**Department of Commerce**
**United States Census Bureau**
**OMB Information Collection Request**
**2018 End-to-End Census Test - Address Canvassing Operation**
**OMB Control Number 0607-XXXX**

**Part A. Justification**

**1. Necessity of the Information Collection**

During the years preceding the 2020 Census, the Census Bureau will pursue its commitment to reduce the costs of conducting a decennial census, while maintaining our commitment to quality. In Fiscal Year 2018, the Census Bureau will conduct the 2018 End-to-End Census Test. This last major test before the 2020 Census will (1) test and validate 2020 Census operations, procedures, systems, and field infrastructure together to ensure proper integration and conformance with functional and nonfunctional requirements, and (2) produce a prototype of geographic data products.

Address Canvassing is the first operation in the 2018 End-to-End Census Test, with field activity beginning in the summer of 2017. The purpose of the Address Canvassing operation is (1) to deliver a complete and accurate address list and spatial database for enumeration and tabulation, and (2) to determine the type and address characteristics for each living quarter. The Address Canvassing operation consists of two major components: In-Office Address Canvassing and In-Field Address Canvassing. Only the latter component involves collection of information from residents at their living quarters.

The following objectives are crucial to a successful Address Canvassing operation:
- Test the listing and mapping capabilities required by In-Field Address Canvassing.
- Validate the creation of In-Field Address Canvassing workload by In-Office Address Canvassing.
- Conduct a listing quality control operation during In-Field Address Canvassing.

**Supporting Documents about the 2020 Census Design and the 2018 End-to-End Census Test**

**Objectives**

We are submitting with the package the following documents with the purpose stated:

1.  The 2020 Census Operational Plan documents at a high-level the objectives for the census tests already completed, as well as those planned for the future. This document shows the current planned design of the 2020 Census and identifies design decisions made, as well as remaining decisions to be made using census test results.

    http://www.census.gov/programs-surveys/decennial-census/2020-census/planning-management/planning-docs/operational-plan-2.html

2.  The 2020 Census Detailed Operational Plan for the Address Canvassing Operation describes the objectives and procedures for all aspects of the Address Canvassing program, including a description of the major tasks involved in the implementation, the overall program workflow, and the overall resources needed to support the effort.

    https://www.census.gov/programs-surveys/decennial-census/2020-census/planning-management/memo-series/2020-memo-2015_04.html

In addition, we are submitting a planning document that lists our Goals, Scope, Constraints, and Issues for the 2018 End-to-End Census Test.

**Sites**

For the 2018 End-to-End Census Test, the sites of Pierce County, Washington; Providence County, Rhode Island; and Bluefield-Beckley-Oak Hill, West Virginia, were chosen based on a variety of characteristics, including:

- A mix of address styles, such as city-style addresses (i.e., 101 Main St), non-city-style addresses (i.e., Rural Route 2, Box 12), and location descriptions (i.e., tan mobile home).

- A mix of housing types and conditions, including small and large multiunit structures, commercial-to-residential conversions, residential redevelopment, vacant housing units, group quarters, and mobile homes.

- A diverse population with varying demographics, such as age, race, and language spoken at home.

**Address Canvassing**

For the 2010 Census, the Address Canvassing field staff, referred to as listers, traversed almost every block in the nation to compare what they observed on the ground with the contents of the Census Bureau's address list. Listers verified or corrected addresses that were on the list, added new addresses to the list, and deleted addresses that no longer existed. Listers also collected map spot locations (i.e., Global Positioning System coordinates) for each structure and added new streets.

The Census Bureau has determined that while there will be a full Address Canvassing of the nation in advance of the 2020 Census, a full In-Field Address Canvassing of the nation is no longer necessary. Advancements in technology have enabled continual address and spatial updates to occur throughout the decade as part of the In-Office Address Canvassing effort. This has made it possible to limit In-Field Address Canvassing to only the most challenging areas.

In-Office Address Canvassing is the process of using empirical geographic evidence (e.g., imagery, comparison of the Census Bureau's address list to partner-provided lists) to assess the current address list and make changes where necessary. This component detects and captures change from high quality administrative and third-party data, reducing the In-Field Address Canvassing workload. Areas not

resolved in the office become the universe of geographic areas worked during In-Field Address Canvassing. Performing the In-Field Address Canvassing operation has not fundamentally changed since the 2010 Census. The software has been updated and needs to be tested in a full production environment before the 2020 Census. The major innovation for Address Canvassing this decade has been reducing the areas that require In-Field Address Canvassing through the use of In-Office Address Canvassing. In-Field Address Canvassing is the process of having listers visit specific geographic areas to identify every place where people could live or stay, and then compare what they see on the ground with the existing census address list and either verify or correct the address and location information. Listers also classify each living quarter (LQ) as a housing unit or a group quarter (GQ). Listers will knock on doors at every structure in the assignment in an attempt to locate LQs. If someone answers, the lister will provide a Confidentiality Notice and ask about the address in order to verify or update the information, as appropriate. The listers will then ask if there are any additional LQs in the structure or on the property. If there are additional LQs, the listers will collect/update that information, as appropriate. If listers do not find anyone at home, they will update the address list as best they can by observation. The Census Bureau expects that they would make contact with residents (i.e., someone is at home) approximately 25 percent of the time.

## 2. Needs and Uses

The Census Bureau needs to validate that the operational design of Address Canvassing is ready for 2020 Census production, from a systems, operational, and architectural perspective. The results of this test will inform the Census Bureau's final preparations for the Address Canvassing operation in advance of the 2020 Census. In particular, conducting a live operation will ensure all the systems, instruments, and processes are functioning correctly or will provide indicators of what needs to be fixed. In addition, metrics collected during the operation will provide additional data to be used for budget and operational planning purposes. In particular, the following are research questions that Census Bureau plans to answer

using data collected from In-Field Address Canvassing operations:

1. What is the summary of the operational metrics?

2. What are the block actions performed by In-Office Staff and Field Staff?

3. How well did In-Office Address Canvassing identify the workload for In-Field Address Canvassing?

The last question, in particular, will add a data point for input into budget estimates and expectations for the 2020 Census.

While the Census Bureau will endeavor to answer the above research questions, there are some known analysis limitations. These include 1) the 2018 End-To-End Census Test is a site test with its own special living quarters characteristics, so test results cannot be generalized to the entire nation and do not necessarily predict trends or rates/estimates expected in the 2020 Census; and 2) In-Field Address Canvassing is not an independent listing and true evaluation of In-Office Address Canvassing because it is dependent on In-Office Address Canvassing, which provides block and address information for listing.

**Information Quality**

Information quality is an integral part of the predissemination review of Census Bureau data (fully described in the Census Bureau's Information Quality Guidelines at https://www.census.gov/quality/guidelines/). Information quality is also integral to the data collections conducted by the Census Bureau and is incorporated into the clearance process required by the Paperwork Reduction Act.

The data collected from households and individuals during the Address Canvassing operation in the 2018 End-to-End Census Test will be used to evaluate the readiness of operations and systems for the 2020 Census. Additionally, the Census Bureau will use the Address Canvassing results to create the address list for the enumeration portion of the 2018 End-to-End Census Test.

### 3. Use of Information Technology

The Address Canvassing operation in the 2018 End-to-End Census Test will use an automated listing and mapping instrument.

The Address Canvassing operation is heavily dependent on information technology systems, and a significant portion of the test is devoted to operationally testing these systems. In addition to data collection, the test will employ automated systems to administer and manage training, manage workloads, route field workers to assignments, alert supervisors of potential problems, create management reports, and process the data received from the operation.

### 4. Efforts to Identify Duplication

These efforts do not duplicate information collected by any other agency. Further, there is no similar current information available that could be used or modified for these purposes. This operation creates the address list that is used for enumeration activities in the census or census test.

### 5. Minimizing Burden

Using the Delivery Sequence File provided by the U.S. Postal Service, along with address information provided by state, local, and tribal governments to update the Master Address File (MAF), will allow us to verify existing information in appropriate areas instead of collecting this information during In-Field Address Canvassing. This minimizes respondent burden by minimizing the areas and addresses that are included in the In-Field Address Canvassing.

The information collection instruments document (OMB Package 2018 Ad Can-LiMA screenshots) contains screenshots of the LiMA instrument, which includes the fields the lister will fill out. When contact with respondents is required, the information requested is minimal (inquiry about the address or physical location of the housing unit and additional LQs in the structure or on the property). For GQs, the

requested information also includes information sufficient to identify the type of GQ and include it appropriately in subsequent enumeration operations, such as GQ name, number of beds, and GQ contact person. When speaking with a respondent, the lister asks the respondent to confirm or provide the data in these fields. If no respondent is available, the data elements are collected or verified based on visual inspection.

The Address Canvassing Test in late 2016 tested the two major components of the reengineered Address Canvassing operation: In-Office Address Canvassing and In-Field Address Canvassing. The purpose of this test was to determine accuracy and feasibility of some of the planned innovations for Address Canvassing. The focus in the 2018 End-to-End Census Test is the overall integration of the operations, processes, and systems, including the Address Canvassing operation.

## 6. Consequences of Less Frequent Collection

If this collection of information does not occur, it would significantly prevent the Census Bureau's ability to conduct integrated testing of 2020 Census systems, procedures, and field infrastructure, and thus the ability to refine operations before the 2020 Census. Frequency cannot be decreased, as this is a one-time data collection activity.

## 7. Special Circumstances

No special circumstances exist.

## 8. Consultations Outside the Agency

In developing this test, the Census Bureau consulted with a variety of stakeholders, including, but not limited to, academics, national researchers, community and organizational leaders, and the Census Bureau's Advisory Committees. In addition, external consultants from the National Academy of Sciences provided feedback about the Census Bureau's objectives for the 2018 End-to-End Census Test.

The results from this test will be shared widely with decennial census stakeholders and released to the public. To help evaluate and assess the results of the 2018 End-to-End Census Test, the Census Bureau will conduct debriefings with field staff who work on the test.

The notice for public comment, titled, "2018 End-to-End Census Test — Address Canvassing Operation," was published in the *Federal Register* October 19, 2016, 81 FR 72036. The Census Bureau received one set of comments during the 60-day period from the National Association of Latino Elected and Appointed Officials (NALEO) Education Fund. The NALEO comments focused on ensuring that efforts to reduce the overall costs of conducting the 2020 Census do not compromise the quality of the data, particularly as it relates to undercounts of hard-to-count populations.

The Census Bureau has implemented a number of mechanisms to ensure the quality of its Address Canvasing operations. The In-Office Address Canvassing process will review all housing units using multiple sources of data, such as aerial imagery, administrative data (including the U.S. Postal Service's Delivery Sequence File, which includes all known delivery addresses), and third-party data. In-Office Address Canvassing allows continuous update and verification of MAF data so that the Census Bureau can target resources to resolve data gaps before In-Field Address Canvassing. In-Field Address Canvassing can then focus on areas identified for additional data collection, including areas likely to contain hidden housing units and difficult-to-list units, which the Census Bureau expects will minimize undercounting.

The In-Office Address Canvassing results will determine blocks that require In-Field Address Canvassing during the 2018 End-to-End Census Test. The Census Bureau will review this information well before the start of In-Field Address Canvassing in order to employ effective recruiting and hiring strategies. These strategies will ensure that field listers have the knowledge and skills (including language skills) necessary to work effectively in areas targeted for In-Field Address Canvassing, which will also ensure the quality

of address data. The testing of this process will allow the Census Bureau to evaluate its hiring and recruiting procedures and make any necessary adjustments to its 2020 Census Address Canvassing operations.

The Census Bureau has also developed a series of tests, processes, and analyses designed to ensure the quality of MAF/TIGER data used for census enumeration. The MAF Coverage Study (MAFCS) will be conducted annually between 2016 and 2019 and is designed to 1) produce Master Address File (MAF) coverage estimates at national and subnational levels; 2) provide continuous updates to the MAF for current surveys and the 2020 Census; and 3) evaluate the In-Office Address Canvassing processes and results. The 2016 Address Canvassing Test, the 2018 End-to-End Census Test, and the use of quality control measures during both the In-Office and In-Field Address Canvassing operations will also contribute to the continuous improvement of the MAF/TIGER data. The Census Bureau will use this high-quality address frame data to carry out thorough and accurate enumeration operations.

**9. Paying Respondents**

Respondents will not be paid or provided with gifts.

**10. Assurances of Confidentiality**

The Census Bureau will conduct the Address Canvassing operation in the 2018 End-to-End Census Test under the authority of Title 13 United States Code Sections 141 and 193. All respondents who participate in the Address Canvassing operation in the 2018 End-to-End Census Test will be informed via the Confidentiality Notice that the information they provide is confidential under that law, but that the same law makes participation mandatory. All collected information that identifies individuals will be held in strict confidence according to the provisions of Title 13 United States Code, Section 9 and 214.  Per the Federal Cybersecurity Enhancement Act of 2015, the data is protected from cybersecurity risks through screening of the systems that transmit the data.

**11. Justification for Sensitive Questions**

None of the questions asked during the activities described above are of a sensitive nature, and they should not pose any problem for respondents in that respect.

**12. Estimate of Burden Hours**

The estimated number of respondents is based on the expectation that 25 percent of addresses in the 2018 End-to-End Census Test are sent to the In-Field Address Canvassing operation. From those addresses in the In-Field Address Canvassing operation, we expect 25 percent of households to have somebody at home. The expectation that only 25 percent of households will have somebody at home is based on the Address Canvassing Test in 2016 and previous Address Canvassing operations. The estimated time per response is 5 minutes, which is based on the Address Canvassing Test in 2016 and previous Address Canvassing operations.

**Estimated Number of Respondents:** 43,965 households

**Estimated Time per Response:** 5 minutes

**Estimated Total Annual Burden Hours:** 3,664 hours

| Test Site | Estimated Number of Respondents | Estimated Time per Response | Total Burden Hours |
|---|---|---|---|
| Pierce County, Washington | 20,818 | 5 minutes | 1,735 |
| Providence County, Rhode Island | 17,526 | 5 minutes | 1,461 |
| Bluefield-Beckley-Oak Hill, West Virginia Area | 5,621 | 5 minutes | 468 |
| **Totals** | **43,965** | | **3,664** |

### 13. Estimate of Cost Burden to Respondents

There are no costs to respondents other than their time to participate in this data collection.

### 14. Cost to Federal Government

The cost for the Address Canvassing operation in the 2018 End-to-End Census Test is estimated to be $1.4 million. This cost includes only salaries for field workers for training and production, as other costs, such as space acquisition, are attributed to the enumeration portion of the 2018 End-to-End Census Test.

### 15. Reason for Change in Burden

The increase in burden is attributable to the information collection being submitted as a new collection.

### 16. Project Schedule

| Activity/Milestone | Date/Range |
|---|---|
| Conduct In-Field Address Canvassing | August 14, 2017 – September 12, 2017 |
| Conduct In-Field Address Canvassing Listing QC | August 21, 2017 – September 19, 2017 |

### 17. Request to Not Display Expiration Date

No exemption is requested.

### 18. Exceptions to the Certification

There are no exceptions to the certification.

**Appendix A- Documents Included in the 2018 End-to-End Census Test- Address Canvassing Operation**

1. Supporting Statement A (this document)
2. Supporting Statement B
3. 2020 Census Operational Plan v2.0
4. 2020 Census Detailed Operational Plan for the Address Canvassing Operation
5. 2018 End-to-End Census Test – Goals, Scope, Constraints and Issues
6. 2018 End-to-End Census Test – Address Canvassing 83-I
7. 2018 End-to-End Census Test – Address Canvassing 60-day Federal Register Notice
8. 2018 End-to-End Census Test – Address Canvassing 30-day Federal Register Notice
9. 2018 End-to-End Census Test – Address Canvassing Public Comments for the 60-day Federal Register Notice (NALEO)
10. 2018 End-to-End Census Test – Address Canvassing  Instruction: LiMA Screenshots
11. 2018 End-to-End Census Test – Address Canvassing Confidentiality Notice