WORDZXPRESSED
TRANSCRIPTION SERVICES

NTIA

California Broadband Workshop
Innovative Approaches to Digital Inclusion
ntia-2015-1117-1345

Date of Transcription: December 8, 2015

3525 Piedmont Road, N.E.
Eight Piedmont Center, Suite 310
Atlanta, Georgia 30305
800-872-6079
FAX 404-873-0415
www.wordzx.com

KAREN ARCHER PERRY: My name is Karen Archer Perry, and I wanted to thank you for being here, and I also wanted to thank Amy Meacham [ph], Joelle Tesler [ph], and Barbara Brown for putting together both the whole event, and in particular, our panel today.

This panel is about innovative new approaches to digital inclusion in America, and we have got some excellent presenters who are going to share not just what they've done, but really their perspectives going forward about what's going to be important in order to bridge the new digital divides that are emerging in our communities.

I'm going to introduce the speakers very briefly, and then we'll get started.

On the far right of the stage is Diana Rodriguez. She's the Director of Digital Learning and Technology at the Youth Policy Institute.

Next to her, Israel Oliveros, the Director of Technology at the Coachella Valley Unified School District.

Barrie Hathaway, the Executive Director of the Stride Center.

Erica Swanson, the Head of Community Impact Programs at Google Fiber.

And Chris Mitchell was wrong; he doesn't have the longest title of anybody listed here; that goes to Alicia Orozco, who is the Project Manager of Broadband Awareness and Adoption and Get Latinas Connected Projects at the Chicana/Latina Foundation.

Just to get our conversation grounded, I'm going to ask each one of them to describe just one innovative approach that they've used to drive broadband adoption and digital inclusion successfully in the communities that they serve.

And, Diana is going to get things started.

DIANA RODRIGUEZ: Okay, thank you very much. I'm Diana Rodriguez again, Director of Digital Learning and Technology with the Youth Policy Institute, and I'm also the

Co-Project Coordinator for the Los Angeles County Regional Broadband Consortia Group, so I'm here representing both.

I would say one of the things that -- YPI has been in the digital inclusion space for quite some time now, and one of the most notable projects that we had was a BTOP project that we were awarded back in September of 2010, and it was aimed at opening 80 public computer centers throughout the greater Los Angeles area. We were actually able to install 83 public computer centers, I'm pleased to say, and we deployed over 1,700 computers in those PCCs over a 14-month period. So we were really pleased about that. We had about 800,000 training hours that were delivered through those PCCs, and we had over 26,000 people coming in to visit our centers on a weekly basis, so it was a really large project, and I'm still a little tired right now from rolling all of that out, but that was one of the projects that we were able to roll out that made a huge impact, I feel, to provide the communities with access to technology, both youth and adults, in places where folks were already convened and just really looking for new skills to add to their portfolio.

ISRAEL OLIVEROS: So again, my name's Israel Oliveros with Coachella Unified School District, Director of Technology.

Our district covers about 1,250 square miles. The majority of that is rural, undeveloped communities. So we do have a one-to-one initiative that our voters astoundingly approved with 67% vote. So we have iPads for pre-K to twelfth grade.

So once we rolled that out, we noticed that there was another challenge, which is access to reliable internet connection at home.

So what really is changing the game for us now is what we call our Wi-Fi on Wheels Program. We place Wi-Fi routers on school buses, our entire fleet; that's all depending on

Verizon's LT network. What we did then is we started surveying our community and strategically targeting concentrated areas where students live to place those buses overnight. That allows them to connect to the internet, extending learning beyond the classroom.

So we're just continuing to evolve this program; we're trying to build different partnerships and helping this be successful.

KAREN ARCHER PERRY: That's definitely an innovative approach. Another innovative approach?

BARRIE HATHAWAY: Yeah, so the Stride Center is a workforce development non-profit; we help people get started in careers in the technology field, so you wouldn't think that we would have much to do with broadband adoption, but in fact, we've really got a lot to do with it now. We run a couple of social enterprises; one of them creates low-cost computer equipment from refurbished product, and provides tech support, and the other is a call center model, which is what I'm really going to talk about today in terms of an innovative approach because tech support and low-cost equipment is not innovative. Important, but not innovative.

So about four years ago, we had a grant with California Emerging Technology Fund, and they asked us to include 50 broadband adoptions in our grant, which we thought would be very easy. We're training three or 400 people a year, most of them are going to be needing access to the internet; we thought no problem; in two years, we're going to get that knocked out in the first quarter. And by the end of the second year, we still had not gotten our adoptions. And the problem is that it's very complicated when you know you want people in your community to get access to the internet. There are a lot of choices for them; you need a lot of expertise in your organization; unless you have that really focused, it's difficult to accomplish.

So based on that experience and our work with Social Enterprises, we decided we wanted

to try a novel approach, and that is to create a call center model that is dedicated to taking calls from people who are not connected at home, but want to be, and to develop an expertise, which is how do we talk to those individuals; what do they need; how can we help them figure out what they need, and then help them get connected to that?

So we worked with, in over a couple year period, several non-profit organizations, including the Chicano/Latino foundation; they reached out to their communities, sent their callers to a phone number that we were answering, and then we helped them beat their targets for their broadband adoption.

So this idea of creating an expertise, sort of a consumer advocate model, who's speaking to the end-user and helping them figure out what they need, and then get access to those things is our innovative approach.

ERICA SWANSON: Hi, I'm Erica with Google Fiber, and real quickly, I had this light bulb moment when I heard Commissioner Sandoval talking because she was talking about the physicality of the internet. And I thought oh, my gosh, I have a piece of the internet in my purse.

And so I will pass it around, if that's okay with Karen. I think it's a really good reminder that so much of the work we do in the digital inclusions space is a large part sociology; we're working with people, we're changing behaviors, we are shifting kind of the community and ecosystem. A large part of it is technology, and really meaningful things can happen when we marry technology and sociology.

So I'm with Google Fiber. Google Fiber is a fiber to the home business. We are delivering gigabit internet speeds to residents and small business. We're building these networks from the ground up, and we're working to make the web faster and better for more people.

And inherent in the work we do, because of the way that we build networks, because of

the homes that we're passing, because we are very local in our business model, is a real commitment to helping to close the digital divide.

And I'm struggling with whether or not it's innovative, Karen, but I definitely think it's important that key to our approach is knowing what our strength is, and then knowing how to work well with others, understanding that this is not the scope of the problem, the complexity of the issue is not one that we can solve alone, but we can really begin to do good work if we're working together. And the key there is knowing that we can build the physical internet; we can work to make it more affordable; we can drive really strong marketing campaigns that get at why the internet is important and how people can sign up. And then we need to invest in and partner with community organizations who know their communities very, very closely.

So figuring out how those pieces line up and how very local that needs to be is pretty key to our approach.

ALICIA OROZCO: Alicia with Chicana/Latina Foundation, and the Foundation, since 1977, its key mission has been to support Latina women with their higher education goals. We do this through a leadership institute and a monetary scholarship.

Through our work, in doing this work and other projects that we've had, we know our community; we knew the necessity for internet connection and accessibility in our community, and so we received two money from the California Emerging Technology since 2010, it was the first grant, and then in 2013, we received the second one.

With the first one in 2010, we again also thought it was going to be easy. Our goal was 1,100 people to find and connect in two years. We knew that people wanted this information; they wanted to connect, and actually, we did meet our goal in two and a half years, but it required a lot of work. And what we did was we went into the community as community

organizers, which we had done in our experience in the ‘70s and ‘80s.

You come into a community, you go to the organizations that are already there that know the community, and you say this is what we bring: we bring information about the programs that are out there that are affordable; we bring information how to qualify, and by the way, we have a computer for those who sign up. Does that make sense to the community you’re serving? And most of the time it did, and we would partner to bring this information.

We also used our scholarship recipient; we have 30 every year that receive our scholarship, and we call them Ambassadors, and we train them with the basic information, we didn’t want to take them away from their studies and everything else that they’re doing, but they went back to their community where their families lived, where they went to school, and they spread the word about how important this is, information that we have for them, and our contact information, and that worked really well.

And finally, we did tech fairs where we would bring information about the diversity of what is available in that great world, and why it’s important mainly to the adults; the kids get it, and parents understand it for their children; it’s bringing it to the adult, also.

And one of the things we brought was refurbishers who would then say you bring your computer that’s sitting in the closet not working, and for free, we’ll get it fixed if it’s fixable. The last one we did in Salinas, out of 35 computers that were brought in, 28 walked out working.

And so those fairs also brought the twenty-first century, and one thing that we always said is our people deserve a seat at the table of the twenty-first century, where opportunity and choices exist.

KAREN ARCHER PERRY: What we’ve heard is to meet people where they are, from Diana; from Israel, to put the Wi-Fi on the school buses and do hyper-local neighborhood

outreach; from Barrie, to augment many of the traditional things with a very customer-centric call center with a consumer advocacy focus in order to help new tech buyers navigate their choices; and Erica reminded us that there's some sociology involved in this, as well as a physical internet, and it's important to know what you do well and that partnerships are at the core of connecting a community. And Alicia has commented that connectivity isn't easy, but one approach is to create tech ambassadors using some of your leaderships, and also to incent people by helping them with choices and by encouraging them with better device options.

So that's kind of a quick tour to some of the innovative things that are going on right now, but I also wanted to ask our panelists to talk about what they see in the future.

So the most recent digital nation report from the U.S. Department of Commerce that is based on 2013 census data found that still 28% of American households don't use the broadband at home. And it would be one thing if it was 28% of households across the board, but you know it's not. The groups that tend to lag behind are African-Americans, Hispanics, Native Americans, and seniors.

And I would say that that 28% number is not really a good measure of our digital divide, that in some regards, it's more and less because of better mobile options than we used to have, but that in many ways, it's more when you look at the digital skills gap, and at the kinds of fluency we need to be effective.

So when you look forward and you think about what's digital inclusion or digital equity going to look like in your work programs in the next two to three years. Again, would you just share one idea that you have for something that we need to do going forward? Diana, do you want to start us again, or do you want me to mix it up?

DIANA RODRIGUEZ: I can go ahead and start off. So first, I want to say that although

I mentioned a second ago that we had over 100,000 training hours through the BTOP program, so that's quite a bit; however, what we've found is that basic digital literacy skills are still very, very much high in demand in the communities that we serve.

So I do want to highlight that because I think that that's a really important piece never to forget is that there is still quite a few people out there who still need those very basic skills. We're still seeing quite a few people who have come into our public computers centers to take their very first class, or we see at one of our offsite locations, where they've never actually touched a mouse before, they've never laid hands on a computer before, they've never plugged one in before, and so, you know, it's important not to forget that component of things.

But further than that, I want to say that the folks that we see and provide that basic digital literacy skills to, they become very excited about the skills that they're able to acquire through the classes that we've provided to them, and they're thirsty for more in general.

So we have a lot of people who come in and say what's next? Now for YPI and a lot of the partners that we work with, basic digital literacy skills is kind of what we specialize in and where we go and what we're funded to do because it's basic adoption that we're kind of provided funding for, and so closing that gap.

And so I think one of the things that really needs to be thought of now is kind of what our plan is. Once we're able to close that gap -- we're all talking about closing that digital inclusion gap, the digital divide -- once we're able to close that, and we have a lot of people are a majority of the state online, and we're able to reach those goals that the folks were talking about.

What comes next? What skills are we going to provide next to these folks so that we can help them apply those skills that we have given them in a really productive manner, and I think that one of the things that we want to do, to achieve, is to teach people how to learn online.

Like many of us, we have acquired these skills and it wasn't all at once, right? You didn't just take a class and then know everything about a computer; you picked up the skills that you needed and enough to be able to then go and turn those skills into something else by probing online, by finding things, by researching, and by learning online. And so I think that that's one of the things that's going to be really important is incorporating, teaching people how to learn online.

KAREN ARCHER PERRY: Let me invite you not just to answer this for your own organization, but answer it for the whole field.

So when we move to you, Israel, when you think about what you think we're going to need -- of course, you're doing enough right in your organization -- but what do you think we're going to need in the next two to three years to really create digital equity overall? Big, big picture.

ISRAEL OLIVEROS: Well, for us, like I said, the real challenge is physical access to the internet. We're talking about different ideas, just dark fiber for example; we're talking about building a reliable network, partnering with local school districts within our valley to be able to provide that, and building that capacity.

We're also going out to our community and offering workshops, talking about: digital skills; how can parents adapt their parenting skills in the twenty-first century; how do you educate your students to be digital citizenships in this twenty-first century? So when we're talking about building capacity, I mean, we're targeting young minds; we're building that capacity from the bottom up, and also focusing on the parents that make that difference in their homes.

So moving forward, I mean, at least for us in our case, the real challenge is going to be

how do we reach those parents and community members in those undeveloped areas? How can the school district and educational institution play a big role in bridging that gap?

KAREN ARCHER PERRY: So for those of you who were here yesterday or here earlier today, who heard the comment that you need to find a champion in your community, and sometimes that champion is somebody very influential in the school district, I think you're looking at him.

Barrie, what do you see in the future?

BARRIE HATHAWAY: You know, what's really happening to us now as we close this digital divide is the smaller it gets, the tougher it is to get at that last percentage of families and individuals who are not yet connected. They're further and further away from having access to the internet, so it gets more and more challenging -- I feel the heads nodding around me here because those of us who have been doing this for awhile really understand that while it was hard for the last four years, it's only going to get more challenging going forward.

How do we get at this last -- not this last, but this next wave of people in our country who are not yet connected to the internet? And so you can imagine for me, it's very hard to pick one thing that I think is the most important thing because there are so many important things, like what have already been said.

But my one thing would be because of the people that we're trying to reach, we have to select trusted partners, trusted people in the community to reach them, that it is not going to be a commercial necessarily; it is not going to be flyers; it is going to be somebody I know and trust is going to convince me that I need it, and convince me that there is a resource for me that I can trust.

So I really feel strongly that as we move to this next wave, we have to do it in a very

thoughtful, community-focused way that is going to help us reach people in a way that they can hear us and they can trust us to help them make the best choices.

ERICA SWANSON: And that's just perfect because what I would say is that we really need to refine and hone our understanding of the various segments of the people who are digitally divided right there. While they have many things in common, and we know that there are communities who are more disproportionately affected than others, it is still a very, very diverse heterogeneous group of people with very different sets of motivations and levers that we will need to collectively poll to get people online. And so beginning to understand who in that population is going to -- for whom is it about affordability, first, foremost? All right, let's make the internet more affordable, and let's start there; that's something that we can do.

For whom is it that affordability needs to be quickly followed by real deep understanding of how to use a computer and how to use it safely? Okay, that work is actually very hard to scale; it's a little bit of a heresy for a tech company employee to be talking about one-on-one training programs; it is the antithesis of scale; it is actually highly effective and what we need for many people who are digitally divided.

And so how can we provide support to the community organizations through things like the digital inclusion fellowship that we've housed with the non-profit technology network, and place people into a community who can go out and recruit volunteers and build out programs and just exponentially increase the number of people that we can touch and talk with and teach in communities.

But most importantly, knowing that it's going to take that whole menu of an approach, and that we're going to have to really be better at figuring out what is it that people need and how do we make sure that we're aligning them to the appropriate intervention?

ALICIA OROZCO: I think it has been covered. I had in my list here: partnerships, accessibility, equipment, price. And that's been covered, and education.

But one thing I want to mention because that is very true in my community, the community we're working with, the work they do -- they're migrant workers; they move around following work, so they sign up for the internet where they're working right now, and then they move, and where they move sometimes, there is no accessibility, even if they have equipment with them.

So it's the backbone of California, the people we work with, and you go into the Salinas areas, and Greenfield, and Soledad, King City, you see it there. And so we need to remember that not everybody lives in an urban area, and they are as interested in this as we are, and they need it as much as we do.

KAREN ARCHER PERRY: So it sounds like I'm hearing that it's personal, and it takes trust, and that's even more difficult when you're dealing with the last 15 or 20%, and particularly people who move around, and who have other kinds of constraints in their lives.

Most people when they talk about digital inclusion or the basics of broadband adoption, they talk about devices, broadband, and skills, and so we knew that you'd be a little bit tired at this point in the agenda, and any one of these speakers could talk about all of these, but we're splitting them up.

So let's start by talking about devices. There are a lot more devices now than there were when we first started talking about the digital divide, but how do we navigate those options, especially for new entrants, and both Barrie and Israel are going to comment on this question.

Your call.

BARRIE HATHAWAY: Devices. You know, we have so many conversations now

about what's the right device? Is it a desktop, is it a laptop, is it a tablet, is it a smart phone; what do those people need? And I would say to you that what we need to be thinking about is how to create a model of choice around that because we don't all need the same thing. If you live in a community or if you live in a home with a large family, maybe a desktop is a good suggestion for you; it stays in one place, and you have that happen in that one place.

But maybe a tablet is a better solution for you if you have to be very mobile. You know, we can't decide for people whether mobility or price or functionality or accessibility are the most important things for them, and we have to, I think, stop trying to decide for people what choice they need around device.

So our best bet is to create options, and then help people who are new to internet, new to these devices, understand what the device can do for them and make the best choice for themselves.

So it's all of the above, and we just need to stop choosing for people, help them make good choices in that regard.

ISRAEL OLIVEROS: I believe from an educational perspective, I mean, we're fortunate enough to have a one-to-one program, so that exposes parents to a particular device: a mobile device, a tablet. So what do new entrants really need in the twenty-first century? You're talking about people that are hesitant to adopt. So starting with basic substitution, instead of paying your bills by mail, pay your bills online. You know, creating that type of philosophy and understanding with them will really allow them to select a device that they really need.

We were talking about creating that buy-in, creating that partnership. So if they don't understand what they could do online, how can they select the appropriate device?

So instead of going out and spending thousands and thousands of dollars on a desktop

system, start with the basic smart phone; replace your old flip phone with a smart phone; see what access to the internet is really going to give you. So I think that really sits on when it comes to selecting devices.

KAREN ARCHER PERRY: So there's still an access gap, and perhaps it's widening in some communities. When you particularly talk about really the benefit of having high-capacity connections in order to not just consume content but create content, and both Alicia and Erica are going to comment on what the broadband picture looks like in the area of digital inclusion.

ERICA SWANSON: Well, I think that there are some promising practices that are beginning to emerge of ways that we can combine access and devices and digital literacy skills. And the example I want to just share real quickly is coming to us from Austin, the Austin Housing Authority for the City of Austin, leading a program that has now been lifted up by HUD and by the White House as an exemplar, and in many ways, being modeled in 28 other communities through this Connect Home initiative.

There is a program design at the heart of what they're doing at HACA in Austin that has been described by other funders as "quite elegant" because it starts with a user-first perspective; it starts with the residents in mind, and they wrote out a logic model: why is this work important; why is it important to us as a Housing Authority and to our mission of self-sufficiency? And then they thought, okay, what do residents need in order to change those behaviors and become internet adopters? And everyone on as a national partner came in, and it was really helpful to them to think through, okay, here's what it might look like to start with digital literacy skills training; here's how you can meet people where they are; here's how to get folks to help them have that sense of accomplishment that they are earning something by participating in these classes, and then inviting in the community to support this initiative.

So the community college in Austin stepped forward and said we have devices, and Goodwill can refurbish them. So we have devices that are being refurbished and now being put into the homes of people who live in the Housing Authority, who have earned those devices because they've gone through digital literacy workshops, what I think we used to call "skin in the game" in programmatic work.

And then once they've gone through the classes, earned their device, have this appetite for internet, now they can sign up for free internet through Google Fiber.

So we've looked at all three of these key barriers, designed interventions aligned to those, and run them in a sequence that has the end user in mind.

And I think that that is the very best way that we can think about access when we're talking about that hardest to reach one or two persons, but designing with a comprehensive solution in mind.

ALICIA OROZCO: Do you know that there are many places in California where people live and they don't have an address, so they're hard to find by Comcast and AT&T, etc.? They get their mail downtown, whatever the town "downtown" is at the mailbox? We've had to drive out to people's home with them and drawn a map so that then we could give to Comcast or to AT&T, depending on who service that area.

So being the partnership in the communities is extremely important because those organizations that are working in those communities are the ones who know their community, know their people, and as Barrie said, they're trusted, they're proven, but most of all, they know the people. So that is extremely important because that's going to come into different ways that we have partnered with them.

We came in with our project that had a life of two, two and a half years, and then we

leave; we're not going to continue that particular work in Salinas; we're in Burlingame and our work is different. So we didn't want to abandon that community in that way, so we created flyers and informational flyers about resources that were local, what were the refurbishers there that you could trust that were not going -- if you had a problem, you could go to them and they would help, and we then talk to those refurbishers, let them know what was going on.

For classes, in most places, libraries had their funding cut back, so hours were limited and not many people go there to teach, so we began the Train the Trainers, using high school children, young people, and junior high, and in places like Salinas where they were having such a problem with the youth and gang-related situations in others because of the situation there, we partnered with schools and libraries, where we trained groups of students to be the ones who will train their community, and that was wonderful. They got a certificate; they were acknowledged. For the student, it was wonderful; they learned leadership; they had to stand in a room full of adults and teach them; they learned patience because adults learn differently.

And second, more importantly in this community, they realized they had something to give; they had knowledge that they could give and impart to their communities, especially when they are usually at the bottom receiving the free backpack, the free this, the free that because of the situation they live in. So that was extremely important.

And to tell you, in Santa Cruz, in Salinas, and in Napa, that is still continuing because as the kids graduate from high school, they train the next group. You do need a core of two or three adults who are going to see this as a wonderful thing, so I think that was a wonderful practice that we had carried on.

And finally, I think -- well, not finally, but another thing I want to say is that it's important to -- what we did also was we saw our role as helping people become knowledgeable

consumers. If you call Comcast, they're going to sell you -- any company; they're going to try to sell you everything, including stuff what you don't need. So that knowledge, that education that we gave at the classes that we gave included how do you deal in the world that they are beginning to understand; they just learned how to turn on a computer. I still struggle with somebody telling me what I need and what programs I need.

So that was, we thought, a valuable thing that we left behind.

KAREN ARCHER PERRY: I'm going to pass to Diana. So they were supposed to be covering access and you've got skills, but as you can see, they both started with skills, which tells you something about their disposition.

DIANA RODRIGUEZ: I'm not sure that I can cover access.

KAREN ARCHER PERRY: Okay, so go for skills.

DIANA RODRIGUEZ: Okay. So I think that one of the things that I want to start out with is that we have been -- I'm sure that everyone here in the audience, if you have worked in grants and in that space, you've started to see the same trend where there's been a lot coming out of the White House in terms of initiatives that are around breaking down silos. So Promise Neighborhood Initiative, the Promise Zone, this Broadband Opportunities Council, where they're bringing together a whole bunch of different types of organizations that are not just in the technology realm, but just across the board, to work together and start weaving together programming.

So what does that mean for those of us in the digital inclusion space? I think that for skills building, it means that we also have to look at things a little differently; it means that we have to look at technology not just for technology's sake, but also look at it in ways that we can weave our programming into different things that are happening across the community, and for

YPI, that means that, for us, we provide wraparound services for families, and so within our organization, we're really able to build technology and skill building into things like financial planning for savings accounts and for students who are applying to colleges, and building workforce development skills, and all of those different types of things.

For other organizations that don't have that breadth of variety of programming, it could mean that you turn yourself into a service organization for other non-profits that also want to weave your types of skills and skill building into the programming that they're doing.

And so I think that in terms of skill building, what we need to do is we need to kind of push a little further and push a little outside of what we have been doing and consider what types of practical applicability we can teach in our digital literacy classes, and kind of take our show on the road, as you'd say.

KAREN ARCHER PERRY: Diana is definitely our transition speaker because the last question is a question about a policy wish, or what kinds of policies will help us in the future, and they're all going to give you a short answer on that, but before they do that, we wanted to check to see if there's any questions from the audience.

Yes, you're still there. I see you. Yes, Michael; do you want a microphone?

MICHAEL CALABRESE: Yeah, Michael Calabrese, Open Technology Institute in New America. I just wanted to ask Israel, at the very beginning, you mentioned the school buses, putting Wi-Fi routers in schools buses, which is -- I love this; it's brilliant, too -- then you said you parked them around the community where after hours, they might serve as internet access for the students, and we talked a little bit yesterday at the Anchor Net's conference here on schools, you know, schools and libraries, and we talked a little bit about that with respect to the TB white space, the unlicensed TB spectrum that, in some cases, you know, and Don Means [ph]

works with libraries to do this, where they'll use that spectrum to take their connectivity, such as if they have a gigabit at the library, but they can use that long-distance spectrum to, let's say for example, light up a -- bring bandwidth to a bookmobile that goes around the community. But you said you used Verizon Wireless as a connectivity, so I was just wondering, do they waive their bandwidth caps for your school because, I mean, I would think if you just left a Verizon Wireless internet connection open all night in a bunch of places in the community, you'd be running up thousands and thousands of dollars in charges compared to, say, using TB white space, which is unlicensed spectrum and is really sharing your wire line connection out into the community, to the students and so on.

ISRAEL OLIVEROS: With our partnership with Verizon, they do waive the data caps that they typically have in place, so all our [Indiscernible] are filtered through our filtering system, so all the traffic reroutes back to us, so they're compliant 24/7; they can't access inappropriate material. So data caps are waived, like I said, and we noticed as soon as we started finishing up with the placement and retrofitting these buses with the routers, I mean, data consumption went from 100 gigs to four terabytes, and this is within three weeks.

KAREN ARCHER PERRY: Whoa, how many buses? A hundred gigs to four terabytes.

ISRAEL OLIVEROS: We're talking about -- once the project was complete, we're talking about a hundred buses.

So I mean, the feedback that we received from bus drivers alone, I mean, when it comes to students misbehaving and misconduct on the bus, that went down drastically. So students are engaged, I mean, they could be streaming online; it could be YouTube; it could be something else, but for those students that do need that internet connection to do homework and work online before they get home, it gives them that capability.

We do have families that don't have any internet connection, like I said, so that is their only connection. Our students that travel on these buses, the largest route is two hours, so that gives them two hours of connectivity to be able to do the work that they need.

[APPLAUSE.]

MICHAEL CALABRESE: You've really come up with something that I think could be the mobile counterpart of what Comcast does with essentials, for example.

KAREN ARCHER PERRY: Yeah, and it sounds like if anybody wants to try this in your community and you can't get that same deal from Verizon, that Michael will help you design a TB white space implementation of the same thing.

MICHAEL CALABRESE: That's true, but I also think [Indiscernible] --

KAREN ARCHER PERRY: That's true, too; he said that. I just want to amplify that.

FEMALE SPEAKER: A less tech-related question more pertinent to community. You gave a lot of examples that were related to education today, and I'm just wondering, are any of you working in that digital literacy and workforce development space, especially where it's concerning youth?

KAREN ARCHER PERRY: Oh, Barrie, start that one.

BARRIE HATHAWAY: Yeah, did you have a specific question around that? We are in both of those spaces.

FEMALE SPEAKER: Just what programs, what initiatives are you doing, especially those that might speak to something innovative?

BARRIE HATHAWAY: Yeah, so first of all, our workforce development side starts with profound digital literacy and then moves through a series of entry-level technical certifications that leads somebody into a professional career in the technology field.

So I could say more about that, but our website is stridecenter.org; you can see what we offer there, but digital literacy is the basics, and if you don't already have that, we have to train that, and our version, as I say, is profound digital literacy; they come out as mid-level users around Microsoft Suite and what we call working on living online, and of course, some basic hardware understanding.

And I think that this idea of education needs to expand as well to the idea of the more sophisticated user who understands what a data cap is and understands how much data it requires to do the different things that you might want to do, and can have an intelligent conversation with a carrier, for instance, or a product that they might want to buy.

We really need to think about digital literacy as going beyond how to use technology to what it is, and how to protect ourselves around it and be smart about acquiring it.

KAREN ARCHER PERRY: Were there other questions?

MALE SPEAKER: I just had a question in regards to the Google rollout of this fiber to the home. Is there a part of your strategy that's going to target low income or underserved communities?

ERICA SWANSON: Yes, absolutely. And so what you'll see from the work we've begun so far in Kansas City and in parts of Utah and in Austin, is that we're working to make the internet more affordable, and so that means in public housing and affordable housing, working with those housing providers to offer internet that is free to residents. Let's remove that affordability barrier for those residents, and then let's layer on all the other programs and supports that are required to then help make meaningful adoption out of that investment.

So absolutely. We also are very, very aware that the work that we do, because it's so local, we're building a network so we are on people's streets, in their right of way; if they sign

up to be a customer, we're digging through their yard, coming to the back of their house or in their apartment unit, and that requires us to have a pretty sharp sense of responsibility for what it means to be invited into somebody's yard, into somebody's house.

And that also means that we need to have teams that are representative of the community. They are local; they need to know their way around the community; they need to look like the community, so diversity in hiring is key to us building a successful local business.

And then really understanding the very nuance opportunities that we have neighborhood by neighborhood, so going out, not just dropping the mail in the door hangers, but going out and doing -- being at community festivals and having taco trucks and popsicle parties. But just being really present and really, really ready to engage with the community.

KAREN ARCHER PERRY: Did you want to mention the digital inclusion cellos, or digital inclusion leadership awards?

ERICA SWANSON: Yeah, we have so many things that start with digital inclusion, and a digital inclusion fund.

We do; we have a fellowship program in partnership with N10 [ph], and the thesis there is that we can invest in organizations by building their capacity. So taking a competitive application process, finding people who want to build these programs, supporting them, training them up, creating a cohort of shared experiences, placing them in host organizations in their community so they can deliver really scaled training.

We also know it's important to invest financially, and so have launched digital inclusion funds that are competitive grant programs for organizations that work to do this.

KAREN ARCHER PERRY: There's only one person on this panel that is specifically working for a policy organization, and that would be Diana, but from a practical perspective, and

looking at the work that these folks have done and their experience, they really all have some policy perspectives.

So we're going to close on policy, and we're going to close looking forward, and there's been some policy shifts when you look at the whole digital inclusion landscape.

One is really a lot of the President's conversation and messaging that was reiterated by David Edelman [ph] earlier today, that the internet is -- broadband is essential for people, and when I was talking to Amina [ph] at the Benton Foundation the other day, she said, you know, there's a couple of changes. When you realize that the internet is essential, that means everyone needs it. And she also said that with the changes in the lifeline program, we now have the first permanent federal program that invests in broadband for low income households.

And those are both really big policy steps, necessary, but not sufficient, so I'm going to ask each of our panelists to look to the future, and you can popcorn this one if you want -- based on kind of who feels most ready to go -- with some policy goals that you'd like to see in order to promote digital inclusion and digital equity in America.

So what are your policy ideas, and you can start anywhere, but remember, we're in that one-minute wrap-up round.

BARRIE HATHAWAY: I'll just say that I think the most important thing we can be thinking about right now is lifeline broadband; that conversation is going on at the FCC right now; we all need to support this; if you want to get more information, go to CETF's website, which is cetfund.org, and help us get that right, and help us get that passed.

DIANA RODRIGUEZ: I would say, I mean, I spoke just a second ago about kind of breaking down the silos and going into different types of programming, and including technology into it, and so those of us who have been in this space have been kind of doing that

ourselves, and trying to find those places to fit ourselves in, but I would say from a policy perspective and from a grant program creation perspective, to really have some goals and expectations and weave those into each of the grant programs that are out there. It's been harder and harder to find digital literacy funding out there, and this might be a great way for us to both still provide the digital literacy skills, but also within the context of other grant programs that are out there.

KAREN ARCHER PERRY: Participate in getting lifeline right and build digital literacy into other programs.

ALICIA OROZCO: And I would say infrastructure accessibility. We can be educated, we can have a computer, but if you move in an area where there's no accessibility, it's useless. So the government needs to really take this on, whatever it is it's going to take.

ERICA SWANSON: And policymakers, there's a lot policymakers can do to increase competition, and also to directly invest in what I would call collaborations, so competition and collaboration can go hand in hand. Competition is important because we see that when there are many providers, we see faster internet speeds; we see lower prices. That's good for consumers everywhere, especially for those who are most price-sensitive.

We also know collaboration is important, and we're seeing some really cool practices emerge, cities directly investing in digital literacy work, in device refurbishment work, and that leadership is important because policymakers have a bullhorn and should be talking about why the internet is important; they should be driving policies like one-touch, make-ready, and access to conduit, and permitting processes that enable and inspire competition. They should also be leading with their investments and directly invest in some of this work that happens in their community.

ISRAEL OLIVEROS: From an educational space, we believe that state and federal funding needs to start adopting twenty-first century models. We need to be able to sustain initiatives that are driven by citizens adopting -- right now, like I mentioned, we are fortunate enough to have a bond that allowed us to furnish our networks with 10 gigabit capabilities, but we need E-rate and federal funding to catch up in order for us to be able to sustain this.

KAREN ARCHER PERRY: And I want to add one more as well; it's one that Erica and I talked about this morning and other people have mentioned, and that is, I think of it as E-government tithing, and that is for governments of any level. When you put services online and hopefully improve services and improve access and hopefully save money, tithe some of that money and institutionally invest it in digital inclusion programs in your city, in your state, and at the federal level, such that we have more institutional funding to make sure that we have access inclusion and support for people in our community.

So I'll add that to the policy wish list, and I'd like to ask you to help me thank the panel for their good work.

[END OF RECORDING]