



# 2018 End-to-End Census Test: Nonresponse Followup

Presentation to the Census Scientific Advisory Committee

September 14, 2017

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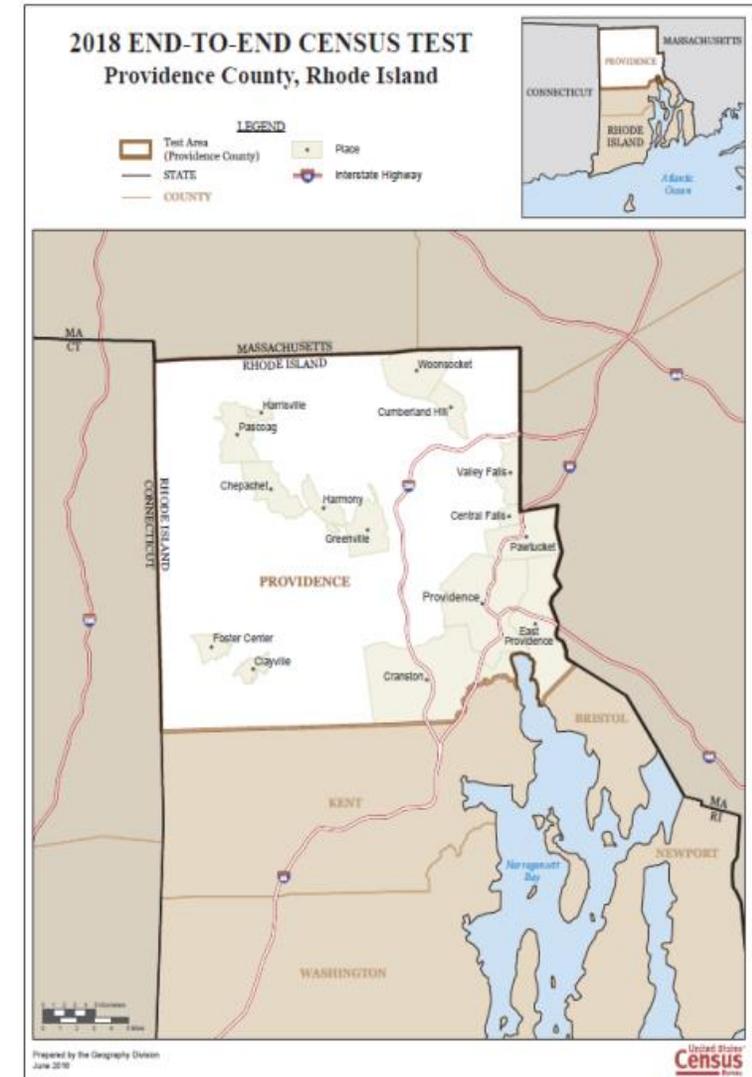
Decennial Census Management Division

# 2018 End-to-End Census Test Overview

- April 1, 2018 Census Day
- Site test in Providence County, Rhode Island

## Purpose

- Test and validate major operational threads, procedures, systems, and infrastructure (IT and non-IT) together to ensure proper integration and conformance with functional and non-functional requirements
- Validate that the operations in scope for the 2018 End-to-End Census Test are ready to go into production for the 2020 Census
- Produce a prototype of geographic and data products



# 2018 End-to-End Census Test

## Key Milestones

Activity	Date	
Conduct In-Office Address Canvassing	October 27, 2016 – February 2, 2017	✓
Open Regional Census Centers	January 3, 2017	✓
Begin Address Canvassing Field Staff Recruitment	March 10, 2017	✓
Open Area Census Offices	April – July 2017*	✓
Conduct In-Field Address Canvassing	August 28 – September 29, 2017	
Conduct Group Quarters Advance Contact	January 5 – March 9, 2018	
Conduct Self-Response, Including Non-ID Processing	March 19 – August 31, 2018	
Conduct Group Quarters Enumeration	March 28 – June 12, 2018	
Census Day	April 1, 2018	
Conduct Update Leave	April 9 – May 4, 2018	
Conduct Nonresponse Followup	May 9 – July 24, 2018	
Conduct Nonresponse Followup Reinterview	May 10 – July 31, 2018	
Publish Prototype P.L. 94-171 Data and Geographic Products	April 1, 2019	

\*Delayed the opening of the Area Census Offices.

# 2018 End-to-End Census Test

## Mail Strategy

### Self-Response

- Self-response contact strategy two-panel design
- 271,000 housing units in sample

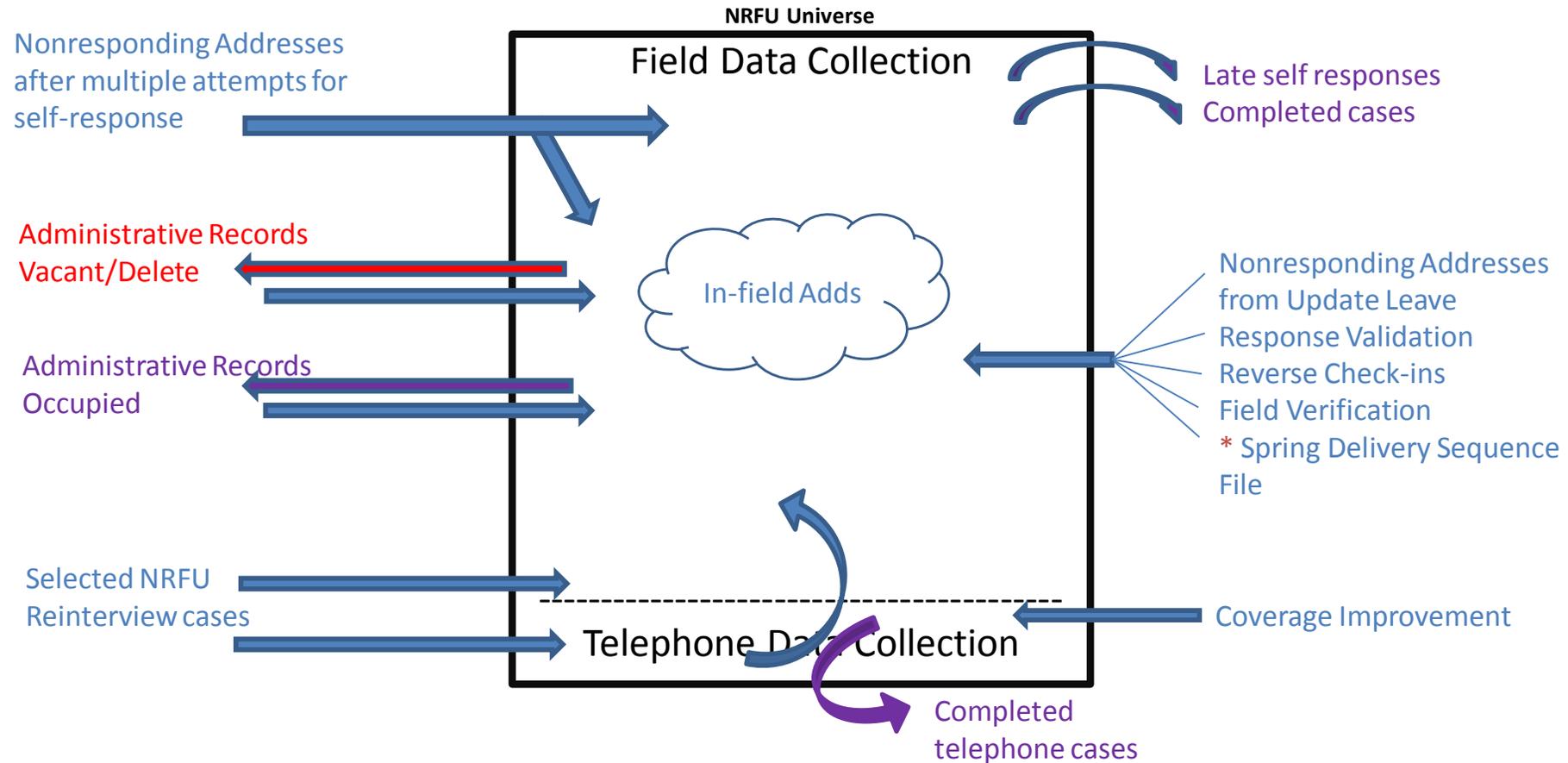
March							April						
S	M	T	W	T	F	S	S	M	T	W	T	F	S
				1	2	3	①	2	3	4	5	6	7
4	5	6	7	8	9	10	8	9	10	11	12	13	14
11	12	13	14	15	16	17	15	16	17	18	19	20	21
18	19	20	21	22	23	24	22	23	24	25	26	27	28
25	26	27	28	29	30	31	29	30					

Panel	Cohort	Mailing 1 <i>Letter (Internet First) or Letter + Questionnaire (Internet Choice)</i>	Mailing 2 <i>Letter</i>	Mailing 3* <i>Postcard</i>	Mailing 4* <i>Letter + Questionnaire</i>	Mailing 5* <i>"It's not too late" Postcard</i>
Internet First	1	March 16, 2018	March 20, 2018	March 30, 2018	April 12, 2018	April 23, 2018
	2	March 20, 2018	March 23, 2018	April 3, 2018	April 16, 2018	April 26, 2018
	3	March 23, 2018	March 27, 2018	April 6, 2018	April 19, 2018	April 30, 2018
Internet Choice	N/A	March 16, 2018	March 20, 2018	March 30, 2018	April 12, 2018	April 23, 2018

(\*) Targeted only to nonrespondents

# 2018 End-to-End Census Test

## Nonresponse Followup Universe

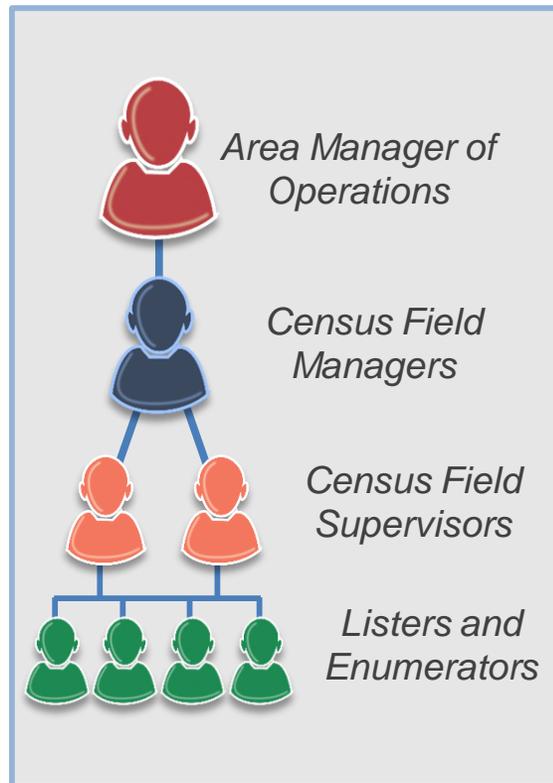


\* Addresses not previously in the enumeration universe.

# 2018 End-to-End Census Test

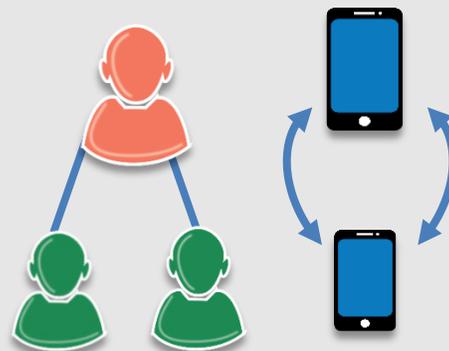
## Nonresponse Followup – Staffing Structure

### Streamlined Office and Staffing Structure



### Increased use of Technology

- Automated and optimized work assignments
- Automated recruiting, training, payroll and expense reporting
- Reduced paper and manual processing



### Increased Management and Staff Productivity

- Increased visibility into case status for improved workforce management
- Redesigned quality assurance operations
- Improved communications



# 2018 End-to-End Census Test

## Nonresponse Followup – Enumerator Training

- Moving from 2010, using a 100 percent cascaded, verbatim, and all-classroom style training, to a blended learning approach of online and classroom training
- Online training benefits include: self-paced training, a truly standardized delivery approach, use of an interactive training approach, and easier ability to incorporate edits into training
- Moving from 100 percent classroom based verbatim-style training to self-paced online and facilitated classroom instruction, augmented with hands-on practice using the devices (e.g. smartphones, laptops, tablets)
- Online training use of scenario-based videos, demonstrations, and simulations of how the device operates
- Automated knowledge and skills assessment vs a hand-scored and corrected paper test
- Use of electronic manuals and job aids to support field staff's on-the-job performance
  - Encourages use of the manual due to searchability of content

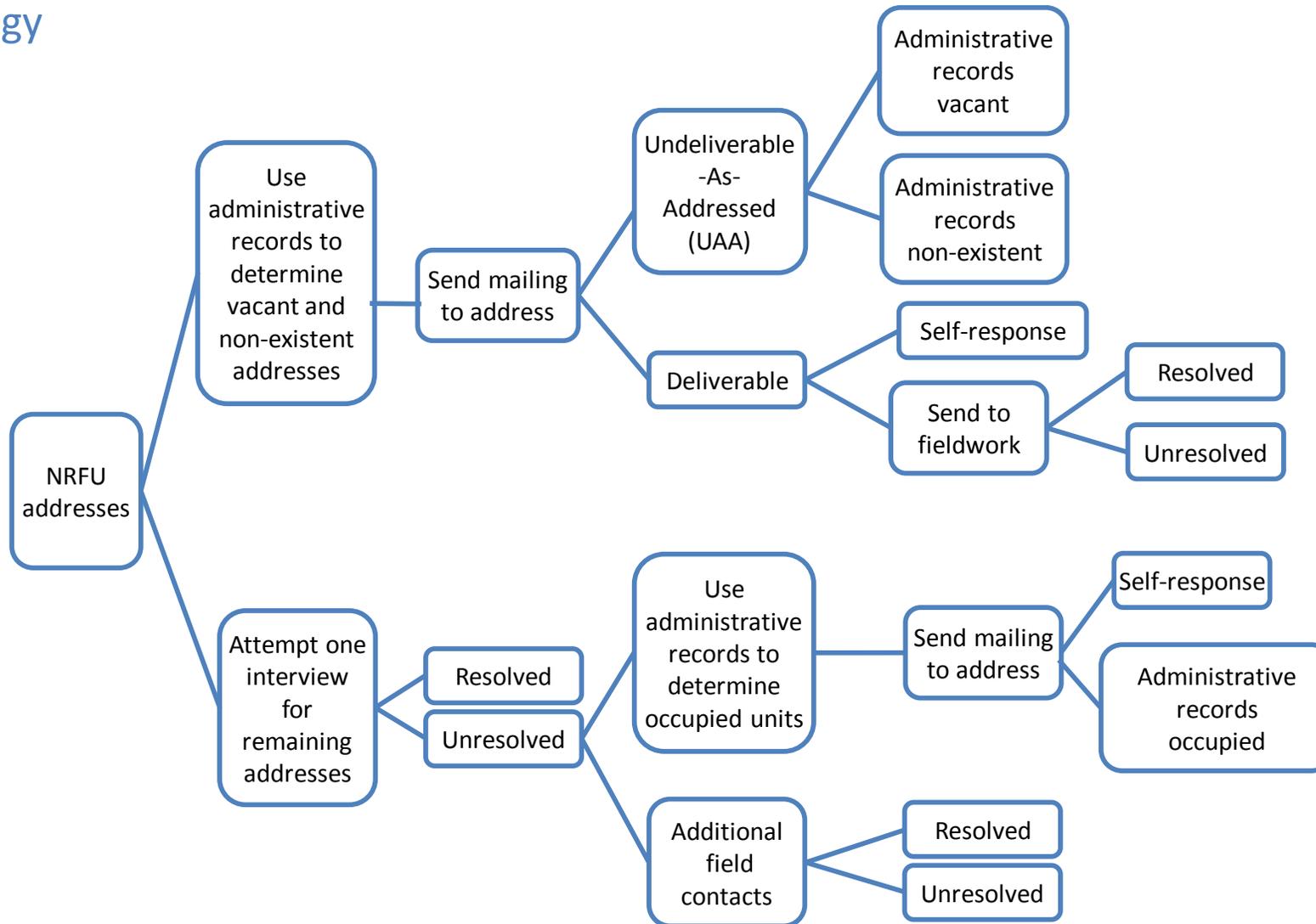
# 2018 End-to-End Census Test

## Nonresponse Followup – Field Data Collection Contact Strategy

- Administrative Records modeling determines initial contact strategies
  - Vacant/Delete: Removed from nonresponse followup workload
  - Occupied: Receives one contact attempt
  - No Determination: Receives maximum of 6 contact attempts
- Nonresponding addresses become proxy eligible when:
  - Third contact attempt at census address is unsuccessful
  - Enumerator observes a unit is vacant or not a housing unit
  - Supervisor determines a case should be proxy eligible or proxy required
  - Maximum daily limit of three proxy attempts
- Contact strategies for multiunits
  - Interview building manager to remove vacant units from nonresponse followup workload
  - Same enumerator assigned manager interviews for all multiunits in a Basic Collection Unit
- Non-ID Field Verification cases receive one attempt
- Self-responding vacant cases receive one attempt
- Response Validation Re-collect cases receive maximum of three contact attempts

# 2018 End-to-End Census Test

## Contact Strategy



# 2018 End-to-End Census Test

## Nonresponse Followup – Multiunit Manager Visits

**Purpose:** Resolution of occupancy status for units at multiunit structures via an interview with a ‘manager’

**Process:**

- Grouping of nonresponding addresses within a multiunit
- Enumerator attempts contact with ‘manager’
- Addresses by ‘manager’ as vacant or nonexistent are designated as such and are not subject to additional contact attempts
- Addresses identified by manager as ‘occupied’ or left undetermined will be assigned for contact attempts by an enumerator to collect response data

**2016 Census Test Findings:**

- Manager visits successfully identified the occupancy status of nonresponding units, thus reducing enumerator attempts to resolve vacant units

**2018 End-to-End Census Test:**

- Increase in the number of units at a Basic Street Address that triggers a eligibility for a manager visit
- Maximum of two manager visit attempts before assigning nonresponding units for enumeration attempts

# 2018 End-to-End Census Test

## Nonresponse Followup – Field Verification

**Purpose:** To verify the existence of addresses resulting from Non-ID self-responses that could be assigned to a Census Basic Collection Unit (BCU) or block and identified as new to the Master Address File

### Process:

- Non-ID self-response received
- Address completes Non ID processing including automated matching and/or clerical processing
- Identify “new” geocoded MAF addresses for field work – Field Verification (FV) workload
- FV cases added to the NRFU workload
- Enumerator attempts to locate the FV address and capture status
- No capture of response data
- No use of Notice of Visit correspondence

# 2018 End-to-End Census Test

## Nonresponse Followup – Proxy Enumeration

**Proxy Enumeration:** Occurs when attempts to contact a household member to determine/occupancy status and complete a census enumeration are unsuccessful and when a person with sufficient knowledge is identified to provide the census enumeration

### Proxy Eligibility:

- Cases become proxy eligible on the third unsuccessful attempt
- In-moves become immediately proxy eligible
- Vacant by observation, nonresidential, address does not exist, etc., are immediately proxy eligible

### 2016 Census Test Findings:

- Challenges acquiring proxy responses
- Additional enumerator training to emphasize the importance of proxies and proxy procedures
- Contributing factor to the unresolved rate

### 2018 End-to-End Census Test:

- Enhanced training on proxy concepts
- Modifications to enumeration application to capture occupancy status and housing unit population (in the case of occupied units) early in the proxy interview

# 2018 End-to-End Census Test

## Nonresponse Followup – Quality Control

- Quality is infused throughout the operation
  - Automated edits within the application
  - Operational Control System Alerts
- Quality Control Reinterview
  - All cases reviewed by SMarCS for indications of falsification using Administrative Records and paradata
  - Suspicious cases sent for telephone reinterview (via CQA); then case is sent to the field if necessary
  - SMarCS will select up to a 10 percent sample for reinterview
  - One staff conducts field data collection for both NRFU production and NRFU Reinterview

# 2018 End-to-End Census Test

## Nonresponse Followup – Operational Control System Enhancements

### Additional Operational Control System Alerts

Alert Name	Description
Proxy Attempts	When two or more cases were proxy eligible but the employee did not enter any proxy attempts into the enumeration application device.
Reopening Cases	When an employee opens two or more inactive cases but did not complete them.
Working Before Assigned Hours	When an employee attempts a case more than 30 minutes before their assigned start time.
Unconfirmed Delete	When an employee has two or more deletes that are not confirmed for UE FU and NRFU assignments.
High Field Resolution Rate	When an employee has a high field resolution rate.
Low Cases per Hour	An employee has worked a low number of cases/hour compared to peer (where peers are defined as other employees working in a similar geographic area).
High Cases per Hour	An employee has worked a high number of cases / hour compared to peers.

Questions?