

# Looking Inward: Quality Audits for Demographic Programs at the U.S. Census Bureau

Cynthia Rothhaas

Richard Levy

U.S. Census Bureau

[richard.a.levy@census.gov](mailto:richard.a.levy@census.gov)

[cynthia.a.rothhaas@census.gov](mailto:cynthia.a.rothhaas@census.gov)

Disclaimer: Any views expressed are those of the authors and not necessarily those of the U.S. Census Bureau.

# Overview

- Background
- Audit Process
- Program Types
- Compliance evaluation
  - Areas of complete compliance
  - Areas of high compliance
  - Areas with most frequent noncompliance
- Conclusions

# Background

- U.S. Census Bureau Statistical Quality Standards
- First demographic audit conducted in 2011
- Audits conducted in accordance with Generally Accepted Government Auditing Standards (GAGAS)
- Audit Steering Committee

# Audit Process

1. Notification
2. Self-Assessment
3. Independent Review
4. Program Action Plan
5. Follow-up

# Program Types

- Surveys
- Estimations
- Value-Added Products
- Process/Participant Programs

# Areas of Complete Compliance with Standards

- Developing & Implementing a Sample Design
- Establishing & Implementing Data Collection Methods
- Acquiring and Using Administrative Records
- Capturing Data
- Linking Data Records
- Addressing Information Quality Guideline Complaints

# Areas with High Compliance with Standards

- Editing and Imputing Data
- Coding Data
- Producing Direct Estimates from Samples
- Producing Estimates from Models
- Analyzing Data
- Providing Documentation to Support Transparency
- Protecting Confidentiality

# Areas With Most Frequent Noncompliant Findings

- Producing measures and indicators of nonsampling error
- Managing data and documentation
- Releasing information products
- Reviewing information products

# Most Common Noncompliant Requirements by Standard

Standard	Requirements
<b>Producing Measures and Indicators of Nonsampling Error</b>	<ul style="list-style-type: none"><li>• Developing a plan for general measures and indicators of nonsampling error that will be produced</li><li>• Developing a plan to evaluate the measures and indicators to guide improvements to the program</li><li>• Verifying and testing the calculations of measures and indicators of Nonsampling error</li><li>• Defining sufficient partial interviews</li></ul>

Source: Analysis of 2011-2017 data from Demographic Quality Audit Program, U.S. Census Bureau

# Most Common Noncompliant Requirements by Standard (Cont'd)

Standard	Requirements
Reviewing Information Products	<ul style="list-style-type: none"><li>• Review by Disclosure Avoidance Officer</li><li>• Statistical review and approval</li><li>• Policy and sensitivity review</li></ul>
Releasing Information Products	Releasing information products with restrictions when data quality issues are known

Source: Analysis of 2011-2017 data from Demographic Quality Audit Program, U.S. Census Bureau

# Most Common Noncompliant Requirements by Standard (Cont'd)

Standard	Requirements
<b>Managing Data and Documents</b>	<ul style="list-style-type: none"><li>• Developing a plan for data and document management</li><li>• Knowing, documenting, and adhering to data and document retention schedules</li></ul>

Source: Analysis of 2011-2017 data from Demographic Quality Audit Program, U.S. Census Bureau

# Conclusions

- Knowledge of the Standards
- The Programs
- The Auditors

# Questions?