

2020 Census: Researching the Use of Administrative Records During Nonresponse Followup

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Outline

- Census 2020 Planning
- Background on Decennial Nonresponse Followup (NRFU) Operation
- Researching Application of Administrative Records Usage for NRFU
- 2013 Census Testing Results
- Ongoing Research

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2020 Census Planning

Researching and testing toward a design that has potential to

- Significantly reduce costs while
- Maintaining commitment to quality.



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2020 Census Planning

Researching options to meet this challenge

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



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2020 Census Research and Planning Phase

- Census 2020 Research and Planning Phase
 - Focus on research on utilizing Administrative Records to reduce NRFU contacts
 - Other research is examining usages of administrative records for adaptive interviewing, address canvassing, race and Hispanic origin reporting and others.
- Researching and identifying possible designs during this phase
 - In future, Census 2020 approach will be determined
 - Census 2020 approach will require necessary approvals



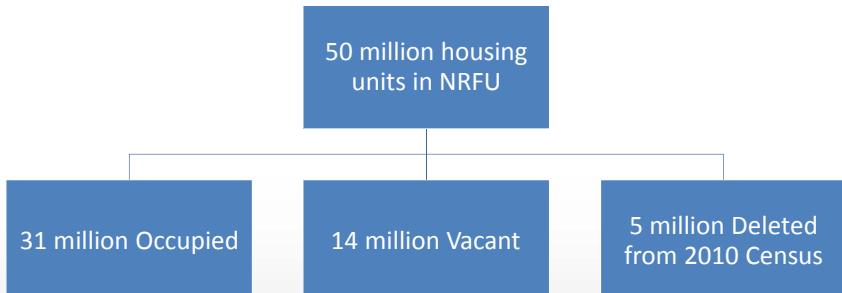
Census Nonresponse Followup Background

2010 Census

- Questionnaires delivered to housing units
- People asked to respond by mailing back questionnaire
- Nonresponding housing units required follow up.
- Largest and most expensive Census 2010 operation
- \$2 billion in interviewer costs (salary, training, benefits, mileage)
- Does not include overhead like infrastructure



2010 Census NRFU Background Magnitude and Statuses



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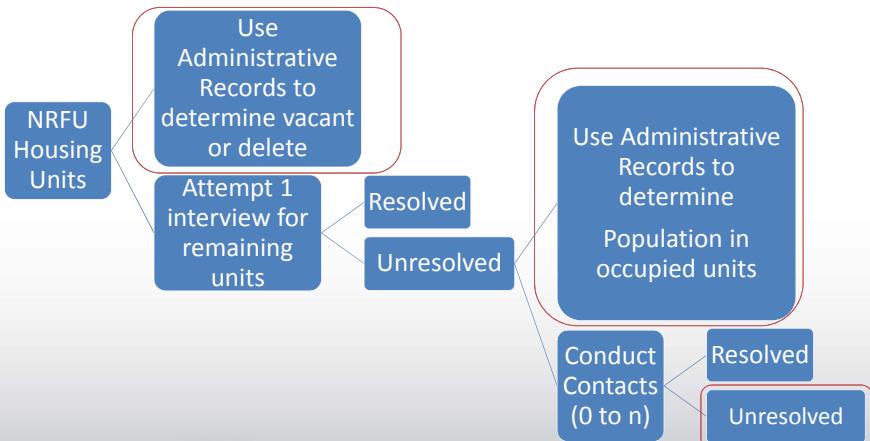
Administrative Records Decentralized Statistical System

- Federal sources
 - Internal Revenue Service, Social Security Administration,
 - United States Postal Service
- State sources
 - Supplemental Nutrition and Assistance Programs (SNAP)



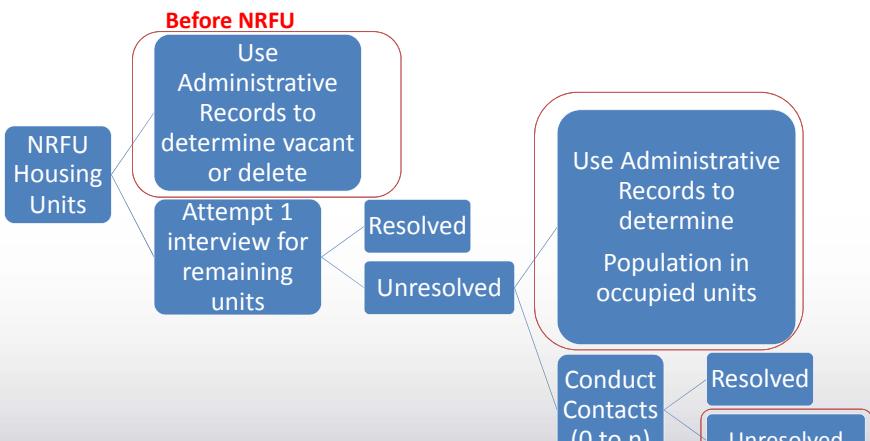
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2020 Census Research Application Possible Approach



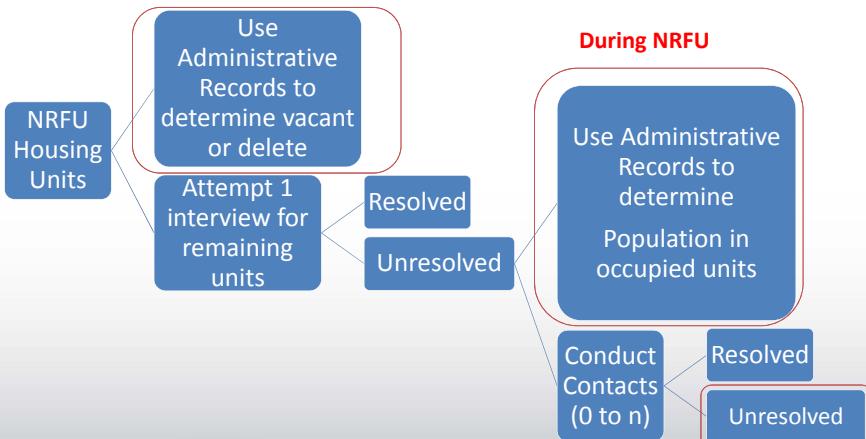
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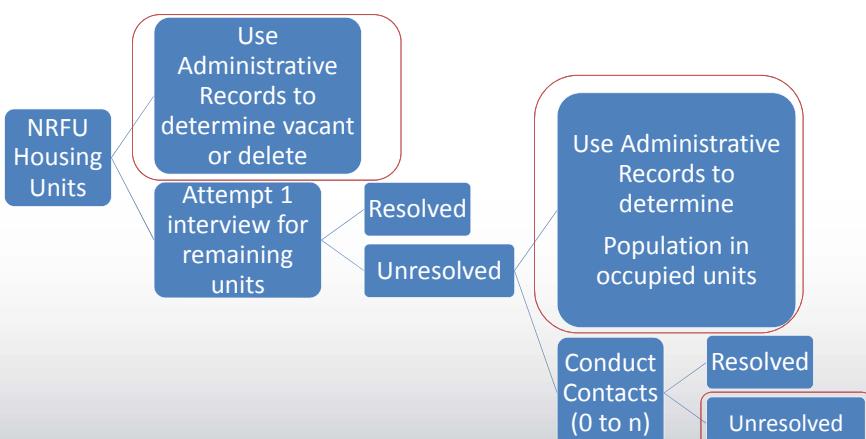
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2020 Census Research Application Possible Approach



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2013 Census Test

- A sample of about 2,000 Nonresponding Housing Units from the last Census.
- Philadelphia, Pennsylvania
- No self-response. Just only enumerator visit
- October to December, 2013



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Flagging Occupied Units

- Three administrative record (AR) sources from 2011 and 2012
 - IRS Individual Taxpayer Returns (IRS 1040)
 - Medicare Enrollment Database (MEDB)
 - Targus Federal Consumer (TFC)
- Two Rules Applied Separately for each AR source
 - People must be the same across two years
 - All persons must be validated by Bureau processing
- Units satisfying these two rules for a given AR source are flagged as occupied.
- Some units are flagged by a single AR source, some units are flagged by multiple AR sources.



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Flagging Vacant Units

- Postcard mailed to sample addresses
- United States Postal Service collects reasons for undeliverable as addressed (UAA)
- Units with a) UAA-Vacant reason code flagged as vacant and b) no occupied records

Note: Records with conflicting occupied administrative records and UAA-Vacant were sent to field.



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2013 Census Test Comparing Administrative Record Processing to Fieldwork

Treatment Description	Overall Total	Administrative Occupied Flag	Administrative Vacant Flag
2 – Fixed contact strategy, no Adrec Removal	510	150	31
4 – Adaptive Design, no Adrec removal	528	152	71
Total Units	1,038	302	102



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Using Administrative Record Information to Identify Occupied Housing Units

- 302 units with occupied flag set:
 - 86% were occupied when a field interview occurred
- Among units with occupied flag set and were occupied during the field interview (the 86%):
 - AR count only composed of persons from identifying AR source(s)
 - 66% had an AR count within one person of the field count
 - 24% had an AR count at least two persons less than the field count



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Using Administrative Record Information to Identify Vacant Housing Units

- 102 units with vacant flag set:
 - 76% were vacant when a field interview occurred
 - 96% were unoccupied (vacant or delete) when a field interview occurred
- Future Research Question:
 - Are there additional covariates we can incorporate to better distinguish between vacant and deletes when a vacant reason code exists?



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Census Tests

- 2014 Census Test
 - Parts of District of Columbia and Montgomery County, MD
 - Census Day: July 1, 2014
- 2015 Census Test
 - Being planned
 - Census Day: April 1, 2015



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Some Ongoing Research

Using and assessing administrative records in place of NRFU visits

- 2010 Census
- 2010 Census Coverage Measurement Results
- American Community Survey

Administrative Records Fitness For Use Research

- Assignment of characteristics
- Hard-to-count population analysis

Imputation research

- Improve imputation using administrative record information



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Thank you

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