

# **Efforts to Address Respondent Concerns in the American Community Survey**

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# ACS Basics

- Ongoing monthly survey sent to 3.5 million addresses per year to produce detailed population and housing estimates each year
- Designed to produce *critical information on small areas and small population groups* previously collected on the decennial long form
- Supports over 300 known Federal Government uses



# Components of Respondent Burden and Concerns

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- It takes an average of 40 minutes per household to respond to the 72 questions included on the survey
- Some questions can be perceived by respondents as sensitive, personal, or difficult to answer
- It is unclear to ACS respondents why the Census Bureau needs to collect information on some topics
- Response to the ACS is required by law, and the multiple contact attempts by mail, telephone and personal visit can be perceived by some respondents as harassment

# Research to Address Respondent Concerns

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## Topics of Research Underway

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|---------------------------------------|--|
| • Using Administrative Records        | • Asking Less Frequently or of Fewer Respondents |
| • Testing Messaging in Mail Materials | • Promoting Awareness of Data Uses               |
| • Modifying Survey Questions          | • Reducing Follow-Up Attempts                    |

See <http://www.census.gov/programs-surveys/acs/operations-and-administration/2015-16-survey-enhancements.html>

# Using Administrative Records

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We only want to ask households once for information already reported to the government, potentially allowing us to remove some questions from the ACS.

- Identifying administrative and commercial data sources
- Evaluating coverage and quality of other data sources
  - Preliminary results being released on a flow basis by topic from September 2015 through October 2016
- Implications to topic-specific estimates
  - Preliminary results will be released on a flow basis by topic from March 2016 through March 2017

# Testing Messaging in Mail Materials and Promoting Awareness of Data Uses

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- Field Testing Revisions to the Mail Materials
  - Tests conducted in Spring 2015 to revise mail methods and timing
- Envelope Mandatory Messaging Test
  - Testing the removal of mandatory messages from the outside of the ACS envelopes in May 2015 (preliminary report released Sept. 4, 2015)
- Mandatory Messaging Test
  - Testing more comprehensive changes throughout the mail packages in September 2015 to soften references to mandatory and explain data uses (preliminary report planned for December 2015)
- Why We Ask Brochure Test
  - Testing a graphic-based insert with the paper questionnaire in November 2015 to provide information on why we ask the questions

# Results of the Envelope Mandatory Messaging Test

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- Split-ballot experiment embedded within May 2015 production, where 24,000 cases eliminated the phrase “YOUR RESPONSE IS REQUIRED BY LAW” from the initial mail package envelope and the paper questionnaire package envelope
- Eliminating this phrase does significantly lower the self-response return rate by 5.4 percentage points (this rate is before the start of computer-assisted telephone interviewing and it pushes additional cases into the more expensive follow-up modes)
- We estimate the preliminary cost impact of eliminating mandatory messages from the envelopes in the manner we tested to be an increase in the annual costs of the survey by roughly \$9.5 million
- See full report at:  
[http://www.census.gov/content/dam/Census/library/working-papers/2015/acs/2015\\_Barth\\_01.pdf](http://www.census.gov/content/dam/Census/library/working-papers/2015/acs/2015_Barth_01.pdf)

# Evaluating Modifications to Survey Questions

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We are researching the possibility wording questions differently to reduce some of the difficulty for respondents in completing the survey.

- 2016 Content Test – field test of changes to many questions that were proposed by Federal agencies in 2013
- 2015-2016 Lab Testing—work with Federal agencies to develop changes to make questions less difficult, and evaluate those changes in a lab setting



# 2016 Content Test Topics

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- Telephone Service
- Computer and Internet
- Relationship
- Hispanic Origin and Race
- Health Insurance
- Journey to Work:  
Commute to Work
- Number of Weeks Worked
- Class of Worker
- Industry and Occupation
- Retirement Income
- Health Insurance  
Premiums and Subsidies
- Journey to Work: Time  
Leave for Work

# Evaluating Methods to Ask Questions Less Frequently or of Fewer Respondents

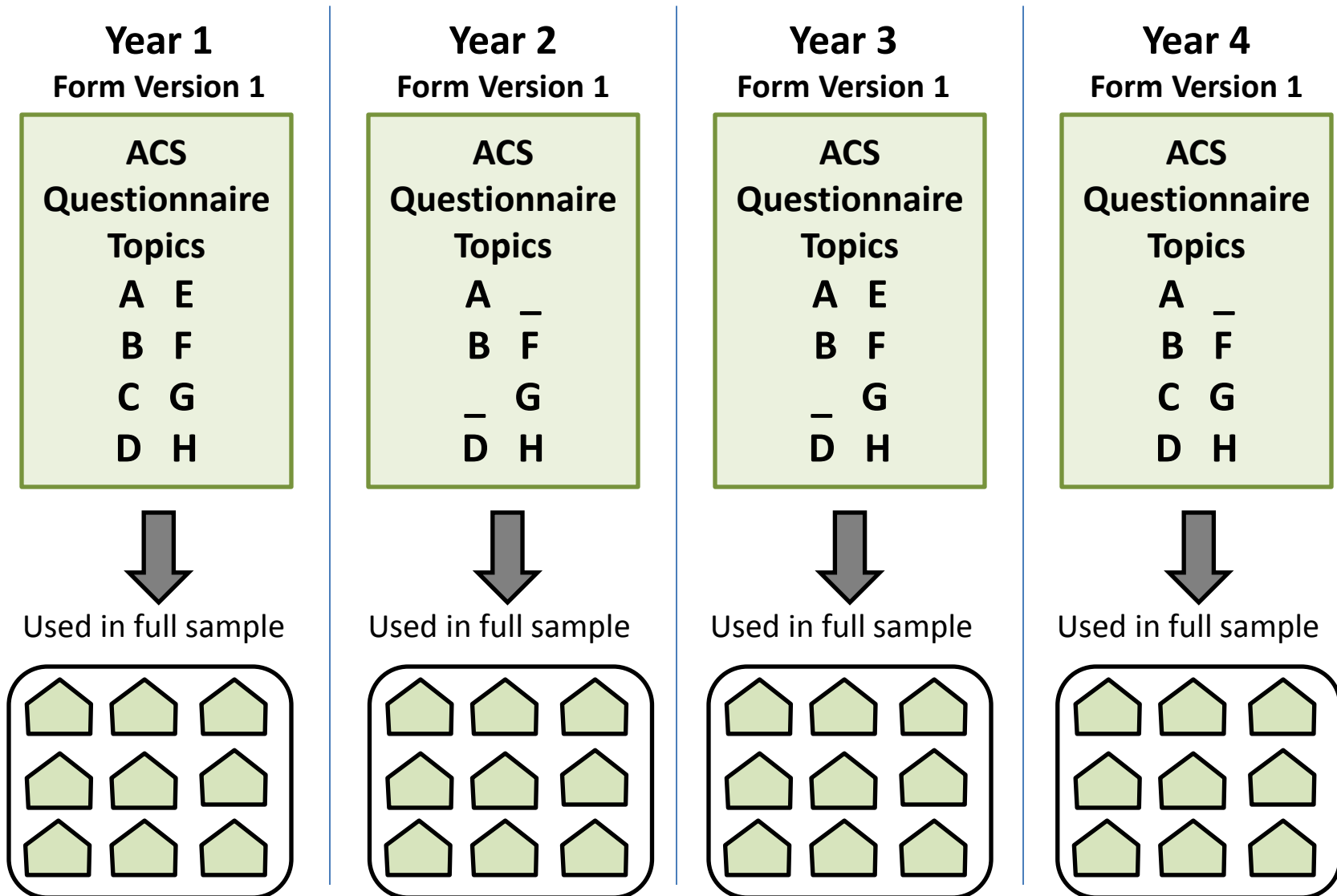
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The current design of the ACS asks all of the survey questions from all sampled households every year. Alternative survey designs might reduce that burden.

- Feasibility report issued September 30, 2015 identified some opportunities to include some questions periodically, rather than asking every question every year, or to ask some questions of only a subset of the ACS sample.
- The report also evaluated methods like “matrix sampling” and a hybrid approach using administrative records to reduce the burden on respondents.

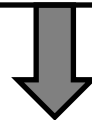
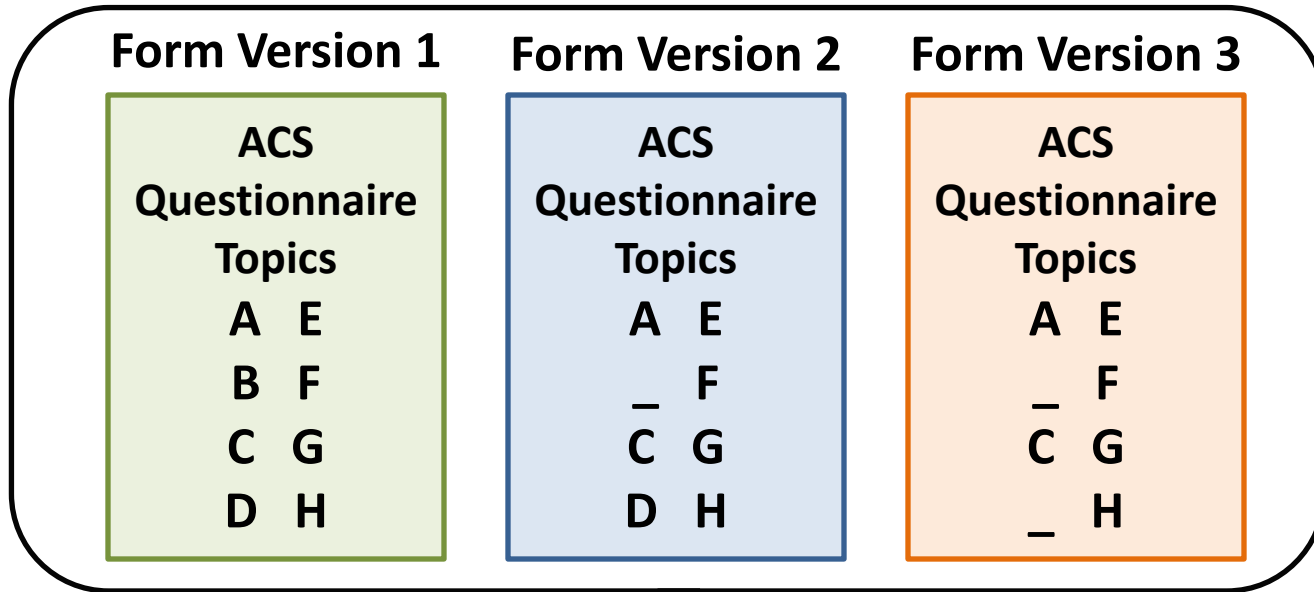
# Illustration of Option 1: Periodic Inclusion

In this example, Topic C is needed only every three years, while Topic E is needed every other year. One version of the questionnaire is used for all households in sample each year.

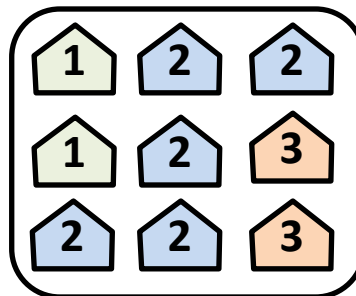


# Illustration of Option 2: Subsampling

In this example, Topic B is needed only at the state level, while Topic D is needed at the county level.

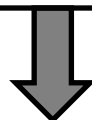
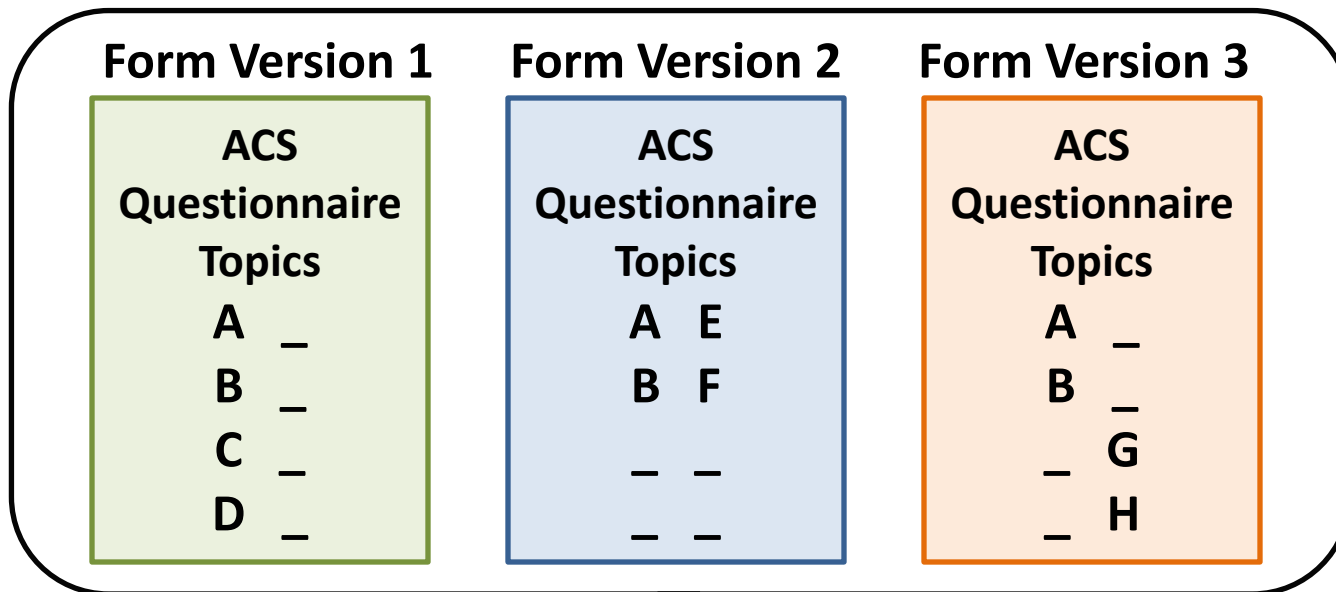


Only the portion of the full sample that is needed to produce estimates at the necessary geographic level receives the corresponding form version. Since Topic B requires less sample than Topic D to produce only state level estimates, form version 1 is used for a smaller set of households.

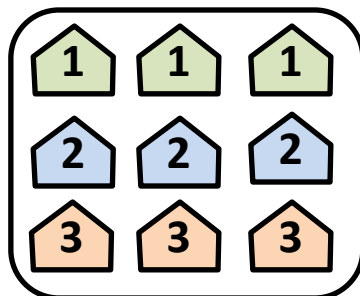


# Illustration of Option 3: Matrix Sampling

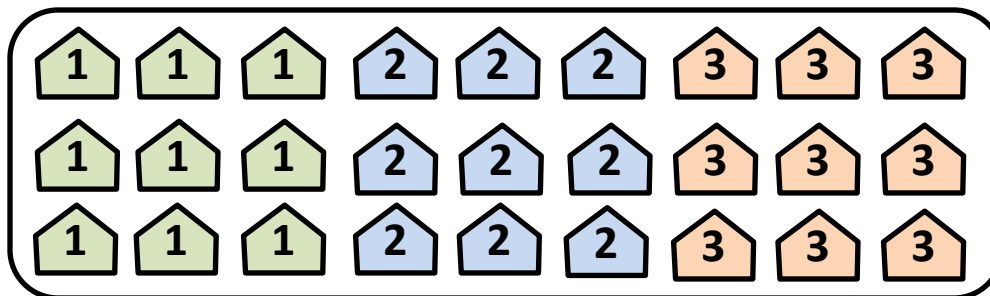
In this example, topics are assigned to form versions in a partially overlapping manner.



Either only a portion of the full sample receives each form version and other statistical tools help to mitigate the impact of the missing data, or the total sample is increased to achieve the reliability needed for each topic.

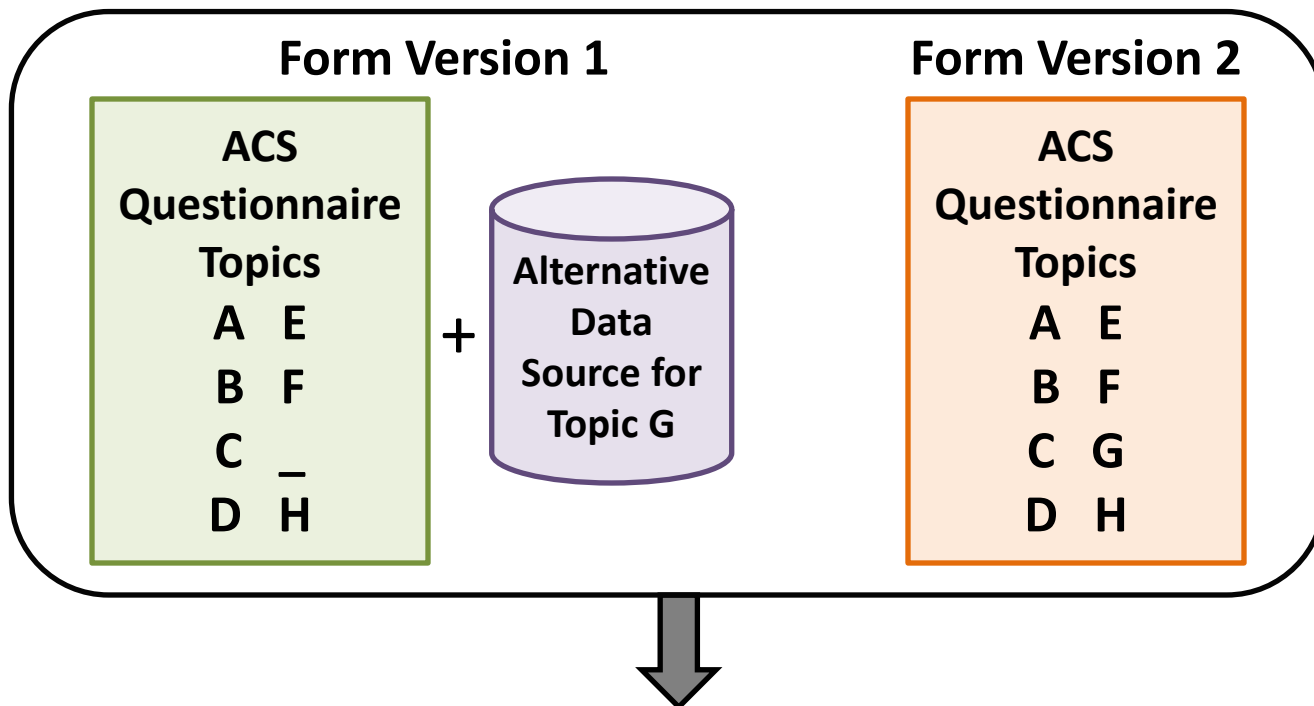


OR

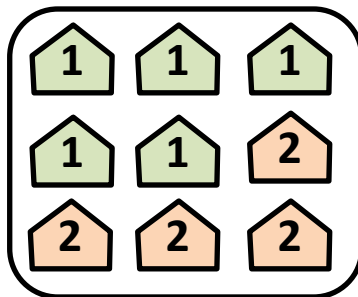


# Illustration of Option 4: Administrative Records Hybrid

In this example, Topic G has an alternative data source with good quality and coverage for most geographic areas that can be used directly in place of collecting the data on the questionnaire in those areas.



Areas with good coverage for the alternative data source receive form version 1, while areas without good coverage for the alternative data source receive form version 2.



# Assessing Each Option

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A Census Bureau team assessed each option according to a set of factors that demonstrate the feasibility and impact of the method. These assessments were based on the professional judgment of the team members, and not on empirical criteria. These factors are:

1. Operational and processing complexity
2. Impact on the accuracy of the data
3. Impact on data availability for small geographies and groups
4. Estimated reduction in respondent burden
5. Impact on richness of the data products
6. Assessment of additional costs and resources required

The report is available at: [http://www.census.gov/content/dam/Census/programs-surveys/acs/operations-and-administration/2015-16-survey-enhancements/Reducing\\_Burden\\_ACS\\_Feasibility\\_Assessment.pdf](http://www.census.gov/content/dam/Census/programs-surveys/acs/operations-and-administration/2015-16-survey-enhancements/Reducing_Burden_ACS_Feasibility_Assessment.pdf)

# The Team's Recommendations

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- **Pursue Periodic Inclusion:** The team recommends only periodically including any questions where the frequency and geographic needs for the data can be supported through asking some questions less frequently than every year.
- **Pursue options for incorporating Administrative Records.** Using administrative records either as a substitute for survey data collection for some topics included in the ACS, or via a hybrid approach with partial survey data collection, could significantly reduce respondent burden. When compared with subsampling and matrix sampling, using administrative records also seems to involve fewer potential undesirable impacts.
- **Seek additional input on efficient possibilities for Matrix Sampling or topical subsampling.** These options present potentially costly impacts on survey operations and the accuracy and richness of survey estimates. Therefore, the Census Bureau is seeking input that may help to develop research into efficient and effective designs for matrix sampling.



# Reducing Follow-Up Contact Attempts

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- In 2013 changes were implemented to reduce the calls made in the CATI operation
- In August 2015 a pilot test was conducted to reduce the number of contacts made in CAPI
  - The pilot employed stopping rules that also considered the previous contact attempts made by mail and CATI
  - Targeting national deployment in May 2016

# Projects Addressing Respondent Concerns and Reducing Respondent Burden

Projects	Fiscal Year 2015			Fiscal Year 2016				Comments
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Envelope Mandatory Messaging Test								Possible implementation in 2016
Additional Testing of Mandatory Messaging								Possible implementation in 2016
Reducing Personal Visit Contact Attempts								Conduct pilot in August 2015, and implement in Spring 2016
Matrix Sampling: Operational and Statistical Assessment								Initial assessment complete in September 2015
Field Test of Question Wording Changes Recommended by Federal Agencies								To assess question changes proposed for 2017 and 2019
Testing Changes to Question Wording to Reduce Difficulty and Sensitivity								Qualitative testing ongoing starting in 2015
Matching Coverage and Quality Assessments of Administrative Records								Coverage and quality assessments completed by September 2016
External Expert Consultations								Providing input on reducing respondent concerns in general, and specific projects above

**Thank you!**

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*Any views expressed are those of the author and not necessarily those of the U.S. Census Bureau.*