

# The American Community Survey: Looking Ahead



ACS Data Users Group Conference  
May 2015

John H. Thompson  
Director, U.S. Census Bureau

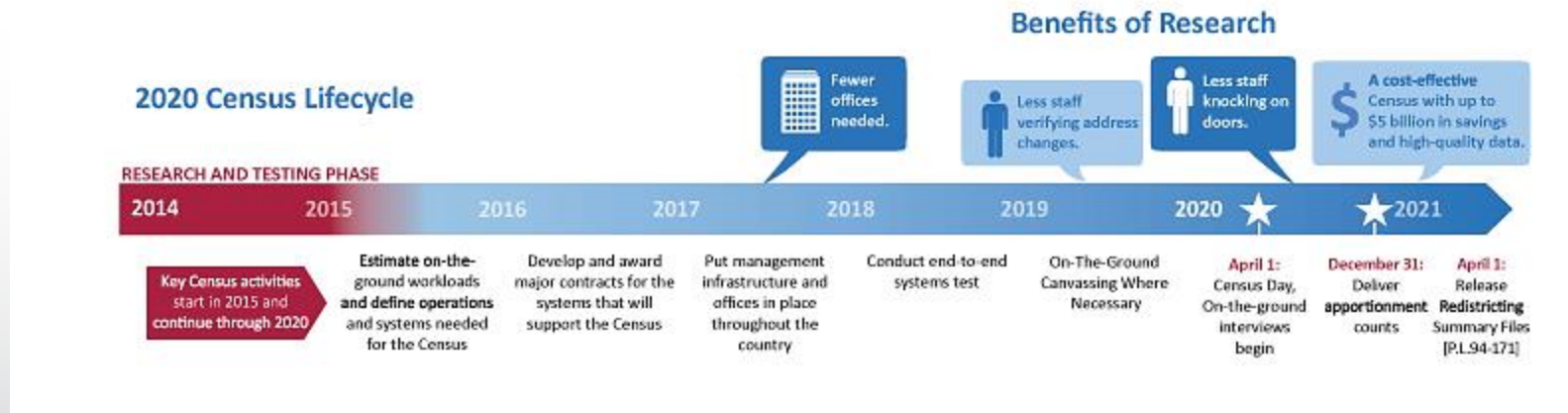
Lisa M. Blumerman  
Associate Director, Decennial Census Programs

Rebecca Blash  
Program Manager, Center for Enterprise Dissemination Services and Consumer Innovation

# 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 by the end of FY 2015.**



# Where Are We Today: Research and Testing

**Up to  
\$5 Billion  
in Savings  
Through:**

**Reengineering Address Canvassing**

[\$1 Billion]

**Optimizing Self-Response**

[\$548 Million]

**Utilizing Administrative Records**

[\$1.2 Billion]

**Reengineering Field Operations**

[\$2.3 Billion]

# Where Are We Today: 2015 a Critical Year

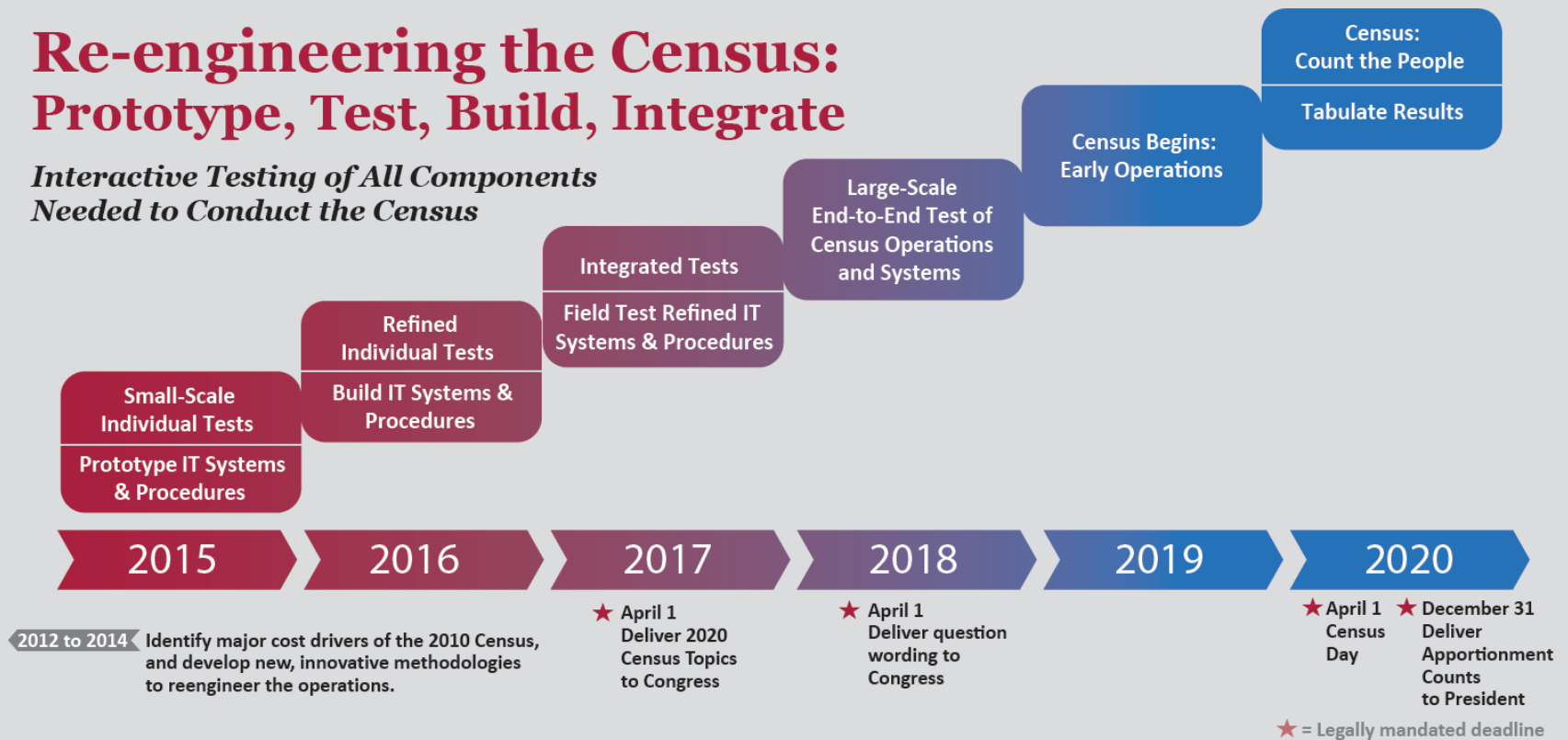
In 2015 we:

- Will Conduct Four Field Tests
  - Address Validation Test
  - 2015 Optimizing Self-Response Test – Includes Real Time Non-ID Processing
  - 2015 Census Test
  - 2015 National Content Test
- Will Release: 2020 Census Operational Plan (Major Design Decisions)
- Will Begin Core Programmatic Work such as Local Update of Census Addresses (LUCA)
- Will Continue Defining Testing Activities for 2016 and beyond

# 2020 Census: What's Next?

## Re-engineering the Census: Prototype, Test, Build, Integrate

*Interactive Testing of All Components  
Needed to Conduct the Census*

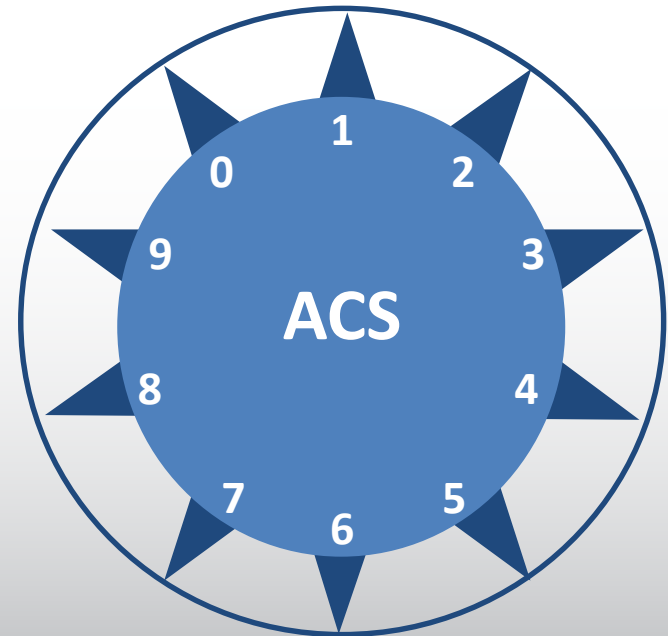


# Decennial Census Program: American Community Survey

Beginning in 2005, the Census Bureau started conducting the American Community Survey (ACS):

- The ACS **replaced the decennial census long form** and responses to the ACS are **mandatory**—all responses are **confidential**.
- ACS is the **authoritative source of annual demographic, socioeconomic, and housing information** for all communities.
- The advantage of ACS is providing an annual, consistent source of data for states, counties/cities, census tracts—small area data.
- ACS is the only source of data for most rural communities.

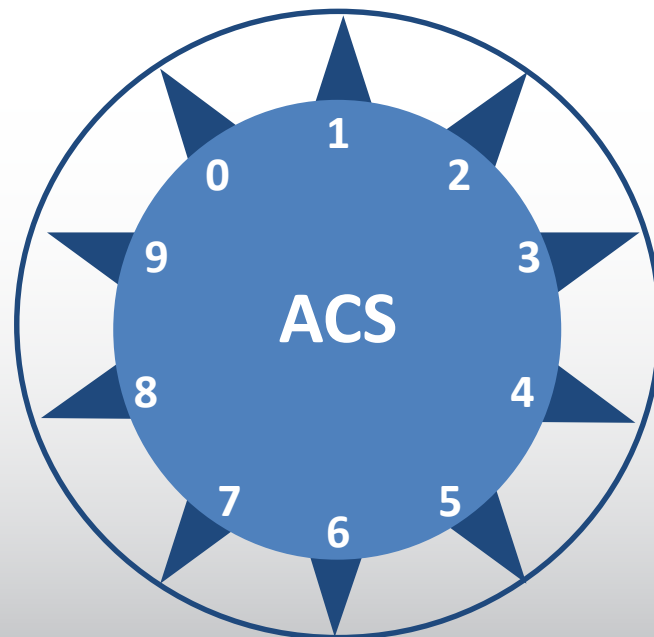
ACS has been evolving, but there is **increasing pressure to adapt.**



# American Community Survey: Concerns and Challenges

## Concerns for the future of the ACS

- **2020 Census Planning:** the need for increased funding to support critical research and development of systems and infrastructure for the 2020 Census.
- Respondent Concerns, which reflect general trends in society, but have specific implications for the ACS:
  - **Mandatory**—respondents have concerns, with particular focus on the envelope message.
  - **Privacy**—respondents express concern and reluctance in regard to certain questions.



# American Community Survey: What's Next?

What have we done...where are we headed?

- **Content Review:** comprehensive review and analysis of each question, specifically focused on federal uses.
- **Response burden reduction:** considering new methodologies and new data sources to reduce respondent burden and continue providing the wide-range of socioeconomic data to all communities.



# Program Update

# General Program Updates

- Budget:

Fiscal Year (FY) 2015	Fiscal Year 2016
Enacted \$230M	Presidents Request: \$257M

- Selected Program Impacts for FY15:
  - Failed Edit Follow-Up Operations (FEFU)
  - General Performance Review Observations
  - 3-Year Data Product
  - CAPI Field Representative Refresher Training

# 2014 Data Product Release Dates

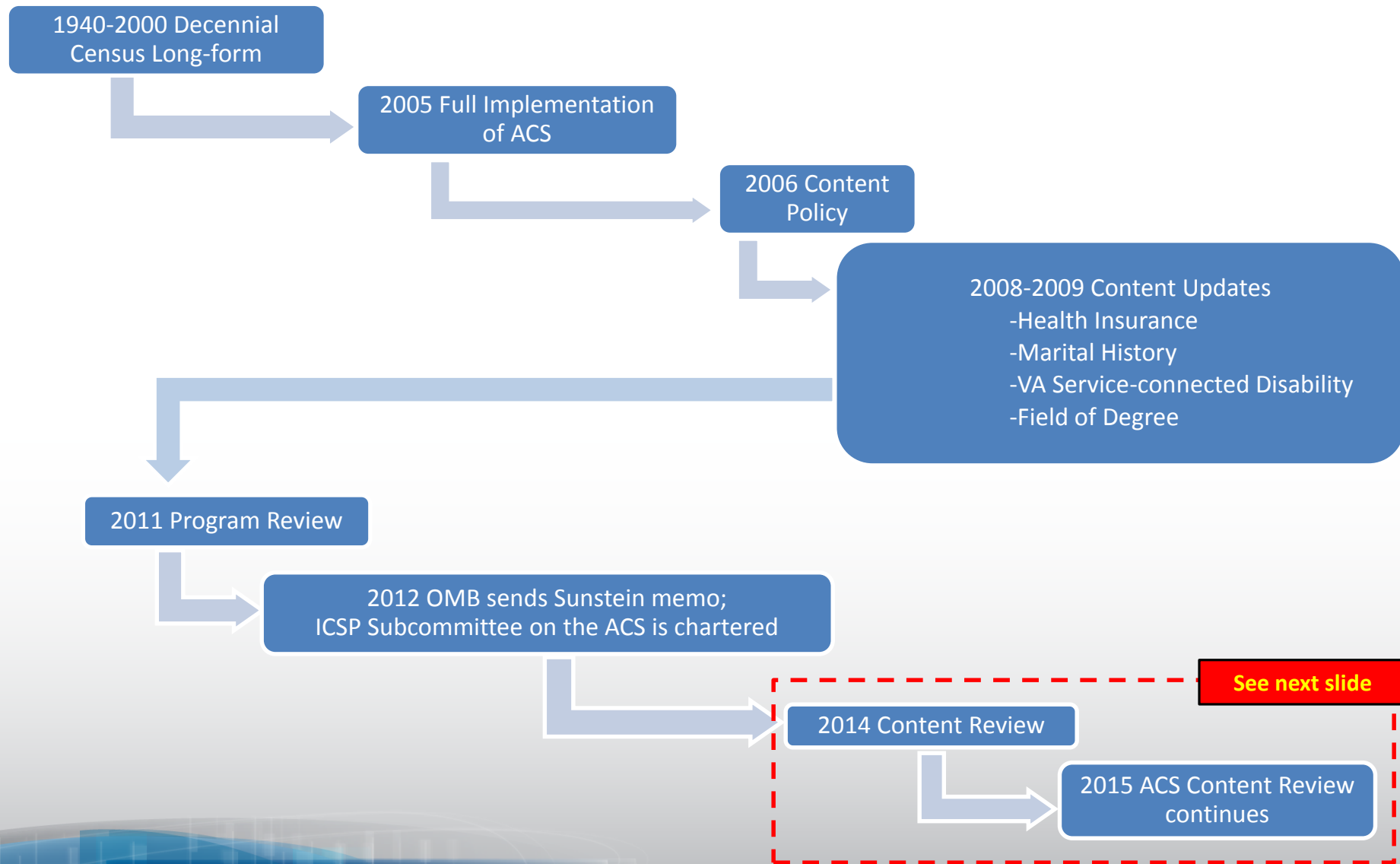
## 2014 Data Products Release Dates

- 1-Year products – September 17, 2015
- 1-Year PUMS – October 22, 2015
- 5-Year products – December 10, 2015
- 5-Year PUMS – January 21, 2016

# Data Products Survey

- Survey to gather feedback on ACS data products
  - Overall experience using the products
  - Needs being met with current products
  - Usage of geographic areas
  - Usage of the documentation
  - Suggestions for dissemination
- Link to the survey:  
[http://www.census.gov/acs/www/utilities/data\\_products\\_survey.php](http://www.census.gov/acs/www/utilities/data_products_survey.php)
- Available Monday, April 13 through May 29, 2015

# 2014 Content Review



# 2014 Content Review

The ACS Content Review builds upon earlier efforts begun during the comprehensive 2012 ACS Program Review to:

- Examine and confirm the value of each ACS question – 24 housing and 48 person questions
- Confirm and update the legal basis for questions
- Gather input from federal agencies and other data users
- Analyze data using pre-specified criteria established by the ACS Subcommittee of the Interagency Council on Statistical Policy
- Develop recommendations for ACS content that will provide the most useful information with the least amount of burden to the public

# Facts about Content Review

Who provided us with information? →

What did we examine?

- All 72 survey questions
  - 24 Housing Questions
  - 48 Person Questions
- 126 Individual Survey Components

Growth in total known uses:

- 175 to 300+

## Agency

- Agriculture
- Board of Governors of the Federal Reserve System
- Bureau of Economic Analysis
- Census Bureau
- Centers for Disease Control and Prevention
- Education
- Energy
- Health and Human Services
- Homeland Security
- Housing and Urban Development
- Interior
- Nat'l Telecom. & Info. Administration

## Agency

- Veterans Affairs
- Justice
- Environmental Protection Agency
- Transportation
- Labor
- Federal Communications Commission
- National Institutes of Health
- National Science Foundation
- Office of Management and Budget
- Social Security Administration
- Equal Employment Opportunity Commission

# 2014 Content Review: *Federal Register* Notice Comments

**1,693 comments received in response to the *Federal Register* Notice**

## Wide Range of Commenters

- Congress
- State Government
- City and County Government Agencies
- Professional Associations
- Business
- Nonprofits, Think-tanks, and Advocacy Groups
- Media
- University Researchers and Administrators
- Private Citizens

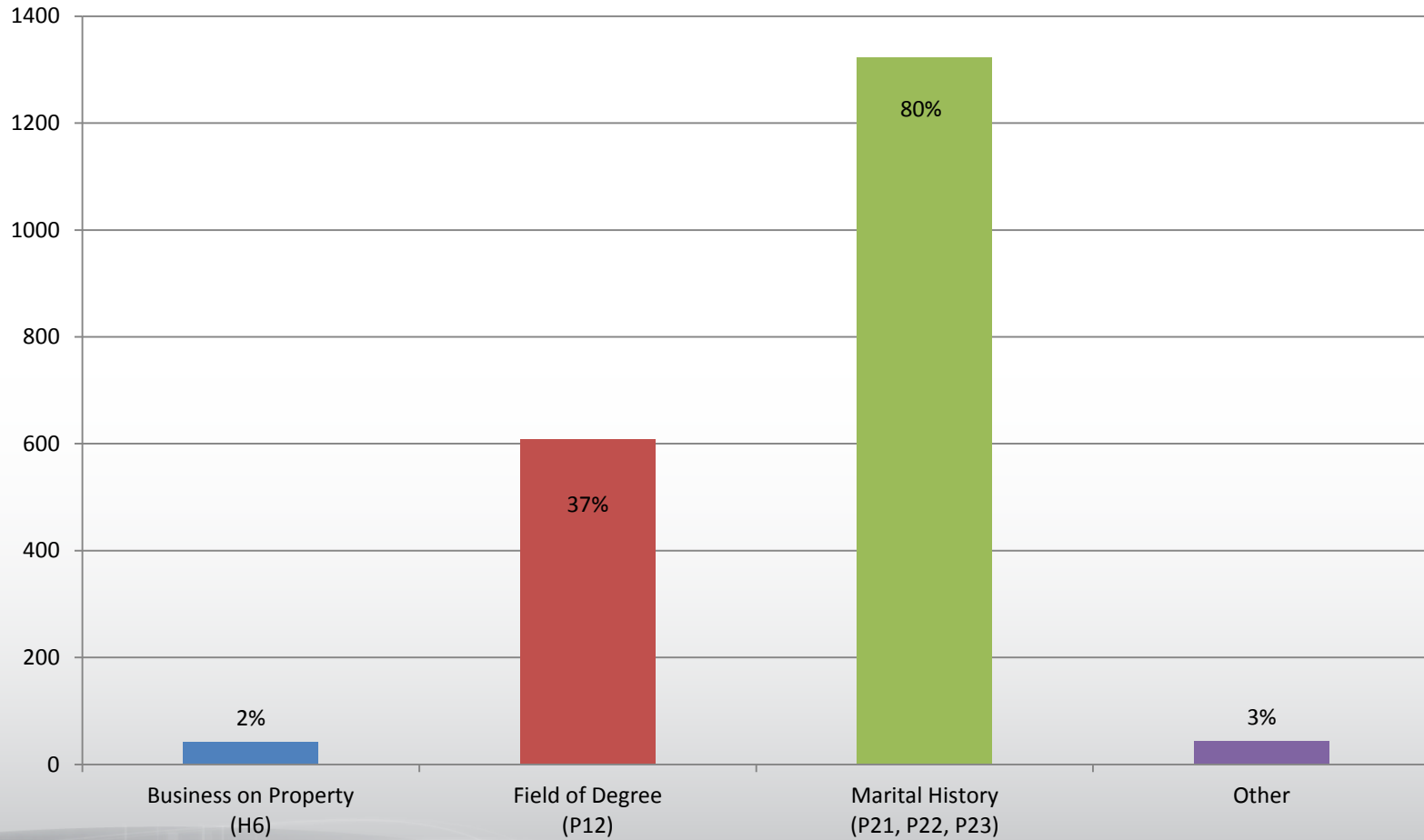


# Aggregate View of Public Comments

Topic	Comment	No. <sup>1</sup>
Survey	ACS provides important estimates, good value	207
	Other/potential ACS questions should be included on the ACS	238
	Maintain consistency of the questionnaire over time	30
Content Review	Did not consider population subgroups, non-federal uses	38
	Questions have insignificant respondent burden	35
Research	Families, marital patterns, federal program funding, and policy changes	354
	STEM (characteristics, economic outcomes, program planning)	125
	Non-STEM (characteristics, economic outcomes, program planning)	148
Other	Government agenda to attack/change/marginalize marriage	422
	Estimates are needed for the NSCG sampling frame	59
	There are no other sources for these estimates	132
	Other comments/ anecdotal comments	252

<sup>1</sup> Comment counts are not mutually exclusive.

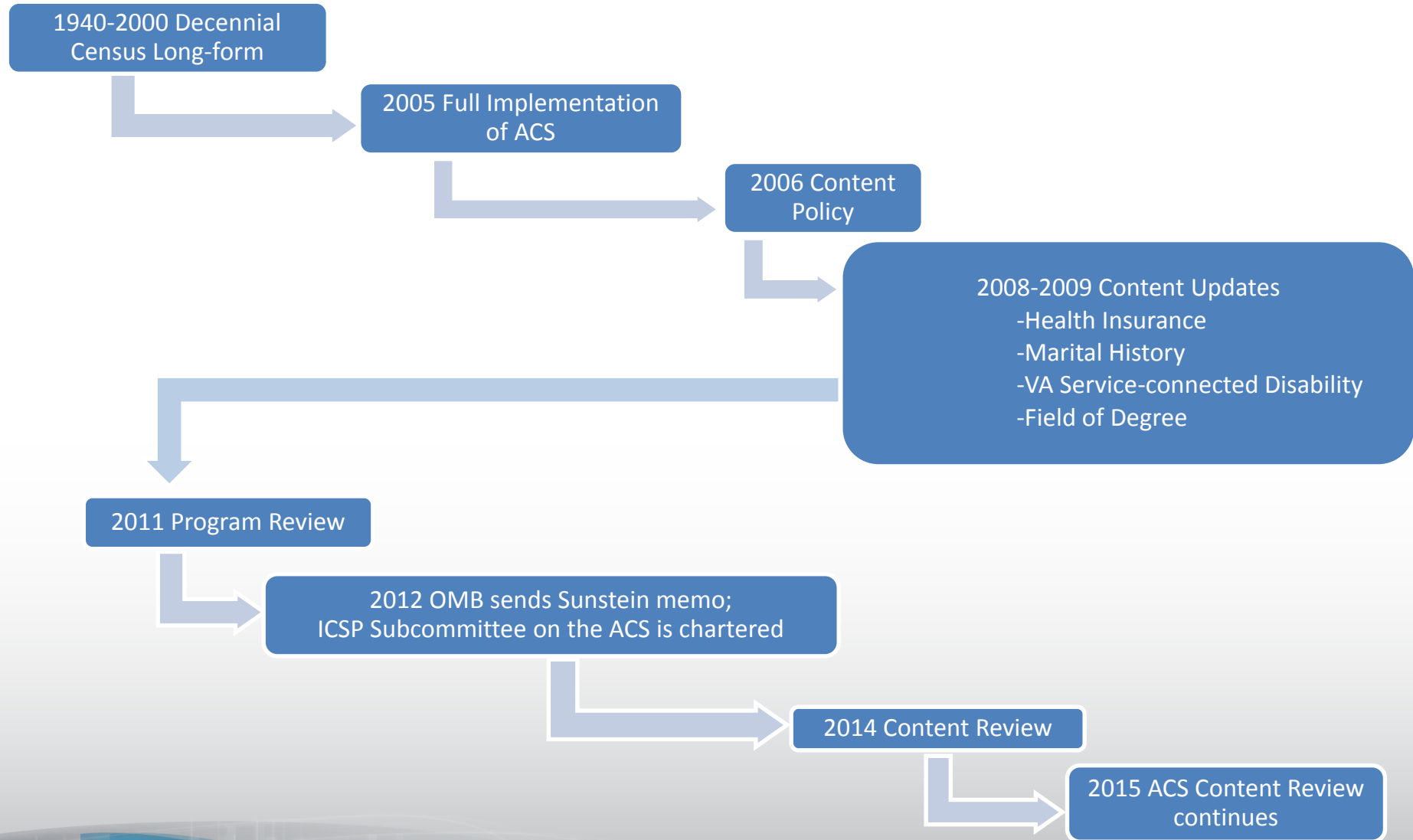
# Questions Mentioned



# Content Review Next Steps

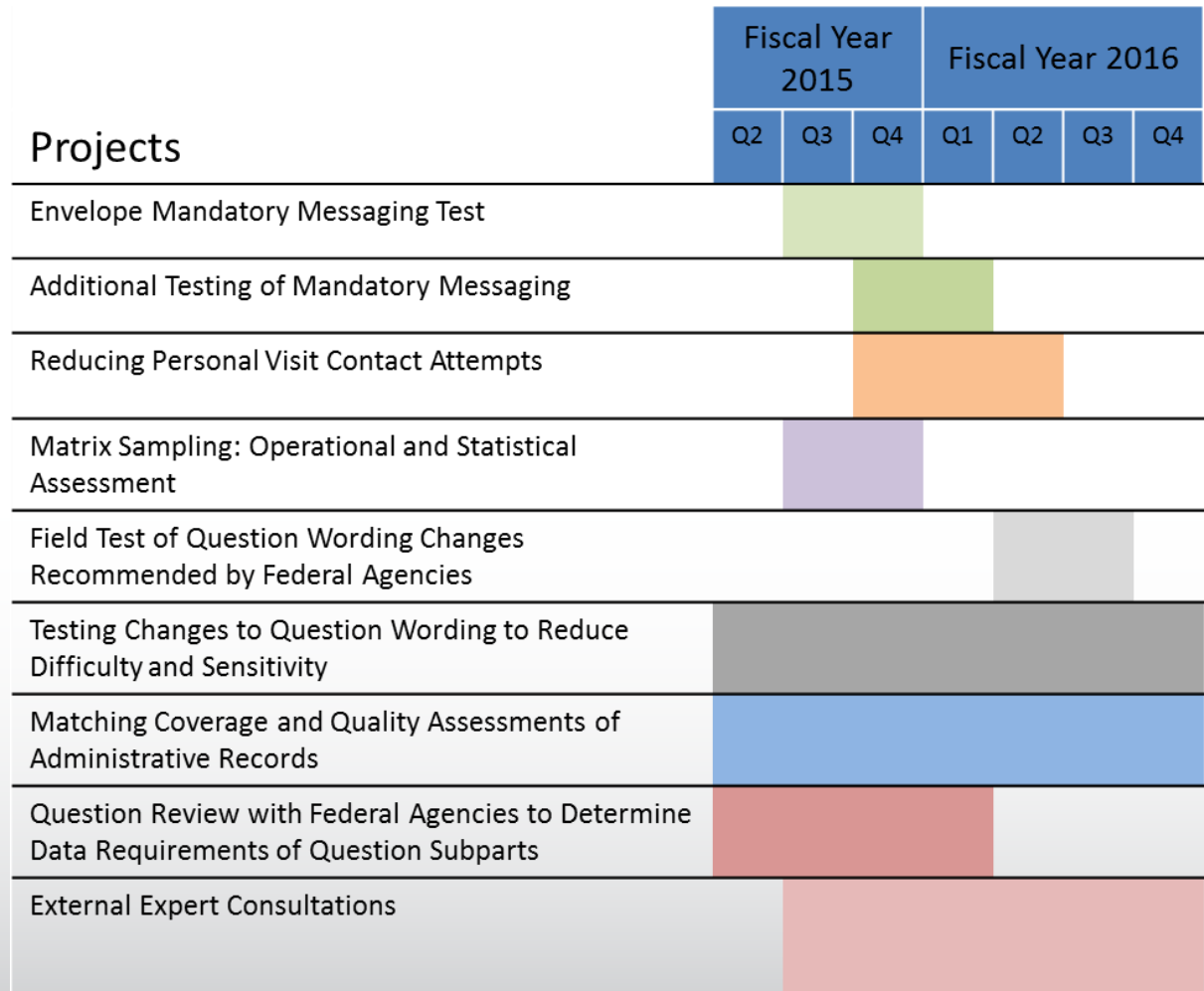
- Proposal to OMB for 2016 ACS Content:
  - Remove:
    - H6 – Business or Medical Office on Property
  - Retain:
    - P12 – Field of Degree
    - P21, P22, P23 – Marital History
- Submitted OMB Package (April 28, 2015)
- Published 30-Day Federal Register Notice (FRN) (April 28, 2015)
- OMB receives and reviews FRN comments
- OMB provides final decision on 2016 ACS content

# 2014 Content Review



# ACS: Improving the Respondent Experience

# Improving the Respondent Experience



# Mail Package and Messaging Research

Measure changes to mailing pieces and messaging resulting from extensive messaging research on self-response through three tests.

## Project Update:

- Tested the removal of inserts in the paper questionnaire mailing package (instruction guide, instruction card) and messaging approach (March 2015)
- Tested the elimination of the pre-notice while strengthening later reminder contacts (April 2015)
- Test modified envelopes without “Your response is required by law” (May 2015)
- Test modified mandatory messaging throughout mail materials (August 2015)

# Matrix Sampling

Matrix sampling could provide options to reduce the number of questions asked of individual households.

## Project Update:

- Bring questions off the questionnaire during some years and only ask them as frequently as their legislated uses require
- Ask questions from only a subset of households when the geographic needs for the data do not require the level of precision provided by the full ACS sample
- Significantly reduce the length of the questionnaire for each household in sample, yet increase the total number of households selected to provide the necessary data
- Use administrative records to provide the majority of the source data for a given estimate supplemented by more current data from a small sample of survey respondents



# 2016 ACS Content Test

The 2016 ACS Content Test is designed to explore the difficulty of questions while improving data quality.

## Project Update:

- Conduct fieldwork using a separate sample from production during March-June 2016
- Data analysis and stakeholder briefings in 2017

## List of Topics Being Tested:

Telephone Service	Number of Weeks Worked
Computer and Internet	Class of Worker
Relationship	Industry and Occupation
Hispanic Origin and Race	Retirement Income
Health Insurance	Health Insurance Premium and Subsidies
Journey to Work: Commute Mode	Cohabitation and Domestic Partnership*
Journey to Work: Time Leave for Work	

# ACS Uses of Administrative Records

Investigate use of administrative and commercial data sources to replace (or reduce) the need to collect data for some ACS questions.

- Recent assessment of the availability, timeliness and potential issues regarding data sources to replace ACS topics
- Research underway to document fitness for use through matching and analysis:
  - Topics include some of those perceived to be sensitive (e.g., income components, plumbing, property value) and some known to be cognitively difficult (e.g., number of rooms, year building built)
  - Exploring direct substitution for certain questions, including income from Internal Revenue Service, military service from Department of Defense, and pension and disability data from Social Security Administration

Seeking stakeholder input to encourage data sharing and acceptance of direct substitution.

# Data Dissemination

# Vision

CEDSCI will:

- Enable the public to make better decisions using data through a continuously adaptive, customer-centric, open and accessible dissemination environment that sets the standard in the federal community and spurs innovation

# Guiding Principles for New Dissemination Vision

- User feedback drives enterprise dissemination decisions about public products and user tools
- User-customizable information services are available anytime, anywhere from any device
- Flexible tools are preferred over products for content delivery
- Data are decoupled from presentation
- Integrated dissemination systems, processes, and tools support all Bureau censuses and surveys
- Enterprise approaches and resistance to insular thinking are characteristic of all aspects of the future data dissemination capability

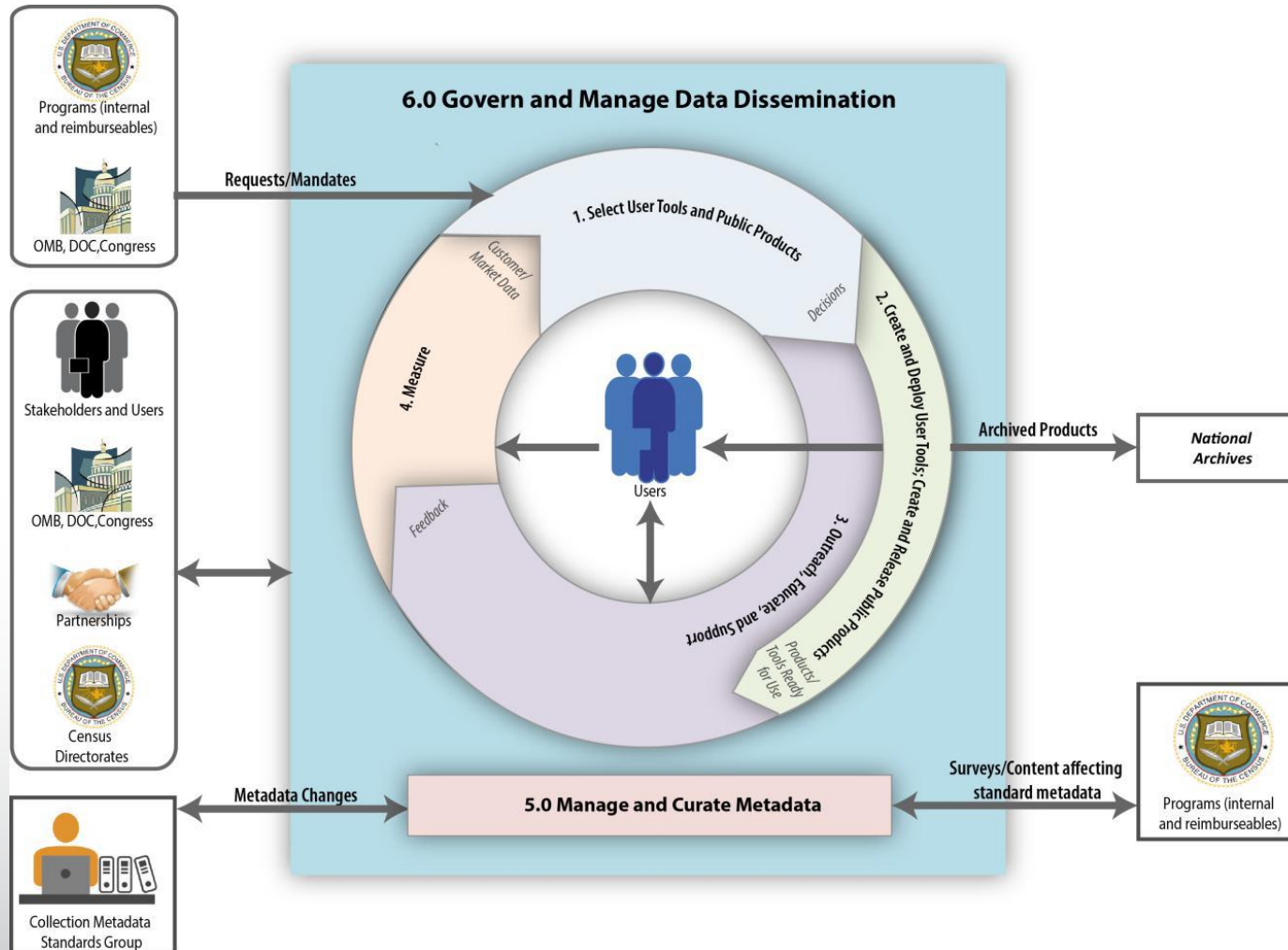
# Goals

- Foster and maintain a customer-focused, cost-effective data dissemination environment
- View dissemination as a business function with a major information technology component.
- Promote a set of dissemination tools that we leverage to meet future dissemination capabilities
- Adopt a Customer Experience Management (CEM) system that captures customer requirements systematically and provides for dissemination tools, systems, and processes to evolve based on quantitative assessment of changing customer needs and new technological innovations
- Design shared enabling technologies based on business requirements and needs.

# How We Will Do This

- Engage early and often: CEDSCI is based on user-centric needs and user/customer feedback gleaned not only from CEM, but from interaction with, and feedback from, our stakeholders and users
- We will work closely with stakeholders to understand their business and data needs
- We will engage with stakeholders through iterative alpha and beta release testing cycles to gather feedback in a continuous loop leading up to production rollout
- Reuse, re-engineer, and redeploy legacy systems into an integrated, shared-services platform
- Program areas will deliver content to a single system. This system will deliver services for customers that include mapping, visualizations, and data mash-ups enabled across all our data sets, eliminating current “siloed” approach

# Dissemination Concept of Operations





# CEDSCI Business Organization

Responsible for Orchestrating All Dissemination Activities  
(Business & Process Management)

\*Enabling Technology Platform (New Data Dissemination Platform):

- Shared Services
- Modular
- Common Tools
- Common Infrastructure

\*Metadata Standardization (Data/Metadata Harmonization)

- Separate presentation metadata from content metadata
- Standardize repositories to enable platform and tools
- Develop requirements based on industry best practices
- Collaborate with COMET to develop a metadata lifecycle across censuses and surveys

\*Dissemination tools & services (Enterprise Information Services (EIS)) to include:

- Digital Transformation
- Enhanced Search
- DataWeb
- AFF
- Indicator Release Improvement Project (IRIP)
- CIDR
- Census Data API
- Open For Business Suite of Tools
- On The Map
- Other dissemination activities

Customer Engagement Management (CEM)

- All customer feedback data streams into single platform
- Interactive dashboard to inform new product and tool development
- CEM platform linked to Enabling Technology Platform as a service.

\*Enabling Technology Platform, EIS, and Standardized Data/Metadata will consist of tightly integrated teams providing support to the CEDSCI Technical Team. This will ensure seamless integration of search capabilities, tools, and data retrieval.

# Intended Benefits

- Cost Savings through Elimination of Duplicate Systems and Processes
- Spurring Greater Innovation
- Systematic Quality Assurance
- Improved Customer Satisfaction through Metadata Standardization
- More Efficient and Effective Work Environment
- Better Utilization of Existing Tools to Meet Customer Needs
- Greater Insights into Customer Needs
- Increased Census Brand Awareness and Acceptance

# Some Examples of High-Level Future Capabilities

- The capability to aggregate geographies, collapse variable categories, and calculate Margins of Error on-the-fly
- The capability to combine and analyze data across surveys, censuses, other programs, and external sources over time
- The capability to maximize consistency in geographies among data sets, programs and over time, and to provide geographic tools to users
- The capability to provide customizable reports, visualizations, and analysis to users
- The capability to make available data, metadata, and analytic tools that are easy for data users to understand, locate, and use

# Initial & Planned Program Milestones

- Proof-of-Concept Phase: Present – August 2015
- Prototype development & launch (Alpha) to inform Beta launch: September 2015-June 2016
- Beta launch to inform Production launch: July 2016-June 2017
- Phase I Production Launch: July 2017
- Phase II Production Launch: TBD with additional capabilities as users become more sophisticated and technology evolves
- Phase III, IV, V...: This is an evolving dissemination strategy that is designed to mature with emerging technologies and sophistication of users, while continuing to serve all levels of users

# Questions



# Continue the ACS Conversation



## Connect on Social Media:

@uscensusbureau

facebook.com/uscensusbureau



## Email:

deborah.m.stempowski@census.gov

acso.users.support@census.gov



## Receive email updates:

<https://public.govdelivery.com/accounts/USCENSUS/subscriber/new>

## Find more information:

[census.gov/acs](https://census.gov/acs)



[acsdatausers.org](https://acsdatausers.org)