Keith Bailey: Thank you again to Rachel, Chris, Taylor and Curtis. We will take a - I'm sorry our next session highlights several new Census products many of which represent collaborations between the research and methodology and economic directorates within the Census Bureau.

Please welcome Carol Ann Aristone, Assistant Division Chief for Manufacturing Corporation Profits and Business Dynamics of the US Census Bureau. Carol the floor is yours.

Carol Aristone: Hi everyone I'm Carol Aristone, I'm happy to be representing our Census panel. We're really excited to show you some of our new data products that will be highlighted today.

So without further ado I'll introduce our panel which we'll start with Colin Shevlin who will go over our Small Business Pulse Survey followed by Jason Fields who will present information on our Household Pulse Survey, Alyson Smola will present on Business Formation Statistics and we will wrap it up with Aneta Erdie presenting on Non-Employers by Demographics Statistics, yes okay. I will share my screen and get us started. Colin please just begin when you see your slide.

Keith: And Carol and panelists thank you in advance for keeping to the 30 minute timeframe. I know it is a lot to talk about in the brief time so I will be quiet now so you can take the floor.

Carol: Thank you go ahead Colin.

Colin Shevlin: Appreciate it. So like Carol said my name's Colin Shevlin, I work in the Economic Indicators Division and I'm here to talk about the Small Business Pulse Survey.

In April of 2020 the Census Bureau launched the Small Business Pulse Survey to measure the changes in business conditions on our nation's small businesses during the coronavirus pandemic. Census recognized the need for accurate, real time data during these challenging times. The survey helps to understand how small businesses are weathering the current crisis given business disruptions, stay at home orders, changes to consumer patterns and other abrupt and significant changes to American life.

Since the start Pulse there have been four collection phases with approximately a one month gap between each phase. Content included in the survey has been developed in a joint effort between both internal and external stakeholders. Next slide.

For the purposes of this survey Census defined a small business as a single location business with between 100 and 499 employees and at least $1000 in annual revenue. So each week we invited over 90,000 businesses to respond reaching nearly one million small businesses across a nine week rotation and we do this to reduce burden and lesson survey fatigue.

For data collection this was the first economic survey that was conducted entirely by email and for a typical week we - the initial email was sent out on Monday asking for a response by Thursday. A reminder is then sent out on Wednesday and a final notice is sent out on Friday. But businesses have until the end of the phase to complete the survey.

The next slide highlights the content and how it's changed across phases. Historically Business Pulse content can generally be grouped into a few key concepts, there's overall effect, current business operations, challenges faced and future outlook. In Phase 4 we also started collecting information on

COVID testing and vaccine requirements for employees of small businesses. This ability to be agile with our questions has allowed us to keep content as relevant as possible to the current state of the pandemic.

In addition to - I'm sorry next slide. In addition to our question and answer estimates we also construct indexes to create a numeric representation of a question or set of questions that have non-numeric answers. The overall sentiment index assesses the overall effect of the pandemic on businesses where the operation challenges index assesses the overall effect on business operation.

The expected recovery index summarizes the length of expected recovery and the financial stress index which was discontinued in Phase 4 would assess the financial difficulties experienced by these small businesses. And the table on this slide shows the survey questions that contribute to the various Phase 4 indexes. Next slide.

On the Thursday following survey closeout the weekly data is released through both an interactive data tool as well as static data tables. We provide estimates at the national level as well as state industry both sector and more detailed three-digit NAICS code, estimates for the Top 50 MSA and estimates by employment size. Next slide.

So I mentioned that we provide data in an interactive data tools and it was really important for us to provide our data users with a rich set of prepacked visuals that lend themselves to quick insights into the story that data is telling from week to week. One such example of this is shown on this slide, the response by geography and sector viz allows users to quickly get a sense for how responsive to a question differ across state and across industry sector.

So it should be pretty apparent here that a larger proportion of New York small businesses have experienced a large negative effect as a result of the pandemic than the national average overall. Similarly on the right you can see that the same is true for Sector 72 which is accommodations and food services.

While these options allow the user to dig into a single answer to a survey question we recognize that it's also useful to view how businesses were responding across the range of possible answers and the next slide shows how we address that with the survey response detailed viz.

Here you can view estimates for all questions or all answers to a question for any given week. You can also dig a little bit deeper by viewing additional states, industry sectors or MSA. The example here shows a look at one of our new questions in Phase 4 asking if a business required employees to test negative for COVID before physically coming into work that week. So the user should quickly be able to see that it's far more likely for a business in Sector 62 healthcare to require a negative test than say Sector 52 which is finance and insurance.

And thus far we've talked about two viz's, one that looks at a single answer, one that looks at all possible answers for a given week but what about how the answers have changed over time. The next slide shows the survey response weekly comparison which allows for this view.

For any question we've asked on the Small Business Pulse Survey we enabled the user to view the responses across the entire span or a subset of the survey phases. So here for example we're looking at our future expectations question which asks how much time does the business think will pass before it returns to normal levels of operation.

At the start of Phase 1 responses were relatively split between two to three, four to six and six-plus months but it didn't take long for that six-plus month response to really dominate the others. This trend continued through Phases 2 and 3. But starting in Phase 4 we're starting to see that answer come down and a corresponding increase in the responses saying that the small businesses actually returned to it's normal levels of operation.

And while the Small Business Pulse Survey was conceived in response to the pandemic the next slide shows how these high frequency programs could be used going forward to provide meaningful insight into more discrete events that might be delayed or lost entirely by our current indicator programs.

Consider the recent winter storm that impacted Texas, certainly none of our questions were going to specifically ask how were you affected by this winter storm but we were still able to see the impact show up in our data. So just a week after the storm we were able to see a huge uptick in temporary business closures as well as supplier production and delivery delays. And, you know, I just found this super interesting and really speaks to the possibility of the programs like these going forward.

And my last slide I'm just going to provide some additional links to other information. I know I covered a lot here in a short amount of time but I really encourage everyone to head over to our landing page, check out some of the other great content we have. If anyone has any questions please don't hesitate to reach out and with that I'm going to pass it over to Jason to talk about the Household Pulse Survey.

Jason Fields: Thank you very much, hopefully you all can hear me now. Good okay right. So I'm Jason Fields, I'm in the Demographic Directorate in the Social

Economic and Housing Statistics Division and I'm going to talk to you a bit about the household size rapid response survey response to COVID.

So the experimental Household Pulse Survey, and I'm going to emphasize that it is experimental, was designed in a very short order to deploy quickly, efficiently collect data in an environment where we really had no other tools to collect household data. In-person interviews were shut down. The National Processing Center was shut down, we couldn't send out mail. And our phone centers were shut down so we weren't able to reach out and use a phone frame.

So this proof of concept was developed based on a couple different pieces that happened to be in the right place at the right time. We had a platform that was being used in our research and methodology area to develop new questionnaires and field test questions.

And it happened to already be able to support Internet and text message dissemination and collection. It was already set around moderate authorized, it already had Census Bureau ATO, Authority to Operate. And we had programmers in house that we could use. So that was really important and that call track instrument has been what we've been using ever since with the Household Pulse for sure.

So this new data collection relied on the integration of an addressed-based frame with contact information that was established in what we call our contact frame. It has telephone and email information that we developed from a number of other - a number of sources.

The timeline for this is much the same as it was for the small business pulse you just heard about. Mid-March we sat down and realized okay we really

need to provide some rapid response data to the federal government for policy and program administration.

So by March we were able to really get things tested, develop agreements, informal agreements with a number of other agencies. In Phase 1 we worked with five other agencies plus the Office of Management and Budget, they're listed here. The success and use of the Household Pulse through the first 12 weeks was such that we expanded to include additional agencies up and through now where January 6 we went out adding the Centers for Disease Control's vaccination item and then some essential worker questions here in the latest addition that will be released next week. Next slide please.

So I talked about the frame and this was really important. The telephone component of the contact frame has over one billion phone address pairs and in the administrative record side their evaluation of that frame they found that it had cell phone address pairs for over 79% of that ACS eligible addresses in the country which is what their, you know, their baseline evaluation. And then 3/4 of those were new in the last two years so that's really important.

The email frame similarly had very high density, it has 186 million email address pairs covering 74% of that same ACS eligible contacts. And those were also relatively new. Okay next slide please.

So the Household Pulse we restricted our frame at about 144.8 million addresses and of those we were able to match - we had 75% of those with at least one email address. We kept up to five. And 62% had at least one cell phone. Again we also kept up to five cell phone numbers for a total coverage of 81% of that 144.8 million addresses. Next slide please.

Our response and this is one of the reasons why this is an experimental survey, the response rate to this type of survey is routinely very low and this survey was no exception. In Phase 1 we had a survey design where we went back to household respondents and asked them to participate a second and third time. We dropped that at the end of Phase 1 because as you can see it resulted in a very low response rate. However that said sending out approximately one million addresses per cycle we were still able to obtain a fairly high and nationally representative sample of respondents back.

In Phase 2 and 3 we extended the data collection period from six days to 13 days and were able to add additional reminders and more effectively applied cell phone numbers and cycle through all of the different contacts that we had. We're able to jump up the response rate a good bit. All told we've sent out now over 29.7 million addresses to be interviewed and we've received back over 2.4 million interviews at this point. Next slide please.

So the content areas that the Household Pulse covers includes a lot of the basic for, you know, the basic necessities of life right. So we have demographics which are - that are primarily for context and weighting controls, those are the only edited variables in the data collection. We have employment questions to focus on the losses of employment income, commuting teleworker, now also adding essential worker occupations.

The USDA had questions on SNAP and food sufficiency as well as money spent on groceries and prepared foods. Several questions included on program use from different areas. And a very important section that has had a lot of coverage on the news on health and primarily on mental health and health access have been parts of the survey that had been used pretty widely.

The telehealth and children's preventive healthcare were just added in this most recent data collection. We also have questions about your shelter and housing questions and questions that illuminated the trends in eviction and foreclosures.

And last - the last content area is that of education. We know that the household - that the COVID pandemic impacted how children receive their education continues to do so and also impacted family's responses in their labor market behavior. Next slide please.

So really quickly some findings I'm not going to be able to highlight them all but here we go. So this slide really tells the story of differing responses to the absence of childcare arrangements either through school or daycares. Women with children differentially were impacted much more than men with children and it really focused on women, you know, 25 to 44 experienced a great deal of the impact from the COVID pandemic. Next please.

One of the nice things about the Household Pulse is that it does have the ability to show geographic specificity for the 15 largest MSAs. So from a weekly basis the Pulse controls to this national and state populations but we also are able to include this detail. Next please.

The confidence in affording food, this was a dramatic finding through the course of the Pulse is the impact on food sufficiency and food security. The Household Pulse measures food sufficiency which is a measure that relies on fewer items than our food security but we saw across the board relatively low confidence in the ability to afford enough food and in households with and without children very high levels for both but those with children they fared worse. Next please.

Similarly confidence in paying rent or mortgage those 25 to 44 year olds with children again impacted here in their ability to confidence in paying the next month's rent or mortgage. Next please.

And all of that said we did see a fairly significant and continued impact in terms of mental health. And these are, you know, fairly basic indicators that are complements to those included on the National Health Interview Survey. These are based on two measures each for anxiety and depression.

The National Health Interview Survey has the same measures plus a few others and in comparison you could see that during the course of the pandemic our observation of anxiety and depressive symptoms were many times higher than those recorded in the six months before the pandemic from the National Health Interview Survey where only 8.2% of the population showed anxiety symptoms and 6.6 showed depressive symptoms. Next please.

So all of this is up on the Census Bureau's Web site. We on a weekly or on a biweekly basis now are putting out data tables, public use data tables. We have about 50 of them that go up along with their companion standard air tables. Public use data files are made available in SAS and CSV. There's an interactive data tool that lets you do several of our key indicators and key measures, look at it geographically and over time and also a brand new data visualization on COVID-19 vaccination and vaccine hesitancy. Next please.

One of the other really, you know, useful tools that we have used over the course of the pandemic has been the America Counts series and there's a number of them from our subject matter staff that look into different aspects and try to give you a little bit more information on the different ways that households were impacted by the pandemic. Next please.

And I think that's going to be the last one. So our - yes our data tools are available for everyone and we would like to - you know, this is as the Small Business Pulse said this was originally designed to be a 12-week data collection and now here we are looking at a year and a half later and trying to figure out what the ongoing life of the rapid response data collection systems are. And now over to Alyson.

Alyson Smola: Thanks Jason. Carol you can go ahead to the next slide yes. So I'm talking about Business Formation Statistics or BFS and it's an experimental data product. And what we're doing is we're capturing business applications when they first file for an EIN and then when we're capturing when that business is actually formed if they form with employees. And then we're measuring the duration in between the application and the formation. And the analysis indicates that the - it provides forward looking and timely information on business formation in the US.

And there's work in progress to explore BFS as an actual federal principle economic indicator. And this has been - the economic activity has been especially useful during COVID-19. Next slide.

So we've got four different types of application series and then eight different formation series and this table shows the high frequency nature and the timeliness of the data. We've got - we're releasing weekly data by - each Thursday by noon and that's through Week 16 so pretty very timely data. And once a month we're releasing this full application series and the full formation series as well as the NAICS data and it's seasonally adjusted and not seasonally adjusted. And then once a year we're releasing county level data. And 2020 data is coming but it's not ready yet. And then next slide.

So in the application series these are the four different types of applications, the business applications encases them all. They are not mutually exclusive and the high propensity are the ones that are most likely to actually form. And they - you can become the high propensity application a number of different ways. I won't get into them right now in the essence of time but if you go ahead into the next slide.

It shows the relationship between those four different application types and how we're filtering them out. Like, we receive all of the EIN applications, we filter some of them out. We have the business applications and then we filter the rest of them out and have those particular subsets. And then next slide.

And so all of the data that we're publishing the weekly and the monthly get published in CSB files on our Web site. And then additionally on our Web site for the monthly data we have an interactive Tableau visualization for the data user and this is the math visualization shown here. And this is for the applications and then next slide.

And then this goes into the formation series that we have. There is really eight - there's really four different types and then we provide each of these four different types for a four quarter window and then eight quarter window and so that's how we get the eight different types.

And so the formations are very forward looking so we can only state within four quarters up until December 2017 because that's the latest that we have the payroll data through. And so to bridge that gap we also have a projected business formation which is modeled so that picks up and then we also have this slice series that combines the actual and the projected. And then the fourth series is the duration which is from application to formation. Next slide.

And then this is just another visualization that we have on our Web site and this is available to refresh monthly with the monthly release. And it's just the formations and this is an example of the sliced. And we have this data by mix industry as well. And go ahead to next slide.

And I glossed over a lot of information there so I encourage you to email if you have any questions. This is our contact information and the slides will be available later. And I'll hand it over to Aneta.

Carol: Aneta you have about four minutes.

Aneta Erdie: Okay I know good afternoon everyone. I'm on the speakerphone so I hope you guys can hear me. My name is Aneta Erdie and let me go over this thing for five minutes.

So first let me give you a big picture where Non-Employer Pulse into. So if any of you guys are familiar with our survey of business owners you know that SBO was a survey based approach and only available every five years and that's how we used to do business. But we heard from our stakeholders that, you know, surveys are burdensome and that there is a need for more frequent demographic data.

In order to transition from a five year program to an annual data product while also reducing respondent burden and decreasing operational cost we first decided to split the employer and non-employer and annualize them separately. And so the SBO's employer component between the annual business survey or the ABS and the SBO's non-employer component became, you know, the non-employer statistics by demographic or NESD. Next slide.

So a very quick summary about ABS, ABS is an annual survey providing data on business ownership by race, ethnicity, sex and veteran status as well as selective economic characteristics for employer businesses. ABS includes estimates on the number of firms, employment, annual payroll and receipts, a detailed mix and geography levels by employment size and by receipt sites categories as well as by other characteristics of businesses such as by years in business.

As I mentioned ABS covers employer businesses only. The ABS is designed to allow for incorporating new content each survey year based on topics of relevance. For example like we had (unintelligible) from a micro businesses, innovation, science, technology, management practices and ABS is also sponsored by the NSF National Center for Science and Engineering Statistics. And next slide.

And here's the NESD summary. NESD's an annual data period and its first official release was this past December with 2107 non-employers data. NESD contains firm level and also owner level tabulation by various demographic characteristics of business owners. The business level tabulation includes counts of receipts of business by race, Hispanic origin, sex and veteran status. The owner level tabulation include the number of owners by additional demographics namely place of birth, foreign born status and citizenship status and owner's age. And these characteristics have traditionally been collected previously from the SBO.

Those measures are available by geography, industry detail as well as receipt size, class and legal form of organization for our business level tabulation. Industry detail is currently available at the two and three digit NAICS and I will talk a little bit more how we're going to extend that later in the presentation. NAICS provides…

Keith: Aneta this is Keith chiming in, my apologies. We have exhausted our time for this session and I do regrettably apologize. In order to keep us on time know that the entire presentation will be made available to all attendees but we do need to move on to the next presentation. I thank you for your understanding and appreciate your time.

Aneta: No problem thank you Keith.

Keith: Thank you. And thank you Carol and Census colleagues for offering that glimpse into what else is happening within the Census Bureau. It's not just LEHD although I love that it could be so thank you Carol and your team for providing…

Carol: And we're happy for any questions in the chat, thank you so much.

Keith: Absolutely yes please encourage if you have any questions please put them in the chat. Again we are recording the chat and we will answer all questions in post conference materials.