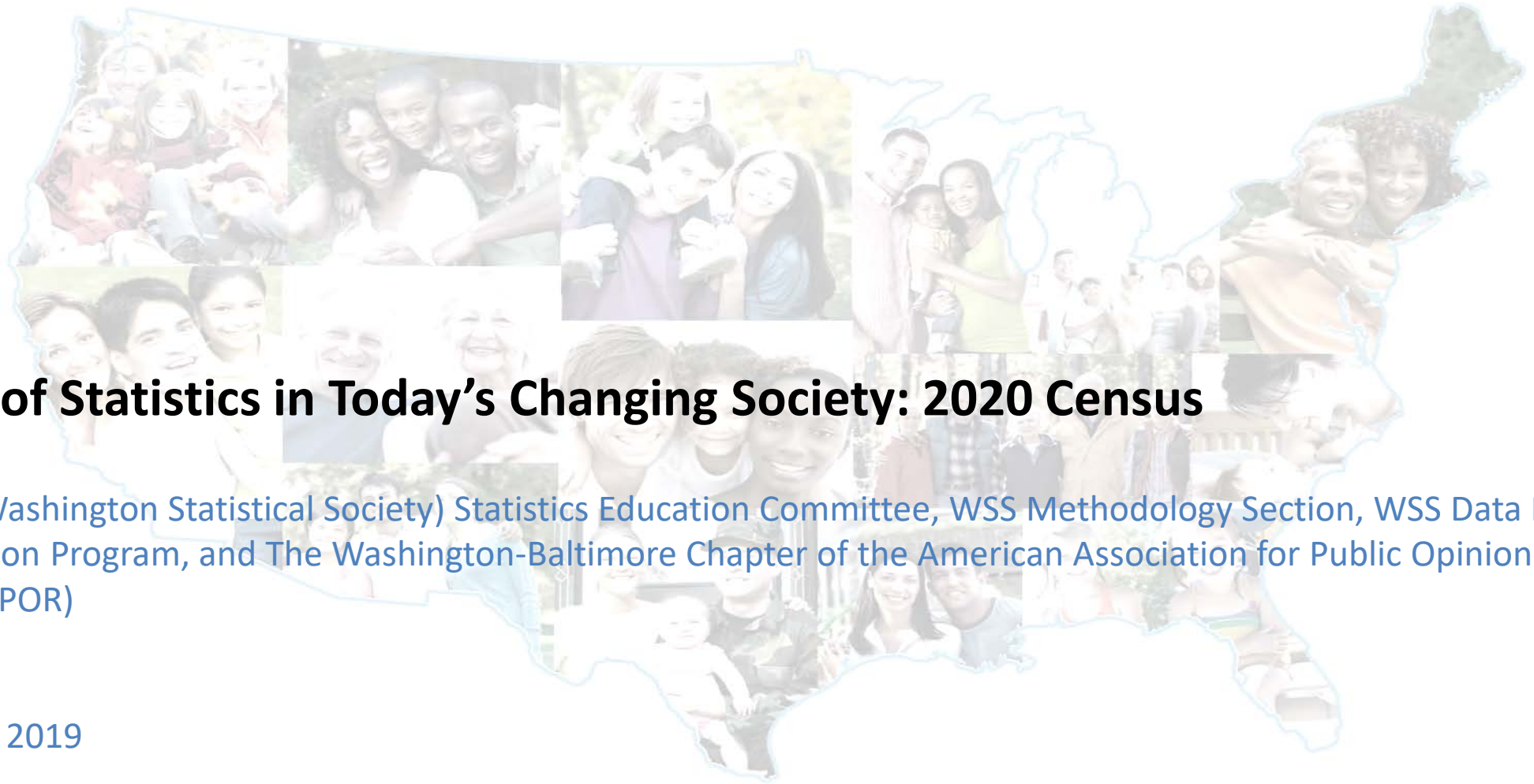


Role of Statistics in Today's Changing Society: 2020 Census

WSS (Washington Statistical Society) Statistics Education Committee, WSS Methodology Section, WSS Data Methods Collection Program, and The Washington-Baltimore Chapter of the American Association for Public Opinion Research (DC-AAPOR)

April 1, 2019

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

United States™ Census 2020

The Decennial Census

Purpose:

To conduct a census of population and housing and disseminate the results to the President, the States, and the American People

Apportion representation among states as mandated by Article 1, Section 2 of the U.S. Constitution:

Representatives and direct Taxes shall be apportioned among the several States which may be included within this union, according to their respective Numbers …

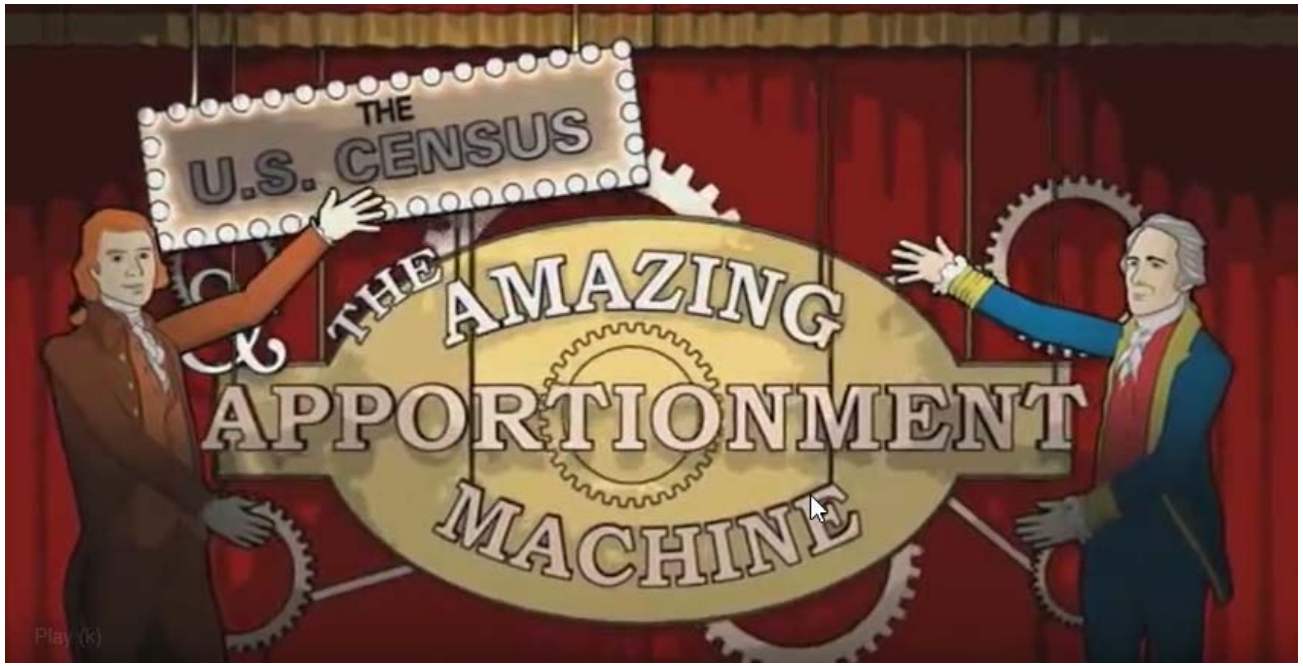
The actual Enumeration shall be made within three Years after the first Meeting of the Congress of the United States, and ***within every subsequent Term of ten years,*** *in such Manner as they shall by Law direct.*

Primary Uses of Decennial Census Data:

- Apportion representation among states as mandated by Article 1, Section 2 of the U.S. Constitution
- Draw congressional and state legislative districts, school districts, and voting precincts
- Distribute more than $675 billion federal dollars annually to states
- Inform federal, tribal, state, and local government planning decisions
- Inform business and nonprofit organization decisions (e.g., where to locate, size of the market)

The Decennial Census

What is Apportionment?



Video: The U.S. Census and the Amazing Apportionment Machine

The Decennial Census

Distributing more than $675 billion dollars annually in funding

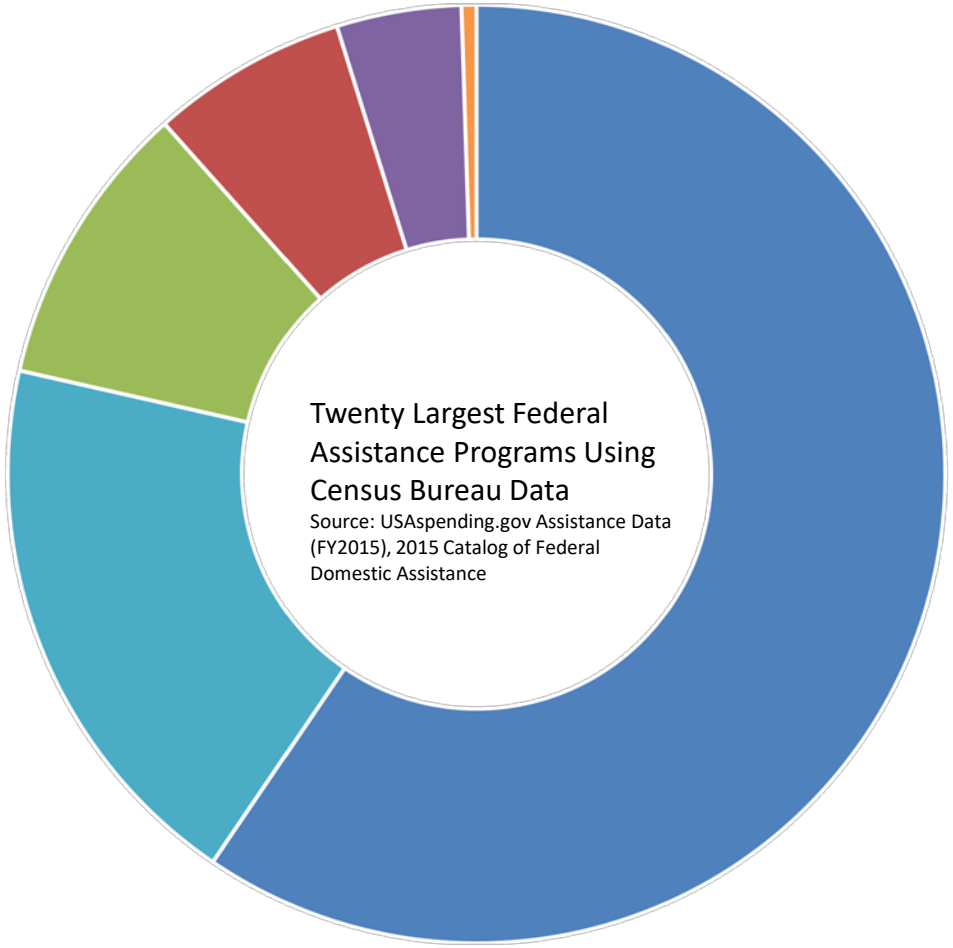
Based on FY15 data, federal programs use Census Bureau data, in whole or in part, to distribute more than $675 billion in funds annually.

Examples of How Census Bureau Data are Used:

Population Count	• Example: area with a population above 50,000
Characteristics	• Example: number of children between the ages of 5 and 17
Derived Data	• Example: per capita income
Geography	• Example: urban/rural classification

The Decennial Census

Among Twenty Largest Federal Assistance Programs Using Census Bureau Data:



Health Care	• Medical Assistance Program $311B • Medicare Part B Physicians Fee Schedule Services $70B • State Children's Health Insurance $4B
Food, Housing and Energy Assistance	• Supplemental Nutrition Assistance Program $71B • Section 8 Housing Choice Voucher $15B • School Lunch Program $18B • Special Supplemental Nutrition Program for Women, Infants, and Children $6B • Section 8 Housing Assistance $4B • School Breakfast Program $4B • Low-Income Home Energy Assistance $3B
Education	• Pell Grants $29B • Title 1 Grants $14B • Special Education Grants $11B • Head Start $8B
Roads	• Highway Planning and Construction $38B • Federal Transit Grants $5B
Families and Children	• Temporary Assistance for Needy Families $17B • Foster Care $5B • Child Care and Development Fund $5B
Disaster Recovery Grants	• Hurricane Sandy Community Development Block Grant Disaster Recovery Grants (CDBG-DR) $3B

The Decennial Census

The 2020 Census Environment

The 2020 Census is being conducted in a rapidly changing environment, requiring a flexible design that takes advantages of new technologies and data sources while minimizing risk to ensure a high quality population count.

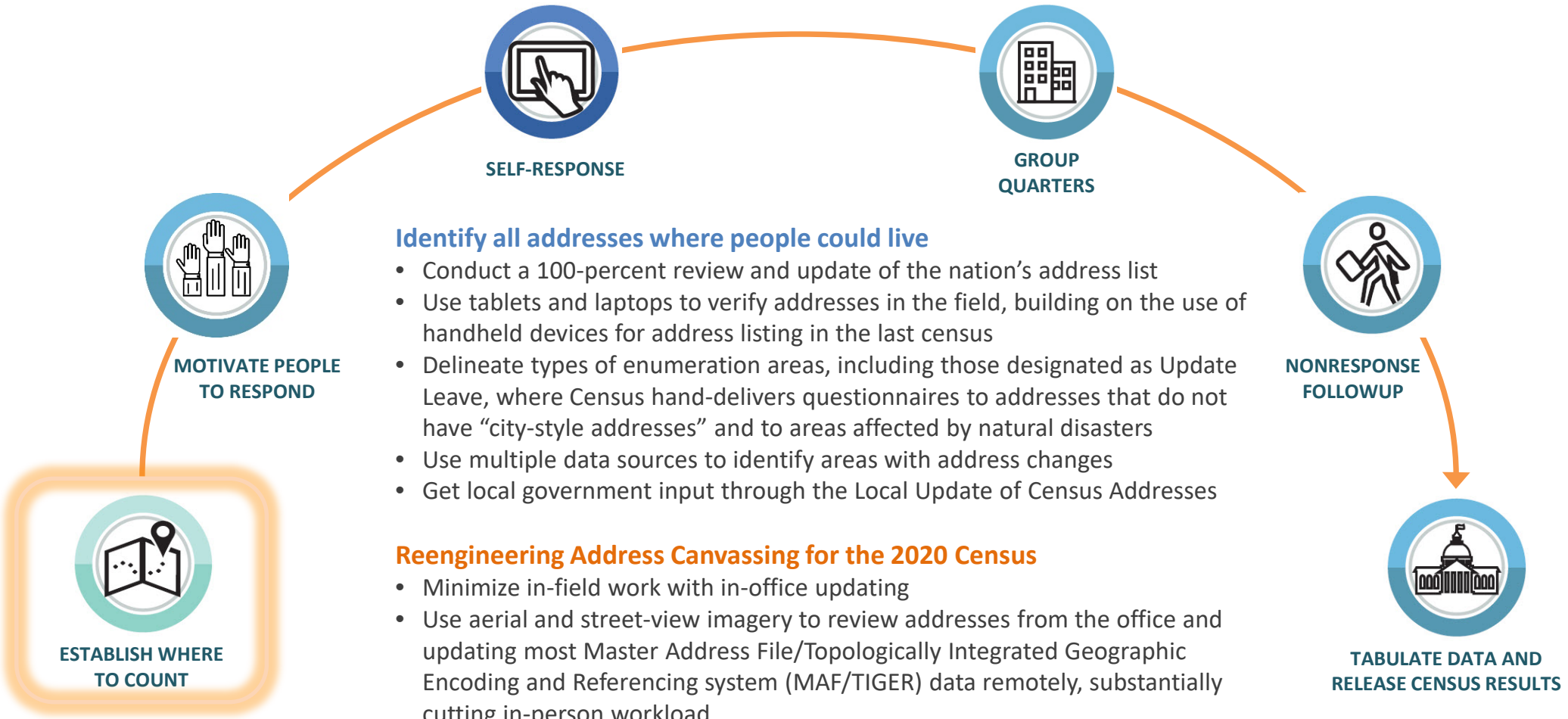
2020 Census

A Complete and Accurate Count of the Population and Housing

Count everyone once, only once, and in the right place.

2020 Census

Establish Where to Count



Identify all addresses where people could live

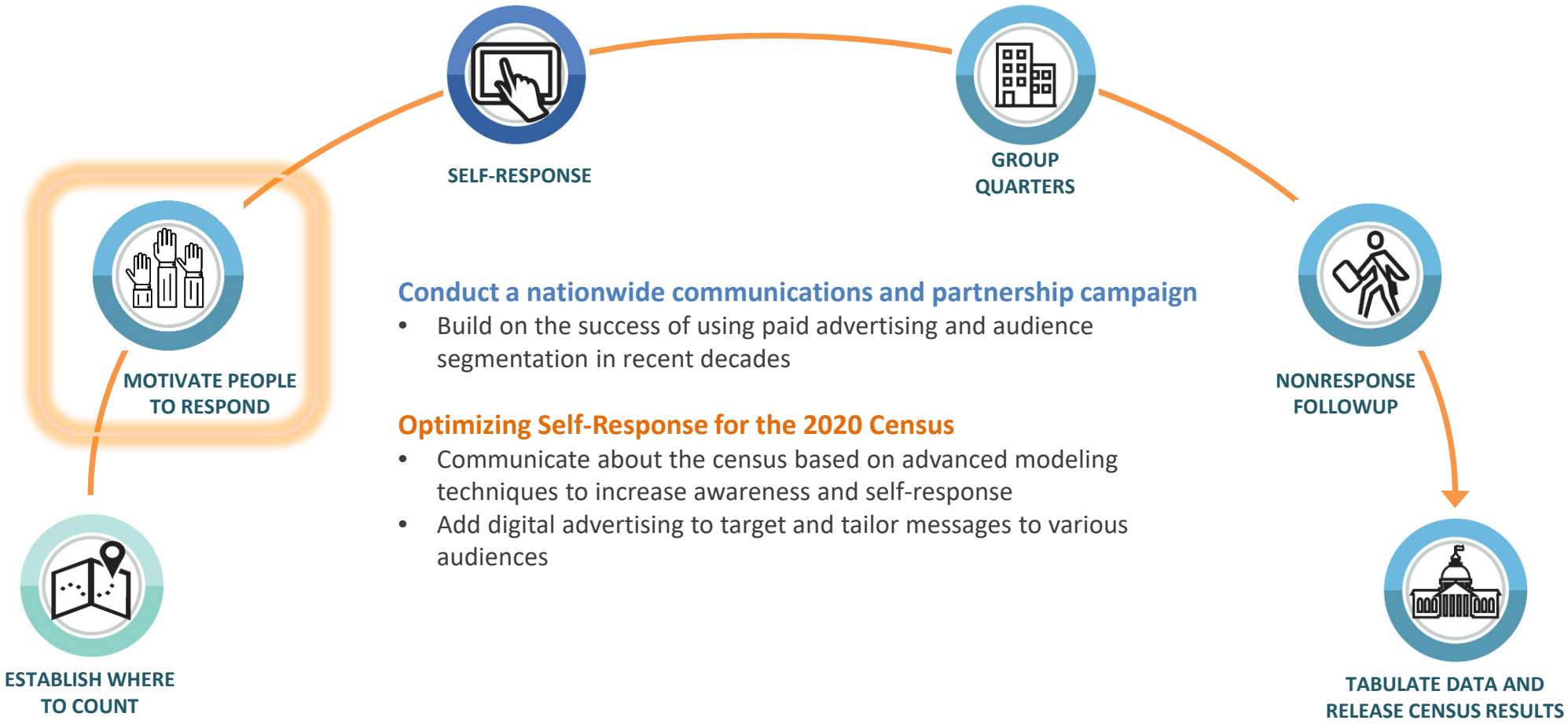
- Conduct a 100-percent review and update of the nation's address list
- Use tablets and laptops to verify addresses in the field, building on the use of handheld devices for address listing in the last census
- Delineate types of enumeration areas, including those designated as Update Leave, where Census hand-delivers questionnaires to addresses that do not have "city-style addresses" and to areas affected by natural disasters
- Use multiple data sources to identify areas with address changes
- Get local government input through the Local Update of Census Addresses

Reengineering Address Canvassing for the 2020 Census

- Minimize in-field work with in-office updating
- Use aerial and street-view imagery to review addresses from the office and updating most Master Address File/Topologically Integrated Geographic Encoding and Referencing system (MAF/TIGER) data remotely, substantially cutting in-person workload
- Leverage workload models and technology to efficiently manage and route on-the-ground staff assignments for Address Canvassing

2020 Census

Motivate People to Respond



Conduct a nationwide communications and partnership campaign

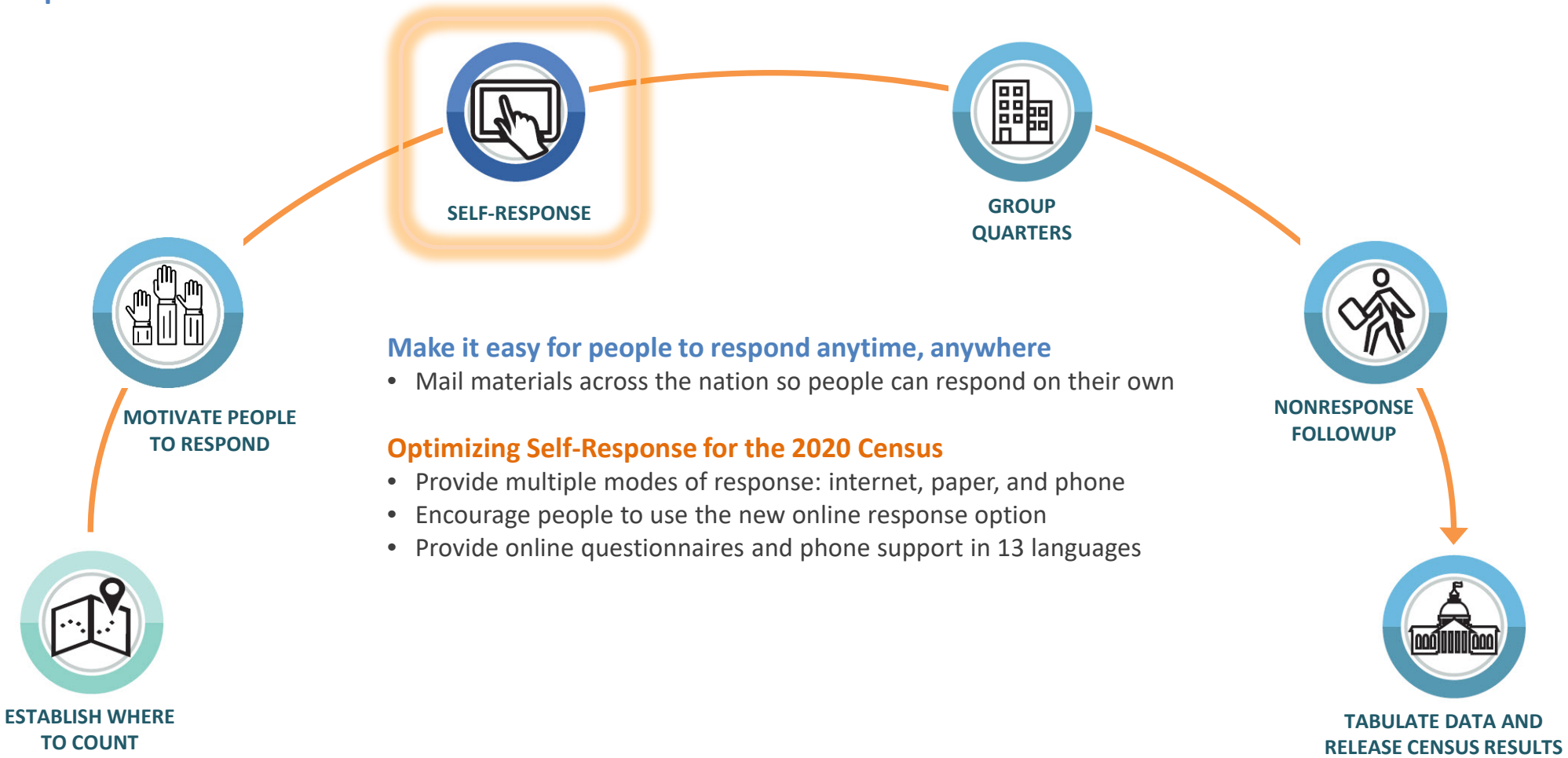
- Build on the success of using paid advertising and audience segmentation in recent decades

Optimizing Self-Response for the 2020 Census

- Communicate about the census based on advanced modeling techniques to increase awareness and self-response
- Add digital advertising to target and tailor messages to various audiences

2020 Census

Self-Response



Make it easy for people to respond anytime, anywhere

- Mail materials across the nation so people can respond on their own

Optimizing Self-Response for the 2020 Census

- Provide multiple modes of response: internet, paper, and phone
- Encourage people to use the new online response option
- Provide online questionnaires and phone support in 13 languages

2020 Census

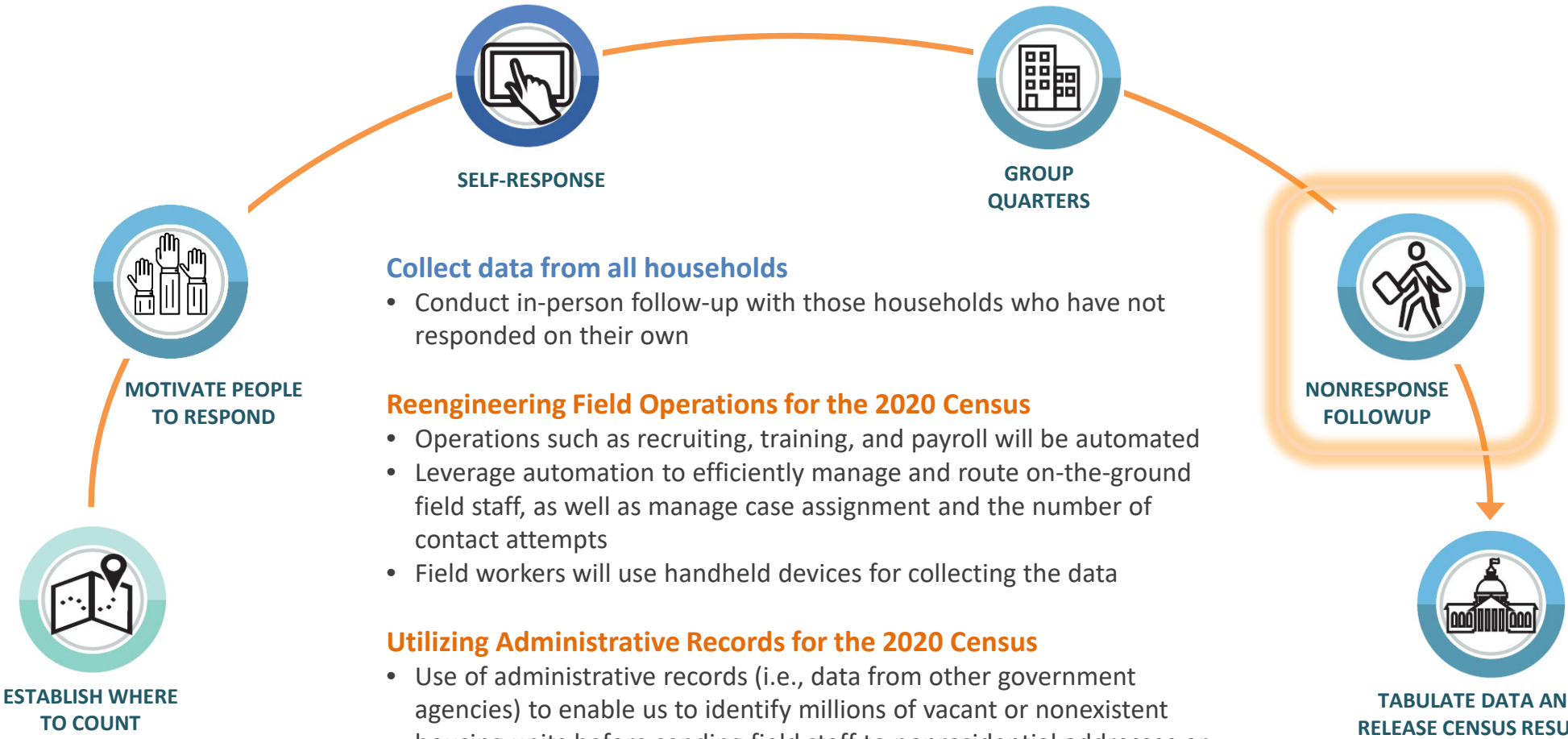
Group Quarters

Enumerate people living or staying in group quarters and provide an opportunity for people experiencing homelessness and receiving service at a service-based location to be counted in the census

- Conduct operation for all people living in group living arrangements in facilities that are owned or managed by an entity or organization providing housing or services for the residents (e.g., college/university student housing, residential treatment centers, nursing/skilled nursing facilities, group homes, correctional facilities, workers' dormitories, and domestic violence shelters)
- Conduct Group Quarters Enumeration of all group quarters through in-field visits or administrative records data
- Conduct Service-Based Enumeration at locations including emergency/transitional shelters, soup kitchens, regularly scheduled mobile food vans, and targeted non-sheltered outdoor locations (e.g., under bridges, cemeteries, etc.)

2020 Census

Nonresponse Followup



Collect data from all households

- Conduct in-person follow-up with those households who have not responded on their own

Reengineering Field Operations for the 2020 Census

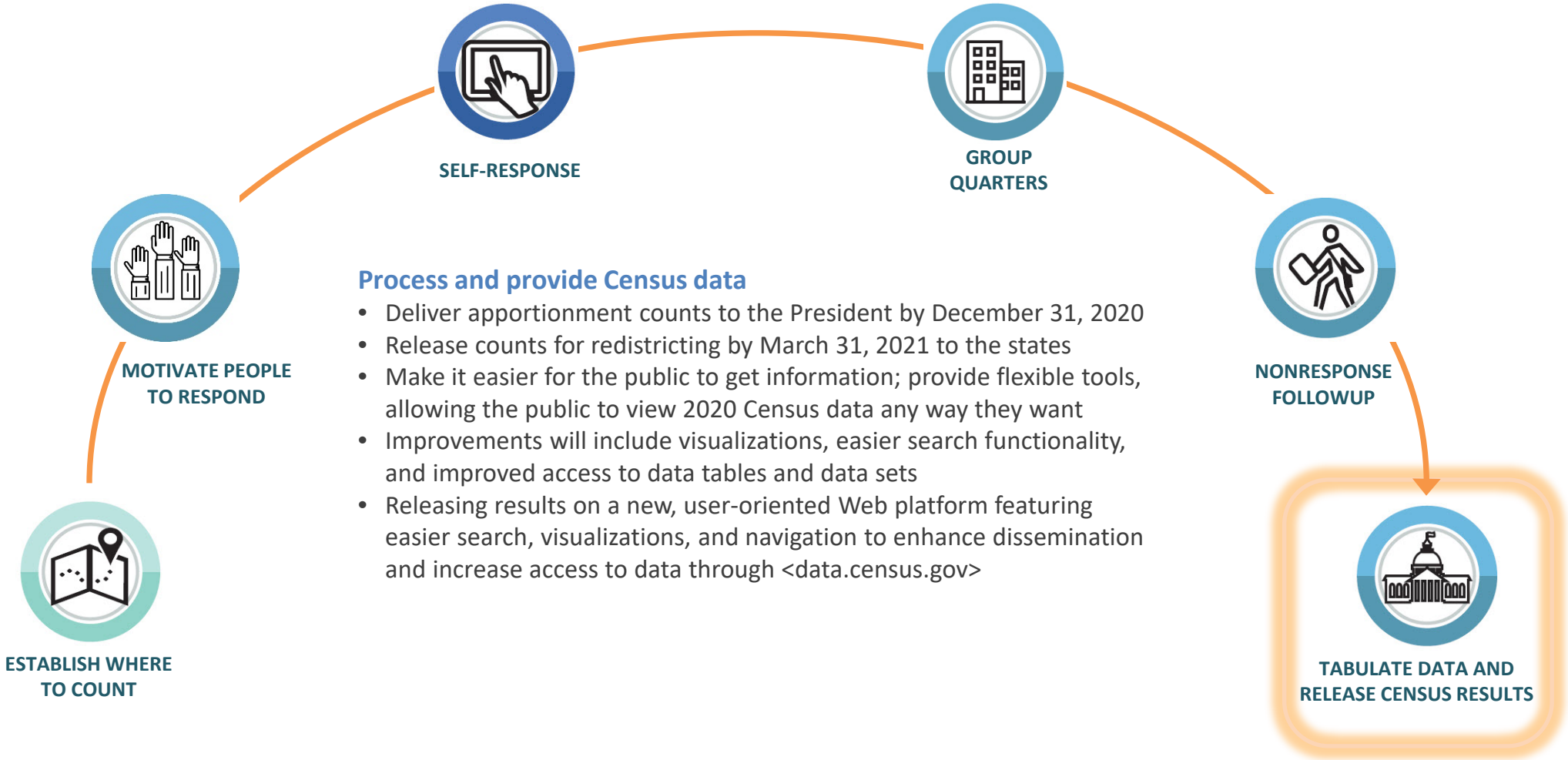
- Operations such as recruiting, training, and payroll will be automated
- Leverage automation to efficiently manage and route on-the-ground field staff, as well as manage case assignment and the number of contact attempts
- Field workers will use handheld devices for collecting the data

Utilizing Administrative Records for the 2020 Census

- Use of administrative records (i.e., data from other government agencies) to enable us to identify millions of vacant or nonexistent housing units before sending field staff to nonresidential addresses or vacant houses

2020 Census

Tabulate Data and Release Census Results



Process and provide Census data

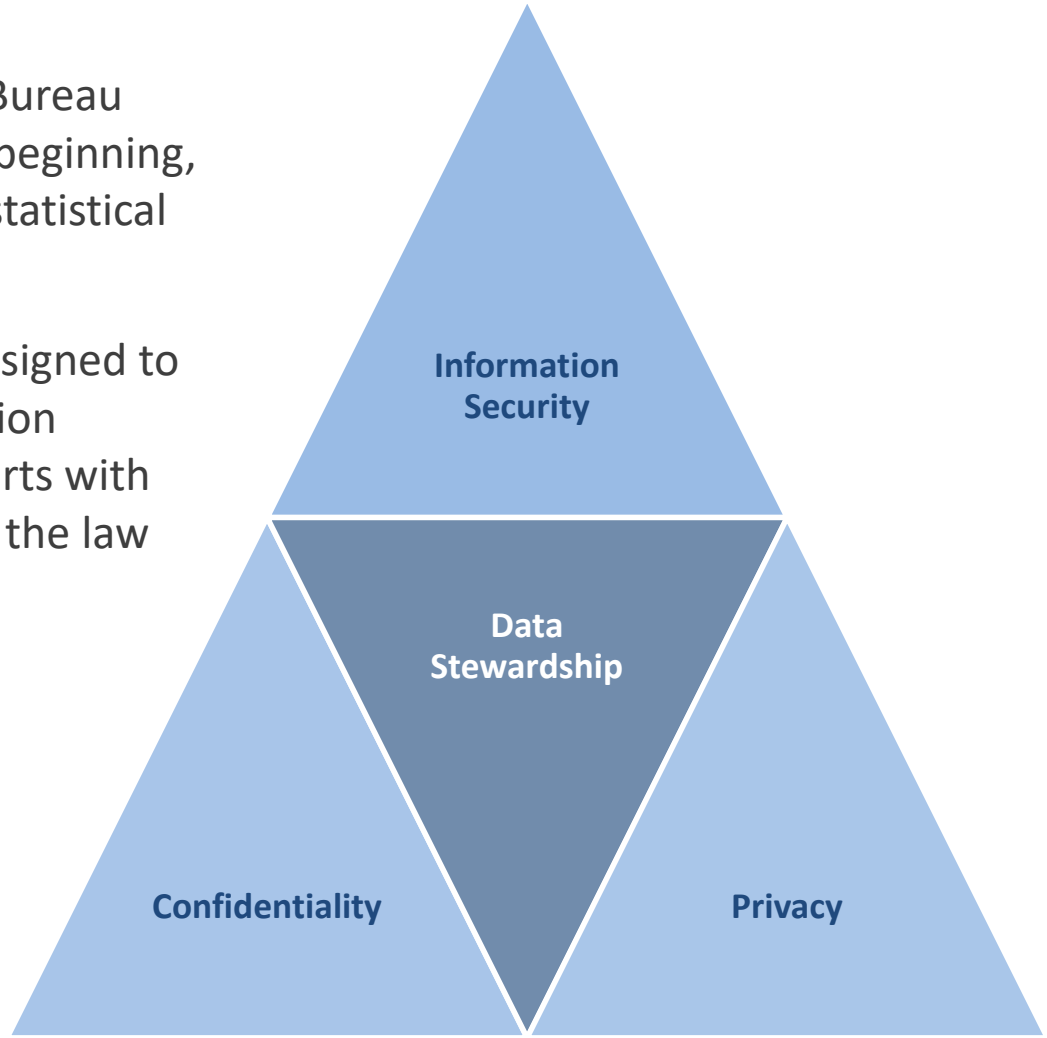
- Deliver apportionment counts to the President by December 31, 2020
- Release counts for redistricting by March 31, 2021 to the states
- Make it easier for the public to get information; provide flexible tools, allowing the public to view 2020 Census data any way they want
- Improvements will include visualizations, easier search functionality, and improved access to data tables and data sets
- Releasing results on a new, user-oriented Web platform featuring easier search, visualizations, and navigation to enhance dissemination and increase access to data through <data.census.gov>

Census Data Stewardship – Ensuring Your Data Is Safe And Secure

Our Culture Values Data Security

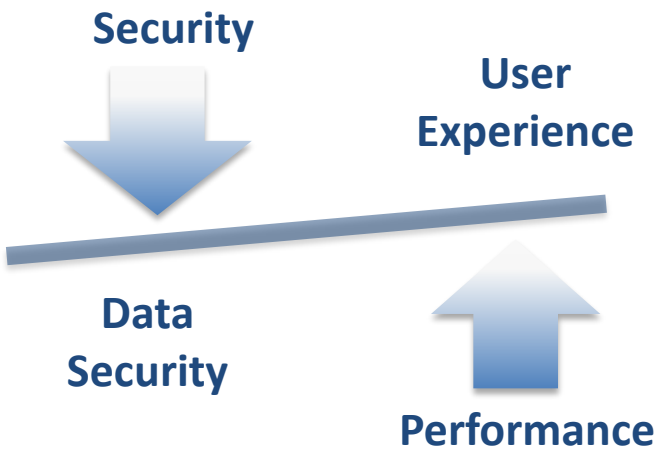
Data Stewardship is the formal process the Census Bureau uses to care for respondent information—from the beginning, when a respondent answers, to the end, when the statistical data products are released.

Data Stewardship is a comprehensive framework designed to protect information over the course of the information lifecycle, from collection to dissemination, and it starts with creating a culture of confidentiality that is based on the law and designed to maintain public trust.



Secure System Design

Designed to Contain, Sustain, and Maintain Public Trust



Census design is focused 1st on data security to protect respondents' data and 2nd on user experience so that respondents may confidently respond to the 2020 Census.

Contain Issues + Sustain Services = Maintain Public Trust

Employ "Physical Security" Techniques

- "Layer" physical entry with the appropriate level of security (doors, walls)
- "Isolate" separate areas within layers to efficiently handle interactions (lines, guards)
- "Lock down" valuables behind closed doors (vaults, safes)

2020 Census

Integrated Partnership and Communications

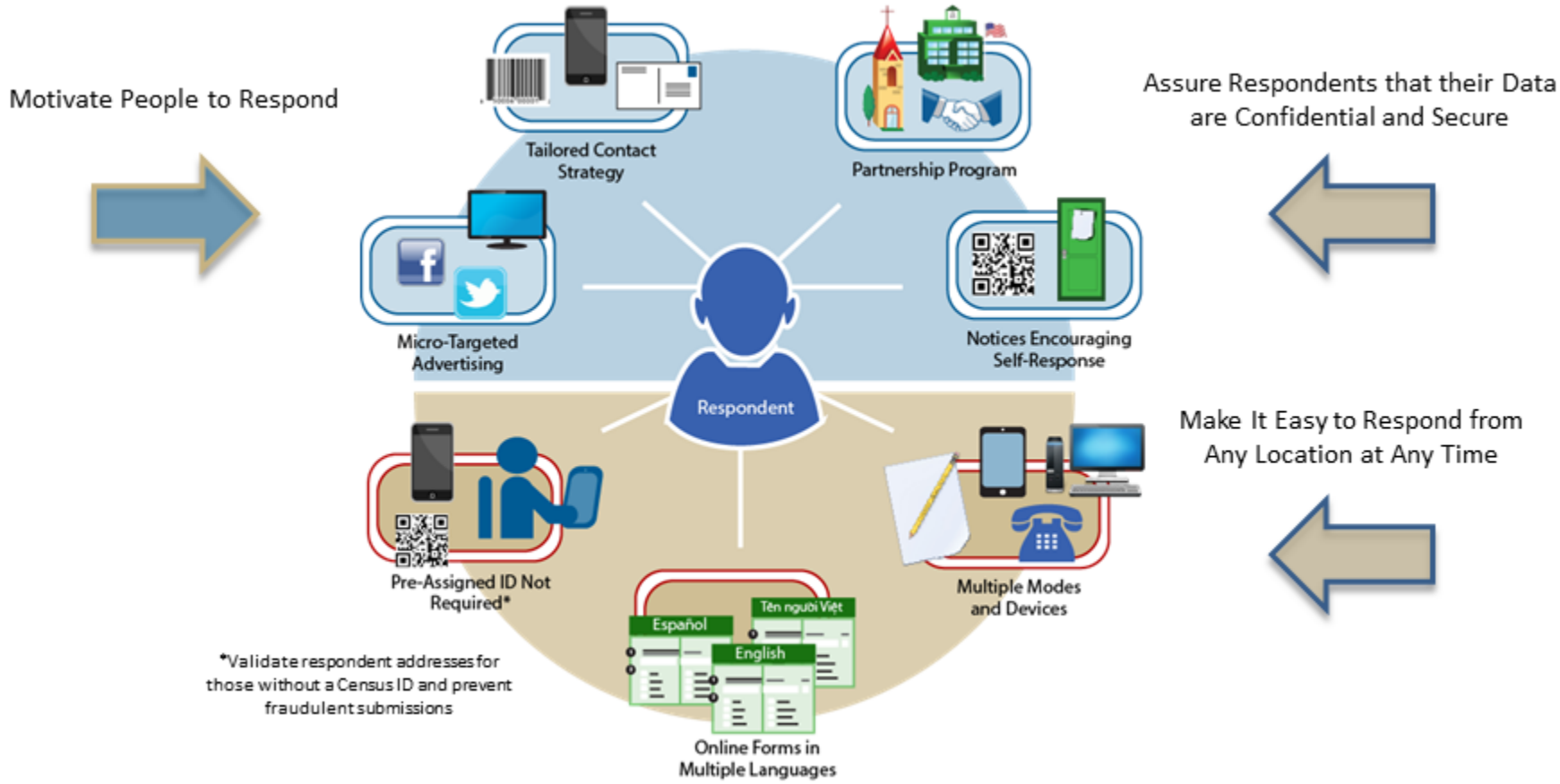
The Integrated Partnership and Communications operation communicates the importance of participating in the 2020 Census to the entire population of the 50 states, the District of Columbia, Puerto Rico and the island areas to:

- Engage and motivate people to self-respond, preferably via the internet
- Raise and keep awareness high throughout the entire 2020 Census to encourage response

2020 Census

Optimizing Self-Response

Generate the largest possible self-response, reducing the number of households requiring follow-up



2020 Census

Summary of Non-English Language Support

Internet Self-Response

12 Non-English Languages

Respondents will be able to toggle between the languages within the instrument.

- Spanish
- Chinese
- Vietnamese
- Korean
- Russian
- Arabic
- Tagalog
- Polish
- French
- Haitian Creole
- Portuguese
- Japanese

Census Questionnaire Assistance

12 Non-English Languages

There is a separate phone number for each language. This information is included in the mailing materials.

- Spanish
- Chinese (Mandarin and Cantonese)
- Vietnamese
- Korean
- Russian
- Arabic
- Tagalog
- Polish
- French
- Haitian Creole
- Portuguese
- Japanese

Language Guides (Video and Print) Language Glossaries Language Identification Card

59 Non-English Languages

Video and print language guides will be available online. Glossaries provide key terminology to bilingual staff. Language Identification Card expanded to 59 languages (50 in 2010). *Language listed below are in order of need (top to bottom, left to right).*

- Spanish
- Chinese
- Vietnamese
- Korean
- Russian
- Arabic
- Tagalog
- Polish
- French
- Haitian Creole
- Portuguese
- Japanese
- Italian
- Farsi
- German
- Armenian
- Hindi
- Ukrainian
- Bengali
- Greek
- Amharic
- Somali
- Thai
- Gujarati
- Khmer
- Nepali
- Urdu
- Romanian
- Telugu
- Burmese
- Punjabi
- Lao
- Hmong
- Albanian
- Turkish
- Bosnian
- Tamil
- Navajo
- Hungarian
- Hebrew
- Malayalam
- Swahili
- Yiddish
- Indonesian
- Serbian
- Tigrinya
- Ilocano
- Dutch
- Croatian
- Bulgarian
- Twi
- Lithuanian
- Yoruba
- Czech
- Igbo
- Marathi
- Sinhala
- Slovak
- American Sign Language

Paper Questionnaire & Mailing Materials

Spanish

Bilingual mailing materials and questionnaires will be sent to addresses in bilingual tracts.

Mailings will include instructions on responding via Internet or phone in 12 non-English languages.

During Nonresponse Followup enumerators use:

- A bilingual handheld instrument (English/Spanish)
- Bilingual materials (English/Spanish)
- Instructions to respond online or by phone in 12 non-English languages
- Language Identification Card

2020 Census

Mid-Decade Research: Testing of Contact Strategy Changes

United States Census 2010

2012 National Census Test
- ✓ No advance letter
- ✓ Second reminder
- ✓ Internet First strategy

2014 Census Test
- ⃠ Email
- ⃠ Preregistration

2015 Census Test
- ⃠ Preregistration
- ✓ Internet responses without a Census ID

2015 National Content Test
- ✓ Fifth mailing
- ✓ First reminder sooner
- ✓ Internet Choice strategy
- ✓ Bilingual materials (flip and swim lane versions)
- ⃠ Never sending a questionnaire

2016 Census Test
- ✓ Reminder letter
- ✓ Census ID printed on letter

2018 End-to-End Census Test
- ✓ Cohorts

United States Census 2020

2020 Census

Mid-Decade Research: Relationship Question Changes

United States Census 2010

How is this person related to Person 1? *Mark* ✗ *ONE box.*

- ☐ Husband or wife
- ☐ Biological son or daughter
- ☐ Adopted son or daughter
- ☐ Stepson or stepdaughter
- ☐ Brother or sister
- ☐ Father or mother
- ☐ Grandchild
- ☐ Parent-in-law
- ☐ Son-in-law or daughter-in-law
- ☐ Other relative
- ☐ Roomer or boarder
- ☐ Housemate or roommate
- ☐ Unmarried partner
- ☐ Other nonrelative

2015 National Content Test

How is this person related to Person 1? *Mark* ✗ *ONE box.*

- ☐ Opposite-sex husband/wife/spouse
- ☐ Opposite-sex unmarried partner
- ☐ Same-sex husband/wife/spouse
- ☐ Same-sex unmarried partner
- ☐ Biological son or daughter
- ☐ Adopted son or daughter
- ☐ Stepson or stepdaughter
- ☐ Brother or sister
- ☐ Father or mother
- ☐ Grandchild
- ☐ Parent-in-law
- ☐ Son-in-law or daughter-in-law
- ☐ Other relative
- ☐ Roomer or boarder
- ☐ Housemate or roommate
- ☐ Foster child
- ☐ Other nonrelative

United States Census 2020

How is this person related to Person 1? *Mark* ✗ *ONE box.*

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- ☐ Other nonrelative

2020 Census

Where are We Now

Connect with Us

Sign up for and manage alerts at https://public.govdelivery.com/accounts/USCENSUS/subscriber/new

More information on the 2020 Census Memorandum Series: http://www.census.gov/programs-surveys/decennial-census/2020-census/planning-management/memo-series.html

United States Census 2020

More information on the 2020 Census: http://www.census.gov/2020Census

American Community Survey

More information on the American Community Survey: http://www.census.gov/programs-surveys/acs/

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Thank You

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