



December 28, 2020

MEMORANDUM FOR: Dr. Steven D. Dillingham
Director
U.S. Census Bureau

A handwritten signature in black ink, reading "Mark H. Zabarsky".

FROM: Mark H. Zabarsky
Principal Assistant Inspector General for Audit and Evaluation

SUBJECT: **2020 Census Alert:** *Inability to Finish Nonresponse Followup RIs Raises Concerns Over the Quality of More Than 500,000 Cases*
Final Memorandum No. OIG-21-015-M

The Office of Inspector General (OIG) is issuing this 2020 Census Alert to bring to your attention our concerns about the nonresponse followup (NRFU) reinterview (RI) operation. The U.S. Census Bureau (the Bureau) considers NRFU RI as one of the most important parts of its quality control processes. The NRFU RI quality control process follows up on completed enumerator interviews by having Bureau personnel conduct an independent RI on selected cases. RIs allow the Bureau to check the quality of work completed by enumerators throughout the entire NRFU operation.¹

The 2020 Decennial Census has been affected by major events such as the coronavirus pandemic and multiple adjustments to operational timeframes. Our previous work has expressed concerns over the quality of data collected during the NRFU operation—including not fully testing NRFU RI procedures,² accelerating the NRFU schedule,³ and instituting a monetary awards program for enumerators based on the quantity of cases completed per hour and number of hours spent working, regardless of whether the work was completed accurately.⁴ Consequently, these events, coupled with our prior work and the concerns raised

¹ U.S. Department of Commerce U.S. Census Bureau, July 15, 2019. *2020 Census Detailed Operational Plan for: 18. Nonresponse Followup Operation (NRFU)*, Version 2.0. Suitland, MD: DOC Census. Available online at https://www2.census.gov/programs-surveys/decennial/2020/program-management/planning-docs/NRFU-detailed-operational-plan_v20.pdf (accessed December 2, 2020).

² DOC Office of Inspector General, January 30, 2020. *2020 Census: Some Decennial Census Data Quality Assurance Methods Were Not Tested or Did Not Work as Intended During the 2018 End-to-End Census Test*, OIG-20-016-A. Washington, DC: DOC OIG.

³ DOC OIG, September 18, 2020. *The Acceleration of the Census Schedule Increases the Risks to a Complete and Accurate 2020 Census*, OIG-20-050-M. Washington, DC: DOC OIG.

⁴ DOC OIG, September 28, 2020. *2020 Census Alert: The Census Bureau's Program to Provide Awards to Nonresponse Followup Enumerators and Field Supervisors May Require Additional Quality Assurance of Cases to Ensure Data Accuracy*, OIG-20-052-M. Washington, DC: DOC OIG.

in this memorandum about the RI program's ability to provide sufficient quality assurance coverage, creates increased risk for a complete and accurate 2020 Decennial Census.

Background

NRFU is conducted to enumerate housing units for nonresponding addresses. The field operation employs temporary enumerators, operating across the United States and Puerto Rico, to collect information from households.⁵ NRFU RI serves as a quality control check by validating whether initial enumerators conducted interviews, followed procedures, and did not falsify data. For the cases selected, an enumerator who did not complete the original interview conducts the RI.

NRFU RI cases are selected for one of the following four reasons:

- (1) *analytic* (based on statistical calculations)
- (2) *random* (to ensure every enumerator is selected for RI)
- (3) *supplemental* (if an enumerator is suspected of not following procedures)
- (4) *rework*⁶

Once a RI is completed, the Bureau uses computer and clerical matching to compare data collected during RI to the original interview. Cases that do not pass computer matching are deferred to the National Processing Center (NPC) where clerks compare the original interview and RI data for any discrepancies. Upon completing their review, clerks assign an outcome and reason code for each case.⁷

I. Questions Surround the Effectiveness of the Bureau's RI Program During NRFU Operations

RIs, a critical component of the bureau's quality assurance process for NRFU, were designed to detect fabrication and other problems through quality control checks of enumerators' initial work. However, we found the following:

- The Bureau did not conduct RIs for approximately 18 percent of its selected cases.
- RIs were not completed for nearly 35 percent of enumerators who completed at least one NRFU case.
- Clerical resolutions for more than 70,000 completed cases were questionable.

⁵ As of October 15, 2020, more than 331,000 enumerators, cumulatively, had completed the necessary online training for deployment into the field.

⁶ When an enumerator receives a *hard fail* outcome for a case, all of that enumerator's eligible cases are selected for RI. Hard fail outcomes are assigned when the enumerator's work is suspected of falsified data or an intentional violation of procedures.

⁷ An outcome code identifies the conclusion of the case. Possible outcome code options for NPC clerks are *pass*, *fail*, and *hard fail*. The reason code explains the specific reason that an outcome code was chosen.

These concerns raise questions about the effectiveness of the Bureau's quality control process and the potential impact on NRFU data quality for the 2020 Census count.

A. The Bureau did not complete RIs—a critical quality control component of the NRFU operation—for the number of cases selected

The Bureau did not complete approximately 355,000 of its 1.94 million cases selected for RI as of October 15, 2020, when the Bureau concluded field operation activities.⁸ This occurred in large part because the Bureau closed cases without (1) making any RI attempts or (2) reaching their maximum number of attempts. Of the 355,000 uncompleted cases:

- Approximately 182,000 cases were closed after just three contact attempt-days or fewer.⁹ To help meet its revised operation plan, from August 3, 2020, to September 5, 2020, the Bureau reduced the number of contact attempt-days from six to three. Although the Bureau resumed making up to six contact attempt-days on September 6, 2020, it still did not exceed three attempt-days for these 182,000 cases.
- Approximately 18,000 cases were closed after four to five contact attempt-days and more than 59,000 cases were closed after six or more contact attempt-days.
- Nearly 96,000 cases were closed without any contact attempts. The Bureau's decision to conclude NRFU field operations on October 15, 2020—rather than October 31, 2020—may have contributed to the number of cases without any contact attempts.

Despite not completing these cases, Bureau personnel stated that they would accept the initial enumerator's interview data without any further verification. Thus, raising concerns about the effectiveness of a critical quality control process designed to ensure data quality.

B. RIs were not completed for more than 100,000 enumerators

RIs were not completed for nearly 103,000 of the 298,000 enumerators (35 percent) who completed at least one NRFU case. This raises questions about the RI program's ability to provide sufficient quality assurance coverage. Furthermore, although the Bureau intended to use *random* selection to ensure eligible cases completed by every enumerator were included for RI, it disabled random selection for nearly half of the approximately 2-month NRFU operation. Bureau personnel

⁸ Because of delays caused by the coronavirus disease 2019 (COVID-19) pandemic, field operations, culminating with NRFU, were tentatively rescheduled to end by October 31, 2020, rather than July 31, 2020. However, after revising operation plans to adjust to the October 31 deadline, the Bureau announced on August 3, 2020, that operations would end on September 30, 2020. Although a district court ordered the Bureau to continue field operations through October 31, the U.S. Supreme Court blocked the district court order and the Bureau ended field operations on October 15, 2020.

⁹ The Bureau sets its attempt limit based on number of days. Thus, if an enumerator makes multiple contact attempts on a single day, those multiple contact attempts are defined as one attempt-day.

stated that *analytic* selection would compensate for the decision to disable random selection by selecting RIs on problematic enumerators. However, more than 170,000 of the 355,000 uncompleted RI cases as of October 15, 2020, were chosen based on analytic selection. By not completing RI cases based on analytic selection, the Bureau missed opportunities to identify potentially problematic enumerators and increase its quality assurance coverage. It also raises concerns that the Bureau's reliance on analytic selection to compensate for disabling random selection was not effective.

C. NPC clerical resolution outcomes for more than 70,000 cases are questionable

Of the approximate 1.6 million cases completed during RI, approximately 696,000 cases received *pass* outcome codes during clerical resolution. However, nearly 69,000 of those cases with a pass outcome code (10 percent) received an *inconclusive* reason code, indicating that the clerk could not determine whether the original interview data was correct or enumeration procedures were followed, but still selected the pass outcome code. For instances when an NPC clerk cannot make a determination after thoroughly reviewing a case, the Bureau's training guides encourage clerks to pass cases using the inconclusive reason code and "move on." This guidance raises concerns about whether cases marked inconclusive should have received a pass outcome code and whether the number of pass cases is overstated.

In addition, nearly 1,700 of the cases with a pass outcome code did not receive a reason code at all, and several received reason codes that should only have been applied to the *fail* outcome code. The clerical resolution process went untested during the 2018 End-to-End Census Test¹⁰ and, according to Bureau personnel we spoke with, the Bureau was unable to fully develop the system used by NPC clerks, thus allowing the selection of reason codes that did not apply to the selected outcome code. We also learned that each NPC supervisor oversaw 25–30 clerks and only an estimated 20 percent of all cases completed by clerks were reviewed by supervisors. The lack of system development and adequate supervisory oversight raises concerns on whether assigned outcome codes were vetted and justified.

II. Additional Uncompleted High-Risk Cases Selected After NRFU for RI Indicate Further Data Quality Issues

In addition to the 1.94 million cases selected for RI (see I.A of this memorandum), after NRFU field operations ended, the Bureau selected additional RI cases to help research methods for improving future samples. The additional selection consisted of approximately 238,000 cases from interviews conducted before NRFU field operations ended. Nearly 120,000 of these cases were based on *rework* and more than 118,000

¹⁰ The Bureau developed key innovations ahead of the 2020 Census to control cost and maintain data quality. To ensure these processes performed as intended, the Bureau conducted what it referred to as the "2018 End-to-End Census Test." However, the NRFU RI operation was not fully tested during the 2018 End-to-End Census Test—in particular, the clerical resolution process went untested. Instead, a limited "dry run" was conducted in September–October of 2019 for clerical resolution.

were based on *analytic* factors. Due to their inherent risk, rework and analytic cases may warrant a greater need for quality control checks. Bureau personnel informed us that most if not all of the rework cases selected would have been a result of assigning a performance fail code to an enumerator—meaning the enumerator continued to make procedural errors even after the Bureau’s attempts to correct performance.¹¹ Analytic cases are selected when an enumerator’s work differs significantly from other enumerators. However, even though these 238,000 additional cases may present a higher risk of instances where enumerators performed insufficient work, the Bureau decided it would not conduct RIs for them. Instead, the Bureau decided it would accept the initial enumerator’s interview data without any further verification. Consequently, these additional high-risk cases that went uncompleted raise concerns about the quality of data collected as part of the 2020 Census.

We are issuing a series of 2020 Census Alert memorandums to bring to the attention of the Bureau and its stakeholders immediate concerns with the 2020 Census that we have identified during our ongoing oversight. We prepared this memorandum in alignment with OIG’s quality control standards and the Council of the Inspectors General on Integrity and Efficiency’s *Quality Standards for Federal Offices of Inspector General*, which require that we conduct our work with integrity, objectivity, and independence.

We are not requesting a formal response to this 2020 Census Alert memorandum, as the key issues discussed in it were briefed to cognizant Bureau officials in advance of issuance. This memorandum will be posted to our public website.

If you have any questions or concerns about this memorandum, please contact me at (202) 482-3884 or Terry Storms, Division Director, at (202) 482-0055.

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¹¹ If an enumerator receives more than two *fail* outcome codes, the Regional Census Center (RCC) is notified and coordinates with the enumerator’s Census Field Supervisor and Census Field Manager to ensure that appropriate procedures take place to correct the enumerator’s actions. If the enumerator’s fail count continues to increase, the RCC will review the enumerator’s body of work. The RCC can decide to assign a *performance fail* code to the enumerator which will (1) prevent further cases from being assigned and (2) place the enumerator’s entire eligible workload into rework RI.