



March 29, 2017

MEMORANDUM FOR: John H. Thompson
Director
U.S. Census Bureau
Carol N. Rice

FROM: Carol N. Rice
Assistant Inspector General for Economic and Statistical
Program Assessment

SUBJECT: *2020 Census: Census Bureau Needs to Improve Controls over
Administrative Records*
Final Report No. OIG-17-022-A

This final report provides the results of our audit of the Census Bureau's controls over administrative records and third-party data for decennial census planning. The objective of this audit was to assess the Bureau's controls for obtaining, using, retaining, and disposing of administrative records and third-party data as part of its planning for the 2020 Census. The Bureau defines administrative records as information from federal and state governments; and defines third-party data as information from commercial sources. We reviewed agreements between the Bureau and data providers, internal controls, and relevant documents and policies. We also interviewed administrative record data providers to identify stakeholder concerns. See appendix A for details of our objective, scope, and methodology.

Background

The Census Bureau is constitutionally mandated to carry out a census of the U.S. population every 10 years. The results of the decennial census are used to apportion seats among the states in the U.S. House of Representatives and assist states with congressional redistricting.¹ The Bureau also uses the results to determine the statistical sampling frames for the dozens of current surveys it conducts and the American Community Survey, which replaced the decennial census long form. The results of these surveys are used to support important government functions, such as

- allocating an estimated \$400 billion in federal funds annually to local communities;
- calculating monthly unemployment, crime, and poverty rates; and
- publishing health and education data.

¹ See U.S. Const. art. I, § 2, cl. 3 & amend. XIV, § 2.

According to the Bureau,² the 2010 Census cost \$12.3 billion to carry out, and if its design and methods were repeated, the next decennial census is estimated to cost \$17.8 billion. However, the Bureau estimates that it can reduce the cost by \$5.3 billion by implementing innovative changes in four key areas.³

Using information individuals have already provided to governmental and nongovernmental entities (i.e. administrative records and third-party data) to reduce expensive in-person follow up activities is one of the four innovative areas the Bureau is exploring to decrease 2020 Census costs. The Bureau is exploring the utilization of administrative records and third-party data to improve the quality of the address list,⁴ increase the effectiveness of advertising and contract strategies, and validate respondent submissions. Bureau management believes using administrative records and third-party data could result in a potential \$1.4 billion in 2020 Census cost avoidance.

According to the Bureau, the primary federal sources of administrative records, and the most recent data provided by each, include the

- United States Postal Service (USPS), which provides change-of-address data received from the public for mail forwarding services;
- Internal Revenue Service (IRS), which provides extracts of data from various IRS tax forms that are collected under Title 26 of the U.S. Code;⁵
- Social Security Administration (SSA), which provides social security numbers and information from social security applications;
- Centers for Medicare and Medicaid Services (CMS), which provides information from the Medicare Enrollment Database and the Medicaid Statistical Information System;
- Selective Service System (SSS), which provides the Selective Service Registration File;
- Indian Health Service (IHS), which provides the Indian Health Service Patient Registration File; and
- Department of Housing and Urban Development (HUD), which provides data from its Tenant Rental Assistance Certification System and Public and Indian Housing Information Center.

As provided for by Title 13 of the U.S. Code, the Bureau enters into agreements with federal agencies to obtain administrative record data.⁶ The Bureau acquires third-party data using

² U.S. Census Bureau, September 2016. *2020 Census Operational Plan, Version 2.0*, Suitland, Maryland: Census Bureau, 7.

³ Four key innovation areas are the use of administrative records and third-party data, reengineering address canvassing, optimizing self-response, and reengineering field operations.

⁴ The Bureau uses its address list to identify locations where people could live to establish where to count.

⁵ Title 26 refers to the portion of the U.S. Code that details the Internal Revenue Code.

⁶ Title 13 refers to the portion of the U.S. Code that details the Census Bureau and its operations. 13 U.S.C. § 6 provides Census with the authority to obtain information from governmental and private sources.

contracts for commercial items. The primary third-party data providers for the 2020 Census are the Veterans Service Group of Illinois and D.A.R. Partners, which provide data that includes address, resident, and contact information. Data collected is protected under the confidentiality provisions of Title 13 (and Title 26 for federal tax information [FTI]).⁷

We focused our audit on the four research projects related to the 2020 Census that required access to administrative records and third-party data, as identified by the Bureau, during the period of our review:⁸

- **Project #861, “2020 Improving Quality Control,” August 1, 2013–December 1, 2018.** With access to 59 datasets,⁹ this project is designed to explore the possibility of using administrative records to enhance the non-response follow-up (NRFU) quality control program through the use of modeling to inform targeted sample selection and operational monitoring, and through the use of administrative records in lieu of the data collected through costly personal visits to nonresponsive households.
- **Project # 863, “2020 Administrative Record Modeling and Evaluation,” February 11, 2013–December 31, 2018.** With access to 136 datasets, this project is designed to investigate administrative record sources in various combinations to enhance data collection and processing methods for NRFU. Different administrative record files were used to explore agreements and disagreements observed in content across sources to develop approaches (such as modeling or business rules) to improve NRFU data quality and reduce costs from fewer in-person visits.
- **Project # 871, “2020 Census and Geographic Support System Address Frame and Listing Operation Research,” June 5, 2013–July 31, 2017.** With access to 123 datasets, this project is designed to validate and enhance the Master Address File; improve methods to unduplicate public, private, and census address lists; and help design and assign resources to carry out the 2020 Census.
- **Project # 873, “2020 Non-ID Processing,” May 20, 2013–September 30, 2016.** With access to 31 datasets, this project was designed to improve the resolution rate of Non-ID cases¹⁰ during automated processing. Administrative records may improve automated matching and geocoding, and may provide sufficient corroborating evidence to verify the existence and location of address data without requiring fieldwork.

⁷ 13 U.S.C. § 9 and 26 U.S.C. § 6103, respectively.

⁸ We did not review a fifth project related to the 2020 Census involving the use of administrative records that was initiated in January 2017 because we had already concluded our fieldwork.

⁹ The term “dataset” refers to an individual file of data. For example, IRS Form 1040 (*U.S. Individual Income Tax Return*) data from a specific time period would be a dataset.

¹⁰ “Non-ID cases” refers to response questionnaires from individuals that do not require a preassigned Census ID to be processed.

Findings and Recommendations

The objective of this audit was to assess the Bureau's controls for obtaining, using, retaining, and disposing of administrative records and third-party data as part of its planning for the 2020 Census. With respect to third-party data, we only reviewed the Bureau's controls for obtaining that information because, according to the contracts with the commercial providers, third-party data will in effect become the property of the Bureau upon acquisition. In addition, third-party data usage rights are provided to the Bureau allowing them to retain and use the data indefinitely.

With respect to obtaining both administrative records and third-party data, we found the Bureau included all required information in their agreements and contracts. However, the Bureau could not provide documentation showing that projects requiring access to administrative records, and related to the 2020 Census, were reviewed and approved in accordance with their *Administrative Records Handbook* (finding I).

With respect to using administrative records, we found the Bureau properly justified projects using administrative records, made payments to data providers in accordance with agreements, and complied with reporting requirements outlined in the agreements. Furthermore, federal data providers were generally satisfied with the way the Bureau manages their administrative records. However, we also found the Bureau could not provide documentation showing that access to administrative record data was modified in response to staffing changes (finding II) and did not restrict employees' access to administrative records when their training had expired (finding III). Finally, with respect to retaining or disposing of administrative records, we found the Bureau did not delete administrative record data files in accordance with their expiration dates (finding IV).

I. Project Review and Approval Documentation Did Not Include All Required Elements

The Bureau could not provide complete project review and approval documentation for the four research projects related to the 2020 Census that required access to administrative records. Research projects are managed using the Data Management System (DMS). DMS is a web-based application that is available on the Bureau's internal network to all users with a username and password. Users are able to search for datasets and propose projects. The Bureau's *Administrative Records Handbook* outlines the policies and criteria for proposing projects that require access to administrative records. These project proposals require review and approval from a division chief and a project review team. The division chief is responsible for ensuring that

- the project has scientific merit;
- the project benefits the Bureau's mission;
- the project presents no undue disclosure risk or conflict of interest; and
- all affected divisions are willing and able to participate in the project.

The project review team is responsible for evaluating

- consistency with existing data agreements or feasibility of obtaining new data;
- corporate benefits (i.e., whether the project benefits the Bureau's mission);
- effects on relationships with partner agencies;
- public perception issues; and
- new data linkage concerns.

Bureau staff provided review and approval documentation related to the four 2020 Census research projects that used administrative records. None of the documentation provided showed the division chief's review of undue disclosure risk or conflicts of interest, or determinations that all affected divisions were willing and able to participate. One project also had no documented division chief review of scientific merit or benefit to the Bureau. In addition, one project listed the project review team's consideration of consistency with existing data agreements or feasibility of obtaining new data but marked it as not applicable. Bureau staff explained that these four projects were documented in a legacy tracking system and staff may have conducted reviews that were not documented. Since no additional documentation could be provided, the projects may have been approved improperly, without the consideration of all the criteria outlined in their *Administrative Records Handbook*. As a result, projects could have been approved with undue disclosure risk or conflicts of interest, or without all affected divisions being willing and able to participate.

II. Risk of Unauthorized Browsing or Access Without a 'Need-to-Know' Not Adequately Minimized

The Bureau could not provide documentation showing that access to administrative record data was modified in response to staffing changes. Based on Bureau policy,¹¹ employees should be granted access to administrative records based on the projects to which they are assigned, and should have that access removed when they no longer support those projects. The DMS includes records of staff assigned to each project with a support end date for each employee. We requested supporting documentation showing that staff access to administrative records was removed in response to the end dates recorded in DMS. Bureau staff was only able to provide documentation supporting access removal related to 7 of the 126 end dates recorded in DMS.

The Census Bureau prohibits unauthorized browsing, which it defines as the act of searching or looking through protected information for other than work-related

¹¹ U.S. Census Bureau, June 2003. *Control of Access to Personally Identified Survey and Decennial Census Data: Unauthorized Browsing Policy*, Suitland, Maryland: Census Bureau, 1.

purposes.¹² In addition, IRS Publication 1075, *Tax Information Security Guidelines for Federal, State, and Local Agencies*, outlines policies related to the use of FTI, which is collected by the IRS and provided to the Bureau. The publication is referenced in the Bureau's agreement with the IRS and includes a description of the importance of need-to-know restrictions:

Under need-to-know restrictions, even if an entity or an individual has the authority to access FTI, one would not be given access to such information if it were not necessary to perform his or her official duties. Limiting access to individuals on a need-to-know basis reduces opportunities to “browse” or improperly view FTI. Restricting access to designated personnel minimizes improper access or disclosure.¹³

Despite multiple requests, the Bureau could not provide additional documentation showing that employees' access to administrative record data was restricted appropriately. Bureau staff explained that DMS is not designed to control access to administrative records and that staff responsible for modifying access only make adjustments when requested by project managers. Since documentation could not be provided for the majority of the end dates recorded in DMS, the 349 datasets related to the four projects reviewed may have been at risk of unauthorized browsing or access without a need-to-know.

III. Access to Administrative Records Was Not Restricted in Response to Expired Training Records

The Bureau did not consistently restrict employees' access to administrative records when their training had expired. The Bureau requires employees to complete data stewardship and Title 26 training on an annual basis. Data Stewardship Awareness Training is designed to reinforce the Census Bureau's strict confidentiality and privacy standards. Title 26 training is designed to ensure that the Bureau is properly protecting FTI. The Bureau monitors employee training using the Commerce Business Systems (CBS)¹⁴ and notifies employees when their training has expired. Policy Coordination Office staff provided an example of a CBS report detailing 255 individuals with expired training and examples of email notifications sent to employees with training expiration dates that were approaching or had already passed. Based on the number of individuals included in the CBS report, we did not limit our review to staff assigned to the four projects. Policy Coordination Office staff explained there is often a lag between the training being completed, and the CBS records, and since not all individuals listed in the CBS report are Census employees, it may not have been appropriate to restrict access to research projects. Despite this explanation, individuals may have been able to access administrative record data

¹² Ibid., 2.

¹³ Internal Revenue Service, October 2014, *Publication 1075: Tax Information Security Guidelines for Federal, State, and Local Agencies*, Washington, DC: IRS, p. 6.

¹⁴ CBS is the Department-wide financial management system used by the Bureau.

without up-to-date training, putting information protected under Titles 13 and 26 at an increased risk.

IV. Administrative Record Data Files Were Not Deleted as Scheduled

The Bureau did not delete administrative record data in accordance with their recorded expiration dates. The Bureau uses their Project and Source Tracking System (PAST) to monitor the expiration dates of administrative record data. PAST includes a client manager responsible for each set of data and a corresponding expiration date. Employees from the Bureau's Center for Economic Studies are responsible for updating PAST with expiration dates that they received from the client manager. Center employees are also responsible for deleting data files once they receive a confirmation from the client manager that the file is no longer needed. They send a monthly report to client managers including any files with blank expiration dates, expiration dates approaching within 6 months, and files past their expiration date that have not been deleted. We reviewed the monthly PAST report as of October 27, 2016, which contained 515 total files from the primary administrative record data providers (see table 1, below). We found 132 files with blank expiration dates, 8 files that were deleted after their expiration date, and 168 files with past due expirations, most of them from 2012.

Table I. PAST Administrative Record Data File Status as of October 27, 2016

Data Provider	Total Files	Blank Expiration Dates	Deleted After Expiration	Expired Files Not Deleted	Current Files
CMS	55	16	2	9	28
HUD	43	19	1	0	23
IHS	32	12	1	0	19
IRS	144	40	3	4	97
SSA	209	34	0	154	21
SSS	19	5	1	0	13
USPS	13	6	0	1	6
Total	515	132	8	168	207

Source: OIG analysis of Census PAST records

Center staff explained that they do not always receive responses from the client managers and are unable to delete files without confirmation from the client manager. As a result, administrative record data files have not been deleted appropriately and could have been at risk of unauthorized browsing or access without a need-to-know.

Recommendations

We recommend that the Director of the Census Bureau take the following actions:

1. Update review and approval policies and procedures for projects requiring access to administrative records to ensure all applicable criteria is considered, and appropriate documentation is retained.
2. Improve controls over access to administrative records to ensure staff have a justified need-to-know to access administrative record data, and appropriate documentation is retained.
3. Update training policies and procedures to ensure staff can only access administrative record data with up-to-date training.
4. Improve controls over the retention and disposal process of administrative records to ensure records are deleted or returned to data providers in accordance with agreements.

On March 23, 2017, OIG received the Census Bureau's response to the draft report's findings and recommendations, which we include here as appendix B. Bureau management agreed with all four recommendations and noted actions it has and will take to address them.

Pursuant to Department Administrative Order 213-5, please submit to us an action plan that addresses the recommendations in this report within 60 calendar days. This final report will be posted on OIG's website pursuant to sections 4 and 8M of the Inspector General Act of 1978, as amended (5 U.S.C. App., §§ 4 & 8M).

We appreciate the cooperation and courtesies extended to us by your staff during our audit. If you have any questions or concerns about this report, please contact me at (202) 482-6020 or Terry Storms, Supervisory Auditor, at (202) 482-0055.

cc: Laura Furgione, Chief of the Office of Strategic Planning, Innovation and Collaboration
John M. Abowd, Associate Director for Research and Methodology
Colleen T. Holzbach, Program Manager for Oversight Engagement, Census Bureau
Corey J. Kane, Audit Liaison, Census Bureau
Pamela Moulder, Senior Program Analyst, Economics and Statistics Administration

Appendix A Objective, Scope, and Methodology

The objective of this audit was to assess the Bureau's controls for obtaining, using, retaining, and disposing of administrative records and third-party data from governmental and nongovernmental sources as part of its planning for the 2020 Census.

To accomplish our objective, we

- reviewed the Bureau's agreements and contracts used to obtain administrative records and third-party data;
- reviewed the approval process for research projects—related to the 2020 Census—that permitted access to 349 administrative records and third-party datasets;
- interviewed data providers to determine if they had any concerns related to the Bureau's management of administrative records;
- reviewed the controls over access to administrative records and third-party data by requesting documentation to support 279 start and end dates recorded in the DMS and reviewing 255 employee training records in CBS;
- reviewed reports the Bureau is required to provide to data providers; and
- reviewed records related to the retention and disposal procedures used by the Bureau including 515 PAST records.

We also reviewed the following laws and guidance:

- 13 U.S.C. § 6
- 26 U.S.C. §§ 6103, 7213, and 7431
- Agreements between the Bureau and federal agencies
- Contracts between the Bureau and companies providing third-party data
- Census Bureau, *Administrative Record Handbook*, May 2001
- IRS Publication 1075, *Tax Information Security Guidelines for Federal, State, and Local Agencies*, October 2014, superseded by a version dated September 30, 2016

Further, we gained an understanding of the internal control significant within the context of the audit objective by interviewing officials at the Bureau and reviewing documentation for evidence of the implementation of internal controls. Based on our review, we identified internal control weaknesses related to the approval of projects requiring access to administrative records, need-to-know access to administrative records, and the destruction of administrative record data files. To assess the reliability of PAST data, we talked with Bureau officials about control procedures and reviewed relevant documentation. We determined that the data was sufficiently reliable for the purposes of this audit.

We conducted this audit from July to December 2016 and performed fieldwork in Washington, DC, and Suitland, Maryland. The audit was conducted under the authority of

the Inspector General Act of 1978, as amended (5 U.S.C. App.), and Department Organization Order 10-13, dated April 26, 2013. We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence that provides a reasonable basis for our findings and conclusions, based on our audit objective. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective.

Appendix B Agency Response



UNITED STATES DEPARTMENT OF COMMERCE
Economics and Statistics Administration
U.S. Census Bureau
Office of the Director
Washington, DC 20233-0001

MAR 23 2017

MEMORANDUM FOR: Carol Rice
Assistant Inspector General for Economic
and Statistical Program Assessment

From: John H. Thompson 
Director
U.S. Census Bureau

Subject: *2020 Census: Census Bureau Needs to Improve Controls over
Administrative Records* Draft Report

The attached comments are in response to your February 22, 2017, draft report titled "*2020 Census: Census Bureau Needs to Improve Controls over Administrative Records.*" The Census Bureau appreciates the opportunity to review and provide comments on this draft report.

Once the Office of Inspector General (OIG) issues the final version of this report, the Census Bureau will prepare an action plan to document the steps to be taken to address the final recommendations.

Attachment

Census Bureau Comments on OIG Draft Report:

"2020 Census: Census Bureau Needs to Improve Controls over Administrative Records"

March 2017

The U.S. Census Bureau appreciates the opportunity to comment on this draft report. We do not have substantive disagreement with any of the recommendations and will soon prepare a formal action plan to document the steps we will take in response to those recommendations.

The administrative and technical advancements the Census Bureau has made over the years in the acquisition and use of administrative data have had a positive impact on our ability to produce statistics about the U.S. population and economy. Furthermore, our capacity to integrate and link external data across multiple sources, including our census and survey data, has made our infrastructure an asset to the entire Federal Statistical Community. Since these capabilities are at the core of our mandate to reduce respondent burden and increase the scope and depth of statistics and analyses, the Census Bureau strives to innovate and improve the way we manage data as an enterprise resource.

We are committed to the highest standards of data stewardship. Our control systems have improved over time, and we recognize the need to further tighten controls and review procedures.

Concerning the findings:

I. Project Review and Approval Documentation Did Not Include All Required Elements.

All four of the Decennial projects reviewed date back to 2013 and were established prior to the full implementation of the Data Management System (DMS) in a production environment. One of the major goals of the DMS was to improve the control and documentation of data usage across the Census Bureau. We acknowledge that although the Census Bureau has established policies that require project review and documentation, we need to better align these policies to our work processes and build stronger enforcement mechanisms into them.

After the establishment of the DMS, the four Decennial projects were transferred to this new management system. Two of the projects, including 861 – 2020 Improving Quality Control and 863 – 2020 Administrative Records Modeling and Evaluation, are ongoing and will continue until the end of fiscal year 2018. The other two projects either are completed (873 – NonID Processing) or in the process of being closed (871 - 2020 Census and Geographic Support System Address Frame and Listing Operation Research). A new DMS project, 987 – 2020 Decennial Production, was established in January 2017, and will be used to monitor, control, and document the data used for the 2017 and 2018 Tests and the 2020 Census.

II. Risk of Unauthorized Browsing or Access without a “Need-to-Know” Not Adequately Minimized.

The Data Stewardship and Information Technology (IT) Security Awareness and Title 26 mandatory training, combined with BOC policies DS007: Safeguarding and Managing information, Data Access and Transfer Policy and DS018: Unauthorized Browsing Policy all reinforce the prevailing culture of data stewardship and awareness of the responsibilities and restrictions that are placed on the access and use of our data. All new employees and contractors are required to complete these trainings prior to being granted access to any BOC IT system. Follow-up training is required once every fiscal year thereafter.

The DMS has notifications and reports that are sent to project stakeholders. Project Contacts are required to review their projects at least once annually. It is largely the responsibility of the Project Supporters (Information Owner(s), Project Contacts, Project Owners) and their management to ensure that existing policies are adhered to and that the established procedures are followed. The Census Bureau is increasing its enforcement of these procedures. Regarding the four Decennial projects, 873 – 2020 Non-ID Processing research project has been completed and the annual reviews of the remaining three projects will be completed by the end of April with 871 - 2020 Census and Geographic Support System Address Frame and Listing Operation Research slated to be closed.

The Bureau is currently working on a system to automate provisioning and removal of access to data in the new Integrated Research Environment (IRE) which is a technical solution for protected access by researchers for use of census data. Project and user information from the DMS will be used to control access to data in the IRE. For example, when a Project Contact sets an end date for a user in a DMS project, access for the user to data under that project and to the project workspace will automatically terminate as of that date.

III. Access to Administrative Records Was Not Restricted in Response to Expired Training Records

Now that both the Data Stewardship and IT Awareness (meets T13, privacy and Federal Information Security Management Act requirements) and the Title 26 trainings are aligned by fiscal year, this year we will combine the practice of shutting off network access June 30 for non-compliance with these trainings. This will require some minor policy updates. Further, users accessing data through the IRE will have their access automatically cut off if their training is expired.

Privacy Coordination Office (PCO) is educating stakeholders about the new shutoff alignment, a sanction for non-compliance.

IV. Administrative Record Data Files Were Not Deleted as Scheduled

Procedures exist to properly document the closeout of a project within the DMS. Additionally, notifications are enabled and are routinely sent to Project Supporters and prescribed intervals both prior to and after the Retention Date of associated datasets.

PCO is reinforcing expectations and sanctions for non-compliance with its uses as a function of policy education and enforcement. In addition, The Center for Economic Studies and the Center for Administrative Records Research and Applications have implemented a plan to review all administrative data entries in the Project and Source Tracking System (PAST) to update retention dates. Any files with expired dates will be destroyed.

Concerning the individual recommendations:

OIG Recommendation 1: Update review and approval policies and procedures for projects requiring access to administrative records to set logical controls that ensure all applicable criteria is considered and appropriate documentation is retained.

Census Bureau Response: The Census Bureau agrees with this recommendation. Our Policy Office is working with the DMS development team to ensure that all approvals are in place before a status can be set to "Approved."

OIG Recommendation 2: Improve controls over access to administrative records to ensure staff have a justified need-to-know to access administrative record data, and appropriate documentation is retained.

Census Bureau Response: The Census Bureau agrees with this recommendation. We have recently revised the Administrative Data Acquisition, Access and Use Policy (DS001 a & b) and will reinforce the controls within. We will reexamine our existing procedures and ensure controls are implemented and documentation is retained.

OIG Recommendation 3: Update training policies and procedures to ensure staff can only access administrative record data with up-to-date training.

Census Bureau Response: The Census Bureau agrees with this recommendation. The Census Bureau will improve documentation and alignment of training with access to specific projects.

OIG Recommendation 4: Improve controls over the retention and disposal process of administrative records to ensure records are deleted or returned to data providers in accordance with agreements.

Census Bureau Response: The Census Bureau agrees with this recommendation. We believe that records retention and disposal is an important component of successfully carrying out our mission and are committed to continued improvements.

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