

NWX-DOC-NTIA-OTIA

Moderators: Emy Tseng and Karen Perry
June 17, 2020
1:00 p.m. CT

Coordinator: Welcome and thank you for standing by. I'd like to announce that this call is now being recorded. If you have any objections please disconnect at this time. And I'd like to hand the call over to Emy Tseng. Thank you. You may begin.

Emy Tseng: Hello everyone and thank you for joining us today for BroadbandUSA's monthly webinar. I am Emy Tseng. I'm a Senior Program Specialist with NTIA's BroadbandUSA program. And I'm co-moderating this session with my colleague, Karen Perry, who is a Senior Policy Analyst. Today's webinar focuses on utilizing federal data to measure the digital divide.

This session will provide an overview of how federal data can help state and local government leaders and other stakeholders, better understand the digital divide in their communities, and what drives broadband adoption and utilization. Our presenters today are Rafi Goldberg, Telecommunications Policy Analyst with the Office of Policy Analysis and Development at NTIA; and Tyson Weister, Survey Statistician, Dissemination Outreach Branch in the Center for Enterprise Dissemination in the US Census Bureau. Next slide.

Karen Perry: Before we begin, I would like to review the logistics for today's webinar. First, we will open up the webinar for questions after the completion of all of the presentations. As you hear from each presenter please use the question box to the right hand side of your screen, to submit your questions or your comments. Second, the presentation along with a transcript, and an audio recording of today's session, will be available on the BroadbandUSA website within 7 days of this webinar under the Events/Past Events tab.

Finally, visit our BroadbandUSA website for information about our technical assistance program, including useful guides, products, and publications that can assist you with planning, funding, and implementing your broadband project. The newest additions to our website are our recently updated broadband funding guide and our one stop permitting section. You will also find archives of all of the previous webinars and newsletters, which contain a wealth of great information. Next slide.

Our first speaker is Rafi Goldberg. Rafi has spent nearly a decade as a policy analyst at NTIA's Office of Policy Analysis and Development. While he has worked in a wide range of issues in the Internet policy space, from intellectual property to lifeline reform and even cell phone unlocking, one of Rafi's favorite and longest-running projects has been working to inform digital inclusion policy through NTIA's Internet use surveys.

Rafi oversees every stage of the program, including survey development, data analysis, and reporting on NTIA's latest findings. Prior to starting an Internet policy, Rafi worked in the Office of the Governor of Massachusetts and he earned a Masters of Public Policy degree at Georgetown University and a BA at Tuft University. I'd like to turn it over to Rafi.

Rafi Goldberg: Thank you very much, Karen, for the warm introduction and for it to be a part

of this discussion. One of the amazing things about working on the Internet policy and digital inclusion in particular, that we have a range of valuable data sources at our fingertips. The one that I'm going to focus on today is NTIA's Internet Use Survey which we have been fielding periodically for over 25 years now. It is especially good timing for us to talk about this survey today because we actually just started releasing results from our most recent data collection last week. Next slide, please.

So it's important to know at the outset that when we talk about federal broadband data we could actually be referring to any of several different data collections. First, there is NTIA's Internet Use Survey which provides a wealth of information about how Americans use or don't use computers and the Internet. This is the one that I'm going to be talking about for the rest of my presentation. Separately, in 2013, Census became adding a few questions about Internet use to the American Community Survey, which is a different data collection that Tyson is going to discuss a little bit later.

Another major data source is the FCC's Form 477 data collection. This one is pretty different from the other two because the FCC collects data from Internet service providers rather than from the households. And finally, other parts of the government, commission various data collections that will sometimes include questions relevant to broadband. For example, the Department of Education asks schools about Internet use in the classroom.

Most recently, there are a few questions on the Census Bureau's Household Pulse Survey, about home Internet use for educational purposes during the COVID-19 pandemic. Next slide, please. So what exactly is the NTIA Internet Use Survey? Well, since 1994 NTIA has regularly contracted with the Census Bureau to ask Americans a range of questions about their computer and Internet use. Our survey is actually fielded as a supplement to the current

population survey, which primarily serves as the source of some of our nation's official labor force statistics, including the unemployment rate that you hear about on the news every month.

Each month Census interviews over 50,000 households around the country. The sample is constructed to yield good estimates not only at the national level, but also for every state as well as the District of Columbia. From NTIA's perspective, one of the most exciting things about the CPS, is the opportunity for other federal agencies to sponsor supplemental questions that get asked during that particular month. That's how NTIA's Internet Use Surveys work and the other agencies that also take advantage of this opportunity to ask questions about a range of topics ranging from school enrollment to food security, banking, and even voting. Next slide, please.

So as you can see, the CPS has been a source of computer and Internet use data for a long time. It actually even goes back another decade before NTIA started sponsoring its own supplements back in 1984, '89 and '93 there were a few computer ownership questions in the annual school enrollment supplement, which is sponsored by the Department of Education. Since 1994 NTIA has partnered with the Census Bureau on 15 different additions to our survey, the most recent of which was filled in this past November.

This has given us a great opportunity to track changes in the how Americans utilize their computers and the Internet over more than two decades now. Next slide, please. So what kind of data do we get from these surveys? I pulled a few basic examples here that include our latest data. Here you can see Internet use over the last few decades broken out by race or ethnicity.

We have relatively good news here. While African Americans and Hispanics were still significantly less likely than Whites or Asian Americans to use the

Internet in 2019, the gap has narrowed somewhat over time. Still, there is clearly more work to do and the latest data point for Asian Americans is a little bit worrying. Over the last two decades, Internet use among Asian Americans has usually been pretty close to the estimate for Whites/Non-Hispanics. That appeared to change somewhat in 2019, but we'll really need more data to know for sure whether this is a trend or just a statistical blip. Next slide, please.

This next illustration shows the proportion of Internet users who say that they went online to work remotely and of course, it's broken out by state. Thanks to the large sample size and the state-based design of the CPS, we were able to get estimates for every state and DC. And perhaps the most interesting thing here, that dark blue dot representing Washington, DC, remote work is very popular here and it clearly shows up in the data. I do want to note of course that this is all pre-pandemic data. It was collected back in November.

It's possible that if we were to repeat the survey again right now, we would get larger numbers of teleworkers across the country. Next slide, please. One - the last example I wanted to show is about the values to Internet adoption. Starting in 2001 we began asking those households that are not online at home, about their main reasons for non-use. We don't list out any particular answer choices. Our role is to collect whatever responses that come to mind and then the experts at the Census Bureau will categorize them after the fact.

As you can see, a few different answers have consistently been the most common. The largest group of offline households said they either don't need or are not interested in home Internet service. And the second largest says that Internet service is too expensive or that they can't afford it. There was initially a third pretty common response that the household lacked a working computer. But that answer has faded over the past decade, seemingly with the

rise of smartphones.

What is interesting about these different groups of known users is that they have some characteristics in common as well as some differences. For example, while they didn't cite expenses for non-use, offline households citing lack of interest also had significantly lower family incomes than their Internet using counterparts, suggesting that even though they didn't cite expense, that may still be an issue for them.

On the other hand, households in the too expensive category, were much more likely to have school-aged children at home and to report their previous Internet use than those in the lack of interest group. Those in the too expensive group were also more likely to be non-White or Hispanic than their counterparts in either the lack of interest or the online at home groups. So while it's important not to read too much into the answers given to this question, the data do suggest some differences that may demand multiple strategies for closing the digital divide. Next slide, please.

The things we can learn from NTIA's surveys don't stop at basic Internet use statistics. We asked over 50 questions in our surveys, including about what devices and the technologies people use, where they go online and what the activities Internet users do online. And just as importantly, we also ask what the challenges Americans experience that prevent them from taking full advantage of the Internet.

In addition to the reasons for non-use question, we asked offline households whether they would purchase home Internet service if it were offered at a lower price. And we asked online households how privacy or security concerns may affect their activities on the Internet. Next slide, please. So where do we learn more? The data central section of the NTIA's website is the

place to go for everything related to our Internet Use Surveys. I encourage everyone to check it out at NTIA.gov/Data.

But right now I would like to do a quick demo for you all and we'll see if we can get the demo set up here.

Chris Holt: Rafi, you now have control.

Rafi Goldberg: Okay. Fantastic. And hopefully, you now all see the data central Web page. Is that right?

Chris Holt: Yes.

Rafi Goldberg: Okay. Excellent. So as you'll see, Data Central is divided into three main sections. The first one is our blog and this is where you can go to learn about our latest research that we do internally using our data here at NTIA. And you'll see right at the top there is - it's a blog post that we released just last week but you can scroll down and see everything that we have written about over the last few years.

If I go back and for a moment, skip over the middle category, on the right you'll see the Research Center. And this is the place where researchers could go if they want to use our raw data sets in their own studies. You can download all of the raw data sets since 1994 here. We're going to have 2019 up later this summer, as well as get the sample code if you happen to use the data package as well as complete technical documentation.

But I saved the best for last. The middle option at data central is our Data Explorer Visualization tool. And our goal with creating Data Explorer is to sort of create a sort of middle category for those people who want to do their

own analysis and it seems to be telling me that - all right, hold on one second here. Okay. I think we should be back to normal.

You know, so this is for folks who want to be able to dive into the data on their own, but don't necessarily, you know, want to get started using the raw data sets. And when you first open up Data Explorer you will see this very nice looking map of Internet use broken out by state. And then if you scroll down even further, you will see the - a table with the estimates behind the map. But this is not a static map. As you can see, for example, you can click on any year to get the map to look the way it was during that data collection.

And if you hit the play button here it will actually cycle through the way that the country has changed over time. So that's really cool. But we also don't start - we also don't stop at basic Internet use. If you go to do this dropdown menu at the top here, we have a whole range of different metrics that you can track using the Data Explorer tool. For example, if we clicked on wearable device use which we only just started tracking back in 2015, you can see how quickly that has changed across the country over the last four years or so.

You know, state by state maps are great, but you can click over here to switch from map mode to chart mode. And you will instantly see a line chart of how wearable use has changed over time. And we can change the metric here, for example, to, you know, let's look at, you know, Internet users searching for a job online. And that's really interesting on its own, but actually more interesting if we go to this other dropdown menu, is if we break it out by various demographics, let's look at it broken out by employment status.

And when you do that you get more of the real story which is that unemployed Internet users are very, very likely to turn to the Internet to look for a job, which, you know, is perhaps intuitive but also very interesting. We

can also, for example, let's see, look at taking classes or doing job training online. And this is most important for those who are employed, but if you instead break it down by age group, you'll see that younger Internet users were more likely to say that they did this.

So, you know, there are a lot of different stories that you can tell using the Data Explorer tool. We have all of these different breakouts. You can easily switch between a chart mode and map mode and back again. And you can also download, if you go to the bottom here, the spreadsheet that powers Data Explorer. Data Explorer just, you know, pulls from a massive spreadsheet of, you know, pre-computed numbers. And you can easily download that if you wish or, you know, use the tables to get more information.

And so there's a lot to explore here and we highly recommend that you, you know, see for yourself and take a look. So I'm going to go back to the slides now. The demo is done. And Chris, hopefully, you have control again.

Chris Holt: I do.

Rafi Goldberg: Okay. Excellent. Well, so that's Data Central at NTIA.gov/Data. If you are interested in hearing the latest from us we have a very low volume mailing list you can sign up for, that is linked from the main Data Central page and also available on this slide. And with that, I'm going to turn it back over for the introduction of our next presentation. Thank you.

Emy Tseng: Thank you, Rafi. As a reminder, we will have time to answer questions at the end of this session, at the end of the presentation. And a number of you have found the question box, but please use the question box on the right hand side of your screen, to submit questions or comments at any time. And I've already been directing some of the questions over to Rafi. So, next slide.

Our next speaker, Tyson Weister, is a Survey Statistician in the US Census Bureau's Center for Enterprise Dissemination, where he engages users in the future of accessing census data and provides training on Data.Census.gov. He has specialized experience in helping data users access statistics from the American Community Survey using a variety of tools. Tyson holds a Bachelor's Degree in Economics and Public Affairs along with a Master's Degree in Communication. And we're pleased to welcome Tyson.

Tyson Weister: Great, thank you. And thank you all, so much, for tuning into the webinar today. We're going to talk about how to access the American Community Survey computer and Internet statistics that were mentioned earlier. Not only are some of these data new in terms of your ability to get it for small geographic areas, but we also at the Census Bureau, have a brand new site for you to access it. It's on Data.Census.gov. Next slide, please.

But before we get into the accessing portion, I just want to make sure that everyone is familiar with the American Community Survey and the rich data that you can get from it. The American Community Survey is the nation's most current reliable and accessible data source. We are the largest household-based survey in the United States. We have 3-1/2 million addresses in our sample size and because we're such a large scale, that has a unique ability for us to produce critical information for small geographic areas in population groups.

On our survey we ask about computer ownership and Internet subscription. We'll talk more about that in just a moment. Next slide, please. We mentioned the benefit of the American Community Survey is to get information for small geographic areas. You can get data down to the neighborhood level at the Census tract and block group level. Even if you're not familiar with what

those areas represent, we'll show you how you can visually look at that on a map.

Notice on this slide here we listed out some of the more common geographic areas that we provide American Community Survey data for, from the United States down to your states, counties, places and zip code tabulation areas, along with many others that are listed and other geographies as well, that are not included on this slide. Next slide, please.

With the American Community Survey we rolled this out in 2005. We collect data on an ongoing basis and release fresh estimates for you every year. The most recent data is based on the 2014-2018 American Community Survey five-year estimates. That's the most recent data that will give you results down to the census tract level. We cover many different topics, but what we're most excited about for the webinar is having that new five-year data set for computer and Internet use.

We began asking about computer and Internet use in 2013, so the very first release of that data was with the 2017 ACS five-year estimates. We've refreshed that data last December and we'll continue to refresh that information on an annual basis moving forward. Next slide. There are 11 billion statistics that we're pushing out from the American Community Survey alone. And you have a variety of options in the way that you want to access these data. Today I'm going to show you a live demonstration on using [Data.Census.gov](https://data.census.gov).

Please be aware, there are other access points. If you're a developer, this information is available through our application programming interface as well as the file transfer protocol site, if you'd like to download the data in bulk. And you can access it through an easy, quick to use, interface on Quick

Facts. My two favorite tables that we'll look at today, are the subject tables at F2801 and F2802. Next slide, please.

But before we pull up those tables I just want to give you a brief look at how we collect the data - everything from the American Community Survey is based on self-response. And we do have very high response rates, just over 90% for the American Community Survey. On that question there, question number 10, we ask whether the house has access to the Internet by paying a cell phone company or Internet service provider; if they have access without paying a company or Internet service provider; or if they have no access at all.

And then moving on, we get into more detail on the way that they're able to access the Internet with yes/no questions, whether they can access the data through their cellular data plan, broadband, satellite, dialup, or some other mode of connection. Please note here that a single household can have more than one connection type. Moving onto the next slide, we'll take a look at the data on the United States level. Here I'm showing the ACS five-year estimates only because we're going to show this data to smaller geographies, and just want to compare apples to apples.

You can see just at a very high level, 80.9% of households do have a subscription to the Internet with 19.1% of households without a subscription. And you can view some of the breakouts in the middle. Next slide. The other question that we have on computer ownership is the type of devices that anyone in the household has broken out by desktop/laptop, smartphone, or tablet, as well as some other computer devices with yes/no checkboxes and of course, the household being able to select more than one type of device. Next slide.

I have a look at the United States. You can see 87.8% of households have one

or more computing devices compared to 11.2% of households with no computer and the breakouts (unintelligible). Next slide. So before I show you how you can access the data, I just want to give you a little bit of context. If you're tuning in for the first time, Data.Census.gov, the demo will be new and fresh. However, some of you may have been accessing the data from our previous platform, American FactFinder (unintelligible) we've been disseminating our data with for the past 20 years.

However, we're moving to a new vision that's more centralized where everything is one place. And it's all based on the API. All that means is in order for you to see data on our site, Data.Census.gov, it's also on our public API. And we've made this model based on user feedback to streamline our processes. Next slide. And then today we're going to focus on data from the 2018 release of the American Community Survey.

Do know that we have data all the way back to 2010 where the topic is applicable. And then we also have data from other surveys and programs, selected tables from the 2000 and 2010 Census, as well as data from the economic surveys and programs listed here from 2012 forward. With that, we'll go ahead and start transitioning over to the live demonstration. And as we're just waiting for that screen share to transition over here, I just want to give you all a heads up. One is that we do recommend using Google Chrome when you're on Data.Census.gov.

Here I have the main page pulled up. You all are more than welcome to pull it up and follow along or if you just want to watch, we do have some step by step slides that cover the core of what I'm going to show today. So on the splash page there's lots of functionality at the site and ways you can go about searching. I'm just going to show you one way and that's through the advanced search. The reason that I like the advanced search so much is because it allows

me to precisely select what I'm looking for and I can also browse the options that are available to me and a set of filters.

So when I go to the page I just want to show you how you can access the data that we showed at the national level for smaller geographic areas. And for today's demonstration, we're going to focus on Mobile County. So on the Advanced Search page, I want to see the percent of households with no Internet subscription in Mobile County. I can select whatever I think is most important to my search first.

Usually, it's going to be your geography, so we'll click geography. Then I choose the geographic level I'm interested in, which is county; it prompts me to select the state, so I choose Alabama. And then from here, I scroll to Mobile County, Alabama. Once you check the box you want to make sure at the bottom of your screen that it shows as a selected filter and that's how you know you successfully added it to your search.

Next, we'll go ahead and select the topic for what we're interested in, clicking under topic; housing; and then under physical characteristics, you'll see a checkbox for telephone, computer, and Internet access. Again, on this screen, a checkbox is a final selection and words and phrases without checkboxes tell you they're going to have more detailed options presented on the right-hand side once you click on it.

So here I selected my geography and my topic. Now that we're ready to run the search I'll click Search in the lower right. This takes you to our All Results page. Generally I like to go right into the data so I click Tables in the upper left. And here I can see there are 31 different table results from the American Community Survey for this geography. I can scroll between on the left-hand side and click on the different tables to load them on the screen here. But what

I actually want to show is the very first table result F2801 and then we can choose Customize Table in the upper right.

At the very top of the screen you have a product drop-down menu to where you can swap back and forth between the ACS 1 inside your estimate. So one year estimates are available for geographies that have 65,000 people or more. We're going to look at more detail geography in just a moment. So I'm going to print it on the five year estimate just so we get the same comparison across the board.

And here we have our table. So I have the geography selection at the top data for the total number of households and a column for the percent of household. So in this particular table I can look at folks that have Internet have computers. That's the first section. And then as I scroll down I'll see the type of Internet subscription. These were the data that we were looking at at the previous slide except that the national level we were able to look at a smaller geography. We can see for Mobile County, Alabama based on the 2014 to 2018 ACS five year estimate about 42,196 households did not have an Internet subscription or about 27.1% of those households. With that information know that there are lots of different ways of slicing and dicing up the characteristics of folks who do have access to the Internet versus folks that don't and same for computer ownership.

In this particular table you can look at income broken out by that information. Most folks kind of just want that high-level information so going to the line for without an Internet subscription or under the computer section you may be interested in one of our more popular data points for no computer. With that we're going to go ahead and transition to show you we know that the 27.1% of folks don't have Internet subscription in the county overall but how can you look at that across the neighborhood level? Here I'm going to click on the US

Census logo in the upper left. That's going to clear everything out and start me fresh and just going to show you how you can select the census tracks in the county and knock that out visually. So we'll click on Advanced Search once again.

Here I already went through the steps to find the table that I'm interested in. And I know the table ID is S2801. So once you found your favorite IDs jot them down, and you can search very directly by typing them in that first text box under the advanced search heading. Then all we have to do is select our geography. So in this case I'll choose track, fill out the prompt. We'll be selecting all of the tracks in Mobile County so I'll choose Alabama first. Then I will select Mobile County, Alabama. I can choose individual census tracks or the checkbox up at the top which I'll click to select all census tracks within Mobile County.

We'll click search in the lower right and tables once again in the upper left. Here I have the one result for the table ID I specified. This is the same data that we looked at before except when I scroll across the table I get this for all of the neighborhoods in Mobile County, Alabama. It's good to have the information in a table but easier to digest in that format.

So I'm going to click on Maps in the upper left. By default it's going to take me into the selection map so the first thing I want to do is start zooming out of the middle of the map in Kansas and zoom into my selected area here in Mobile County. We can see the county and the different census tracks. And then all you have to do is first click on the table on the left that has the data you want to map out. By default the system is mapping out the very first estimate that you see in the table but we can easily change that by clicking the Data Variable drop-down menu here in the top of your screen.

I'm actually going to click customize map into on the left-hand side just because it's easier to see the options that are available. And what I like to do is continuously scroll to the bottom. Once my scroll stops jumping I know I've loaded all of the available options that I can choose to map out. And then I go to the top and carefully read the label. We have one set of labels for the total number of households and the other set of labels for the percent. So just like the table had a column for total and a column for percent your data variable drop-down will be laid out similarly.

We want to map out percent without Internet subscription. So I will go through till I see the type of Internet description section just like there was that section in the table and then read the label. So what I want is percent, type of Internet subscription without an Internet subscription estimate. And here we've mapped that out.

So what you can see when you zoom in the census track in the darkest shade of blue has the highest percentage of households without a subscription to the Internet. And you can click on the individual tracks to see the underlying data. So in census tract 48 we see 72.7% of households do not have a subscription to the Internet. If I'm not really familiar with what that census tract means no worries there. You can zoom in on the map and see the boundary laid out here for you as well as the street label so you can get a sense as to the neighborhood that have the greatest need for services.

On the left just want to point out one additional feature. When you click customize map your left-hand navigation will have this option that says View Table. And this lets you look at that single estimate that is mapped out from that table, the percent of households without an Internet subscription. And you can click on the column header to sort that data variable in ascending or descending order. Just another way to help you digest this information a little

bit more easily than the Default Table view.

That a wrap up what I wanted to show you here on the live demonstration so we'll get transition back over to the PowerPoint slides here. Just a couple of things to wrap up. We want to make sure we have time for your questions. What we were able to show today is of course a very condensed demonstration. There are a lot more data on the site that you may be interested in as well as functionality. If you'd like to learn more about data.census.gov please visit the link in the upper left. It's the one stop shop for educational resources. We have full-length webinars, short videos as well as your FAQs and step-by-step PDF flyers.

Next slide. And then what we show today is the official way to access data but we're only continued to make the site better and it's all based on user feedback. So please let us know how we can make accessing census data easier for you by emailing us at fedsi.evac@census.gov.

Next slide. And we did just want to point out certainly not the subject matter expert for the Household Pulse Survey but I know there's a lot of interest in having recent data. So we wanted to highlight that. We do have a data set from the Census Bureau that we began collecting on a weekly basis. You can access the data beginning from the week of April 23. And there is a section on that Household Pulse Survey for computer and Internet use for educational purposes. So if you visit the link at the bottom just wanted to point out that you may be interested in exploring some of these tables to get very recent data.

Next slide. And then we just wanted to provide contact information for you to stay in touch with us. So with that we'll go ahead and start transitioning us back over to our folks at NTIA.

Karen Perry: Thank you very much Tyson. I wanted to just highlight a little bit about - you can hear me right?

Chris Holt: Yes.

Karen Perry: Okay next slide. I wanted to highlight – talk a little bit about different ways to use this data. These are really rich data sets and I wanted to just remind you that both Rafi and Tyson spoke about consumer data sets. So lots of times when people talk about broadband data they talk about the FCC Form 477 data which is an availability data set that's based on ISP provided data. These data sets are based on consumer feedback about how people use the Internet and what people say they subscribe to. It's really complementary data because people usually know what they're doing with the Internet and what they subscribe to. So we think this is also very, very useful data.

And you can use it not just for looking at digital divide but you can also use it at looking at business planning and broadband planning and long term planning. And you could look at it in a lot of different ways. So one way to use it is looking at household numbers but another way to look at it is in looking at individual numbers. So the Mobile County numbers that Tyson just looked at he looked at who has the Internet and who doesn't have the Internet. And he showed you a map very similar to this one.

Next slide. You can go to Quick Facts. We do do the fill in on this one. And he indicated the 27% of the household don't have the Internet. But from Quick Facts you can also identify that there is 2.6 people per household in Mobile County. Some of the surrounding counties in Mobile are very rural counties but Mobile's a pretty big county. It has a population of more than 400,000 people. So even though 27%, you know, is kind of the same in every county

when you multiply that 2.6% out you end up with 100,000 people. So that's 100,000 people in Mobile County who don't have access to the Internet.

You can really pick whichever number you want is 27% it's, you know, 42,000 households it's 100,000 people and all those things are the same it really depends on what kind of story you want to tell. And Emy is going to talk a little bit more about why the stories are important or how you can use that data in building a case for change in your community.

Emy Tseng: Hello. I'll go through this quickly because there are a lot of questions. So my colleagues have shown you how you can access and use federal data to identify communities in need and that are suffering particularly from digital divide. And you really can use this information in your entire planning process as you assemble your team, as you decide round engaging stakeholders and which stakeholders to engage and you inform government officials as you work with these stakeholders to further identify community goals and also the barriers as you've seen.

And also it's really important to that look at the current resources in the programs that address the digital divide in your community. And again you have information about certain demographics and communities that you want to work with so you can identify who already works with them because we find that is a real best practice. And then you can decide what further programs and projects you want to undertake whether it's broadband deployment, digital skills training, device lending or subsidies or outreach around broadband discount programs. But I really want to emphasize the importance of informing that - those decisions with data and also with the stakeholder engagement.

I see a lot of communities go directly to action without doing these steps. So

therefore I recommend that you check out the BroadbandUSA Community Broadband Planning Toolkit. And the link is there. And there are other publications which go into more detail about the steps and our TA team of which I am a part is also available to help.

Next slide. Okay so we will now begin the Q&A part of the webinar. And again there are a lot of questions so our apologies if we don't get to all of them but, you know, feel free to add more questions. And we will try to get through as many as we can. Okay, Karen actually do you want to start?

Karen Perry: Yes we've got a lot of questions about diversity. And there is two different flavors that we've gotten. One a number of people have indicated that communities across the country are very concerned in particular about racial inequity. And they've asked both of our speakers what does your data tell us about inequity in general and about inequity in our communities? And maybe Rafi you can give us kind of a general look at that and Tyson maybe you could tell us about how we can understand that in more detail in our communities.

Rafi Goldberg: Absolutely, that is a fantastic question. You know, the challenge of systemic racism is unfortunately everywhere in the society and Internet use is no exception. As we saw earlier there is a long-running digital divide based on race and other factors. And while these differences are linked in part to disparities in income education and other factors those factors alone don't seem to explain the entirety of the gap.

And given the importance of the Internet today to getting a job, doing homework, et cetera, it is easy to see how not being online can magnify those other systemic problems. And with the rise of so many different kinds of devices and the range of different skills people need to make effective use of

the Internet simply having some means of using the Internet, you know, the binary yes or no question do you use the Internet is, you know, really no longer enough in many cases.

Even as a digital divide for basic Internet has narrowed we're seeing racial and other disparities and the use of different kinds of devices as well as participation of various online activities. So I think the takeaway from our data set is twofold. The Internet offers unprecedented opportunities for, you know, commerce, communication and the free exchange of ideas. However inequities in the adoption of various technologies, you know, certainly mean that some people are being left behind.

Karen Perry: Tyson how can we drill down?

Tyson Weister: Great, so yes that's a great question. My standpoint, my area of expertise is with the data.census.gov site overall. So from that perspective knowing the filters that you need to access and some of the table Ids is just a start in exploring what's available to you. And we showed you how you can go about on the site looking at small geographies. I showed Census tract as one example. That allows you to look at possible inequities by geographical area. And you can also choose the demographic slicing and dicing, looking at Internet or computer ownership by the different demographic groups.

With that we also have on the call Michael Martin. He is the subject matter expert for computer and Internet use so he definitely has more insight into what the data can say overall from the census. So I just wanted to give him a chance to add anything to what may have already been set already.

Michael Martin: Thanks Tyson. I just wanted to follow-up. I know this is a very important question as we're sort of thinking about racial disparities and echoing what

Rafi said disparities in Internet access can certainly have a long reaching effect that sort of impacts other areas in social life as well. If you would like to look closely at the data that we have on Internet access by races one table I can recommend is S2802.

This table reports by race and Hispanic origin the rate of Internet access for each of these groups for broadband subscription with or without a computer. At the national level using the 2018 one year data that we published last September Asian - respondents who were Asian alone of two or more races or white non-Hispanic had the highest rates of Internet access while American Indian and Alaska natives and black respondents had the lower – lowest amount of access. I'll also point out that this table is a person level table rather than a household level table. So if you wanted to look specifically at how many people did or did not have an Internet access subscription I'd recommend using this to get a very detailed estimate.

This table if you use the 2014 to 2018 five year data is also scalable down to the census tract level. So you can use this to look at the rate of access for different racial groups in Mobile, Alabama throughout neighborhoods if that is what you are interested in seeing in our data.

Karen Perry: And Mike I think you gave us a tip off into one of our next questions that got has quite a bit. People really wanted to drill into more information about native and tribal communities. And I think this is a more general question not just about the broadband data but also about how we can get census data in general about tribal lands. So would you all respond to how we can get data on tribal communities?

Tyson Weister: Sure this is Tyson. So just from a general perspective we have lots of data from the American Community Survey as well as the 2010 Census. Those

data are available in two different ways that you can look at separately or you can combine the two. So you can look at data for people who identify their race as belonging to American Indian Alaska natives and sometimes you can break that out into individual tribes or tribal groups like the Navajo nation and smaller groups.

In addition to that, there is a geography when you're on the advanced search and you click Geography we have looked at selecting county. And we looked at an example for tract, when you're in that panel you'll also see an option to select American Indian area Alaska native area Hawaiian homeland and then you can choose the individual area such as the Navajo nation, American Indian area. So you can look at data for people by race or by whether or not they live on the reservation with or without regard to their race or you can combine the two and look at that information together and you can look at the totals as well as characteristics such as their income, educational attainment and whether they have access to the Internet. Anything you wanted to add to that Mike or...

Michael Martin: No I think that's a really good approach at looking at this. You can get the five year data for these tribal areas. A coworker of mine Tim Smith and I are also working on a project that should highlight some of the disparities that we see particularly on tribal area lands that we hope to get out a little bit later this summer. And we can maybe share with the mailing group. It should be an American counts piece and maybe a couple of data tables as well.

Karen Perry: Mike when you get that make sure you let us know and we'll send it out through our newsletter.

Michael Martin: Will do.

Karen Perry: Rafi would you also talk a little bit about how the Internet use survey highlights and differentiates travel information?

Rafi Goldberg: Yes so, you know, although we have a sample size of about 50,000 households in the NTIA Internet Use Survey and that sounds like a lot it's, you know, certainly not the 3 million size in the ACS. And so unfortunately we don't have data on people living in tribal areas. We are able to break down our numbers by those who identify as American Indian or Alaska natives. However, you know, that, you know, sort of irrespective of whether they happen to live on a tribal area or not. And I would also note that while we do have that data, the error bars around it are I think pretty high. You know, so I think it's important to understand that context when looking at the estimates so unfortunately the ACS for a lot of purposes is going to be the better place to look in that particular situation.

Karen Perry: Well you mentioned error bars and I think that was another question that we got. You know people don't always answer surveys when they come to the house or when they call. And I've worked with both of you so I know that you don't just call me once at dinnertime. You guys are persistent. And so I need you to talk a little bit about that level of persistence and about what your response rate is on your surveys and what your margin of error is because it knocks my socks off and I think you'll impress people when you talk about it.

Rafi Goldberg: Sure. So, you know, it seems a little bit weird, you know, for me to talk about this when we have folks from the Census Bureau on the line. But very quickly and they can expand or, you know, correct me if I get anything wrong about our survey.

So the Current Population Survey which, you know, our Internet use survey questions are a, you know, a supplement to that. So has a very good response

rate for voluntary survey. I believe it is - has usually been around to 85% in recent years which for a not mandatory survey is a very high.

As you alluded to Karen it is not just randomly calling people during dinner. If a household is selected to be in the CPS sample it actually starts with them getting a letter in the mail to that effect. Then the first time that household gets interviewed they will attempt to conduct the interview in person. So if you're selected for the CPS your household is actually in the sample eight different times so it goes for consecutive months and then you take eight months off and then go back on for another four months.

And so during the first and the fifth interview they will attempt to talk to you in person most of the time. During the other interviews it will be a live telephone interview or and in my understanding is that they make multiple attempts to reach you. You know, the folks at the Census Bureau have been doing this for a very long time and they have a very good system going that yields a pretty high response rate.

Of course, you know, any voluntary survey no matter how well-designed is going to have some sort of bias even if it's unintentional. And I don't know if, you know, either Tyson or Mark anybody wants to talk a little bit more about that.

Karen Perry: I'm going to...

((Crosstalk))

Tyson Weister: Go ahead.

Karen Perry: I'm going to ask you to do a quick response on this because I think we have to

wrap it up here and talk about our next webinar.

Tyson Weister: Sure. So I can answer this from the American Community Survey perspective. Our overall response rate for the American Community Survey is over 92%. And we collect the data first by sending a postcard, inviting folks to do it online. We don't get a response we follow-up and send a paper copy and then if we still don't get a response we continue to follow-up and eventually will come to the household and knock on the door.

We're very persistent in getting the response. With that high-level response we also publish the margins of error right on the data table. And that gives you the 90% confidence level. So if you add and subtract the margin of error from the estimate you can be 90% sure that the true estimate that we've been able to do an overall population count for that particular item would fall within that range.

Emy Tseng: Okay great. I apologize, I know that there are many questions. And a couple of things. One is that we will be posting the presentations transcript in an audio recording on the website within seven days. Feel free to also reach out to the BroadbandUSA team and hopefully we can answer any questions or help you get the information you need that are not answered by the presentation itself.

And please join us again on July 17 for our next webinar which is Cyber Infrastructure Moving Beyond Broadband at HBCU, Historically Black Colleges and Universities, and TCU's, Tribal Colleges and Universities. Thank you again to our speakers. This was a wealth of information and thank you all the attendees for joining. Again BroadbandUSA is available for Technical Assistance to help expand broadband connectivity and promote digital inclusion and broadband adoption.

So please email us at broadbandusa@ntia.gov for more information or again please visit our website not only for the information for this webinar but for more information on our access - to access our toolkits and publications. So thank you all again and have a wonderful afternoon.