TREASURY INSPECTOR GENERAL FOR TAX ADMINISTRATION



Opportunities Exist to Improve Hiring and Retaining Employees With Information Technology Expertise

June 2, 2021

Report Number: 2021-20-028

Why TIGTA Did This Audit

As of May 2020, the Information Technology organization had 7,237 employees compared to 7,042 employees in July 2015, an increase of 195 employees. In May 2020, the IRS reported that 50.2 percent of the Information Technology organization's workforce is eligible to retire within the next three years, which could create a significant knowledge and experience gap.

Hiring and retaining a workforce with the appropriate information technology skillsets is critical to ensure that modernization efforts, technology upgrades, and system maintenance are completed on schedule.

This audit was initiated to evaluate the IRS's efforts to hire and retain skilled Information Technology organization personnel.

Impact on Taxpayers

A decline and turnover in Information Technology organization staffing could lead to gaps in addressing system security issues, performing necessary system maintenance and upgrades, and developing modernized tools and systems to enhance the taxpayer experience and improve operational efficiency.

What TIGTA Found

The Office of Personnel Management states that, to help ensure the most efficient and effective means of mission accomplishment, agencies should incorporate strategies for employee recruitment, retention, and training and development. The Human Capital Office reports on mission-critical skill gaps that can be accessed by front-line managers. However, not all Information Technology organization managers review the skill gap reports. TIGTA reviewed skill gap reports for 335 individuals hired during Fiscal Year 2020 and determined that 281 (84 percent) have deficiencies in one or more mission-critical skills for their position and only 54 (16 percent) have no mission-critical skill gaps. Of the 335 individuals, 82 (24 percent) have deficiencies in all of the mission-critical skills for their position. Skill gap mitigation reports summarize skill gaps at the Information Technology organization function level and outline how the functions need to address deficiencies (e.g., through training), by level of importance. However, the Information Technology organization does not require all of its functions to participate in skill gap mitigations.

Individuals access job announcement templates when applying online for an IRS position. Job announcement templates are sufficiently detailed to target the job skills necessary for the positions and are reviewed timely. In addition, the Information Technology organization primarily used surge hiring as a strategy along with direct-hire authority to fill 2,427 positions from Fiscal Years 2017 through 2019. During this time, applicant interviews were not performed. Finally, the Information Technology organization does not administer hiring assessments whereby an applicant must demonstrate his or her job qualifications.

The IRS retention strategy focuses on employee engagement and includes a retention incentive policy that the Information Technology organization used twice in the last six years. Within the next three years, 619 information technology employees with expert-level skills are eligible to retire.

What TIGTA Recommended

The Chief Information Officer should develop policies and procedures to ensure that mission-critical skill gap reports are reviewed by managers to address training needs and that all Information Technology organization functions participate in skill gap mitigations; ensure that interview and hiring assessments are performed on all potential employees; and consider using retention incentives when an employee with unusually high or unique qualifications would be likely to leave Federal service, significantly affecting the mission.

The IRS agreed to enhance its skills gap mitigation process and strategically administer retention incentives. However, the IRS did not agree to perform interviews and hiring assessments on all potential Information Technology organization employees.



U.S. DEPARTMENT OF THE TREASURY

WASHINGTON, D.C. 20220

June 2, 2021

MEMORANDUM FOR: COMMISSIONER OF INTERNAL REVENUE

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FROM: Michael E. McKenney

Deputy Inspector General for Audit

SUBJECT: Final Audit Report – Opportunities Exist to Improve Hiring and Retaining

Employees With Information Technology Expertise (Audit #202020018)

This report presents the results of our review to evaluate the Internal Revenue Service's efforts to hire and retain skilled Information Technology organization personnel. This review is part of our Fiscal Year 2021 Annual Audit Plan and addresses the major management and performance challenge of *Implementing Tax Law Changes*.

Management's complete response to the draft report is included as Appendix II.

Copies of this report are also being sent to the IRS managers affected by the report recommendations. If you have questions, please contact me or Danny R. Verneuille, Assistant Inspector General for Audit (Security and Information Technology Services).

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Background

According to Internal Revenue Service (IRS) officials, from Fiscal Year (FY) 2015 through FY 2020, the Information Technology (IT) organization lost between 344 and 390 employees each year, with an attrition rate ranging between 4.93 and 5.50 percent. The IT organization primarily used surge hiring 1 as a strategy along with direct-hire authority to fill 2,427 positions from FYs 2017 through 2019. As of May 2020, the IT organization had 7,237 employees, compared to 7,042 employees in July 2015 (an increase of 195 employees). In May 2020, however, the IRS reported 2 that 50.2 percent of the IT organization's workforce is eligible to retire within the next three years, which could create a significant knowledge and experience gap. Hiring and retaining a workforce with the appropriate information technology skillsets is critical to ensure that modernization efforts, technology upgrades, and system maintenance are completed on schedule.

The Office of Personnel Management states that, to help ensure the most efficient and effective means of mission accomplishment, agencies should incorporate strategies for employee recruitment, retention, and training and development. The Human Capital Office's (HCO) mission is to support the IRS workforce and stakeholders through progressive human capital services and solutions. The HCO supports efforts to identify, recruit, hire, and advance a workforce with the competencies necessary to achieve current and future organizational performance goals. For example, the HCO oversees the IT organization's candidate review process for potential and existing employees, reviews and updates job descriptions for online job announcements, and develops Service-wide guidance on engaging and retaining employees. In addition, the HCO plays an important role in helping the IT organization achieve the IRS Strategic Plan goal of cultivating a well-equipped, diverse, flexible, and engaged workforce.³

Results of Review

Hundreds of Skilled Employees Are Nearing Retirement Eligibility

We analyzed IT organization staffing data and identified 619 employees with expert-level skills who are eligible for retirement within the next three years. There are no other employees with these expert-level skills in the IT organization. Figure 1 provides a breakdown by IT organization function for employees with expert-level skills who are eligible for retirement within the next three years.⁴

¹ See Appendix III for a glossary of terms.

² IRS, *IT Human Resources Board Succession Management Update* (May 22, 2020).

³ IRS, Publication 3744, *Internal Revenue Service Strategic Plan – Fiscal Year 2018-2022* (Revised Apr. 2018).

⁴ HCO data for expert-level skills are as of August 5, 2020. Retirement eligibility data are as of July 18, 2020; therefore, employees included in this figure are eligible to retire on or before July 17, 2023.

Applications Development

176 Employees

175 Employees

176 Employees

177 Employees

177 Expert Skills

178 Expert Skills

179 Expert Skills

179 Expert Skills

170 Expert Skills

Figure 1: Number of Employees Eligible for Retirement Within the Next Three Years by IT Organization Function and Expert-Level Skills

Source: Our analysis based on HCO data of expert-level skills by IT organization function.

Collectively, the 619 employees account for 13,520 skills for which the employee is the only person in the branch within one of the seven IT organization functions with that skill at the expert level. We requested evidence of an action plan to mitigate the risk of losing retirement-eligible people with expert-level skills. The HCO provided a November 2020 report that outlined several recommendations for the IT organization's consideration, including focusing on training and the transfer of knowledge, especially in the area of legacy system programming. We are unable to evaluate the effectiveness of the risk mitigations because the HCO is in the early stages of implementing its recommendations.

Skill Gap Review and Mitigation Is Not Required

Standard operating procedures⁵ state that the HCO is responsible for implementing, coordinating, and monitoring the IT organization skills assessment. The HCO identifies technical skills of IT organization employees by performing skills assessment surveys. The surveys are performed every two years and are comprised of both mission-critical and nonessential skill questions.⁶ The HCO uses the Information Technology Workforce Tool, which is a centralized database that captures the technical skills of IT organization employees using web-based assessments. The skills assessment survey is based on the *Skills Framework for the Information Age*, which is an industry standard model for describing and managing skills and competencies for information technology professionals and provides a method of mapping an individual's professional skill level to a set of standard definitions. The surveys are mandatory for all General Schedule employees. The most recent assessment was completed by employees during FY 2019 and the first quarter of FY 2020.

The skill gap reports summarize the skills captured in the skills assessments for each of the seven functions within the IT organization. While the skills assessment survey includes both mission-critical and nonessential skill questions as defined by each IT organization function, skill

⁵ IRS, *IT Skills Assessment Procedures* (Feb. 1, 2019).

⁶ The term mission-critical skills is interchangeable with technical parts.

gap reports only include the mission-critical skills from the skills assessments. The IT organization has identified 14 mission-critical skills,⁷ and the number of mission-critical skills for each IT organization function varies based on the specific needs of that function. Each mission-critical skill is made up of multiple competencies, and each competency is made up of multiple questions. The skill gap reports compare an individual's skill level in a particular area to the industry's standard and identifies strengths and deficiencies. For example, one assessment question may ask for an individual's skill level in understanding acquisition management systems. An individual may have a skill level of "2" in this area. However, if the industry standard for that skill requires a level of "4," the individual would be considered deficient in that skill.

Management review of skill gap reports is not required

The HCO shares the skill gap reports with IT organization management which can be accessed by front-line managers. Because managers have access to individual results, they can identify skill gaps for each of their employees. This allows managers to work with their staff to ensure that all needed skill gaps are addressed with training tailored to their positions. However, the IT organization does not require management to review all staff members' skill gaps in the skill gap reports. We judgmentally sampled 12 (33 percent) of 36 managers from one of the seven IT organization functions to evaluate whether, in the absence of a requirement, the managers review skill gap reports. Of the 10 responses we received, only two managers said that they track and review all skill gaps related to each staff member's job duties, and eight said they did not.

In addition, we analyzed skill gap reports for 335 individuals hired into the seven IT organization functions during FY 2020 to help determine whether the IT organization hired individuals qualified to perform their job duties based on mission-critical skills.⁸ As of August 21, 2020, we determined that 281 (84 percent) of 335 employees included in the skill gap reports have deficiencies in one or more mission-critical skills for their IT organization functions, and only 54 (16 percent) have no deficiencies in mission-critical skills. Of the 335 employees, 82 (24 percent) have deficiencies in all mission-critical skills for their IT organization functions. Figure 2 summarizes our analysis of the IT organization new hire skill gaps.

⁷ The 14 mission-critical skills are: Acquisition, Architecture, Cybersecurity, Data Analysis, Finance, Information Systems, Policy and Law, Process Improvement, Project Management, Software, Strategic Planning, System Development, Technical Services, and Technical Support. Software is not included in the skill gap reports.

⁸ We did not validate the accuracy and reliability of the data within the skill gap reports.

Figure 2: FY 2020 IT Organization Function New Hire Skill Gap Analysis

IT Function	Mission- Critical Skills	New Hires That Completed Skills Assessment	New Hires With Skill Gaps in One or More Mission-Critical Skills	New Hires With Skill Gaps in All Mission-Critical Skills	New Hires With No Skill Gaps in Any Mission-Critical Skills
Applications Development	4	46	40	8	6
Cybersecurity	Cybersecurity 3 79		55	31	24
Enterprise Operations	9	79	75	4	4
Enterprise Program Management Office	5	17	17	0	0
Enterprise Services	8	19	19	4	0
Strategy and Planning	7	12	12	4	0
User and Network Services	Network 5 83		63	31	20
TOTAL		335	281	82	54

Source: Our analysis of data as of August 21, 2020, provided by the HCO.

Without established procedures that require IT organization management to review skill gap reports, managers may not conduct reviews of their employees' deficiencies. We acknowledge that there will be some variation in how deficiencies are addressed with employees because expert-level skills are not always required for entry-level positions, for example. We did find some commonalities in the reports we reviewed, however, such as that the reports for all 12 managers show staff with deficiencies in Project Management, which is a mission-critical skill for all IT organization functions. If the managers do not address skill gaps, their employees may not meet the job requirements or further develop the skills needed for their positions to enable the IT organization to effectively and efficiently meet its mission.

Not all IT organization functions are participating in skill gap mitigations

According to HCO management, the HCO works with IT organization management to develop skill gap mitigation reports. Skill gap mitigation reports summarize skill gaps at the IT organization function level and outline how the functions need to address their deficiencies (e.g., through training), by level of importance. Skill gap mitigation reports assist the HCO and IT organization to forecast skill gaps to determine the IT organization's training needs. Because the HCO cannot complete mitigations for all skill gaps within each IT organization function due to limited resources, it assists in providing suggested mitigation strategies for the top mission-critical skills of each function. The number of mission-critical skills reviewed is tailored based on each IT organization function's size. As a result, there could be more skills that need to be addressed that are not addressed through skill gap mitigations. This further supports the

need for IT organization management to review and assess all mission-critical skill gap reports for their staff.

During July and August 2020, the HCO conducted lessons learned sessions for four of the seven IT organization functions to get feedback on how to improve the skills assessment surveys, skill gaps, and mitigations. The participants made several recommendations, including:

- Employees should update their skills assessments throughout the year or as skill sets change.
- Communication with management and subject matter experts needs to improve.
- Subject matter experts should have hands-on knowledge.
- Skills assessment questions need to be phrased more clearly so employees know exactly what is being asked.

Skill gap mitigation reports can be used to help ensure that employees are meeting job requirements by identifying deficiencies that need to be addressed. However, the IT organization does not require all functions to participate in skill gap mitigations. As a result, one of the IT organization functions did not participate in the skill gap mitigations and has yet to agree to participate. According to HCO management, instead of participating in the mitigations, the IT organization function identified its own workforce concerns. If there is no requirement for complete mitigation participation across the IT organization, each function may create its own solution, or not have any solution, which would reduce the impact of collaboration efforts between the HCO and the IT organization.

The Chief Information Officer should:

Recommendation 1: Develop policies and procedures that require management to track, review, and assess mission-critical skill gap reports for their staff and work with their staff to address formal and informal training needs.

Management's Response: The IRS agreed with this recommendation. The IT organization skills gap mitigation process is evolving, and the IRS is in a position to formalize enhancements through updating existing standard operating procedures. Updates include engaging IT organization senior leadership during the assessment and gap mitigation phases and establishing requirements for management to track and review mission-critical skill gap reports for their staff.

Office of Audit Comment: While the IRS agreed with this recommendation, it states that employees may have one or more deficiencies in a critical skill that does not always correlate to a deficiency in a skill that is critical for their job position. Our report acknowledges that expert-level skills are not always required for every position. We also acknowledge that employees with expert-level skills nearing retirement eligibility may not have skills that are mission-critical for their current position and, therefore, would not cause work stoppage in the event that they retire when eligible. During our work, we requested an action plan that identifies how the IRS would mitigate the risk of losing retirement-eligible personnel with expert-level skills. The IRS provided a report with several recommendations to mitigate the risk. We were unable to evaluate the

effectiveness of the risk mitigations because the HCO was in the early stages of implementing the recommendations when the report was issued.

Recommendation 2: Require all IT organization functions to participate in the skill gap mitigations.

Management's Response: The IRS agreed with this recommendation. The IT organization skills gap mitigation process is evolving, and the IRS is in a position to formalize enhancements through updating existing standard operating procedures. Updates include engaging IT organization senior leadership during the assessment and gap mitigation phases and establishing requirements for all IT organization functions to participate in the skill gap mitigation process.

Job Announcements Are Detailed and Reviewed Timely

The Internal Revenue Manual (IRM)⁹ states that a standard position description is the official description of management's assignment of major duties, responsibilities, and supervisory relationships to a position. The position description must be kept up to date and include information about the job that is significant to its classification. The more detailed the description of job duties and responsibilities is, the easier it will be for job applicants to identify positions that align with their skillsets and for the hiring officials to determine whether applicants can perform the job duties successfully. While position descriptions are internal documents, individuals access Career Connector templates (hereafter referred to as job announcement templates) when applying online for IRS job announcements. Each job announcement template is associated with one or more internal position descriptions.

To determine whether the job descriptions and qualifications included in the job announcement templates coincide with the skillsets required for the IT organization positions, we performed a test to determine whether the content in the templates is specific enough to help ensure that applicants meet the general qualifications. This detailed information in the job announcement helps ensure that the individuals applying for a job adequately meet qualifications. Without this detailed information, the hiring process could be impeded because hiring officials would need to spend more time determining applicant qualifications, and the applications of unqualified applicants would need to be considered. We selected a judgmental sample of 10 job announcement templates from the inventory of 360 templates in active status as of July 2020. We found the templates were sufficiently detailed to target the job skills necessary for the positions.

In addition, we evaluated whether the IRS regularly reviews the job announcement templates to account for any changes, such as changes in occupation, to ensure that the templates are still relevant to the IT organization. While there is no specific time requirement to update the templates, HCO personnel stated that their goal is to review them every three to five years. HCO personnel also stated that they receive a report early in the calendar year which identifies templates that are three years old or older. We reviewed a job announcement template report with an active status of templates between January 2015 and December 2020. This criteria

⁹ IRM 6.511.1, *Position Management and Classification Policy and Operational Guidance* (Mar. 19, 2010).

¹⁰ A judgmental sample is a nonprobability sample, the results of which cannot be used to project to the population.

included eight of the templates from our judgmental sample. We determined that the HCO is timely reviewing and updating job announcement templates.

<u>Assessments That May Assist in Hiring Qualified Individuals Are Not</u> Performed

The IRM¹¹ states that a well-defined assessment strategy will allow candidates to exhibit the competencies required for the job. The strategy provides the details on the methods or systematic approach by which an applicant's proficiency in the required competencies is measured. The strategy can include a variety of assessment instruments to accomplish this, such as structured interviews, work simulation, and traditional tests.

Interviews are not performed

Direct-hire authority allows Federal agencies to fill vacancies in specific occupations, grade levels, and locations when there is a proven critical hiring need or a severe shortage of candidates. In addition, it allows for an abbreviation of the normal hiring process. There is no requirement for a job announcement, only a public notice is needed, and a person can be selected outside of the competitive process. However, the IRS still must identify and use the proper assessments for the positions being filled to determine the individuals who are qualified for the approved positions. Interviews are considered a best practice by other government agencies.

According to IRS management, the IT organization primarily used surge hiring as a strategy along with direct-hire authority to target filling 2,427 positions from FY 2017 through FY 2019. HCO management stated that surge hiring was created by the IT organization in FY 2017 and was needed to fill critical information technology and Cybersecurity function positions and to support tax reform legislation. The first surge hiring process occurred between December 2016 and January 2017. In March 2018, the IT organization initiated a nearly two-year–long surge hiring process, which included direct-hire authorization to streamline hiring external staff to support changes needed for tax reform legislation. The last stage of the hiring surge began in August 2019 to fill the remaining positions for FY 2019. Figure 3 summarizes the timeline of significant IT organization hiring initiatives.

¹¹ IRM 6.337.1, *Alternative Rating and Selection* (Nov. 3, 2009).

¹² Tax Cuts and Jobs Act of 2017. Pub. L. No. 115-97. Officially known as "An act to provide for reconciliation pursuant to titles II and V of the concurrent resolution on the budget for Fiscal Year 2018."

Figure 3: Timeline of IT Organization Hiring Initiatives

Date	Hiring Process	Targeted Positions to Fill	Purpose
December 2016 – January 2017	Surge	981	Hiring in anticipation of potential freeze on Federal hiring in FY 2017.
March 2018 – December 2019	Surge	1,446	Multipurpose, including hiring of critical information technology and Cybersecurity function positions and to support tax reform.
August 2018 – December 2019	Direct Hire	426 (subset of the 1,446)	Support for tax reform.
August 2019 – September 2019	Surge	200 (subset of the 1,446)	Accelerated push to complete the hiring surge before the end of FY 2019.

Source: Our analysis of IT organization hiring initiatives.

HCO management stated that the IT organization did not perform interviews during these hiring surges. The IRS decided to omit individual interviews in these cases and focus on assessing the written materials submitted by each applicant. The IRS accepted the risk of having limited information to assess applicants to mitigate the risk of having critical positions left vacant. We interviewed six of eleven IT organization managers who were assigned new employees hired in FY 2020 who no longer work at the IRS to discuss their experience with the hiring process and whether or not these departed employees were qualified for the positions. Three of the managers stated that the employee was not interviewed, one manager considered a phone discussion with the employee an interview, and two did not know whether an interview was performed. All the managers we interviewed told us these new employees were qualified for their positions.

Interviews are an important step in the hiring process because they give the hiring manager an opportunity to ask more in-depth questions about a candidate's qualifications, skills, and experience than the candidate's application can answer. Interviews also allow the applicant to obtain information to help determine whether it is suitable for them to accept the position. Although the managers we interviewed believed the employees were qualified for their positions, our analysis of the skill gap reports for 335 individuals hired into the IT organization functions during FY 2020 indicated new employee skills deficiencies. Conducting interviews to properly assess potential employees reduces the risk of hiring unqualified individuals and may also reduce long-term employment and performance challenges and costs for the IT organization.

Hiring assessments are not administered

The IT organization does not administer preemployment skills assessments (hereafter referred to as hiring assessments as defined by the IRS) whereby an applicant must demonstrate job qualifications, although the IRS requires hiring assessments for some positions in other business units. These assessments allow for the demonstration of skills and experience based on actual simulations and could help determine skillsets prior to hiring. Currently, IT organization job applicants are directed to respond to multiple choice questions related to their qualifications and experience to help determine their qualifications. However, that is one of several methods the IRS uses to consider a candidate's potential to perform job duties. The IRS partnered with an independent third party to develop an assessment exam consisting of four test types

designed to evaluate the applicants' knowledge, skills, and abilities needed to successfully perform the duties of the job. For example, an exam may consist of: 1) situational judgment test items; 2) multiple-choice writing items; 3) job simulation items; and 4) a writing sample item. These exams can be used to evaluate an applicant's judgment in critical situations that they may encounter on the job.

There is no specific requirement for the IT organization to administer hiring assessments; however, requiring applicants to demonstrate the skills of a job position based on minimum qualifications could be beneficial. While nothing precludes the IT organization from using an assessment to verify an applicant's qualifications or potential to successfully perform in a position, management stated they do not need to use hiring assessments to verify an applicant's qualifications because the IT organization is meeting its business needs.

In the technical field of information technology, demonstrating one's experience and knowledge is crucial. A hiring assessment allows management to further evaluate an individual's experience to determine whether a candidate has the minimum requirements necessary for the position prior to being hired. Hiring assessments can also help ensure that more potential IT organization hires have the mission-critical skills needed for the job duties within the hiring IT organization functions. Finally, interviews and hiring assessments may provide potential hires a greater appreciation and understanding of the job.

The lack of interviews and additional assessments may have contributed to employees being hired with mission-critical skill gap deficiencies shown in Figure 3. For example, Project Management is one of the mission-critical skills identified in all seven IT organization functions. If the IT organization interviewed applicants and administered hiring assessments, the hiring managers could consider whether an individual has Project Management skills prior to being hired. While it is unlikely that all skill gap deficiencies can be eliminated, interviews and hiring assessments may allow the IRS the opportunity to hire individuals who possess more of the mission-critical skills required.

The Chief Information Officer should:

Recommendation 3: Ensure that interviews are performed as a best practice in the hiring process for all potential IT organization employees.

Management's Response: The IRS disagreed to mandate interviews during the hiring process for all IT organization positions. Although the IRS agrees that interviews are a best practice, the agency needs to have flexibility around internal and external hiring. To ensure that flexibility, interviews are at management's discretion and may be conducted as part of the normal hiring process for potential IT organizational employees.

Office of Audit Comment: While the IRS agreed that interviews are a best practice and may be conducted in the normal hiring process, we believe interviews performed for all potential IT organization employees is an integral part of the hiring process, beneficial for both the IRS and the potential employee.

Recommendation 4: Coordinate with the HCO to develop and deploy hiring assessments for potential IT organization employees to demonstrate job qualifications prior to hiring.

Management's Response: The IRS disagreed with this recommendation. The IRS currently utilizes hiring assessments when developing questionnaire templates and assigns weights to them for every job posting. Applicants answer assessment questions, and the IRS considers their answers during the candidate screening process. To develop templates of assessment questions and responses for identified position descriptions, subject matter experts from the IT organization meet with personnel psychologists to discuss skill-targeted questions and apply weighted values to the responses. These questions along with the weighted responses serve as a screening assessment that separate applicants into quality categories. Candidates in the highest categories are referred and considered for selection. The collaboration between the HCO and the IT organization resulted in over 300 deployed assessment templates in Career Connector. Assessment templates are reviewed and updated periodically.

Office of Audit Comment: The recommended hiring assessments (or preemployment skills assessments) allow the potential IT organization employee to demonstrate skills and experience because they are based on actual simulations. We believe that the demonstration of skills is a better assessment method than answering questions. The recommended assessments would benefit the IT organization by helping to determine a candidate's actual skillsets prior to hiring.

Retention Strategy Focuses on Employee Engagement

One way to effectively use limited resources is to retain those employees who possess the necessary skills and expertise the agency requires to meet its mission. The IRM¹³ states that the IRS relies on the HCO Engagement and Retention office to develop Service-wide guidance on engaging and retaining employees. Some of the Engagement and Retention office services also include overseeing the administration of the Federal Employee Viewpoint Survey¹⁴ and collaborating with internal and external stakeholders on employee engagement initiatives. In addition, the office creates annual corporate engagement guidance to commit to Service-wide and business unit–specific engagement initiatives.

The goal of an employee retention program is to ensure that the right people are in the right positions and that they have an opportunity to develop and grow throughout their career. The IRS retention strategy¹⁵ states that continually investing in employees throughout their careers can influence retirement-eligible employees to stay with the organization and share their knowledge with other employees. In addition, the strategy states that retaining employees requires the organization to have a strong employee engagement strategy.

¹³ IRM 1.1.22, Organization and Staffing, Human Capital Office (Nov. 2, 2017).

¹⁴ The Federal Employee Viewpoint Survey is a once-a-year snapshot in time of how employees feel regarding their work experience, leadership, and satisfaction with their job and agency. Survey results provide valuable insight into the challenges organization leaders face in ensuring that the Federal Government has an effective civilian workforce and how well they are responding.

¹⁵ IRS, *IRS Retention Strategy* (Mar. 2017).

The IRS implemented a Service-wide engagement strategy, ¹⁶ which provides meaningful engagement actions that all business units should accomplish. The IRS Leadership Engagement Action Plan focuses on the Office of Personnel Management's recommended engagement themes of Recognition and Empowerment, Motivation, Diversity and Inclusion, and Communication. As a result of the IRS Leadership Engagement Action Plan, the IT organization developed its FY 2020 Employee Engagement Action Plan, which is updated annually based on the Federal Employee Viewpoint Survey results. Figure 4 summarizes the IT organization's FY 2020 Employee Engagement Action Plan based on the FY 2019 Federal Employee Viewpoint Survey results for each of the four engagement themes.

Figure 4: Summary of the FY 2020 IT Organization Employee Engagement Action Plan

Office of Personnel Management Engagement Themes	Federal Employee Viewpoint Survey Questions and IT Organization Proposed Initiatives for Employee Engagement
	Employees have a feeling of personal empowerment with respect to work processes.
Recognition and Empowerment	Promote knowledge sharing with events that bring employees together.
	Promote training opportunities based on the results of the annual training needs assessment.
	I have trust and confidence in my supervisor.
Motivation	Involve employees in day-to-day decisions impacting their work.
	Promote both peer-to-peer and employee-to-manager collaboration that fosters team building.
	Supervisors work well with employees of different backgrounds.
Diversity and Inclusion	Regularly recognize career milestones and other professional achievements.
	Provide multiple ways for employees to engage with management on a voluntary basis.
	How satisfied are you with the information you receive from management on what's going on in your organization?
Communication	7. Regularly share updates about employees, our organization, and strategic program areas.
	Create opportunities, such as town hall meetings, that enable employees to share feedback on the quality and timeliness of information they receive from management.

Source: IRS, FY 2020 IT Organization Employee Engagement Action Plan.

The IRM¹⁷ states that an employee may be considered for a retention incentive if the unusually high or unique qualifications of the employee or a special need for the employee's services makes it essential to retain the employee and the employee would be likely to leave the Federal

¹⁶ IRS, FY 2019-2021 Leadership Engagement Action Plan (Oct. 1, 2018).

¹⁷ IRM 6.575.1, IRS Recruitment, Relocation, Retention, and Extended Assignment Incentives (Mar. 3, 2020).

service in the absence of a retention incentive. The IRS has several factors it must consider before authorizing a retention incentive, including special or unique competencies required for the position and the extent to which the employee's departure would affect the IRS's ability to carry out an activity, perform a function, or complete a project that the IRS deems essential to its mission.

In the last six years, the IRS approved use of its retention incentive policy for two IT organization employees; the first request was in December 2014, and the second request was in August 2020 (both for a one-year period). The IRS recertified the first retention incentive request in December 2015 for another year, but the employee retired in January 2016. We reviewed the retention incentive request forms and verified that the IRS documented the factors it believed warranted the authorization of the retention incentives. The retention incentives were approved at a cumulative cost of \$83,524.¹⁸

According to HCO management, the retention incentive policy has not been used frequently in recent years due to budget constraints. A loss of employees with expert-level skills could negatively affect the IT organization's ability to meet its mission. It could lead to insufficient staff to address system security issues, perform necessary system maintenance and upgrades, and develop modernized tools and systems to enhance tax administration.

<u>Recommendation 5</u>: The Chief Information Officer should consider using the retention incentive when an employee with unusually high or unique qualifications would be likely to leave Federal service, significantly affecting the mission.

Management's Response: The IRS agreed with this recommendation. The HCO will coordinate with the Chief Information Officer to communicate to IT organization leadership the availability of the retention incentive program and strategize how the IRS can broaden the use of this program. Additionally, the HCO and IT organization leadership will approach the administering of retention incentives from a strategic viewpoint by analyzing available data, including retirement-eligible employees with unusually high skillsets, particularly those who have a history of working significant additional hours beyond their tour of duty to accomplish critical deliverables.

¹⁸ The employee retired on January 8, 2016. Because the retention policy agreement was designated to be paid in biweekly installments, we estimate the IRS paid approximately \$1,120 towards the recertified retention incentive.

Appendix I

Detailed Objective, Scope, and Methodology

Our overall objective was to evaluate the IRS's efforts to hire and retain skilled IT organization personnel. To accomplish our objective, we:

- Reviewed employee separation and retirement eligibility data to determine whether the IT organization reviews data on attrition and staffing.
- Interviewed IT organization and HCO management, analyzed new hire skill gap reports, and reviewed skill gap mitigation reports to determine whether the IT organization and HCO management ensure that existing employees are qualified to perform their job duties and functions. We selected a judgmental sample of 12 of 36 managers from one of the seven IT organization functions to evaluate whether the managers reviewed skill gap reports.
- Evaluated job announcement templates to determine whether they are specific enough
 to help ensure that applicants meet job qualifications. We selected a judgmental sample
 of 10 job announcement templates from the inventory of 360 templates in active status
 as of July 2020 to determine whether the templates are still relevant to the
 IT organization.
- Interviewed IT organization and HCO management, obtained hiring documentation, and analyzed skill gap reports of new hires to evaluate hiring efforts. We selected a judgmental sample of six of eleven IT organization managers assigned employees hired in FY 2020 who no longer work at the IRS to discuss their experience with the hiring process and the departing employees' qualifications.
- Reviewed IRS Service-wide and IT organization policies and procedures on employee engagement and retention to determine whether the IRS has established written policies and procedures to improve employee retention.

Performance of This Review

This review was performed with information obtained from the HCO and the IT organization in Washington, D.C., during the period February 2020 through March 2021. We conducted this performance audit 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 objective. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective.

Major contributors to the report were Danny Verneuille, Assistant Inspector General for Audit (Security and Information Technology Services); Jena Whitley, Director; Mike Mohrman, Audit Manager; Chanda Stratton, Lead Auditor; Natalie Russell, Auditor; and Jonathan D. Elder, Information Technology Specialist (Data Analytics).

¹ A judgmental sample is a nonprobability sample, the results of which cannot be used to project to the population.

Internal Controls Methodology

Internal controls relate to management's plans, methods, and procedures used to meet their mission, goals, and objectives. Internal controls include the processes and procedures for planning, organizing, directing, and controlling program operations. They include the systems for measuring, reporting, and monitoring program performance. We determined that the following internal controls were relevant to our audit objective: IRM policies and procedures for assessment strategies, management of position descriptions and their associated job announcement templates, and retention incentives. In addition, we reviewed HCO standard operating procedures for addressing skills assessments, skill gaps, and mitigations. We evaluated these controls by interviewing IRS employees, reviewing employee skill gap data obtained from IRS systems, and analyzing relevant documentation provided by the IRS.

Appendix II

Management's Response to the Draft Report



DEPARTMENT OF THE TREASURY INTERNAL REVENUE SERVICE WASHINGTON, DC 20224

May 17, 2021

MEMORANDUM FOR DEPUTY INSPECTOR GENERAL FOR AUDIT

FROM: Robin D. Bailey Jr. Robin D. Bailey Jr. Date: 2021 05 17

IRS Human Capital Officer Bailey Jr. Date: 2021.05.17

SUBJECT: Response to Draft Audit Report – Opportunities Exist to Improve

Hiring and Retaining Employees with Information Technology

Expertise

Thank you for the opportunity to review the draft audit report and meet with the audit team to discuss early report observations. The IRS is committed to hiring and retaining skilled Information Technology (IT) personnel and we appreciate the continued support, assistance, and guidance from your team.

The hiring and retention of a skilled information technology workforce is critical as the IRS looks to ensure that modernization efforts, technology upgrades, and systems maintenance are completed on schedule. We agree with recommendations 1, 2, and 5 and disagree with recommendations 3 and 4. In response to your recommendations, we have attached our corrective action plan. We are committed to implementing the corrective actions and continuing to seize any opportunities found in the report.

We acknowledge the skills gap data and analyses can be complex. The analysis process has evolved over the past 5 years, from a voluntary to a mandatory requirement for IT personnel. As we formalize the process, we continue to develop mitigation strategies with IT leadership. Recommendations 1 and 2 align with the evolution of this process; however, we disagree with some of TIGTA's analyses and conclusions. During the review, we provided clarifying information; however, the auditors elected not to include this information in the report. We provide some examples in the following paragraphs.

The IT Workforce Tool (ITWT) is an IT-wide tool established to inform management on current employee skill proficiency levels. It is not designed to nor does it identify the specific skills needed for every one of our 7,200 positions individually. We would like to clarify a few statements regarding the specific data cited in the report.

As of August 21, 2020, we determined that 281 (84 percent) of 335 employees included in the skill gap reports have deficiencies in one or more mission critical skills for their functions and only 54 (16 percent) have no deficiencies in mission

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critical skills. Of the 335 employees, 82 (24 percent) have deficiencies in all mission critical skills for their functions.

Page 3, last paragraph.

To clarify this statement and provide the appropriate context, the 281 new employees may have one or more deficiencies in a functional critical skill. It does not always correlate to a deficiency in a skill that is critical for the position for which they were hired.

For example, "procurement skills" are absolutely needed by some IT personnel and is flagged as a mission critical skill in the ITWT and reflected as a skill across our workforce. However, not every IT employee needs to have knowledge at an expert level in procurement skills. Each manager ensures that they have the right mix on their team to cover the skills needed, and these managers may not need each individual on their staff to be expert in every area. Efforts are currently underway to map critical skill gaps to the hiring process and job announcement questionnaires as a way to focus specifically on candidates possessing the most needed critical skills.

Two additional statements in the report require clarification and context:

We analyzed IT organization staffing data and identified 619 employees with expert level skills who are retirement eligible within the next three years. There are no other employees with these expert level skills in the IT organization.

Page 1, last paragraph.

Collectively, the 619 employees account for 13,520 skills where the employee is the only person in the branch within one of the seven IT organization functions with that skill at the expert level.

Page 2, figure 1 and first paragraph

While we concur that the 619 employees do have expert level skills, those skills may not be mission critical for their current position and would not cause work stoppage should those individuals retire on their eligibility date. Granted, the IRS does not want to lose any employee with expert level skills; however, we believe TIGTA's conclusion may have ignored strategies in place that address the eventual loss of these employees. Monthly, IT reviews data and mitigation strategies around knowledge capture or sharing and training to address those expert level skills that are mission critical.

Recruitment and hiring of IT personnel is based on approved position descriptions, with the IT Skills Assessment used as a post-employment tool to evaluate developmental needs of the employee. The IT Skills Assessment establishes a broader IRS IT set of competencies and collects employee technical skills with proficiency level ratings using

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the ITWT, which, as mentioned above, is our centralized database for gathering employees' technical skills via online self-assessments. Additionally, the tool captures other technical skills that might not be required for the position that an employee currently holds. This process is designed to assist with long-term training strategies to develop and equip employees with a full spectrum of skills needed by the organization. Further, it provides roadmaps for managers that encompass a collective approach for training requirements.

All potential IRS employees are evaluated against the position description to determine the applicant possessed the knowledge, skills, and abilities needed to successfully perform the duties of the job. This process includes a question-based exam to evaluate the candidate relative to the Knowledge, Skills and Abilities and provide a basis to rank the applicant against other potential employees.

Although the IRS agrees that interviews are a best practice, the agency needs to have flexibility around internal and external hiring. To ensure that flexibility, interviews are at management's discretion and may be conducted as part of the normal hiring process for potential IT organizational employees. This follows the National Agreement 2019, Article 13, and the Internal Revenue Manual section 6.335.1.12.14.3 (03-20-2013) and section 6.335.1.22.2.3 (03-20-2013).

The IRS values the continued support and assistance provided by your office. If you have any questions you may contact me, or a member of your staff may contact, Samuel Dada at Samuel.O.Dada@irs.gov or 484-844-4239.

Attachment

Attachment

RECOMMENDATION 1: Develop policies and procedures that require management to track, review, and assess mission-critical skill gap reports for their staff and work with their staff to address formal and informal training needs.

<u>CORRECTIVE ACTION 1:</u> The IRS agrees with this recommendation. The IT Skills Gap Mitigation process is evolving, and we are in a position to formalize enhancements through updating existing standard operating procedures. Updates include engaging IT senior leadership during the assessment and gap mitigation phases and establishing requirements for management to track and review mission critical skill gap reports for their staff.

IMPLEMENTATION DATE: June 15, 2022

RESPONSIBLE OFFICIAL(S): Director, HCO Office of Customer Relations

CORRECTIVE ACTION(S) MONITORING PLAN:

We will enter accepted Corrective Actions into the Joint Audit Management Enterprise System (JAMES), monitor progress towards completion on a monthly basis, and upload supporting documentation into JAMES with Form 13872 Planned Corrective Action (PCA) Status Update for TIGTA/GAO/MW/SD/TAS/REM.

RECOMMENDATION 2: Require all IT organization functions to participate in the skill gap mitigations.

CORRECTIVE ACTION 2: The IRS agrees with this recommendation. The IT Skills Gap Mitigation process is evolving, and we are in a position to formalize enhancements through updating existing standard operating procedures. Updates include engaging IT senior leadership during the assessment and gap mitigation phases and establishing requirements for all IT organization functions to participate in the skill gap mitigation process.

IMPLEMENTATION DATE: June 15, 2022

RESPONSIBLE OFFICIAL(S): Director, HCO Office of Customer Relations

CORRECTIVE ACTION(S) MONITORING PLAN:

We will enter accepted Corrective Actions into the JAMES, monitor progress towards completion on a monthly basis, and upload supporting documentation into JAMES with Form 13872 Planned Corrective Action (PCA) Status Update for TIGTA/GAO/MW/SD/TAS/REM.

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RECOMMENDATION 3: Ensure that interviews are performed as a best practice in the hiring process for all potential IT organization employees.

<u>CORRECTIVE ACTION 3</u>: The IRS does not agree to mandate interviews during the hiring process for all IT positions. Although we agree that interviews are a best practice, the agency needs to have flexibility around internal and external hiring. To ensure that flexibility, interviews are at management's discretion and may be conducted as part of the normal hiring process for potential IT organizational employees.

IMPLEMENTATION DATE: N/A

RESPONSIBLE OFFICIAL(S): N/A

CORRECTIVE ACTION(S) MONITORING PLAN: N/A

RECOMMENDATION 4: Coordinate with the HCO to develop and deploy hiring assessments for potential IT organization employees to demonstrate job qualifications prior to hiring.

CORRECTIVE ACTION 4: The IRS does not agree with this recommendation. The IRS currently utilizes hiring assessments when developing questionnaire templates and assigns weights to them for every job posting. Applicants answer assessments questions, and we consider their answers during the candidate screening process. To develop templates of assessment questions and responses for identified position descriptions, Subject Matter Experts from the IT organization meet with Personnel Psychologists to discuss skill-targeted questions and apply weighted values to the responses. These questions along with the weighted responses serve as a screening assessment that separate applicants into quality categories. Candidates in the highest categories are referred and considered for selection. The collaboration between HCO and IT resulted in over 300 deployed assessment templates in Career Connector. Assessment templates are reviewed and updated periodically.

IMPLEMENTATION DATE: N/A

RESPONSIBLE OFFICIAL(S): N/A

CORRECTIVE ACTION(S) MONITORING PLAN: N/A

RECOMMENDATION 5: The Chief Information Officer should consider using the retention incentive when an employee with unusually high or unique qualifications would be likely to leave Federal service, significantly affecting the mission.

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CORRECTIVE ACTION 5: The IRS agrees with this recommendation. The HCO will coordinate with the Chief Information Officer to communicate to IT leadership the availability of the retention incentive program and strategize how we can broaden the use of this program. Additionally, HCO and IT leadership will approach the administering of Retention Incentives from a strategic viewpoint by analyzing available data including "retirement eligible" employees with unusually high skillsets, particularly those who have a history of working significant additional hours beyond their tour of duty to accomplish critical deliverables.

IMPLEMENTATION DATE: June 15, 2022

RESPONSIBLE OFFICIAL(S): Director, HCO Office of Customer Relations

CORRECTIVE ACTION(S) MONITORING PLAN:

We will enter accepted Corrective Actions into the JAMES, monitor progress towards completion on a monthly basis, and upload supporting documentation into JAMES with Form 13872 PCA Status Update for TIGTA/GAO/MW/SD/TAS/REM.

Appendix III

Glossary of Terms

Term	Definition		
Attrition	The loss of employees due to retirement or separation.		
Career Connector	The name of the Treasury-wide automated applicant management system. It posts electronic job listings and allows candidates to submit resumes via the Internet, <i>i.e.</i> , online.		
Direct-Hire Authority	Approval that the Office of Personnel Management can give Federal agencies for filling vacancies when a critical hiring need or severe shortage of candidates exists.		
Fiscal Year	Any yearly accounting period, regardless of its relationship to a calendar year. The Federal Government's fiscal year begins on October 1 and ends on September 30.		
General Schedule	The classification and pay system that covers the majority of civilian Federal employees (about 1.5 million worldwide) in professional, technical, administrative, and clerical positions.		
Human Capital Office	Provides strategies and tools for recruiting, hiring, developing, and retaining a highly skilled and high-performing workforce.		
Job Announcement	An advertisement for applications for a position or for a roster for positions that are planned in the near future.		
Mission-Critical Skill	Competencies essential to the operation of an organization.		
Position Description	The official description of management's assignment of major duties, responsibilities, and supervisory relationships to a position. The description of each position must be kept up to date and include information about the job that is significant to its classification.		
Retirement Eligibility (Retirement-Eligible)	Determined by your age and number of years of creditable service.		
Separation	Occurs when an employee leaves the IRS through retirement, resignation, transfer, or death.		
Surge Hiring	A strategy created by the IT organization that entails submitting a small number of job announcements for a large number of positions across multiple IT organization functions.		

Appendix IV

Abbreviations

FY	Fiscal Year
HCO	Human Capital Office
IRM	Internal Revenue Manual
IRS	Internal Revenue Service
IT	Information Technology



To report fraud, waste, or abuse, call our toll-free hotline at:

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By Web:

www.treasury.gov/tigta/

Or Write:

Treasury Inspector General for Tax Administration
P.O. Box 589
Ben Franklin Station
Washington, D.C. 20044-0589

Information you provide is confidential, and you may remain anonymous.