Background
This decade, the U.S. Census Bureau (the Bureau) reported major cost drivers of the decennial census and developed key innovations in order to control cost and maintain data quality. The Bureau conducted the 2018 End-to-End Census (2018 E2E) Test in order to ensure that these innovations will perform as intended when used together as part of the decennial census design. The 2018 E2E Test occurred in two phases. First, the Bureau conducted early operations—which included address canvassing—between March 10, 2017, and October 6, 2017, in Pierce County, Washington; Providence County, Rhode Island; and Bluefield-Beckley-Oak Hill, West Virginia. Second, the Bureau conducted peak operations, which included enumeration activities (group quarters, nonresponse followup [NRFU], and update leave) between August 31, 2017, and July 31, 2018, only in Providence County.

Why We Did This Review
Our objectives during this audit were to determine whether (1) the test included data quality components identified as success criteria in the test plan; (2) the Bureau designed the test to inform the 2020 Census; (3) NRFU systems are included in the test and function as designed; and (4) the Bureau performed non-ID processing and unduplicated responses in a timely manner to reduce the NRFU operation’s workload.

U.S. CENSUS BUREAU

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

WHAT WE FOUND
We found the following:
1. The Bureau has not fully tested some activities designed to ensure the quality of 2020 Census respondent data.
2. The Bureau’s reengineered approach to NRFU closeout has not been adequately tested.
3. Potentially unqualified field staff completed cases during NRFU.
4. Unresolved NRFU alerts may not help the Bureau maintain or improve the quality of decennial census data.

The Bureau cannot be certain of how some of its new decennial census innovations will function as part of the integrated 2020 Census design. This uncertainty increases the risk that the Bureau will not be able to control cost while maintaining data quality during decennial census operations.

With respect to our fourth objective, we learned that the Bureau performed non-ID processing (that is, real-time matching of responses without Census IDs, or non-ID responses) to the Bureau’s existing address inventory in a timely manner in order to reduce the NRFU workload. Additionally, we learned that the Bureau does not unduplicate responses from the same household collected via various response modes until all data collection operations are complete. Therefore, the unduplication process does not reduce the NRFU workload.

In addition, and noted in an “Other Matters” section of this report, we discussed how (1) NRFU quality assurance lacks segregation of duties and (2) the Bureau must still improve its training for NRFU operation proxy procedures.

WHAT WE RECOMMEND
We recommend that the Director of the U.S. Census Bureau do the following:
1. Develop a strategy to immediately address quality assurance issues that may occur during the early stages of the self-response and NRFU operations.
2. Determine the optimal time during NRFU to begin closeout procedures and ensure that systems support those procedures prior to the 2020 Census.
3. Correct automated training system failures that occurred during the 2018 E2E Test and implement and monitor controls to ensure that field staff are qualified before working in the field.
4. Monitor the resolution of alerts at a national level to identify whether alerts are (a) resolved timely and (b) functioning correctly during the operation.
5. Develop a strategy to remedy alert issues and communicate appropriate procedures and instructions to field staff if monitoring efforts identify issues.