specifically, sadly, affordability as well.

We have also mentioned digital literacy, which is key to provide resources and training to folks to understand how to use technology. We know that technology is ever changing by the hour, the minute, and the second. So for folks who have not used technology, it's critical to keep them caught up on these updates and changes. With the IVCS I want to give kudos to the FCC for recognizing the importance of IVCS which was very huge and important work throughout the pandemic. For people who were working remotely who were not really able to access their daily work, and so this is another critical point. Again, I know I have said this already - affordability. And I know with the ACP, the data collection is critical, yes, but we also say each number has a name. And each name has a story. And we need to go, we need to go into these communities, these multiple disabled communities and say what are we doing, what do you need to survive? Your education, your telehealth, your teletherapy and all of these things altogether. Thank you.

Diane Burstein: Thank you very much, Ann Marie. You bring up some really interesting points about affordability and the IVCS, so thank you for that. Stephanie Enyart is next. Thank you, Stephanie.

Stephanie Enyart: Alright. Thank you so much for this opportunity. Alright, how is that? Is that better? Thank you so much for this opportunity. I would first like to frame my remarks as I'm representing those who are blind, have low vision, and Deaf-Blind by just noting that it's very important to remember that there are a range of barriers related to accessing the internet. Broadband is just one of those barriers. As we have heard from other panelists, affordability is one certainly correlated with the lack of access to broadband. People who are blind are nearly twice as likely to live in poverty as people who are not. In fact, 47% of older adults who are

blind, who live at our below the poverty level, do not have internet access at home. Well, this doesn't relate to gaining access, it's worth noting that public internet spaces, like libraries, don't always have screen readers or screen magnification software available for blind users. So that means that people who are blind and don't have internet at home have significantly fewer opportunities to secure this kind of access outside of the home.

In terms of understanding more about the barriers that people who are blind and low vision face, I'd like to highlight that to use the internet, individuals need an internet connection, a device to use the internet (and this would include the assistive technology that is sometimes very costly), digital literacy (which is really a skill set in order to be able to use the device and also to navigate the internet), and also accessible web content to be able to make use of the internet and its connection. Disability plays a role in all four of these factors. If you look at data about who in the United States does not have internet access, people with visual disabilities are less likely to have internet access than sighted people, even if you control for age, income, employment status, computer ownership, and more. For example, according to the American Community Survey, 28% of blind older adults do not have internet access as compare to 16% of sighted older adults which is a difference of 12%. 5.3% of working-age blind adults whose income is at least three times the poverty level do not have internet access as compared with 2.6% of sighted older adults with the same age and income group.

Disability can play a role in whether you can afford broadband and whether you can travel to a store to sign up for internet services or to purchase a cell phone or other device. Lack of accessibility to rehabilitation services can also limit your ability to have the skills needed to sufficiently use assistive technology necessary to use the internet effectively. A higher prevalence of poverty can impact the ability to afford needed assistive technology which can be quite costly. And when websites are not accessible, which is a massive problem that the blind and low-vision community faces, it reduces the usefulness and the ease of use of the internet, even if you have a great connection. And also stigma plays a role. Many have stigma as a barrier that prevents them from gaining the needed skills to be able to navigate

these technologies effectively and independently.

During the pandemic, we also asked educators to describe some of the largest barriers that they saw for the community, and the three most commonly encountered technology barriers they noted that there were major internet connectivity problems. 43% of educators reported lack of reliable internet or Wi-Fi access as one of the most challenging barriers they or their students faced. This lack of access impacted the quality of education that students had and many parents and families found the difficulties with connectivity to be such a barrier that they actually pulled their children from receiving educational services. When the connections were choppy or weak, students would often toggle between cell phones and laptops, which may work for some students, but students who are low vision often require a large monitor and large magnification to be able to have equitable access to the content.

Some of these issues are also found in the labor market. And in 2022, the Department of Labor found that job retention during the pandemic for people with disabilities was positively correlated to having internet at home, even though it was not necessarily correlated for adults without disabilities. There are likely a number of reasons for this that go beyond what we're speaking here today. But it's very important to see the interconnections to the freedom that an internet connection can provide people with disabilities. And I also want to take a moment to simply note that we're very, very comforted in the disability community to see the FCC putting so much attention around fighting digital discrimination. But there is only one element of this that seems as though it's within the realm of authority for the FCC to tackle. And so from that standpoint if you are looking at trying to level the playing field for people who are blind and low vision, you may be focusing on getting us on to the bus that has a lot of fuel and is able to take us places. But if we can't go anywhere because the websites and internet are largely inaccessible, we won't get to the final destination that you are working so hard to address. So my plea is that you actually take a holistic approach to work with other federal partner to try to solve for this dynamic problem. Thank you so much.

Diane Burstein: Thank you very much, Stephanie. That was a really interesting presentation, and we only have a few minutes left, so I just wanted to open it up for the panel to see.. you know, we have covered a lot of different areas. I think affordability is one thing we have talked about. Another is accessible technology or devices and web content. Are there other areas where the FCC needs to focus that we haven't mentioned this morning? Yeah, please, Ann Marie, go ahead.

Ann Marie Killian: Thanks, Diane. First of all, I want to open by apologizing. I realized I didn't provide a visual description of myself – so I'm going to do that now. I'm a tall woman wearing brown glasses, brown hair and I'm not going to tell you my age and I'm also wearing heels that also adds to my height.

But one thing I would urge the FCC to look deeper into is specifically talking about bandwidth caps. Specifically data caps. We want to see these caps removed from ISP providers and the limitations that are put on to broadband affordability. This is a critical impact on the quality of those video communications I alluded to earlier. One of the thing I thought about this week is that ISP's use algorithms to calculate speed and this impacts to the video. So whether folks are using Zoom or an a VRS meeting, they prioritize the audio access over the visual data so that the bandwidth consumption goes down so the visual is impacted whereas the audio is not. So I wonder if the FCC has a deeper understanding of how those algorithms are set up for controlling bandwidth and this is something to dive deeper into with consumer because although some consumers have high speed and access to broadband, they are still experiencing these caps on bandwidth so I really encourage FCC prioritize that and understanding that process.

Diane Burstein: Anyone else want to share anything? Henry?

Henry Claypool: I think a number of us touched on the need kind of for a broader approach,

leveraging multiple agency perhaps and government and there are some existing networks that reach in to the communities. Specifically the Developmental Disabilities Act has a pretty extensive network, and if the FCC were to partner with them to learn more about the very specific communication needs, particularly in communities of color, and the real challenges that people have finding their voice and learning how to communicate, I just...there is lots of work to be done there and without that type of ground-breaking work, I'm fearful that many people will just kind of languish away. My other panelists have spoken far more eloquently in describing the circumstances and the situation, but I do think it takes that type of in-reach to communities to better understand these issues.

Diane Burstein: Thank you, Henry. Bob?

Bob Williams: I have not heard much about older adults with significant disabilities needing access to broadband in some ways that are more critical in terms of avoiding isolation, and I would urge an equal focus on that.

Diane Burstein: Thank you, Bob. Yes, Stephanie?

Stephanie Enyart: To build on what Bob said, I think one of the areas that we were looking at in preparing remarks for today is the fact that we don't have a lot of information about how individuals are accessing broadband and internet and other services who are living in assisted living and we know a lot of people with a variety of disabilities may enter these spaces and still very much benefit in a variety of capacities in having the same kind of access that everyone else has.

So I think that that is an area of further interest and possibly research. And then another area that I know will become more and more prevalent as we migrate to a more digital environment with artificial intelligence is that chat bots seem to play larger and growing roles

in the way that we interface for obtaining services. And from that standpoint, we do need to be very, very conscious of the fact that people will have a lot of disability-related needs that they are needing to rely on a chat bot to be able to serve us, and I don't think that there is a lot of research that shows some of these issues. But I can imagine that for a variety of disability populations, including people who are blind, that there will need to be some underlying ability to be able to accommodate the disability in the same way that we would have the ability to interface with a customer service agent. And so that's something that is definitely to be determined. (LAUGHTER) But also a bit scary as we transition to this space and this replaces the humans that we often interface with, so I just wanted to flag that as well. Thank you.

Diane Burstein: Anyone else? Okay. Well, I want to thank the panel. All of you had excellent presentations. It was really terrific, so thank you very much and we'll be talking to you.

[Applause]

D'wana Terry: Thanks to everyone on the panel and to our facilitator. We are now going to have a break for about 10 minutes as we transition to our next panel. So please stay tuned.

[Setup and Transition for Panel 2 Discussion]

D'wana Terry: Hello? Can you hear me now? That's better. Those of you that are -- we are trying to come back together for our second panel and we want to start so we can try to stay as close to being on schedule as possible. And so we are going to get ready to start. With that, welcome back from the break. Our second panel entitled: *Next Steps and Potential Solutions for Enhancing Disability Access to Broadband*. During this panel, facilitated by Suzy Rosen Singleton, scholars and data experts will address research and issues around economic profile of people with disabilities and potential pathways for enhancing broadband access for people with disabilities. Suzy is the Chief of the Disability Rights Office of the FCC's Consumer and Governmental Affairs Bureau. Since 2016 she has overseen the division's rulemaking

proceedings and stakeholder activities to ensure the accessibility of emergency communications, modern communication technologies, and video programming for millions of individuals with disabilities. Prior to the FCC, her disability policy expertise included work at the California Center for Law and the Deaf, the National Association of the Deaf, the U.S. Department of Education, and Gallaudet University.

Following this panel, my Task Force leadership team colleague, Sanford Williams, will facilitate the remainder of our listening session. Sanford is a Special Advisor to Chairwoman Rosenworcel and a Deputy Managing Director of the FCC. Sanford has worked in various roles at the FCC since 1999. Prior to the FCC he worked as an attorney for Womble, Carlyle, Sandridge & Rice. It has been my pleasure to serve you today in the capacity of facilitating the listening session thus far.

Thank you so much for your attendance, your input, and your participation. With that, I turn you over to the very capable hands of Suzy Rosen Singleton who will facilitate our Panel Number 2.

Suzy Rosen Singleton: Thank you so much, D'wana. This is Suzy Rosen Singleton. Short visual description, I am wearing a black coat, short blond hair and I'm so excited to be here with everyone this morning, this highly esteemed panel we have with us today. We heard from the first panel and they shared some powerful stories. They talked about broadband access and how barriers are real. They are isolating, they are segregating, they are oppressive. People with disabilities, it's so important that we continue to listen to their stories, the stories of the disability community and many of us have our own personal experiences as well. This panel actually earlier this morning made me think of back when I was a starving student myself at the University of California, Berkeley. I grew up in Maryland, so I didn't know anyone in California, and of course I needed telephone communication abilities in order to be able to communicate with my family. I was very fortunate that in California they had DDTF, Deaf and Disabled Telecommunications Program, where I did receive a free TTY, so I was able to

communicate with my family who are deaf as well. And looking back, it is so important that we are able to make those connections and that is even more so true now we are working remotely, we are highly dependent upon broadband. As Ann Marie mentioned during the first panel, her analogy to water about broadband carries so true so with this panel we will be looking at solutions and how we can truly close that accessibility gap. With that, I would like to invite our panelist to introduce themselves. Please share with us your role in the broadband access space for people with disabilities.

David Bahar: Hello, everyone. My name is David Bahar. I am currently Director of the Telecommunications Access for Maryland. We provide two different programmatic services for the deaf and hard-of-hearing community in regards to communication access, both relay services and more specifically related to this panel, we have a program that we provide access to telecommunications equipment for people with disabilities in the state of Maryland who are a part of one of seven different disability groups: deaf, deaf-blind, physical disabilities, cognitive disabilities, developmental disabilities, and intellectual disabilities. We provide iPads, wireless devices and other devices that they can use for telecommunications, and for most of our purposes they are iPad-based. Thank you.

Christian Vogler: Hello, everyone. My name is Christian Vogler. I'm a white man, tall, brown hair, also starting to make some gray appearance, and I'm also not going to share my age. I do work here at Gallaudet University. I serve two roles. The first is as a professor. I also co-direct a new program here on campus that was very recently implemented on accessibility in human-centered computing. My second role is the director of a group here at Gallaudet University known as TAP, the Technology Accessibility Program. And within our program, we focus on how deaf and hard-of-hearing individuals utilize technology in order to communicate with one another. And how we can make such technology accessible. Broadband access has a tremendous impact, as you can imagine, on accessibility for deaf and

hard-of-hearing individuals.

Julie Jean-Louis: Hello, everyone. My name is Julie Jean-Louis. I am the project lead for PEAT, which is also known as the Partnership of Employment and Accessible Technology. PEAT is a program that is funded by the Department of Labor under the Office of Disability and Employment Policy. We promote employment, retention, career advancement of people with disabilities through the development, adoption, and promotion of accessible technology. Currently we are regularly convening with select members of the National Telecommunication and Information Administration, also known as NTIA's Office of Internet Connectivity and Growth team. That team currently supports the states in building out their digital equity plans, working with stakeholders, really bringing in knowledge and experience and intersectional equity, digital inclusivity and accessibility.

Recently, PEAT partnered with NTIA this past July and a think tank with the goal of helping states build inclusive state, digital equity plans. And I believe there were some folks from the previous panel that also participated in said think tank. The state digital equity plans really are -- in that think tank, we help to build the state digital equity plans that serve the needs of people with disabilities and those intersectional identities. The PEAT team recognizes that people with disabilities face technology barriers and that this not only impacts employment but other areas that impact quality of life, when we think of education, when we think of telehealth and our work is to address those barriers and assist in breaking those down.

Jonathan Lazar: Hi, good morning, everyone. I'm Jonathan Lazar. I'm a professor at the University of Maryland in the College of Information Studies. I'm a white male wearing a blue suit, a striped tie, a blue shirt, I have brown and rapidly graying hair. And at the University of Maryland, I lead the Maryland Initiative for Digital Accessibility known as MIDA. It's over 40 faculty and staff who are passionate about digital accessibility. And the way I describe what we do is full-stack digital accessibility, so we not only do research and design and

development, but we also do advocacy and accessibility education and policy and law and we've got, again, passionate faculty and staff, a lot of graduate students working across seven colleges in multiple offices to try to make the world of technology more inclusive for people with disabilities. Thank you.

Suzy Rosen Singleton: Thank you panelists. Thank you, panelists, for sharing your introductions.

Now that we have heard a little bit, listening to the first panel and have some information on data, I would like to invite Julie to answer the first question. Julie, can you provide data about the demographics of people with disabilities, specifically regarding employment, income, for people of color and senior citizens so that we may understand the magnitude of the impact discussed by the first panel?

Julie Jean-Louis: Absolutely. And let me step back and forgive me for not providing a description. I am a black woman, copper-toned short hair wearing glasses and blue and white pattern collared shirt.

In terms of providing data, I feel like there is so much information that I want to share, but also wanted to be respectful of the time and respectful of the other panelists and in providing data what I also want to do is make sure I am giving information that tells the story behind the numbers as well. So what do we know? We know that people with disabilities are significantly underutilized source of talent. There are studies that show the significant impact, positive impact to organizations that have leveraged the talents of people with disabilities by creating those inclusive, accessible, and safe environments. Some may be familiar with the [inaudible] study that was done in 2018 where they identified 45 companies and these companies were identified because they stood out in leadership in areas of inclusion and disability employment and they were identified as champions. And these companies averagely have shown that they have 30% higher in profit margins. They have 200% higher in

net income. Additionally, the study showed that these companies that have improved their inclusion of persons with disabilities were four times more likely to outperform their peer groups.

Although lately we have heard that people with disabilities have shown increase in their employment rates, what I want to highlight is that those rates still continue to trail significantly behind those without disabilities. The most current population survey that was done by the Bureau of Labor this past August states that 41% of adult seekers with disabilities are in the labor force and that is compared to the 78% of those without disabilities, nearly double. Within the disability community, as we have heard again with the other panels, older people, people of color tend to experience even a more heightened employment gap. During the 2021, what they called the employment recovery, nearly 500,000 more people with disabilities entered into the workforce. That entire increase was among folks that were under the age of 65.

So what we also know is that the prevalence of disability is higher in underrepresented communities and varies drastically by race and ethnicity. African Americans are most likely to have a disability, followed by non-Hispanics, followed by Latinos and followed by Asians but the disparity really results from a complex interaction of social, economic, and demographic characteristics. ODEP, the Office of Disability Employment Policy, released a data brief that shed some light on the size of the black disability community and their employment status. It revealed that nearly 2.5 million working age, so that's between 16 and 64, working age black adults in the U.S. have a disability. And with nearly half of them living with either two or more disabilities. Black individuals, black people with at least one disability have had the lowest employment per population ratio among all the racial and ethnic groups, including the disability community since the annual data has begun to be collected back in 2009.

ODEP also had a research study done that was titled *The Disability and the Digital Divide* back in 2022. And I just want today highlight some of the findings from that research.

Working age people with disabilities are less likely to have internet subscription at home than folks without disabilities. Between the late 2019 and late 2020 disabled workers transitioned from being employed to unemployed, or out of the labor force, at a much higher rate. This trend occurred that first year of the pandemic. During this time, workers have reported using the internet at work, stayed employment at higher rates than those reported than having not to use the internet at work. Workers with disabilities who have some form of internet subscription at home stayed employed at a far higher rate than workers without disabilities who do not have internet subscriptions at home. These staggering gaps in the workforce participation cannot be fully resolved with accessing broadband or affordable broadband or even inclusive technologies but again the access to affordable broadband and inclusivity can have substantial impacts to these numbers.

Suzy Rosen Singleton: Thank you so much, Julie. Would anyone like to add a comment? Any questions? Given those numbers, it is very important that we look at broadband adoption and utilization, and we have noticed numbers are pretty low. We would like to try to learn more about data, about advancements toward closing that gap. Some examples are the Affordable Connectivity Program (or ACP), Lifeline, and the Emergency Connectivity Fund. That's about \$7 billion dollars that has been used funding towards schools and libraries, so there are some programs that exist out there. But how can we optimize our outreach? How can we spread awareness? David?

David Bahar: Thank you, Suzy. What a wonderful question, thank you, Suzy. Really the data tells us a sad story. If we look closer at the data, we see more nuance that can at least give us guidance on how to best approach this challenge. For example, when we look at different groups of individuals with different groups of disabilities, those who are deaf and hard of hearing and use ASL, we have data from studies that were done between 2010 and 2013 by the Communication Services for the Deaf under a grant program from the National

Telecommunications Information Administration. This was called Project Endeavor. The goal of this project was to survey about 15,000 deaf and hard-of-hearing constituents about what their situation and then to be able to provide some no-cost internet plans and some no-cost devices and equipment for them to use that internet. Going into Project Endeavor, they were imagining that the statistic for disabled communities using adoption of broadband was about 50%. But what they found was that it's actually 94% communities with disabilities already had access. So actually accessing broadband was not the biggest issue. But it was knowing *how* to use it. it was digital literacy. It was training, it was education so that folks knew how to use this technology and their access. At the same time, there are many subgroups of ASL users that do not have internet and I see this every day through my work in the State of Maryland.

Our Deaf and Blind constituents, almost none of them have internet access at home. And for different reasons. Inability to use their internet service because they can't see or the equipment they have is not accessible. They can't make calls because the equipment is not accessible. So we established a program several years ago, the Deaf-Blind Communication Facilitator Program where we will send for a deaf-blind person who wants to make calls through Video Relay Services, we will send a deaf interpreter who can interpret and provide tactile sign language services to this person. However, most of the time they need to meet outside, not within the deaf-blind person's home because the deaf-blind person does not have internet so they'll meet in our office or even at a Starbucks or a place where they can use free internet and they don't want to have internet in their home because they can't use it.

There are other groups that experience inaccessibility to internet services because they are unable to find the right resources. I'm sure all of us can agree when I say that there are many people with disabilities who are not experts at being disabled. People that recently became disabled, they are not sure what to do. They are not sure what resources are out there. How can they navigate this new landscape? They are not sure what devices are available to them. This especially hits senior citizens really hard especially, they are lost. They don't know where they can get support or where they can get technology and they are unaware of private

organizations or state resources that are available to them. And often they'll go to their family or friends or their family or friends will see that there is a need and try to connect them with either our program or another program where we can provide the right equipment, the right training so that these senior citizens can become independent and their technology used.

Historically since the ADA was established in 1990, we had TTY, captioning, very analog-based devices. However, in the 2000s, we started to see the internet and the usage of that really rapidly changed for the deaf and hard-of-hearing community and internet access became so much more important. Many deaf and hard-of-hearing users don't use TTY's anymore. They are using computers, laptops, tablets and mobile devices. And the reason for this is that the TTY it's not efficient. It's not equivalent. It's not an equivalent form of communication. It's slow and cumbersome. Other avenues of communication are much more functionally equivalent so that's why the deaf and hard-of-hearing community have transitioned to those modes of communication, which also is why it's so critical for them to have access to high-speed internet.

Another community that we see having issues with accessing the internet are people with speech disabilities. People with cognitive disabilities. We have seen many applications on behalf of senior citizens who also have memory issues and often when we go, we'll sit down, we'll talk with people. I do this in my work. I travel all around the state and different booths and I'll ask, I'll say "do you know someone who has a hard time using a phone?" And they will say "no, no." Then I'll say "okay, do you know someone who is not deaf, maybe has Alzheimer's, or cognitive decline and a lot of times people will say "yeah, yeah, yeah, my grandpa, my father, my mother, my family member, my loved one... We actually had to take away their phone because they weren't able to protect themselves online from fraudulent callers, from scams because they can't remember their phone number or their name and they were disoriented in using their device." So we can actually provide a special IP-based device that does require internet connection. It's a larger device and it provides apps that will allow people with memory issues and cognitive disabilities to communicate maybe by using -- it will

be pictures of people, right? So call mom or call my son and it will use pictures and so when I click on this picture of this person that I recognize, I can call and communicate with them. And this device actually is limited to only outbound calls so it won't allow any inbound calls in order to protect our vulnerable senior citizens. This does require internet connection and what we have found in providing them accessibility and the best way to quickly provide this access and to evaluate their needs and in order to provide them these devices and training, we have to be able to do that quickly to allow them to be successful and independent on their own. So this is a lot of our efforts.

Now, with phones and with tablets, we have -- it's wonderful to really just have an open platform that you can put on any sort of devices that you need for different groups, including relay services, deaf and blind relay services and apps, as well as time text and so on and so forth.

Yeah, so I think that's a quick summary. I kind of thrown out a lot as things were coming to mind as I was watching the first panel talking about and sharing about their experiences especially for blind individuals and what huge barriers they experience in equipment accessibility and I think we often see that similar issues in the deaf-blind community where if they don't have the equipment (accessible equipment) to use the internet with, right, or maybe they use JAWS where they can have access to a website, it's more likely to just say hey, I'm not going to pay for internet if I can't access it with accessibility equipment. Thank you.

Suzy Rosen Singleton: Thank you, David. Suzy speaking. We could speak all day about the barriers and the importance of identifying the barriers so that we can address them. Thank you for sharing that. You shared some wonderful information. Would anyone like to add?

Christian Vogler: Sure, I'll add something. This is Christian Vogler speaking. I really appreciate both Julie and David's comments and it really impacted me on what I would like to

emphasize here. Not enough people have internet access, but they also need the equipment that meets their needs and makes the internet accessible to them. This is a theme I see coming up, that there is a great digital divide between young people and older people who are deaf and hard of hearing. We have noticed for example in using VRS, Video Relay Services. If we ask about who uses VRS, I ask in my class. My class is normally young folks and they are like maybe two or three of them are actually using this service. Ten years ago all of them were using this service and so what's happening now is that VRS, the population that uses VRS, is an aging population that is using this device to call other deaf people and young people are engaging with technology that gives them more options. And so it's really critical to figure out the relationship between online access and how we can bridge that divide between the younger generation and our older generations. Because often what we hear is it's too complicated, right? You have mentioned using an iPad which is a wonderful open platform, but it's complicated. It's hard for older adults to use. It may seem easy, but it's not. One example I can give is my mom. I gave her an iPad. I set up FaceTime so she could call her grandchildren. It was wonderful. But she refuses to use it for anything else because she's scared she is going to mess up her FaceTime system and cut off her communication. So access to the internet is so important, but also focusing on how people are using the equipment and making the internet accessible to them.

Suzy Rosen Singleton: That really segways us very nicely into the next question. Thank you, Christian. For everyone else on the panel, if you would like to add... What are promising industry practices that are seen as pathway to enhancing broadband and other digital accessibility? Would you mind expanding on those type of practices?

Christian Vogler: Okay. So it's a big question to answer and a question that I could take all day to answer, so I will not do that. But I'll focus on a few things. First of all, how to frame the question. Generally with broadband internet access and digital discrimination, there are two

key issues at hand. One is ensuring that people can afford it. And also on the other hand, it's making sure that broadband access is available where the people need it to be. And there is no easy solution.

Related to -- well, and it's all related to each other and interconnected. But I would like to start talking about what people need for internet access. So right now they need accessibility apps and services to meet their communication needs. These apps consume a lot of data and they are really intended, you know, or the disabled -- a disabled person on an average needs much more bandwidth, needs more available data compared to mainstream consumer population groups. For example, video calling...you may have accessibility services that you use through the internet. For example, speech recognition or different describing ads, images describing ads, screen readers and things that describe the environment on your mobile device all consume large amounts of data.

The second issue that I see, it's much than a little bit less, we have talked a lot about latency because a lot of access, we need to have the internet, right, for general population, and for our population, we also need real-time. So we can't have latency, we can't upload our message and then wait a couple minutes or a couple seconds it to come back to us. We are communicating in real-time so we can't have latency when deaf and hard-of-hearing users are using these video platforms.

And in smaller communities, smaller neighborhoods, this bandwidth and this latency isn't an issue. But in large cities with more compact populations, with many people who are living in that population, the data is consumed and the bandwidth gets throttled. Often in more rural communities they may have access to that bandwidth if they have access to broadband.

Another thing I'm noticing to really start developing, a promising item is satellite communications. So back in the day in the past satellite communications were not effective. They didn't work because of that very high delay, and now we have a new generation of satellite communications which is called low earth orbit. And so these satellites are not as far

away so the time it takes to communicate is less because of the way that it's moving close to and around the earth. And the way it's signaling with towers all over. So some companies are providing that service now, and I'm personally aware of people who work here at Gallaudet who are using these services and are setting up these services and seeing a great benefit for their everyday work, their video calls, anywhere, at any time. So this is a really fantastic new technology that is actually changing the game. At the same time, this is still an area that requires more competition. And also requires more oversight as well.

And that leads me back into another issue about this. In the earlier panel, they mentioned data caps. Fortunately I have seen some companies starting to remove these data caps, which is a very positive impact, a positive change for our communities. But I'm still afraid that there are silent caps. So they are not saying there is a data cap, but if you are consuming these large amounts of data that the disability community is using, it's going to throttle your speed so I think there is still a lot of fear around that.

And then also related to that, if you look at what type of internet you need for access, high speed, low latency internet, it's very expensive and there are still many people that cannot afford this privilege. So honestly, I am convinced, I'm convinced that this is the program that will cover this. For example, my family is a mix of deaf and hearing people. Trying to figure out how much we spend a month on internet and communication access, it's over \$250 for my family. So if I only had internet that was priced at \$30 or something more affordable, it probably wouldn't be enough for us to use. One more thing I'll add, that I'll mention in regards to the economics of it all...oh, excuse the interpreter, of the equipment, devices, such as phones, tablets, computers. This is a very positive thing time seeing is that the equipment, the technology, has just greatly improved even opinion you look back 5 or 10 years ago, computer technology was not able to be made fully accessible. So the changes that we are making are great improvements and I would like to give kudos to the industry for looking at equipment accessibility and ensuring that devices and equipment that are available can continue to meet the ever-changing disability community's needs.

David mentioned that some people are not aware of how to get access to this equipment. And I also want to add the consideration that a lot of equipment programs look at telecommunication needs specifically. And so, for example, if I'm on -- using the VRS, I just use any iPad and it's fine. Or for captioning, I can actually set up my phone and have live captions come up on my device. Today, internet access and communication is so much bigger than just telecommunications. So what we really want to look at is what do people really need for their everyday work, for their everyday lives. Older equipment doesn't work for me. It doesn't work for my students either. So what is working is computers with large monitors, huge monitors as big as possible. And that costs a lot of money. So the question is: what can we do to start changing our thinking about equipment being affordable and accessible?

Suzy Rosen Singleton: Thank you, Christian. Would anyone else like to add about industry practices? Anything that you have seen and would like to share with us? Okay. Thank you. Now, we have heard about industry practices, and there has been so much information shared with us today, interesting and much for us to think on. I would like to now focus on state and local resources. And, David, you had already mentioned this in your discussion, but I will turn this question over to Jonathan. Jonathan, if you can share with us how state and local resources can be leveraged to enhance the digital accessibility?

Jonathan Lazar: Great. Thank you and I know we are running short on time so I'll try to keep my comments brief. Whenever I discuss digital accessibility in the community, I'm often struck -- and you heard this a little bit already from David and Christian about how people aren't familiar with the resources that are available to them. You know, kind of every state has a standards and a resources, right? Some telecom services, library for the blind and print disabled, an assistive tech act program and most people don't know...I actually think that in terms of, right, research communities and in terms of some of the communities I'm involved with like disability student services, I actually think broadband access similarly is sort of a

hidden topic. It's a topic that people aren't very aware of. And so when you hear people talk about digital accessibility, they often say, well, you have to make sure that the user with the disability has the right tools, the right assistive technologies and you have to make sure that whatever they want to access - software, mobile phone apps, websites, eBooks - right, you have to make sure that's accessible. And you hear those two things, right? Give people the right tools and make sure that what they are trying to access is accessible. But that kind of leaves out that topic of broadband access, right, that so if you have the right tools and you technically can access them but you don't have the right bandwidth, you don't have the right network access, that's still really a problem.

You don't actually have access then and so I think we need to broaden out the discussion more and I think that the way to do that is partnerships at local and state level. And I am a big believer in collaborations across different silos. I think very often within the kind of digital accessibility realm we are very siloed. The researchers talk with the researchers, educators talk with educators, policymakers talk with policymakers and I think that -- first of all, let me start with small policies and initiatives that we could do to raise the awareness of broadband access for people with disabilities. So two examples: One, are people familiar with Teach Access? The organization that focuses -- I see a few heads nodding. Teach Access, the organization that focuses on teaching more content about digital accessibility. They are rolling out new modules about digital accessibility. Let's make sure there is some content in there about broadband access but also think about this...if you are state or local government and you are funding people locally to do projects, university researches, contractors maybe you want to have a broadband impact statement required. Something where the contract has to say like we are aware of the current levels of broadband, here are some activities that we are going to do that might increase the levels of broadband. You imagine that any time you have to have a statement it kind of bubbles up, it raises the awareness of the topic. So those are just kind of two basic examples but I do think that more broadly about digital accessibility what we need is more partnerships at the state and local level across all these different categories because we

are all siloed so at the University of Maryland I lead a new initiative called the Maryland Initiative for Digital Accessibility or MIDA and we do full stack accessibility. We are interested in research, design, development, right? Education, advocacy, policy, law, and we are not staying within the campus. We have 12 disability rights groups as collaborators, we have four tech companies, we have a few policy-making organizations. If anyone here is interested in joining, let me know by the way. But the idea is that our goal is to be outside of campus. Our goal is to work across all the different disciplines on campus and to also be outside campus and work across all of these different communities to raise awareness of digital accessibility, including broadband access.

Let me give you one example of how there are new opportunities now for state and local engagement and digital accessibility, right. So we talked a little bit about the knowledge gap. Certainly you can easily imagine having students at universities, at colleges, right, working hand in hand with people locally with technology users to help them learn about what the opportunities are, right, in their state and local government and also to help them figure out how to use some of the technology. That's easy. That's obvious. Everyone knows that, but when you think of how technology changes, what the opportunities are at the state and local government, you know, every state has a library for the blind and print disabled and typically for decades if you are someone with a print disability, you two to the library, the local public library, they say 'go to the library for the blind and print disabled'. It used to have a different name. Given that libraries are now primarily acquiring their resources in digital format, right, that's an opportunity for the local public library to actually serve people with print disabilities. But it's not just saying okay, we are going to have, you know, if we are having eBooks and e-Journals and we are going to have that in accessible format, it's also saying okay how do we need to train our librarian staff, right, to work with people with disabilities? What are the considerations if we are providing network access, if we are providing Wi-Fi, what are the considerations for people with disabilities? What is more embedded in every local community than a public library, right? And because of the way technology is changing and the way

library resources are changing, that's an opportunity for public libraries to be a center point for figuring out digital accessibility in the community, being a service provider, doing all these great things that libraries do. This is just one example of the opportunities that is now exist when you start thinking in new ways and start collaborating across different local and state agencies. So forming those partnerships with groups you don't often think of like the public libraries, like colleges and universities, right, with the policymakers, with state government. I am thrilled that a number of states recently have appointed either created a new position or appointed someone for like chief accessibility officer, director of digital accessibility for the state, right. So a few states are paying attention. I think it's important not only to have that figure head position, but also to be able to have people in that role work at building these networks across the state and that's what we are trying to do with MIDA at University of Maryland is build a network across the state and the more we can get those collaborations going, the more we can find those opportunities. I think that helps not only with broadband access, but also with digital accessibility more broadly. Harnessing the energy, I tell you one of the great things about working across the campus where we try to find people in every discipline, I love the energy of the faculty, staff, and graduate students, who come from these different backgrounds and different disciplines and it's not just computer science and information systems. It's across all these different disciplines, right? We need to harness that passion within our local communities, that passion that people have. So thank you very much.

Suzy Rosen Singleton: Thank you so much for that, Jonathan. Thank you for your remarks and all the information grew shared. I'm sure we could spend all day discussing that, unfortunately we have only a few minutes left, so closing remarks? Commissioner Starks is here and I would like to mention him. And thank you so much for your time and let's continue this conversation on this very important topic. I really appreciate your time. Round of applause.

[Applause]

Sanford Williams: Hopefully you can hear me okay. This is Sanford Williams, good morning. I'm not getting any indication that I can't be heard, so I'm going to go forward. Commissioner Starks is there so we'll continue on with the program. Good morning again. Thanks to the panel and the participants on the first panel. Thanks to Gallaudet University, President Cordano, Chairwoman Rosenworcel of the FCC, and the FCC staff for organizing this important listening session. The FCC appreciates the insight we have obtained today, it is invaluable. We will continue to work to ensure that everyone is listened to and represented in our quest to address digital discrimination. We can't thank you enough.

The final speaker of the day is FCC Commissioner Geoffrey Starks. Commissioner Starks believes that communications technology has the potential to be one of the most powerful forces on earth for promoting equality and opportunity. To unlock that potential, however, all Americans must have access. Because high-quality broadband is essential to participating in our economy and society, Commissioner Starks has been a champion for the millions of Americans who lack access to or can't afford a home internet connection. As a native Kansasian, he understands communication needs of broad America. Before he entered public service, Commissioner Starks practiced law at Williams and Connolly, he clerked on the U.S. Court of Appeals for the 8th circuit, served as a legislative staffer in the Illinois state senate and worked as a financial analyst. Commissioner Starks graduated from Harvard College with high honors and Yale law school. He lives in Washington, D.C. with his wife, Lauren, and their two children. And I'm pleased to introduce and turn over the mic so to speak to Commissioner Starks. Thank you.

[Applause]

Commissioner Geoffrey Stark: Good afternoon. Thank you, of course, to Sanford for the warm introduction. This has been a fantastic -- I've been watching -- has been a fantastic and

informative field hearing. I would like to thank the Task Force on Digital Discrimination for all of their tremendous work, hard work in organizing today's hearing. Of course thank you to Gallaudet University, its students and its staff, especially President Cordano, for hosting us, and of course for all of the speakers for sharing their experience and their deep wisdom and insights.

At the Commission accessibility is woven into many strands of our work. During my time as a Commissioner, I've been privileged to listen to and learn from members of the disability community as we have tackled in particular accessibility regulation across the industry. A few examples, in response to concerns raised by our Disability Advisory Committee, we are currently working to ensure that video conferencing services, we have all increasingly relied on since 2020, are accessible to everyone, accessible to all. We have proposed performance objective that is these services must meet, including captioning, text-to-speech, sign language interpreting, including integration with Video Relay Service. I'm proud of this item, eager to see it move forward. I believe we have a commitment as well to make communications accessible to all Americans. Recently, we began our process of implementing the Martha Wright Reid act to ensure that incarcerated individuals with disabilities have equal access to communications technologies so they too can stay in touch with their loved ones. Critically, we are using this new and important authority given to us by Congress, signed by the President, to ensure that providers make that technology available at just and reasonable rates.

We have also recently sought comment on how to make our wireless emergency alert systems more accessible. In a time of increased severe weather events and emergencies, the WEA system delivers timely and frequently life-saving information to individuals in the geographic sphere of a disaster. To make sure these alerts are understandable and understood by all, we have sought comment on how to leverage text-to-speech functionality on mobile devices to ensure that alerts can be understood by blind and low-vision users and weather and how WEA might be improved upon to provide support for American Sign Language. I'm eager,

eager to hear your input on this proceeding as we move forward with these critical and life-saving alerts to become accessible to all.

Importantly, increasing accessibility in each of these areas can only benefit those who have connectivity necessary to use them. And that ties into one of the most important tasks of the Commission and the government as a whole that we have in front of us and that is ensuring broadband access for all. That brings us to today. Where you have helped us focus on digital discrimination and access to broadband, as you surely know. Eliminating digital discrimination is a critical step in the Commission's ultimate goal of providing access to broadband for every, every American. Eradicating digital discrimination is not just a promise for today. It's a guarantee for a more just and equitable future tomorrow. I believe that. So it's fitting that we are here today at Gallaudet University to discuss and hear how we can appropriately curb digital discrimination. For years, Gallaudet has been a beacon of innovative progress, inclusion, and growth. From visual learning and language to social justice to equal rights. Gallaudet is the right environment, a perfect environment to advance this conversation on digital discrimination.

It was enlightening to hear about some of the broadband access experiences of the disability community, hearing firsthand from this community what different challenges people have who are deaf, hard of hearing, visually impaired and how they faced challenges in accessing the internet. It is critical, critical as my colleagues and I consider the big picture of how digital discrimination currently exists and what we can do to eliminate it. I also greatly appreciate the viewpoints of the panel that I heard and that discussed some of the potential solutions for access to broadband for those with disabilities.

Importantly, this hearing and all of the information shared is now part of the digital discrimination proceedings public record, which means and helps us ensure that we are all well informed of these challenges. Thank you. Thank you to all who participated in the field hearing today. Thank you to Gallaudet University for hosting me, for hosting us. I look forward to continuing this partnership with you as we get this right. My door is always open. Surely open

to new ideas, to new thinking how we are going to ensure that we're doing all that we can to close the digital divide, to ensure that we are improving access to digital resources for persons with disabilities. Thank you.

[Applause]

D'wana Terry: Thank you, Commissioner Starks, for those closing remarks. And with that our time today has come to an end. On behalf of Sanford Williams, Alejandro Roark and myself, thank you so much for all that you have shared. We have listened, we have learned and so our goals are achieved. We are dismissed and until next time, thank you.

[Applause]