

NWX-U.S. DEPARTMENT OF COMMERCE (US)

2020 Census Program Management Review
U.S. Census Bureau Headquarters

Friday, January 9, 2015
Conference Rooms 1-4
9:00 a.m. – 4:15 p.m.

Agenda:

Pages 3 – 18	9:00 a.m.	Welcome and Program Review Lisa Blumerman, Acting Associate Director for Decennial Census Programs Deirdre Bishop, Decennial Management Division
Pages 19 – 61	9:30 a.m.	2020 Census Operational Plan Lisa Blumerman, Acting Associate Director for Decennial Census Programs Ann Wittenauer, Decennial Systems and Contracts Management Office
	10:15 a.m.	BREAK
Pages 62 – 82	11:15 a.m.	2020 Census Field Reengineering Stephanie Studds, Office of Innovation and Implementation
	12:00 p.m.	LUNCH
Pages 83 – 110	1:00 p.m.	2014 Census Test Assessment Maryann Chapin, 2020 Research and Planning Office
Pages 111 – 163	2:00 p.m.	2015 Testing Overview – Jill O'Brien, 2020 Research and Planning Office Address Validation Test – Evan Moffett, 2020 Research and Planning Office 2015 Census Test – Maryann Chapin, 2020 Research and Planning Office Optimizing Self Response Test – Stephen Buckner, Communications Directorate 2015 National Content Test – Jennifer Kim, Decennial Management Division
	3:00 p.m.	BREAK
Pages 164 – 171	3:45 p.m.	2016 Testing Scope Deirdre Bishop, Decennial Management Division
Pages 172 – 174	4:15 p.m.	Wrap-up Deirdre Bishop, Decennial Management Division

Lisa Blumerman: Wait, we'll back on whoo hoo. Happy Friday. Good morning everyone. We're going to get started. It's about 9:00 and we have a very, very full agenda today. Excuse me. I know people will continue to come in and out throughout the day and that will happen, and if I'm facing a little weird is because that light is right in our eyes. We'll manage just fine.

So thank you so, so very much for joining us for today's Program Management Review on the 2020 Census. I'm excited to see you guys here and I know that there are more and more people watching us from the comfort of their office or their home on Ustream. So this is very exciting for us to have that. If you're not aware I do want to make you aware about that but we are broadcasting this on our Ustream channel. This is the second time that will have been Webcasting our PMR and we're excited about that. And I'll talk a little bit more about that in a second.

I also want to start this morning with a quick apology on my own behalf. For those of you that know me well, you'll probably notice that I'm not here today with my usual enthusiasm. I've been struggling this week and I've actually been out for most of this week with that cold that's going around. But I am here and I'm glad to be here. I just don't have that usual energy. So please do bear with me a little bit for that.

I am here now and I hope to stay here through the day, but we'll see how that goes for me today. I'm stealing Chuck's thunder this time and I'm going to do the quick housekeeping items just to get us going. First of all the reminder that this is being broadcast internally, as well as externally. At our last PMR which was the first time we did use the Webcast, we had over 400 unique views.

So we were really excited about that. And why was I so excited about that; that was a fairly last minute addition for us to be able to Webcast it. And so we didn't do a lot of promotion around it. And we still had over 400 views. For this PMR we were able to get the word out over the last few months. Not the fact that we were doing it, and the fact that these recordings have been archived or will be archived on our Website.

So I know a press release went out about the Webcast of this PMR. I think a tip sheet went out about it. An email went out about to our data dissemination network. Yesterday when I was doing some work from home, I happened to notice on APDU the Association of Public Data Users Newsletter they had a promotion piece about the PMR, so I think word is getting out there. So I'm confident that more and more people will be tuning in and I look forward to seeing what those counts are about it.

But I do remind you that it is being Webcast which means that the mics are on, so while you do have mics in front of you, and you can turn them on and off, and the red light indicates when they're on. In general the room is mic'd, so just be conscious of that and be aware of that if you're talking, it could be picked up. And it's something to remember.

For those of you who have brought laptops or iPads or some other tech device with you and need some support, we do have guest wireless available for you and there is tech support to help you connect that should you need it. And if you do Chuck is sitting over at the table over there, can point you in the right direction to those people that can help. And he's raising his hand for you guys. And they're raising their hand in the back of the room should you need. Even better.

If you do have questions please do remember to speak directly into the microphones and announce who you are before your question. That's for the purpose of letting people know who you are, but also we are recording and transcribing these events so that help with that as well.

I need to tell you that there are restrooms and they are down to my right down the hall. I think most of you have been here before so you know where they are. There's a set right there right behind us and another set if you go out into the main corridor to your left or right.

And in the case of an emergency we do have an emergency exit right here. There's another emergency exit just to the right of outside the room. And should we be told that we have to shelter in place for some reason, we will exit this room and go down the stairs which are right out there. Which is something that I just learned which is interesting.

We will be taking our lunch break today at around 12 and we may shorten that, if not if we feel like we need to based on the exciting discussions that are occurring. One other thing that I wanted to tell you. It kind of goes hand in hand with Ustream. If we are dipping our toes into the concept of Tweeting. For those of you that do Tweet, we will be Tweeting during the event.

Our hashtag is #2020census, so please feel free to use it and please feel free to join us as we do this. I know that I'll be looking forward to doing the search on that tonight to see what people were saying about today's event.

So back to our program. I think that's it for this slide. We do encourage questions. As you know, we look forward to the open dialogue. It's a wonderful opportunity for us to hear from you all about what's going on as much as it is for us to share with you what we're doing. But we do have a very full agenda today and we're very excited about that. So I just caution you that we may to take some things offline.

Not because we want to limit that conversation but just for the sake of time. If you do have additional questions, please feel free to email us as always at the Census.2020.programmanagementreview. There's more dots in there but it's up on the slide at census.gov. And we look forward to your questions. We'll be happy to respond to any and all of those.

And that's the same email that we've been using, so we do have that mailing database. One last thing before we jump right into today's agenda. I do want to take a moment to thank Kim Higginbotham who's sitting here and Chuck Fowler and their staff for all of

their effort to put today's event together. We do this every three months, and for all of you it seems to come off like clockwork.

But for us it's quite a bit that they do to get us ready. And I'm extremely appreciative for them - for their efforts. In addition to the work they do we also should thank our conference and management staff as well as all of our IT staff and our communication staff that all do their part in helping us prepare for this and get this ready.

I truly, truly do appreciate everything that goes into it. It's quite monumental. The last thing is just mark your calendars our next PMR is planned for April 8th. And we are actually already working on that agenda. So, with April in mind, what is we're going to be talking about today. I'm very excited.

Today we're going to give you an update on the Decennial Census Directorate reorganization efforts. I'm going to share with you where we are with that and where we are in terms of our staffing. Then we're going to jump in and review the current state of the 2020 Census Program. We'll have a quick demonstration – well not so quick - we'll have a demonstration of where we are with our re-engineering of field operations.

We'll spend some time talking about the 2014 Census Test results. We'll discuss our 2015 Testing activities, and we'll end the day with what I expect will be a briefer discussion than what we planned just because of time. But discussions our planned 2016 testing activities. And if that does happen to get cut short because of it, you do have the slides and we'll plan to go into much greater detail at the next PMR on that.

It's just that feeling as we've gone through the dry runs that that one is going to get cut short. Okay. So you may be wondering why I wanted to spend some of the precious time talking with you about our reorganization. There's a lot of reasons for that and many of you may be familiar with an expression that I use quite a bit. But you may familiar with it in general which is we're only as strong as our weakest link.

And it's something that I truly firmly believe. And so the reorganization to me is quite essential and getting the right people in the right place so that we can execute the program that we are designing to execute is so important. We can have the best planned program in the world, but if we don't have the right people to do it, then it won't come off the way we need it to come off.

We need to have the right people in the right place, and allow them to do what needs to be done. With that said, completing our Directorate reorganization, and getting that full team in place for the 2020 Census has been one of my top priorities for the last few months. And I'm extremely pleased to be here today to be able to share our progress; our accomplishments and roll out our Senior Management Team for the Decennial Census programs.

In front of you is the high level decennial - the high level director of design and hand in hand with that I think is my first announcement for the day, which is we like to have like breaking news. Which this isn't for like breaking. Because I'm sure most of you have already heard it. But, earlier this week I was able to announce that Deirdre Bishop had been selected and probably most important has accepted the Chief of the Decennial Management Division.

I'm extremely pleased about that. I'm extremely, extremely pleased to be able to plan, to think through, to work and to be able to execute the 2020 Census with Deirdre by my side. And this is a wonderful announcement. So please join me in congratulating her. With Deirdre's selection as Chief of our Decennial Management Division, our Senior Leadership Team within the Decennial Directorate is almost complete.

I think there's no surprises with the rest of this, but I will remind you, and they're all here today. Tim Trainor who's over on the side somewhere. There he is Tim Trainor is Chief of our Geography Division. Pat Cantwell who's sitting next to Tim is Chief our Decennial

Statistical Studies Division. Jim Treat who I don't see here today. I believe he has a meeting on the American Community Survey.

I see ACS people here with the National Academy of Sciences, but I don't see Jim; is our Division Chief of our American Community Survey Office. And we are making progress on the posting and the filling of the Chief of our Decennial Information Technology Division. I was able to hear back from our Human Resources Division today, and I'm pleased to say that we can - we hope and we expect to have that posting up in about three weeks. So we're very pleased about that.

Since we last got together, my staff working on the reorganization have made tremendous progress since October. Some of the accomplishments that we've had; we've based line our organizational structures. We have placed our GS15's; our Senior Managers in their new positions in the reorganization. As well as placing our Branch Chiefs in their new positions is in the reorganization.

With that said, people are not in those jobs today. Our reorganization won't take effect until the Spring, but what we're doing now is going through the process of designing and implementing that reorganization to be executed later this year. We've identified the process and have actually begun the process for placing our GS13's and our staff and will actually have that complete probably in the next six weeks.

We are on schedule still for Spring implementation of our reorganization. We've been working very, very closely hand an hand with our Human Resources Division, and we've been submitting our paperwork along the way. They've been working with us so I feel very comfortable that this will all take effect as we have scheduled it.

To aid us as we go from the old to the new; we have a number of teams working on different aspects of our reorganization. Because we've changed some of the functions of the Directorate and modified how we'll be operating, we have a process alignment and

clarification team that we have set up. What this team has really done is they've case lined a racy diagram for us as well as determining the concepts of operations for the new divisions.

So what they've looked at is they've looked at surveys, they've looked at the Census, they've looked at different components of our program and how we do our day to day work. And they've walked through those concepts of operations for each of those and determined who's responsible; who's accountable; who needs to be informed and who needs to be consulted. This helps us as we implement our reorganization, understand those roles and responsibilities.

Recognizing that things will change, we're going for the 80% solution, but the more we can have documented and figure it out before we step into this new environment, the better prepared we will be to execute it. And we'll continue to evolve as we work. We also have an organizational and workforce alignment team. This team has been responsible. Both teams have done a lot of heavy lifting but this team has been really working hand in hand with our Human Resources Division.

They are responsible for updating the organizational charts; the organizational profiles; developing the process maps at the division level, meaning the functions of what each area does. In addition to that, they've been responsible for redoing all of the position descriptions for GS15's and our GS14's. They'll soon be embarking on that for our GS13's. Anytime we do something even as simple as changing the name of a division which we did, all of those position descriptions and the associated paperwork need to be updated and this team has had the heavy lift for getting that done. And they've been instrumental in helping us do that.

And last but not least, we've communicated, communicated and communicated. We have a communications team that's also part of our reorganization effort, and we have had multiple brown bag and all Directorate meetings. I want to say since October we've

probably had maybe nine maybe ten. We did a series of six. One every day focused on each of the divisions, and we've done several.

Our most recent being just before the holidays, I believe it was December 18th. It might have been the 16th. But we've really done the best that we can do to communicate. We also have a SharePoint site where our staff can go at any time to get information about our reorganization efforts as well as submit questions to us.

I wanted to - with that said as our accomplishments, I wanted to briefly roll out those individuals as key individuals that are part of the 2020 Census or planning for the 2020 Census. Due to time and we are rather limited, I'm only going to focus in the next few minutes on the key steps that are involved in the Census. It's not that I'm choosing to exclude other people, but most of those key staff are here. And what I'm most excited about for this PMR is our ability to share with you that management team that's going to bring this Census to fruition.

And so let me start with our Decennial Census Management Division. I've already shared with you that Deirdre Bishop is our Chief of that division. Hand in hand with that, the rest of our senior leaders within this division Andrea Brinson who I did see in the room. She's over there, will serve as the Deputy Chief of this division. Kim Higginbotham is at the head table with us today, will be taking on leading our efforts on Innovation and Strategic Planning.

Evan Moffett who's also at the head table. And one of things you'll notice as we go just as those of you who have been around for many Census as you'll see we're starting to bring back our Census people. And Evan is probably the first I'm talking about on this and though he certainly won't be the last.

But Evan is our ADC for our Geographic Operations. Maryann Chapin again we're back our Decennial people, is our ADC for Nonresponse and Coverage Operation. Ann

Wittenauer also at the head table this morning will be our ADC for Infrastructure. Mike Perez who I didn't see in the - oh he is in the room. There he is. Mike will be our ADC for Budget, Schedule and Performance Management. He's over to your right. Jill O'Brien who's also over to your right is our ADC for Operations and Systems Integration. And at our next PMR coming up you'll get to meet Jessica Graver who hasn't started with us. She's actually starting next week, who will be in the role to serve as our Assistant Division Chief for Self Response.

So I encourage you to take some time and continue to explore this division's structure. As you explore, you'll begin to see and to recognize that we've begun to recognize that transition from moving from planning this Census into implementation of the Census.

And you'll see particularly for DCMD that we have several branches that we're creating that are temporary branches that we will need to execute the Census operations. And you'll see those reflected there.

And before I move off DCMD I do want to point out one other person who's not represented in DCMD, but we all are familiar with. And that's Jim Dinwiddie who's actually out sick this week, too. So Jim and I had a lesson that both of us shouldn't be out sick at the same time. That was interesting. But he assures me he's watching this on Ustream. I didn't mention Jim was with DCMD but Jim is actually going to be reporting to me and our reorganization structure.

So for those of you that have been working with Jim on things related to GAO on the IG serving as their oversight, he'll retain that role plus he'll continue in some other strategic roles helping me with the day to day operations. I'm very excited to have Jim by side.

Moving to our Decennial Statistical Studies Division, very briefly we've already mentioned Pat, Tom Mule is here in the room and Tom remains in our technical position

as our lead for Administrative Records and Adaptive Design Research on our Nonresponse Follow-up. And you'll be hearing from Tom later today.

I didn't see but she may be here. Debbie Fenstermaker. DDebbie is our ADC First Statistical Methods and she has the lead for our modeling efforts on Address Canvassing and on our cost quality trade off work. Magda Ramos. I thought I saw. No, Gia is telling me I don't see Magda. Magda is our ADC from Matching and Covering Measurement. And Magda really remains absolutely instrumental for us in the design and implementation right now of Nonresponse Follow-ups.

She's really played a key role on that. Bob Colosi who I did see come in somewhere. Ah, there's Bob in the back. Bob is actually moving from our Decennial Management Division into our Decennial Statistical Studies Division where he's going to take on the role as the ADC for Frame, Enumeration and Quality Assurance.

And even as Bob is beginning to bridge this transition, he's jumped in already to help us jump start or kick start. You can pick your phrase. Our efforts around quality assurance and our plans for quality control. And we're very, very excited to have him in this role. And then Tony Tersine who I did see.

Many of you may be familiar with Tony who has worked on the American Community Survey. And he's over here on this side. In our reorganization and Tony has taken on additional efforts and he will be taking on our Census evaluation in experiment works in addition to that work for the ACS. So I'm really excited to have Tony's expertise in 2020.

When I move to our Geography Division, Greg Hanks who I saw in the back. Greg is going to continue to serve as our Deputy Chief of our Geography Division. Mike Ratcliffe is our ADC for Geographic Standards, Criteria, Research and Quality. And Mike, you guys know Mike, he's not here today because he's actually out in the Field and he even emailed this morning. He's conducting part of the partial lot canvassing test. So he is out

in Indiana I think is where he is. And the last time he checked in yesterday it was like negative ten below or something like that.

But he said all is going well. So it's good to get that report from the Field. (unintelligible) is our ADC for Address System. And Ama has been instrumental and working with Evan and others in developing the systems that will be used for Non-ID Processing.

And Andrea Johnson. Andrea Johnson. I get my Andreas and my Andreas mixed up. Now they do this me. But Andrea Johnson who is sitting at that table, is our ADC for Address and Special Data Updates. And she's also serving our team for our 2020 Operational Plan , which you'll hear more about. So she's been instrumental in bringing that geographic perspective to our planning for 2020.

Moving do DITD, our Information Technology Division. Very briefly, Michael Clark will remain as our ADC for Census Applications Development and Operations. Pam Mosley will be our ADC for Data Management and Testing. And here we have a change with (Pete Budrio) moving from our Geography Division into our IP Division to take on the role for Systems Engineers and Integration.

This is really wonderful for us because Pete was part of the enterprise team that developed the ESPLC and having Pete available to bring that expertise into our Information Technology Division will really help strengthen our efforts there. And (Marion Brady) who I also didn't see here is moving into the role of Program Manager of the ADC for our Dissemination System for DAS, our current Dissemination System.

Lastly, as I said I'm not going to talk about ACS because the focus today is on 2020. But you do have that information for you. We have a very, very strong - very strong (If I were Chief of ACS I'd be very happy); a very strong Senior Leadership team within the American Community Survey Office. And with that, what I'd like to do is pass the clicker

over to Deirdre and let her jump in and do a very brief program status update for us on the 2020 Census. So thank you.

Deirdre Bishop: Thank you Lisa and good morning everyone and happy New Year. It's nice to see you. This morning I'll provide a quick update on the 2020 program. We've been very busy since the last time we met in October of 2014. We've established a 2020 Census Operational Plan Team to document the 2020 Census design decision. We're committed to completing our design decision for the preliminary 2020 design decision by the end of this year.

And we plan to share that with you during the October PMR. We've identified 34 operations that will be part of the 2020 Census Life Cycle. We've completed the field work associated with the 2014 Census Test that we conducted in northwest D.C. and Montgomery County, Maryland. In November we conducted a simulation. We called it a human in loop simulation to test our Operational Control System and the management of our Nonresponse Follow-up workload.

We continued planning for the 2015 Test and we defined the preliminary (unintelligible) for the 2016 Census Tests. I think you'll agree that this is a large list of accomplishments over the past three months especially when you consider Thanksgiving, Christmas, Hanukah, New Years and all the other events that occurred during that time. I must send a huge thank you to the staff that worked on this especially over the holidays, for their dedication and their commitment to this very important work.

A quick overview of the budget schedule and risk in terms of 2020. We recently received our inactive budget for fiscal year 15 and we're currently preparing to update our operating plans. We're working with the Department of Commerce and the Office of Management and Budget to finalize our FY16 budget requests.

And we just began formulated our FY17 budget. In terms of schedule, I'm happy to say that at the end of December, we integrated and base lined our 2015 Census Test schedules. Both for the Optimizing Self Response Test and the 2015 Census Test. Our certified schedulers are continuing to develop an integrated schedule for our other Census tests.

Most importantly, the National Content Test which will occur in September of this year. Finally we continue to monitor and mitigate or risks both at the program level and the project level on a regular basis. Let's now move into the status of our major cost savings and innovation tracks. The last time we were together we talked about our four key deign areas. The first is re-engineering Address Canvassing.

And you'll remember that our goal here is to eliminate a nationwide infield Address Canvassing effort late in the decade. Instead we plan to do the work throughout the decade both in in the office and in the field. Over the past 90 days we kicked off our Address Validation Test. That test had two components. The first was the mass model validation test. It contained 10,100 blocks and was used to validate our statistical modeling that will help us determine where to conduct infield Address Canvassing.

I'm happy to say that that work is finished. We also started our partial block canvassing test to see if we could go out and canvass only portions of a block as opposed to the full Census block. That's the work that (Lisa) referred to earlier that Mike is out doing now. And Jill I believe will have an interesting report for you as well. She just returned from listing. We established a Leadership Team that will be responsible for the design, planning and implementation of our Address Canvassing efforts.

We've drafted requirements for the development of a system that will store and track block level information that will be used to make decisions for our Address Canvassing efforts. And we've drafted requirements for an interactive tool to support imagery review and the detection of change on the landscape.

What we will be doing in the next 60 days? Very importantly we're going to be developing the 2020 Address Canvassing implementation plan. We plan to release a request for information on change detection. We're currently conducting market research to identify available sources, processes, software and technology related to detecting change both for structures such as housing units and for street center lines such as roads.

We're also going to release a request for proposal on address, feature and image resources. Over the past few months Geography Division has conducted an evaluation of commercial sources and issued a request for information on available sources of address and street center line information. These efforts lead us to believe that there are commercial sources that that could really help us in terms of our Address Canvassing efforts moving forward.

And this RFP will address that. Let's now turn to Optimizing Self Response. You'll remember that the goal here is to communicate the importance of the 2020 Census to the public and generate the largest possible self-response. What have we done in the last 90 days?

We've analyzed results from the 2014 Census Test and we've planned for the 2015 Optimizing Self Response Test. You'll hear about both of those efforts today. We were awarded a contract to support multilingual research for the 2020 Census questionnaires. Work related to this contract will include cognitive and usability testing of both our enumeration instruments; the Internet application and the handheld device used for Nonresponse Follow-up.

It will include expert review of our translation materials and focus groups to help us determine how to communicate with non-English speaking populations. We've released a request for information on respondent validation and non-id business processes. These RFI's close on January 2nd and we've received over 30 responses. Over the next month we'll be reviewing the responses and moving forward with those.

Finally we released a federal register notice requesting comment on our 2015 National Content Test. The link to that federal register notice is included in the slide deck, and the comment period closes on February 2. Looking ahead we'll continue to evaluate our results from the 2014 Census Test. We'll continue to plan for 2015 and for the National Content Test.

Let's now talk about using administrative records. The goal is to use data that the public has already provided to the government and in some instances 3rd party data to reduce the Nonresponse Follow-up workload. I'm very happy to announce that in partnership with the IRS, we have secured early delivery of the tax year 14 data to use during our 2015 Census Test. Why is this important? Because our Census Day is traditionally April 1. Having the IRS data early and applying that to our Nonresponse Follow-up universe is very important to provide accurate and timely statistics.

We've completed documenting our production process for identifying the vacant units and the occupied units during the 2014 Census Test. We've completed a comparison of methodologies for classifying the quality of administrative records. That paper was published in September and we're happy to share the findings with you. We've completed an analysis of determining the Census Day address for a partner file we received from the New York State Office of Temporary and Disability Assistance Participants.

And then we compared that data to the IRS data, the Center for Medicare and Medicaid Services Database and our 2010 Census Nonresponse Follow-up information in New York City. Looking ahead, we'll continue to determine the methodology for the use of administrative records and support of identifying vacant units and occupied units in the 2015 Census Test. And we will continue to evaluate the results for 2014.

Especially, the use of administrative records in helping with the count and characteristics imputation. Our last key design area is re-engineering field operation and of the most exciting areas. The goal here is to make our field operations more effective and more

efficient by using technology to perform tasks that have historically been performed by humans. What have we done in the last 90 days?

A lot of work here. We conducted the Human in the Loop simulation that Stephanie Studds we'll talk about this morning. In preparation for the 2015 Census Test, we've further refined and enhanced our tools. On the COMPASS instrument which is the instrument that we use to obtain information from our non-responding households. We've now built in the ability for our enumerators to enter their time and expense data and to enter their work availability to help us better assign cases.

We've tested the ability to receive and transfer data between COMPASS, the handheld instrument and MOJO our Operational Control Systems in our mobile enterprise development environment. And we've shared MOJO and COMPASS and eight automated training modules with our Regional Census Center staff to obtain feedback on our plans for 2015.

Looking ahead we still have more work to do here. We're going to author another training module for our local supervisor of operations, and we will prepare most importantly for production as part of the 2015 Census Test. You're going to hear more about all of these activities today, but I'm happy to answer any questions that you may have.

Lisa Blumerman: Okay if we don't have questions, we are like right on time which is awesome. So I'm going to take the honor to introduce our next presentation which will be by Ann Wittenauer and team. And the reason why I'm doing this is that our next presentation is on our 2020 Census Operational Plan . So I've been now back for over a year now and what I've heard people have asked questions and we've said these are our answers, this is where we are with the program, but when we release that design decision, that answer will be in that.

What Ann is going to talk with you about next and what the team is going to talk to with you about next is how we're getting to that design decision. At our last PMR Deirdre presented a document that we called the path to the design decision. The path to the 2020 Census. We've taken from that path document and have started a team which Ann will talk more about that is working on our 2020 Census Operational Plan .

This Operational Plan is critical to us, but it's also critical to you and to our stakeholders. It's very important that we all understand what is - what we mean by the 2020 Census Operational Plan . What will be contained within the 2020 Census Operational Plan , and how this Plan will continue to evolve over time. And the team is going to talk you through that today. I'm very, very excited about the work that they've done to date.

And the work that we have planned for the next three months; the next six months; the next year. But our focus today will really be on setting that stage for us. With that let me turn it over to Ann and to the team. Thank you.

Ann Wittenauer: Thank you Lisa. Good morning everyone. As Lisa mentioned I'm the Project Manager for the team responsible for developing the 2020 Census Operational Plan . Today I'm here with a few of my teammates to talk with you about our progress toward a comprehensive set of documentation and Operational Plan for the 2020 Census emphasizing the preliminary design decision and also addressing what we know, and what we don't know about the operational areas proposed for the next Decennial Census.

As you listen to what we're about to discuss, please bear in mind this presentation is a continuation as Lisa and Deirdre alluded to of what you heard back in October when we presented the path to the 2020 design decisions. Today, I will talk with you about the team that will spearhead this effort propelling us into the next phase of preparations for the 2020 Census.

Several of my teammates Andrea Johnson, Evan Moffett and Maryann Chapin will expound upon a few key examples that illustrate what you'll be seeing when the Operational Plan is available for public review in October of this year. And let me add before we officially begin that the work products you're going to hear about today are preliminary. And thus pre-decisional.

So without further ado let's begin. Next slide. Let me provide some context for this team. Let's step back a moment and review where we are. This year puts us on the cuff of major milestones for the program as you see in the notional timeline of the 2020 Census Life Cycle. In late September of this year, the Census Bureau will formally announce the preliminary design of the 2020 Census. The goal of which is to enable us to conduct a 2020 Census at a lower cost per household (adjusted for inflation) than the 2020 Census while maintaining high quality.

To that end, we will conduct three tests this year that will inform the design decision. And thus 2015 is the combination of the formal research and test phase. 2015 is pivotal for other reasons as well. We're going to conduct a fourth test that will inform and seed future tests. The testing we propose in fiscal 16, 17 and beyond that's required for our upcoming operational work.

Additionally, in 2015 we're launching the start of our core programmatic work. By this I mean we'll begin to work on Census Coverage Measurements. The language program. The medium and smaller size operations if you will that to date have been largely

unaddressed in our research efforts. When fiscal year 2015 winds down will be on the eve of an intensive period of preparation with five major activities.

The first I mentioned additional operational research. The second development and award of contracts for the systems that we will use in the 2020 Census. We'll be putting management infrastructure and offices in place. We'll be conducting operational readiness testing. And in some cases we'll actually be implementing early operations like the local update of Census addresses which Andrea will talk a little bit more in detail shortly.

Though without a doubt, the design decision and the supporting documentation, this whole package that we're calling the 2020 Census Operational Plan lays the foundation for this entire phase of which we are about to embark. This phase in which we see a significant uptick in tempo as we march to 2020 and begin to operationalize our research. So clearly the Operational Plan must be solid. So I'm going to tell you now about the work we've done to get it underway.

Next slide. What are going to brief at the October Program Management Review. Let me define what I mean by the 2020 Census Operational Plan . As I said a minute ago, it really is what we call a set of documentation. And come October, we will baseline version one of this documentation. I say version one as you would expect because not all research questions will be answered by the end of this fiscal year.

Nor will all 2020 Census related decisions be made in this timeframe. We fully expect that further research, testing and stakeholder recommendations will refine the design decisions released in our Operational Plan . Next slide. So what constitutes this set of documentation? We've identified three elements or buckets of work that will be included in the 2020 Census Operational Plan .

First, the concept of operations or CONOPS for short. It will be the core of this Operational Plan . And I'll discuss it more in detail in just a minute. Supporting

documentation is the second element. These are the appendices. Some examples of what will include are things such as business process models for each operation.

The IT architecture. A detailed Census Life Cycle cost model estimate based on the major design decisions. Another example, the acquisition strategy for the 2020 Census. Similarly equally important, a high level schedule. And also a program risk register. To name just a few of the documents we intend to include within the supporting documentation.

The third element of our Operational Plan consists of what we called Communication Tools. By that I mean infographics, videos. These are the materials that we will need to convey to our stakeholder community how we will execute the Census. Next slide. Now let me explain further what I mean by the 2020 CONOPS.

The CONOPS describes how the 2020 program will operate to execute our strategic plan. It describes the operational intent and context and will be used to drive how the 2020 Census will be executed. Within the Operational Plan , our CONOPS will include a heavy focus on the 4 key design areas. Re-engineering Address Canvassing; Optimizing Self Response; utilizing administrative records and re-engineering field operations.

These design areas as you know are the biggest operations in terms of costs. Additionally our CONOPS will include information; what we know today or by the end of September regarding the rest of the 2020 Census operational areas. And I should stress that the narrative for both the key design areas and the other operational areas will have varying levels of maturity based on the research and implementation work completed to date.

This is important to note because the CONOPS we release in October as part of the Operational Plan will document as I said what we know and then what's still needs to be researched in order to determine the final design. Now then for each of the operations within the CONOPS you're going to hear the description of the proposed operations. For example that we propose to combine Nonresponse Follow-up and Field Verifications.

You're going to hear about the key decisions and those that still need to be made and are working assumptions. You'll see the milestones that we've laid out for when key decisions need to be made. For example, bill versus bye decision for the acquisitions. Excuse me for the systems that we'll be using in the Census. You're also going to read about the research completed to date and that which is required in the next phase of the Life Cycle. We're going to include costs and quality trade-offs.

One of the changes for example that we're proposing in relation to 2010. Lastly in the CONOPS we will include a listing of the IT capabilities that will support the operational implementation of our Census. A little later in this presentation you'll get some concrete examples from my teammates of what we mean by each of these and what you can expect to see come October.

Next slide. You're probably wondering who is behind this critical effort. Actually it's a team of people who are documenting it. On this slide you see a complimentary mix of people from the 2020 Census and the Decennial Census Program Directorate along with our key partnering Directorate. The Research and Methodology Directorate, the Information Technology Directorate and the Field Directorate. We are very fortunate in fact to have Harry Lee the Deputy Chief Information Officer. Peter Miller, the Senior Researcher for Survey Measurements and Al Fontenot, the Chicago Regional Director to round out our team with their expertise.

Now clearly this is and must be a team effort to do the level of integration that will be required for an Operational Plan of this size and magnitude. So I would be remiss if I did not talk to you about the rest of the team. Those people not listed on this slide. Many other folks, many of whom are in this room or watching live have been tapped or will be soon I assure you to contribute to this effort.

And by this I'm referring to the R&T and Implantation Teams for the 2020 Census. Stakeholders and other divisions. Excuse me other Directorate such as Communications and Administration. Participating divisions such as the Population Division. And the Social Economic and Housing Statistics Division to name just a few.

Next slide. As you heard in October when Deirdre presented the path to the 2020 Census design decision and even earlier this morning. We're focusing our preliminary design decision on the four key design areas. Because these are the areas that have the potential to help us achieve tremendous cost savings as planned and implanted correctly.

Re-engineering Address Canvassing. If we can successfully eliminate a nationwide infield Address Canvassing in 2019, we estimate a potential savings of one billion dollars.

Optimizing Self Response. If we can communicate the importance of the 2020 Census to the United States population and generate the largest possible self-response, thus eliminating the need for the follow-up with these households, we estimate a potential for 548 million dollars in savings.

Utilizing Administrative Records. If we can use data that the public has already provided to the government and reduce the Nonresponse Follow-up workload, we estimate a potential savings of 1.2 billion dollars. And last but certainly not least, Re-engineering Field Operations. If we can use technology such as our enhanced Operational Control System to more efficiently and effectively manage the 2020 Census field work, we estimate a potential for 2.3 billion dollars in savings. That's a lot of money.

Next slide. Against this backdrop of a potential life cycle cost reduction amounting to just over 5 billion dollars, the teams' objectives are threefold. We'll gather and document information. We'll create a narrative that includes all of the proposed operational areas, but focuses heavily on the four key design areas. And the ways in which they influence the other operations. The second focus will integrate results from a test to examine combinations of design components in order to derive that preliminary design decision.

And third, we're going to keep you, our stakeholders informed. We'll be conducting briefing. And we'll be developing the materials to communicate our major design decisions and the associated CONOPS in the upcoming Operational Plan .

Next slide. So what have we been able to accomplish thus far with these objectives? Let's look at the to do list. We kicked off the team a week before Thanksgiving on November 20th. We have assigned Team Charter . A preliminary life cycle cost estimate in the four areas of innovation. We have a draft table of contents which serves as our outline and includes the entire set of supporting documentation.

We have the list of proposed operations for the 2020 Decennial Census. We have an inventory consisting of the research informing our operational design. And in the future, the operational research that is still needed in fiscal year 16, 17 and beyond. We've also worked on updating key activities in the fiscal year 16 and 17 life cycle.

Now bear in mind most of these work products are preliminary and thus pre-decisional. A few like the original signed Team Charter will be posted on our Website with the PMR materials. But the point I'm making, we have a framework in place for the Operational Plan . The foundation is laid and over the next few months we'll be building it out. Well, maybe six or nine months.

So next slide. As I spoke to a few moments ago, one of the key objectives for the team is to keep our stakeholders informed and engaged both those within and outside the 2020 Census Program. Here's how we plan to do it. At the heart of this effort are the 2020 Research and Implementation Teams. I think of them as the bedrock of our program and these teams will contribute to the Operational Plan that is the writing and or reviewing of narratives that flush out the CONOPS.

They will also assist with or prepare and review supporting documentation such as the 2020 Acquisition Strategy or the revised high level life cycle schedule. Twice a month maybe more, the team and I will reach out to this core group of people through the 2020 program leads form or directly when needed. My team the 2020 Census Operational Plan Team along with the folks supporting them will lead the effort to integrate results from tests.

Both the tests already conducted and those still to come either as part of our research phase or the later operational research. Our focus will be to examine combination of design components; to derive a preliminary design decision and then refine it. This team is also tasked with providing updates to the various stakeholders represented on this diagram. Our team meets on average three to four times per week barring Christmas, Hanukah, New Years and illness.

The leadership group for the Operational Plan provides guidance on and a day in and day out basis. These are the division chiefs from the Decennial Management Division; Decennial Statistical Studies Division; the Geography Division and the Acting Associate Director for the Decennial Census. They attend our team meetings as much as possible and regularly work with us to address issues.

The Decennial Leadership Group which has representation from all of the participating divisions in the 2020 program will receive updates on average twice per month and provide guidance as needed. The 2020 Executive Steering Committee will be briefed as we have materials that are ready to share or when we need their guidance.

As an example, we met with them in December to vet the table of contents for the Operational Plan as well as our proposed list of operations for the next Census. Last but not least are our external stakeholders. Like today, we will leverage the quarterly program management reviews to provide updates while our work is still pre-decisional.

And then as you've heard we will use the October Program Management Review to brief the Operational Plan in its entirety. Similarly we will use existing advisory committee meetings and like forums to engage with other external stakeholders.

The goals are simply dialogue early and often. Opportunities for senior leadership to review documentation on a flow basis. And ultimately a complete and high quality Operational Plan that enables us to design and execute an accurate and efficient Census. Easy for me to say.

Next slide. You've heard a lot about the key design areas. And these of course will be emphasized in the 2020 Census Operational Plan . In October however you'll see what we are envisioning for the other operational areas. Our documentation will summarize what we know and what we still need to figure out about the full scope of the 2020 Census as delineated on this slide.

And as Deirdre said if you don't remember, there are 34 so you don't need to count. Last time around we had 44 operations. So what are we proposing to change this time? I'm going to talk you through two changes that we're testing and where we have consolidated several operations into one.

Next slide. As discussed at the March Program Management Review in 2013, the 2020 program undertook an effort to consolidate field operations. The working assumption is through the use of technology we can reduce the number of field operations and make the 2020 Census more efficient. Based on the research, we are moving forward with plans to test the consolidated Update/Leave; Update/Enumerate and Remote Update/Enumerate.

We're referring to this as an Update/Enumerate program, and will test this in April of 2017. We're also moving forward with plans to test the consolidated version of Nonresponse Follow-up where we will recycle cases that traditionally would go to Field Verification into the Nonresponse Follow-up workload.

This too will be tested in the coming years. The hope is this consolidation will allow us to manage fewer operations; consolidate training and potentially hire fewer staff. We are also anticipating operational efficiencies because we're reducing the lag time between canvassing and enumeration.

Next slide please. So now with the help of my teammates, I would like to elaborate further on the level of detail and maturity you can expect to see in the CONOPS portion of the 2020 Census Operational Plan . We'll give you a few examples and in this deeper dive, you'll hear about the operations described at a very high level.

You'll hear about the accomplishments; the research and the analysis activities that have been completed to date and then you'll hear what we anticipate going forward such as where we propose operational research and what development activities will be needed. Now bear in mind what you're hearing is not meant to be a detailed discussion of the operation itself, but rather an illustration of what you will see come October.

So with that context in mind, let me turn the floor over to Andrea Johnson who will speak to you about the local update of Census addresses.

Andrea Johnson: Hi. Thanks Ann. I'm going to be covering the LUCA Program over the next few minutes and I wanted to reiterate some of the things that Ann just said. My presentation will really be how we're going to treat LUCA in the Operational Plan that you'll see in October. And it will be an overview of sort of where we are where we need to be before we begin to execute the program.

But it's not going to be and what I'm you know, hopefully no one's waiting with bated breath as an overview of what we're going to do with 2020 LUCA because at this point you know, I have ten minutes and I think we have more to say about LUCA than that. Okay so all right you're on the right slide. So what is LUCA? Just in case you didn't

know, LUCA is a partnership program that provides an opportunity prior to the 2020 Census for designated representatives from local states and tribal governments to review our address before the Census basically.

Like 2010, 2020 LUCA is a really important program because it gives government partners, sorry I'm going to get all close to Evan now. Government partners an opportunity to review and comment on our list and then submit feedback to us and then see what happens after Address Canvassing. So really it's a last shot to look at our list before we start the Census.

We do hope to streamline many aspects of the program since 2010, you know always improving things. To improve the experience and outcome for both the partners and for the Census Bureau. So with this in mind, when you see the Operational Plan you'll see several assumptions that we're making about each of the operations.

Now I'm going to cover those. So for LUCA the assumptions that we're making at this time are that the LUCA 2020 Program will be simplified from the 2010 Program and then it will be compatible with the GSS-I or Geographic Support Systems Initiative. That's the program that we've been doing over the decade to improve the MAF/TIGER using partner data.

And with the re-engineered Address Canvassing. You know it's mentioned several times that previous PMR's and just earlier you know our efforts with Re-engineering and Address Canvassing include doing part of it in the field and part of it in the office. So we have to consider that when we're developing LUCA.

We are making the assumption that Address Canvassing will be used to validate the 2020 LUCA submissions and again that would be both In-Office and infield. This will again impact the design and so we anticipate having to coordinate very closely with the Address Canvassing team. We are also assuming that administrative records and possibly third

party data such as imagery or possible third party address data will be available for our validation of LUCA submission.

I'm not saying at this time we haven't determined the specifics on how exactly we're going to use that data, again working with our colleagues on the Address Canvassing team, we're going to develop some procedures over the next several months. But we do think it will be useful to have this data available to validate LUCA In-Office. And lastly and not leastly, we're making the assumption that the Geographic Update Partnership Software are what we're calling GUPS will available for LUCA participants. The GUPS software is the replacement for the MAF/TIGER partnership software or MTPS that we've been using for the last ten years.

And it's a partnership software that we're using in all of our geographic programs for 2020 such as BAS, BBST and eventually LUCA. Next slide. So a key component of the 2020 Census Operational Plan is identifying the completed research and research that needs to be completed or things that we've identified that we need to research for each of the 34 operations.

LUCA is in a unique situation in that unlike my colleagues here LUCA starts in 2017. So it's a little less runway to finish some of our research but we still have quite a bit of research to do. So on this slide what I'm going to cover is what we've done to date and what we're planning to do and these again would be things that we're going to cover in that Operational Plan. So I'm just doing the deep dive in the Operational Plan.

Just for your sanity, if you can see the slide and this is going to be the same for all three of us. The checks determine research that's already been complete. And the opened circles indicate research that will be - that's underway you know, but I can't say that today is January complete. But it will be by the end of the year.

Okay, so let's cover some of this completed research and development that's occurred from 2012 to 2015. Mostly, and most importantly we've been identifying several improvements for the 2020 LUCA program, so as part of the research and development efforts, staff has been evaluating 2010 LUCA both in terms of its procedures, various lessons learned and various surveys that we're conducted after LUCA.

And also conducting a series of focus groups around the country with former LUCA participants to understand what worked, what didn't work and also new suggestions that local participants have based on sort of where we are in the technological 2015 realm I guess is the best way to say.

Staff has been working hard on this and as a result has pulled it together to 12 recommendations for 2020 LUCA. An example of one of these recommendations would be, it would be useful to you structure coordinates both on the materials going out to participants and potentially on materials coming in so we could see where people think the housing units are on that list.

So these will be detailed in a report and I'm going to read the report that's why. The 2020 Census Local Update of Census Address Program Improvement Project Recommendation Report. So basically a recommendation report is in review right now and we'll make that available as soon as it's finalized.

With the 12 recommendations and the work that the team did in looking back, we need to still look at the feasibility of several of the methodological and technological changes. Some we're going to need to look at in the short term in 2015 and some we can put into 2016 and I'll cover that. And last but not least, I think it's important, but all this research in some capacity needs to be developed so that we can develop an implementation plan and an appeals process.

Okay, one of the first pieces of research that we need to do that we're in process of doing and in process of doing with our ADCAN colleagues is determining how In-Office Canvassing procedures will be used to validate addresses submitted by local governments. Because of its direct relationship with ADCAN, many of the research questions and how-to's required to define how we're going to do LUCA, will also impact Address Canvassing. So we'll working part in parcel.

We're also researching additional sources of data that could be used for independent and office validation of addresses. With the concepts of Re-engineering Canvassing - Address Canvassing we you know, we will have to do some of our validation in the office, and we have to make sure that we're doing that effectively.

Again, we're working with our partners in Address Canvassing in terms of researching resources that we could use. Specifically how we might use these resources in the state of like imagery or address sources. Is it effective using it? And also is there an inner relationship between some of this data so for instance if somebody provided - an entity provided data in GSS-I; we made updates and then they provided similar data in LUCA, can we use the data that they provided in GSS-I knowing that it probably came from the exact same source?

These are questions that we're going to have to really kind of mull over in the next year. Last but not least we have to put together all of this stuff that I'm talking about into a 2020 LUCA Implementation Plan, i.e., write it down. And I think once we do that, once more research has been completed, we'll be able to do that.

This will be this Operational Plan for LUCA or this Implementation Plan for LUCA will be a key input into the 2020 Operational Plan , which is what I'm giving you the deep dive about now. So we've also - we're not done in the end of this year even though LUCA begins in 2017. We'll be continuing research in 16 and 17. Once we've defined an appropriate appeals or we will obviously have to work for OMB to define an appeals

process. And a lot of that depends on sort of how we're doing things so what is the design of LUCA? What have we come up with in 2015? And also what's the design of ADCAN?

Because I think appeals is going to depend greatly on the marriage of those two things. Once we know more, we're going to engage you. We need to research the feasibility and usability of various technological improvements to LUCA. Including the use of background imagery on paper map. While the goal of the Census, and you've heard this repeatedly is to have a paperless Census or what I'd like to call a less paper Census.

We know one size doesn't fit all especially for many of our partnership programs. We're going to get a glimpse of that in this year's all digital BAS to see how well that's performing; how well we're able to reach people. So for LUCA right now, we're investigating to improve some of those things in the meantime.

I mentioned previously another one of the 12 recommendations was to look at structure locations and how we could both provide those to local governments so that they could understand where we think various addresses are and then also potentially receive those back from local governments. This idea came out of a lot of our work on the GSS-I where we've received structure locations and they're really helpful.

And it helps us tremendously review our data against the locals' data and also just kind of understand what people are trying to communicate. So if at all possible, we'd like to make that happen in LUCA. But we have to figure out you know how that works out.

And last but not least, we're looking at the feasibility of Web based registration for LUCA. This will help simplify and streamline the process for registering for the program regardless of what type of material you're getting. There's a lot of paper shuffling back and forth to get permission to get LUCA materials and what type you'd like.

So it would be great if we could do that over the Web. This is in alignment with several of our other programs, however LUCA has the interesting and unique and fun challenge of being Title 13 so we just need to make sure that's feasible.

Next slide. Last but not least and within the 2020 Census Operational Plan if we go back to the - if you remember that slide with all the dots we're going to talk quite a bit about the IT requirements for each of the programs - each operation. So for LUCA from the IT capabilities we're going to be addressing in the Plan are developing and testing in the GUPS Partnership software functionality require for LUCA participants.

I kind of - I gave an introduction to GUPS on my previous slide. This is the software essentially that locals who have available to participate in the program if they choose to go that route.

So they'll be able to make updates - review what our address was, and our geographic information is and make updates and submit them back in a very standardized format. And we're using the GUPS software not only for LUCA but for all of our geographic partnership programs for the 2020 Census.

So the LUCA component of GUPS has yet to be developed. Right now we're focusing on more of the other geographic programs that are starting first such as Block Boundaries Succession Program or BBSP but those are all going to be complimentary and hopefully use some of the same core functionalities.

So it's an IT capability for LUCA that where it's similar to the sense that we were partnering with ADCAN on In-Office review. GUPS is the software where LUCA will partner with other geographic programs to achieve the same goal through a similar software.

And last but not least and this is a big bullet. I can spend 20 minutes on this long. We need to develop systems to create, process and evaluate LUCA submissions. So basically we have to develop systems within GO that will create LUCA materials, yes. Take them back in. These are all the comments that are coming back in.

Evaluate what people have given us and then match LUCA materials up to ADCAN and produce feedback materials. So while some of that might be old hat from 2010 or we might have some components of that as we develop GUPS in other programs, it's still quite a bit of work. And then keeping in mind from my earlier slide we're still - we're going to be working with LUCA or ADCAN and some of our GSS colleagues to kind of figure out how we can you know, reuse some of the same concepts and methodologies across all programs that are doing In-Office canvassing.

Okay, so that's all I have time for. That's your LUCA update for today. I hope you have a better understanding of LUCA a little bit, but also mostly what you're going to be seeing in the Operational Plan come October. I you know, there's many things that we're going to be putting in in that Plan that are just sort of documenting the road ahead. And the Plan is fantastic for those of us that are working on operations because it really does chart out what needs to be done and when it needs to be done. So, without further ado, back to you Ann.

Ann Wittenauer: Thank you Andrea. So at this point I'm going to turn the floor over to Evan who will be talking - sketching out if you will what you can expect to read in the Operational Plan about Address Canvassing.

Evan Moffett: Thank you Ann and Andrea. You're going to hear some recurring themes here. We're going to repeat ourselves with the hope that we're setting expectations around what you will see in this document in October. So what I'm going to talk about today is kind of a high level overview of Address Canvassing. The components we envisioned at this point. Our working assumptions; completed research; examples of planned research and the IT

enabling capabilities that we think we will need to support the 2020 Address Canvassing program.

So begin with what is Address Canvassing? And I think that we're all pretty familiar with the fact that this is a foundation of the Census. It is how we built the frame. And so our intention with this program is to implement a methodology; to build an accurate list of addresses for each block that meets the objectives of the 2020 program.

So how are we going to do this? Again, this is today's thinking and this is going to evolve, but there are various components around Address Canvassing. The first one would be you know how are we going to canvas? Do we canvas in field. Do we canvas In-Office? Are we able to pull out various portions of the country?

So I worked in Denver in 2010 and we did Address Canvassing in remote areas. And then we did Update/Leave in remote areas. And so we may have some opportunities in 2020 to simply not cover the ground twice if we deem that that's not necessary. But I want to stress that our intention is to ensure that we have 100% coverage of addresses for the 2020 program moving forward.

As has been presented in a number of previous PMRs and was mentioned earlier, there are some basic assumptions around Address Canvassing that are leading or originating from the 2020 Census design decision. And those are listed here. First of all, we plan to only infield canvas 20% of the housing units. Secondly, to get to the cost savings objective, we will eliminate the early local Census offices.

Third, we'll reduce the number of crew leader assistance by one half over what we had in 2010. What we design the training strategy to reduce the numerator training hours by 35%. And we'll establish a training pay rate of \$1.50 lower than the production pay rate. All of these elements combined as you heard earlier we anticipate good results and cost savings of roughly a billion dollars.

Next slide. So as part of the 2020 Operational Plan, we'll document the research completed to date. And what I mean by to date, what we have completed by the end of 15. And one of the elements of that research the will be done is the Address Validation Tests and they're two components as was mentioned earlier.

The MAF Model Validation Test (MMVT) and the Partial-Block Canvassing Test (PBC). I'm not going to go into any details on that right now. You're going to hear from me later this afternoon when I give you some more information on that. Additional research that will be done is the in-office canvassing and validation of the business process and procedures. So Andrea mentioned earlier that from a LUCA perspective, we need to figure out how we might validate some of those records in-house as opposed to in the field.

So there's an opportunity to leverage the work of the LUCA team as well as the Address Canvassing team to define a common set of procedures that will allow us to complete some of this work in-house again as opposed to going to the field to save money. So that work will be done by the end of this year as well.

We will also issue as was stated earlier a 2020 Address Canvassing Implementation Plan. We currently have on the street a request for information for change detection. In addition, by February, there will be a request for proposal for commercial data and services acquisition and this is intended to provide us with data on addresses, imagery and those sorts of things to help us shape how we are able to conduct Address Canvassing moving forward.

So those are examples of the research that will be done by the end of this year that will then of course feed the implementation plan which will then feed the 2020 Operational Plan. Next slide please. So in addition to the research that's done by the end of this fiscal year, you can expect to see additional work outlined in the 2020 Operational Plan.

Examples of this include we will refine our methodologies to ensure In-Office Canvassing meets the program's quality objectives. We will also refine the methodology to make sure that the infield canvassing meets the program's quality objectives. We'll refine our methodologies to resolve on GEO coded addresses.

We are optimistic that this will be done via In-Office Canvassing or Validation operation. We'll also define the field infrastructure. So in other words, the personnel that are needed to support the In-Field Canvassing. You're going to hear later and you've heard the path PMR is about the ROCKIT team and the framework that it's created.

We need to work with Steph and her team to understand how that structure could be implemented for Address Canvassing. And then you know, how do we use automation to more effectively and efficiently manage the staff that is collecting the data? There are a number of IT enabling capabilities that we will build or we have that we will leverage for 2020 that will be documented in the Operational Plan.

Examples of these include the tools that we'll use for imagery analysis for geographic review for the In-Office portion of canvassing. From an infield perspective, we have every intention of using the corporate listing and mapping system as well as the enhanced Operational Control System. So for those of you that are familiar with the listing and mapping instrument, that is a part of that corporate listing and mapping system.

And we will be using that in 2020. Both of those systems that were just mentioned are part of the said cap initiative. And then lastly, we will outline our methods of how we plan to evaluate the work that we are doing to ensure that the frame is where the frame needs to be to meet the objectives of the 2020 program.

So we, and I will speak about this a little later this afternoon. We plan to implement an ongoing math coverage study which will collect data in the field that will allow us to compare back to what our plan implementation was. We'll also use the statistical

modeling to estimate coverage in the math. And finally we use the micro simulator to assess the tradeoff between costs and quality. And I believe you've heard about that last piece at a previous PMR. So at this point I'm going to turn it back to Ann.

Ann Wittenauer: Thank you Evan. I'm going to quickly pass the microphone down to Maryann and she's going to provide a similar overview of what you can expect to read next fall regarding the Nonresponse Follow-up operation.

Maryann Chapin: Thank you Ann and Evan. As both Andrea and Evan alluded to specific to LUCA and Address Canvassing. My presentation today is not meant to be a detailed discussion of the Nonresponse Follow-up operation. Rather, the discussion is to illustrate what you can expect to see about the Nonresponse Follow-up operation in the 2020 Census Operational Plan this October.

The 2020 Nonresponse Follow-up Program is at its core the integration of software, systems and procedures designed for the purpose of determining housing unit status and enumerating housing units that did not self-respond. Unlike the 2010 Census where enumerators determined housing unit status and enumerated housing units using paper questionnaires.

In the 2020 Census, we plan to use automated data collection tools for the enumeration of those housing units. And our research is focused on administrative records and how they can be used for the removal of vacant and deleted units as well as the enumeration of housing units to reduce the overall Nonresponse Follow-up workload.

You'll hear about our 2014 Test results later this afternoon. And you'll see that we are learning about, but there's much more to be done. In addition to our continued administrative records research, our out year work will also focus on developing the Nonresponse Follow-up operation quality control capabilities. Which to this point has really not begun.

You heard a lot over the past few PMR's about the four key innovation design areas that are focused on the potential to achieve significant cost savings. While the Nonresponse Follow-up Program. I'm sorry with the Nonresponse Follow-up Program we see the influence of many aspects of the research underway coming together to inform the design of the 2020 Census Nonresponse Follow-up.

For example within utilizing administrative records, and re-engineering field operations including adaptive design, as well as efforts across the enterprise to develop and enhance our IT systems solutions, they will all shape what becomes the Nonresponse Operation for 2020. What we know about how these pieces are coming together and work still needs to be done, will form the Operational Plan and what you will see in October related to Nonresponse Follow-up.

Next slide please. As with LUCA and Address Canvassing to be documented in the 2020 Operational Plan , our assumptions that we've made and are working to achieve in order to meet our goal of conducting the 2020 Census at a per house unit cost at or below that of the 2010 Census or maintaining high quality results.

These assumptions focus our research and have established goals that we hope to meet or exceed for Nonresponse Follow-up. While by no means and exhaustive lists, examples of the nerved through assumptions you can expect to see in the Operational Plan and then are currently documented in the 2020 path for the design decision document include.

Reducing the total Nonresponse Follow-up workload by 11% to the removal of vacants and deletes; removal of late responses from the Nonresponse Follow-up workload. A reduction in total number of local Census offices. The elimination of crew leaders for Nonresponse Follow-up. In achieving a goal of having 75% of our enumerators bring their own device to the job.

Next slide please. In addition continuing with our assumptions, as you heard in Evan's presentation, we are also working toward reducing the training strategy. I'm sorry, redesigning the training strategy to reduce the enumerator training hours by 35%. And establishing a training pay rate that is \$1.50 lower per hour than hourly production pay rate.

We're also working to increase nerve of productivity by 20% through the use of automation. And using adaptive design to allocate resources more efficiently. We'll also introduce a variable contact strategy with an average of three attempts per case. A variable contact strategy affords us the opportunity to make more attempts for a case when needed.

We are working toward being able to identify housing units where only one visit or one attempt is needed for the enumeration. And also to identify those housing units where more attempts are needed. Perhaps three; perhaps six; perhaps more and able to ensure consistent completion rates for all areas.

As a final example of one of our assumptions, we will eliminate the vacant delete check operation and the coverage follow-up operation as you may have known them in the 2020 Census.

Next slide please. The 2020 Operational Plan you will see in October will document our research and development activities that have been completed to that point and time. Since the 2020 research and testing phase began in fiscal year 2012, we have completed activities toward reaching key design decisions, but there's much more work to be done before a final operational design will be known for the Nonresponse Follow-up operation.

Again, although not an exhaustive list, you can expect to see in the Operational Plan results from the following work that has been accomplished or will be accomplished by the end of this fiscal year. Work we have completed includes the 2013 and 2014 Census Tests in which we tested administrative records usage to identify and remove vacant and

occupied units from the workload, adapted design to guide procedures and allocate resources, a reduce contact strategy and automated data collection, what you know as the COMPASS, was used in the 2014 Test.

We recently completed the SIMEX or the Human in the Loop test, which you're going to hear much more about from Stephanie in the next presentation.

Next slide please. Work we also expect to complete and document in the Operational Plan includes, as part of our 2015 Census Test, enhancements to the administrator of records usage to identify and remove vacant and occupied units from the workload, adaptive design, our reduced contact strategy, enhancements to the COMPASS and the enhanced Operational Control System.

In addition, by the end of 2015, we will determine our approach to the using administrative records meaning we'll decide whether we will use administrative records for the removal of vacant and deletes.

We will decide how we will use - or if we will use administrative records for enumeration of the population. In addition, we will determine our approach to processing administrative records.

And by this, I mean how the various files work together and how they will integrate with other components of the 2020 design. Associated with that, we will also identify the resources needed to develop tests and implement that solution.

And we will identify and document other key decision points associated with aspects of administrative records usage. Next slide please. As stated before, the Operational Plan will document the work that still remains to be done before we have a complete 2020 Census design for the non-response follow up program.

Examples of work that would be done in FY' 16 and beyond include completing the actual work, implement the administrative records processing capabilities and solutions, reaching decisions on which administrative records we will be used to support the 2020 Non-Response Follow-up, understanding and documenting the quality implication associated with administrative records and, certainly not least of all, determining the operational timeline for the non-response follow up as well as much, much more.

Next slide please. Finally, the 2020 Operational Plan will include information about the IT capabilities needed to support non-response follow up. Examples of IT capabilities that we will see for non-response follow up include the data collection application or the COMPASS, the enhanced Operational Control System, concurrent analysis and estimation system, the control and response data system, the administrative records database and capabilities to continue to support simulations and modeling.

In terms of ongoing evaluations that we will be conducting specific to the non-response follow up operational design, we will be doing ongoing acquisition and assessment of administrative records and third party data sources and ongoing evaluation and assessment of adaptive design approaches and operational implementation strategies on cost and quality.

So as you can see, the 2020 Operational Plan will contain a lot of information about the non-response follow up. There will be things that we know and a lot of things that we need to learn. And with that, I'll turn it back to Ann to wrap up.

Ann Wittenauer: Thank you, Maryann. So for those of you in the audience or who are watching live, I hope that these examples have given you a good taste, shall we say, of what is to come in the fall.

So, in summarizing, as we conclude the introduction to our Operational Plan and the team that is behind it, you can see we've laid out the foundation for the Operational Plan by

appointing a dedicated inter-directorate team, we have an outline for the 34 operations that we've established.

We started writing early, pre-decisional iterations of the CONOPS and we're including in that section the inventories of work that's been done, that which is still needed and a whole host of research questions to inform the fiscal year '16, '17 and beyond.

Looking ahead over the next few months, one of the key focus items for our team will be conducting informal content reviews, and by that, I mean, over the course of several afternoons or more, we'll be bringing to Lisa and the CONOPS Leaders -- excuse me -- the Operational Leadership Group, early iterations of the narratives to get their feedback.

And then, by late February, we anticipate having our first draft in place. Farther downstream, we'll see a couple more drafts before the final draft that goes to the director in June. And then on September 30th of 2015, we will baseline Version 1 of the 2020 Census Operational Plan which will then be briefed to you in October.

Of course, I want to reiterate before we conclude, we're going to be updating this Operational Plan over the course of the next several years since not all research questions and decisions can be made in this timeframe, as you've heard through the examples provided by my teammates.

In fact, we anticipate the final version of the Operational Plan won't be released most likely until after the apportionment and redistricting counts to reflect not only what we've planned but what we actually did for the 2020 Census. So we'll be keeping you informed, handling revisions by change control and governance and, as I said, keeping you informed along the way.

So as you can see, completing the Operational Plan in its first version by September 30th is going to be a huge accomplishment, not only because it is a lot to integrate and to

document but it's going to be three years earlier than we did it last decade. So come April, I'll be back to talk with you at the next Program Management Review to let you know about our further progress. Are there any questions?

Patricia Durr: Patricia Durr from Office of the Inspector General Commerce Department. It's great to see you all and it's - the team is coming together, the new team, so I guess from my perspective, I see a lot of institutional knowledge gathering again, and re-gathering and a lot of aflux between now and April and it's been going on for some time, people finding their roles in all of this important work.

Can you give us an example of - or can you tell us, ballpark, I guess, how many people are involved and would you characterize the teams - I think generally the teams, the project teams, are matrixed across divisions and is the budget reflecting the project level information?

And I guess, just kind of along this line of, I guess, the human capital type question. People are still doing - you know, their noses are to the grindstone doing the training - I mean, doing the research that they have been tasked to do since, I guess, 2011 or 2012.

So what - and I hear really good things, you know, a lot of communication and so on. Is that a - what kind of issues do you see as a result of this sense of flux which has to be somewhat of a distraction? Is it impacting the research and answering the research questions?

Lisa Blumerman: So there were a lot of questions in there. I will do my best to parse them apart but feel free to come back at me and we'll take it from there and other people can assist as necessary.

I think the first thing I would say, and you've been around the program and have seen the program go through its ups, its downs, its starts, its stops and deal with budget uncertainties when we've had budget uncertainties.

I think we're in really good shape right now. You know, I think we've come a long way in the last 18 months. We're on very solid footing with our budget this year. We have about 500 - probably a little more than 500. I don't have the numbers in front of me - FTE associated with the program throughout the agency working on all the components of 2020.

And I think we're really moving from that research phase into that implementation phase, into that build phase. And that's what's really critical for us.

It has been challenging over the last couple of years for the teams to do all of the work that they need to do, knowing the magnitude of work that's yet to come. But they did it and they did a monumental job in making that happen.

They pulled off a '13 test at the same time they were planning a '14 test. They pulled off a '14 test at the same time they were planning a '15 test or - or four '15 tests to happen in '15.

And we're in the process now of implementing and executing those '15 tests at the same time that we're planning our '16 tests and our 2020 design. So, in terms of the team coming together, this is the critical point and it's the right point in time.

You know, it's a different skillset to - in some ways, to plan and to execute and to implement. And so we're making that transition and putting the right people in the right place.

We're staffing up the branches, bringing in staff from all over the Census Bureau that had an opportunity to work on things in our IT Directorate, in our Communications Directorate or in our Economic Directorate and having them bring those skills to bear

within the 2020 program. And I think it's coming together nicely. I don't know if I hit everything you were looking for. Feel free.

Patricia Durr: Oh, so the research has been basically done, the 2012 to 2014. Is that correct or?

Lisa Blumerman: Well, you know, I wouldn't say that the research is done. I think we've completed some aspects of research and we certainly still have more to do. We're in the Address Validation Test now. We have three additional tests planned for '15.

But in terms of thinking about the census design, we have a good handle on what that high level design will look like. It's pretty clear that we focus our early research offer around the four innovation areas, really, to Address Canvassing, Field Reengineering, Utilizing Administrative Records and Optimizing Self Response.

What our staff and what our teams need to do now is to take the high level design and flesh that out a level lower so that we understand the interaction effects of all of these components and we can bring it to life and we can make it real and we can execute it.

With each of that, there's a myriad of decisions that need to be made and some of those decisions require additional research and testing. Some of those decisions we know. The beauty about bringing back some of our folks with institutional knowledge, is they bring back the strength and that experience.

But not everyone at the table has that institutional knowledge and that's good too because that's know we have new ideas and innovation and can continue to push the program forward.

This census is going to be like no other census that we've done. It's the census of the 21st Century. We're using technology in ways that we should've been doing. We're using technology in new ways.

That changes how we think about things. Bob Colosi's over on the side and I don't think he's speaking today but I'm sure at the upcoming PMR he will be about quality control.

That's one of the areas that Bob and I have had so many conversations. Our typical approach, and you'll all know this, to quality control, has been let's do a re-interview. Let's get out there. Let's do a re-interview.

And that's what we've done. But we have technology now that can help us. We have para-data that tells us information, that tells us if we have an interviewer sitting at McDonald's filling out their form. Maybe not McDonald's. Maybe it's Panera. I don't know - Starbucks, you know. Who knows?

But telling us if they're sitting in one place when they should be at this place way over here, that gives us those indications. We saw that through SIMEX. We saw what technology will help us do. This is a very, very different census and it's exciting for us. Other questions? Ben.

Ben: I was just wondering how - what the process is to determine what decisions can be made this year and then which ones are sort of still outstanding even at the design decision point which is kind of an artificial point and we're acknowledging that there are still outstanding questions. So what kinds of things are we okay with not deciding this year? How do we figure that out?

Deirdre Bishop: Again, we will focus heavily this year on the four key design areas. In addition, we'll focus on the programs that have an early implementation. For example, the re-districting data program kicks off in 2016. The local update of census addresses in 2017.

We can wait a little while for the operations traditionally known as Update/Enumerate, update of - Update/Leave. You'll see in the Operational Plan that we're focusing and the

most narratives and most content will be associated with the earlier operations. And then we'll build the Operational Plan as we approach the others. But eventually all 34 of those operations will be included.

Patricia Durr: Trisha Durr again. This has to do with the systems and the LUCQA program has a major bullet there about building the systems and, of course, NRFU and Address Canvassing, so much is relying on systems coming together.

And, okay, as Trisha, not as the OIG, I'm just going to say that the systems did operate in the 2014 Test and I was sho- well, not shocked but, you know, the politically correct word - equivalent.

Anyway, my point is that the enterprise system lifecycle development, right, and that's basically using agile approach, and there's just like this enormous number of requirements that are coming out of these functional areas.

I guess this is an observation but it just seems like there should be some big central repository of these requirements so that people can be constantly understanding them and consolidating them and so on, breaking down the interfaces and making sure everybody's talking to one another, both within the computers and within the requirement level. So I'd just like to hear a few words regarding that.

Lisa Blumerman: So let me start with one thing and I think Deirdre might want to say something and I don't know if Brian does or not, but we'll play it by ear. I think you're spot on. I mean, the integration of our systems is something that we're well aware of.

What we've been doing as we did our '13 test, as we did our '14 test, even as our '15 test, is we've been using prototype proof of concept systems or one-off systems from what we had from the 2010 Census as we moved forward, starting to roll in the components of our new systems moving down the road.

But that integration and how they come together isn't something we're not thinking about. In fact, it's something we're actively thinking about. What you'll see in the '15 test, actually, as we start to integrate MOJO, our new enhanced Operational Control System, is we're beginning that integration even while - in proof of concepts phase.

But to that end, I also wanted to share something that you may or may not have seen which is another reflection, I think, of our awareness of the point that you just raised, is that earlier this week it was announced that Stephanie Studds is actually going to be leading a new effort for us within the Census Bureau.

And she's going to be the head of an office called the Office of Innovation and Implementation. And around that effort, we're super-excited about this, right. Around that effort, is that very notion, it's that notion of how do we bring all of this together and ensure that it's integrated in such a way that the systems meet the business needs?

And Stephanie, through the work that she's been doing with ROCKIT for us, developing MOJO, the enhanced Operational Control System, as well as the work that she's led in the Economic Directorate on both Economic Systems and on Enterprise Systems, such as CoMet and iCADE, brings that expertise for us and really will help us move that forward.

So when you talk about sort of that central repository, I think this is a reflection of the fact that we see that same need. Come on, any other questions? We left lots of time. Dan, thank you.

Dan Cork: Dan Cork, National Academies National Research Council. I have a small slew of questions. First set for Andrea, and I apologize if this is getting into the weeds a little bit but if there's a hint of weeds, someone's got to dive into them.

When you're talking about GUPS, the partnership software, the first mention of it, it sounded like it was something that might already be in use. Later on it sounded like something completely de' novo and I'm just trying to figure out where in the maturity cycle it is.

Andrea Johnson: It is - okay, so - and you're going to ask them one-by-one, so I appreciate that. So the - GUPS is in development right now so we had a request for - like an RFP out for GUPS in the summer and it's been awarded and we are in the process of, you know, developing user stories and defining requirements for all of the components of GUPS.

GUPS will start off and be first used by our Block Boundary Suggestion Program. And that - we will begin testing with some of those participants later in this year so that it can be used in 2016.

Dan Cork: Okay.

Andrea Johnson: The idea with GUPS is going to be a little bit different from TPS which was our - the predecessor to that that we used last decade. GUPS has been - I can't say it's been built.

It has - the concept behind GUPS is that we'll have core modules that will be used by all the programs as opposed to last time around, I believe we had a, you know, a kind of release for each particular geographic partnership program.

So in a sense, we are developing some of the LUCA functionality especially related to, you know, seeing a map and being able to update features, because those core functionalities would be used in other geographic programs like Block Boundary Suggestion Program. So does that kind of get at it for you?

Dan Cork: Yes. That's a good segue to where I was going, thinking of. Would that also be eventually used in BAS or other things?

Andrea Johnson: Yes, it's going to be used in every- you know, I can list them all or...

((Crosstalk))

Andrea Johnson: ... the statistical program, LUCA, all the major geographic programs throughout the...

Dan Cork: Yes, so you made a reference to doing BAS first time all digital. Is that using a prototype of what might be or a holdover of the...

Andrea Johnson: It's a holdover and, in fact, we really wish the new software were available but it's not - we're using the MTPS offer right now or also accepting digital submissions like we had when - you know, not through it but in lieu of using that software.

Dan Cork: Okay.

Andrea Johnson: So that decision was made largely because we wanted to explore how we could save some money and doing an all-digital BAS helped us, you know, sustain a budget cut that we had and it also helps us examine how many people are interested in doing digital BAS.

So far, so good. We've actually had really good response rates already. Invitation materials went out in December and already, you know, we did an email blast with our new systems, and we've already had quite a few people respond. So it's going well so far but we're going to monitor the sort of conversations that get started as a result of are we marginalizing the paper participants?

Dan Cork: I'm going to come back to GUPS in a second but on the point of the BAS experience, there was also a line in there about looking at the feasibility of Web-based registration for LUCA. How much does the all-digital BAS pave the way for some of that?

How much is the feasibility of Web-based registration tied to the swearing, the certifying of the particular local liaison? How much of it is tied to the - demonstrating the capability for just basic upload of geographic files the right way?

Andrea Johnson: Yes, yes, you're asking an excellent question and that is one of the research questions essentially that we're going to be asking in the 2016 timeframe to figure this out.

We're looking at digital partic- you know, digital signup for all the geographic partnership programs through the GUPS. So that's probably the better example for where we're going to start getting the experience.

But as you mentioned, then as I mentioned, it's more complex when we're talking about the, you know, signing the paper to say, you know, I'm not going to put these materials on our shared drive at work or, you know, the reco- the security requirements that sort of are a little more arduous, so.

Dan Cork: Certifying that...

Andrea Johnson: Yes. So we're looking at it - we don't know if that's going to work out. But that's something that we'd like to do.

Dan Cork: And then back to GUPS proper, and in light of also one of the future work things, there's just an interesting word choice of it being - looking at the requirements for participants as opposed to by participants.

Because I'm, like, requirements for structuring the input you're going to get as opposed to what the people might need, what might incentivize them to supply, to participate in LUCA as they might otherwise not.

You mentioned developing user stories and I'm just curious, based on the - thinking of requirements for GUPS as an enabling thing for LUCA, what sort of thoughts you might've had about getting user stakeholder input, getting past participants or non-participants.

Andrea Johnson: Okay, so let's - I'm going to try to answer this to the best of my ability and if I don't, you're just going to let me - so GUPS is a piece of software and right now we're trying to get requirements for how that software will help satisfy the needs for the geographic program in terms of the, like you know, how to add a line and how to make a modification into an area or how to submit an address change. Okay, so those are sort of more technical and functional requirements of the actual software. But I think...

Dan Cork: Requirements for populating census's databases?

Andrea Johnson: Well, and actually for developing the software itself. Now, within the GUPS plan, there are plans to engage stakeholder participants in our testing to make sure that, you know, they're understanding it.

But I think maybe where you're going is, hey, how are we going to engage our partners into thinking about taking the leap to do digital? And I think that's where we've got a lot of good feedback from the focus groups that we did over the past year.

And so I mentioned that report where we have 12 recommendations. Several of those surround folks wanting different types of data formats, for instance. Like, last time around, we just had an askey data format.

This time around some of the participants suggested that they would like to see us put some of the data in, like, a shape file format because that would be easier for them to consume.

So I think we have already kind of completed that through those focus groups to engage folks in how they want to play with LUCA so I think - so does that answer your question? So the program requirements we're defining throughout. The functional requirements for the software, you know, are a little bit different, so.

Dan Cork: Some of us do await LUCA with bated breath. Any chance I get. Backing up just a little bit, running through the structure for the basic high level stuff for the CONOPS, a question came to mind.

There was a line in there about list of operational research in FY'16 and '18 and it just made me wonder what the ties are between the folks developing the con ops document and the people who are currently working on the '15 test, will be working on the '16 test, might even be (detailed) to be thinking about '17 and later, whatnot just ties between - you know, how much the document is driving the testing, how much the testing is driving the document or both.

Lisa Blumerman: So that's a great question and it was one of the questions we asked ourselves as we were putting the team together. We needed to ensure that we had those linkages.

So when we put together the core team, and another factor related to putting together that core team is we recognized that we have over 500 people right now working on the 2020 program and we can't put over 500 people on the team responsible for synthesizing all of this information.

But it is why there are three people from the Decennial Programs that are actively represented on that. There are actually more than three, right. If we're looking at the '15 test, for example, Maryann Chapin is on that core team.

Maryann is also instrumental now in the planning for the Non-Response Follow-Up component of the census test in Maricopa. Evan is on the core team. Evan is instrumental

in the Address Validation Test that we have going on now as well as our plans for the '16 test.

Andrea Brinson, who will be - she's clearly instrumental now. But in our new role, as the deputy chief of our decennial census management division is instrumental across all the boards in ensuring that integration, it was something that we really thought long and hard about.

Peter Miller, of course, who was critical to our work in adaptive design, in our work in bringing forward the efforts of adaptive design and the initial use of administrative records from the '13 test that we did in Philadelphia, is our key methodologist on the team and it's what we really thought about and worked hard to ensure that we had the right representation so that information flow would go both ways.

Sorry - as I hit the mic - would go both ways and would continue. It's also why Ann and her team update the program leads, which the program leads meeting, team leads meeting, is a meeting that happens every two weeks, I think. And it includes the team leads from all of the teams involved in the 2020 program so that active communication is being fed both ways.

Dan Cork: Okay.

Lisa Blumerman: Did you want to add anything?

Deirdre Bishop: I think I'd just like to say, and today was a very good example, that we recognize the importance of contingency planning. So my goal is to ensure that we have backups for everything and really, how do we funnel the knowledge base down?

Many of us have worked on the census for 20 years. We have great people in the ranks that we need to work with, strengthen, build their skillset and make them ready to stand up right behind us.

Dan Cork: Just a couple of other things. In the list of the 34 proposed operations, that's, you know, tentative also. There's a change. I understand that. But just a couple of points that caught my eye.

Under the infrastructure, there was a label for service center. Is that envisioned as sort of any help desk operation from what might be the local offices to the numerators out in the field to whoever?

Man: Yes.

Dan Cork: Okay. And the field infrastructure piece, is that also include - I mean, sort of traditional MPC operations and adding in logistics tracking? Okay. I'll shut up. One last question, if I could, back up to Lisa's presentation.

I got in a little bit late thanks to Gate 7 but on the top level organizational thing for the new management structure, one offshoot to the side was Translation Office. You might've mentioned a few words about what that was and I'm just curious.

Lisa Blumerman: Actually I didn't talk about any of the centralized offices today just in the essence of time but I'm happy to. So within our directorate's reorganization, we have several centralized offices. Most of the centralized offices that we're proposing are just that we're looking to pull functions from the divisions instead of replicating them across all the divisions.

We'll have a core staff that will help reform that across. The translation office is a little bit different. The translation office is something that actually will be housed within the decennial directorate but it's an enterprise office.

It came about as a result of one of our IOE - our Improving Operational Efficiency submissions a couple of years ago which was that the Census Bureau needs to have or should have a centralized translation office.

Within this office, we're looking at having three components within the office. One will be some in-house translation staff and we're actually working actively with HRD and with OPM right now because there is a series that the Census Bureau currently doesn't utilize for professional translators.

And we're looking to bring that series in-house to staff that component of that office. And so that section within that office will have the core languages that we use most frequently.

We'll then have a small section within that office dedicated to doing translations research so that we can stay abreast of what is current and we can ensure that we're up to date with the current standards.

And then the third section recognizing that the translations needs for the Census Bureau kind of grow and shrink, depending on where we are during the decade will be a core staff dedicated to maintaining the contract for us and then managing that contract vehicle.

Jenny Kim actually will be on the agenda later today. She'll be talking about the 2015 National Content Test. She is the lead for us in developing the plans for the translation office. So if you have specific questions beyond what I've...

((Crosstalk))

Dan Cork: Now, I have a basic question. It looked like an enterprise-wide thing and I was just kind of - just curious to see it stuck there but that's good. Thanks.

Lisa Blumerman: Ty.

Ty Mitchell: Hi. Ty Mitchell, government accountability office. Happy new year everybody. It's great to see starting off the year with all this energy. One question and just two general comments, and thank you again for breaking the glass on the weeds.

I feel more comfortable diving in a little bit here. Actually, this one's not that weedy. I heard reference to a couple of sched- a couple of the different sets of schedules being baselined and no doubt there're many others like IT there that have their own schedules being baselined.

In the context of the 2015 rollout, are we looking to see kind of the tier three, tier four stuff baselined all kind of integrated in the same timeframe given all those together?

Deirdre Bishop: Our schedules are all baselined, tier one through tier four. Next week we have an offsite of the DC - decennial census management division ADCs. And as soon as that - that offsite is to help us work toward our reorganization and the placement of the 13's. Lisa referenced that activity earlier.

As soon as that's over, we're going to take a very close look at our schedules and figure out what needs to be updated in light of recent changes that have been made, in light of our research and testing through '13, '14 and '15. But we do have a dedicated set of schedules that we're currently and consistently working with our staff to make sure the updates are in.

Ty Mitchell: Okay and - thank you. The three to four tier, that's baseline beyond the 2015 decision?

Lisa Blumerman: So the 20- just to I think speak specifically to the question you might be asking, as of December 31st we had baselined the 2015 Testing schedule. We have completed the integration of that and have baselined it.

Ty Mitchell: Okay. Just two general observations. One, I was a little bit confused on the - on what you meant by census Operational Plan when I saw the communication tools being part of the plan, you know, the tools on how to communicate the plan being part of just - but anyway, just a general observation.

I'm not sure - because when I looked at the operational team, I didn't see the communications director on there, right. But some - I'm just trying to reconcile that a little bit. But you don't need to respond to that one, obviously.

The second observation is I heard a lot of talk already about the administrative records on the address side and I know we're going to hear more on the NRFU side.

And just as we're talking today or down the road, the touchstones that demonstrate how those different pieces are being worked on together, I know everybody's matrixing but specifically, when you mo- I mean, I'm making this up but when you're modeling the change intention, for example, I can imagine that some of the information at the block level might be correlated with some of the propensities for whether a unit is vacant or not.

You know, I mean, so you're probably wrestling with challenges on both sides, you know, and stuff like that just to the extent that there's touchstones of where you learn from each other and working together and the actions of having the admin records research plan census slide in place, it'd be great to hear some of that if there're some obvious ones when you're presenting. Thanks.

Lisa Blumerman: Just to quickly speak to, I think, the first point which is about communications and why the communications tools were there. Actually, Jeannie and I -- but she's not here right now -- but Jeannie and I have been talking actively and we do have folks from the Communications Directorate as part of it.

Why we indicated it as part of the Operational Plan , is we recognize in this day and age the value and the utility in communicating through things like infographics and other communication tools that really aren't, for those of us that are statisticians, our strengths in producing.

We try. Sometimes we understand them. Sometimes we confuse you with them. So we really wanted to bring in core help in order to help us do that. That's also why the team name has changed from, I think, when we first talked about it which was when we first chartered this team, we called it the CONOPS Team.

And as we moved through the six weeks that we've been operating, we realized that it was more - there's a technical meaning behind the term CONOPS which that is one component of what we're producing. But the team itself is really producing more than just that CONOPS. It really is that Operational Plan .

Lisa Blumerman: Other questions?

Patricia Durr: Just a quick question about the term administrative records and its use in the geography arena versus non-response arena. Those are two things that may overlap to a degree, probably to a large degree, but not completely. So to the extent that that can start being differentiated, that would be great.

Lisa Blumerman: Thank you. We have a horrible weakness of referring to administrative records to mean administrative records and third party data and we do need to do a better job of delineating what we're speaking about. Okay, if we don't have any other questions or comments, I think we are right on schedule for our break at 11:00. So we're going to take about a 15 minute break and then come back. And when we come back, Stephanie Studds will talk with us about 2020 Census Field Reengineering. Thank you.

((BREAK))

Deirdre Bishop: Okay, everyone. We're ready to get started, if you could please take your seats. Okay, great. I'd like to now introduce Stephanie Studds. Stephanie is now moving to a new office, the Office of Innovation and Implementation.

And - but we feel confident we're still going to be working very closely with Stephanie and we're thrilled about that. Steph, I'll turn it over for your presentation about field reengineering.

Stephanie Studds: Great. I am Stephanie Studds. I am the team lead for ROCKIT and this is just one of the key projects that will be part of the new Office of Innovation and Implementation. So what I'd like to do is spend a few moments with you preparing you for what we did during our November simulation experiment.

So as we've talked about in the last few PMRs, we talked a lot about the ROCKIT journey and I'd just like to level set our journey for just a moment. The - when the team was formed in April of this year, John's simple request was to the team, "I need 20% increased produ- increase in NRFU productivity."

Okay, thank you. So during John's goal introduction to the team, we walked away thinking, okay, how do we get to that 20% increase in NRFU productivity?

Everyone assumed it was the implementation of MOJO or our Operational Control System that would get us to that 20% reducing our miles and our hours spent as we've talked about before in 2010. We drove everywhere in the United States nine times or more.

So everyone began with that assumption that it would just be optimization and routing of enumerators and passing that information off to our COMPASS handheld device.

What the team quickly realized is how can we have an automated handheld device that we're using to enumerate respondents in an automated optimization and routing tool yet we still have paper payroll?

We still have a training avenue that's all verbatim manual, things of that nature. And then the staffing that was in place that really managed from a paper perspective.

The team took it on to automate the training and you're going to see that as you've seen before. Some of our introductory modules. We automated payroll so that we don't have to meet at McDonald's or Panera anymore every morning to turn in those D308s.

And that led us to a huge transformation in the way we manage the field operations. So when we left off on the journey, we talked a lot about the simulation experiment that the team was about to then trend to.

As you'll remember, I talked about that simulation experiment truly being our dry run. The team came up with a lot of really radical concepts, system design. And we needed to make sure that we had tested that before we put it into the field.

So what I'd like to do is back, the week of November 17th to the 21st, and I see many familiar faces who spent some of that week with us, which we really, truly appreciated and enjoyed.

I'd like to take you back right before you entered our Operational Control Center or our area of support operations. You saw a video that introduced you to the simulation experiment and what the team had done to get there. So now what I'd like to do is just take a moment to share that video with all of you.

((VIDEO))

- Man: Welcome to the ROCKIT live test, the SIMEX were simulation experiment. Before you see the SIMEX in action, we'll explain ROCKIT and its impact on the decennial census particularly the non-response follow up, or NRFU operations.
- Man: ...from the US Census Bureau...
- Man: One of our overarching challenges is conducting the most complex decennial census ever using new methods, technology and approaches to data collection.
- Woman: With all the structural changes we're making, from the people perspective to the device perspective and all of the automation, we needed a dry run, an opportunity to test all of these things in as real life as we could get without setting up a brick and mortar test environment.
- Man: Our goal has generated a brand new con ops for NRFU including an enhanced Operational Control System near real time operations information and automated training. The new con ops structure eliminates roles that supported a paper-based operation which we won't need in our new automated environment.
- Woman: And so we eliminate the need for meeting at McDonald's every morning. Instead of having to wait a week or ten days to get data back in from the binders, it's actually giving us data at nightly intervals so we can do a much faster analysis of the data and the quality of the data coming back in during this test.
- Man: The structure you'll see is the AOSC. The AOSC will be at Headquarters and the Denver Regional Office will run on the ground operations in Maricopa County, Arizona.

The new organizational structure separates the management of staff from the management of workloads. Local supervisors of operations will ensure enumerators have what they need to complete their assignments.

Field managers of operations and area managers of operations will ensure work is progressing in the operational window. The ROCKIT implementations phase has a creation task, a live test and a refined test.

The creation task includes an enhanced Operational Control System called MOJO, automated training materials and Operational Control Center or OCC design. The SIMEX will allow us to conduct a simulated dry run using real world scenarios, real world systems and synthetic data.

We're looking to learn if we've set our staff and ratios appropriately, if the Operational Control System design is right, if the automated training properly prepares staff and if the Operational Control Center design works appropriately. Feedback from the live test will allow us to refine the CONOPS and move on to the production phase of our ROCKIT journey.

Woman: This team has made massive aggressive changes to the way we're doing business. We needed a fundamental way to test that prior to going into the field. SIMEX gives us that core capability and allows us to refine once we're finished at the end of November before we go into the field on the 18th of 2015.

Man: These are the key milestones associated with the ROCKIT project. This live SIMEX is only halfway through our journey. The decennial census is the largest civilian administrative peace time effort in the U.S.

Due to their success in developing simulation capability for DOD and DHS, both huge operational environments, we asked MITRE to create a SIMEX for our project.

In this SIMEX there are 40 LSOs participating throughout all the regions as they will for the 2020 Census. In 2015, LSOs were participating in one just region - Maricopa County.

Woman: These are the actual positions, the AMOs and the FMOs sitting in front of you actually doing their daily work as you would see them in 2015 in the Denver Regional Office.

Man: During the SIMEX, ROCKIT will also test the ratio of enumerators to LSOs.

Woman: Before they could only manage eight to ten enumerators. Now we're moving into an infrastructure where they believe they can manage somewhere between 15 and 30 enumerators.

Woman: Hello?

Man: Hi, Susan. This is Jay, your supervisor.

Woman: And we will come away with metrics and an analysis that will give us the quantified approach.

Man: Here is a sampling of scenarios from SIMEX. Some are initiated by enumerators and some by managers - LSOs or FMOs. These scenarios created by the ROCKIT fuel team are supported by synthetic data to illustrate real life situations in the SIMEX.

All refinements will be completed in time for the last phase of 2015 production. And here's a quick look at some video from our enumerator training courseware that's in development right now.

Man: Not all of these addresses are actually houses where people live. Take a look at these photos, for example. Some are stores like this coffee shop.

Man: Is there a number for the management office I can call or my supervisor can call?

Man: Understand that the local guard may not be trained in your situation. The supervisor should be.

Susan Smith: Hello, my name is Susan Smith. I'm going...

Man: ((Foreign Language Spoken)) Maria! ((Foreign Language Spoken)).

Man: You have a smart phone to use out in the field and he has. That will help you determine what counts as a housing unit. If you still have questions, you should call your supervisor.

Woman: How long will it take again?

Woman: About ten minutes.

Woman: Okay, let's do it.

Man: Okay, now let's test your understanding of the materials we have just covered.

Woman: The most exciting part for the entire ROCKIT team has been just this opportunity to really think outside the box, bring in new innovative technology, embracing Field Division and others within the Bureau as well as outside academia and the industry community and actually seeing this come to life in this simulation experiment that everyone's about to see.

Man: Now please step inside to see our live test. And thanks for being part of the SIMEX.

((END VIDEO))

Stephanie Studds: Okay, so bringing it back, let's talk for a moment about what it took for the ROCKIT team, as well as our partners at MITRE to actually get us to the simulation experiment.

It was a heavy lift on both sides and in order for us to get there, we actually had to do some preparation ahead of time. So as many of you've heard in previous PMRs, field division helped us tremendously by putting together what we call our ROCKIT field team.

That's about 22 people with varying degrees of knowledge about previous censuses, current surveys and at various levels in the organization. They have been provided to us from all six level - or all six regional offices.

So about every eight weeks we all come together. We're sharing new capabilities within MOJO, within COMPASS, the handheld device, the automated training.

So what we did during one of our most recent trips was we asked the field team, we divided them up and we said, "Can you come up with scenarios that would accurately reflect what would happen in the field?"

We, the ROCKIT team here, did not do that. We wanted field to actually tell us about the day-to-day activities that go on - cars break down, dog bites, all of those kinds of things.

So they not only came up with a scenario. They actually came up with how often those things happen and helped us come up with the data that was behind this.

That came hand-in-hand with what we've talked about before, synthetic data. When the ROCKIT team formed, one of the quickest things we realized heading for this simulation experiment and what we were about to undertake with MOJO, we realized we did not have a three dimensional constructive simulation model here at Census.

And we were fortunate enough to work with ROCKIT and the mastheads here at Census to come up with that simulation. That simulation provides us the household data, the enumerator data and our time data for optimization which was something we never really needed before.

So why is that so important? Why are those two key components so important for us going into SIMEX? As you saw in the ROCKIT simulation and what you're going to see here in just a moment, is we actually prepared Maricopa County, which is where the 2015 Test will be.

We actually put the networks and the data together to emulate those household scenarios as well as the data it took for COMPASS and MOJO to interact for those 80-some odd scenarios.

In addition, the recruiting was huge. And this was probably one of our biggest wins of all, and I'll talk about this in a few minutes. Field division was gracious enough with their chaotic schedules to put on loan to the ROCKIT team, about 89 people for a two week stand.

Why was that so important to the team? It was important to us because field is the ultimate user and the (grid) that we're impacting the (millets). We're changing our staffing ratios. We're giving them new technology and devices.

Them being able to hand - to hold those was huge for us. So they participated from around the country in their homes and their regional offices and some here in the MITRE white cell as well as headquarters which was critical for us.

This is closer to what the 2020 look and feel will be. Finally, our infrastructure build out. So infrastructure, everyone assumes is just, you know, the TV monitors that you'll see, that area operations support center that we put in place.

But there was also a lot behind the scenes there which we worked very closely with IT. This was a radical change in how we're doing business and IT came together with ROCKIT in the very beginning and they worked hand-in-hand with us to develop all the solutions that you're about to see.

Not only the TV screens, the monitors that we are now setting up in Maricopa County for the actual production test, but even down to how we communicated via the telephone devices from the enumerators to the LSOs which is our first line of command in the management structure, and from the LSOs to the SMOs, and you're going to see that in just a minute.

So in all of this preparation, what was the team trying to get to? What we really wanted to see was the MOJO Operational Control Center design. Did we get it right? Were we engaged enough with field to deliver what they really needed?

Did we set staffing ratios appropriately? Let's do some testing and see what it's actually going to look like in 2015. Was the training content appropriate that we used? Keep in mind what we did prior to engaging in the simulation experiment because we trained everyone right here in the rooms that you're sitting in today.

We did it via virtual teleconference to the region, so anyone who participated did not fly here to headquarters to take the training. We actually did it via virtual teleconference to the regions and that's how they got their training.

Did that work? Did the content itself work? Because what we don't want to do, as we talked about before, is spend five days in classroom and paper training. We want that true automation, that true ability to use technology.

Finally, did this solution deliver our Operational Control Center, the TV screens, our dashboards, our heat maps, all of those key pieces? So what I'm going to share with you now is actually what occurred during our simulation experiment here at Headquarters out in the field with all six regions participating, and last but not least, the MITRE white cell.

((VIDEO))

Woman: Welcome to the Census Bureau's ROCKIT simulation experiment. This is what operations will actually look like on the ground as we manage the two ROCKIT panels for Maricopa County, Arizona.

It is extremely different than the way we've done censuses in the past. Before, we would meet at McDonald's in the morning and pass out binders and maps. When we give out work assignments to the enumerators, we would also meet with them every morning and we would collect their D308 payroll forms.

Now what we're doing is we're actually giving their assignments to them via the COMPASS device. They'll receive their text message in the morning. They'll open their device. They're already routed the way they should go for the day with all their case assignments.

Man: We've got our simulated set of enumerators. So whenever they have a problem, they're escalating that to the LSO levels and sometimes the LSOs are escalating that to our FMOs here in the office if there's something they can't handle or they need approval for.

Woman: That one is actually a working alert so, I mean, I will send out a great job working in a timely manner.

Man: We kind of input a lot of real life situations that will come up in the field to the simulation so these scenarios that are coming up we think are probably pretty common things that are

going to come up in the field and all this data updates on the slide. It all - we're not looking at, you know, a day old data. We're not looking at three hour old data. This is happening - this is probably ten seconds old.

Woman: One thing that it's really good for is just to track changes in enumerators and they were schedules and availability. This is good data to use to kind of monitor your team's performance and progress.

Woman: This MOJO system is amazing. Coming from the 2010 Census as an area manager, I can see how far we've come from paper to automation. I can really see this being a cost savings effort.

Man: These are my LSOs up here. We have alerts that are generated, alerts that are resolved and alerts that are live. It's amazing. SIMEX is flawless. I've had previous experience from three decennials 1990, 2000 and 2010.

We have more paper with SIMEX and what we call our MOJO system. We're able to connect actions. We can send it out to those local supervisors and they can impart that data on enumerators and we can resolve things quickly and very flawlessly.

So (unintelligible) and she has additional resources that we can move over, and that can happen instantaneously. That was never the case before. It would take days and possibly weeks.

Man: (Unintelligible).

Man: There's a huge paradigm shift. We're no longer expecting people to dig through reports and figure out where the issues are. The system ought to be smart enough to tell them you've got somebody with a lot of short interviews, there's something wrong. You cannot possibly enumerate somebody in two minutes and get quality data out of that.

Man: We never had an idea of when enumerators were actually out there working or not. So the fact that we've got this real time data coming in about whether someone has synced their COMPASS device, has picked up the assignments and are actually out there working is a huge step for us. This gives us a better feel for whether work is actually getting done in the field and where we need to assign resources in the future if work is not getting done.

((Crosstalk))

Man: My only advice is don't set the targets too low. At UPS, ten years ago, we did a reengineering effort and reduced 85 million miles driven a year. No one would've believed we could've done that.

And I think there's more to gain than you think. You're going to find more benefit and you're going to make bigger changes for this organization than you expect.

Woman: I love it.

Woman: For anyone in the future in a role of FMO, I would definitely say let MOJO work for you. Let MOJO guide you on how to do your work, to be the best and most efficiently to get your job done.

Man: Well, she submitted that she speaks Spanish and if she doesn't speak Spanish then you might have to take some action on...

Woman: Oh, definitely.

Man: With seeing how well the system is working so far, I'm excited to get out there and see what successes we have and see what we can fix as well.

Woman: Up here, we've got a pocket where we're not hitting very much.

Woman: These dashboards were paid out of MOJO too.

((Crosstalk))

Woman: It brings us mass efficiency. It brings us into the 21st century. It gives us that gateway to the future. Let's walk before we run. And we're actually starting to deploy that technology early on.

((END VIDEO))

Stephanie Studds: Okay, so the benefits of SIMEX - why is it so important for us to do this? I really think the team felt as though, with all the radical and revolutionary changes we were making, we were doing it from a staffing perspective, system and technology.

We invoked training, automating payroll. That was a lot to take on from April of this year. And, you know, the cool thing about this was senior level management here let us think outside the box but would it work?

So what we found was at the end of the simulation, when we walked away, was we were able to test this in a dry run scenario. We were able to test our systems before we went to the field in 2015.

And we have data behind all of this now using the MITRE simulation technology to support our decisions as we move ahead, which I'll share with you in just a moment.

If you were here during the simulation experiment, what you would've seen was us doing a morning run that encased the East Coast. In the afternoon, we would embrace both the East Coast and the West Coast.

In two sessions every day, we did what we called hot washes. And what we gained from that was a very quick knowledge of understanding from all of the individuals that are participating and in the field, how things were going. Were they working well? Were they not working well?

We had our IT Team on standby and the Operational Control Center. They were able to make quick changes if we could in the lab environment prior to us opening up the afternoon session or potentially the morning session.

So field was quickly getting able to use that technology, any updates they were asking for. It also illustrated that agile process. That's what we were doing in this throughout the entire revolution of the project.

Every eight weeks we would continue to go to the field and we would say, "Is MOJO getting to where you need it to be?" They were constantly giving us that feedback.

What we felt we delivered in the simulation experiment got us through all of the high and the medium things that they wanted and most of their must-haves on the low list for us going into the 2015 production test.

We were able to deploy the training and get feedback from the training of what they think was really, really good but also what did we need to elaborate on now that they actually were driving the technology?

And if any of you have kids, this is a really easy scenario to relate to. If you have kids and they play video games, Mario Kart, and they want to drive. They're 16. They want to drive. They can do all of those things.

But until they physically get behind the wheel of a car, they don't really understand what it is, nor do you as a parent, the things that a car is capable of doing.

That's what this allowed us to do. We turned the keys over to field division and field was able to alert us and tell us what went well and what didn't. We were able to put tablets in the field. We learned very, very quickly things with the tablets.

This is the first time they really deployed tablets for the use of data management for the supervisor's operation. And, again, just including all levels of the management structure from all of the regional offices.

So what did we learn? As I said earlier, the big piece we were looking for is staffing ratios. In the earlier PMR, we talked about in 2010, we were only able to manage eight to ten enumerators because of the paper process and the weight behind that.

Moving into our SIMEX scenario, field felt they could manage somewhere between 15 and 30. With the simulation experiment, we actually went above 30 into the range of 35, and in some case, 40 enumerators to an LSO.

What we found and feel comfortable with going into production, is we're looking at 23 enumerators to 1 LSO. So remember, our local supervisor of operation is the individual that is managing the people on the ground, the enumerators.

Remember in our previous discussion, that huge distinction between LSOs or first tier managers, and our second tier, our field manager of operations, we want the LSOs to manage the people and the field managers of operation and the area manager of operation, which you saw in the simulation that were sitting there in the room together, actually managing the day-to-day.

In doing that, we figured out they can, without much of a productivity lapse, we can do 23. That is a conservative level. When we started getting into the 30s, we started to notice a little bit of a decrease in productivity.

So we felt comfortable that 23 is where we should be for the 2015 Test. As good as SIMEX could get us to reality, we know with automation, being in Maricopa, there're a lot of other things that could happen that we need to be prepared for.

On the ground and reality is always different than any experiment or demo you can do. We also looked at the LSO to SMO so that first tier manager to that second tier manager. We believe they can manage ten LSOs to one FML. So we feel comfortable deploying that environment in the 2015 Test.

We also looked at the Operational Control System at MOJO itself. In all of the hot washes and the final feedback that we got from everyone after the simulation experiment was over, and as you heard in some of the video feedback, they felt MOJO was very intuitive to them.

Most - we really looked at the smart phone device background that some people had. Some people had no experience whatsoever. Some of them were on their devices like we are every day.

What we learned was within a day, they felt very comfortable with the application itself and being on the tablet. Within a day and a half to two days, it was almost like back of hand for them.

So that was a big incentive for us because we were concerned about how long it would take them to feel comfortable. MOJO user interface improvements - why was that important? We walked out with a lot of things that we needed to tweak.

But here was the coolest part of all - one of those things was, as you saw, our learning capability. As you remember, the key for MOJO was manage the alerts, always manage red.

And as you saw in MOJO system, we're actually automating your to-do list. I wish someone would do mine for me every morning. But basically we're telling them what all their alerts are when they come on for their shift and we're putting them in the priority order.

One of the things we realized in the simulation experiment was that they were actively working the alerts but we could easily provide more information in that alert to them.

Yesterday for the first time, we released, in the afternoon, what the new alerting system was going to look like. The team actually got to look at it and we actually got to provide feedback and we'll be sharing that with field and everyone very soon.

The other key piece that we thought was just a nice to have, when we developed MOJO, we threw in what we called a messaging component. And it's just like a simple messaging, I can IM back and forth, but the system was keeping the history behind the messaging.

What we figured out very quickly in the simulation experiment was we forgot to train them on one of the key pieces that is necessary for the SIMEX, a key word they needed to put in so we could get a quick analysis from MITRE every day.

And we were sitting at the Operational Control Center and we were, like, "Oh, how are we going to do this?" Somebody yelled out and said, "Hey, just send them an IM." What we quickly realized, and it was like an ah-ha moment, of did we just really do that that fast?

It's like, yes, we're in the 21st century. We should have. So here's what it eliminated - in the past, I would've picked up the phone and I would've called a manager who would've

called eight people and they would've called ten people, and by the end of that, we don't even know what the message was.

Within minutes in our IT environment, we were able to send out that message in a standardized fashion to everyone. They could implement it almost instantaneously. That was a huge win for us.

But the other piece we realized was how important that was for them to do the job. Now, we all have email so why was that so important? Everything was self-contained within the instrument itself.

It had the history. They could pull it up by enumerator, by case, however they needed that information. They felt that was huge. So to us, it was something we threw in as a nice to have. It was something that turned out to be a key evolutionary piece as we move ahead.

So I'm happy to say here today that we've made almost all of the changes to the messaging that came out of the SIMEX experiment and we saw that as well yesterday and we'll be sharing that very soon with everyone.

The other piece that was important was the training. As I said before, Jenny Kim's team has done an absolutely phenomenal job with ADCOM here at Census, the videos and all of the automated training that they've developed, as well as our contracting support group.

And what was important was this is the first dynamic change we're making in this and what we wanted to make sure was the content was being delivered appropriately.

So we were able to do that, deliver that content here in the SIMEX and get feedback for that as well. We have actively embraced all of those changes. We took the first eight modules to Chicago the second week of December and have gotten feedback from field and are implementing that.

And the last modules will go to LA in February, the week of the 10th through the 12th. Our OCC design - so when you saw our simulation experiment, you saw our field manager of operations and our area manager of operations just as you would see managing Arizona from Denver for the 2015 Test.

What we figured out during that was that the design was right and we've worked with IT. They're actually implementing that design this week and next week in Marico- or in Denver in the regional office for the 2015 production.

So we felt as though, not only did the concept we came up with work, we were also able to implement it with very minimal changes and we had TCO support on site the whole time which was phenomenal for us. If we wanted to make tweaks or changes as we were learning, we were able to do that.

And that was my final key, is being with IT from the day one. You know, we kind of knew where we were going as a ROCKIT team. The changes were radical and different. IT was able to listen to what we needed and actually bring those things to life as you saw them. And now they will do that for us in the production world.

What we're refining - so as we're coming out, as you'll remember in our journey, our refinement stages are last piece prior to hitting production. So we've solidified our concept of operations. We've gone back and updated that to actually show what we will be doing as far as the staffing, the training and implementing the technology on the ground.

We've made the - most of the updates at this point to the MOJO interface coming out of the simulation experiment and we will be sharing those very soon with people here inside of Census, with field, et cetera.

We have made some refinements with TCO on the tablets, things that we learned throughout the process, updating our automated training materials, as I mentioned a few minutes ago, and actually working with field for the institutionalization of these new staffing ratios and how we're going to move forward for 2015.

Our team milestones - so we finished our simulation experiment in November, on the 21st, and the team quickly turned its direction from coming out of the simulation, taking what we learned, what we got out of it, and how do we get it done for 2015?

And I feel as though we're getting there quickly. We will be going to LA and sharing the technology and everything in February and then we will be beginning our training of the actual LSOs or FMOs and our enumerators.

We will release MOJO in the late March timeframe for all the testing and final implementation for production and then us just going on May 14th for that production environment. Okay?

So we've accomplished a lot with our simulation and we've, I believe, implemented almost 90% of the list we came out with in November. And I believe we're in a great place moving into that 2015 Test.

So within this year - in that one year from the time of creation of the team on April 1st to the time we deliver, I feel like the team has been able to pretty much envelope everything that came from field, what we got from our stakeholders as well as what we learned in our simulation experiment from MITRE so that we can deploy those in '15 as our true pilot and proof of concept. Any questions? Sure, Trisha.

Patricia Durr: Trisha Durr with IG. Yes, it was very exciting to be there and I'm just - my question is how will this be replicated, either for ROCKIT or for other systems, this SIMEX methodology?

Stephanie Studds: So that's a good question. So we're working very closely with the IT team especially with CEDCAP to begin to say how we can begin to show integration using the simulation experiment.

We have a SIMEX onboard for 2016 but you guys saw a lot of the cool bells and whistles and will enable more technology and you'll see that in '16, but where we're really going after it is also being able to show implementation and integration with things like Maestro and other systems or the Operational Control System, the UTS (Unified Tracking System), other things in the 2016 simulation.

There's a lot of discussion and planning going on now since the close of our simulation of how we can integrate those things going into later in '15 and also in '16. I know you guys are hungry. You just want to go to lunch. Any other questions?

Deirdre Bishop: Okay, well, thanks for your attention this morning. We'll take a one hour lunch break. We're right on schedule. We'd like to see you back here at 1:00 and we'll proceed with our presentation about the 2014 Census Test results. Thank you.

((LUNCH))

Deirdre Bishop: Good afternoon everyone. I hope you had an enjoyable lunch. We're ready to get started. I'm happy to turn the program over to Maryann Chapin . She'll be leading the discussion about our 2014 Census Test results. It's all yours Maryann.

Maryann Chapin: Thank you. Good afternoon and welcome back from lunch. We're starting this afternoon with a presentation on the 2014 Census Test results building on what was presented in the October PMR.

A significant amount of work has been done since October. There's a wealth of data available from the 2014 Test that will inform our path forward. Today we will highlight key findings. Additional analysis and results will be issued in official reports later this spring.

In this session, we'll cover the following topics - self-response and lessons learned presented by Michael Bentley, results and lessons learned from administrative records removal presented by Thomas Mule, results and lessons learned from the panel comparisons and the COMPASS instrument presented by Elizabeth Poehler, backup slides with information on the schedule of key activities for the test.

The context strategy panels and the non-response panels are provided at the end of the slide deck for your reference. These slides have been presented in the past and will not be discussed in any detail today.

Optimizing Self Response and utilizing administrative records are two of the key design areas where our research is focused on the potential to achieve significant cost savings.

With that in mind, the high level objectives of the 2014 Test included testing contact alternatives for both the self response and nonresponse followup enumeration to determine the most efficient and cost effective way to get data from non-responding households.

Testing the use of administrative records to determine the quality of the records in conjunction with actual field enumeration while using pre-determined context strategies.

Learning about the timing on how people come to the Internet so that we can optimize systems and procedures for the future. Testing enumeration instrument prototype in the field to determine its impact on completing field enumeration and to determine what are the application and operational issues that need to be addressed in future testing. And testing adaptive design approaches to set priorities for cases to either use telephone or personal visits in specified order and to train enumerators.

You'll hear in this session about the 2014 Census Test results and how they are informing our approach to testing that will occur in 2015 and how the results are laying the foundation for design decisions that will be made later this fiscal year.

As mentioned this morning, at the end of the fiscal year, we plan to reach decisions on the potential usage of administrative records in the non-response follow up operation.

Our research to date has focused on the feasibility of using administrative records for two purposes - removal of cases from the non-response workload where administrative records indicate the address is vacant or a delete and removal of cases from the non-response workload where we have confidence that administrative records can be used for enumeration.

Our goal is to use administrative records where they work and to not use them where they do not. As you'll hear in the presentation, we are beginning to gain an understanding of the feasibility of using administrative records but need to continue our research. At this point, I would like to turn the presentation over to Mike and he can share with you the information on self-response.

Michael Bentley: Thanks Maryann. So over the next few slides, I'm going to present findings from our data analysis specific to self-response. I'm going to cover contact strategy results, Optimizing Self Response, Non-ID Processing and questionnaire content, mentioning lessons learned and next steps for each.

First, I just want to briefly summarize where we tested for ways to optimize self-response. The first objective of the research was to test implementation of a notify-me census.

This is where we send a sample of addresses, a postcard inviting them to sign up to be notified by email or text when it's time to respond to the survey. In an actual census, the idea is that this would be part of the initial advertising and promotional blitz where eager respondents could engage with us and we could reduce paper mailings.

The second objective was to test use of Internet response without an ID. Here we did not provide the sample panel with the user ID to enter the Internet site. The goal for this was to test our ability to process and match respondent provided addresses.

This was accomplished daily in batch. For the spring 2015 Census Test, we're working on real time matching functionality while responding in the survey. The third objective was to test the use of email of initiation invitation response in lieu of mail materials.

Finally, we also tested a couple tweaks to our standard Internet push design. It should be noted that because the 2014 Census Test was a site test and not a nationally representative sample, no broad generalizable conclusions should be drawn about the results.

So our major findings as it pertains to Optimizing Self Response include first and foremost, that Internet push where we did not send a paper questionnaire right away is a successful strategy for generating Internet responses.

Altogether, out of the entire universe for the 2014 Census Test, of approximately 192,000 cases, 50.6% responded by Internet with a total response rate of 66%. That means that out of all self-responses including Internet, paper and phone responses, more than three-quarters -- 76.8% -- responded online which is great and we were very happy with that result.

The next finding was that respondent participation in notify-me was low. Of 10,000 cases invited to do so, only 3% participated. We also found that, perhaps not surprisingly, email was not an effective replacement for postal mail.

Over half of the emails that we sent bounced back to us and total response rates for these panels were 10% age points lower than the control panel. In addition, automated voice invitations to landline phones showed no impact on response when used as either a pre-notice or as a reminder.

Based on these experiences and analysis, we're applying the following lessons learned and next steps to 2015 Testing. First, it does appear that a standard mail Internet push invitation approach is the contact method that is currently performing the highest which is consistent with other surveys that we conduct as well as other academic survey research.

And we're going to test tweaks to this as a baseline moving forward. In the 2015 National Content Test, which you will learn a lot more about later this afternoon, we are experimenting with a variety of different approaches to maximize response rates including altering the timing, order, format and number of contacts.

Second, we also learned that email invitations or reminders are currently not an effective replacement for postal mail. Though we do still see some potential value here, and in a 2015 national test, one of the panel designs include using email as a reminder, delivered at about the same time as paper reminders, if not replacing them.

Third, to succeed, notify-me needs advertising and promotion to educate respondents about this option. And we will learn more about some of these unique advertising efforts this afternoon from Steve Buckner during the 2015 Testing session.

Next, I'm going to provide some of the final results related to non-ID Internet responses where respondents could access the survey site without a unique ID. This test provided the opportunity to test enhancements to our existing Non-ID Processing and here's what we found.

First, the response rates were lower compared to the control panel which contained the user ID. For Internet response if the difference is more than five percentage points -- 46.3 for the control panel compared to 40.6 for the panel without and ID -- response is also lower overall -- fifty-eight point nine% for the non-ID panel, and 61.4% for the control panel with ID. One explanation for the difference is that the address provided for all Non-ID Responses needs to be matched to our frame. If a responder provided address does not match, then effectively it's a non-response for our purposes.

Results from the matching operation though did show that about five% of Non-ID Responses were not matched. So this was a much higher match rate than we saw in 2010 for Non-ID Responses. In addition, the use of the address supplementation from administrative records isn't needed very often. But when it is used, it increases matching rates by about 50%.

Based on these results and analyses, we believe that a Non-ID Response option could have great value in the presence of a census promotional campaign. This will be studied as part of the spring OSR test in the Savannah media market -- which again, you're going to hear more about this afternoon.

Also we learned that the success of allowing Non-ID Responses depends on accurate matching. The spring test will include real time Non-ID Processing as a means of

increasing these match rates. And lastly, we need to test Non-ID Processing on a more diverse set of addresses -- such as more rural route addresses for example. We hope that the advertising and outreach in the OSR test will generate more of these non-sample addresses for more robust testing.

Next I'm going to move on to some of the main findings from the question our content testing that was included in the 2014 site test. As you may be aware, one of the findings from the census 2010 Alternative Questionnaire Experiment was that a combined race in Hispanic origin question was found to be a more accurate and truer reflection of respondent's racial identifies than a separate question.

The ACOU was a paper only though, so this was the first time that we tested this comparison on the Internet. We found that the use of the combined question compared to separate questions showed no different in the distribution for most groups.

Further, soliciting race - write-in race and origin details online on a separate screen from the major group checkboxes, compared to one the same screen results in more detailed reporting. So what does that mean? For example, if a respondent was more likely to say that they were Cuban for example than just simply saying that they were Hispanic or Latino, we would count Cuban as detailed response for that group.

Detailed reporting for the major groups varied quite a bit by question version. The combined question saw higher percentages for white, black, and Hispanic -- but a little lower for Asian and Native Hawaiian.

Finally, we also tested the use of a new relationship question which includes categories to distinguish same sex and opposite sex categories for spouse and partner relationships. This showed no difference in distribution for each category -- though the paper for did see slightly higher item non-response for the new version. I do want to reiterate once again that this was a site test, and not focused on the value adding content as a main objective.

The 2015 National Content Test will continue testing race and Hispanic origin, relationship, and other content on a larger, nationally representative sample. Among other things, this will include testing different approaches to optimize detailed race and origin reporting online -- and findings from the relationship question need to be validated with a national sample. Next, Tom is going to provide some results on the use of administration records in the 2014 Test.

Thomas Mule: Thank you, Mike. We're going to - I'm going to briefly for the 2014 Census Test give a brief summary of the test design, I'm going to give some results and lessons learned from the administrative records and the comparisons that we ended up doing, and Eli is going to give some results of the interview panel comparisons, and also looking at evaluations of the COMPASS instrument.

So just a brief summary of the 2014 NRFU census test design. Just a reminder -- these results were presented at the previous PMR -- is that the initial NRFU workload that was established on July 29, this test had a census day of July 1. So on July 29 we determined a NRFU workload of 46,247 addresses. And also, just a remind that all non-responding addresses in the area were included. We didn't have to do any sub-sampling. All right. Just a reminder, our non-response follow-up operation was conducted between August 14 and September 25.

So this was a brief summary of the four panels that we used in the 2014 Census Test. There was the control panel where we end up implementing 2010-like procedures, but we did have the automation of the COMPASS instrument and the automated control system.

We did have two panels which ended up using our reduced contact strategy. In those we ended up having personal visits with a telephone option in the middle. And these two panels differ because ended up having whether administrative records were used or not.

The second panel listed, no administrative record cases were used to remove any of the workload for that panel.

In the third panel we did end up implementing our full administrative record removal. In the course of our processing we were able to identify cases that we determined to either be occupied, and we had a household population that we could insert, or those that we could determine to be vacant based on their administrative records. For this test we did not identify any deletes, or those units that we thought were non-existent.

So of those two if we identified any of those two groups or cases, they were initially - they were removed from the workload right away. Our fourth panel was our adopted design panel. This one did have a caddy component where it had outbound calling of some cases. It also ended up having - when the fields workloads are occurring, we did assign seven priority cases to the interviewer to be completing each day that was something that ended up changing daily -- and areas either got one or three total visits based on their geographic location and their 2010 response rates.

It did have an administrative records component. And this is what we refer to as our hybrid component. It did have the same treatment that we had for vacants. If we identified a unit as being vacant based on its administrative record, it was removed before the field work even happened.

For those cases that we identified as being administrative record occupied with a household composition, we proceeded to allow those units to receive one visit out in the field. In the course of doing that where they got one visit - in the course of doing that, either they could go online and self-response on the Internet, they could decide to take their paper questionnaire and send it back, or we could have a completion with the enumerator at the doorstep. That was three potential ways of us to be able to resolve the case. If we didn't get either of those, we did not go back again. They only received one visit.

And also, just a remind of the administrative record sources that we ended up using for our production. So we did end up using the United States Postal Service -- their undeliverable as addressed. We mailed a prenotice on June 23, so we were able to use the information that the United States Postal said about whether they were able to deliver it, and the reasons.

They were collected between June 23 and July 6. So the primary - we ended up using vacant -- which is a reason that we did use in the 2013 test. We also included additional reasons to be able to include - (the test still is out), and the main one of the two, it would contribute "in this time was unable to forward". So we're doing that as a difference from 2013.

For the personal information we ended up utilizing, we took information from the Center for Medicare and Medicaid statistics from their Medicare transaction database. We ended up using two years of that information. Since we go the deliveries in the August timeframe and our test was July, we ended up looking at two years of the past data and said, did we see consistent households in a two year period.

We also were able to receive from the Internal Revenue Service, tax year 2013 information that was delivered to us in early July, and we ended up processing that and using the returns for the first half of the year. And we were also able to use the information from the Social Security Numident database.

So now we're going to look at some of the results overall by the panels - by the four panels that we ended up having. So we're going to take a step back and we're going to focus on all the entire cases. So we're looking at all the 112,000 cases that we ended up having going out for the field work.

So the last one is the control panel. So in that one there at the bottom we ended up having - 59% of the cases there ended up where we were having self-response before our NRFU cut was done. We proceeded to go out and do our non-response follow-up operation, and we were able to resolve 32% of those and the next bars up above that.

With resolution, in this one we were able to determine the status -- whether it was occupied, vacant, or delete -- and also, if we determined it was occupied, we were able to determine the population count there. So there was a total of 9% that was unresolved for that panel.

For the reduced contact without an administrative record, it had similar comparisons as the control panel. Sixty% of those were completed before the NRFU cut, another 29% of the whole entire universe was complete during NRFU, with 10% unresolved.

My focus - the main part of this will be on the administrative record panels -- we had those removals. So for the one - the panel that had the reduced contacts with the full removal, there we ended up having 58% before the cut, and then we ended up having two% in the next bar where based on our administrative records we were able to identify them as being vacant.

Then we ended up in the purple we ended up having 24%. So based on our administrative records processing, we - able to identify those as being administrative record occupied when we had a household to insert there.

For the remaining 16% of the entire universe, they went out for field work, 10% were resolved, 6% were unresolved. And then the last panel -- which ended up having our hybrid removal -- again, we have a 58% before the contact -- before the non-response follow-up cut -- another two% which was done by the - determined based on the administrative records vacant, and then with the next two blocks we have both of them showing 12%.

The first one -- the green 12% -- is those were the cases where we had administrative records information, but we did receive the enumeration from the person. Either they ended up going online, they ended up sending their paper questionnaire, or they will complete the enumeration on the doorstep. So for those 12% we were able to receive data from the household.

The remaining 12% above there, we did not receive any NRFU information, so we ended up utilizing our administrative records for those cases. For the remaining about 17% which went out, 12% were resolved and five% were unresolved. If any of these columns did not add up to 101, that's just a rounding error.

So with the - let's look a little bit further at the administrative records with our vacant removal. In these two panels we identified there are about two% of the whole entire universe that were determined to be vacant.

So one of the things we were able to take advantage of in this analysis is the lock panel -- the control panel. There was no administrative record. They were removed there. We were still able to do our administrative record processing on those cases there. So we can compare our processing and our results to cases which ended up getting field work. So we'll show the results of some of those later.

There's a couple of comments about the two% that was a little bit lower than we were expecting. One of the things that we did end up seeing in this test is we had fewer undeliverable addresses in the 2014 Test time period as we did in 2010. So at least we were seeing fewer UAA reasons -- and since UAA reasons are a main driver of determining units to be vacant, we ended up identifying a smaller number in this test.

But let's look a little bit at these two% and see what's kind of happening with those particular cases. So in the control panel with our processing, we were able to identify 464

cases that we determined to be vacant based on our administrative records processing. Looking at the results in the control panel, 366 of them we were able to resolve the status in NRFU.

So looking at those 366 status cases, 194 were determined to be vacant, 62 were non-existent, and 110 were occupied. So we had 53% vacant, 17% non-existent, 30% occupied. So we ended up having 53% where we ended up matching the same status, we had another 17% where we did not match the same status but both of them were being classified as non-occupied.

And then we did end up seeing in this test, we had 30% who were determined to be occupied. This was definitely one area where we want to do some more investigation. So what we ended up doing was looking further at these 110 cases in the control panel.

What was going on with these cases that we ended up seeing? So we ended up doing some further looking and we ended up seeing - 51 cases which ended up having a series of things which we ended up noticing. Six of cases we ended up looking at the notes field of the NRFU interview coming out of COMPASS, they had some type of note indicating the unit might be vacant.

We kept looking further and we ended up identifying eight cases where the notes was indicating there was some movement that they thought was going around at that unit around July 1. We ended up seeing another instance where there was another four field notes indicating there might be a possible delete -- a non-existent housing unit.

Kept going through - there was 11 interviews where the results of the interview could determine the status that it was occupied, but the interview was not totally complete and didn't determine a population count. We did end up having 14 which ended up looking that they were resolved by the self-response option. So either through the Internet or TQA.

At least one thing which this particular test is in that particular option there is not a question dedicated for vacants to determine - that the self-response of the unit is vacant.

Now in the last meeting we also ended up noting that there was about eight of the addresses after this particular point where there still was some building access issues. We also did look at the national change of address file, and for 110 of these - I looked at 110 units, there was 23 where we are seeing based on change of address there was some - in filing of that for these particular units within two months of census day.

We also - we decided - we also looked at the administrative records occupied removal. So in looking back overall, we were able to identify 24% of the whole entire universe in the full removal panel, and the 12% in the hybrid removal panel. So we wanted to end up looking at how the status and the account comparison for those cases.

So again, we went back to our control panel. We were able to identify 7028 administrative records -- occupied addresses. We proceeded to look through and there were 6259 where the NRFU results in the census process had the status being resolved.

We proceeded to go further and ended up for the - there was 5883 -- or 94% - where the census NRFU result was determined it was occupied. So we're agreeing on occupied status 94% of the time.

We proceeded to look further and be able to identify the cases where the NRFU status was determined to be occupied, but also there was a population count. So that last box of 5442 we have cases where we have census responses with a population count, we have our administrative records in our population count.

So we're going to do some - we did some additional analysis looking at those. So look at those 5442 cases we did a comparison on what was the census count, did the census count

match our administrative records count. And our finding with looking to the control panel was that the overall match rate was 54%.

We did end up seeing that there was 13% where administrative records had one fewer person, and also 16% where the administrative records had greater than one person. So that was 83% where there's plus or minus one. We did see instances where there was 10% where AdRec had two or more people, and 7% where AdRec had two or fewer people.

So we did want to - we did look further if you all see - try to explain - especially this 54% overall. With this varying by different types of household structures. So we were able to take our administrative records, the household that we were able to compute and put together, we were able to then take from the Social Security Numident database, we were able to get the ages.

So we could make household composition categories. We could classify them based on the number of adults, based on being 18 or older, and whether children are present or not. So they were able to make these seven categories listed here.

So when we end up looking at the comparisons of the administrative records based on these categories we ended up seeing some differences. We ended up seeing higher count agreements for if there was one adult and no children present, or if there was two adults with no children present, or two adults with one, or one with one or more children present.

Those three household compositions had match rates of 57, 61, and 65%. We did end up noticing that we have instances of one adult and one plus children, or instances when we had three or more adults, or the other category, those results were between 32 and 40%. So we're definitely seeing differences in our household matches based on these administrative record compositions that we were able to put together.

So some of the lessons learned, and things that we're doing forward is the administrative records vacant. We are looking at these results and seeing which improvements we're going to be able to make. We did use the vacant code and also the "do not forward" code. So we're decided which codes to be using as we're going forward in our production rules, and continue.

We also configuring - taking into account our business rules and our models to address what's the desired tolerance of the different between the administrative records based determination and the NRFU occupied differences that I was showing earlier.

For administrative records occupied we were able to utilize -- see if we might be able to go forward -- utilize more of this household composition in our rule based and our model based assignments. So we definitely are doing that, and we're continuing to examine this data a little bit continuing further -- especially to be able to see categories, especially the one adult with children present. And now we'll transition over to Eli.

Elizabeth Poehler: Thanks, Tom. All right. So now we're going to look at the impact of the various contact strategies and the use of administrative records on the NRFU interviews themselves. So again, you see the slide before -- Tom just presented it -- we're going to focus on the NRFU interviews.

So in the control panel we're mostly talking about that 32% where the data comes from NRFU interviews themselves, and the nine% that are unresolved, and the reduced contact strategy without the use of administrative records were focused on the 29% of the cases with NRFU interviews, and the 10% that are unresolved.

In the reduced contact strategy with the full MN removal, we're focused on the 10% of cases with the NRFU interviews, and the six% unresolved. And finally in the adapted design with the hybrid AdRec removal, we're focused on the 12% of NRFU interviews

without AdRec, the 12% of NRFU interviews where we did have AdRec but we were able to complete and interview after the one visit, as well as the five% unresolved.

So the first thing we looked at was the average number of contact attempts. And looking at the table, we see that the strategies which reduce the maximum number of contacts allowed have overall lower averages as you would expect. However, what we also noted here is that the control panel average is higher than we anticipated when compared to the 2010 Census.

The average contact attempts in Washington D.C. in the 2010 Census was 2.7, and in Montgomery County it was 2.6. That is for the entire county, not just for the subsection that was in the control panel. But we think the comparison is comparable. So we'll need to continue to monitor this moving forward to understand more about why - what would cause the number of attempts to be higher, and if those attempts would relate to other contact strategies.

Next we looked at the completion rate or the completed interviews. These completion rates include CAPI and CATI interviews self-response received after the NRFU universe was established, as well as cases that we used administrative records for. And you can see here that the use of administrative records leads to higher completion rates.

Next, looking at proxy rates, comparing the control panel to the reduced contact strategy without the use of administrative records. We see no impact on the proxy rate. So a reduction in the number of attempts does not appear to impact the proxy rate. But using administrative records to remove occupied cases in a reduced contact strategy with the full AdRec removal increases the proxy rate. And by not allowing proxies in a portion of the adaptive design panel we see that the proxy rate is reduced.

Okay, and the next we listed the housing unit status distribution. Here we see that the unresolved rate for housing unit status is high. It is primarily being driven by non-

interviews which were higher in the 2014 Census Tests than the 2010 Census. The use of administrative records reduces the unresolved housing unit status rate, and the vacancy rates are not significantly different between the panels. We would - we plan to continue to research the non-interview unresolved rates and to monitor this in the 2015 count.

Okay, so next we explored the CATI interviews. CATI interviews were conducted just for the adapted design panel for the first two weeks of the operation. Eight thousand eight hundred fifty-nine cases had phone numbers and were eligible to be interviewed as part of CATI. We see that 5.2% of those cases were completed in CATI, and just under 25% actually had a late self-response. So no further interviewing on those two categories of cases were needed.

However, the remainder of the categories that are shown on the slide required further interviewing in the field or with CAPI. Six point seven% ended up being refusals, 3.4% were partial interviews, 0.3% were language barriers, and just under 60% we had no contact with anyone.

Among those 8859 cases we sent to CATI, there were 21,416 phone numbers. That is there was more than one phone number provided for most of the cases. So looking at the phone numbers in particular we found that 2.2% yielded completed interviews, 5.9% resulted in a non-interview, 10.5% were determined to be bad numbers, 46.5% were attempted, but no contact with anyone was made -- so we were unable to determine if the phone number was a good number or not -- and 34.9% of the phone numbers were never tried.

This could be because the first number we used for the case was successful, or we received a late return so there was no reason to continue to dial numbers for that case for example.

So our lesson learned at this point based on the results of the 2014 Tests -- and some of the similar results we saw in the 2013 tests -- is that we need more effective phone numbers, and or improved or changed interviewing methods in order for CATI to be an effective interviewing method.

Another aspect of the CAPI operation in the 2014 Census Tests was to encourage soft response during NRFU interviewing. When a respondent was not home when an enumerator visited, the enumerator left a note of the visit telling a respondent that they were there, and instructing the respondent to go online or call the telephone questionnaire assistance hotline to complete a census form. The idea behind this is that we could avoid a return visit to the housing unit if the respondent completed the form.

So what we saw was that 4385 soft responses were received we started the NRFU operation on August 14. Three thousand nine hundred and seventy-four of those occurred after at least on attempt by an enumerator. Thirty one% were received - the soft responses were received the same day as the NRFU attempt, and 52.9% were received within two days of that NRFU attempt by the enumerator.

Of the cases that were received after the start of NRFU, 61.1% responded via the Internet, 15.7 via the telephone questionnaire assistant, and 22.2 via paper.

Based on this experience we believe that the push to soft response during NRFU is a successful approach. We need to assess the optimal wait time between visits to allow for the soft response, and research ways to identify potential soft responders during NRFU to optimize this approach.

Okay, and finally we looked at some debriefing and observations of the COMPASS interview, and of interviewing in general and found a couple of areas that I wanted to highlight. So we talked about the first one at the September PMR. We did identify some issues with blocked buildings and multi-units in this test.

Interviewers, we found that interviewers were recording attempts for a unit or sometimes all the units in a multi-unit building -- even when they could reach it. So if the outdoor door was locked and they couldn't get into the unit, they were just positioning the cases for the units in that building. There were also observations that there were interviewers trying to gain access or contact the same building manager, multiple of them at the same time. So we're talking about what we're going to look at in terms of addressing this.

Another issues that we identified was the vacant and deleted units. Multiple attempts were required before attempting a proxy in the 2014 Test, and this was due to the contact rules that we had in place. So they were required to make three contacts for example with the housing unit before going into a proxy. This isn't necessarily - necessary for vacant and deleted units.

And finally, for telephone attempts made by enumerators -- out in the field, so not CATI interviews -- if multiple phone numbers were available, interviewers were just positioning the case after dialing one number -- versus all of the numbers -- if the first number wasn't successful. Also interviewers noted that moving between the COMPASS application and the phone application on their device was not smooth, and sometimes required them to write down the numbers in order to make the correct phone call.

So some lessons learned from these observations -- based on the observations about the multi-unit and locked building issues, a group of headquarters staff go together in October to work through this issue, and we determined that we do need to conduct more training on multi-units and access issues for the enumerator.

We want to clarify to interviewers that attempts should only be recorded when a housing unit is reached. So if the building is locked, they're not to record that as an attempt at the housing unit -- but they are to notify their supervisor immediately if they encounter that situation.

For vacant and deleted units, we're recommending creating options in the COMPASS interview - COMPASS application to allow interviewers to disposition cases prior to making attempts - all of the attempts in some cases. So for example, we would have an option in the COMPASS interview for the interviewer to know, I think this unit might be vacant.

Then the COMPASS interview would prompt them to go visit a proxy immediately. If that proxy confirmed that the unit is vacant, the case is resolved and no additional attempts are made. If the proxy would indicate, no I think somebody is living there, then the interviewer would continue to make attempts at the housing unit before attempting another proxy interview. And in general we will continue to make improvements to the COMPASS instrument to address additional special situations.

Deirdre Bishop: We'll now take any questions that you have. Trish?

Trisha Durr: Where do the telephone numbers come from for both the CATI and the CAPI?

Elizabeth Poehler: So the telephone numbers that were utilized in this test were provided by our internal – Center for - CARRA. It's Center for Adaptive - Center for Administrative Records Research and they procured them from outside sources.

Patricia Durr: So that was the same was what was used by the Non-ID Processing the same area, the same application or same repository?

Dave Sheppard: Yes. The - sorry. (Unintelligible)?

Dave Sheppard: Again? Okay. This is Dave Sheppard from CARRA. Yes, both of those tasks, putting that database to phone numbers and emails together as well as working with the non-ID people

to use administrative records to supplement our ability to MAF match. Those both came from our area.

Patricia Durr: So the administrative records that were used for NRFU in the analysis that you did Tom, that was a separate area - that was a separate repository. Is that correct?

Thomas Mule: Yes.

Patricia Durr: Okay. Now you're getting - I ask this question sometimes when I see you in interviews, but I guess my confusion -- and I'm really trying to clear up -- is did the 14 Test - how - did it get census closer to that predictive ability, and you know, some kind of measured level of accuracy to predict which of these houses are going to match?

Thomas Mule: It helped us out because -- experience with the household composition that I was showed. It did allow us to identify a certain composition which we were seeing better performance than others. So we were able to see that in the 2014 Test, but one of the things that is similar to the - Mike, that we mentioned is this is a site test. So there is limitations of this particular area.

And the other at least challenge for the administrative records is that census day was July 1. So in 2020 Census day is going to be on July - on April 1. So this comparison of administrative records -- especially IRS returns between February and April -- if - one of the caveats is it is a further away time period for some of the comparisons.

Patricia Durr: What will the ideal test or testing that will accomplish the gap?

Thomas Mule: The nice thing with the planning for the 2015 Census Test is it has an April 1 Census Day. So that was one of the nice things about the tests that we're going to be doing coming up is that this is on the April 1 timeframe.

Patricia Durr: So you'll be predicting which houses you don't have to go to beforehand, and then checking the accuracy of the results?

Woman: Michael, regarding the Non-ID Responses and the address matching, how exact did the respondent have to enter their address for it to be deemed a match or unmatchable. For instance, if they put unit instead of apartment, or spelled out street instead of St. was that something that would have triggered as a non-match or...

Michael Bentley: I'm going to ask Frank McPhillips who actually did some of that work to come up. He can give you a much better answer than I can.

Frank McPhillips: I was trying to avoid that, but - it's a simple answer. We didn't just do exact matching. The Geography Division has a complex set of - you know, a variety of matching techniques, so there was equivocation as well. So not all elements had to be exactly the same.

Dan Cork: Dan Cork, National Academies. Just to follow-up on the non-ID a little bit. On the response rate - the response dip in the non-ID, was there anything different in - any difference in the wording, in the appearance of the materials that they would have seen? The absence of an identifier or even reference to an identifier might look less legitimate, more, you know, stalk mail.

Michael Bentley: The difference in the materials between the control panel that had the ID and the non-ID panel that did not have an ID, they were very similar except for the absence of that ID -- and theoretically the sample cases that were in the non-ID panel should - would not have even known that there would be an ID. I think on that - yes?

Dan Cork: On the one panel it would have said you need this user ID to log in. But on the non-ID case it wouldn't say the opposite. It says you don't need any sort of identifier to log in.

Michael Bentley: Yes. The non-ID panel was taken to a different log in page where they were first asked to just provide an email address, and then pass a captcha to get in -- whereas the ID panel were taken to a different page that first asked for their unique ID number.

Dan Cork: Okay.

Michael Bentley: But - so the difference - the non-match rate accounts for some of that difference. The rest of that difference, we're not real sure if it could be something happening to its legitimacy or what. We don't have a - we need to learn more about that.

Dan Cork: Not at all defending automated voice invitations -- not going there -- but since you mentioned the use of them, and to talk about the - there being no real impact on response, what does that mean exactly. Is that response overall, over the lifetime of the test, is it looking within a time window of when the machine - when the phone message would have arrived? Any sort of signal, spark of anyone at all being reminded by...

Michael Bentley: So there's probably a little bit more details. We tested this in two different panels. One was at a prenotice -- and this was actually the prenotice for one of the email invite panels. So we had a panel where we sent calls to say, "Hey, this test is coming. Please respond when you receive the materials", and then they got an email. And then we compared that to the panel that just got an email right off the bat, and there was no measurable - we couldn't see anything in terms of any impact on response there.

The other panel was where we sent it after they received the paper questionnaire, and in terms of the response rates, we're just not seeing anything there. Dave Sheppard and -- who spoke a little while ago -- and his contact frame team is trying to dig into the results a little bit more and kind of compare data from, you know, when we send the - when we leave a message, you know.

Did we get an answering machine, did somebody pick up the phone, is there some indication that it's a work number? And they're trying to do a little bit more there to figure out the overall impact of it.

Dan Cork: But on the overall topline numbers it's eventual response at all?

Michael Bentley: Right. Pretty much flat.

Dan Cork: Okay. Eli had results about the 31.1% responses received the same day as the NRFU attempt -- 62.9 within two days, the biggest take-up by Internet. Is there any sort of meta-data that might be attached to those records that might be able to parse out how much of that was responding to the notice of visit.

I guess - I mean a paper response is what would have to be late May overturns just coming in from the stream, but the other - the phone responses or the Internet responses could be to some people responding the thing on their door as opposed to finally getting around to sending in the form.

Elizabeth Poehler: Yes. So unfortunately there is not any additional data to tell us that they were going online because they have this notice of visit in their hand versus they just happen to remember or they found their form sitting at home. So we're really just using the date time frame to say that something perhaps about this NRFU visit now has prompted them to pick up the paper form that's been sitting on the desk, or call us, or go online.

Dan Cork: Then on the tech front, you mentioned enumerators sometimes having to write down numbers to call to hand off between COMPASS and the phone application. Is that a limitation of COMPASS or a limitation of the iPhone -- just not being able to use data connections at the same time as the phone to begin with. Was there a link out to the phone app that was supposed to work that didn't work?

Elizabeth Poehler: Yes. So both applications can work at the same time -- and in fact they have to in order to make a call on the iPhone and complete the interview. So that was the case, and they were doing that. But there was not a link to say - like say, I want to call this number that's on my screen, and I would select it, and it would dial. They had to manually go over to the phone application on the device and then manually enter the number. That was as designed. That's what we did.

I don't know that there is or is not a technical limitation. It was just in terms of progressing and starting the COMPASS application, not something we had asked them to do for the (unintelligible).

Dan Cork: Okay. So it was just a function that wasn't initially (unintelligible).

Elizabeth Poehler: Correct. It was not a required from them to implement.

Dan Cork: Final point of trivia. When you mention the enumerator is supposed to notify their -- looking ahead -- notify their supervisor immediately if they detect a locked building, what is the supervisor supposed to do?

Elizabeth Poehler: So for the 2015 Test, that supervisor or their upper line supervisor is being asked to research ways to maybe have a centralized approach of contacting the building management instead of all of these individual interviewers doing it, or find out if there's other resources to gain access.

Moving beyond the 2015 Test, there are some thoughts about perhaps working with some property management associations to build or maintain a database of people to identify these types of units or have contact so that we have them in advance and we're prepared for these situations.

Dan Cork: That was the question -- whether it touches off an intervention or someone else trying to broker access from a higher level to get into the building as opposed to just "this is why I can't do the work right now."

Elizabeth Poehler: Right. Right.

Dan Cork: Okay.

Deirdre Bishop: And I actually witnessed this in the Field. When I went out for a non-response follow-up in Northwest D.C., we could not gain access to the building. The enumerator did call the supervisor and she said we've had problems with that building before. Here's the management company's phone number.

We did call the management company, but at that point we couldn't get through. Ended up getting in the building a different way, but it was evidence that if you do call, you know, the supervisor sometimes may have this additional information.

Ty Mitchell: Hi. Ty Mitchell, Government Accountability Office. Thanks for all this information. This is - trying to keep up with all the results. It sounds like you've got lot to think about.

In the weeds question and then kind of more of a high level one. In the weeds, on slide 13 -- this is I think real simple -- looking at this 40.2% CAPI proxy rate. Is that -- and the reduced contact strategy with full administrative records removal -- and you already draw the conclusion that removing those, the proxy rate goes up.

Is that simply a data point the Edmond records in this case is kind of getting some of the low hanging fruit, or some of the easier cases? Is that - I mean is that really was going on? Is there something else that I'm missing? You're still looking for it. Okay.

Elizabeth Poehler: Ty, can you tell us what slide you're looking at again?

Ty Mitchell: Slide 30.

Woman: Thirty, thank you.

Ty Mitchell: CAPI proxy rate table. Sorry. I thought it was 33.

Man: Thirteen.

Ty Mitchell: I'm sorry. My bad.

Elizabeth Poehler: You're referring to the adaptive design panel?

Ty Mitchell: The 40.2%.

Elizabeth Poehler: Which is contacting strategy?

Ty Mitchell: Right. And you already draw the conclusion that - or the observation that using AR removed increases the proxy rate. I'm just curious -- is that where we're seeing the administrative records kind of took care of some of the easy cases and what's left behind? I mean, so you have some other thoughts on...

Elizabeth Poehler: That was kind of my fault, yes. But they're removing the AdRec removed so that it will be easier cases. And so the remaining ones are the harder cases and require more work or require proxies.

Ty Mitchell: No. I just - I think it's a great data point. The conversation is about, you know, you might do some things that reduces - takes care of the easy ones. It doesn't necessarily mean the NRFU on those cases is going to get any cheaper. But you're removing some of - you're

reducing the overall expense by taking some things offline. But that's an artifact to think of. I was just verifying that. Thanks. Thanks for the weeds.

The higher level one is a lot of additional pieces of research that are alluded to in your presentation -- and there's probably many others that you didn't explicitly mention -- and how - can you say just a few sentences about the mechanism that's going to ensure that the ones that need follow-up are going to get the research where those are going to get done?

Some of those might get handed off to other teams -- just kind of tracking a lot of the knowledge and the leads you've got, you probably can't afford to do all of them. But, you know, kind of just talk us through the mechanism for making sure that that's a kind of concerted effort.

Deirdre Bishop: I'll start, and I would like to start off by commending the people at this table and their teams back in the office, because these results are, you know, the preliminary pieces of the assessment. The final assessments are not yet complete.

With that said, we're already taking these findings and applying them to our planning for the 2015 Test. Compared to the 2010 Census, I'm really starting to recognize the benefit of doing these more frequent tests, and applying the lessons learned. It is making a difference.

We do have the experts at the table, we are ensuring that we're applying the lessons learned to the next round -- even thinking forward to 16 we're saying, well, remember what happened in 13, what happened in 14 -- making sure that we're applying the findings. Any other questions? We're right on track today, thank you.

Okay. Then we'll move to our next presentation. Thank you, everyone. Now we'll move into the 2015 Testing plan. Jill, are you at the - Jill is at the table way down there. Jill's going to kick it off with an overview of our plans for 2015.

Jill O'Brien: Good afternoon. Thank you for joining us on this nice cold afternoon in January. I'm going to talk to you today about the high level testing objectives for 2015. And following my update, Evan will talk with you more in depth about the Address Validation Test -- which is currently underway -- followed by Maryann Chapin who will cover the 2015 Census Test. Stephen Buckner is going to address the Optimizing Self Response test, and Jennifer Kim will finalize this session with a discussion on the 2015 National Content Test.

I know you saw this slide back in the fall, but many people weren't part of that - were not part of that update. So I just wanted to cover the high level testing objectives again.

The purpose of the 2015 Census Test objectives are to focus on the major design decisions and content development for the 2020 Census. We will inform the performance of the methods and models that will help us development the address list, tests of the use of aerial imagery for change detection, and assist in the delineation of the reengineered Address Canvassing workloads.

We will also test the feasibility of fully utilizing the advantages of planned automation and available real time data to transform the efficiency and effectiveness of data collection operations. We are also looking to reengineer the roles, responsibilities and infrastructure in the field.

Shown on the screen is the graphic that I presented in the October PMR. As indicated earlier this morning, we do have four testing activities planned for 2015. The Address Validation Test began in September. The second phase is currently underway.

The 2015 Census Test has an April first census day in Maricopa -- and that is on its way too. We're developing that as we go right now. The Optimizing Self Response test also has an April 1 Census Day, and the national content test is scheduled for a September 1 census day.

The Address Validation Test summary. We will look to inform the performance of the methods and models that will help us development the address list. We will test the use of aerial imagery for change in detection, and implementation of partial block canvassing as an alternate for full block canvassing, and assist in the delineation of the reengineered canvassing workloads.

The first part of the test is called the mass model validation test. All of our field operations for this phase of the test ended on December 15. We listed 10,100 blocks, and we checked 821 blocks during our listing check.

The partial block canvassing portion of the test began - I'm sorry, we received OMB clearance on October 29, and the field option - field operations, our lister started field work on the week of December 15 and the operations are scheduled to end next week on the sixteenth.

I had the pleasure to be part of this test. I actually just returned Wednesday night. I spent three days in South Florida, and I traveled 650 miles and went to 25 locations as part of the team that's doing this work. It was actually a great opportunity, and I learned a lot. Being new to decennial, it was my first real opportunity to be able to go out and perform field work and gain the perspective.

So I found the work to be very, very interesting, and I think that we'll gain a lot from the results that we're going to gather once the test completes. Driving 650 miles in three days was quite a challenge, but I did make it, and I did get to all of my locations. So it was a great opportunity, and I also got to use the new laptop instrument that they're working on. So that's well under way, and I think the work is going very well.

Once the operation is complete we will then have quality control work that's going to continue in the field until the twentieth of February. A high level test - census test

summary where we're going to test the feasibility of fully utilizing the field operations, management systems, that leverages planned automation and available real time data as well as households have already provided the government to transform the efficiency and effectiveness of data collections operations.

We're looking to reduce NRFU workload and increase NRFU productivity with administrative records, field reengineering, and adaptive design. And we are also testing the implementation of the Bring Your Own Device option for enumerators.

The high level status update for this test is as follows. We have submitted our own B package to the Department of Commerce on the second of December. Our field test is completed and baselined. Our integrated schedule -- as Deirdre mentioned this morning -- was baselined on December 21 - December 31, I'm sorry, and we're making some final revisions to the schedules after we get through our onsite-offsite next week.

Our low level solution requirements, we've been finalizing as necessarily. Our form content and design is completed and locked down. The local census office building -- the lease was signed in October, and the build out activities began in December, and our system is completed. They released predevelopment and testing for the NRFU system. We are recruiting staff that began, and testing sessions have also began, and we are on track for our April 1 Census Day.

In the next 90 days we will obtain the OMB number and prepare printed and online materials. We'll finish the tweaks that we're going to make to the schedule -- as mentioned earlier. We're beginning our recruiting activities -- and that we're going to continue through March of 2015. And with our training we will print our control training materials the week of February 16, and our trained field operation supervisors the week of March 23.

And for our systems, we're going to complete the release for development and testing activities, prepare for our user acceptance testing, and we will go through our systems readiness activities for self-response operations.

Moving on the Optimizing Self Response tests, the objectives are to conduct early research on the use of advertising, promotion, and outreach to engage and motivate respondents. We will determine the extent to which we will use early engagement -- such as Notify Me. We will assess the operational feasibility of real time Non-ID Processing, and the potential resulting workloads for system development, and we will study the extent to which encouraging responses without a census ID will contribute to the national self-response and Internet response rates.

The status report for this test is as follows. The OMB package was also submitted to the Department of Commerce on the second of December. Our integrated schedule is complete, and we're making final revisions. The form's content and design is completed and locked down. Our user acceptance test for Centurion in the phase one operations currently underway. The low level solution requirements we are finalizing as we go. And April 1 is - we're still on track to meet our April 1 Census Day.

In the next 90 days we will gain approval by OMB, and have the number, and prepare and print online materials, integrate our schedule -- it will be finished. So low level solution requirements will be complete and baselined, and the systems, we will complete all of our user acceptance testing, and our systems readiness activities.

And finally the National Content Test. The summary information is that we will use a large nationally represented sample to ensure representation of race and ethnicity groups. The test will inform language support plans and refined estimates of national self-response and Internet response rates.

Content testing will focus on race and Hispanic origin, relationship, and within household coverage. And the test will include a content re-interview to examine accuracy measures for experimental content.

A federal register presubmission notice was published on December 2, and our 60 day comment period has commenced. The field test plan has also baselined. The business process models and project level business requirements are baselined. Our capability requirements have been turned over to our solution providers to be finalized. And we are on track for our census day of September 1. And I just wanted to highlight that results from this test are not necessary for our September 2015 design decision - preliminary design decision.

In the next 90 days we expect to submit our full package to OMB. The capability and solution requirements we will finalize as necessarily, and baseline. Our re-interview tool, we're going to determine the technology and complete our specifications, and with our schedule the integrated project teams will finalize their pieces, and the systems will finalize their pieces as well.

I think the team has made a tremendous amount of progress. We are moving into planning for the operations stages now, and I'm looking forward to seeing how the next several months play out, because I think it's going to be very exciting with the implementation of the new technologies. Thank you.

Evan Moffett: All right. Thank you, Jill. My name is Evan Moffett. I spoke earlier. I'm going to apologize in advance because I am going to replot a little bit of the ground that we've already covered. My goal today is to provide you with an overview of where we are in development of the 2020 Address Canvassing program, as well as an update on the Address Validation Test and its component parts.

So before I get into AVT, I want to begin with this high level overview of Address Canvassing. The intention of this graphic is simply to provide that high level overview. So at this point in the decade we are looking at the various methodologies that we would implement in order to ensure we build an accurate list of addresses in each block to meet the objectives of the 2020 Census.

So in the top left hand corner you'll see that we have the how to canvas element or component of the 2020 program. And in here we are thinking about ways to establish via statistical models and geographic review, to identify those areas that we would go to the field and canvas using an in-field methodology.

We also think that this effort will help us identify areas obviously where we would in-office canvas as well. And as was discussed this morning, this idea of in-office canvassing is trying to dive at the cost savings associated with reducing the Address Canvassing and field workload down to 20%.

So in the right box you see that there are a number of methods that are currently being examined, related to how we would conduct the in-office canvassing operation. We might use imagery -- well, we will use imagery, I believe -- administrative records, partner files and such.

In the bottom right hand corner you see the in-field canvassing methodologies that are being examined. The full block canvassing and the partial block canvassing. And we'll get to some of that with the AVT work that's discussed in just a moment.

In the bottom left, or the final component -- let me say a critical component -- represents the quality of the frame, and the quality of the data collection activity feeding 2020 Address Canvassing. This includes inputs from statistical modeling efforts that will measure the level of undercoverage and overcoverage, also leveraging the ongoing address frame, maintenance and update activities and data.

So what I mean by this is geography division on an annual basis processes DFF refreshes, there is the ongoing engagement through GSS-I with partners, and updates that are received from other census programs -- whether it be current surveys or listing operations that are current in the field.

So all of this will come together -- as was discussed this morning -- in this 2020 implementation plan. But one of the component parts for that is going to be a subset specifically focused on quality and how we ensure that we have complete coverage and we build the frame to provide that basis for the 2020 program.

So this graphic represents a notional timeline for 2020 Address Canvassing -- and I'm just going to walk through it. In FY 15 we're going to complete the Address Validation Tests which examines our ability to use statistical models and geographic review to identify areas for in-field canvassing, and how we might conduct in-field canvassing -- whether it be, again, full block canvassing as we've traditionally done, or through this refined methodology of partial block canvassing.

We're also going to release the 2020 Address Canvassing implementation plan -- which is going to document how we're going to pull all these pieces - parts together -- and as stated earlier, this is going to feed the 2020 Operational Plan that the CONOPS teams has been working on.

Also in 2016, we plan to implement Address Canvassing in advance of the 2017 test -- which Jill identified I believe. Did you? You did not. Which will occur on April 1. We are currently working on site selection to support that. In addition we are looking to implement an ongoing MAF coverage study that I mentioned earlier this morning -- and the purpose of this would be to measure coverage in the MAF, to inform the statistical modeling activities, and measure the quality of the in canvassing - in-office canvassing operation.

We've had a number of discussions in-house, and we think that there is a reasonable investment to be made in going out and listing blocks on an annual basis to help us understand those three particular areas -- again, coverage of the MAF, informing the statistical modeling, and measuring how well we are at our in-office canvassing.

In 2017 we're going to begin series of system performance testing leading up to an operational readiness test the following year. As stated earlier, more information on how we will conduct 2020 Address Canvassing will be documented in the implementation plan as well as the Operational Plan.

In the upcoming slides I'm going to discuss ongoing research that we will complete this fiscal year which is critical to the planning process for 2020 Address Canvassing. The purpose of the Address Validation Test is to help us assess the performance of the methods and models that will help us development the address list and refine the workloads for the 2020 Address Canvassing program.

As stated earlier, there are two components to this -- the Master Address File Model Validation Test we call MMVT -- and the partial block canvass test. The MMVT will test our ability to use statistical modeling to measure errors or to estimate errors in the MAF, and identify areas of change. This work will inform where we conduct in-field canvassing.

The partial block canvas test is a proof of concept of an alternative approach to canvassing which uses these geographic review activities to identify portions of blocks that are undergoing change, and then go out there and just list or capture that change that was identified via the geographic activities.

From a data analysis perspective, we'll compare the data collected in the field with the predictors from the statistical models. This will allow us to estimate MAF errors, predict which blocks we would have selected for In-Field Canvassing, and estimate results in

blocks with no addresses. We'll also use data collected in the field to compare against predictors made based on aerial imagery and other geographic sources. Finally, we intend to use the results of MMVT to refine the statistical models and geographic review process, and integrate them to the extent possible.

Jill mentioned a moment ago that the MMVT field implementation is complete. There was a national sample of 10,100 blocks -- which represents just over a million addresses -- production, as I mentioned, production listing and listing check operations are complete. We ended up hiring 822 - or we ended up employing 822 listers to complete this work, and it was a combination of current survey field staff as well as new hires.

And this is the traditional full block canvassing, so we went out, we verified, updated, added, deleted addresses. So we worked ground to book as we have in the past. And one of the things that makes this exercise different from the partial block canvas test is we use the automated listing and mapping instrument -- which is our legacy system for capturing address updates in the field. The partial block canvas test uses the new instrument.

There's just some key dates up here. I think the important one -- which I will highlight later -- is this May 29 date when we will have the results of AVT - both MMVT as well as partial block canvas. We will have those results, and I believe that will allow us to report out at an upcoming PMR.

As mentioned earlier, partial block canvassing is an opportunity to test this new methodology by which we use the geographic review process to identify only those portions of the block that are undergoing change, go out, list those portions of the block.

There are a number of questions that we are researching related to this data collection effort. The first is, can growth or change within the block be accurately isolated and listed while ignoring the stable portion of a block? The second is, can listers effectively follow instructions to list the block portion of interest? The third is, can this be done without

compromising address coverage in the MAF? And fourth, can this be done at a net cost savings when compared to the traditional listing operations?

For partial block canvas, 615 MMVT blocks were selected. I believe that 26 or 27 people are either in the field or going to the field to complete this work. It's a combination of headquarter staff and regional office staff. And as I mentioned before, this data collection effort is using the Census Bureau's corporate listing and mapping instrument -- the LiMA - - and the system around that called CLMS. Yes, the corporate listing and mapping system I believe is the correct solution. Thank you, Barbara.

The power in this solution is that it really is corporate. There has been a team that's been brought together for the last, I would say, two years, year and a half, to define requirements to build core capabilities that not only meet the needs of the 2020 program, but also meet the needs of the current surveys. This instruments will be used for current survey listing as well as time of interview. So it will help them relocate housing units that are selected for sample.

So again, just a highlight from a schedule perspective. Since Jill covered some of this already, the key date here is May 29 when we expect to have a completed AVT report which will allow us to share the results at the July PMR.

So in summary, the AVT work is informing the 2020 Address Canvassing implementation plan by focusing on statistical modeling's ability to estimate errors in the MAF, and identify areas of change which then will inform where we will conduct in-field canvassing. In addition we'll have a better understanding of our ability to implement a geographic review process -- which identifies portions of blocks undergoing change, our ability to proceduralize that in-field data collection activity for only that portion of the block that is experiencing change. So that concludes my portion. I believe I hand it down to Maryann.

Maryann Chapin: Hello again. In this session I'll present information pertaining to the 2015 Census Test in Maricopa County, Arizona. In the upcoming slides I'll cover the following topics: information about the test site, information on the sample design, I'll talk about the response modes, we'll discuss some details about self-response and non-response follow-up, we'll talk a little bit about the evaluate follow-up, and end with information on testing of Bring Your Own Device.

Jill covered the objectives of the 2015 Test in her presentation I'll not repeat this again, but provide this slide to you for context in case you look at this slide deck separate from all the other ones at some point in time in your leisure.

The 2015 Census Test will be conducted in portions of Maricopa County, Arizona, 165,000 addresses will be selected. The nonresponse follow up operation will include no more than 70,000 addresses. With 5000 of that 70,000 addresses to be re-interviewed in the evaluation follow up operation.

Maricopa County was selected for three primary reasons. First, the diversity. The area includes a large Hispanic population, which has been hard to count and pass synthesis. Next, for his mobility. The area has a relatively transient population where people in the area come and go after a short stay, and third, due to its close proximity of urban and suburban areas.

Having these conditions in the site will allow us to gauge the impact of the various new processes on response rates for the Hispanic population, as well as helping us to test the quality of administrative records that are available. It will also allow us to test new methods that will enable us to accurately identify where people should be counted as actual residence in the testing area. And finally, to test how real-time caseload assignments can improve how we assign and manage our staff in the field.

I was hoping these colors would show up a little bit better. Block groups for the test were identified based on the diversity of Socio economic characteristics. The block groups in Central Maricopa -- which are shown in blue, which is sort of in the center top part of the map -- were selected for the high concentrations of both vagrant and Hispanic populations.

Including the slot groups will allow us to test administrative record's objectives related to access and implementation in areas with high concentrations of both vagrant and Hispanic populations. The second set of block groups are located in the cities of Chandler in Mesa - - shown in yellow and pink respectively.

Both of these areas - or for both of these areas, the Census Bureau identified areas with high or 2010 Census return rates, and lower mobility. Including these areas allows the testing of performance of administrative record in areas with high return rates and low mobility.

The third set of block groups is the outer ring of block groups on the northern border of Maricopa County that is shown in green. Including these block groups will allow us to test in a more remote location.

The Maricopa simple design is a two-stage simple design with three panels -- which I will discuss in a little more detail later. The sample size for the Maricopa site is driven by the need to ensure a sufficient workload for non-response follow up, to allow for comparing key metrics of efficiency and quality.

For the Nonresponse Follow-up strategy, power analysis was conducted to detect a difference for the productivity rate where the productivity rate is an estimate of cases attempted per hour. And this test we expect to be able to detect statistically significant differences between the panels of 0.12 cases per hour.

One of the objectives of this test is to measure how cost parameter estimates computer from the two experimental panels to our control panel. Assumptions were made for mail return rate and the administrative records removal for the two experimental panels. These assumptions lead to beat identification of 250 block groups. The goal is to have 20,000 Nonresponse Follow-up cases per panel.

The block groups were randomly allocated to the three panels. Since the experimental panels have more cases removed due to administrative records, they had additional block groups allocated. The simple design projects to have about 22,000 nonresponse follow up cases in each panel. And additional subsampling operation of block groups will happen after the initial mail out to reduce the sample to about 20,000 non-response cases.

Since we are measuring cost implications, we are subsampling the block groups so we can measure cost implications of it attempting to ignore an entire block group. The significant difference testing took into account this additional subsampling.

To further reduce responded burden, any addresses selected for the American Community Survey will be excluded from our sample selection. I should say the 2015's American Community Survey. The test will not include any field quality control operations. And since this day, as Jill mentioned is April 1 of this year.

The test will employ for response modes: an Internet response mode, self-response with the paper questionnaire, computer assistant telephone interviewing -- meaning telephone questionnaire assistance -- and computer assistant personal interviewing in nonresponse follow up.

In addition, the test will allow for responses from respondents who do not have a unique census ID at the time of the response. Accepting responses without a unique ID will allow us to test our ability to increase self-response rates, and reduce respondent burden. Non-ID cases will be validated against our address frame. The key measure for non-ID data

collection is the number of non-ID cases successfully resolved through automated matching and geocoding and subsequent batch processing.

The primary objective of the self-response component of the test is to experiment with different methods of maximizing self-response to increase the number of cases that respond online. All addresses in the Maricopa site sample will be sent and Internet push mail contact asking them to respond to the senses questionnaire on a secure Internet site, or by calling the telephone questionnaire assistance number to provide their responses.

To reminder postcards will be sent in each of the two weeks following the initial mail out. The second reminder will only be sent to non-respondents. Approximately three weeks after the initial notification we will send a final reminder along with the paper questionnaire that's either bilingual or English to non-respondents.

We estimate that one third of the non-respondents will receive a bilingual form. The determination of which cases will receive the bilingual form was based on applying the 2010 algorithm to the most recent ACS data.

Respondents will be instructed to complete and return the census questionnaire or they can choose to respond online, or by calling the telephone questionnaire assistant.

A major objective of the 2015 since his test in the Maricopa site is to evaluate the difference in productivity rates between the control panel and our experimental panel treatments. The alternative treatments vary the approach by removing cases from the NRFU work load prior to fieldwork, and changes contact strategies for cases that are visited in the field. It's also varies the way cases are managed behind the scenes. Data collection for non-response follow-up will be done with a handheld device.

For the 2015 since his test, the nonresponse follow up panel will consist of approximately 60,000 not responding cases that are relatively evenly split between the three panels. The

three panels include a control panel, and two experimental panels. The adaptive design and administrative record treatments will be applied to the two experimental panels.

I'll now talk a little bit about the three panels. First, the control panel will employ similar Nonresponse Follow-up procedures to those used in the 2010 Census. We will have a traditional local office since his office is located in Maricopa County.

Enumerators will be instructed to make no more than six contact attempts. The first contact attempt must be made in person with no more than two additional in person attempts. The main difference from the 2010 Census is that enumerators will use an automated instrument instead of paper for the field data collection.

To simulate the 2010 methods, the enumerator will leave a notice of visit requesting that the respondent call the enumerator to schedule an appointment for the enumerator to return to collect information from the respondent should the respondent not be at home when first visited. The control panel will use the same Operational Control System that has been used in the 2014 since this test.

Panel two is the full administrative records removal panel which implements an adapted design context strategy, and will reduce the initial workload for NRFU to exclude any housing units identified as vacant or occupied based on administrative records. The work will be managed out of the AOSC running out of the Denver regional office and monitored at an AOSC located here at headquarters.

Vacant housing units will be identified by using the undeliverable as addressed information from the United States Postal Service. Occupied units will be identified based on administrative records. For remaining NRFU cases all units will be visited at least once. The reengineered fieldwork and adaptive design procedures will be utilized to determine the number and timing of visits.

If the enumerator cannot reach a person or cannot reach someone during an in person contact attempt, the enumerator will leave a notice of visit with information for the respondent to either respond via the Internet, or through calling telephone questionnaire system. This panel would use the enhanced Operational Control System developed by the ROCKIT team discussed earlier today.

This slide just provides you a graphic for the full administrative records removable panel - - and I believe you've seen something similar to this in past presentations.

Panel three is the hybrid administrative record removable panel which implements and adaptive design contact strategy, and reduces the initial workload for non-response follow up to exclude any housing units that were identified as vacant using administrative records prior to any contact attempts at being made.

For all housing units that have not been removed due to vacancy, enumerators will make one personal visit. After the initial personal visit the remaining NRFU workload will be further reduced to remove any housing units that could be enumerated using administrative records. The methods to reduce the NRFU workload using administrative records are the same as those that will be employed for panel two -- the full administrative record removable panel. For remaining NRFU cases all units will be visited at least once.

The reengineering fieldwork and adaptive design procedures will be used to determine the number and timing of visits. Similar to panel two, if the enumerator cannot reach someone during the in person contact attempts, the enumerator will leave the notice of visit with information for the respondent to respond via the Internet or through calling telephone questionnaire system. This panel will also use the new Operational Control System developed by the ROCKIT team. And again, I just provide an illustrative depiction of the hybrid AdRec removable panel.

During the month of July 2015 enumerators specially trained on re-interview techniques will conduct the evaluation and follow-up operation. There are two major objectives for the evaluation follow up. These are first, to obtain the most accurate status of the housing unit One since it's the day, and next to identify people associated with an occupied housing unit during the calendar year, as well as their timing for association with that housing unit. This will help determine the most accurate household status and roster for census day.

The evaluation follow up sample will consist of approximately 5000 cases subsampled from the non-response follow-up control panel cases where housing unit information collected in non-response follow-ups is either different or conflicts with information we have from administrative records for that housing unit.

The types of cases selected for the evaluation and follow-up will include cases where the nonresponse interview was conducted with a household member, and the resulting population count is different from that that we have from our administrative records. We'll also select cases where the non-response to view was collected by proxy and the resulting population count is different from that which we have from administrative records.

The third set of cases will be selected where the address was determined to be occupied in the non-response interview, but where administrative records have determined it to be vacant.

We'll next select cases where the address was determined to be vacant by the non-response interview, and where administrative records has said that it is occupied.

We'll also select non-response proxy cases where the administrative records determination was occupied. And finally cases where the administrative records composition changed from the previous year.

This evaluation will collect information on all people associated with the housing unit during the calendar year to help assess the accuracy of the rosters and administrative records.

In the 2015 census site test we will also conduct initial - an additional non-response follow-up data collection activity to test, Bring Your Own Device.

The test will occur after the non-response follow-up completes. Enumerators will be recruited from those who participated in the non-response follow-up control panel, and who have a mobile device that meets the operating system specifications for iOS and Android platforms.

The enumerators will use their own device for this data collection. The sample size for this component of the test is 5000 addresses that were not included in other test activities.

This is a technical implementation. So in other words, the data collected on the device is not what's driving the data collection. The driver is the process for utilizing someone's personally owned device. So therefore it's safe to say that if anything would happen such that we can't complete all the 5000 cases, we'll be all right.

The objectives of the test include the design, development, deployment, and support of secure software solutions that can be installed on an employee's personally owned mobile device.

Conducting interviews with respondents using the enumerator owned mobile devices, and capturing lessons learned for future operation including focus groups with a subset of the respondents, questionnaires for enumerators, and collection of feedback from the local Census office.

Feedback from the enumerators and the local Census office will be used to shape duties using BYOD and future census site tests.

And with that I believe I now pass to Steve, and I'm not throwing it.

Stephen Buckner: Good afternoon everyone, my name is Stephen Buckner. I'm the Assistant Director for Communications and I'm pleased to be here this afternoon to give you a status report on where we're at with our communications research that we're going to be doing in the Savannah media market here this spring.

Let me start just by saying that we have a dedicated team of professionals and contract staff that are working on this task, and I'm really excited about the progress we've made since October.

It is a cross-directorate team comprised of Decennial, IT, Communications, Field, and Research and Methodology directorates, coming all together with some really intriguing ideas about how we might be able to move communications to the next level and really motivate self-response and allow the public to better respond anywhere and anytime at their convenience.

And that's sort of where the Optimizing Self Response test is really trying to go. It's making it as easy as possible for the American public to respond to the census with all the other operations that are being said underneath of that.

So let me just briefly start. These are the goals of the entire 2015 Tests that we've gone over a little bit earlier today and this afternoon. But just as a refresher, you can see that we're really focused in on trying to increase the opportunities to engage hard to enumerate populations, as well as trying to make sure that we can increase the self-response rate while reducing any kind of differential or non-response follow-up and related costs.

So specifically for the 2015 Savannah media market test where we're trying to optimize self-response, these are the objectives that we are trying to meet.

Recall that this is really the first time that we've had the opportunity to test digital and micro-targeted digital advertising which is really instrumental for the overall planning of the 2020 Communications Program.

Site selection as I mentioned in our last briefing, was really key. The Savannah media market with its 20 counties is a medium size media market here in the U.S. and it is ranked about 92nd out of the 210 markets.

That is important because we chose that site not only based on the demographics and it having a good representative sample with different population groups, but it also gave us some efficiencies when it came to the actual media buy.

So it's a lot cheaper to do some advertising in the Savannah media market than for example, than a top tier market such as New York, Chicago, or Dallas.

So as a result, just for some of the digital advertising that we're going to be doing, we're going to be spending about 7 cents on the dollar compared to what we'd have to spend for digital advertising in one of the previous markets I just mentioned.

In terms of the overall research goal, you can see here that we're really trying to look at the effects -- there we go -- really trying to look at the effects of integrating and combining digital advertising and micro-targeted ads with the other traditional communication things that you're very familiar with from both the 2020 Census.

Each time we've taken and set a new bar in terms of the communications and outreach program, and tried to tailor that to very specific audience groups, whether that be an in-

language ad or outreach materials to trans-creative stuff that really resonated with different populations.

As we move towards 2020 it's all about personalization and making sure we get the right message to the right person at the right time.

So as we move into the overall research questions that we're looking at, research question 1, what are the effects of micro-targeted digital advertising on a couple of different factors?

So I'll just go briefly through some of those bullets for those of you watching on line.

Internet - we want to understand the impact on Internet and overall self-response rates. We're looking at how the Internet and self-response rates of different specific socioeconomic and demographic groups are measured through different geographic areas.

So in this case we're actually going all the way down to the zip code area the way we designed the research.

We're looking at the Internet and self-response rates of housing units that receive specific mailing strategies such as the push that you just heard about or the pre-registration Notify Me strategies, or even the non-ID push, as well as just looking at the overall Notify Me rates and the types of impact that we can have using communication tactics such as digital and targeted outreach.

Our second question relates to that first overall research question along the same types of factors. But the difference here is that we're going to be trying to combine looking at high levels of spend in a couple of the panels versus low levels of spend.

So the variation of the media buy and the outreach we do could vary across the different research panels that we're going to be going over.

So I did talk a little bit about the benefits of digital advertising. But the last one I'm going to go back through these because I think they're important. The benefits of traditional advertising which will always remain part of the mix that we're doing, but there are a lot of new ways to reach people, both on line and they each have unique benefits.

So if you see here, it's definitely a little bit more affordable to get into the market and do digital ads versus perhaps a television ad or something else that's a little more costly to produce.

You can have real-time feedback in terms of how people are reacting to that particular creative piece of information. And you can do a lot of testing and piloting of different things. So you can put something out in market and also pull it back if it's not performing very well.

So it allows you the ability to quickly change strategies if something is not working. And I think that's really important as we move forward into 2020.

Now another benefit, and I alluded to this, was some research that we've been looking at and is going out in the industry right now across the marketplace.

Traditional advertising, the% of allocations that private sector companies are using in terms of pushing towards traditional media versus digital. We've seen that traditional is going down - the% that's going on television and other medias are going down while the% spend on digital is going up.

So as a comparison for this 2015 Test as part of our media buy, whereas in the 2010 Census we allocated just about 8% of the total media buy on digital ads, in 2015 we're

spending five times that. So we're up over 40% while television will be dramatically down.

So it's almost a little bit of a role reversal, but that's where the industry and the market is taking us.

So the types of digital and micro-target advertising - so you'll see here the - what we refer to is digital advertising. You have four different factors here. We call that - we're referring to online ads in any platform that are designed for consumption by mass audience. That's what we mean by digital advertising.

The micro-targeted digital advertising really refers to online ads in any platform that were designed for a specific population in terms of messaging, language, or placement.

And while we can create micro-targeted digital advertising for any audience, we're especially aiming those individuals to reach audiences that are hard to count or that have historically had a low self-response rate.

And here's sort of how we're defining the four main types of digital micro-targeted advertising that we'll use during the '15 test.

So here are a couple of examples that, as we're still sort of in the process of designing our advertising and our targeted plan, the two examples here, just to give you sort of a range.

So if we're talking about demographic, looking at trying to target those that are 65 and older in Buford County, South Carolina, it would be a demographic type of target that we would do versus a behavioral where we are targeting specific zip codes in let's say Chatham County, Georgia that have visited Spanish language Web sites in the past.

So you can see how those just sort of factor in as possible examples of how we might do different targeting.

So here is the sort of final research panel that we have come up with. So working with the research methodology directorate, we have finalized our research panel design. And we actually a fifth panel since the last PMR, what we're calling Panel E.

That panel will not receive any digital media but will serve as sort of a control condition for all the other communication tactics that will be employed during the test.

The other four panels are cross-targeted and non-targeted advertising and spending level which sort of corresponds to the research questions that I mentioned earlier in the presentation.

So if you look at the targeted column, Panel A and C, they both will receive targeted advertising as well as general advertising, but at different spending levels, while Panels B and D on the other column under non-targeted will only receive general digital advertising, but also at different spending levels.

All panels, which include Panel E, will be exposed to all of the outreach areas, sort of the traditional tactics that we've done in a census environment which include television advertising, radio ads; earned media, phone calls by partners, social media, and partnership efforts.

In terms of looking at the types of audience allocations - so how are we allocating that across the five research panels.

First it's imperative to note that we will be purchasing digital advertising by zip code as that is as precise as we can be, using the most digital existing digital advertising technology.

So there are about 106 zip codes within the Savannah media market. We used these eight demographic characteristics - age 18 to 24; age 65 plus. As you can see, we had a couple of different age groups.

Renters, percent that were African American, percent of households with children that have children under six. Those with less education, and also you see Internet access and those that have female head of households.

These are all sort of characteristics that we mapped evenly across the research panels and put through a Monte Carlo simulation.

The first seven obviously are very closely related. If you're no stranger to the census, are very closely related to the low self-response rates from previous censuses, as well as the American Community Survey data that we've been looking at as we design the research.

Additionally, we used Internet access data so that we would have an even distribution between wired and less wired households across the five panels in the Savannah media market.

Ultimately we selected, designed, and tried to maximize the parity between these eight demographic panels while also trying to maximize the geographic closeness of the research.

The panels and the closeness is a way to try to keep the bleed across the panels at a minimum and the consumption of advertising by the respondent outside of the assigned panel that they're in.

So we are trying to look at that so we can actually measure what works in each panel.

Here's a graphical depiction sort of segmentation that we did by zip code. So using all those things that I just discussed, you can kind of see what our final design looks like.

This map is a little hard to decipher up on the thing. If you want to refer back to the presentation it's a little bit easier. But we're looking at - we've separated out South Carolina up in the upper right corner just so you could see the three counties. But again, it is broken up by zip code. That's why you have those different colors.

But each one is color-coded to the various panel of which the zip code is in. So the purple panel corresponds to Panel A which is the high spend with targeting. That's about 32 counties in the market.

Blue corresponds to Panel B which is a high spend but no targeting and it's about 21 counties.

Green is the Panel C which has targeting. That's about 24 counties. And red is our low spend with no targeting which is also Panel D, and that has about 15 counties. And then finally the yellow is our control panel with 14 counties.

You heard a little bit about some of the calls that have been going on during the census test and research. We're taking a stab at it as well, from a communications standpoint. So we're actually embedding the smaller test to show the effectiveness of perhaps using influencer phone calls to encourage self-response.

Past research has shown mixed results on the overall successfulness of that, however we think that this is a good opportunity to determine whether or not we'll continue to explore this tactic from the communications front.

So if we observe a positive effect on the phone calls during the test we may consider using them in additional tests in '16 and '17.

Of the households that are not receiving any type of mailing during the '15 tests, we are selecting 60,000 households to receive phone calls. We're going to also attempt to observe the effect using different voices for these calls.

So whether or not that be a community leader or an elected official or even a national voice, is there any variance in terms of how people may respond to getting a phone call from one of those individuals. And these calls will be randomly distributed across the five panels.

Here we are looking at the overall -- there we go -- communications timeline. So we do intend to separate the advertising into two phases. One is sort of an educational that will begin with the Notify Me where respondents in the Savannah media market can actually select an option of how they would like to be contacted by the census when it's ready to respond through the Notify Me.

And then later on in March we will be implementing our motivation call to action to actually get people to try to respond on line to the census.

Here we have called out some specific dates in terms of the milestones, just for quick reference. Again, I mention the kick-off really begins on February 23 as part of the Notify Me advertising begins.

And then on March 23, we actually move into that motivational where we actually open it up and get people to respond on line. You'll see that the advertising actually wraps up on May 31.

So where are we at in terms of some other things? So we've done a lot over the course of November and December. We've done some partnership site visits where a team of contractors and staff actually went into the Savannah media market and met with local

leaders and community officials to try to get a sense for what's going on in the media market right now so we could craft the effective messaging and the creative so that would resonate with the population there.

They also scouted some video and photo locations that would build into the creative that we're actually producing.

We've recently reviewed a lot of concepts that have come in through - and I've got a couple of examples here later in the presentation, and I'm just going to give you examples of, but these are sort of creative concepts that we're exploring, using within the Savannah media market as part of the test.

And then actually production dates. Believe it or not, we're actually kicking off on January 15, so we're about ten days out from that time period. This is where we'll start doing some of the television and other more production areas that need a little bit more lead time than some of the digital stuff.

Here's you see just one creative treatment that is being considered that they're taking into the testing in the market. This is what we call, Make it Count.

Again these are only illustrative based on some of the feedback that we've gotten from the local areas. This has not gone into production yet but, they are exploring it and giving us feedback. So this is just one example.

It says, our dreams, our voice, and our future - make it count. Participate in the 2015 Census Test today.

Here you can see how we're trying to actually localize the message. These are just perhaps posters. They could be digital ads; they could be part of another part of the campaign.

But you see here we say, we are (unintelligible) county or we are Savannah. We count. So it allows you to personalize it a little bit and put it in a market to where it resonates a little bit with the local population.

And then here, another treatment where trying to really get the feel for the local area and pull on the civic pride of the location of which people live in. So by identifying various city names or things that people identify with and giving some good visual evidence to allow people to think about and try to motivate them to actually participate in the census.

Again, these are just brief examples of some of the things that we're exploring. But as you can see, they do go around sort of the benefits message that we've used in previous censuses that seems to work very well, and that we always work with the local leaders to sort of get out as far as the partnership and other outreach efforts.

Speaking of partnerships and some of the other outreach we're doing, most of the material we're doing is already on the 2015 Test Web site that has officially launched. So that's a great way to keep in touch with what's going on with the test.

We also have a pretty robust 2015 census Web site that is growing with a lot of materials. All the materials today on the used stream broadcast, as well as that are in the materials for everyone today are on line and downloadable.

We have developed a lot of talking points and fact sheets for some of the partnership efforts in our kickoff here over the next several weeks.

We did hire a regional partnership specialist down out of the Atlanta region that actually is from the Savannah area and has worked on a census before. We're really excited about bringing him on board, and also a clerk that's going to help him conduct the outreach across the 20 counties.

And we're in the process of developing partnership training and integrating those with all the materials.

Here's just a screenshot of some of the 2015 Census Test stuff where you can actually go and get some of the latest news.

Moving on, this is sort of a more specific site that we'll be growing, focused specifically on the Savannah area and the Savannah media market test, explaining to individuals what's going on. So you can expect to see more information going on there as well.

Something I'm really excited about that has been a fantastic effort that's been going on here, something called Customer Experience Management. It's basically trying to take customer analytics from all the information that we gather around this and how we're interacting with customers and pulling it into a data store that we can actually visualize what's going on with our customers. What are they trying to tell us? Whether it's through the telephone, through our Web site, through social media, through our call centers that we have.

We prototyped something down in the Center for Applied Technology, the CAT. It is coming out of that pilot production stage and actually moving into production with the help of IT.

We are standing this up for the 2015 Census Test so that we can have near real-time data about response rates, the advertising, and how successful those individual ads are doing so that we can actually make some decisions on and see real-time and try to make adaptations.

We tried to do this during the 2010 Census. But given the fact that a lot of the media was not digital, it was very hard. The lead time would take three or four days to get and ad pulled and changed.

This way we can actually see how things are resonating. We can mine down into the data by zip code and actually see the response rate, and do we need to deploy perhaps more partnership efforts in one area because it's lagging below the rest of the test sites.

So this is a good trial period for us too, as well as a management device to actually see how things are performing. And then pivot if we need to, based on the overall. So we're really excited about that and trying to move forward.

As I mentioned, we're going to be able to do it through a sort of a customized set of dashboards that would be pulling from Web site metrics, advertising metrics from the actual by themselves, as well as the response rates coming in from the Centurion System.

So we're in the process of working heavily with IT and Decennial on pulling the right data together so that we can get this information across the various management streams.

This is just a real rough sketch. It doesn't do it justice when you're sitting and looking at the monitor and how quickly the data populates. I'd be happy to do a demonstration at point, once we get it stood up.

But right here you're just looking at sort of the types of visualizations in the dashboards that you can actually see from some of the data sets. Here specifically it perhaps is looking at some of the Web hits; some of the social media interaction, some of the call centers and things like that.

But this just gives you sort of an eye and a glimpse into some of the potential, not just for external data that we're doing, but any of the data that we're pulling internally. And how we might be able to better manage by having the data, because it's an enterprise system and it's sort of extensible to pretty much anything internally or externally. So, we are very excited about that.

And with that I'm going to turn it over to Jenny Kim.

Jenny Kim: Thank you Stephen. Good afternoon, my name is Jenny Kim and I'll be discussing the 2015 National Content Test with you today, also referred to as -- thank you -- also referred to as NCT.

I'd like to acknowledge our colleagues - our subject matter experts from the demographic directorate and the decennial directorate who are here today and helped compile the information I'm going to share with you today.

At our last PMR in October we went over the high level descriptions of the NCT. So what I plan to do today is to share a more detailed look at the tests and what we have been progressing so far.

The NCT will take place in late summer of 2015 with a census date of September 1. We'll be using a nationally representative sample, including Puerto Rico, with over-sampling of key population groups.

This sample will include approximately 1.2 million households, with the specific sample design currently under development.

What we plan to accomplish through the NCT is to test the key content areas related to race and Hispanic origin, relationship, and within household coverage.

Through this test we'll be continuing our testing on contact strategies for Optimizing Self Response, particularly Internet response, building on our test from the 2014 and the spring of 2015.

Most of these strategies are related to the timing and the format of the mailings and the reminders.

We've already discussed with you that the NCT will include a content re-interview operation to further assess the accuracy and the reliability of our question alternatives for race and Hispanic origin, as well as the within household coverage. The re-interview sample will include approximately 100,000 cases.

The NCT will be a self-response test only and will not have a non-response follow-up operation.

The NCT has three key objectives related to content, contact strategies, and language. I'd like to first focus your attention to the first which is content, that's broken down by race and Hispanic origin, relationship, and within household coverage.

The NCT will be our primary opportunity to compare different content strategies, prior to making final decisions for the 2020 Census content.

Many of you may be aware, but as a reminder, by early 2017 the 2020 Census topics must be submitted to Congress. And by 2018 April, we need to submit the final question wording.

With respect to the race and Hispanic origin question, follow up on our successful strategies of the 2010 AQE that Mike Bentley had already mentioned, we've been developing refinements to focus on the several key dimensions for improving our question on race and Hispanic origin, which I'll explain more in the subsequent slide.

But in the meantime these dimensions include the question format where we are continuing our research on the combined question approach versus the separate question approach.

The response categories where we will be exploring ways to collect and tabulate data for respondents of the Middle Eastern, North African, and Arab heritage, also referred to as MENA.

Wording of the instructions and the question terminology will be examining ways to examine detailed reporting of race and Hispanic origin data, and also improving respondent's understanding for the options to report multiple race and ethnic data.

We'll especially be using Web based technology such as the Internet, smartphone, tablet and telephones to enhance question design to optimize the reporting of the detailed racial and ethnic groups.

I've never been the remote control person. I apologize. All right, here we go. We're on the screen.

Okay, what you're seeing on this slide are some examples of the alternative question format approaches that we're testing for collecting the data on race and Hispanic origin.

If I can direct your attention to the left side where it says separate questions, you can see that this is one of the approaches that we're using that uses two separate questions.

As you can see on Number 8, that is the question about the Hispanic origin. And then the second about race on Question 9.

Now shifting to the right side where it says combined question, this approach combines the two items into one question about race and origin.

Now with respect to the response categories, we'll be evaluating the use of the MENA category, the Middle Eastern or North African, in the race question. The graphic on the

left illustrates one example of our research designs where the MENA category is placed among the options for selecting a major race or ethnic category.

Now taking a closer look, if you look on the right side where it's amplified, the image on the right shows the MENA category, along with the six example groups and a dedicated write-in space for entering detail ethnicities such as Lebanese and Egyptian.

With respect to the wording of the instructions, our current paper version of the instructions states, mark one more boxes and print your specific origin.

Based on the 2010 AQE and feedback from our Advisory Committee, respondents frequently overlook the instructions to mark one or more boxes. So as a result, our new instruction will say mark all boxes that apply. Now this is our attempt to improve the clarity of the question and to make it more apparent that more than one group may be selected.

Shifting your attention to the question terminology, the current version of the race and ethnic origin questions use the word race and origin to describe the concepts and the groups.

Recent focus groups in quality of research have informed us that the word origin is confusing or misleading to many respondents, and many thinking that this is about where they emigrated, from where they were born.

Now the exact terminology to be used for the alternative version is pending cognitive testing and usability testing which is being conducted earlier this year.

With the new technology to collect data through the Web based design, we'll be also testing a combined question with detailed check boxes for soliciting detailed race and ethnic origins.

On the initial screen a combined question will collect the data on the major OMB categories. And then for any of the categories that are selected, a subsequent Internet screen will present the detailed check box groups. And also a dedicated write-in area.

So if you look here for example, the screen will collect the detailed responses for the specific Hispanic groups such as Mexican, Puerto Rican, Cuban etcetera.

And then in a similar fashion, a screen will collect detailed response for specific Black groups as African American, Jamaican, Haitian etcetera.

Additional screens will also be available for other categories that are reflected by the respondent. So for example here, if a respondent were to select Asian, a follow-up screen would collect detailed responses for the Asian groups such as the Chinese, Pilipino, Asian Indian, and etcetera.

As you can see here, these Web based designs give us a lot more flexibility than the paper questionnaire. And we really believe that these new approaches will help us collect the data for the broader OMB categories, as well as help us collect more detailed responses across all groups.

Moving on to the relationship questions, similar to the race and Hispanic origin question, we're examining the most effective way to gather information on relationships among household members.

In particular, gathering information on same sex married couples is increasingly important as this would inform planning for federal programs that rely on information on marital status.

Two versions of the relationship question will be tested. The first version that you see on the left will use a 2010 response options but in a new order, starting with husband or wife and then the unmarried partner category.

The second version that you see on the right includes the same basic response options from the 2010 Census, but expands and modifies the husband or wife and unmarried partner categories to distinguish between the same sex and the opposite relationships. This version also reintroduces the foster child category into the questionnaire.

A household coverage question will determine how many people live in each housing unit. In other words where they live and sleep most of the time.

We're going to test two designs to compare the different approaches for helping respondents provide a more accurate roster.

The first version that you see there is the first - the rule based approach. This provides the respondents with the residence rule instructions and examples, and asks them to apply these instructions and report a population count for the household.

Now with this approach we are expecting the respondent to interpret the rules correctly and provide the population count.

The second version is the question based approach where we ask guided questions to list a household roster. In this approach respondents are not shown the residents rule instructions. They're only asked to create an initial roster of people they consider to be living or staying at the address. And they are guided by questions such as who lives or stays here, and also follows up with questions that identify potential and missing people such as babies and those away in college and so forth.

In this we're going to take advantage of the Internet. That will allow us to ask a series of questions required for this approach.

Now through the re-interview operation we will be examining which approach gives us a more accurate roster. And also through the re-interview operation we will compare the number of people that are added, deleted, and the total roster changes.

Now turning to the contact strategies, as we already mentioned we'll be testing our contact strategies to encourage respondents to self-respond, particularly through the Internet.

It's important that we consider a variety of options for finding the best contact strategies.

The NCT will test nine different approaches, and it will help us determine the best strategies for collecting - contacting respondents who live in areas that are in high, medium, and low Internet response rate areas. We'll also be building on lessons learned from prior testing in the ACS.

So let's go and take a look at the nine approaches. Beginning with approach number one, the Internet approach strategy, which has been used in the most recent series of our self-response test will be serving as our control panel.

The motivation for our second panel is to study the timing of the reminders. So the hypothesis is that by sending the first reminder sooner, closer to the initial Internet approach, we will provide for a better connection between those two mailings.

For the motivation for the panels three to five are based on recent ACS research that actually found lower self-response rates in certain areas after the introduction of the Internet options.

So this reminds us to be mindful of the fact that while we are striving and encouraging respondents to reply via the Internet that we also need to be cognizant of the fact that they are respondents who prefer not to use the Internet option.

Through panels three to five we'll be testing the delivery of the paper questionnaires at various points in the process. And respondents in Panel 5 will receive the questionnaire first to address those populations who do not prefer to respond via the Internet.

The motivation for Panel 6 is to further incur self-response, even after the questionnaire mailing, but prior to when we will conduct. As a reminder, the NCT will not be conducting a non-response operation.

Panel 7 will study the impact of sending a postcard at the first mailing instead of a letter.

And then Panel 8 takes an approach where we do not send a mail questionnaire at all.

And then lastly, Panel 9 will build on what we learned from the 2014 Census Test as Mike Bentley has mentioned, that we cannot replace postal mail with email.

So what we're going to do in this panel is use email to supplement the postal email instead of completely replacing it.

Now on to the language where we're going to test the two methods for offering Spanish language materials.

In advance of our major language testing plans for 2016 and '17 where we plan to test instruments and materials in additional non-English languages, the NCT will have the Internet instrument in English and Spanish, as well as a paper - bilingual questionnaire in English and Spanish as well.

We will have help from questionnaire assistants available in additional non-English and non-Spanish languages.

Taking a look at the panels on this screen, in the in the mailings that contain a letter in the Optimizing Self Response panels, we'll be using different methods to encourage response in Spanish,

So different from the method used in 2014 Census Test where we provided the materials in English with a sentence in Spanish that provided the URL and the telephone number, we're actually going to mimic the same content in English into Spanish.

So what we will do in that is providing equality between the content in English and the Spanish.

The dual-sided letter will provide the English content on one side of the page and Spanish on the other. And then the swim letter - the letter is similar to the 2010 bilingual questionnaire that you may remember, where it has English on one side of the same page and Spanish on the other. So, we'll be testing these two methods.

In addition, because research has shown us that non-English speaking respondents often don't open the packages, not knowing that there are materials inside that are written in non-English languages, what we're going to do is we are going to have the URL in a brief message in both languages on the envelope this time.

In terms of where we are with all the planning, Jill has already shared with you that we have prepared our test plan and high level scheduled. Here is the link to the federal register for those of you who may be interested. We are currently in the 60 day period where we are garnering comments from the public. And this was posted on December 2.

So we will be - the 60 day period will come shortly at beginning of next month.

As we mentioned earlier that the NCT will be our primary opportunity to compare the different content strategies prior to making final decisions to 2020 content. So it is very critical in our testing.

The results of this test will inform the content topics and the final question wording for the 2010 - 2020 Census -- excuse me -- as well as with the content and the topic that is decided for the 2020 Census, this will also have an impact on the ACS.

Well that brings me to the end of my slides, and as well as all of our testing updates, so I will hand this back to Deirdre.

Deirdre Bishop: Thank you Evan, Maryann, Stephen and Jennifer. We've just shared a lot of information about the 2015 Census Test. We'd be happy to entertain any questions now.

Patricia Durr: The math validations have used modeling. And I was just wondering, what were the sources of the data.

Pat Cantwell: The data we have come from the current sources otherwise, 2013. So some of this comes from census data. Some of this comes - this is Pat Cantwell of the Census Bureau.

It comes from a variety of sources including administrative records that are available up until this point in time.

Patricia Durr: Okay, specifically?

Pat Cantwell: I don't know the details of the files that they're using. But this is...

Jenny Kim: Patricia, similar to how we provided the list that we're using for the non-response follow-up workload we could provide something similar after this meeting.

Pat Cantwell: Right. The important point is this is not just up until 2009 period, as our work, but based upon the 2010 Census Address Canvassing results were.

Woman: I have a question for Maryann, and then one for Stephen. Maryann you said, for the 2015 Test that the panels would be relatively evenly split. Is that before the administrative records are used to lean out the workloads, or after?

I was just wondering, like if that's going to make the - oh I guess - is the control panel going to wind up being a lot larger than the experimental because of the clean-up, or are they going to be even, like once they've been cleaned up?

Thomas Mule: The 250 block groups, they have been randomly allocated to the three panels. The control panel has fewer block groups, because since they do not have administrative records removed, we can get roughly to 20,000 interviews.

The other two panels have more block groups to also account for to get the 20,000 to be able move the vacants from the one panel before field work, and the full removal panel removing the vacants and the occupied.

Woman: Okay, right. And then Stephen's question, regarding the targeting that you're going to be doing - and I know that you guys probably put a ton of research into how you segmented the counties, when you measure I guess the response rates after the different types of advertising, are you going to look at historical data for those areas and demographics, or you just going to compare them kind of across like - did the high spend versus low spend do better, or did this area have a different level of response compared to the last test that we did in this area the last census?

Stephen Buckner: So I will attempt to answer and then Monica, if you want to jump in, let me know.

So we're going to be tagging each one of the ads within each panel. So we'll actually have what we call a campaign code. And you'll be able to grab metrics off of that particular add and see how that resonates across the various groups - the eight different groups that I had on there in terms of the audience segmentation.

We had the response rates in that area from obviously the last several censuses, so we could do some comparison posts afterwards.

We have the response rates right now that we're looking at that help identify this band and media market to begin with, but also by county and down to that block group level.

So we know which tracks have been harder to count than others, and so that's going into the planning around the media strategy, as well as the outreach strategy, particularly the partnership side which is going to focus on probably the 15% hardest to enumerate tracks. And then we'll be able to measure those impacts.

And then a lot of the post research will dive into okay, what are the effects of that. The communications, the digital, the advertising, as well as the low and high are added factors to it, but we will try to do it as sort of a longitudinal, looking at how those response rates are by area.

Woman: Okay. And then once you get those results, is the goal to figure out the global strategy, or will you continue to target just with a better kind of understanding of which approach affects which demographic or area the best.

Stephen Buckner: That's a great question. So at the last one, we had talked that we had put out an RFI for some communications industry to have some questions around this and other topics.

We've gotten back several responses. We're going through those as we build the solicitation around the communications contract that will help support increasing self-response.

Our intentions at this point is absolutely to take every single bit of research that we've learned through this test and apply it to not only subsequent tests, but help us build and better refine that contract so we have a better understanding.

So we've seen a lot of the research that has shown where advertising is going and how are you better able to connect and get people - increase awareness and get them to convert into something.

So, by utilizing some of this data we may have a much better understanding going into this cycle than we've ever had before. Coupled with all the other data that we're pulling, I think we're going to be in a much better position.

The analytics stuff that I talked about too, we're going to be grabbing that. And so we'll have baselines by day, so we can actually start looking at how many people are responding or what% of the population is responding by day.

We have that probably from the 14 tests, but we'll start building that in too, because I know that IT, you know, is wanting to make sure, what are the load capacities that we're going to need to do as we move into a decennial cycle.

And particularly since this is an April 1st census, it does really mirror more of the census timeframe, so we'll be able to start building those simulations as well in terms of not only load, but what we might be able to do.

So if we place an ad and we see a spike, we might be able to build in some assumptions into our strategy and timelines as we move into 2020.

So it's the very first part. We're excited we started this early, because I think it does open up a lot of possibilities to really maximize response.

Woman: Thank you.

Stephen Buckner: Thank you.

Carol Rice: Carol Rice with IG. I know this isn't group hoarders testing, but did you consider in Savannah media market, looking at the college students? Because that's - when you talk about this - some of this stuff that I don't do, college students I think do, do it. And that's sort of a good market to test. And I know that's one of your hard to count populations.

Stephen Buckner: Yes, certainly, 18 to 24 is one of the groups that we're actually looking at. And one of the things about the Savannah media market is we did have some universities and colleges within that. You have Georgia Southern, Statesboro, as well as some of the Savannah stuff.

We met with several academics there at the various colleges between the contractors and the staff from Communications here, as well as Mr. Moore's team from Chicago who's looking at trying to help us build a partnership plan moving into 2020.

We had some people on the ground and one of the initiatives he's looking at is how do we better utilize colleges and universities to actually reach students.

That gets into group quarters but also off-campus housing. And we've used a variety of different techniques over the last couple of censuses to reach college students.

But I think that the benefit that we have here that we haven't had in the previous censuses is the online technology and the possibility of using this non-ID concept.

It's very limiting to have to go back and find an ID in this society as we live now, where it's immediate. If I have time I just want to go do it, to not have to look up a number and do it.

But you can just answer a couple of quick questions and it maps back automatically on that back end. So I think it does make it a lot more accessible to that population that's very mobile to be able to do it any time on their mobile device because we'll have all that optimized.

As we move forward to 2020, it could be an app, it could be a lot of different things in terms of how we open that up. But I think the technology definitely skews towards that next gen generation in terms of trying to get them to respond to it.

Carol Rice: So, are you testing in the Savannah media market or no?

Stephen Buckner: Which part?

Carol Rice: I mean just the student population.

Stephen Buckner: They are part of...

Carol Rice: They are part of the...

Stephen Buckner: ...the individual panel.

Carol Rice: Okay.

Stephen Buckner: So we should be able to align that, based on the zip codes and how we can mine through the data. But we'll definitely take that back and make sure we come back to you with something.

Ty Mitchell: Hi, Ty Mitchell, Government Accountability Office. Thanks again for the data dump. I think I've got just three quick ones here.

On the '15 tests, the multi-unit, all the issues with access to multi-units, I know it's probably hard to design this into a panel or anything, but are you planning to collect information systematically somehow so that after the fact you'll be able to discern which approaches for multi-units had success?

I mean there's a lot of ad hoc re-involved in this situation and what not, but there was a question earlier about how you're going to deal with that. And it sounded like that might still be kind of influx, what kind of guidance people are going to get and what the supervisors are going to do when they get that phone call.

But is there some way to capture what in fact, were the solutions in some of those cases so that you can draw something specific from it?

Deirdre Bishop: Yes, like I said earlier, these are the preliminary findings from the test. We will be finalizing our assessments. We are documenting anecdotally, what was successful in the field in terms of having enumerators interacted with the building management; with the people at the gate, to determine how best to move forward with the 2015 Tests.

Something else to consider is the use of the automated Operational Control System and the automated management of cases now, and how we interact with our enumerators digitally. It will be much easier to do that in the 2015 Tests.

So we will document our findings as part of our formal assessment, and we will incorporate those into the 2015 Tests. And that will give us another opportunity to refine and enhance for '16, which will be even bigger tests than we've conducted thus far.

Ty Mitchell: Thank you. It wasn't '16 I was thinking of, if you're thinking on how to systematically track some of that so that it's easier to pull out those lessons learned afterwards. Just a thought.

Let's see, the evaluation follow-up sample design, is that finalized?

Thomas Mule: At this point it's going to be a selection of cases coming out of the non-response follow-up, with comparisons to the administrative records results, plus also the last frequent cases, based on identifying cases based on their administrative record compositions from two previous years.

Ty Mitchell: I mean are you going to think through before you pull the trigger on executing it, how many of what you're trying to get?

Thomas Mule: We're up to 5000 we'll keep track on just based on NRFU workloads.

Ty Mitchell: Whichever ones happen first?

Thomas Mule: Right. Okay, that's part of it.

Ty Mitchell: Okay.

Thomas Mule: And it will be an independent interview of those cases going out.

Ty Mitchell: Okay. Okay, and then lastly, I think Evan, I'm looking at the MMDT is the bullet, reviewing predictions based on aerial imagery and other sources is one of the outcomes.

Is there a research design in place yet that's going to lay out, not just aerial imagery versus other sources, but imagining the different methods used for - the different methods for the in-office - everybody calls it in-office canvassing?

You've got an RFI that's coming out soon. Is there a design that's going to try to literally line up the different ways using imagery? I imagine you've got multiple tools you might be considering for using the imagery, whether it's assisted or not.

The role of admin records might be different ways of modeling better. Is there a design in place yet that's kind of laid out what you're hoping to do with that, or will there be?

Evan Moffett: There will be. At this point I think the correct answer is, we're working on it. So I would anticipate coming back in the future and addressing exactly what those different pieces; parts are that are going to answer that question.

Ty Mitchell: Excellent, thank you.

Dan Cork: I have a few clarifiers - Dan Cork, National Academies. Actually I want to start off with a comment or a plug actually I guess.

Evan, in your talk you started off with a diagram which nicely laid out pieces of the Address Canvassing concept; the two by two split. And the comment was just I consider rotating everything, either one tick clockwise or preferably one tick counterclockwise, just so that horizontally across, you've got the two in-house - In-Office versus in-field canvassing aligned horizontally next to each other over the base of the more conceptual questions, how good is the frame to start off, and how do you approach canvassing. Just a presentation thing.

On the 2015 Test for Maryann, I just wanted to clarify a couple of things that I might have mis-heard.

The sentence which you used to describe why Chandler and Mesa were chosen as the additional cities within Maricopa was based on - I thought you said based on higher response rates and lower mobility. And it seems like it was - I don't know, it sounds, is it gaming the system or what, to try to get the favorable cases, or trying to set up a contrast with the outlying areas or with Central Maricopa?

Deirdre Bishop: The latter, yes.

Dan Cork: You also mentioned doing a power analysis on the cases per hour, and I just - there was a combination of a one, a point, and a two, and I don't know what order - I can't...

Maryann Chapin : Zero point one, two.

Dan Cork: Zero point one, two.

Maryann Chapin : That's - we'd like to be able to detect statistical differences of 0.12 cases per hour.

Dan Cork: Okay, so that precise as opposed to a whole...

Maryann Chapin : I'm going to wait and look at Tom to make sure I said that correctly.

Dan Cork: That's what I thought I heard. I just wanted to make sure. You had also mentioned that the - in the control panel, the Notice of Visit, that the enumerator would leave - would be asking the person to call the enumerator back. So in a way they'd be writing in the cell number or something like that.

Is there a concept of having them use the same device if they're doing the enumeration on - all through one number? I'm just curious whether you're trying to make the control panel as either 2010-ish or 2014-ish as possible, but the change back to providing - asking what to call the enumerator as opposed to referring them to the Web site or to the TQA. It just seemed a little bit odd.

Maryann Chapin : I'm going to look to someone again, but I thought that the Notice of Visit in the control panel for the 2014 Test was similar to the Notice of Visit for the control panel in the 2015 Test.

Thomas Mule: But one thing, it did have like the self-response option. And since the 2010 - is the 2015 Testing able to implement in the control panel as 2010 like as possible, wanted to not have those people having that option for the control panel to do the appropriate cost comparisons?

Dan Cork: Okay, so the 2014 Tests also had a control panel where the Notice of Visit had them call the enumerator. Okay, just a minor trivia question or what not.

Is the in-bound call function of the phone that you're using COMPASS on disabled when you're conducting an interview?

Maryann Chapin : I'm not sure we know the answer now, but we can find out. So the question is...

Dan Cork: I'm just - following the enumerators around during the 2010 Census or what not, I had, you know, observed an enumerator getting the call back from someone, you know, on their cell phone, minutes after they had just the door.

So I'm just - there at that point it wasn't key to having to conduct an interview on the same device in which I'm supposed to be talking into to.

Maryann Chapin : I see. Not a concern that they may receive a call when they're conducting a different interview.

Dan Cork: Actually I was more concerned about them conducting - inbound call when they're conducting any interview. But particularly I was thinking of a different interview as opposed to...

Maryann Chapin : No, that's a good point.

Dan Cork: ...just kind of getting motivated to call in.

Maryann Chapin : Right, right that's a good point.

Dan Cork: It's just a lightening striking point, but I was more concerned of someone who'd just a Notice of Visit getting an immediate call back at the same time they're trying to resolve a case.

Maryann Chapin : Right.

Dan Cork: A different case.

Maryann Chapin : So, we should look into that. Thank you Dan.

Dan Cork: And then one final just clarifying point for Stephen, you said something about zip code being the most precise level at which you could target or - I can't remember the exact phrasing, but make use of existing digital media databases or target digital interventions.

It just struck me as interesting that the zip code being tied to delivery of physical mail, still being the more precise way of targeting digital interventions. Is that just an artifact of the direct mail days or...

Stephen Buckner: So digital can be targeted down to a much lower level than zip code. The construct of the research panels and packaging them by zip codes allows for a very condensed group and a nice cutoff, so that you wouldn't have the bleed over between the various panels so we could define zip codes.

So we would just take it at that higher level. You can go down to a lower level, but for the purpose of the actual test, we would look at zip code first and then mine down into it and look for opportunities within those markets.

But you are correct, it definitely goes down. It's not a construct of the postal as much as just a clean cut for the geographies of the 20 counties.

Maryann Chapin : Thank you. I'm going to ask that we hold further questions - ask them off line or send them to the email so we can stay on schedule today.

Before we take a break, Lisa asked me to apologize to you. She had hit the wall. She was definitely a trooper to come in after being sick - so sick this week.

I think you'll agree that even while sick, her energy and her enthusiasm tends to be contagious. So I'm glad that we had her while we did.

With that said, let's take a 15 minute break. Let's come back at 3:45. I'm going to suggest that we leave the doors open when we come back and let the air circulate a little bit.

I will breeze through the 2016 Testing scope I promise, and will try to keep it short. Thank you.

((((BREAK)))

Deirdre Bishop: Okay. I'm determined to keep us on track here. It's 3:45, and let's get started everybody over there in the peanut gallery.

Okay, as I mentioned before, I'll try to speed through this. When we were planning the agenda about a month ago, we wondered if it would be too ambitious to include the information about the 2016 test; if we would all be tired by the time we got to this point in the agenda.

In our deliberations we thought, you know what, we have this information. We've vetted this information through our 2020 Program Leads group, our Decennial Leadership group, the Executive Steering Committee, our Decennial Leaders, and John and Nancy, and we thought, why not share it.

It's another opportunity to put the information out there and to solicit feedback. With that said, this is the preliminary scope for the 2016 Census Testing Program.

I think after what you've heard today you likely understand that 2016 is going to be a transition year for us. We're moving from our research and testing phases and into true implementation of how we will conduct the census in 2020.

In order to do this we will have a few major tests in 2016. The first will be called the 2015 Simulated Field Operations Test for the 2020 Census. This will be a simulation exercise similar to the one we conducted in November of 2014, and that you heard about from Stephanie Studds earlier today.

We would like to further test how our enhancements from '14 experience; from the '15 experience apply to the 2016 tests. We'll have a 2016 field operations test for the 2020 Census; a 2016 early operations test, and that will lead to a 2017 early operations test. So now I'll just step through each of those tests quickly.

As I mentioned, the simulation exercise will be scheduled for the fall of 2015, similar to what we did for 2014. The focus this time will be enhanced functionality to our MOJO Operational Control System.

We're really going to look at how we optimize the creation of our assignments. How do we consider traffic patterns when we're sending enumerators out into the field?

How do we incorporate the use of enhanced mapping software, including the use of turn-by-turn navigation?

And as I've mentioned several times today, we'll be incorporating lessons learned from the 2015 Census Test. This simulation will again occur in the CAT lab here at the Census Bureau, and will be a true simulation of what the Operational Control System is doing.

Let's move now to the 2016 Field Operations Test. This test will have an April 1 Census Day. The focus of this test will be self-response and non-response.

In terms of self-response, we'll test targeted communications and partnerships to help us promote our language support options and to reach historically hard-to-count populations.

The 2016 Field Operations Test will be the first test in which we try to host Centurion, our enumeration instrument that we use on the Internet, in a Cloud based environment.

Finally, we'll continue to test and further enhance our ability to conduct real-time Non-ID Processing as Evan mentioned earlier.

In regard to Non-Response Follow-up, this test will determine our strategy for the 2020 Census. By then we'll have a really good feel, and we'll have good measures as to how we can use administrative records in the census, and how we can use our adaptive contact strategies.

At this point in the decade we will make the decision as to how we're going to move forward in '17, '18, and then finally for 2020.

In terms of location we would like this test to occur in an urban area, and ideally one in which has a SNAP Agreement in place; a Supplemental Nutrition and Assistance Program Agreement.

Why would we like that? We would like to test the use of administrative records that are provided from state sources. And this source is a good source of information that we may not be able to get from some of the other sources.

What else are we going to test during this test? We will begin integrating the Operational Control System that we're using now, MOJO, with our enterprise-wide multi-mode Operational Control System.

We'll be moving from what we've learned with MOJO, into our official system that we plan to use for 2020.

For the first time we'll have automated applications for our field recruiting and administration processes. We'll have an online job application for the 2016 Census Test. We'll use Web based technology to help us manage our decennial applicants; our personnel, and our payroll.

We will use a dashboard to help us track our staffing progress, and we'll use an online system for training, similar to what we've been doing already.

This test will include reengineered quality control, and will really begin to focus here on quality and control.

Carol just asked a few questions about how will you collect information in the Field and how will you conduct re-interviews. The information that we collect as part of the COMPASS instrument, the instrument that's used to enumerate those non-responding households, that's providing us with a lot of paradata about what's happening during the interview. When is the interview occurring; how long is the interview occurring?

In addition, the devices are collecting GPS control points, so we know if the person at the household or are they somewhere else? Are they in their living room or are they at a restaurant?

This is much different than the way we've done business in the past. Typically, we'd have to do a whole re-interview operation where we'd send a subset of enumerators out in the field to double-check the work.

This also gives us the opportunity to correct any errors much sooner than we have been able to do in the past.

Finally, during this test, we'll continue to test the concept of, Bring Your Own Device.

The 2016 Early Operations Test will occur in the summer and fall of 2016. The focus of this test will Address Canvassing . You've heard a lot about how we're changing the way we do business in terms of In-field and In-Office Address Canvassing .

This test will allow us to implement our plan and see how it works. During this test we'll continue to use our listing and mapping instrument, the LiMA Application.

So far we've had very good luck with this application. I like this example. Every week I have to report to the Executive Steering Committee about the progress of the 2015 Census Test and the test that we have in the Field.

And so Tuesday I was getting ready to go upstairs to John and Nancy and I asked my team to brief me. And they said, “Well, we have one major glitch with the LiMA.” And I said, “Well what is that?”

“We’re doing partial block canvassing now.” And I said, “Yes.” And they said, “Well the weather is very cold and it’s very difficult to be out there without gloves.”

So, we found our glitch. It’s not that big of a glitch. We may have to provide our enumerators; our listers with the gloves that operate on the handheld devices in order to help them keep warm, but I think we can solve that problem pretty easily.

During the ’16 test, in terms of Address Canvassing , we’re also going to look at a different unit of geography to help us collect the information. Traditionally we’ve sent our enumerators out and we’ve given them maps of their assignment areas. Within those assignment areas we’ve included collection blocks. That was the geography we used.

There are eleven million blocks across the nation. And so we’re studying the use of a new geography which we refer to as the basic collection unit. This collection unit, unlike blocks of the past will follow visible features. It will continue to be the building block for other geographies.

We’ll have about 25 to 100 housing units within each basic collection unit. And there will be about one to two million of these basic collection units nationwide.

We’re not sure if it’s going to work, but it’s a good opportunity for us to test it out.

Finally, for the first time in our research and testing program we’re going to take the updates - the address and the spatial updates that we collect in the field, and just those updates, process them and apply them to the MAF/TIGER System. And so that will help

us further build the foundation that we use to have a good frame and a good spatial database for 2020.

In terms of location here, we'd like to include a broad area so that we can test our In-Field Address Canvassing approaches. And then we'd like to have more specific areas that we can carry over for the 2017 tests.

Specifically, an urban area, one of which who has participated in the geographic support system initiative. If you have been following our geography program and our initiative, you know that we've been continually trying to update our address and spatial database. We would like participants to constantly send us their information, so we continually update our files.

We'd like to see what a file - what it looks like. What our database looks like for a participant who has continually done this. And so we'd like to be - that to be part of the focus.

We'd like to have an area with a different time zone than Headquarters, so we can test our Operational Control Centers and how they transfer information between our centers.

We'd also like to include representation of the limited English proficiency population.

The other area of focus will be an Indian reservation most likely located in a rural area.

And what else will we do in this early operations test? We'll continue to test the use of English and Spanish online applicants - response options, but also consider other language support.

For the first time we'd like to have an instrument that has the ability conduct address listing and enumeration on the same handheld device so that we could say to an

enumerator, today you're going to do listing, or tomorrow you're going to do enumeration. Or perhaps you're going to do both on the same day. We haven't had that capability before.

Again, we'd like to manage our operations out of multiple Operational Control Centers.

Finally -- and this is a big one -- this test will be the one in which we integrate our data collection, our data processing, and our data tabulation processes in terms of the systems - the terms of the CEDCAP systems, the enterprise systems.

There's quite a few listed. I won't run through them all. Just to give you some examples, how do we process the data, our control and response data processing system?

How do we move to our new Operational Control System, MOCS? Again, for some of the units that we don't collection a response via the Internet and we have to have a paper form returned, how do we process that information? We'll use what we call iCADE, the integrated data - integrated capture and data entry.

Again Centurion, our Internet instrument, COMPASS the instrument that is on the handheld computer.

Finally, just to show you that we are thinking ahead, how does this apply to 2017? We'll have a big integrations test on April 1st of 2017. This will be the test in which we determine how one operation impacts another.

We're doing a lot of work now. We're going to release the Operational Plan , September/October of this year. We're going to continue enhancing and refining the work we've done. We're going to build on more of those 34 operations.

This test will use the work we do during the 2016 test during Address Canvassing, to build the address frame.

We'll do work in this test related to Update/Enumerate. Ann mentioned earlier in the day how we're going to combine a few operations this time. Update/Leave, Update/Enumerate Remote/Update Alaska, how does this work together, especially after we've done Address Canvassing.

We'll continue to focus on communications, on partnerships, on our self-response options. We'll study during this test group quarter's populations and special populations very specifically. And then we'll continue to look at quality control.

We must do this test; this integrations test in '17 to help us prepare for our big test - our end-to-end test that we'll conduct in 2018. And that will be our final opportunity to be out there in the field to get ready and be ready for the 2020 Census.

Any questions about the 2016 census scope?

Carol Rice: With respect to using the handheld for - in I guess the 2016 is the Indian reservation rural area, will you be using the handheld or paper to do enumeration?

Deirdre Bishop: That's yet to be determined. In some Indian areas we have very good address information and spatial information. In other areas it's lacking. We'll just have to see where we are in the decade in terms of how we've progressed and what may be best for our plans for 2020.

Patricia Durr: On the, what else slide, where your integration with CEDCaP systems, and there's a number of systems, that's very - I think that's very good and it's also very ambitious.

And I don't get - I'm not sure how it reconciles with the fact that the focus is on the Address Canvassing though.

Deirdre Bishop: There are two - there are two tests, the early - yes, the early operation test feeds - and this slide is just saying to say - trying to say in 2016 that will be the year in which we have to integrate with our CEDCaP systems.

The movement of Stephanie Studds from the ROCKIT Team to the Innovation and Implementation Office, I think will be a big win for us here because she's been through the development of the Operational Control System for ROCKIT and for the work we're doing in 2013, 2014, 2015. She gets it and she understands all the divisions and the directorates within the Census Bureau and has a lot of connections across the Agency. So, that always helps.

Okay, how is everyone doing? Ready to move on to the wrap-up? Okay, thank you.

All right so very quickly, thank you again. I can tell you over the past three months I've become more and more exposed to the decennial directorate; the decennial environment, what life is like when you have to interact with oversight and with external stakeholders.

I didn't always understand the value, but I think I do now. I appreciate what you have to bring to the table. I'm really grateful that you're here today; that you're willing to sit through a full day of presentations, and really provide us a lot of helpful information, so thank you.

And feel free when we're done, to call us; to interact with us. We really appreciate that.

We've talked about a lot today. Lisa started off by talking about the reorganization of our Decennial Directorate. It is one of our top priorities to make sure this is a success.

We realize that we have to have the right team in place. It has to be the best team. This census is going to be like no other. We need the brightest, the smartest; the hardest working people to make sure this gets done. And I believe that we can make that happen.

I encourage you to look at the organizational charts that we shared earlier today to get an understanding.

You know Dan had a question about what will be located in the field infrastructure area. Those org charts really lay out the different branches that are part of our new organization.

If you have any questions feel free to call us. Those org charts will also help you identify the people that you'll be working with over the next few years. And another one of our top priorities is to make sure we get this design decision done by September of 2015 and we can share it with you in October.

The team that's established and is working on this effort is a good one. They've made a lot of progress. Ann said this morning they kicked off the team on November 20. I think it's pretty amazing the work that they were able to do, especially considering the holidays.

We are poised to move into the implementation phase. We've had great success with all our applications, our Internet instrument, our COMPASS instrument. We need to further refine those instruments and that technology, but we're making great progress.

And these tests do give us a good opportunity to continually study what we're doing. Ty I promise that we will share the assessments as soon as they're finished.

I think that's it for today. Again thank you for your participation; your attendance. Dan has a final question.

Dan Cork: One really quick thing. Just seeing the date up there for the next one being April 8.

Deirdre Bishop: Yes.

Dan Cork: Is there a rationale for it being Wednesday rather than Friday?

Woman: That Friday is Good Friday.

Dan Cork: Okay.

Deirdre Bishop: Yes, thank you Dan, that was an important slide. So yes, the next PMR is April 8; it's a Wednesday not a Friday. So please note that on your calendars.

Tentatively, note that the following PMR is now scheduled for July 10. We welcome your feedback. Our email address is listed up there on the slide. Feel free to email us, call us; we would like your comments on this PMR by January 23, so that we can incorporate them in the documentation that we post on line. Thank you everyone.

END