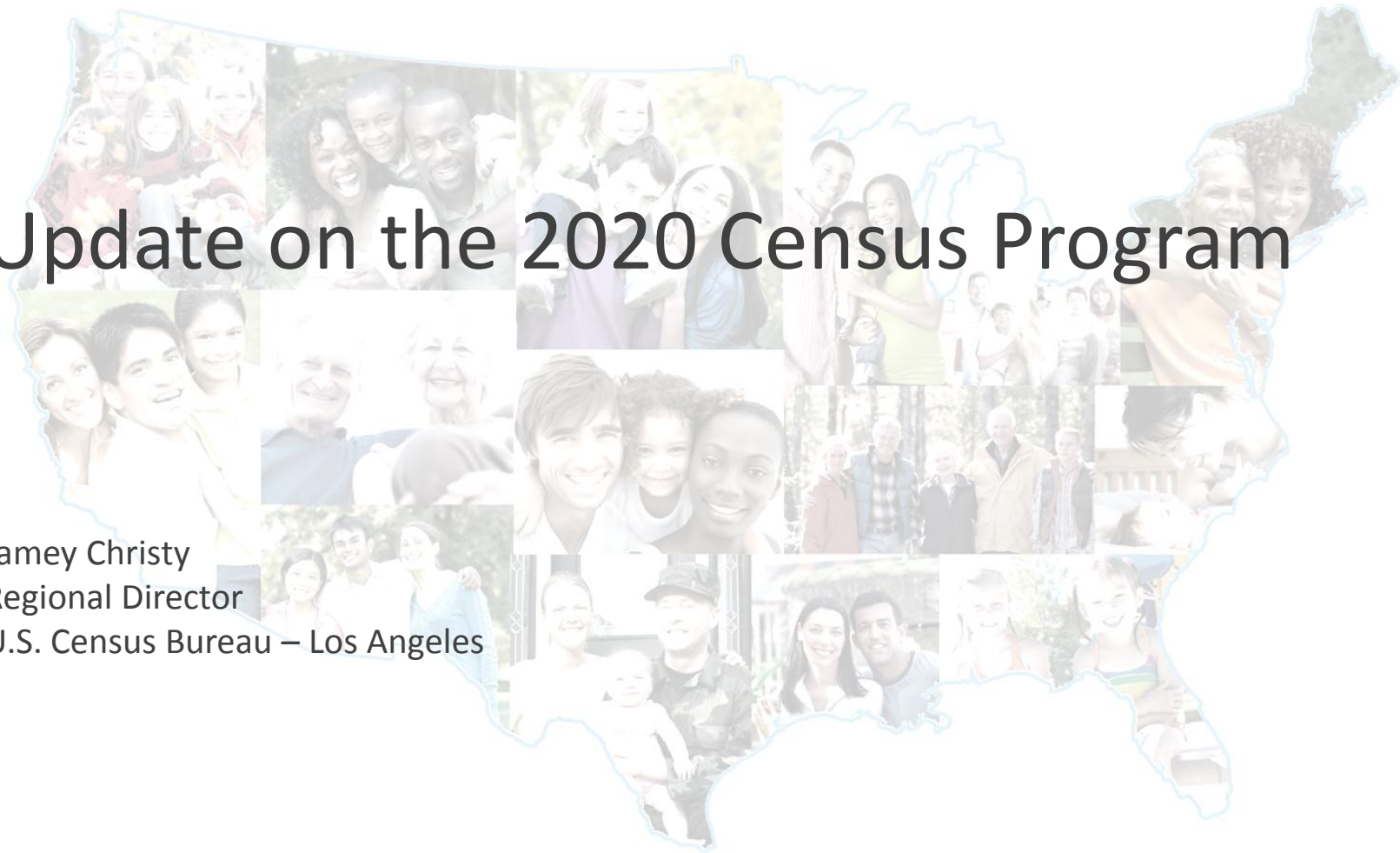
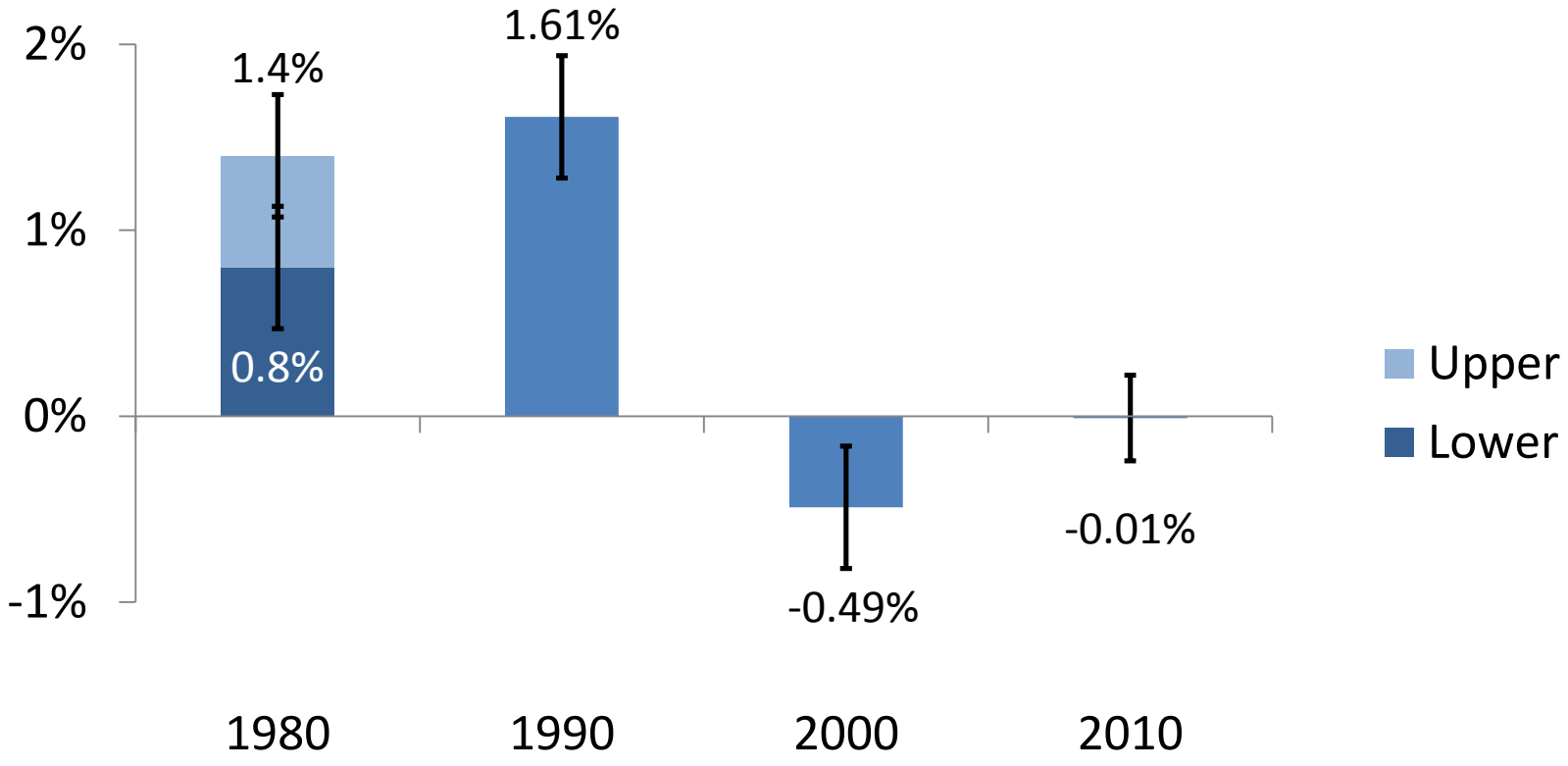


Update on the 2020 Census Program

Jamey Christy
Regional Director
U.S. Census Bureau – Los Angeles

United States Census Bureau
U.S. Department of Commerce
Economics and Statistics Administration
U.S. CENSUS BUREAU
census.gov

Percentage Net Undercount, U.S. Total, 1980 to 2010



Cost Per Housing Unit (1970 -2010)

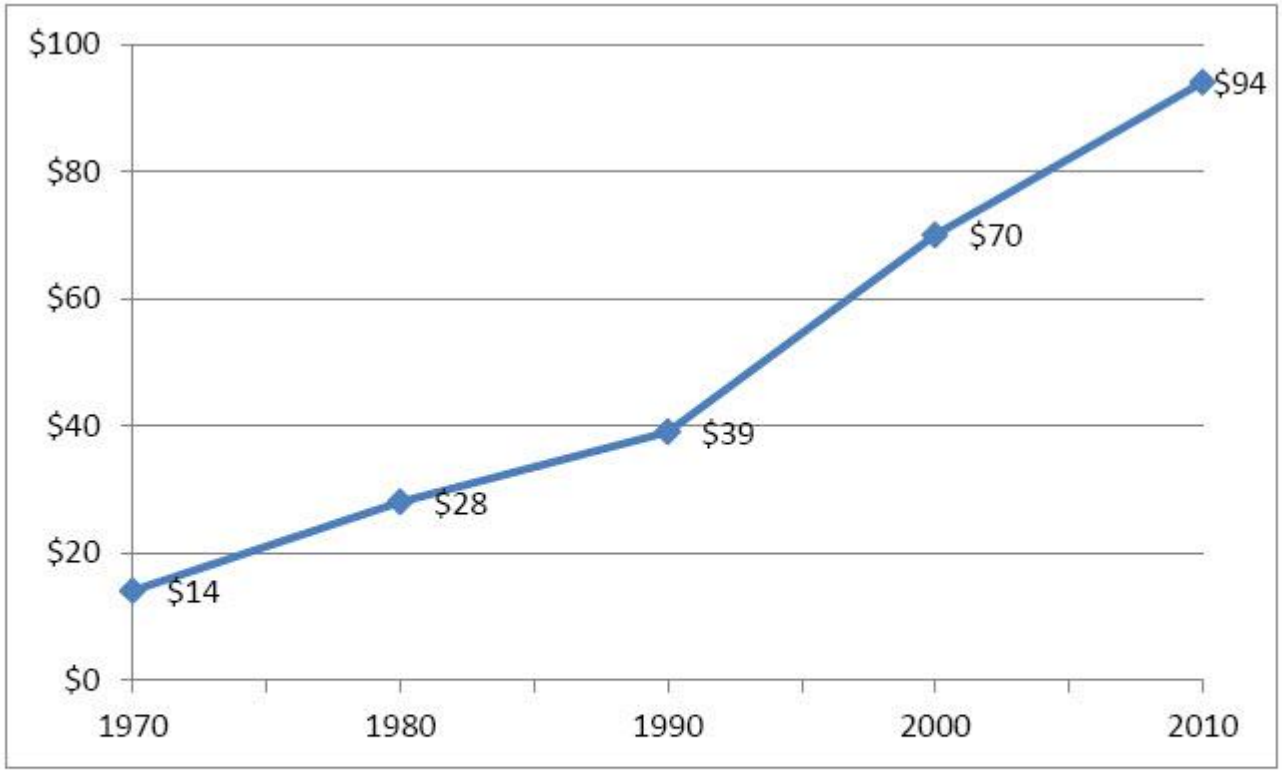


Figure 1: Cost per Housing Unit by Census Year, 1970 - 2010 (2010 dollars)

Source: Bureau of the Census. **Note**: Includes the costs for the Master Address File/Topologically Integrated Geographic Encoding and Referencing Enhancement Program and American Community Survey.

2020 Census

2020 Census Innovation Areas Recap

Up to $5 Billion* in Savings Through:

- Reengineering Address Canvassing
- Optimizing Self-Response
- Utilizing Administrative Records
- Reengineering Field Operations

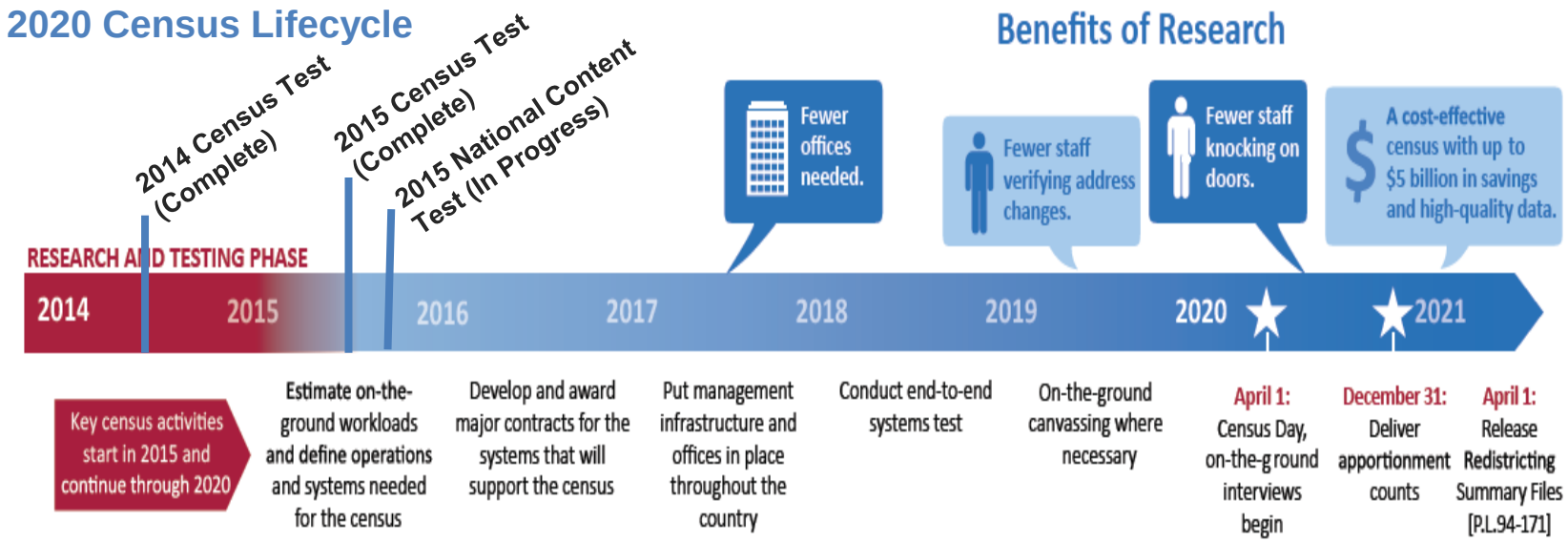
*This estimate is based off of the 2014 Census Lifecycle cost estimate.

2020 Census

Lifecycle Recap

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 by the end of FY 2015.



2020 Census

Research: 2015 Census Test Recap

In 2015, we conducted five tests:

1. **Human in the Loop Simulation (SIMEX):** Established a simulated operational control system (SIMEX) to test capturing and resolving issues in real time by using simulated data to support conceptual decisions in the 2015 Census Test
2. **Address Validation Test:** This test enables us to assess the performance of the methods and models that will help us develop the 2020 Census address list and define the address canvassing workloads
3. **2015 Optimizing Self-Response Test:** Test reaching and engaging respondents to have them opt into a our 'Notify Me' campaign for the Census Tests
4. **2015 Census Test:** Our 2015 Census Test was conducted in two locations (Savannah, Georgia and Maricopa County, Arizona) to employ a variety of new methods and advanced technologies under consideration for 2020 Census
5. **2015 National Content Test:** Evaluate and compare different versions of questions that will be asked in the 2020 Census as well as test different contact strategies for optimizing self-response

2015 Census Test

Optimizing Self-Response

- Savannah, Georgia media market area
- Continue testing “Notify Me” and “Non-ID” response to determine if we can optimize self and Internet response rates
- Research how advertising, outreach, and promotion can engage and motivate respondents for action
- Key Findings
  - Partnerships and advertising continue to be successful mechanisms for motivating self-response
  - While pre-registration was not an effective means for motivating self-response, mailing invitation letters and postcards were effective
  - We achieved high match rates for non-ID cases, and our real-time non-ID processing approach worked well

2015 Census Test

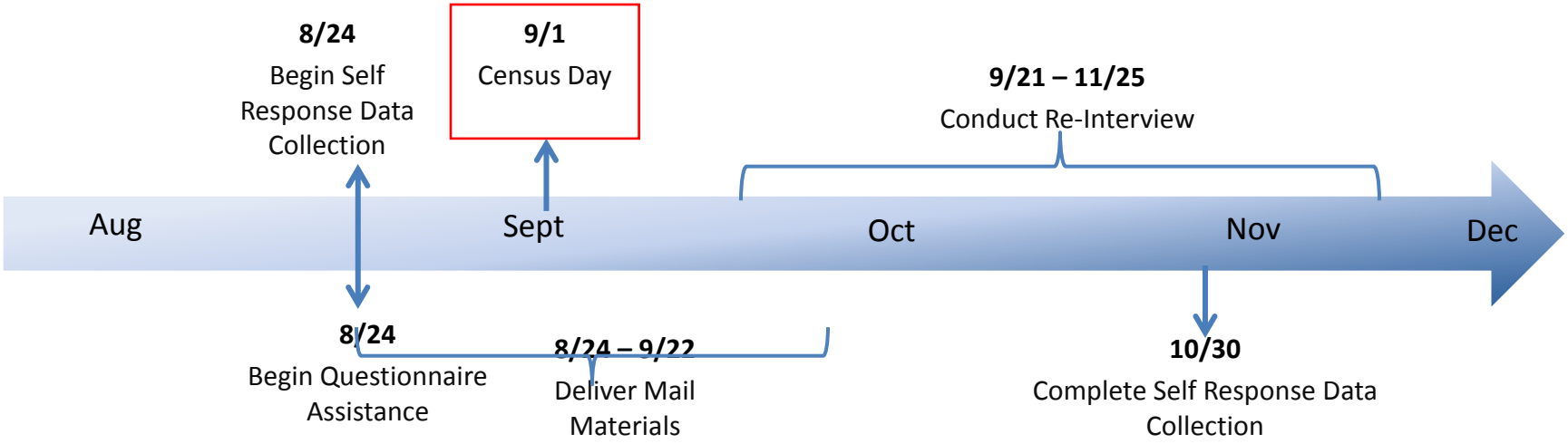
Reengineering Field Operations and Utilizing Administrative Records

- 165,000 Housing Units in Maricopa County, Arizona
- Reengineer the roles, responsibilities, and infrastructure for field data collection
- Test and implement routing and navigation
- Test a “Bring Your Own Device” component
- Determine how administrative records can reduce the NRFU workload
- Improve efficiency with alternative contact strategies
- Preliminary Findings
  - Overall self-response rate was about 56.2 percent
  - New training approach reduced the allotted training from 32 hours to 18 hours
  - The COMPASS application was easy to use; however, experienced some freezes and crashes
  - Enumerators experienced challenges specific to our procedures, the interactions with the COMPASS application, and the management of assignments
  - Area Operations Support Center well run and alerts, entry of work availability, and routing successful

2015 National Content Test

In Progress

- September 1, 2015 Census Day
- Use a large nationally representative sample, including Puerto Rico
- Evaluate and compare different census content, including race and Hispanic origin, relationship, and within-household coverage
- Refine estimates of national self response and Internet response rates and continue testing different contact strategies for optimizing self response
- Conduct content re-interview that includes a subsample of respondents, to measure accuracy of race/origin and coverage



2015 National Content Test

Key Content Areas

Race and Hispanic Origin	Separate questions vs. combined question
	"Middle Eastern or North African" (MENA) category
	Instruction wording and question terminology
	Web-based questionnaire designs to improve question understanding and optimize reporting of detailed racial and ethnic groups
Relationship	2010 relationship response categories
	New relationship response categories
Within-Household Coverage	Rules-based approach
	Question-based approach

2015 National Content Test

Contact Strategies

	Panel	#1	#2 (7 days later)	#3* (7 days later)	#4* (7 days later)	#5* (7 days later)
1	Internet Push (Control)	Letter	Postcard	Postcard	Mail Q'nnaire	
2	Internet Push with Early Postcard	Letter	Postcard (3 days sooner)	Postcard	Mail Q'nnaire	
3	Internet Push with Early Questionnaire	Letter	Postcard	Mail Q'nnaire	Postcard	
4	Internet Push with Even Earlier Questionnaire (Low response stratum only)	Letter	Mail Q'nnaire	Postcard	Postcard	
5	Internet Choice (Low response stratum only)	Mail Q'nnaire	Postcard	Postcard	Mail Q'nnaire	
6	Internet Push with Postcard as 3rd Reminder	Letter	Postcard	Postcard	Mail Q'nnaire	Postcard
7	Internet Push Postcard	Postcard	Postcard	Letter	Mail Q'nnaire	
8	Internet Push with Early Postcard and 2nd Letter Instead of Mail Q	Letter	Postcard (3 days sooner)	Postcard	Letter	
9	Internet Push with Postcard and Email as 1st Reminder (Same time)	Letter	Postcard and Email (3 days sooner)	Postcard	Mail Q'nnaire	

*Targeted to Nonrespondents

2016 Census Test

- April 1, 2016 Census Day
- A site test in parts of Los Angeles County, CA and Harris County, TX
  - Language diversity
  - Demographic diversity
  - High vacancy rates
  - Varying levels of Internet usage
  - Multiple locations across different time zones
  - Approximately 225,000 housing units in each test area
- Test Objectives
  - Refine technologies and methods for assigning cases to field staff conducting nonresponse follow-up
  - Explore self-response options
  - Provide non-English support for respondents with limited English proficiency – both in terms of our contact strategies and response options (Internet, paper, NRFU)
  - Study partnerships and outreach efforts to reach historically hard to count populations
  - Use of text messaging and Real Time Non-ID processing methods

2016 Census Test
Los Angeles County, CA

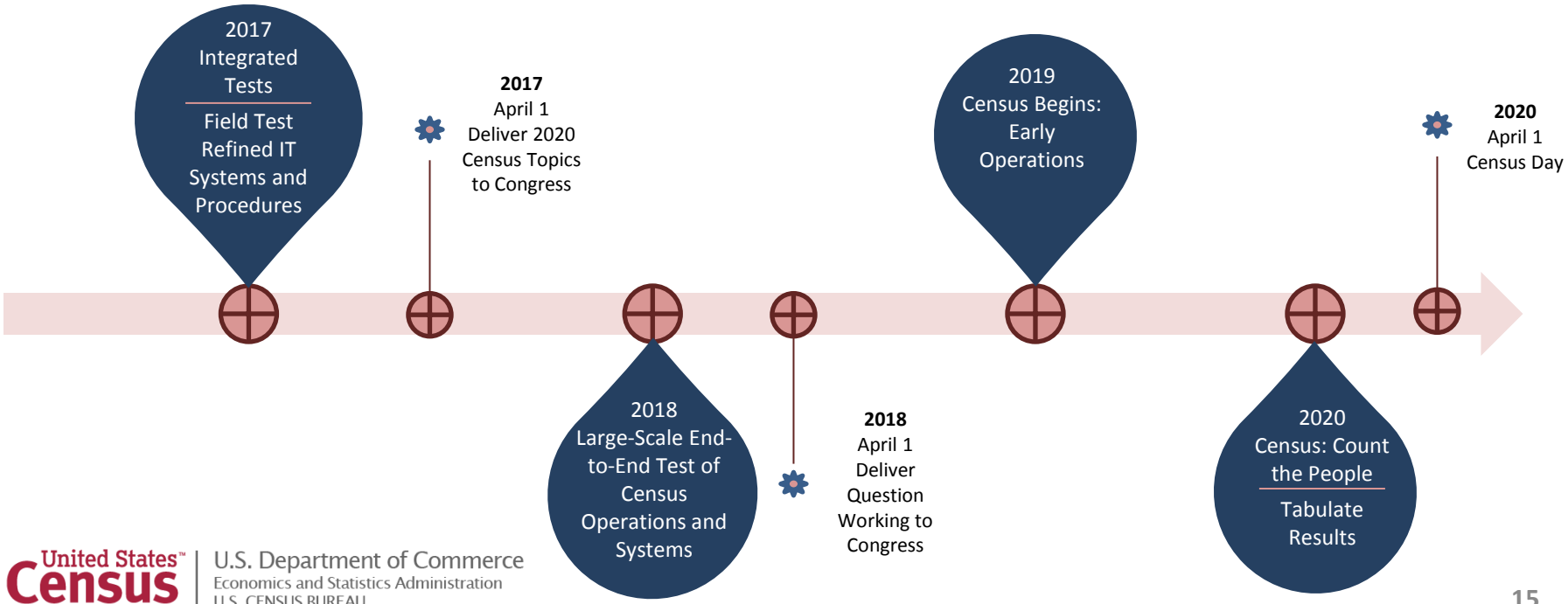
2016 Address Canvassing Test

- Address Canvassing
  - Deliver a complete and accurate address list and spatial address database for enumeration
  - Determines the type and address characteristics for each living quarter
  - Combination of In-Office and In-Field methodologies and Quality Control processes for test areas in the United States and Puerto Rico
- Test Objectives:
  - New In-Office and In-Field Address Canvassing methods
  - Utilization of Listing and Mapping Instrument (LiMA)
  - Use of the Basic Collection Unit instead of traditional collection geography
  - Updates to the MAF/TIGER System and address matching and updating software for Puerto Rico
  - Reengineered methods for quality control
  - Updates to the MAF/TIGER System with address and spatial data

2020 Census

Future Tests

- 2017 Census Test
  - April 1, 2017 Census Day
- 2018 End-to-End Test
  - Test critical systems and operations simultaneously to ensure readiness for the 2020 Census operations
  - Includes field data collection components
  - Timing of field operations will mimic the 2020 Census

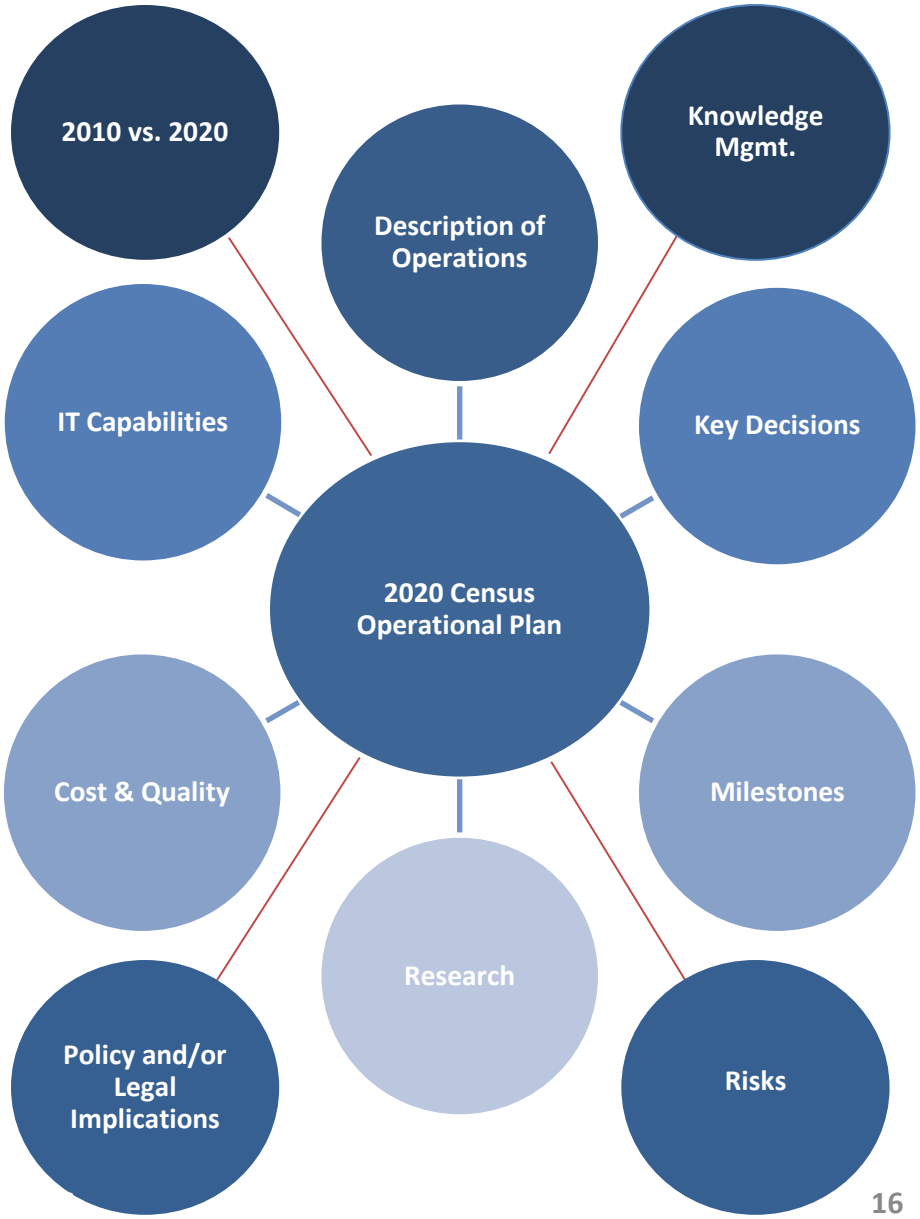


2020 Census Operational Plan

Documents the major design decisions for the 2020 Census, which includes:

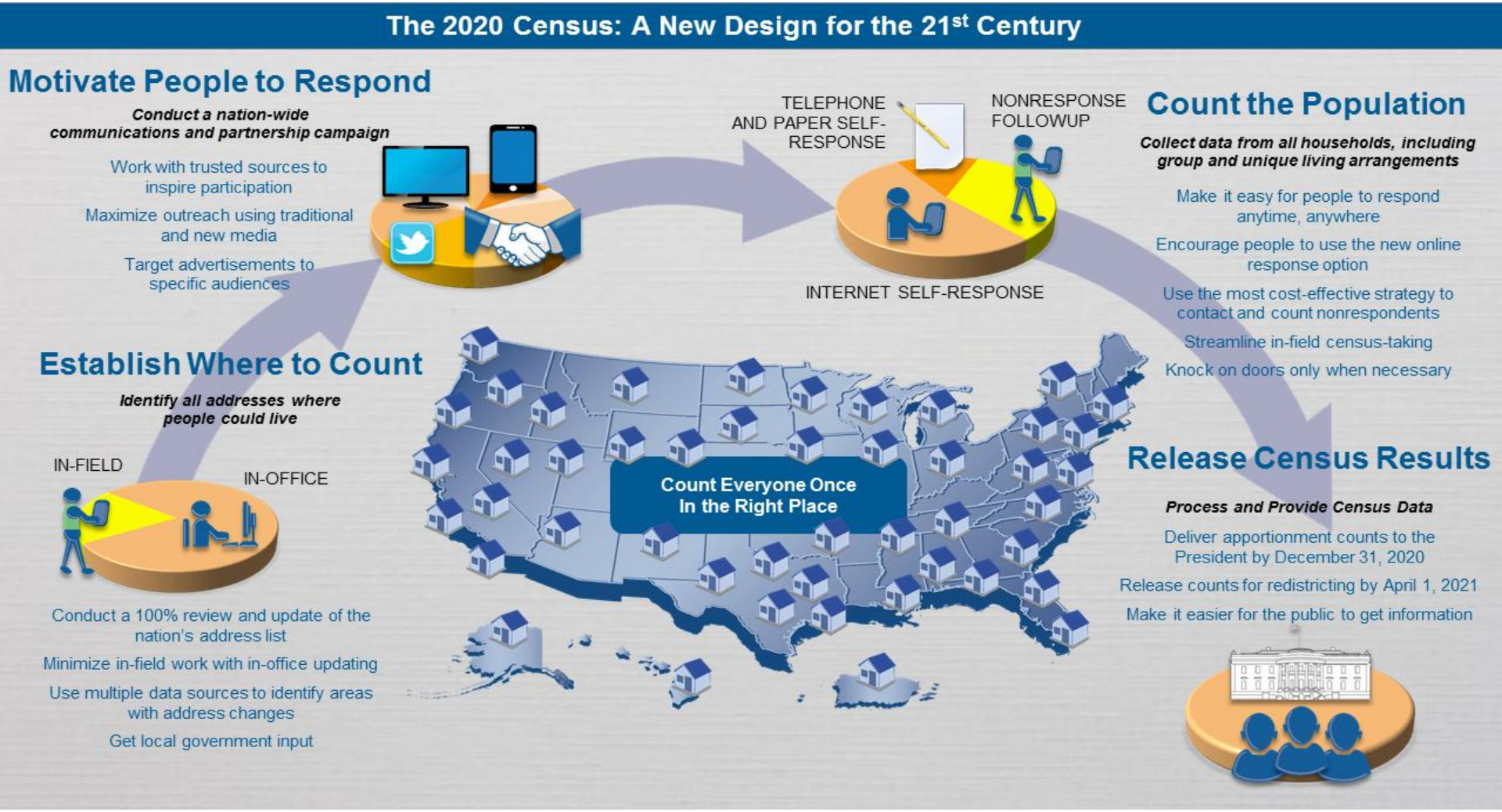
- 2020 Census Concept of Operations
  - Four Key Innovation Areas
  - Thirty-four 2020 Census Operational Areas
- Supporting documentation, including:
  - Lifecycle Cost Estimates
  - IT Architecture
  - Acquisition Strategy
- Communication materials

2020 Program Management Review:
October 6, 2015
www.census.gov/2020census



2020 Census Operational Plan

Operational Overview



Thank you!