Applications of the Demographic Frame in the 2030 Census

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Agenda

2020 Census Administrative Data Use

Research into Administrative Data for 2030 Census

Demographic Frame in the 2030 Census

Testing and Evaluating the Demographic Frame for 2030 Census Uses

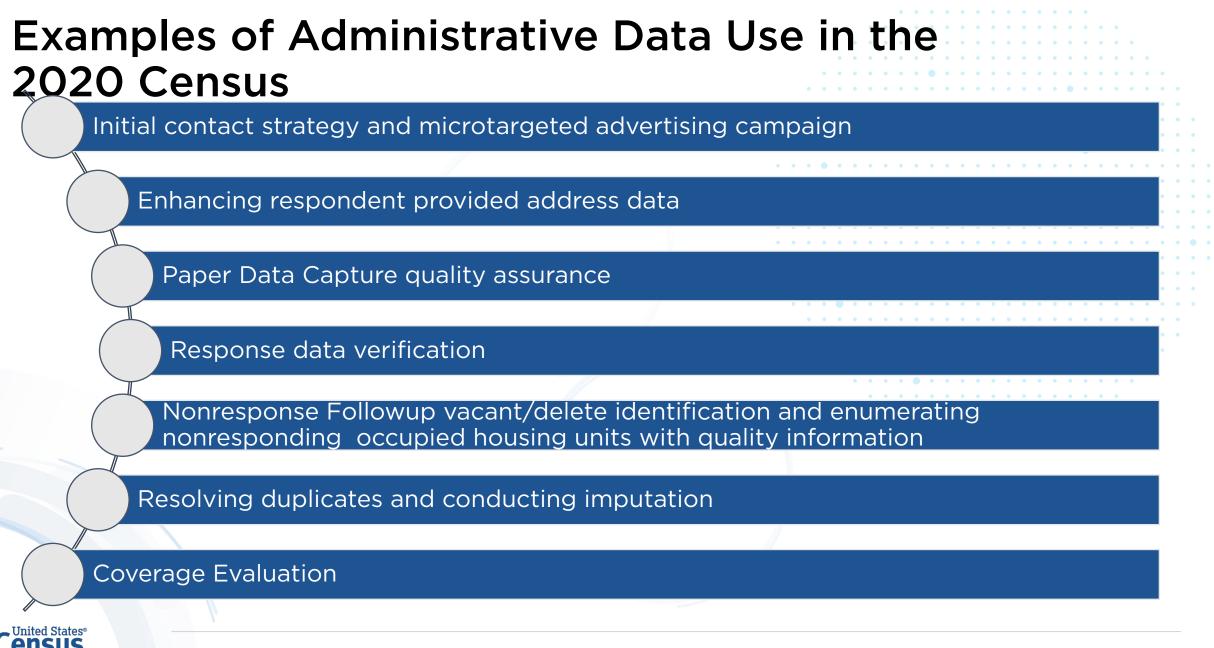
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Administrative Data Composites in the 2020 Census

- The 2020 Census used administrative data to avoid cost, maintain quality, and improve efficiency of operations.
- Administrative data from several federal, state, and third-party sources, including data from prior decennial censuses and Census Bureau surveys, were combined, standardized, and corroborated to create a Title 26¹ composite. Federal Tax Information (FTI) such as taxpayer ID and return type were included in this repository.
 - A robust Title 13² composite was created from the Title 26 composite.
 - Extracts of the Title 13 composite were provided to various 2020
 Census operations that did not need to use FTI.

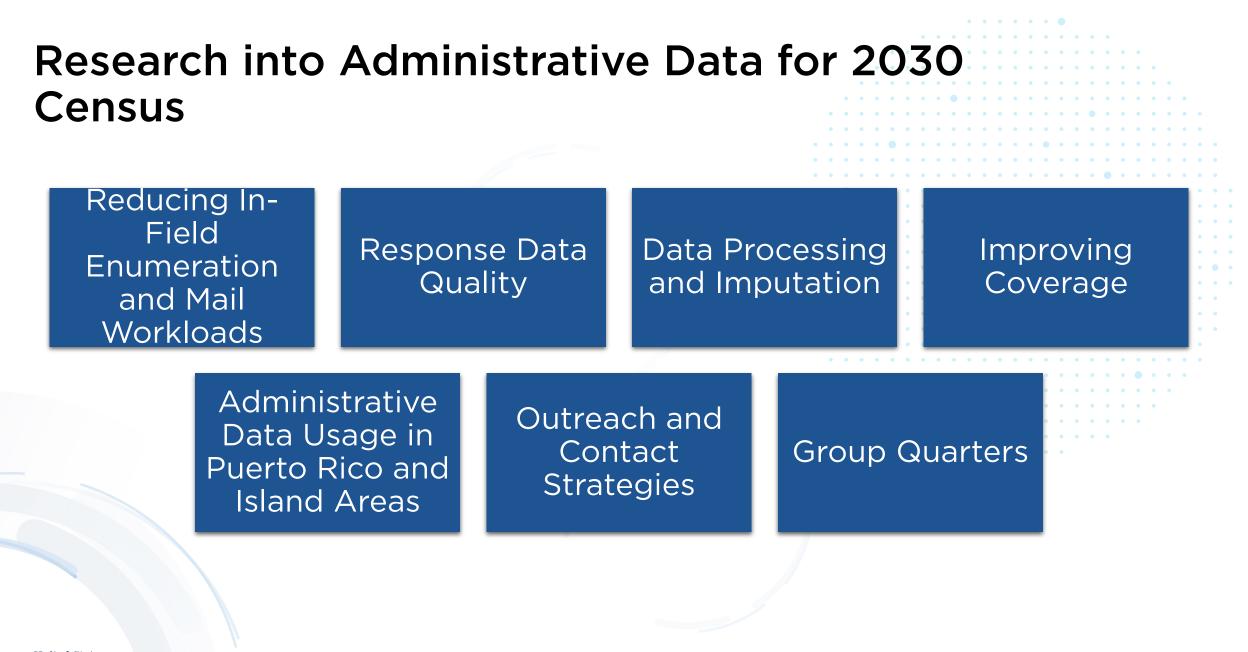
¹ Data from the Internal Revenue Service (IRS), which is referred to as Federal Tax Information (FTI), is protected by 26 U.S.C. § 6103(b)(8). In accordance with Title 26 and a 2013 Memorandum of Agreement between the Department of Treasury, Internal Revenue Service, and the Department of Commerce, U.S. Census Bureau, the scope of work for which FTI may be used includes frame building, enumeration, imputation, and evaluation.



Research into Administrative Data for 2030 Census

- The 2030 Census will continue to build upon the 2020 Census innovations around administrative of data in order to streamline data collection and minimize respondent burden.
 - The Census Bureau is actively working to expand its administrative data repository by identifying and acquiring new administrative data sources, such as driver's license data and utility data.
 - Many of the research areas for the 2030 Census are working on ways to expand the application of administrative data and improve administrative data methodologies.







2030 Plans for the Demographic Frame

- The Demographic Frame is a comprehensive, person-level frame consisting of demographic, social, and economic characteristics for use in replacing and supplementing census and survey data, as well as development of other data products.
 - The 2030 Census Program plans to use the Demographic Frame, enhanced with decennial-specific data and/or data elements that are not needed by the entire Census Bureau.
 - The 2030 Census research teams are actively collaborating with the Demographic Frame team to identify potential gaps or enhancements, and ways to address them.
- Thus far, the 2030 Census Program is directly using the Demographic Frame without any additional enhancements during the research phase.



Frame Testing and Evaluation for 2030

Assessing the current inventory of administrative data to identify areas of improvement.

Identifying and acquiring new, trusted administrative data sources to meet these areas of improvement, such as state-level data sources (e.g., vital records).

Current frame testing/evaluation research includes:

Identifying reliable data sources for operations that did not use administrative data in the 2020 Census.

Assessing the fitness for use of Demographic Frame for 2030 Decennial purposes.



Assessing Fitness for Use

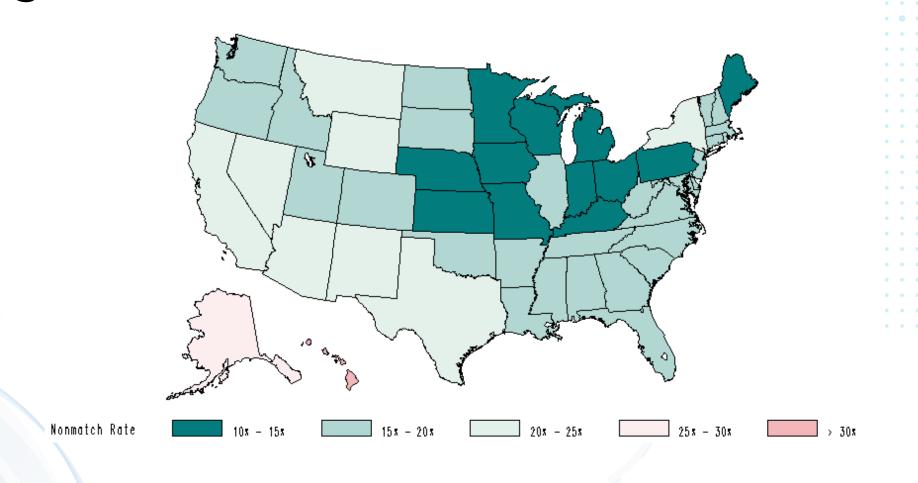
- The 2030 Census Program is currently in the process of assessing the fitness for use of the Demographic Frame for decennial operations.
 - Comparing the 2020 Census results to the Demographic Frame, in assessing the fitness for use.
 - Conducting nation-wide analyses as well as analyses by geographic areas, demographics, etc.
- Results from fitness for use assessment are being used to define the 2030 Census requirements for the Demographic Frame.



Initial Results: Comparing 2020 Census to the Demographic Frame

- Demographic Frame high Protected Identification Key (PIK) coverage.
- We also observed data-defined persons in the 2020 Census universe without a valid PIK.
 - These persons showed higher rates of missingness for age, and higher rates of Nonresponse Followup responders, of which had higher rates of proxy responders who were neighbors, followed by landlords or property managers.
- We also observed data-defined persons from the 2020 Census universe that had a valid PIK but did not link to the Demographic Frame.
 - Of these persons, they showed higher rates of persons of ages 55+, higher rates of self-response, and higher rates of missingness for race.
- Areas have been identified, across the United States, where we could improve PIK coverage by either incorporating additional administrative records or improving the PIKing process.

Initial Results: Comparing 2020 Census to the Demog



Sources: 2020 Census Unedited File; Demographic Frame Disclosure Review Board (DRB) approval number: CBDRB-FY23-0430



Next Steps

- Continue evaluation of the Demographic Frame for 2030 Census uses.
- Begin Non-PIK'ed 2020 Census responses evaluation to determine:
 - Whether non-PIKed responses are already in the PIK'ed universe;
 - If we can create a stable identifier for Non-PIKed responses using a different record linkage process; and
 - If we can incorporate the tools in this analysis in our standard record linkage pipeline.
- Evaluate additional data sources to increase coverage and work with staff who are apply the data for various uses.
- Use the information learned to inform the 2030 Census Design.



QUESTIONS?

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