| Test | Date | Objective ID | Qs from FY13/Fy14 Bus Plans | Objectives/Goals from Test Plans | Results of Objective from Results Reports | Operational Decisions Made (from Operational Plan) |
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| Address Validation Testing | | ADC1 | D.f, D.g, | Objective was to evaluate our methods for a reengineered address canvassing | Statistical models we applied were not effective at (a) identifying specific blocks with many Adds or Deletes, or (b) predicting national totals of MAF coverage errors<br>Showed that Partial Block Canvassing methodology offers the potential to implement a more efficient approach to canvassing | ⯀ The Address Canvassing Operation consists of:<br>o In-Office Address Canvassing<br>o In-Field Address Canvassing<br>o Quality Control<br>o MAF Coverage Study<br>⯀ In-Office Address Canvassing creates the universe for In-Field Address Canvassing.<br>⯀ In-Office Address Canvassing will review public lands.<br>⯀ Statistical modeling will not be used in Address Canvassing |
| Address Validation Testing | | ADC2 | D.a, | Objective was to test how well in-office procedures can replace in-field procedures | Demonstrated the utility of imagery review to guide decision-making and operational planning for address canvassing<br>Demonstrated the value of fieldwork to gather information for use in assessing the effectiveness of in-office methods | ⯀ The Address Canvassing Operation consists of:<br>o In-Office Address Canvassing<br>o In-Field Address Canvassing<br>o Quality Control<br>o MAF Coverage Study<br>⯀ Administrative records and third-party data sources will be used to validate addresses within each block<br>⯀ In-Office Address Canvassing creates the universe for In-Field Address Canvassing.<br>⯀ In-Office Address Canvassing will review public lands. |
| Address Validation Testing | | ADC3 | D.f, D.g, D.h | Objective was to assess our ability to ensure an accurate Master Address File (MAF) | Statistical models were ineffective at measuring MAF coverage error<br>Ongoing research will focus on collecting metrics via the MAF Coverage Study | ⯀ Production Address Canvassing begins October 1, 2015.<br>⯀ The MAF Coverage Study will be conducted throughout the decade. |
| Address Validation Test: Part 1 - MAF Model Validation Test | Sept 2014 - Dec 2014 | ADC4 | D.c, | to collect data to inform components of the Targeted Address Canvassing decision-points<br>MAF Error Model<br>Targeted Address Canvassing, Research, Model, and Classification team<br>Models for Zero Living Quarters blocks | Summary of results: The statistical models we applied were not effective at …<br>> identifying specific blocks with many Adds or Deletes<br>> predicting national totals of MAF coverage errors<br><br>Results for Statistical Models:<br>• Determining specific blocks that need additional action:<br>· rate of error capture was too low<br>· rate of erroneous canvass was too high<br>• Using statistical models to predict national totals of coverage errors on the MAF:<br>· model parameters reflected condition of MAF in 2009<br>· now: only halfway through decade, and MAF has improved under Geographic Support System Initiative | ⯀ Address Canvassing updates the Census Bureau address list using a dependent canvass (from ground to list).<br>⯀ Address Canvassing validates and collects coordinates for every structure with a living quarter.<br>⯀ Imagery will be available on the LiMA to use during In-Field Address Canvassing |
| Address Validation Test: Part 1 - MAF Model Validation Test | Sept 2014 - Dec 2014 | ADC5 | D.a, | Concept test Micro-Targeting and uses of Aerial Imagery | Based on weighted results of imagery review for the 10,100 MMVT blocks:<br>• 84% of blocks with at least one address are stable.<br>• These blocks encompass an estimated 85% of all housing units.<br>• These blocks would be placed in a "passive" category, with ongoing monitoring for change, but not requiring active processing to acquire updates.<br>• 15% of housing units are located in "active" blocks, with updates acquired through the USPS' Delivery Sequence File, local government partner files, other administrative or commercial address lists, or fieldwork. | ⯀ At most twenty-five percent of the living quarters will be canvassed in the field |

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| Address Validation Test: Part 2 - Partial Block Canvassing | Dec 2014 - Feb 2015 | ADC5 | D.a, | Test ability to navigate to targeted area/coordinate using locational information produced based on in-office review of imagery. | Test Analysis of Imagery Review Results to Inform In-Office Canvassing:<br><br>• Based on weighted results of imagery review for the 10,100 MMVT blocks:<br>  • 84% of blocks with at least one address are stable.<br>  • These blocks encompass an estimated 85% of all housing units.<br>  • These blocks would be placed in a "passive" category, with ongoing monitoring for change, but not requiring active processing to acquire updates.<br>  • 15% of housing units are located in "active" blocks, with udpates acquired through the USPS' Delivery Sequence File, local government partner files, other administrative or commercial address lists, or fieldwork. | ⬜ Imagery will be available on the LiMA to use during In-Field Address Canvassing |
| Address Validation Test: Part 2 - Partial Block Canvassing | Dec 2014 - Feb 2015 | ADC6,7 | | Collect specified information for use in comparison to information collected for the same block through full block canvassing in the MAF Model Validation Test. | | |
| Address Validation Test: Part 2 - Partial Block Canvassing | Dec 2014 - Feb 2015 | ADC7 | D.b, D.d, D.e, | Collect metrics to measure efficiency, cost, etc. | | |
| Address Validation Test: Part 2 - Partial Block Canvassing | Dec 2014 - Feb 2015 | ADC8 | | Identify potential issues affecting ability to conduct fieldwork and collect accurate information:<br>· Is imagery required in the field?  What other tools/data are needed in the field?<br>· Should updates other than those specified be collected?<br>· How do we limit the scope of work once in the field? | | |
| Small-Scale Testing | January 2014 and ongoing | CFD1 | | Explore different formats and content to email, text and automated voice invitations | From the opt-in, non-probability panel:<br><br>1. A text based email out performed graphical emails.<br>2. Short email subject lines that include the "10-minute" burden and the "U.S. Census Bureau" name seem to perform better than other subject lines, especially those including the word "Help" as the first word in the subject line.<br>3. Longer email content with "Dear Resident" and signature of the director similar to the 2014 Census Test email outperformed a shorter email invitation without the greeting and signature.<br>4. Response rates did not differ by link type (whether the full URL or "Click here") with this population.<br>5. The time of day the email is sent did not appear to have a big impact on the response  rate.<br>6. Respondents report preferring reporting online to a decennial census with a mailed invitation with the link over all other options. | ⬜ The 2020 Census will use texting and emailing to motivate self-response |

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| 2012 National Census Test | | CFD2 | | Evaluate the performance of combined race and origin questions on the Internet | • Response Distributions<br>· Similar across the two question versions<br>· Item nonresponse lower in the two-part version than the one-part version<br>• Detailed Reporting<br>· Some differences across the two question versions<br>· Noticeably less detailed reporting in 2012 National Census Test Internet than in 2012 National Census Test paper<br>· Noticeably less detailed reporting in 2012 National Census Test Internet than in 2010 Alternative Questionnaire Experiment (AQE) (paper)<br>• Results did not indicate expected benefit of enhanced reporting of detailed race and origin groups<br>· Additional research needed<br>• Predictive Text<br>· Hypothesis:  Decrease typos and extraneous characters; Lower rate of residual coding<br>· Results not as expected:  NCT resulted in a relatively higher rate of residual coding compared to 2012 National Census Test paper responses | |
| 2014 Census Test | CD: 6/1/14 | CFD3 | | *This site test was not focused on evaluating content as a main objective* | Major Findings<br>· Use of combined race/Hispanic origin question, compared to separate questions, showed no difference in distribution for most groups<br>· Soliciting write-in race and origin details on a separate screen from the major group checkboxes, compared to on the same screen, results in more detailed reporting<br>· Detailed reporting for major race and Hispanic origin groups varied by question version – combined question saw higher percentages for White, Black, and Hispanic, and lower for Asian and NHOPI<br>· Use of the new relationship question, which includes categories for same-sex and opposite sex spouse and partners, showed no difference in distributions for each category, though the paper form had slightly higher item nonresponse for the new version | |
| 2015 National Content Test | | CFD5 | | Use nationally representative sample to evaluate and compare different census content: race/origin, relationship, and coverage | | |
| 2015 National Content Test | | CFD6 | | Conduct a reinterview to measure accuracy of race/origin and coverage | | |
| 2012 National Census Test | | CQA1 | | Assess the Telephone Questionniare Assistance (TQA) workload | • TQA available throughout data collection<br>· Agents answered questions and took interviews<br><br>• 6,226 calls to TQA (roughly 8% of sample)<br>· 65% resulted in interviews | ⬚ CQA will complete interviews by telephone.<br>⬚ CQA will provide respondent assistance relating to specific items on the questionnaire.<br>⬚ CQA will handle calls relating to general questions on 2020 Census processes and frequently asked questions. |
| 2012 National Census Test | | CQA2 | | Assess the Telephone Questionniare Assistance (TQA) reasons for calls | • Reasons for calls<br>· Reasons recorded for 81% of calls<br>· 69% of those were because respondent did not have computer and/or Internet access | ⬚ CQA will handle calls about technical issues (e.g., Internet problems, lack of access to Internet) by offering to complete the 2020 Census questionnaire instead of offering technical assistance to respondents. |

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| 2012 National Census Test | | ISR1 | A.a, A.b, | Assess relative self-response rates and Internet self-response rates across various contact strategies | • Second Reminder:<br>· Performed well, across multiple treatments<br>· Sending 2nd reminder prior to mailing a paper questionnaire resulted in significant gains in both overall self-response and Internet response; increase in telephone interviews<br>• Advance Letter:<br>· No significant difference in overall self-response compared to No Advance Letter<br>• Telephone Number in Initial Mailing:<br>· No significant difference in overall response<br>· Increase in telephone interviews<br>· Operationally inefficient not to include<br>• Content Tailored to Nonrespondents:<br>· No significant difference in overall  response<br>· Recommend continued research | ⬛ An Internet self-response option will be provided for the 2020 Census.<br>⬛ Respondents will receive direct contacts inviting their participation in the Census.  Contacts may include some of all of the following:  postcard mailings, letter mailings, emails, text messages, pre-recorded telephone messages, questionnaire mailings, and in-person visits by an enumerator.<br>⬛ Invitation letters and mailed materials will encourage people to respond using a unique Census identifier; however, the 2020 Census will allow people to respond without a unique Census ID.<br>⬛ The Census Bureau will offer Internet questionnaires in a small number of languages other than English and Spanish, including those requiring non-Roman alphabets.  The languages selected will be based on national prevalence rates of low-English proficiency households and the available technology. |
| 2015 National Content Test | | ISR1 | A.a, A.b, | Refine estimates of national self-response and Internet response rates and continue testing contact strategies for optimizing self-response | | |
| 2012 National Census Test | | ISR2 | A.e, | Assess relative self-response rates and Internet self-response rates utilizing Internet Push methodology | | ⬛ An Internet self-response option will be provided for the 2020 Census.<br>⬛ Respondents will receive direct contacts inviting their participation in the Census.  Contacts may include some of all of the following:  postcard mailings, letter mailings, emails, text messages, pre-recorded telephone messages, questionnaire mailings, and in-person visits by an enumerator.<br>⬛ Invitation letters and mailed materials will encourage people to respond using a unique Census identifier; however, the 2020 Census will allow people to respond without a unique Census ID.<br>⬛ The Census Bureau will offer Internet questionnaires in a small number of languages other than English and Spanish, including those requiring non-Roman alphabets.  The languages selected will be based on national prevalence rates of low-English proficiency households and the available technology. |

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| 2013 National Census Contact Test | | ISR3 | A.c, A.e.iii, A.g, | Contact Frame Quality: Evaluate the quality of phone and email contact information acquired from commercial sources | • Ability to determine the quality of the supplemental contact frame was limited due to respondents not being willing to share all of their available phone numbers and email addresses<br>• The Contact Frame team learned a limited amount about phone numbers and characteristics of those who were likely to respond to the phone survey, but less about email addresses. More research is needed for those areas<br><br>The Contact Frame team is developing the following future research goals as a result of the 2013 National Census Contact Test analysis:<br>• Develop an optimal prioritization algorithm to order the phone numbers most likely to have a correct phone- residential address link.<br>• Conduct phone number and email address verifications with other available Census surveys such as:<br>  o 2010 Census Coverage Followup Operation<br>  o 2010-2012 American Community Survey<br>  o 2012 National Census Test.<br>• Conduct analysis of phone-residential address links at lower levels of geography (state, county, block, and tract-levels) which will require looking at larger datasets.<br>• Investigate other phone number and email address sources (commercial or government/administrative records sources) to improve the demographic and geographic coverage of phone numbers and email addresses.<br>• Conduct analysis of residential address-email address links. Perhaps, develop a prioritization algorithm to order the email addresses most likely to have a correct residential address-email address link. Also, analyze these links at lower level of geography. | ▪ Text messaging will not be used as a data collection mode. |
| 2014 Census Test | CD: 6/1/14 | ISR4 | A.c, A.d, | • "Notify Me"<br>· Postcard solicitation<br>· Respondents select their preferred mode for future invitations and reminders – email or text message | Low participation in "Notify Me"<br>3% of invitees participated | ▪ A formal "Notify Me" option will not be offered. |
| 2014 Census Test | CD: 6/1/14 | ISR5 | A.c, A.d, A.e.iii, | • Email invitation<br>· Test use of email as initial invitation to respond<br>· Evaluate use of pre-notices (letter and automated voice) to introduce and legitimize email contacts | Email not an effective replacement for postal mail<br>Over half of the emails were not delivered - "bounced back"<br>Response rates 10% lower than control | ▪ Invitation letters and mailed materials will encourage people to respond using a unique Census identifier; however, the 2020 Census will allow people to respond without a unique Census ID. |
| 2014 Census Test | CD: 6/1/14 | ISR6 | A.e, | • Mail Internet invitation<br>· "Internet Push" strategy:  letter → postcard → postcard → questionnaire<br>· Test use of email and automated voice reminders | Internet-push is successful strategy for generating Internet response<br>50.6% of total response was via Internet<br>76.8% self-response was via Internet<br><br>Automated Voice Invitations (AVI) show no impact on response<br>When used as pre-notice or as a reminder | ▪ An advance letter will not be used; the first letter will be the Internet push letter inviting response to the Census for those areas with Internet access or a paper questionnaire for targeted populations without Internet access (under review ).<br>▪ Housing units from whom an Internet questionnaire is not received will be mailed a paper questionnaire. |

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| 2015 OSR | | ISR7 | A.c, | Continue efforts to increase Self-Response through research and testing of communications strategies prior to awarding a communications contract<br>• Test the use of digital targeted advertising methods to engage and motivate respondents<br>• Assess effectiveness of early announcement offer ("Notify Me") when paired with advertising | • **Preliminary Self-Response Resutls (Mail Panel Design):**<br>> In control panel, weighted 47.9 percent of sample has responded<br>> Significantly lower internet and total response rate for Internet Push without an ID and Notify Me postcard panels<br>• **Preliminary Self Response Results (Other responses in Savannah):**<br>> Additional postcard mailing resulted in about 8.3 percent response<br>> Outside of the mail panels, more than 35,000 non-ID responses received – due to advertising and promotional efforts<br>• **Preliminary Self Response Resutls (Notify Me):**<br>> Low participation<br>• 1,925 participants "pre-registered"; of these 1,341 signed up before the cutoff date and were matched, and of those 1,203 were in the Savannah area<br>• Majority selected email as their preferred contact mode<br>• 93.0 percent of Notify Me participants ultimately responded<br>> Additional burden may depress response | ⬛ An advance letter will not be used; the first letter will be the Internet push letter inviting response to the Census for those areas with Internet access or a paper questionnaire for targeted populations without Internet access (under review ).<br>⬛ The 2020 Census will offer alternative response options to respondents without Internet access.<br>⬛ Messaging will be coordinated with the Integrated Partnership and Communications Campaign.<br>⬛ A formal "Notify Me" option will not be offered.<br>⬛ Respondents will receive direct contacts inviting their participation in the Census. Contacts may include some of all of the following: postcard mailings, letter mailings, emails, text messages, pre-recorded telephone messages, questionnaire mailings, and in-person visits by an enumerator. |
| 2015 OSR | | ISR8 | A.c, A.d, | Improve the usability and respondent experience with improved Internet response functionality<br>• Provide a mobile-optimized application for Internet self-response<br>• Study the extent to which encouraging responses without a Census ID will contribute to the national Self-Response and Internet response rates ("Non-ID") | • Preliminary Self Response Results (Non-ID Processing):<br>> Address matching and geocoding occurred in real time (during response) and then for addresses that did not match, another attempt was made after Administrative Records data were used to update the addresses by correcting or adding address elements. | ⬛ The 2020 Census will offer a Non-ID option for self-response and telephone agent-assisted response.<br>⬛ The Non-ID workflow will include real time matching and geocoding, post real-time processing that will utilize administrative records and third-party data, and manual (interactive) matching and geocoding. |
| 2015 Census Test | CD: 4/1/15 | ITIN4 | C.e, C.g, C.h, C.j | Test operational implementation of the Bring Your Own Device (BYOD) option for enumeration:<br>· Design, develop, deploy and support secure software solutions that can be installed on an employee's personally owned mobile device.<br>· Conduct interviews with respondents using the enumerator-owned mobile device.<br>· Capture lessons learned for future operations, including focus groups with a subset of the respondents, questionnaires for the enumerators, and collect feedback from the local census office. | | |

| LUCA Focus Groups | March 2014 - June 2014 | LUCA1 | D.i | Identify changes that help increase participation and coverage, while decreasing program costs for the 2020 Census LUCA Program | **Recommendation 2:** Reduce the complexity of the LUCA program<br>**Recommendation 5:** Provide the address list in more standard formats<br>**Recommendation 6:** Include an in-office verification of LUCA submitted addresses (Research Activity 3)<br>**Recommendation 7:** Utilize GSS-I tools and data to validate LUCA submission (Research Activity 2)<br>**Recommendation 8:** Encourage governments at the lowest level to work with larger governments to consolidate their submission<br>**Recommendation 12:** Continue the 2010 Census LUCA Program improvements that were successful: (Research Activity 1)<br> > Expanded the review time for participants from 90 days to 120 days<br> > Provided more advance notice of the pending LUCA program<br> > Initiated comprehensive program communications with partners<br> > Provided participants with the opportunity to use the Census Bureau supplied MAF/TIGER Partnership Software (MTPS) application<br> > Invited states to participate in the program | Address Canvassing will validate LUCA submissions<br>Validation of LUCA submissions will occur during primarily during In-Office Address Canvassing, with minimal validation occurring early in the In-Field Address Canvassing operation<br>⯀ Conduct a comprehensive communication program with LUCA participants<br>⯀ Include census structure coordinates in the census address list and allow partners to return their structure coordinates as part of their submission<br>⯀ Provide ungeocoded addresses to State and County partners in LUCA materials<br>⯀ Provide the address list in more standard file formats so that lists are easier to load into common software packages<br>⯀ Encourage governments at the lowest level to work with larger governments to consolidate their submissions<br>⯀ Provide a variety of LUCA media types<br>⯀ Simplify the 2020 Census LUCA program and make it compatible with the Geographic Support System Initiative (GSS-I) and Address Canvassing<br>⯀ Utilize administrative records and third-party data to improve validation process<br>⯀ Use the Geographic Update Partnership Software (GUPS) to support automated exchange of information for LUCA participants |
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| LUCA Focus Groups | March 2014 - June 2014 | LUCA2 | D.i | Identify ways to improve the quality of address updates for the 2020 Census LUCA Program | **Recommendation 1:** Eliminate Option 1 (Title 13 Full Address List Review) and Option 2 (Title 13 Local Address List Submission) full address list submission<br>**Recommendation 3:** Include census structure coordinates in the census address list and allow participants to return their structure coordinates as part of their submission (Research Activity 2)<br>**Recommendation 4:** Provide ungeocede United States Postal Service Delivery Sequence File addresses to State and County partners<br>**Recommendation 7:** Utilize GSS-I tools and data to validate LUCA submission (Research Activity 2)<br>**Recommendation 8:** Encourage governments at the lowest level to work with larger governments to consolidate their submission<br>**Recommendation 9:** Eliminate the Block Count Challenge (Research Activity 3)<br>**Recommendation 10:** Require unit designators for multi-unit structures (Research Activity 3)<br>**Recommendation 11:** Encourage LUCA participants to identify E-911 Addresses used for mailing, location or both | Address Canvassing will validate LUCA submissions<br>Validation of LUCA submissions will occur during primarily during In-Office Address Canvassing, with minimal validation occurring early in the In-Field Address Canvassing operation<br>⯀ Conduct a comprehensive communication program with LUCA participants<br>⯀ Include census structure coordinates in the census address list and allow partners to return their structure coordinates as part of their submission<br>⯀ Provide ungeocoded addresses to State and County partners in LUCA materials<br>⯀ Provide the address list in more standard file formats so that lists are easier to load into common software packages<br>⯀ Encourage governments at the lowest level to work with larger governments to consolidate their submissions<br>⯀ Provide a variety of LUCA media types |

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| 2013 National Census Contact Test | | NID1 | D.k | Improving Non-ID Processing: Test proposed enhancements to automated processing of census responses lacking a preassigned census identification number | • Address enhancement influenced a significant number of address records, and thus warrants further research<br>• The more steps the Non-ID Processing team took to enhance the addresses, the higher the matching and geocoding rates<br>• Internal Revenue Service address data has great potential for use in automated processing, particularly for confirming the respondent has given us a good address, but also fro use in supplementation<br>• The 2020 Non-ID Processing team needs to continue to refine the address enhancement process throughout the research and testing phase, utilizing data from field tests while also reprocessing 2010 Census data through the address enhancement process<br><br>**Recommendations:**<br>• Continue to explore the possibility of acquiring authorization for using Internal Revenue Service address data for administrative records matching.<br><br>• Explore utilizing the respondent-provided version of the address over the administrative record version for subsequent processing when an address is confirmed by an administrative record address.<br><br>• Explore using DataFlux to update ZIP codes and street names only if possible, since DataFlux introduces some undesirable effects on some addresses (e.g., moving rural route information to the city-style address fields).  The administrative record database must be standardized the same way.<br><br>• Explore using the GEO Standardizer to standardize individual address fields; that is, do not use the whole address standardizer.  However, the whole address standardizer does a good job of parsing city-style addresses that were entered in one field during data collection.  Therefore, if we can identify those cases with city-style address information in one field at the onset, we could potentially use the whole standardizer exclusively on them, and the individual address component standardizer on the rest.<br><br>• Identify noncity-style addresses prior to standardization and do not update rural route | ▪ The 2020 Census will offer a Non-ID option for self-response and telephone agent-assisted response.<br>▪ The Census Bureau's matching process will be included into the 2020 Non-ID workflow. |
| 2014 Census Test | CD: 6/1/14 | NID2 | D.k | • Non-ID Internet response<br>· No user ID provided in mail materials<br>· Test ability to process and match respondent-provided address information (not real-time) | • Lower Internet response for Non-ID Panel<br>· 40.6% for Non-ID panel vs. 46.3% for ID panel<br>• Lower overall response for Non-ID<br>· 58.9% for Non-ID panel vs. 61.4% for ID panel<br>• Response rates are impacted by the ability to match<br>· About 5% of Non-ID cases weren't matched<br>· All unmatched cases treated as nonrespondents<br>• Address collection in the Internet instrument appears to be successful<br>· Higher match rates than 2010 and fewer incomplete records<br>• Address supplementation from administrative records isn't necessary very often, but increases matching rates by 50% when used | ▪ The 2020 Census will offer a Non-ID option for self-response and telephone agent-assisted response.<br>▪ The Census Bureau's matching process will be included into the 2020 Non-ID workflow. |
| 2015 OSR | | NID3 | | *Respondent Validation to authenticate people/addresses who self-responded with or without a Census ID* | | ▪ The Non-ID workflow will include real time matching and geocoding, post real-time processing that will utilize administrative records and third-party data, and manual (interactive) matching and geocoding. |
| 2015 Census Test | CD: 4/1/15 | NRFU-?? | | Reduce Nonresponse Followup (NRFU) workload and increase NRFU productivity with Administrative Records, Field Reengineering, and Adaptive Design. | | |
| 2015 Census Test | CD: 4/1/15 | NRFU-?? | | Evaluation Follow-Up:<br>· Obtain the most accurate status of the housing unit on Census Day<br>· To identify people associated with an occupied housing unit during the calendar year | | |
| 2013 Census Test | Dec-13 | | | An operational study of NRFU procedures | | |

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| 2013 Census Test | Dec-13 | NRFU1 | | Use administrative records to "enumerate" some housing units | • Interviewers were approximately 20% less efficient when workload was reduced with records<br>• Cases remaining after workload is reduced are more difficult<br>• But interviewers spent approximately 22% fewer hours<br>• Overall interviewer cost is reduced | ⦿ Administrative records and third-party data will be used to enumerate nonresponding housing units, as appropriate |
| 2013 Census Test | Dec-13 | NRFU2 | | Try an adaptive design approach for cases not enumerated with records | • Interviewers were 22% more efficient in the adaptive design treatments<br>• This pattern holds whether workload was reduced with records or not<br>• Interviewers in the adaptive groups averaged approximately four more contacts per interviewer/day | ⦿ The NRFU operation will utilize automated tools and systems for:<br>o Recruiting, onboarding, and training<br>o Time and attendance and payroll<br>o Case load management<br>o Data collection<br>o Cost and progress monitoring |
| 2013 Census Test | Dec-13 | NRFU2 | | Compare with a fixed enumeration approach | | |
| 2013 Census Test | Dec-13 | NRFU3 | | Examine two telephone methods | • CATI implementation before CAPI led to 12-14% decrease in productivity<br>• Combines CATI and CAPI hours<br>• Productivity =<br>   (CATI hours+CAPI hours)/Number of cases | ⦿ Telephone contact attempts from a central location (i.e., Census Questionnaire Assistance) will not be part of the initial NRFU contact strategy |
| 2014 SIMEX Test | Nov-14 | NRFU4 | B.j, | Objective #1: Identify optimal staff-to-supervisor ratios/mixes for ENUM/LSO and LSO/FMO. | • The Census SIMEX demonstrated that LSOs and FMOs were able to perform tasks within the new staff-to-management structure at both high and low staff-to-management ratios; however, significant negative impacts to workload, situational awareness, response times, and response accuracy were identified when higher staff-to-supervisor ratios were utilized. Within the context of this SIMEX, and because we only tested two staff-to-supervisor ratios (in conjunction with several other variables), we were not able to determine an optimal or absolute value for the staff-to-supervisor ratio. | ⦿ The NRFU operation will utilize a reengineered field management and staffing structure |
| 2014 SIMEX Test | Nov-14 | NRFU5 | B.j, | Objective #2: Assess the necessity and sufficiency of the automated operational control system (MOJO) as it pertains to the FMO/LSO management of staff, response data, and payroll data in an operational setting. | • The Census SIMEX demonstrated that the MOJO Operational Control System (OCS) is sufficient in assisting both LSOs and FMOs in an operational setting. Further, data from the SIMEX suggests that MOJO is essential in supporting the new field staff structure and procedures described in the revised NRFU CONOPS. LSO and FMO participants found MOJO to be acceptable for NRFU operations, and all participants were able to take advantage of different capabilities and functions provided by MOJO and utilize them to successfully support their roles in an operational setting. | |
| 2014 SIMEX Test | Nov-14 | NRFU6 | B.j, | Objective #3: Evaluate and evolve the FMO and LSO responsibilities and duties as defined in the revised NRFU CONOPS. | • Overall, data from the Census SIMEX suggested that roles and responsibilities of the FMOs and LSOs were well defined in the revised NRFU CONOPS. Participants mostly understood the duties associated with their role and tasks they were engaged in, although there was, on occasion, some confusion about what steps to take or which procedures to follow for certain complex events. | ⦿ The NRFU operation will utilize a reengineered field management and staffing structure |

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| 2014 SIMEX Test | Nov-14 | NRFU7 | B.d, B.e, B.j, B.l | Objective #4: Evaluate the effectiveness of the training materials for the FMO and LSO roles. | • The Census SIMEX revealed that the initial set of training materials provided to SIMEX participants in preparation for their roles as FMOs and LSOs appeared to be generally effective. Performance data (response accuracy) suggested that there may have been some knowledge gaps among LSOs with regard to certain procedures. Further analysis of the source of incorrect completions would be needed to confirm that additional training on these procedures in particular is required. Feedback from participants overall suggested that they would like training to be longer, more in-depth, and inclusive of all roles across NRFU operations. Although the training was generally effective for the purposes of the SIMEX, both objective and subjective data suggests that continued development of the training program, as well as the addition of modules covering specific focal areas such as the Census Operations Mobile Platform for Adaptive Service Solutions (COMPASS) application, detailed MOJO components, and CONOPS procedures for off-nominal events may be needed. | ⬛ The NRFU operation will utilize automated tools and systems for:<br>o Recruiting, onboarding, and training<br>o Time and attendance and payroll<br>o Case load management<br>o Data collection<br>o Cost and progress monitoring |
| 2015 Census Test | CD: 4/1/15 | NRFU-8 | | Test the feasibility of fully utilizing a field operations management system that leverages planned automation and available real-time data, as well as data households have already provided to the government, to transform the efficiency and effectiveness of data collection operations. | | |
| Public Opinion Polling | February 2012 and ongoing | SPC1 | | Track public opinion toward the Federal Statistical System | > Data users are more likely to report trusting statistics than non-data users.<br>> Reported belief in the credibility of statistics predicts reported trust in federal statistics.<br>> Reported trust in statistics remained relatively stable over the two year data collection.<br>> The government shut-down caused by a deadlocked Congress coincided with the largest dip in reported trust in statistics (however, this may have been confounded by distrust of the roll out of the Affordable Care Act). | |

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| Public Opinion Polling | February 2012 and ongoing | SPC2 | F.b, | Track opinions toward use of Administrative Records | > Questions regarding administrative record use has shown when framed to indicate that the use of records can save the government money or provide a social good then respondents are more likely to favor using administrative records.  Findings also seem to indicate that respondents prefer the use of government records to "public" or other third-party records.<br><br>**From Focus Groups:**<br>> Participants became more comfortable with the idea of administrative records use when more information about how it will be used and from where the data will be obtained is provided. However, participants were concerned with the accuracy and timeliness of administrative records, leading some to conclude that it might be best if the Census Bureau avoid using them.<br><br>**Overall Assessments (from Privacy/Security):**<br>> Framing of communication surrounding the use of administrative records is of utmost importance. Respondents want to know what is being done and why.<br>> People who use Federal data and know something about it are more likely to trust it, trust us, and favor the use of administrative records for statistical purposes. | ⬜ Administrative records and third-party data will be used to identify vacant units<br>⬜ Administrative records and third-party data will be used to enumerate nonresponding housing units, as appropriate |
| Public Opinion Polling | February 2012 and ongoing | SPC3 | F.b, | Other topics like BYOD, contact methods, and response methods | > Respondents reported preferring to be contacted by email or text messaging over being called on a cell phone.  Respondents reported preferring email to traditional contacts of calling the home phone or in-person interviewing. However, respondents report preferring reporting via paper for the decennial Census compared to receiving an email with the link.<br>> If respondents objected to being emailed or texted, the most common  reason was that they don't use that communication.<br><br>**From Focus Groups:**<br>> Focus group participants disliked the idea of receiving text messages from the Census Bureau. Some participants were open to receiving an email, but were unsure how they could verify its legitimacy. They were worried scammers might take advantage of an opportunity to impersonate the Census Bureau and that their information could fall into the wrong hands.<br>> Most people whose households responded during nonresponse follow-up (NRFU) strongly disliked the concept of Bring Your Own Device (BYOD), citing security, privacy, and confidentiality concerns. However, these participants were unable to identify how they would know if a device were personal or government-issued.<br>> Answering the census online was not an issue for most participants, but some worried about the security of the systems and mentioned events such as Edward Snowden's leak of National Security Agency (NSA) information and the health insurance website issues following the Affordable Care Act as cautionary tales.<br>> Most participants in the groups had experienced Internet-targeted advertising and indicated they found it annoying. While there was some initial confusion about how this concept related to the Census Bureau, most people were able to reason through how it might be useful. The use of a celebrity or athlete created a | ⬜ The 2020 Census will use texting and emailing to motivate self-response |
| *LUCA Focus Groups* | *March 2014 - June 2014* | | | *Research Activity 1 - Researched reports and documents associated with the 2010 Census LUCA and 2010 New Construction (NC) programs* | | |
| *LUCA Focus Groups* | *March 2014 - June 2014* | | | *Research Activity 2 - Researched the impact of the Geographic Support System Initative (GSS-I) on LUCA* | | |

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| *LUCA Focus Groups* | *March 2014 - June 2014* | | | *Research Activity 3 - Researched the impact of the Reengineering Address Canvassing on LUCA address validation* | | |
| *LUCA Focus Groups* | *March 2014 - June 2014* | | | *Research Activity 4 - Conducted Foucs Groups to obtain feedback from partners on potential 2020 Census LUCA models* | | |
| Address Validation Test: Part 2 - Partial Block Canvassing | | | | | PBC Key Take-Aways:<br><br>• When PBC did not find an address that was located by MMVT, reasons for the omission tended to be:<br>  • The area was provided to the PBC lister, but the instruction was poorly-worded or the polygon was poorly-defined, leading to lister confusion.<br>  • The add represented a situation not detectable by the imagery review step (i.e., changes within existing structures), and therefore was not provided as a work area to the PBC lister.<br>  • The add represented a situation that was not detected due to imagery quality and/or vintage issues, and therefore was not provided as a work area to the PBC lister.<br>• Polygons and instructions prepared for PBC listers generally resulted in successful navigation to and within work areas, and facilitated accurate data collection, but improvements need to be made:<br>  • Ensure instructions match the polygon;<br>  • Include imagery on the LiMA to aid in understanding the polygon and instruction;<br>  • Use basic street address information within an instruction; and;<br>  • Missing and misaligned street features and misaligned block boundaries should be fixed in the office before any block goes to the field.<br>• Based on the results of the PBC Test, we recommend:<br>  • Testing PBC in the 2016 Address Canvassing Test with traditional listers.<br>  • Overlap with full-block canvassing for a sample of blocks to compare results.<br>  • Improve clarity of written instructions as well as training to minimize lister confusion in the field.<br>  • Conduct additional analysis at the individual address level to fully understand | |