



July 2019

2020 CENSUS

Bureau Is Making Progress Opening Offices and Recruiting, but Could Improve Its Ability to Evaluate Training

Accessible Version

GAO Highlights

Highlights of [GAO-19-602](#), a report to congressional requesters

View [GAO-19-602](#). For more information, contact Robert Goldenkoff at 202-512-2757 or goldenkoff@gao.gov.

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Why GAO Did This Study

The decennial census is a crucial, constitutionally mandated activity with immutable deadlines. To meet these statutory deadlines, the Bureau carries out thousands of activities that need to be successfully completed on schedule for an accurate, cost-effective head count. These activities include opening area census offices, recruiting and hiring a large temporary workforce, and training that workforce.

GAO was asked to review the Bureau's plans for critical logistical support activities. This report (1) assesses the Bureau's progress in opening area census offices; (2) determines the extent to which the Bureau is following its field hiring and recruiting strategy for the 2020 Census; and (3) determines the extent to which the Bureau has followed its plans for training field staff, and whether this training approach is consistent with selected leading practices.

To assess the extent to which the Bureau is following its plans for opening area census offices, recruiting and hiring, and training, GAO reviewed current Bureau planning documents and schedules, and interviewed Bureau officials, including officials at the Bureau's six regional offices. GAO used its guide to training ([GAO-04-546G](#)) as criteria for selected leading practices.

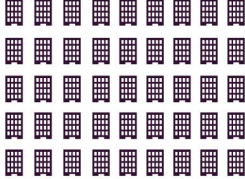
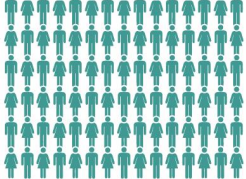

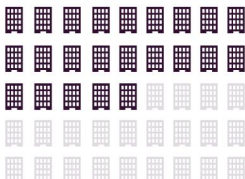

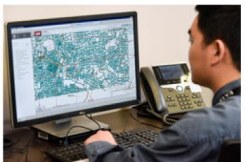
What GAO Recommends

The Secretary of Commerce should direct the U.S. Census Bureau to revise plans to include goals and performance measures for evaluating its new training approach. The Department of Commerce agreed with GAO's recommendation.

What GAO Found

To help control the cost of the 2020 Census while maintaining accuracy, the Census Bureau (Bureau) is making significant changes in three areas—office space, recruiting and hiring, and training—compared to prior decennials. The Bureau is reducing its use of office space, hiring fewer census field staff, and adopting a blended training approach of instructor-led, computer-based, and hands-on training (see figure).

Comparison of Census Bureau 2010 and 2020 Logistical Activities

Year	Office Space	Hiring For Selected Operations	Training
2010	<p>494 offices</p> 	<p>628,000 hired</p> 	<p>Instructor-led</p> 
2020	<p>248 offices</p> 	<p>400,000 hired</p> 	<p>Computer-based instruction</p> 

Source: GAO analysis of Census Bureau data. | GAO-19-602

GAO found that the the Bureau generally appears to be positioned to carry out these activities as planned, if implemented properly.

Opening offices. While the Bureau experienced early delays when regions were trying to find office space and acquire leases, Bureau officials said that the deadlines for the later phases of renovations will allow them to make up time lost. As of June 2019, there were signed leases for 247 of 248 offices.

Recruiting and hiring. As of June 2019, the Bureau was exceeding its recruiting goals for early operations, but identified challenges in areas such as completing background checks and hiring during low unemployment, especially for partnership specialist positions. GAO will continue to monitor these challenges, as recruiting and hiring for the census continues.

Training. The Bureau generally followed its training plans for 2020 and generally followed selected leading practices for its training approach. However, GAO found that the Bureau does not have goals and performance measures for evaluating its new training approach. Without goals and performance measures the Bureau will not be able to accurately assess the cost and benefits of its new training approach.

Contents

GAO Highlights		2
	Why GAO Did This Study	2
	What GAO Recommends	2
	What GAO Found	2
Letter		1
	Background	3
	The Bureau's Efforts to Open Area Census Offices Appear on Track, Despite Some Schedule Slippages	6
	The Bureau Has Exceeded Its Early Recruiting Goals for the 2020 Census; However, It Faces Some Challenges Going Forward	12
	The Bureau Is Following Its Planned Training Approach for 2020, but Has Opportunities to Improve Its Ability to Assess Performance	24
	Conclusions	33
	Recommendation for Executive Action	34
	Agency Comments and Our Evaluation	34
Appendix I: Objective, Scope, and Methodology		37
Appendix II: Comments from the Department of Commerce		39
Appendix III: GAO Contact and Staff Acknowledgments		40
Appendix IV: Accessible Data		41
	Data Tables	41
	Agency Comment Letter	45
Tables		
	Table 1: Deviations from Area Census Office Requirements	9
	Table 2: Expected and Actual Productivity Rates for the In-Field Address Canvassing Operation in the 2018 End-to-End Test ¹⁴	
	Data table for Highlights Comparison of Census Bureau 2010 and 2020 Logistical Activities	41

Data for Figure 1: 2020 Census Area Census Office Structure	41
Data for Figure 2: 2020 Census Area Census Office Locations	42
Data table for Figure 3: Recruiting and Hiring Timeline for In-field Address Canvassing and Nonresponse Follow-up	43
Data for Figure 6: Background Check Process for Employment with the Bureau	43
Data table for Figure 7: Assessing the Bureau’s Planned Training Approach for Design/Development against Selected Leading Practices	44
Data Table for Figure 8: Assessing the Bureau’s Planned Training Approach for Evaluation against Selected Leading Practices	45

Figures

Figure 1: 2020 Census Area Census Office Structure	5
Figure 2: 2020 Census Area Census Office Locations	7
Figure 3: Recruiting and Hiring Timeline for In-field Address Canvassing and Nonresponse Follow-up	13
Figure 4: An Example of Census Bureau Website Spanish Language Recruitment Advertisement	15
Figure 5: An Example of the MOJO Recruit Interactive Map Identifying Early Operation Recruiting Status of Specific Census Tracts	17
Figure 6: Background Check Process for Employment with the Bureau	20
Figure 7: Assessing the Bureau’s Planned Training Approach for Design/Development against Selected Leading Practices	29
Figure 8: Assessing the Bureau’s Planned Training Approach for Evaluation against Selected Leading Practices	31

Abbreviations

AAAP	Automated Advanced Acquisition Program
ACO	Area Census Offices
Bureau	U.S. Census Bureau
CIS	Census Investigative Services
Commerce	Department of Commerce
e-QIP	Electronic Questionnaires for Investigations Processing System
GSA	General Services Administration
IT	Information Technology
OF306	Optional Form 306: Declaration for Federal Employment

OIG	Office of the Inspector General
OPM	Office of Personnel Management
RCC	Regional Census Center
ROAM	Response Outreach Area Mapper
SF85	Standard Form 85: Questionnaire for Non-sensitive Positions

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July 19, 2019

Congressional Requesters

The decennial census is a crucial, constitutionally mandated activity with immutable deadlines.¹ The U.S. Census Bureau (Bureau) is required by law to count the population as of April 1, 2020; deliver state apportionment counts to the President by December 31, 2020; and provide redistricting data to the states by April 1, 2021. To meet these deadlines, the Bureau carries out thousands of activities that need to be successfully completed on schedule for an accurate, cost-effective head count. These activities include opening area census offices, recruiting and hiring a large temporary workforce, and training that workforce. An operation of this scale with these fixed deadlines comes at a high cost and with many risks.

The Bureau estimates the 2020 Decennial Census could cost as much as \$15.6 billion after adjusting for inflation to the current 2020 Census time frame (fiscal years 2012 to 2023), which would be the most expensive decennial census to date. In February 2017, we added the 2020 Census to our High-Risk List because of operational and other issues, and the census remains on our 2019 High-Risk List as these issues have persisted.²

In an attempt to control escalating costs, the Bureau re-engineered its approach to the 2020 Census. Among other innovations, the Bureau is making logistical changes, such as using an electronic case management system to assign door-to-door field work for two of its largest field operations—address canvassing and nonresponse follow-up.³ This change is intended to allow the Bureau to reduce its footprint by opening fewer offices and hiring fewer people than in 2010. The Bureau also plans

¹U.S. Const. art. I, § 2, cl. 3.

²GAO, *High-Risk Series: Substantial Efforts Needed to Achieve Greater Progress on High-Risk Areas*, [GAO-19-157SP](#) (Washington, D.C.: Mar. 6, 2019).

³The address canvassing operation has census workers verify and update addresses to ensure the Bureau has accurate address and map information for every location where a person could reside. For nonresponse follow-up, census workers visit the homes of people who did not respond to their census questionnaires and attempt to enumerate the household.

to incorporate technology into its training processes, such as using web-based training.

You asked us to review the Bureau's plans for critical logistical support activities. This report (1) assesses the Bureau's progress in opening area census offices; (2) determines the extent to which the Bureau is following its field hiring and recruiting strategy for the 2020 Census; and (3) determines the extent to which the Bureau has followed its plans for training field staff, and whether this training approach is consistent with selected leading practices.

To address our objectives, we reviewed current Bureau planning documents and schedules, and we interviewed Bureau officials, including officials at the Bureau's six regional offices. To assess the status of those logistical support activities, we interviewed Bureau officials and compared the current status of the activities to the Bureau's plans, schedules, and timelines, and identified differences. We also reviewed a randomly selected non-generalizable sample of Area Census Office (ACO) files at the Philadelphia Regional Census Center (RCC) to determine whether justification was included when changes to ACO locations occurred.

As part of our analysis of the Bureau's new training approach, we compared the Bureau's planned approach to 11 selected leading practices from GAO's *Guide to Assessing Strategic Training and Development Efforts in the Federal Government*.⁴ The guide includes four phases of training—planning/analysis, design/development, implementation, and evaluation. This report includes the design/development and evaluation phases of training. We did not assess the implementation phase because field staff training for the 2020 Census had not yet begun during our audit.

We also did not assess the planning/analysis phase because practices in that phase are more applicable to agency-wide rather than program-specific training development, and focus on full-time permanent employees rather than temporary employees. Within the design/development phase and evaluation phase, we did not assess all best practices because some of those best practices were also more applicable to agency-wide rather than program-specific training

⁴GAO, *Human Capital: A Guide for Assessing Strategic Training and Development Efforts in the Federal Government* (Supersedes [GAO-03-893G](#)), [GAO-04-546G](#) (Washington, D.C.: Mar. 1, 2004).

development, or we had already evaluated the practices such as the cost.⁵ This report primarily focuses on training for the address canvassing and nonresponse follow-up operations. For more details on our scope and methodology, see appendix I.

We conducted this performance audit from August 2018 to July 2019 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

Counting the nation's approximately 140 million households is an enormous undertaking requiring such essential logistics as the opening of hundreds of area offices to conduct essential field activities, recruiting and hiring hundreds of thousands of temporary workers to carry out those activities, and developing an approach to training those employees. To help control costs while maintaining accuracy, the Bureau is making significant changes in each of these areas compared to prior decennials.

Area Census Offices

According to Bureau planning documents, the Bureau intends to use technology to efficiently and effectively manage the 2020 Census fieldwork, and as a result, reduce the staffing, infrastructure, and brick-and-mortar footprint required for the 2020 Census. The three main components of the reengineered field operations are increased use of technology, increased management and staff productivity, and streamlined office and staffing structure.

The Bureau's 2020 Operational Plan states that 2020 Census field operations will rely heavily on automation. For example, the Bureau plans to provide most listers—temporary staff who verify and update addresses

⁵GAO, *2020 Census: Census Bureau Improved the Quality of Its Cost Estimation but Additional Steps Are Needed to Ensure Reliability*, [GAO-18-635](#) (Washington, D.C.: Aug. 17, 2018), and *2020 Census: Census Bureau Needs to Improve Its Life-Cycle Cost Estimating Process*, [GAO-16-628](#) (Washington, D.C.: June 30, 2016).

and maps—and enumerators— temporary staff who follow up with households that do not respond to the census questionnaire—with the capability to receive work assignments and perform all administrative and data collection tasks directly from a mobile device allowing them to work remotely. Supervisors will also be able to work remotely from the field and communicate with their staff via these devices—precluding them from needing access to a nearby local office.

The Bureau's 2020 Operational Plan states that these enhanced capabilities will significantly reduce the number of offices required to support 2020 Census fieldwork. In the 2010 Census, the Bureau established 12 RCCs and nearly 500 ACOs. The new design for the 2020 Census field operations includes six RCCs with 248 ACOs. Those 248 will be split into two waves, with 39 of the offices opening for Wave 1 by March 2019 to support early census operations such as in-field address canvassing, and the remaining 209 opening for Wave 2 by September 2019.

Recruiting and Hiring

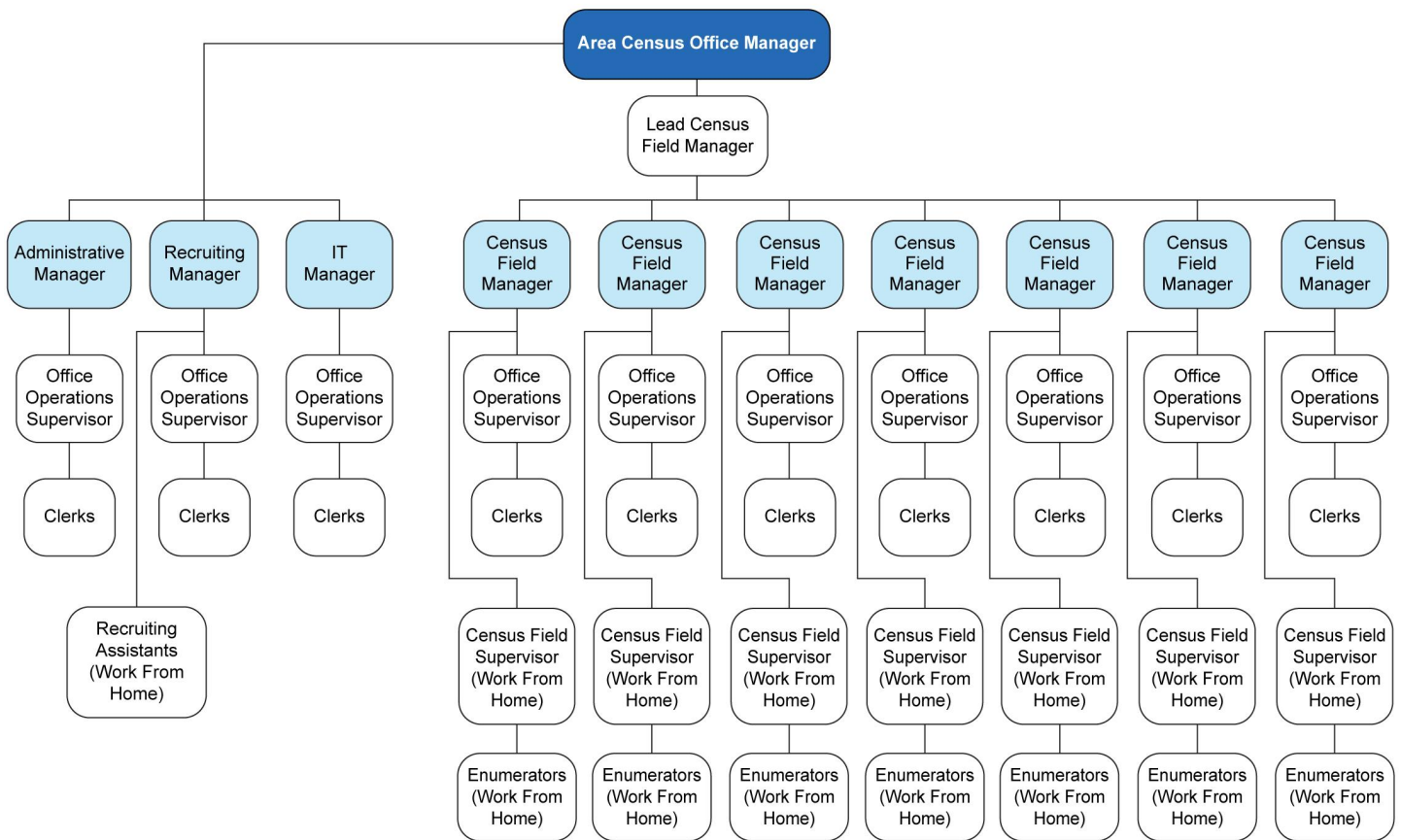
Recruiting enough workers to fill the hundreds of thousands of temporary positions needed to conduct the 2020 Census is a tremendous challenge. According to Bureau plans before hiring begins, the Bureau needs to assemble an applicant pool in the millions. For the decennial census, Bureau plans indicate the Bureau will need a large and diverse workforce to ensure the accuracy of its maps and address list, and to follow up by phone or in person with households that do not respond to the questionnaire. Making these efforts even more difficult are external factors beyond the Bureau's control, such as low unemployment rate, which can make it harder to recruit.

According to Bureau plans, recruiting of potential employees will be conducted throughout the ACOs' geographic area, based on projected operational workloads and staffing models developed for 2020 Census operations. Selected candidates will be invited to be fingerprinted and submit selected appointment paperwork prior to attending classroom training. The candidates will be sworn in and hired during the first day of training.

The ACO staff model is as follows: one ACO Manager, one Lead Census Field Manager, one Administrative Manager, one Recruiting Manager, one Information Technology (IT) Manager, and Office Operations

Supervisors, Clerks, and Recruiting Assistants. For data collection, it is: multiple Census Field Managers, Census Field Supervisors, and Enumerators; specific numbers based on workload; and supervisory ratios to be determined (see fig. 1).

Figure 1: 2020 Census Area Census Office Structure



Source: GAO analysis of Census Bureau data. | GAO-19-602

Training

According to Bureau plans, the 2010 Census approach to training was predominantly instructor-led training with some hands-on training. This primarily consisted of instructors standing in front of a room of trainees and reading training materials to them from a prepared script. For 2020, the Bureau has developed training materials that use a blended training approach including instructor-led training, computer-based training, and

hands-on training. This approach is intended to maximize trainee learning and on-the-job performance during the 2020 Census. According to the Bureau's Detailed Operational Plan for the Field Infrastructure and Decennial Logistics Management Operations, it has developed training materials based on the lessons learned from previous censuses, such as the need to provide computer-based training.

The Bureau's Detailed Operational Plan for the Field Infrastructure and Decennial Logistics Management Operations also states that this innovation to training combines multiple modes of training delivery designed to maximize training outcomes for various types of learning styles: visual, auditory, and hands-on, blending online training methods, instructor-led classroom training, and on-the-job training or role-playing to prepare field staff to effectively fulfill their duties. Blended training is intended to:

- Provide a standardization of training, limiting the impact of instructor interpretation.
- Allow for easily updateable training materials in the case of errors or operational changes, minimizing the burden of errata materials.
- Provide automated assessment tools to enable a more consistent and reliable way to measure learner understanding of concepts.
- Provide post-training support through easily accessible online manuals and job aids.

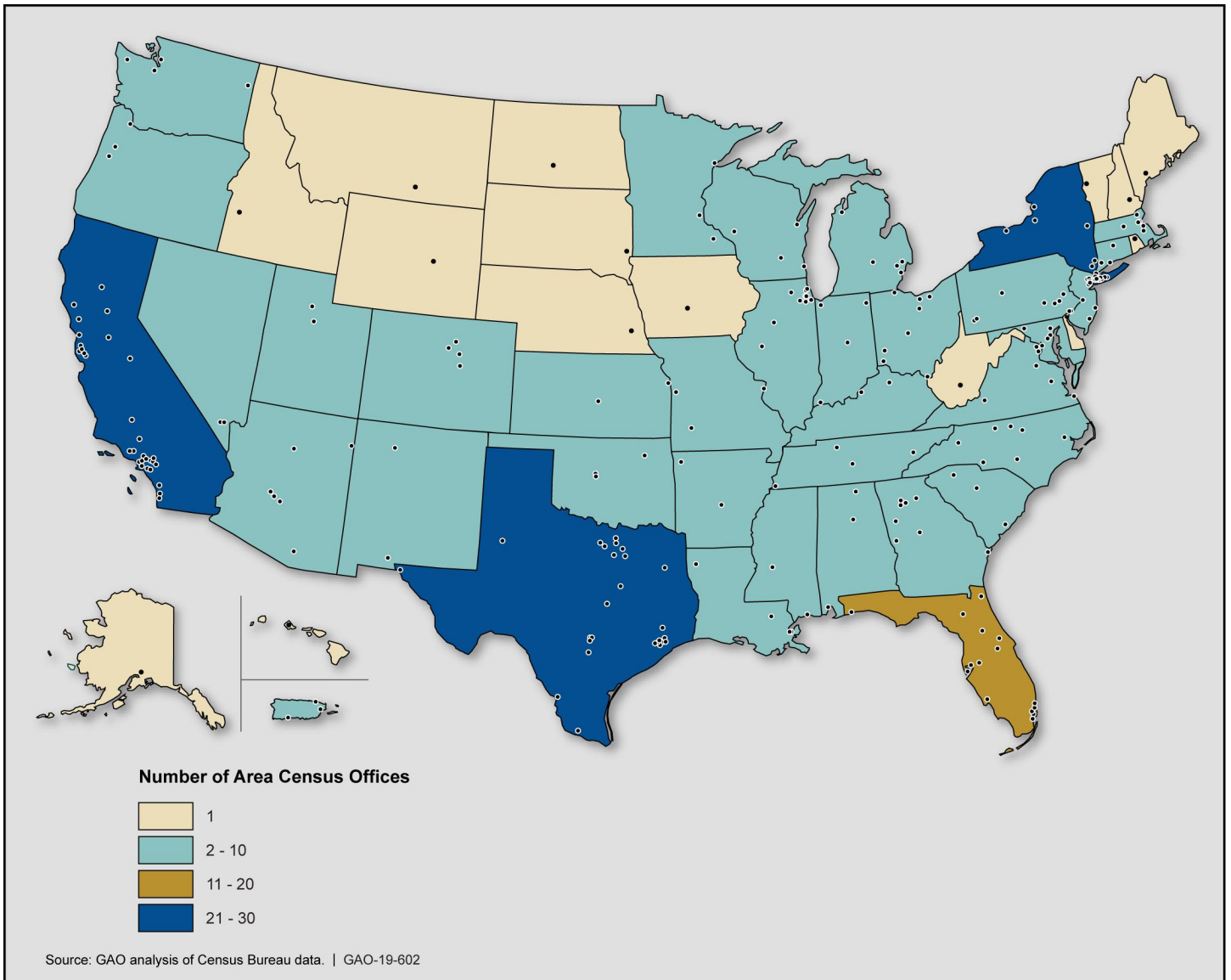
Training materials are designed to maximize self-paced learning. These accompanying training materials are developed to provide the most up-to-date methodologies for recruiting, onboarding, and training-the-trainer to carry out field data collection activities.

The Bureau's Efforts to Open Area Census Offices Appear on Track, Despite Some Schedule Slippages

For the 2020 Census, the Bureau plans to open 248 ACOs. Similar to the 2010 Census, the total number of ACOs for 2020 was derived from the projected workload for field operations based on the number of enumerators needed for nonresponse follow-up. The Bureau allotted a specific number of ACOs to each of its six regional offices. Regions then developed boundaries for the ACO based on seven mandatory criteria

that are described in a program memorandum, including that every state have at least one ACO; federally-recognized American Indian areas and military bases (regardless of county, state, or regional boundaries) will be managed by only one ACO; and ACO areas of responsibility will not cross state boundaries (with the exception of Indian reservations and military bases). See figure 2 below for the location of the 248 offices.

Figure 2: 2020 Census Area Census Office Locations



Requirements for Leased Office Space for Area Census Offices

In addition to the criteria used to delineate boundaries for its ACOs, the Bureau also had requirements for the ACO leased space. These requirements, for example, included that the ACO have a certain amount of contiguous square footage depending on the ACO type, and that an ACO not be co-located in a building that also houses agencies with law enforcement responsibilities because of privacy and confidentiality concerns. The Bureau also designated an “area of consideration” for each of its ACOs. According to Bureau officials, the area of consideration, which is a smaller geographic range where they would like to house the office, was based on such factors as access to public transit, general centrality within the ACO work boundaries, and proximity to eating establishments.

In some cases, the Bureau had to deviate from its requirements for leased space or initial area of consideration. The decision to deviate from requirements usually arose from a lack of viable options in the real-estate market coupled with the Bureau’s need to meet its time frames. According to RCC staff, any deviations from requirements were presented at weekly staff meetings and then subsequently approved by the Regional Director, and in some cases such as co-location with law enforcement Bureau Headquarters approval was needed.

According to Bureau officials, co-location with law enforcement is sensitive because of concerns that census data may be shared with others. Census data are kept confidential for 72 years. However, Bureau officials told us either the law enforcement offices were deemed innocuous, for example, the office housed a public defender or the law enforcement offices operated undercover, whereby no one entering the building would have been aware of their presence.

In another case, Bureau officials told us that the Philadelphia region was struggling to find space for its ACO in Frederick, Maryland. When the General Services Administration (GSA) proposed a space in Hagerstown, Maryland, 30 miles away, the Bureau accepted it, though it was outside the initial area of consideration. According to officials at the regional office, the Bureau saved time and money by using a readily available cost-effective option by choosing Hagerstown, Maryland. The Bureau also had to expand the area of consideration for more than 31 percent or 77 of its 248 ACOs. According to Bureau officials, designating an area of

consideration was an iterative process based on market availability, and having to expand the area was often necessary to secure space (see table 1).

Table 1: Deviations from Area Census Office Requirements

Requirement	Number of Deviations
Co-location with law enforcement	11
Change from Wave 1 to Wave 2 and vice versa	3
Less square footage than initially requested	9
Co-location with other ACOs	5
Located outside ACO boundaries	6
Expanded area of consideration for ACO	77
Total	111

Source: GAO analysis of Census Bureau data. | GAO-19-602

Note: Some ACOs had deviations from more than one requirement and summing the numbers in this table will not provide an accurate total of ACOs with deviations from requirements.

In select cases, the Bureau co-located ACOs in the same building. For example, instead of having one office in North Philadelphia and one in South Philadelphia, Bureau officials in the Philadelphia Region Census Center agreed to accept space in the same building located within the boundaries of the South Philadelphia ACO. The Bureau hired staff for each ACO from the original designated areas and kept the two offices completely separated. Bureau officials provided documentation indicating that this compromise came with considerable cost savings.

The Bureau also abandoned other planned requirements in a number of cases to secure space, such as access to loading docks, assigned parking, and freight elevators.

When we reviewed selected ACO files at the regional offices to determine whether the files included support for when deviations from space requirements and initial areas of consideration were documented, we did not find documentation. Instead, documentation was in staff emails. Files included a checklist of documents required, such as the signed lease and design intent drawings; however, there was not a requirement that documentation of deviations from space requirements or initial areas of consideration be maintained. Bureau officials at the regional level said that all procedures for handling waivers and expansions of the area of consideration were driven by the RCCs as well as informal guidance that was not documented.

Standards for Internal Control in the Federal Government calls for documentation and records to be properly managed and maintained.⁶ Based on our suggestion that the Bureau develop a procedure for documenting these deviations in ACO areas of consideration or requirements, Bureau officials sent an email requiring that staff keep documentation (electronic or paper) on deviations in ACO areas of consideration or requirements in the ACO's lease file folders. In cases where decisions are made via telephone or email, Bureau officials asked staff to write notes and scan emails, and add them to the ACO files. Maintaining this documentation will help ensure the transparency and integrity of Bureau decision-making, and ensure the information is readily available.

The Bureau Is Managing Schedule Slippage in Opening Area Census Offices

The Bureau experienced some early delays when regions were trying to find space and acquire leases. The Bureau attributed some of these delays to the use of the GSA's Automated Advanced Acquisition Program (AAP) process. This procurement process provides building owners and their authorized representatives with the opportunity to offer general purpose office space for lease to the federal government. The AAP process accepts bids the first week of each monthly cycle. Then the remaining three weeks of the month are used to evaluate submitted offers and identify a potential lessor.

According to GSA documents, in tight real estate markets, the first cycle did not always yield a suitable lessor due to lack of available inventory, and the short lease term the Bureau was seeking. Therefore, the Bureau had to wait three weeks until the start of the next cycle to re-open the bidding process. Bureau officials stated that during these 3 weeks, the Bureau regions would conduct additional market outreach and communicate outreach efforts with GSA to find a lessor.

According to GSA, they agreed that too much time was elapsing in Wave 1 trying to receive offers without making any changes to the requirements or areas of consideration. To address this issue for Wave 2, the Bureau stated that GSA provided additional training to the Bureau's regional staff,

⁶GAO, *Standards for Internal Control in the Federal Government*, [GAO-14-704G](#) (Washington, D.C.: Sept. 10, 2014).

increased market outreach which included dedicated support from GSA's national office, and the development of a strategy to use all of GSA's tools, such as using GSA's contract brokers in regions with the greatest number of Wave 2 ACOs. Bureau regional staff also told us they were able to meet leasing milestones in part because of flexibility in their requirements and in the areas of consideration.

As of June 2019, there were signed leases for 247 of 248 offices. However, during our review, the Bureau reported that it had missed several construction (meaning renovations such as new electrical layouts, heating, ventilation, and air conditioning) and deployment deadlines. According to Bureau documents, for Wave 1 offices, nine of 39 offices had missed the February 28, 2019 deadline for having furniture and IT equipment; and for Wave 2 offices, 49 of 209 offices missed the February 20, 2019 deadline for having construction drawings complete. According to Bureau officials they are managing each of these delays on an office-by-office basis, and headquarters officials meet weekly with the RCCs to discuss the status of each office. They are also actively communicating with GSA on how to best work with the landlord to meet deadlines.

Agency officials also indicated that the schedule deadlines for the later phases of construction allow for more time than may be necessary, allowing them to make up time lost from early delays. For example, at the Concord, New Hampshire ACO, the Bureau plans to make up lost time in construction with actions such as using a fence to divide two office areas instead of adding a wall, and using a "cage" for badging instead of constructing a separate room inside the space. As of June 3, 2019, 38 of 39 Wave 1 offices are ready for business. Seven of 209 Wave 2 offices are still working to finish the milestone of completing construction drawings, which had an original deadline of February 20, 2019. According to Bureau officials, the seven offices without completed construction drawings are being given priority attention by both GSA and the Bureau. We will continue to monitor the opening of ACOs in ongoing work.

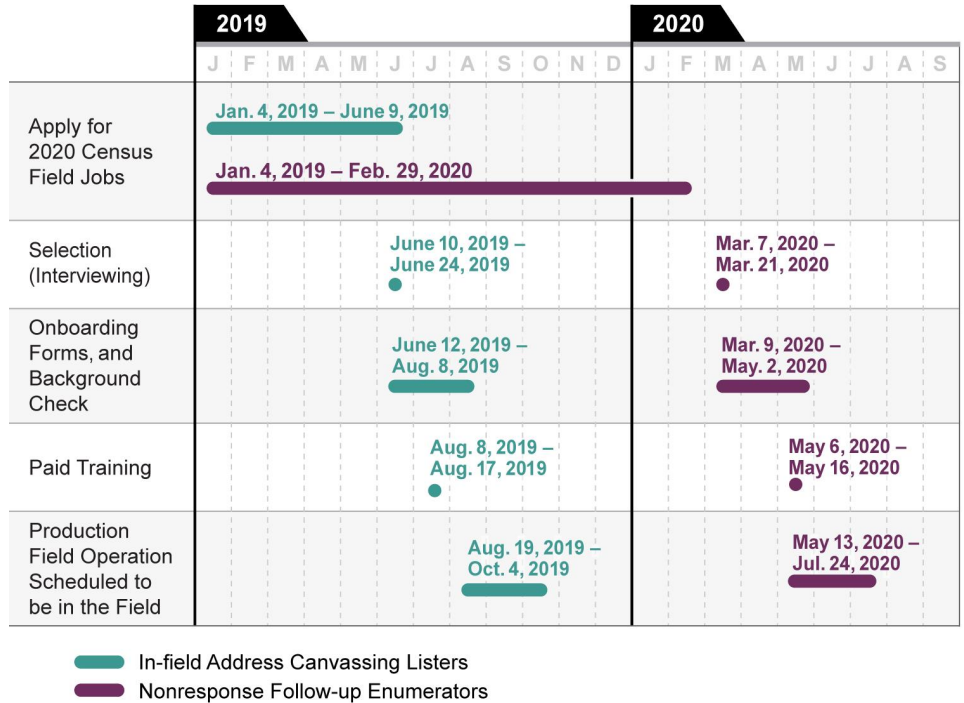
The Bureau Has Exceeded Its Early Recruiting Goals for the 2020 Census; However, It Faces Some Challenges Going Forward

The Bureau Has Exceeded Its Early Recruiting Goals

According to Bureau reporting documents, as of June 2019, the Bureau is exceeding its recruiting goals for early operations. This includes field staff for in-field address canvassing where census staff verify address and map information for housing units in selected areas of the country, office staff at the 39 Wave 1 ACOs, recruiting assistants, and partnership specialists. The Bureau had a goal of recruiting approximately 205,000 individuals for its 2020 early operations efforts by the end of June 2019, and plans to recruit between 2.4 million and 2.6 million applicants for all field operations. By comparison, in 2010, the Bureau recruited about 3.9 million applicants. As of June 17, 2019, the Bureau had processed job applications and assessments for approximately 428,000 applicants which represent about 208 percent of its roughly 205,000 recruiting goal.

For the 2020 Census, the Bureau plans to hire nearly 400,000 temporary field staff from its applicant pool for two key operations: in-field address canvassing and nonresponse follow-up, where census staff visit households that do not return census forms to collect data in person. In 2010, the Bureau hired approximately 628,000 temporary workers to conduct the address canvassing and nonresponse follow-up field operations. Below is the recruiting and hiring timeline for the in-field address canvassing and nonresponse follow-up operations (see fig. 3).

Figure 3: Recruiting and Hiring Timeline for In-field Address Canvassing and Nonresponse Follow-up



Source: GAO analysis of Census Bureau's 2020 Master Activities Schedule. | GAO-19-602

According to Bureau officials, they are recruiting and hiring fewer temporary staff in 2020 compared to 2010, in part, because automation has made field operations more efficient. For example, there is less paper to manage and process as daily payroll records and daily field work assignments are electronic. As a result, productivity has increased and mileage and labor costs have decreased because census field staff do not meet daily with their supervisors, as was the case in 2010. Moreover, the automation of assignment routing to housing units has optimized the time spent by enumerators driving to housing units. During the 2018 End-to-End Test, the Bureau found the productivity for in-field address canvassing had exceeded its goal at all three test sites (see table 2). The Bureau attributes these efficiencies to the automation of work assignments.⁷

⁷In May 2019, the Bureau provided revised numbers for actual productivity from what was reported in GAO, *2020 Census: Actions Needed to Improve In-Field Address Canvassing Operation*, GAO-18-414 (Washington, D.C.: June 14, 2018).

Table 2: Expected and Actual Productivity Rates for the In-Field Address Canvassing Operation in the 2018 End-to-End Test

State test site	Expected productivity rates (addresses per hour)	Actual productivity rates (addresses per hour)
Rhode Island	11.36	21.04
West Virginia	6.9	13.73
Washington	10.07	18.44

Source: GAO analysis of Census Bureau data. | GAO-19-602

The Bureau Plans to Use Successful Recruitment Strategies from Prior Censuses while Leveraging Technology

For the 2020 Census, the Bureau plans to use some of the same strategies it used to recruit and hire all temporary workers as during the 2010 Census—because those strategies were successful—while also leveraging technology and social media. For example, according to the Bureau, the overarching strategy for hiring enumerators is to hire people who will work in the communities where they live. This strategy provides the Bureau with enumerators who are familiar with the areas where they will be working and who speak the languages of the local community. To recruit staff, recruiting assistants are to work with local partnership staff and use paid advertisements and earned media (e.g., publicity gained through promotional efforts, news reports, etc.).

The Bureau plans to also continue to use its recruiting website, <http://www.2020census.gov/jobs>, which provides information about the various positions, local pay rates, application materials, and job qualifications. Moreover, Bureau officials stated that a diverse multilingual workforce is needed and that the Bureau has tailored its approach to that end. For example, the website includes Spanish language pages and recruitment materials (see fig. 4).

Figure 4: An Example of Census Bureau Website Spanish Language Recruitment Advertisement

Empleos con el Censo del 2020



Gane un ingreso extra mientras ayuda a su comunidad.

La Oficina del Censo de los EE. UU. está contratando a miles de personas en todo el país para ayudar con el conteo del Censo del 2020.

[SOLICITAR EMPLEO](#)

Translation – Jobs with the 2020 Census. Earn extra income while helping your community. The U.S. Census Bureau is hiring thousands of people across the country to help with the 2020 Census count. Apply for a job.

Source: GAO analysis of Census Bureau. | GAO-19-602

Bureau documentation indicates that similar to 2010, the Bureau will continue to use waivers and hiring exemptions to enable well-qualified individuals to work on the 2020 Census who otherwise might not have applied for jobs, particularly in hard-to-recruit areas. These waivers allow the Bureau to temporarily hire federal retirees and individuals receiving public assistance without impacting their benefits, and to hire current federal employees without impacting their job status or salary. As of February 27, 2019, the Office of Personnel Management (OPM) had given the Bureau approval to hire 44 re-employed annuitants for the 2020 Census. The Bureau also had dual employment agreements with 28 federal agencies and commissions.

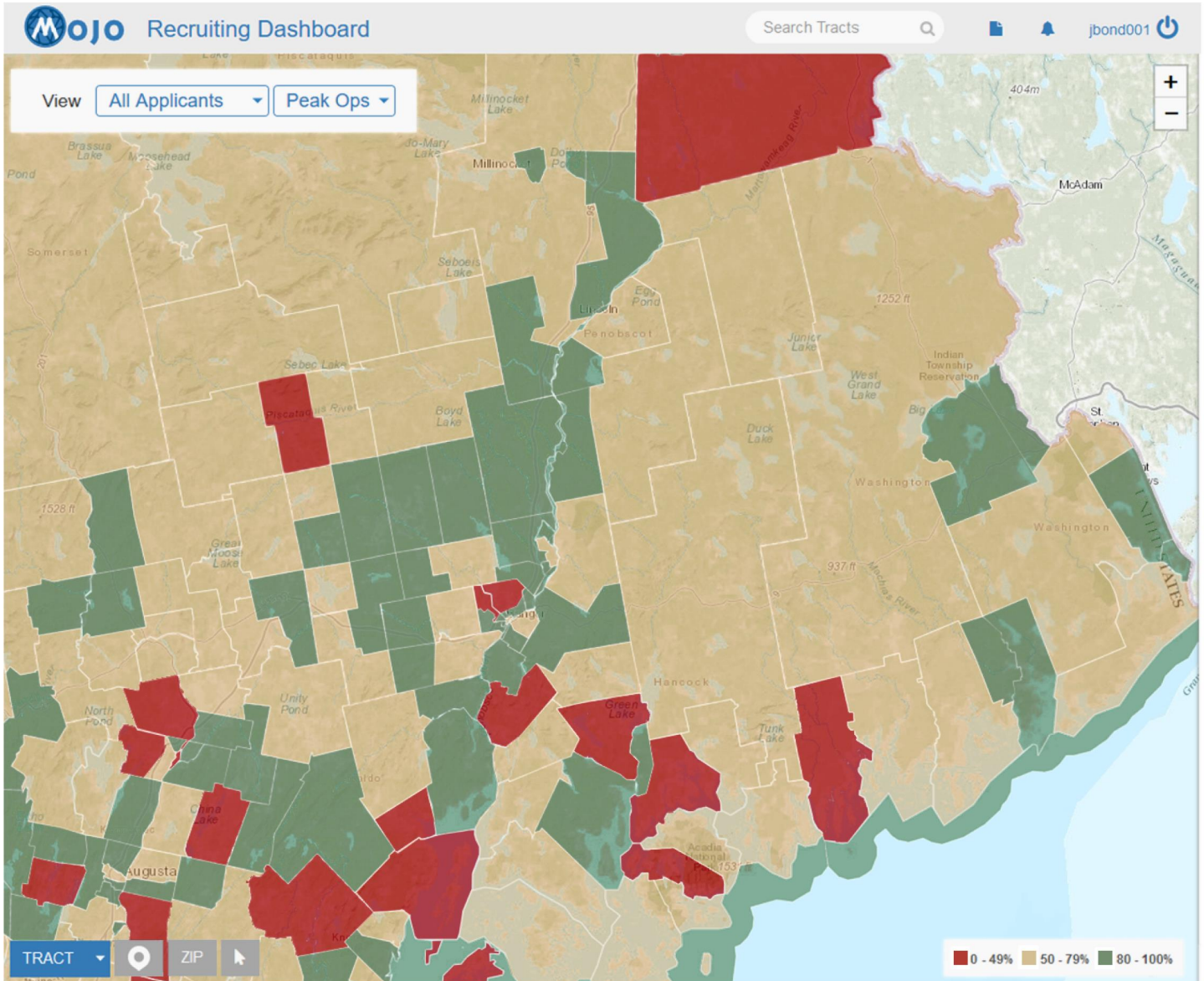
For the 2010 Census, the Bureau had these agreements with a total of 81 federal agencies. To obtain waivers for individuals on public assistance, the Bureau is partnering with the Office of Management and Budget and working with Health and Human Services to obtain waivers for Temporary Assistance for Needy Families and Supplemental Nutrition Assistance Program recipients. The Bureau is also working with tribal governments to acquire similar waivers.

In addition to these previously used strategies, the Bureau is planning to leverage technology in its recruiting strategy for 2020. This technology includes the Bureau-developed Response Outreach Area Mapper (ROAM) application, a publicly available online mapping tool that Bureau staff can use to better understand the sociodemographic makeup of their assigned areas. The Bureau plans to use ROAM to identify areas where recruiting could be hard and to develop recruitment strategies such as hiring staff with specific language skills.

The new technology also includes the MOJO Recruiting Dashboard (also referred to as MOJO Recruit), which is software for Census recruiting personnel to plan and manage recruiting activities and track recruiting progress.⁸ For example, MOJO Recruit includes an interactive mapping feature which lets the Bureau plan recruiting activities and track recruiting status for each census tract. The map draws attention to areas that may be experiencing recruiting problems (see fig. 5). Red indicates areas where the Bureau is less than 50 percent of the way toward meeting its recruiting goal. Yellow indicates areas where the Bureau is 50 to 79 percent of the way toward meetings its goal. Green indicates areas where the Bureau is 80 percent or higher of the way toward meetings its goal.

⁸MOJO is a term for the Census operational control system for re-engineered field operations.

Figure 5: An Example of the MOJO Recruit Interactive Map Identifying Early Operation Recruiting Status of Specific Census Tracts



Source: Census Bureau's MOJO Recruiting Dashboard. | GAO-19-602

Bureau officials also stated that they plan to increase the use of social media platforms such as Facebook, Twitter, and Instagram to promote and advertise 2020 Census job opportunities. For example, the Bureau's 2020 Census Recruitment Toolkit includes social media

guidelines, tips, sample posts, and sample email messages to assist recruiting staff in providing information about 2020 Census job opportunities. It also assists recruiting staff with responding to questions and concerns or directing people to the appropriate location for more information about jobs.

The Bureau Took Steps to Improve Its Application and Assessment Process for Potential Hires

For the 2020 Census, the Bureau revised its application and assessment process to ease the burden on job applicants and to better assist the Bureau in identifying qualified applicants. Job candidates are to apply and take a skill assessment online, as opposed to attending recruiting sessions in person and taking a written test. The Bureau has also streamlined both the application and assessment process by asking fewer questions and requiring only one assessment for all nonsupervisory positions.

According to Bureau officials, the 2020 Census job application should take 10 minutes to complete, by comparison the 2010 Census job application took 30 minutes to complete. Moreover, for prior censuses, applicants had to complete one of two 45-minute assessments to determine the appropriate skill set for either working in the office or in the field. For 2020, OPM has approved the Bureau giving one assessment for all five short-term census positions: Recruiting Assistant, Clerk, Office Operations Supervisor, Enumerator, and Census Field Supervisor, thereby eliminating the need to give separate assessments for the office and field positions. Finally, for those considering a supervisor position, a separate supervisory assessment is required. For 2020, this consists of nine questions compared to 29 questions in 2010. According to Bureau officials, this supervisory assessment should take an additional 10 minutes to complete instead of 1 hour, as it did on 2010.

For 2020, the Bureau has also changed the assessment questions it asks applicants from situational-judgment questions to biodata and personality

questions.⁹ In making this decision, during the 2018 End-to-End Test, the Bureau asked situational-judgment questions in the assessment questionnaire, and then administered a set of biodata and personality questions after hiring. The Bureau conducted an analysis of both types of questions and concluded that the biodata and personality questions were a better predictor of job success. Bureau officials told us they will be evaluating their new job assessment processes for 2020, including the use of biodata.

Despite the Progress Made in Recruiting, the Bureau Still Faces Several Hiring Challenges

The Bureau has identified challenges that exist in some areas, such as: (1) delayed background checks; (2) low unemployment; and (3) language barriers.

Delayed Background Checks

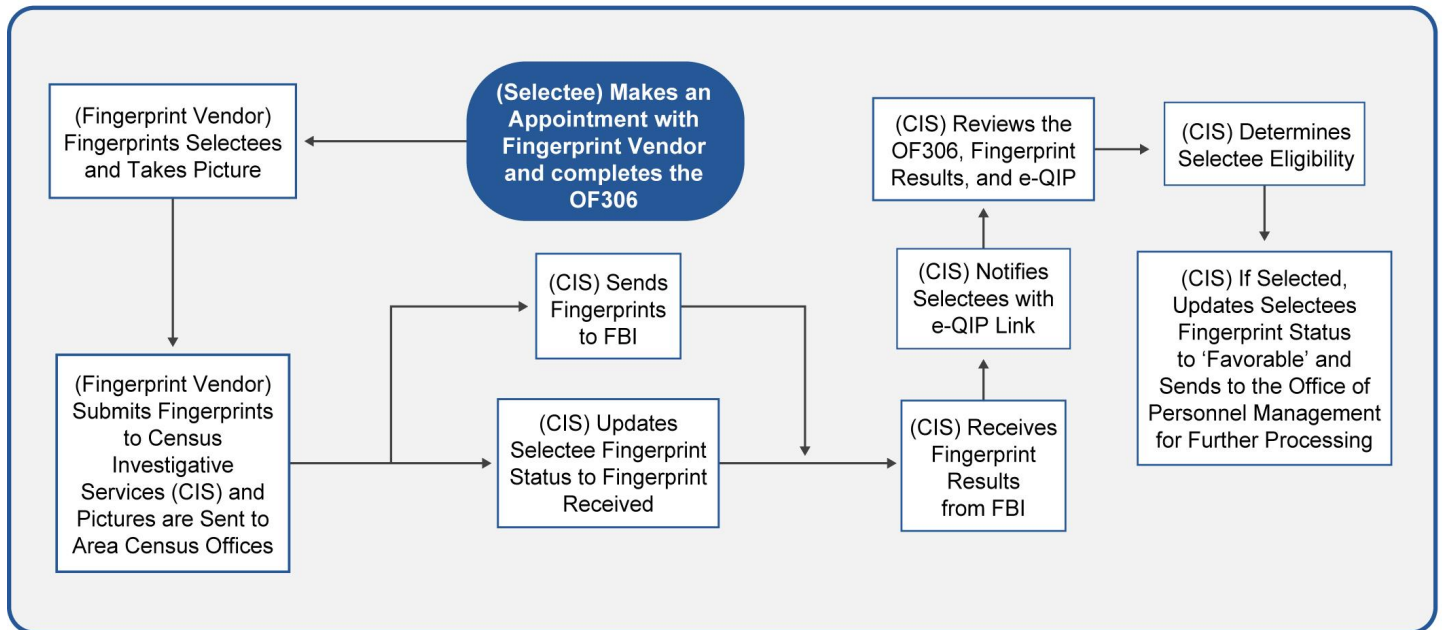
Employment with the Bureau is contingent upon successfully completing a background check. The Bureau found that the process for four positions (recruiting assistants, office operation supervisors, clerks, and partnership specialists) was taking longer than it expected. These positions require a full background check because employees will have access to the Bureau's network, they will be issued expensive equipment (e.g., laptops and desktops), and their employment will likely last more than 6 months. For the full background checks, applicants must complete two security background forms—Standard Form 85: Questionnaire for Nonsensitive positions (SF85) through the Electronic Questionnaires for Investigations Processing system (e-QIP) and Optional Form 306: Declaration for Federal Employment (OF306)—and must have their fingerprints

⁹OPM defines biographical data (biodata) as assessments that ask applicants questions about their past experiences. The experiences, behaviors, and events occurring throughout an individual's life can provide some indication of how an individual will perform in a job. Personality can be defined as the relatively stable pattern of thinking, feeling, and behavior that uniquely describes an individual. Personality measures that are based upon a thorough job analysis can improve the selection process over what cognitive ability measures provide by predicting how individuals will behave when faced with different situations.

processed, in which the Federal Bureau of Investigations conducts a review for any prior arrest or convictions.¹⁰

Once completed, the forms are reviewed by the Census Investigative Services (CIS) where OPM-trained staff make either a favorable, unfavorable, or inconclusive precheck employment determination. According to Bureau officials, certain crimes, for example violent crimes, automatically exclude the applicant from further consideration. If the determination is inconclusive, then CIS is to send the form to the Office of Employee Relations to make a favorable or unfavorable determination. All favorable determinations are then sent to OPM for adjudication with a full background check (see fig. 6).

Figure 6: Background Check Process for Employment with the Bureau



Source: GAO analysis of Census Bureau data. | GAO-19-602

¹⁰The e-QIP system is a web-based automated system that was designed to facilitate the processing of standard investigative forms used when conducting background investigations for federal security, suitability, fitness and credentialing purposes. It allows users to electronically enter, update, and transmit their personal investigative data over a secure internet connection to the requesting agency.

According to Bureau officials, in December of 2018, they began to encounter a backlog of pre-employment background checks Bureau-wide as they began hiring some 800 recruiting assistants and about 1,970 office staff for the first wave of 39 ACO openings. As of March 21, 2019, Bureau officials told us that Bureau-wide there were 7,092 background clearances pending, of which, 4,900 were for field positions.¹¹ In response to the backlog, Bureau leadership said it created a team to determine the cause of the backlog and started having weekly meetings to prioritize which job positions needed to be cleared first.

Bureau officials stated that the delays arose, in part, because a significant number of applicants did not completely or correctly fill out the e-QIP form. This, they said, coupled with the increase in required pre-employment background checks, resulted in a growing backlog of clearances for which the Bureau did not have the resources to clear. In response, in February 2019, the Bureau began to bring on, through a combination of new hires and reassignments, about 130 temporary staff. New staff was assigned to either review the forms for accuracy and completeness prior to being submitted to the CIS office, or help the CIS offices conduct the pre-employment background checks.

Additionally, Bureau officials told us that they meet weekly to reprioritize job positions for the clearance process. The CIS office is to process background checks for all Census employees requiring them, including decennial census field staff, decennial census contractors, and staff needed for nondecennial census surveys in headquarters and in the field. According to Bureau officials, the decennial census takes precedence and within the decennial census positions are also prioritized. For example, in January 2019, the 800 recruiting assistants were given priority and now the hiring of 1,501 partnership specialists has been given priority.

Bureau officials told us that in December 2018 they were processing 110 background checks a week, and have set a goal that each CIS analyst process 25 pre-employment packages a week. There are 40 analysts on board, giving the Bureau the ability to process 1,000 pre-employment background check packages a week. Bureau officials also told us that they anticipate the clearance process for the positions of

¹¹The 4,900 field positions included both the decennial census and nondecennial census surveys. However, according to Bureau officials, the majority of field positions are for the decennial census.

enumerator/lister and census field supervisor will not experience the same delays because these positions only require fingerprint processing, which is quicker.

According to Bureau officials, these results can be made available within 3 hours. Moreover, although the Bureau has taken steps to address the backlog, the bulk of pre-employment background clearances has yet to be processed and Bureau officials told us that they remain concerned. In the coming months, the Bureau will need to conduct background checks for an additional 3,991 recruiting assistants and about 10,300 office staff for the remaining 209 offices. We will continue to monitor the backlog of background clearances through our ongoing work.

Low Unemployment

Although the Bureau has exceeded its recruiting goals for early operations, recruiting a sufficient number of job applicants for the job of partnership specialist is a challenge. Bureau officials told us that a robust economy and low unemployment rate have resulted in a smaller pool of applicants for that position. For example, as part of its 2020 Census efforts, the Bureau had planned to hire 1,181 partnership specialists by May 1, 2019 and 1,501 partnership specialists by June 30, 2019, to help increase awareness and participation in the 2020 Census in minority communities and hard-to-reach populations. The Bureau did not meet its goal to hire 1,181 partnership specialists by May 1, 2019.

To hire sufficient partnership staff, Bureau officials told us they have an “open and continuous” posting for partnership specialist positions instead of discrete individual job postings, and they are selecting two candidates from each certification list of qualified applicants. Moreover, Census leadership tracks the weekly progress of the partnership specialist positions.

As of July 9, 2019, the Bureau’s latest biweekly reporting indicated that it had hired 813 partnership specialists as of June 22, 2019. Moreover, as of July 10, 2019 Bureau officials told us that another 830 applicants were waiting to have their background checks completed. According to Bureau officials hiring data are based on payroll dates generated biweekly, while background check data are tracked internally. Therefore, according to Bureau officials, more current hiring data were not available as of July 10, 2019 to indicate whether the Bureau had met its June 30 hiring goal. Hiring partnership specialists in a timely manner is key to the Bureau’s ability to carry out its planned outreach efforts, especially for hard-to-count communities.

In addition, several RCC officials said the pay rate and the low unemployment rate in some ACO locations initially affected their ability to recruit well-qualified staff for office positions.

- Atlanta RCC officials stated it was challenging to recruit managers in the Gainesville, Florida, area. According to Bureau officials, the pay rate was too low and potential recruits were seeking employment elsewhere. The Bureau increased the managers' pay rate to be more competitive for the area.
- Philadelphia RCC officials stated that in rural ACO locations the pay rate is lower and potential recruits would rather travel to the metro areas to get the higher pay rates offered there.
- The Denver RCC reported that low unemployment rates throughout the regions make recruiting difficult, and that Census enumerators jobs are not as competitive with many other wages offered in the region.
- The Los Angeles RCC reported having difficulty recruiting local applicants in high-cost areas like Beverly Hills, the San Francisco Bay Area, and Silicon Valley.

Bureau headquarters officials acknowledge that some ACO locations have experienced some recruiting challenges, but said that the RCCs were ultimately able to fill the office positions. Headquarters officials stated that their pay rates either match or exceed the competitive pay rate in the majority of the ACO locations. According to Bureau headquarters officials, regional offices that may be experiencing challenges recruiting staff must demonstrate or prove that the pay rate for a specific ACO is causing difficulty recruiting. The Field Division is responsible for approving or denying the request to adjust pay. For the 2010 Census, the Bureau reported 124 requests for pay rate adjustments, of which 64 were approved. The Bureau stated that it will continue to monitor how low unemployment affects its ability to recruit and hire.

Language Barriers

The Bureau reports that the demographic and cultural makeup of the United States continues to increase in complexity, including a growing number of households and individuals whose proficiency in English is limited. Language barriers could make it difficult to enumerate these households, whose members may have varying levels of comfort with government involvement. Several RCC officials also mentioned that language barriers could impact their recruiting efforts:

- Both the Los Angeles and New York RCCs reported it is hard to recruit in immigrant communities where residents speak a foreign language or dialects, and often have no organizational infrastructure (such as associations of individuals of the same national origin, print news media, or radio).
- The New York RCC reported challenges in locating applicants who are bilingual in English and other languages such as Chinese, Russian, Arabic, Korean, Creole, Polish, Portuguese, Bengali, Urdu, Punjabi, Gujarati, Hindi, and Hebrew, as well as Yiddish and African languages.
- The Atlanta RCC reported challenges related to the diverse language needs (e.g., Spanish, Chinese, Vietnamese, Creole, Portuguese, etc.) in south and central Florida.
- The Chicago RCC reported recruiting outreach challenges in urban areas, including Chicago, Indianapolis, Detroit, Minneapolis/St. Paul, St. Louis, and Kansas City, that have higher minority and immigrant populations as well as in rural areas with increasing diversity.

Bureau officials responded that later this fall, in preparation for their peak operations effort, they will begin to focus recruiting efforts on foreign language recruiting. Specifically, partnership and recruiting staff plan to work with partners and advertise jobs locally (at the grassroots level) in places where persons with these skills are likely to look to ensure they are meeting recruiting goals in those areas.

The Bureau Is Following Its Planned Training Approach for 2020, but Has Opportunities to Improve Its Ability to Assess Performance

For the 2020 Census, the Bureau is following its plans to use a blended training approach combining technology-assisted training with classroom instruction.¹² According to Bureau planning documents, on the first day of in-person classroom training, the Bureau will provide orientation information and issue devices that trainees will use to conduct census

¹²For the 2010 Census we recommended that the Bureau consider alternate approaches to instructor-led delivery of field staff training content, such as video or computer-based instruction. The Bureau did not implement this recommendation for 2010 because it believed alternative approaches would be cost prohibitive and that instructor-led training from a script ensured consistency across training sites.

operations. The Bureau plans to use local institutions such as schools, libraries, churches, and fire halls to host training. ACO staff are to coordinate the training location setup, device deliveries to training sites, and manage other logistics for large-scale field staff training.

After the first day of training, field staff will spend the next 4 to 6 days (depending on the operation) completing at-home training online using their own personal device at their own pace. This training will include, for example, operation-specific skills, use of the data collection device (smart phone or tablet), and general field processes. Trainees who complete the online portion of the training program will return to the classroom to practice what they learned through role-playing, mock interviews, or live cases (for listing operations) facilitated by managers or supervisors. According to Bureau officials, employees will also have access to just-in-time training materials on their devices for use in the field.

The Bureau Took Steps to Manage Some Challenges in Implementing Its Blended Training Approach During the 2018 End-to-End Test

The Bureau encountered a number of challenges in implementing and testing its blended training approach, but is taking steps to mitigate those challenges. Specifically, during the 2018 End-to-End Test, the Bureau (1) experienced problems with the proper recording of online training scores for census staff, (2) was unable to test online training for one of its operations because the operation was added late, and (3) encountered challenges with census staff not always having access to the internet, which is required to complete the training.

The Bureau Is Taking Action to Ensure the Completion of Training Is Accurately Tracked

The 2018 End-to-End Test of address canvassing and nonresponse follow-up training revealed some technical challenges in using the Learning Management System. The Learning Management System is the online training system for the 2020 Census; it contains online training modules and tracks final assessment scores and training certifications.

In February 2019, the Department of Commerce (Commerce) Office of the Inspector General (OIG) noted that during the address canvassing operation there was no final assessment scores recorded for 23 trained listers. The Bureau was also unable to provide documentation that

another three lister trainees who failed the final assessment had been observed by their supervisor before being permitted to work.¹³ Bureau officials said they provided an action plan to the Commerce OIG in April 2019. According to Bureau officials, the action plan has not been finalized because they are incorporating changes to the action plan based on Commerce OIG comments.

In December 2018, we reported that roughly 100 enumerator trainees in the nonresponse follow-up operation were unable to transmit their final test scores because the Learning Management System had an erroneous setting.¹⁴ According to Bureau officials, this problem delayed the start of unsupervised work for these otherwise-qualified enumerator trainees by an average of 2 days per trainee, and resulted in the attrition of some who were able to quickly find other work. Bureau officials reported that they have fixed the system setting. Moreover, according to Bureau officials, they have also developed an alternative means to certify training by incorporating the employee final assessment into the final day of classroom training.

The Bureau was Unable to Test All Online Training, but Has Plans in Place to Conduct Dry-Runs of the Untested Training

According to Bureau officials, Update Leave online training was not tested during the 2018 End-to-End Test due to the late addition of the operation to the 2020 Census design.¹⁵ Officials told us that the Update Leave operation was approved in May 2017, leaving just 10 months for the development team to create and implement software and the systems to support this field operation for the End-to-End Test. This left no time to develop online training that would be ready for the End-to-End Test in March 2018.

Therefore, the Bureau classroom-trained headquarters staff instead of temporary field staff for the operation. According to the Bureau's risk

¹³Department of Commerce Office of Inspector General, *2020 Census: Issues Observed During the 2018 End-to-End Census Test's Address Canvassing Operation Indicate Risk to Address List Quality*, OIG-19-008-A (Washington, D.C.: Feb. 6, 2019).

¹⁴GAO, *2020 Census: Additional Steps Needed to Finalize Readiness for Peak Field Operations*, [GAO-19-140](#) (Washington, D.C.: Dec. 10, 2018).

¹⁵The Update Leave operation is designed to occur in areas where the majority of housing units either do not have mail delivered to the physical location of the housing unit, or the mail delivery information for the housing unit cannot be verified.

register, the utilization of Bureau headquarters staff did not properly simulate training conditions or staff characteristics in which new employees have no prior knowledge of census operations. Therefore, the 2018 End-to-End Test did not allow for proper training feedback or the capture of lessons learned with regard to temporary staff or the mode of training. According to Bureau officials, the Bureau plans to conduct scheduled dry runs of training in September 2019 to collect feedback and, if necessary, make changes to Update Leave-specific training.

The Bureau Has Plan to Address Trainee Access to Online Training

In June 2018, we reported that some listers had difficulty accessing the internet to take online training for address canvassing.¹⁶ According to the Bureau, in addition to the Bureau-provided laptop, listers also needed a personal home computer or laptop and internet access at their home to complete the training. However, while the Bureau reported that listers had access to a personal computer to complete the training, we found some listers did not have access to the internet at their home and had to find workarounds to access the training. We recommended that the Bureau finalize plans for alternate training locations in areas where internet access is a barrier to completing training.

The Bureau took action and in March 2019 finalized its plans for identifying alternate training locations in areas where internet access is a barrier to completing training. Specifically, Bureau officials told us that in areas of known low connectivity rates, regional staff will identify sites that trainees can access to complete online components of the training. In addition, the Bureau provided us with a training module for identifying training field staff locations that emphasized training sites need to be located in areas with a good cellular connection and also have access to the internet.

The Bureau Has Generally Met the Criteria for Selected Leading Practices for Training Development, but Could Better Document Measures of Success

Effective training can enhance the Bureau's ability to attract and retain employees with the skills and competencies needed to conduct the 2020 Census. Our Guide for Assessing Strategic Training and Development

¹⁶[GAO-18-414](#).


Efforts in the Federal Government describes components for developing effective training in the federal government. Our strategic training guide identifies four phases of the training—planning, design/development, implementation, and evaluation. We assessed the Bureau’s training approach and found that it generally aligned with selected leading practices.¹⁷ This report includes the design/development and evaluation phases of training. We did not assess the implementation phase because field staff training had not yet begun during our audit, and we did not assess the planning phase because practices in that phase are more applicable to agency-wide rather than program-specific training development.

Design/Development

The design/development phase involves identifying specific training and development initiatives that the agency will use, along with other strategies, to improve individual and agency performance. According to the guide, well-designed training and development programs are linked to agency goals and to the organizational, occupational, and individual skills and competencies needed for the agency to perform effectively. Moreover, in response to emerging demands and the increasing availability of new technologies, agencies, including the Bureau for the 2020 Census, are faced with the challenge of choosing the optimal mix for the specific purpose and situation from a wide range of mechanisms, including classroom and online learning as well as structured on-the-job experiences (see fig. 7).

¹⁷[GAO-04-546G](#).

Figure 7: Assessing the Bureau’s Planned Training Approach for Design/Development against Selected Leading Practices

Phase	Leading Practice	Assessment
Design/ development 	Agency training is connected to improving individual and agency performance in achieving specific results. For example, does the agency have a formal training and professional development strategy with an assessment of needs and a control mechanism to ensure all employees receive appropriate training?	●
	The design of the training program is integrated with other strategies to improve performance. For example, is training focused on building team relationships and new ways of working?	●
	Agency considered the merits of using different delivery mechanisms to ensure efficient and cost-effective delivery of training. For example, does the agency use formal and on-the-job training opportunities that use new technologies and approaches?	●
	Training incorporates measures of effectiveness into course designs. For example, does the training include clear linkages between specific learning objectives and organizational results as well as procedures to incorporate feedback from a variety of stakeholders?	●
	Agency determined a targeted level of improved performance. For example, do specific performance improvement goals and training evaluation documents focus on achieving results?	●

- Fully Met
- ◐ Partially Met
- Not Met

Source: GAO analysis of Bureau's planned training approach. | GAO-19-602

In developing its training approach we found the Bureau met all five selected leading practices related to design/development. Specifically,


- Bureau training aligned with achieving results for the Bureau’s re-engineered field operations. Specifically, the Bureau has a formal online training program that uses the Learning Management System as a control mechanism to provide and record training results for all 2020 Census field staff who take online training.
- The Bureau’s training program is integrated with other strategies to improve performance such as building team relationships. For example, the training includes modules for supervisors that focus on guiding and motivating employees, communicating effectively, and resolving conduct issues. To ensure the training is properly integrated with device issuance, for larger scale operations, the Bureau plans to stagger training sessions to help ensure there is the necessary support during the first day of training when census field staff receive their devices.

- The Bureau also plans to use different training delivery mechanisms. For example, the Bureau will use a blended training approach which includes a mix of computer-based and instructor-led classroom training.
- The Bureau has measures of effectiveness in its course design. The Bureau relied on an in-house training development team that worked with the data collection operations staff to develop learning objectives. We found that the Bureau has procedures to incorporate feedback. Specifically, the Bureau incorporated lessons learned from previous census tests, such as the refinement of procedures for reassigning work in the field and emphasizing the importance of knocking on doors to find a proxy respondent during the nonresponse follow-up operation.
- Finally, the Bureau's training documents contained goals for achieving results for its new training approach. Specifically, the Operational Assessment Study Plan for Recruiting, Onboarding, and Training for the 2018 End-to-End Test contained the following measures of success for training—reduce cost and increase efficiency over what was reported in 2010.

Evaluation

In developing its evaluation phase for training, the Bureau met five of six selected leading practices and partially met one leading practice. The evaluation phase involves assessing the extent to which training and development efforts contribute to improved performance and results. We have previously found that it is increasingly important for agencies to be able to evaluate their training and development programs, and demonstrate how these efforts help develop employees and improve the agencies' performance (see fig. 8).

Figure 8: Assessing the Bureau’s Planned Training Approach for Evaluation against Selected Leading Practices

Phase	Leading Practice	Assessment
Evaluation 	Agency systematically planned for and evaluated effectiveness of training. For example, is there a data collection analysis plan that sets priorities for evaluations and covers methods, timing, and responsibilities for data collection?	●
	Agency uses appropriate analytical approaches to assess training programs. For example, does the agency use the appropriate methods to evaluate training, guidelines for determining when and how training programs will be evaluated?	●
	Agency uses performance data to assess results achieved through training. For example, does the agency use both quantitative and qualitative measures to assess training results?	◐
	Agency incorporates evaluation feedback into planning and design of training. For example, does the agency have a systematic monitoring and feedback process that is used to refine training efforts and reallocate resources?	●
	Agency incorporates different perspectives in assessing the impact of training on performance. For example, does the agency use surveys, interviews, and focus groups with stakeholders to refine training programs when necessary?	●
	Agency compares training investments, methods, or outcomes with those of other organizations. For example, does the agency compare its activities with those of other organizations and attempt to identify training efforts outside the agency for benchmarking?	●

- Fully Met
- ◐ Partially Met
- Not Met

Source: GAO analysis of Bureau’s planned training approach. | GAO-19-602

Overall, we found that the Bureau has a robust evaluation plan for the 2020 Census that gathers data from multiple sources. For example,

- The Bureau has a plan to evaluate the effectiveness of training for the 2020 Census. Specifically, operational and assessment study plans set priorities for evaluations and cover the methods, timing, and responsibilities for data collection, including assessment questions, metrics, data sources and expected delivery dates, and division responsibilities.
- The Bureau has an analytical approach to assess training programs. For example, the Field Decennial Data Collection Training Branch has developed three separate training evaluation surveys which will be administered to field staff through the Learning Management System.

The three evaluations provide training feedback after the completion of the online training; after the completion of the classroom training; and near the completion of the operation. According to the Bureau, these assessments will help determine the effectiveness of training.

- The Bureau incorporated evaluation feedback into planning and design of training. For example, the Bureau held debrief sessions with census workers during the 2018 End-to-End Test and told us they were also incorporating recommendations made by a training vendor. Feedback from the 2018 End-to-End Test is being used to inform training for the 2020 Census.
- The Bureau incorporates different perspectives in assessing the impact of training. Bureau officials stated that they incorporated feedback from a variety of stakeholders when evaluating the effectiveness of its training during testing, including participant debriefs and evaluations from vendors. As previously discussed, the Bureau used three different surveys at different points in time to evaluate training, and relied on debrief sessions with census managers and staff in the field.
- Bureau officials said they considered the training methods of another organization. For example, Bureau officials told us they used training vendors that followed requirements, including e-learning content developed by the Department of Defense.

However, we found that the Bureau does not have performance goals or measures for training in its corresponding study plan for the 2020 Census. Specifically, we found that in the Detailed Operational Plan for the Field Infrastructure and Decennial Logistics Management Operations for the 2020 Census, the Bureau had planned to include the following success measures:

- Process Measures that indicate how well the process works, typically including measures related to completion dates, rates, and productivity rates.
- Cost Measures that drive the cost of the operation and comparisons of actual costs to planned budgets. Costs can include workload as well as different types of resource costs.
- Quality Measures, such as, the results of the operation, typically including rework rates, and error rates.

However, according to Bureau officials they decided not to include the measures from the study plan for training because the study plan was intended to provide descriptive information about operations rather than

evaluate them.¹⁸ We have previously reported that a fundamental element in an organization's efforts to manage for results is its ability to set meaningful goals for performance and to measure progress toward those goals. Thus, without specific performance goals and measures for its new blended training approach that considers cost and benefits when compared to 2010, the Bureau will not be able to determine whether its blended training approach reduced costs or increased efficiency.

Moreover, not having goals and measures in place could inhibit the Bureau's ability to develop meaningful lessons learned from the 2020 Census. Bureau officials agreed and stated they will consider including goals and measures on cost and efficiency in its plans; however, the Bureau has not yet provided us with documentation to reflect the goals and measures it will use to evaluate training, and has no time frame for doing so. Training for in-field address canvassing operation will begin in July 2019. Having performance goals and measures will help the Bureau assess the impact of its new training approach on cost, quality, and resources expended.

Conclusions

Successfully carrying out the thousands of activities needed to complete an accurate, cost-effective head count on schedule is an enormous and challenging task. However, for those activities we examined, the Bureau appears to be positioned to carry them out as planned, if implemented properly. While Bureau officials acknowledged there were some early delays when regions were trying to find office space and acquire leases, they said that the deadlines for the later phases of construction allow extra time—giving them a chance to make up lost time.

Regarding recruiting and hiring, the Bureau was exceeding its recruiting goals for early operations, but identified challenges in areas such as promptly completing background checks, hiring in a time of low unemployment, and overcoming language barriers. Moreover, although the Bureau has exceeded its recruiting goal for early operations,

¹⁸In the design/development phase we determined the Bureau met the best practice for having goals and measures because during the 2018 End-to-End Test, when the Bureau was designing and developing online training, the 2018 End-to-End test study plans for training had measures of success including a training solution that reduces cost and increases efficiency when compared to 2010.

recruiting a sufficient number of job applicants for partnership specialist is a challenge. The Bureau's continued response to and management of these challenges will be important as it begins recruiting for its peak operation efforts later this fall.

The Bureau has generally followed its training plans for 2020, but has opportunities to improve its ability to evaluate training efforts. The Bureau notes that the blended training approach is intended to maximize trainee learning and on the job performance during the 2020 Census. However, 2020 Census documents do not contain performance goals or measures for determining the cost and benefits of the training when compared to 2010. Revising plans to include goals and measures will better position the Bureau to determine how its blended training approach will impact the cost, quality, and resources expended on the 2020 Census.

Recommendation for Executive Action

We recommend that the Secretary of Commerce direct the U.S. Census Bureau to revise plans to include goals and measures for assessing the cost and benefits of the Bureau's new blended training approach. These measures might include, but are not limited to, measures of cost, quality, and resources associated with training when compared to 2010. (Recommendation 1)


Agency Comments and Our Evaluation

We provided a draft of this report to the Secretary of Commerce. In its written comments, reproduced in appendix II, the Department of Commerce agreed with our findings and recommendation and said it would develop an action plan to address our recommendation. The Census Bureau also provided technical comments, which we incorporated.

We are sending copies of this report to the Secretary of Commerce, the Under Secretary of Economic Affairs, the Director of the U.S. Census Bureau, and interested congressional committees. The report also is available at no charge on GAO's website at <http://www.gao.gov>.

If you have any questions about this report please contact me at (202) 512-2757 or goldenkoffr@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page

of this report. GAO staff who made major contributions to this report are listed in appendix III.

A handwritten signature in black ink that reads "Robert Goldenkoff". The signature is written in a cursive style with a large initial 'R'.

Robert Goldenkoff
Director
Strategic Issues

List of Requesters

The Honorable Elijah E. Cummings
Chairman

The Honorable Jim Jordan
Ranking Member
Committee on Oversight and Reform
House of Representatives

The Honorable Gerry Connolly
Chairman

The Honorable Mark Meadows
Ranking Member
Subcommittee on Government Operations
Committee on Oversight and Reform
House of Representatives

Appendix I: Objective, Scope, and Methodology

This report assesses the extent to which the Census Bureau (Bureau) is following its plans for space acquisition, recruiting and hiring, and training. For all of our objectives, we reviewed current Bureau planning documents and schedules, and interviewed Bureau officials including officials at the Bureau's six regional offices.

To assess the Bureau's progress in opening area census offices (ACO), we obtained and reviewed current Bureau leasing agreement information and construction (meaning renovations such as new electrical layouts, heating, ventilation, and air conditioning) and deployment information. We also gathered information on the General Services Administration's role in obtaining office space. To determine whether the Bureau is on track, we compared the current status of opening, construction, and deployment of ACOs to the Bureau's plans, schedules, and timelines, and identified differences for follow-up with Bureau officials. We also reviewed a randomly selected nongeneralizable sample of ACO files at the Philadelphia RCC to determine whether justification was included when changes to ACO locations occurred.

To determine the extent to which the Bureau is following its field hiring and recruiting strategy for the 2020 Census, we reviewed Bureau documentation regarding its strategy for recruiting and hiring temporary field staff for the 2020 Census. We also reviewed output and analysis from relevant Bureau human resources systems/databases, such as MOJO Recruit. We interviewed Bureau officials in both headquarters and the field who are knowledgeable about and responsible for recruiting and hiring temporary field staff to determine the extent to which the Bureau is meeting its recruiting and hiring goals, to describe their perspectives on any challenges facing the 2020 Census, and to understand the Bureau's actions to mitigate any challenges. To understand changes from 2010, we compared the 2010 Census recruiting and hiring plans to those of the 2020 Census to determine differences, and interviewed Bureau officials to discuss what drove these changes.

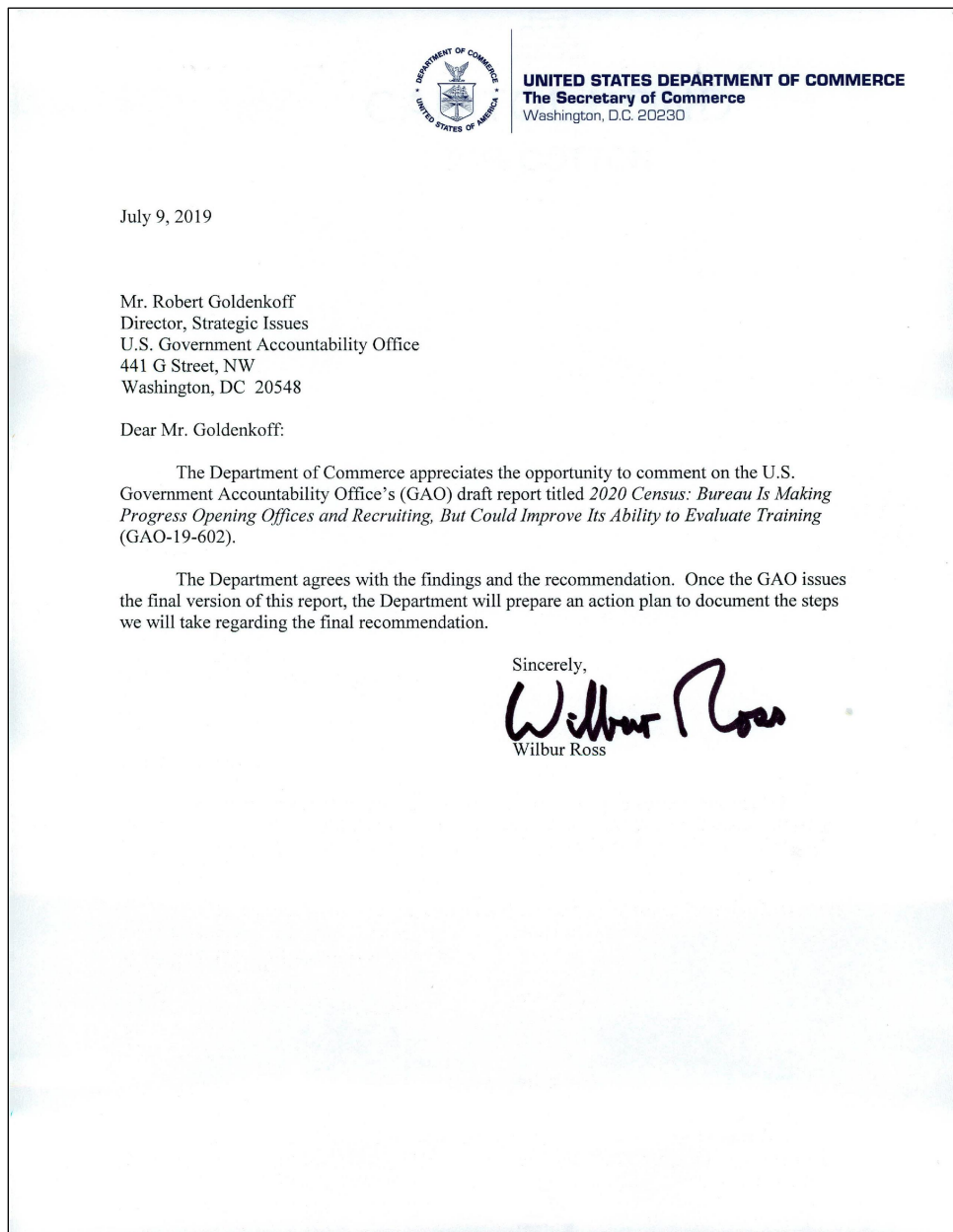
Finally, to determine the extent to which the Bureau has followed its plans for training field staff, and whether this training approach is consistent

with selected leading practices, we examined relevant documents and interviewed Bureau officials to determine the Bureau's planned approach for training, lessons learned from prior Census tests, the extent to which the Bureau is incorporating lessons learned as a result of its own testing, and what changes to training need to be made before the start of 2020 field operations. Additionally, we interviewed Bureau officials responsible for developing training curriculum to understand how training was developed (e.g. what courses to develop, challenges to using technology, etc.). We also reviewed federal guidance and our prior reports, and selected 11 leading practices from GAO's *Guide for Assessing Strategic Training and Development Efforts in the Federal Government* ([GAO-04-546G](#)) as leading practices for training. Our strategic training guide identifies four phases of the training development process (planning/analysis, design/development, implementation, and evaluation). We assessed the approach against leading practices in two of these phases: design/development and evaluation. We did not assess the implementation phase because field staff training for the 2020 Census had not yet begun during our audit, and we did not assess the planning/analysis phase because practices in that phase are more applicable to agency-wide rather than program-specific training development, and focus on full-time permanent employees rather than temporary employees. Moreover, within the design/development phase and evaluation phase, we did not assess all best practices because some of those best practices were also more applicable to agency-wide rather than program-specific training development, or we had already evaluated such practices as cost.¹ Moreover, this report primarily focuses on training for the address canvassing and nonresponse follow-up operations. We then compared the Bureau's training approach to those leading practices and identified practices being followed and any differences.

We conducted this performance audit from August 2018 to July 2019 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

¹[GAO-16-628](#) and [GAO-18-635](#).

Appendix II: Comments from the Department of Commerce



Appendix III: GAO Contact and Staff Acknowledgments

GAO Contact

Robert Goldenkoff, (202) 512-2757 or goldenkoffr@gao.gov

Staff Acknowledgments

Other key contributors to this report include Lisa Pearson, Assistant Director; Timothy Wexler, Analyst-in-Charge; Mark Abraham; Michael Bechetti; Jessica Blackband; James Cook; Rob Gebhart; Kerstin Hudon; Kayla Robinson; and Cynthia Saunders.

Appendix IV: Accessible Data

Data Tables

Data table for Highlights Comparison of Census Bureau 2010 and 2020 Logistical Activities

Year	Office Space	Hiring Selected Operations	Training
2010	494 Offices	628,000 hired	Instructor-led
2020	248 Offices	400,000 hired	Computer-based Instruction

Data for Figure 1: 2020 Census Area Census Office Structure

- 1) Area Census Office Manager
 - a) Recruiting Manager
 - i) Recruiting Assistants (Work From Home)
 - ii) Office Operations Supervisor
 - (1) Clerks
 - b) Administrative Manager
 - i) Office Operations Supervisor
 - (1) Clerks
 - c) IT Manager
 - i) Office Operations Supervisor
 - (1) Clerks
 - d) Lead Census Field Manager
 - i) 7 Census Field Managers (each with the following staff)
 - (1) Office Operations Supervisor
 - (a) Clerks
 - (2) Census Field Supervisor (Work From Home)

(a) Enumerators (Work From Home)

Data for Figure 2: 2020 Census Area Census Office Locations

Number of Area Census Offices by state

1 office	2-10 offices	11-20 offices	21-30 offices
Alaska	Alabama	Florida	California
District of Columbia	Arizona		New York
Delaware	Arkansas		Texas
Hawaii	Colorado		
Iowa	Connecticut		
Idaho	Georgia		
Maine	Illinois		
Montana	Indiana		
North Dakota	Kansas		
Nebraska	Kentucky		
New Hampshire	Louisiana		
Rhode Island	Maryland		
South Dakota	Massachusetts		
Vermont	Michigan		
West Virginia	Minnesota		
Wyoming	Mississippi		
	Missouri		
	Nevada		
	New Jersey		
	New Mexico		
	North Carolina		
	Ohio		
	Oklahoma		
	Oregon		
	Pennsylvania		
	Puerto Rico		
	South Carolina		
	Tennessee		
	Utah		
	Virginia		
	Washington		
	Wisconsin		

Source: GAO. | GAO-19-602

Data table for Figure 3: Recruiting and Hiring Timeline for In-field Address Canvassing and Nonresponse Follow-up

In-field Address Canvassing Listers

- Apply for 2020 Census Field Jobs Jan. 4, 2019 – June 9, 2019
- Selection (Interviewing) June 10, 2019 –June 24, 2019
- Onboarding Forms, and Background Check June 12, 2019 –Aug. 8, 2019
- Paid Training Aug. 8, 2019 –Aug. 17, 2019
- Production Field Operation Scheduled to be in the Field Aug. 19, 2019 –Oct. 4, 2019

Nonresponse Follow-up Enumerators

- Apply for 2020 Census Field Jobs Jan. 4, 2019 – Feb. 29, 2020
- Selection (Interviewing) Mar. 7, 2020 –Mar. 21, 2020
- Onboarding Forms, and Background Check Mar. 9, 2020 –May. 2, 2020
- Paid Training May 6, 2020 –May 16, 2020
- Production Field Operation Scheduled to be in the Field May 13, 2020 –Jul. 24, 2020

Data for Figure 6: Background Check Process for Employment with the Bureau

- 1) (Selectee) Makes an Appointment with Fingerprint Vendor and completes the OF306
- 2) (Fingerprint Vendor) Fingerprints Selectees and Takes Picture
- 3) (Fingerprint Vendor) Submits Fingerprints to Census Investigative Services (CIS) and Pictures are Sent to Area Census Offices
 - a) **Make choice**
 - i) (CIS) (CIS) Sends Fingerprints to FBI
 - ii) (CIS) Updates Selectee Fingerprint Status to Fingerprint Received
 - b)

- 4) (CIS) Receives Fingerprint Results from FBI
- 5) (CIS) Notifies Selectees with e-QIP Link
- 6) (CIS) Reviews the OF306, Fingerprint Results, and e-QIP
- 7) (CIS) Determines Selectee Eligibility
- 8) (CIS) If Selected, Updates Selectee Fingerprint Status to 'Favorable' and Sends to the Office of Personnel Management for Further Processing

Source: GAO analysis of Census Bureau data. | GAO-19-602

Data table for Figure 7: Assessing the Bureau’s Planned Training Approach for Design/Development against Selected Leading Practices

Phase	Leading Practice	Assessment
Design/development	Agency training is connected to improving individual and agency performance in achieving specific results. For example, does the agency have a formal training and professional development strategy with an assessment of needs and a control mechanism to ensure all employees receive appropriate training?	Fully Met
	The design of the training program is integrated with other strategies to improve performance. For example, is training focused on building team relationships and new ways of working?	Fully Met
	Agency considered the merits of using different delivery mechanisms to ensure efficient and cost-effective delivery of training. For example, does the agency use formal and on-the-job training opportunities that use new technologies and approaches?	Fully Met
	Training incorporates measures of effectiveness into course designs. For example, does the training include clear linkages between specific learning objectives and organizational results as well as procedures to incorporate feedback from a variety of stakeholders?	Fully Met
	Agency determined a targeted level of improved performance. For example, do specific performance improvement goals and training evaluation documents focus on achieving results?	Fully Met

Data Table for Figure 8: Assessing the Bureau’s Planned Training Approach for Evaluation against Selected Leading Practices

Phase	Leading Practice	Assessment
Evaluation	Agency systematically planned for and evaluated effectiveness of training. For example, is there a data collection analysis plan that sets priorities for evaluations and covers methods, timing, and responsibilities for data collection?	Fully Met
	Agency uses appropriate analytical approaches to assess training programs. For example, does the agency use the appropriate methods to evaluate training, guidelines for determining when and how training programs will be evaluated?	Fully Met
	Agency uses performance data to assess results achieved through training. For example, does the agency use both quantitative and qualitative measures to assess training results?	Partially Met
	Agency incorporates evaluation feedback into planning and design of training. For example, does the agency have a systematic monitoring and feedback process that is used to refine training efforts and reallocate resources?	Fully Met
	Agency incorporates different perspectives in assessing the impact of training on performance. For example, does the agency use surveys, interviews, and focus groups with stakeholders to refine training programs when necessary?	Fully Met
	Agency compares training investments, methods, or outcomes with those of other organizations. For example, does the agency compare its activities with those of other organizations and attempt to identify training efforts outside the agency for benchmarking?	Fully Met

Agency Comment Letter

Text of Appendix II: Comments from the Department of Commerce

July 9, 2019

Mr. Robert Goldenkoff Director, Strategic Issues

U.S. Government Accountability Office 441 G Street, NW

Washington, DC 20548 Dear Mr. Goldenkoff:

The Department of Commerce appreciates the opportunity to comment on the U.S. Government Accountability Office's (GAO) draft report titled 2020 Census: Bureau Is Making Progress Opening Offices and Recruiting, But Could Improve Its Ability to Evaluate Training (GAO-19-602).

The Department agrees with the findings and the recommendation. Once the GAO issues the final version of this report, the Department will prepare an action plan to document the steps we will take regarding the final recommendation.

Wilbur Ross

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