# 2020 Research and Testing Updates

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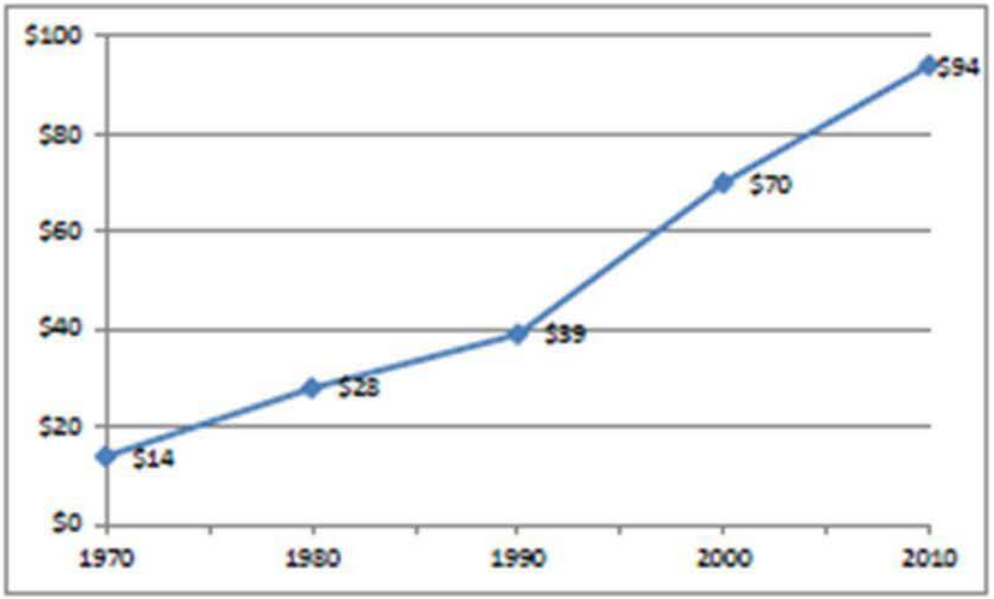
**California State Data Center Meeting**
**September 10-11, 2014**

# Returning to the Census After a Decade

## Right Timing and Opportunities to Use Technology and Information More Effectively

- Leverage **Internet** to increase self-response: give people more options to respond to the census, so we do not have to knock on as many doors
- Utilize **administrative records** (to reduce the NRFU workload and increase productivity)
- Maintain **geographic resources**, including the Master Address File and TIGER, and conduct a reengineered address canvassing




**Cost Per Housing Unit, 1970-2010 (2010 US $)**

- Efforts for **field operations reengineering**, such as improved logistics and automation of field assignments, enable us to transform local and regional management and infrastructure

# 2013 Census Test

- Examined operational feasibility of the use of administrative records and adaptive contact strategy tailored to each household to reduce nonresponse followup (NRFU) workload and increase productivity
- Sample size of 2,077 housing units in Philadelphia, drawn from 2010 Census NRFU universe
- Four panels that combined contact treatments (fixed and adaptive) with use of administrative records
- Data collection began in November 2013 and ended in early December 2013
- Used results to inform the 2014 Census Test

# 2013 Census Test – Results

- Utilization of Administrative Records to Reduce Workload
  - Overall enumerator cost is reduced
    - Interviewers spent fewer hours working cases, BUT
    - Enumerators were less efficient when workload was reduced with records
- Utilization of Adaptive Case Management
  - Interviewers were more efficient in the adaptive design treatments
- Utilization of Computer Assisted Telephone Interview before Computer Assisted Personal Interview
  - Led to a slight decrease in productivity due to few cases being completed by phone

# 2014 Census Test

- Test contact alternatives for self-response enumeration and nonresponse followup (NRFU)
- Compare response rates, cost, and data quality across strategies aimed at reducing costs by utilizing:
  - Three contact strategies for optimizing self-response, including the use of pre-registration, e-mail, and mail
  - Four panels for NRFU, varying the use of contact strategies and administrative records
- Started this month - June 2014
- Use the findings to inform later testing in FY 2015

# 2015 Testing Activities

- Focus on the major design decisions for the 2020 Census by evaluating 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
  - MAF Model Validation Test
  - 2015 Census Test
  - Optimizing Self-Response Test
  - National Content and Self-Response Test

# MAF Error Model Objective

- Model Based Approaches
  - Test our ability to use statistical modeling to measure error in the MAF and to identify areas experiencing significant change
  - Inform the performance of the models used to define the Address Canvassing workloads
- Microtargeting Approach
  - Incorporate aerial imagery reviews to detect changes and discrepancies
  - Include in-field updating of addresses for portions of blocks

# MAF Model Validation Test

- The purpose of the MAF Model Validation Test (MMVT) is to collect data to inform components of the Targeted Address Canvassing decision-points
  - Sept – Dec 2014
  - Areas in the contiguous US
  - Using existing instruments with minor modification

# 2015 Census Test

- Reengineer the roles, responsibilities, and infrastructure for the field

- Evaluate the feasibility of fully utilizing the advantages of technology, automation, and real-time data to transform the efficiency and effectiveness of data collection operations
  - Move to automated training for enumerators and managers
  - Test and implement routing and/or navigation
  - Reengineer the approach to case management

# 2015 Census Test (continued)

- Reduce NRFU workload and increase NRFU productivity with:
  - Administrative Records
    - Reduce cases that need to be resolved in NRFU by varying type of cases removed and timing of case removal from the workload
    - Reduce the number of contact attempts to cases resolved in NRFU
  - Field Reengineering and Adaptive Design
    - Reduce the number of contact attempts
    - Leverage dynamic case management with route planning and other methodologies to improve enumerator productivity through automation
- Planned for an April 1 Census Day

# Optimizing Self-Response Test

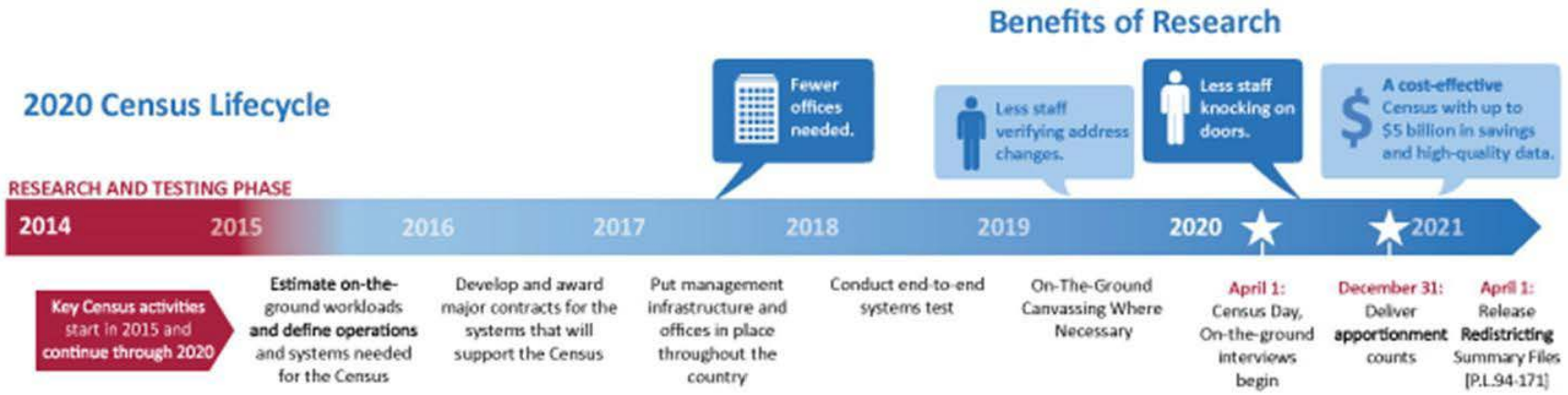
- Continue testing pre-registration and "non-ID" response to determine if we can optimize self and Internet response rates
  - Pending the outcome of the 2014 Census Test, further refine the procedures for pre-registration in the Census
  - Study the feasibility of implementing real-time processing for the "non-ID" response option
- Research how advertising, outreach, and promotion can engage and motivate respondents for action
- Planned for an April 1 Census Day

# 2015 National Content and Self-Response Test

- Full scope to be determined, but likely to continue testing of the following "short-form" questions:
  - Race and Hispanic origin
  - Relationship
  - Other possible topics such as within-household coverage questions
- Use nationally representative sample, with oversampling of key sub-population groups
- Planned for a September 1 Census Day

# 2020 Census: Where are we Today?

In the next census we will be trying to reach an increasingly diverse and growing population of around 330 million people in more than 140 million housing units. **The Census Bureau is conducting research in order to inform key design decisions at the end of FY 2015.**



# Redesigning the 2020 Census Can Save Billions