

U.S. DEPARTMENT OF COMMERCE
Office of Inspector General



U.S. CENSUS BUREAU

*Improvements Needed in the
Reporting of Performance Measures
By the U.S. Census Bureau*

Final Audit Report No. FSD-15990-4-0001/March 2004

**PUBLIC
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UNITED STATES DEPARTMENT OF COMMERCE
The Inspector General
Washington, D.C. 20230

MAR 29 2004

MEMORANDUM FOR: Charles Louis Kincannon
Director, U.S. Census Bureau

FROM: Johnnie E. Frazier 

SUBJECT: *Improvements Needed in the Reporting of Performance Measures by the U.S. Census Bureau*
Final Audit Report No. FSD-15990-4-0001

This is our final report on our audit of the bureau's performance measures and explanations of results for three performance goals presented in the Department of Commerce's *FY 2002 Performance and Accountability Report (PAR)*.

We believe that the reporting for the measures associated with each goal can be improved. Specifically, (1) imprecisely worded measures and related targets limit the usefulness of reported information; (2) incorrectly worded descriptions of verification procedures lessen the reliability of reported information; and (3) conflicting and incomplete disclosures diminish the usefulness of reported results. We note that Census management has already taken some corrective actions in response to our audit findings. However, the bureau still needs to (1) improve the wording of some measures and target performance levels, and (2) provide clearer and more detailed explanations of the measures and related verification methods.

In responding to the draft report, Census generally agreed with our recommendations, noting that it has already addressed many of the issues that had been identified. We have summarized the bureau's response at the end of the report and the complete response is an attachment to the report.

In accordance with Department Administrative Order 213-5, please provide us with your action plan addressing the recommendations for our review and concurrence within 60 days of this memorandum. Should you need to discuss the content of this report and the action plan, please contact me at (202) 482-4661, or Michael Sears, Assistant Inspector General for Auditing, at (202) 482-1934.

We appreciate the cooperation and courtesies your staff extended to us during our review.

Attachment

cc: Ted Johnson, Associate Director for Finance and Administration
Andrew Moxam, Comptroller

INTRODUCTION

The U.S. Census Bureau, the largest statistical agency of the federal government, conducts large-scale surveys and censuses to gather and disseminate complex United States population and economic data that, among other things, influences local, state, and federal policy making; affects how billions of federal dollars are distributed and congressional seats apportioned; and impacts business planning and investment.

The Department of Commerce relies on Census activities to support its mission. In the Department's annual Performance and Accountability Reports, prepared to document compliance with the Government Performance and Results Act of 1993 (GPRA),¹ Census programs and activities are used to support Commerce's strategic goal of providing "the information and the framework to enable the economy to operate efficiently and equitably,"² as well as the bureau's attainment of its own performance goals. The focus of our audit was on the measures Census used to evaluate and report on its performance in the Department's *FY 2002 PAR*, specifically with regard to the bureau's procedures for collecting, verifying, and presenting the associated performance information.

Census generates performance results to enable Congress, the Office of Management and Budget, and other decision makers to evaluate the federal government's investment in its programs, and to help agency officials improve the outcomes of those programs. However, performance results support these objectives only to the extent that the data is reliable, and GPRA therefore requires agencies to verify and validate performance data to ensure its reliability. The General Accounting Office (GAO) has defined verification as the "assessment of data completeness, accuracy, consistency, timeliness, and the related quality control practices." It defines validation as the "assessment of whether data are appropriate for the performance measure."³

For FY 2002, Census maintained three goals and seven measures (table 1) with which to assess and report on program and financial performance. In the *FY 2002 PAR*, it reported meeting them all.

OBJECTIVES, SCOPE, AND METHODOLOGY

Our purpose was to (1) assess the collection and reporting of Census performance information submitted to meet GPRA requirements, and (2) determine whether Census's internal controls are sufficient to ensure that performance data is accurate, consistent, and reliable. We reviewed background documentation, and pertinent federal guidance and

¹ GPRA seeks to improve the effectiveness, efficiency, and accountability of federal programs by requiring agencies to set performance goals against which to annually compare and report on actual performance.

² The Department's two other strategic goals are "Provide infrastructure for innovation to enhance American competitiveness" and "Observe and manage the Earth's environment to promote sustainable growth."

³ U.S. General Accounting Office, July 30, 1999. *Performance Plans: Selected Approaches for Verification and Validation of Agency Performance Information*, GAO/GGD-99-139. Washington D.C.

legislation⁴; interviewed Census officials responsible for generating, maintaining, and reporting performance data; identified and tested internal controls; subjected data to validation and verification procedures; and evaluated the clarity and usefulness of explanations provided for each measure in the *FY 2002 PAR*. We further tailored our audit procedures to ensure adequate coverage of each measure under review, as presented in table 1.

Table 1. Census Bureau Goals, Related Measures, and OIG Audit Procedures

| Goals | Measures/Audit Procedures |
|--|---|
| <p>1. Provide and Improve Current Measures of the U.S. Population, Economy, and Governments that Meet the Needs of Policy Makers, Businesses, and the Public.</p> | <ul style="list-style-type: none"> ● Percentage of household surveys attaining specified reliability measurements. Reviewed eight surveys for FY 2001 and nine surveys for 2002; interviewed officials in charge of conducting them. ● Household response rate for Current Population Survey, National Crime Victimization Survey, and American Housing Survey. Response rate for the National Health Interview Survey. Household Response Rate for the Survey of Income and Program Participation. Compared actual response rates with target results for FYs 2001 and 2002. ● Release data products from Survey of Income and Program Participation (SIPP) and Survey of Program Dynamics (SPD). Determined how Census included core data items, topical modules, SIPP and SPD data products in reported results for FYs 1999 through 2002, and the rationale for inclusion or exclusion. ● Release principal economic indicators. Reviewed FY 2002 press releases announcing the 12 indicators and discussed the releases with Census officials. |
| <p>2. Provide the Statistical Foundation and Benchmark Measures of the Population, Economy, and the Government that Meet the Needs of Policy Makers, Federal, State, and Local Government Agencies, Businesses, and the Public.</p> | <ul style="list-style-type: none"> ● Release Decennial Census, Census of Governments, and Economic Census products. Reviewed production schedules to ascertain the number of actual vs. scheduled releases during FY 2001 and FY 2002. |
| <p>3. Reengineer the 2010 Decennial Census to be More Efficient and Cost Effective, Provide Richer Data, Improve Coverage, and Reduce Risk in Meeting Constitutional and Legislative Mandates.</p> | <ul style="list-style-type: none"> ● Implement Master Address File (MAF) /Topologically Integrated Geographic Encoding and Referencing (TIGER) Modernization. Reviewed MAF evaluation proposal, requested evidence of FY 2002 system completion, assessed modernization methodology presented in FY 2002 PAR, and interviewed relevant Census officials. ● Implement American Community Survey (ACS). Reviewed FY 2001 schedule for data collection via mailout operations, and FYs 2001/2002 production schedules for computer-assisted telephone and personal interviewing operations. |

⁴ GPRA; the Chief Financial Officers Act; OMB Circular A-123, *Management Accountability and Control*; OMB Circular A-11, *Preparation and Submission of Strategic Plans, Annual Performance Plans, and Annual Program Performance Reports*, Part 6; and *GAO Standards for Internal Control in the Federal Government*.

We did not test the reliability of computer-generated data for the measures, as such data was not essential to our audit objectives.

We conducted our fieldwork from May to November 2003 at Census headquarters in Suitland, Maryland. We performed this audit in accordance with *Government Audit Standards* issued by the Comptroller General of the United States, and under the authority of the Inspector General Act of 1978, as amended, and Department Organization Order 10-13, dated May 22, 1980, as amended.

FINDINGS AND RECOMMENDATIONS

Our audit revealed that the reporting of the bureau's performance information can be improved. Specifically, (1) imprecisely worded measures and related targets limit the usefulness of reported information and (2) incorrectly worded descriptions of verification procedures lessen the reliability of reported information; and (3) conflicting and incomplete disclosures diminish the usefulness of reported results. We note that Census management has already taken some corrective actions in response to our preliminary audit findings.

Guidance on reporting performance information is contained in the following:

- The Government Performance Results Act of 1993, Section 4, requires that each agency establish performance indicators to be used in measuring the relevant outputs, service levels, and outcomes of each program activity and describe the means to be used to verify and validate measured values.
- OMB Circular A-123, *Management Accountability and Control*, identifies internal controls as the organization, policies, and procedures used by agencies to reasonably ensure that reliable and timely information is obtained, maintained, reported, and used for decision making.
- OMB Circular A-11, Part 6, *Preparation and Submission of Strategic Plans, Annual Performance Plans, and Annual Program Performance Reports* requires an assessment of reliability and completeness of the performance data to be included in the report. The assessment describes any material inadequacies in the completeness and reliability of the data, and any actions the agency can take and is taking to resolve the inadequacy.

I. Imprecisely Worded Measures and Related Targets Limit the Usefulness of Reported Information

The wording of measures in some instances does not reflect the full range of activities being assessed, and in others, does not accurately reflect what is being assessed. Also, imprecisely worded performance targets set the stage for potential misinterpretations of actual results. Consequently, the usefulness of reported performance information is limited.

Goal 1 measures:

- **Percentage of household surveys attaining specified reliability measurements.** The results reported for this measure included two non-household demographic surveys (Teacher Follow-up Survey and School and Staffing Survey). Lumping these two together under a measure that refers to only household surveys skews the data and thus misinforms the reader. Census needs to either revise the title to reflect the inclusion of demographic surveys beyond those related to households or ensure that only household surveys are reported in the results.

Goal 1: Provide and Improve Current Measures of the U.S. Population, Economy, and Governments that Meet the Needs of Policy Makers, Businesses, and the Public

Goal 2 measure:

Goal 2: Provide the Statistical Foundation and Benchmark Measures of the Population, Economy, and Government that Meet the Needs of Policy Makers, Federal, State, and Local Governmental Agencies, Businesses, and the Public

- **Release Decennial Census, Census of Governments, and Economic Census Products.** The FY 2002 *PAR* states that Census met its target of releasing 100 percent of all scheduled products in both FY 2001 and 2002, the implication being that the number contained products for all three censuses. While Census is correct in its statement that all scheduled releases were completed, the only products scheduled for release during this performance period were decennial census products. In order to avoid confusion, Census should make clear which types of products were scheduled for release, and then note if those releases take place.

Goal 3 measures:

- **Implement MAF/TIGER modernization.** Improving the master address file (MAF) and topologically integrated geographic encoding and referencing (TIGER) system is crucial to the success of the 2010 decennial, and is a major activity for the bureau during these years of preparation. This measure is intended to gauge the progress of the modernization effort. The FY 2002 target against which the bureau reported this progress in the *PAR* was, "Prepare plan and systems by the end of FY 2002 to measure housing unit coverage of the address list; list is at least as complete as it was for Census 2000, as measured by the accuracy and coverage evaluation." The bureau reported having met the target.

Goal 3: Reengineer the 2010 Decennial Census to be More Efficient and Cost-Effective, Provide Richer Data, Improve Coverage, and Reduce Risk in Meeting Constitutional and Legislative Mandates

As worded, the target implies that Census would have the plan and systems supporting housing unit coverage of the master address file in place by the end of FY 2002 and have the list itself updated to a level equal in scope of coverage and accuracy to that provided by the Census 2000 MAF. In fact, the bureau assessed and reported its progress toward developing the plan and identifying which systems are needed to support it. To correct this, Census informed us that they intended to add the following statement to the *FY 2003 PAR*:

“Clarification of FY 2002 reported actual performance for Implement MAF/TIGER Modernization --Revised actual results should read: Prepared plan and identified systems to measure housing unit coverage. Though unintentional, the original wording incorrectly implied the completion of systems and finality of measurement results. This is an ongoing program that will yield an annual national estimate of MAF coverage, with the first estimate available in FY 2006.”

However, the *FY 2003 PAR* did not contain such a statement. A Department official informed us that the change did not make it to the Department budget office in time to be reported in the *FY 2003 PAR*. Census informed us they plan to include the information in the *FY 2004 PAR*.

- **Implement the American Community Survey.** The FY 2002 target for this measure was, “Complete field activities supporting the release of 2001 data from the long form transitional database in Summer of FY 2002.” Again, the bureau reported having met the target.

We found that though the data was ready for release by the summer—the implied objective—Census delayed its release until November 2002. Officials informed us that the objective of this target was simply to report whether field activities had been completed by the summer, which they were. However, the wording of the target was open to more than one interpretation, which could lead to confusion on the part of the readers.

Recommendations

The Director of the U.S. Census Bureau should ensure that the following actions are taken:

- (1) Measures and associated target performance levels are revised to accurately convey what activities the performance results are based on, and unclear or incorrect results are restated in future reports.
- (2) Appropriate disclosures are provided in the *PAR* to clarify and enhance explanations of actual performance results.

II. Incorrectly Worded Descriptions of Verification Procedures Lessen the Reliability of Reported Information

For certain performance measures, Census did not provide accurate descriptions of the procedures it employs in the verification of performance results. The description of procedures employed to ensure the reliability of performance information is important as it indicates the amount of confidence that can be placed in the data.

Goal 2 measure:

- **Release Decennial Census, Census of Governments, and Economic Census Products.** Census's verification methodology for this measure is inconsistent. The bureau reports that its procedure is to compare actual dates of data dissemination against projected dates. However, we found that this method applies to only two of the three products—Census of Governments and Economic Census. For the decennial census products, the bureau compares specific products to its projected schedule.

Goal 2: Provide the Statistical Foundation and Benchmark Measures of the Population, Economy, and Government that Meet the Needs of Policy Makers, Federal, State, and Local Governmental Agencies, Businesses, and the Public

Goal 3 measure:

- **Implement the American Community Survey.** Census reports in the *PAR* that it verifies data for this measure by comparing actual product release dates against those in its completion schedule. Census officials told us that in reality the bureau compares actual and projected dates for data *collection*, not data release.

Goal 3: Reengineer the 2010 Decennial Census to be More Efficient and Cost-Effective, Provide Richer Data, Improve Coverage, and Reduce Risk in Meeting Constitutional and Legislative Mandates

Recommendation

The Director of the U.S. Census Bureau should ensure that verification methods are accurately described and provide a true test of data reliability.

III. Conflicting and Incomplete Disclosures for the Goal of Providing and Improving Current Measures of the U.S. Population, Economy, and Governments Diminish Usefulness of Results

The explanations provided for two of the four measures supporting this goal contained inconsistent and noncomparable information, and omitted key details. As such, the usefulness of the data in assessing Census' performance is diminished.

- **Goal 1 Measure: Household response rate for the Current Population Survey, the National Crime Victimization Survey, and the American Housing Survey; response rate for the National Health Interview Survey; response rate for the Survey of Income and Program Participation (SIPP).** The FY 2002 *PAR* initially reports that "The Bureau met 100% of the stated target of obtaining response rates better than 90%." Later in the text, the target is reported as a "90 percent or better response rate." Under the first guideline, the bureau did not fully meet the measure, as the response rate for the American Housing Survey (AHS) was 90 percent in FY 2001. Under the second guideline—the correct one—AHS' 90 percent response rate qualifies the bureau as having met the target. The reader, however, has no way of knowing which target is correct and whether one or both were met.

Further skewing the presentation is Census' improper inclusion of response rates for the American Community Survey (ACS) in the discussion of household response rates. It also inaccurately reported having met 100 percent of the target for all surveys in FY 2001 and FY 2002, when it did not meet that target for the FY 2001 SIPP⁵ and the explanation of the measure does not provide an FY 2001 or FY 2002 target for SIPP, while it does for all other surveys. This omission denies readers full and consistent information with which to assess the reported results. Census officials recognize the presentation contains conflicting information, and noted that the FY 2004 *Annual Performance Plan* will specify a target for each survey for FY 2003 and FY 2004. We recognize that Census has taken corrective action, and advise that in future performance reports the bureau disclose the discrepancy we identified, provide consistent information for SIPP, and note that the FY 2001 SIPP target was not fully met.

- **Goal 1 Measure: Release data products from SIPP and the Survey of Program Dynamics (SPD).** The presentation of this measure suggests that reported data is comparable across the years, when in fact it is not. SIPP and SPD data was measured in FY 1999 but only SIPP core data was included in FYs 2000, 2001 and 2002. Although Census reported this omission in the measure's explanation, the FY 1999 through FY 2002 targets and actual performance presented in the report are based on two different data sources—the first year includes products from two surveys, the second, third, and fourth years contain products from only one.

⁵ The SIPP response rate for FY 2001 was 86.7 percent.

Despite these inconsistencies, the FY 2002 *PAR* asserts that, “the bureau was able to maintain the production time schedule as was achieved in FY 1999 for SIPP and SPD”—which clearly implies the data for all 4 years is comparable.

Recommendations

The Director of U.S. Census Bureau should ensure that the following actions are taken:

- (1) Explanations and discussions of Census measures in the *PAR* provide appropriate information needed to fully understand the substance, context, scope, and meaning of reported results; and
- (2) Unclear or inaccurate results are revised and restated in future reports.

The U.S. Census Bureau Response and OIG Comments

In response to our draft report, the Director of the U.S. Census Bureau expressed the bureau’s general agreement with our recommendations. In addition, the Director noted that many of the issues discussed in this report have been subsequently addressed in the Department of Commerce’s *FY 2003 Performance and Accountability Report (PAR)*. We appreciate the U.S. Census Bureau’s prompt response to the draft audit report and its continued efforts to improve the reporting of its performance results.



UNITED STATES DEPARTMENT OF COMMERCE
Economics and Statistics Administration
U.S. Census Bureau
Washington, DC 20233-0001
OFFICE OF THE DIRECTOR

MAR 19 2004

MEMORANDUM FOR Michael Sears

Assistant Inspector General for Auditing

From: Charles Louis Kincannon
Director

Subject: *Improvements Needed in the Reporting of Performance Measures by the Bureau of the Census*
Draft Audit Report No. FSD-15990-4-XXXX

Thank you for the opportunity to respond to your draft report, *Improvements Needed in the Reporting of Performance Measures by the Bureau of the Census*. The report contains recommendations about the performance measures that we use in the assessment of progress we make in fulfilling the requirements of the Government Performance and Results Act.

Generally, we agree with the recommendations. The Office of Inspector General (OIG) report stated that some of the measures were imprecisely worded, which limited the usefulness of the reported information. One example was the inclusion of two nonhousehold-related surveys under the household survey. We have addressed that in a subsequent version by making more specific the measures (see *Department of Commerce FY 2001 Annual Program Performance Report and FY 2003 Annual Performance Plan*, page 92).

The report also cites issues with wording of descriptions of verification procedures and incomplete disclosures of measures for other demographic data products. In a similar fashion, many of these have been addressed in the 2003 Annual Performance and Accountability Report.

I appreciate OIG's acknowledgement of the progress we have made, especially the recognition that many of the points in the report have already been addressed by the U.S. Census Bureau. As is customary, we will address the specific recommendations after the issuance of the final report.

Please feel free to contact Andrew Moxam at (301) 763-9575 if you have any further concerns.