March 2019

FEDERAL WORKFORCE

Key Talent Management Strategies for Agencies to Better Meet Their Missions

Accessible Version
FEDERAL WORKFORCE

Key Talent Management Strategies for Agencies to Better Meet Their Missions

What GAO Found

Federal work is changing amid demographic and technological trends (see figure below).

**Key Trends Affecting Federal Work**

<table>
<thead>
<tr>
<th>Key Trend</th>
<th>Strategy/Action</th>
</tr>
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<tbody>
<tr>
<td>Technological advances</td>
<td>will change the way work is done.</td>
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<tr>
<td>An increased reliance on nonfederal partners (e.g., contractors or grantees)</td>
<td>to achieve policy goals will require new skills and competencies for which agencies will need to identify, recruit, and hire.</td>
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<tr>
<td>Fiscal constraints</td>
<td>require agencies to reexamine and re prioritize what the federal government does, how it does business, and as appropriate, who conducts its business.</td>
</tr>
<tr>
<td>Evolving mission requirements</td>
<td>challenge agencies to adapt their work and workforces.</td>
</tr>
<tr>
<td>Changing demographics and shifting attitudes toward work</td>
<td>may require new skills to manage a diverse workforce that seeks purpose, autonomy, and career mobility.</td>
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Source: GAO analysis. I GAO-19-181

Given these trends, key talent management strategies can help agencies better manage the current and future workforce. These strategies are all within agencies’ existing authorities:

**Align human capital strategy with current and future mission requirements.**

With shifting attitudes toward work, technological advances, and increased reliance on nonfederal partners, agencies need to identify the knowledge and skills necessary to respond to current and future demands. Key practices include identifying and assessing existing skills, competencies, and skills gaps.

**Acquire and assign talent.**

To ensure agencies have the talent capacity to address evolving mission requirements and negative perceptions of federal work (e.g., that it is too bureaucratic), agencies can cultivate a diverse talent pipeline, highlight their respective missions, recruit early in the school year, support rotations, and assign talent where needed.

**Incentivize and compensate employees.**

While federal agencies may struggle to offer competitive pay in certain labor markets, they can leverage existing incentives that appeal to workers’ desire to set a schedule and to work in locations that provide work-life balance.

**Engage employees.**

Engaged employees are more productive and less likely to leave, according to the Office of Personnel Management (OPM). Agencies can better ensure their workforces are engaged by managing employee performance, involving employees in decisions, and developing employees.

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March 2019

**Why GAO Did This Study**

Much has changed since the federal government’s employment policies were designed generations ago. Without careful attention to strategic human capital management, the federal government may continue to struggle to compete for workers with the skills needed to address the nation’s social, economic, and security challenges.

GAO was asked to review issues related to the future of federal work and the workforce. This report identifies: (1) key trends affecting federal work and workers, and (2) key talent management strategies for achieving a high-performing workforce, given those trends.

GAO analyzed data from OPM and the Bureau of Labor Statistics, and reviewed reports from GAO, OPM, and selected think tanks. GAO also held group interviews with agency Chief Human Capital Officers, and interviewed human capital experts and representatives of federal labor unions, managers, and executives. Additionally, GAO spoke with private consulting firms and foreign governments regarding human capital strategies that officials said were helpful to improving their organizations.

**What GAO Recommends**

GAO has open recommendations to OPM related to key talent management strategies, including developing a core set of metrics that agencies should use to close mission-critical skills gaps. OPM agreed with most of these recommendations and has made some progress, but additional actions are needed. OPM provided technical comments, which GAO incorporated as appropriate.

View GAO-19-181. For more information, contact Robert Goldenkoff, at (202) 512-2757, or GoldenkoffR@gao.gov.
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Abbreviations

BLS U.S. Bureau of Labor Statistics
Bureau U.S. Census Bureau
CHCO Chief Human Capital Officer
CPS Current Population Survey
DHS Department of Homeland Security
EHRI Enterprise Human Resources Integration
FEVS Federal Employee Viewpoint Survey
GS General Schedule
HR human resources
OPM Office of Personnel Management
SES Senior Executive Service
Treasury Department of the Treasury
UK United Kingdom
March 28, 2019

The Honorable Gary C. Peters
Ranking Member
Committee on Homeland Security and Governmental Affairs
United States Senate

The Honorable James Lankford
Chairman
Subcommittee on Regulatory Affairs and Federal Management
Committee on Homeland Security and Governmental Affairs
United States Senate

The federal workforce is critical to federal agencies’ ability to address the complex social, economic, and security challenges facing the country. The government’s system of current employment policies was designed generations ago for a workforce and type of work that largely no longer exist. Much has changed since the Civil Service Reform Act of 1978 and the Classification Act of 1949 laid the foundation of much of today’s federal personnel system.1 Agencies’ missions have evolved and employees’ expectations of work and the workplace are changing. Recent publications by the administration and others have raised concerns about whether the government’s employment policies and practices are still relevant and desirable to the current and future workforce.2 Further, an increasingly volatile world makes understanding and responding to evolving trends and issues essential.3 Without careful attention to strategic human capital management, the federal government may continue to struggle to compete for high-performing workers with the skills and abilities to meet agencies’ missions and respond to evolving trends.


2For example, see President’s Management Council and the Executive Office of the President, President’s Management Agenda (Washington, D.C.: March 2018) and National Academy of Public Administration, No Time to Wait: Building a Public Service for the 21st Century (Washington, D.C.: July 2017).

The federal government faces long-standing challenges in strategically managing its workforce. We first added federal strategic human capital management to our list of high-risk government programs and operations in 2001. Although Congress, the Office of Personnel Management (OPM), and individual agencies have made improvements since then, federal human capital management remains a high-risk area because mission-critical skills gaps within the federal workforce pose a high risk to the nation. Of the 34 other high-risk areas on our 2019 High-Risk List, skills gaps played a significant role in 16 of the areas, including information technology management and acquisitions, and veterans' health care.

You asked us to review issues related to the future of federal work and the workforce. This report identifies (1) key trends affecting federal work and workers; and (2) key talent management strategies that agencies can employ to achieve a high-performing workforce, given those trends.

To address both objectives, we reviewed literature from OPM, academic reports, and our past studies related to human capital and the future of work. We also analyzed data from OPM's Enterprise Human Resources Integration (EHRI) system. EHRI contains personnel action and onboard data for most executive branch and some legislative branch federal civilian employees. Additionally, we interviewed 22 experts in the areas of human capital, strategic foresight, and the future of work. We selected these experts using a nonprobability sample based on our literature

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4GAO, High Risk Series: An Update, GAO-01-263 (Washington, D.C.: Jan. 1, 2001). GAO’s High-Risk List highlights government operations with greater vulnerabilities to fraud, waste, abuse, and mismanagement, or that are in need of transformation to address economy, efficiency, or effectiveness challenges.

5A skills gap may consist of one or both of the following: (1) a staffing gap, in which an agency has an insufficient number of individuals to complete its work; or (2) a competency gap, in which an agency has individuals without the appropriate skills, abilities, or behaviors to successfully perform the work.


7Among those agencies excluded from EHRI are intelligence organizations and the U.S. Postal Service.

8We analyzed the interviews using qualitative analysis software to describe employees’ shifting attitudes toward work and to categorize the practices into key strategies for managing a high-performing workforce. Statements attributed to “experts” came from two or more experts, but do not necessarily reflect the views of all interviewed experts.
review, suggestions from OPM officials and our own human capital experts, and relevance of their expertise to our objectives. We also selected experts to ensure our analysis included a variety of viewpoints. Appendix II lists the experts we interviewed.

To identify key trends in the workforce and workplace, we analyzed U.S. Bureau of Labor Statistics (BLS) Current Population Survey (CPS) data, reviewed our prior work, and reviewed reports from OPM and selected think tanks and consulting firms. To identify key areas to help agencies manage the workforce, we analyzed employee responses to questions from OPM's 2017 Federal Employee Viewpoint Survey, the most recent data available at the time of our analysis. We assessed the reliability of OPM and BLS data by reviewing technical documentation and interviewing officials, among other steps. We found the data sufficiently reliable for the purposes of this report.

To identify key talent management strategies, we interviewed human capital managers from four private organizations and officials from three foreign governments. We selected the private organizations based on the similarities of their talent pool to that of the federal government, among other factors. We selected foreign governments based on factors including whether the country recently made improvements to human capital policies or practices. To better understand the potential opportunities and challenges of applying human capital practices used by other sectors in federal agencies, we held moderated group interviews with agency Chief Human Capital Officers. We also interviewed federal employee and management groups. We selected employee groups using several factors—including ensuring a broad representation of federal employees—and selected a management group that represented federal managers, supervisors, and executives. We selected strategies that officials said were helpful to improving their organizations and that the federal government could feasibly implement. See appendix I for details on our methodology.

We conducted this performance audit from April 2017 to March 2019 in accordance with generally accepted government auditing standards.

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9We calculated standard errors for estimates from CPS data and used those to construct 95 percent confidence intervals. This is the interval that would contain the actual population value for 95 percent of the CPS samples that the BLS could have drawn. All estimates from the CPS presented in this report have a margin of error of +/- 4 percentage points or fewer at the 95 percent confidence level.
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**

We and others have identified challenges facing the federal human capital system’s ability to recruit, retain, develop, and engage workers, both today and in the future. For example:

- **Classification system.** The General Schedule classification system—which defines and organizes federal positions, primarily to assign rates of pay—has not kept pace with the government’s evolving requirements.\(^\text{10}\)

- **Recruiting and hiring.** Federal agencies need a hiring process that is applicant friendly and flexible, and meets policy requirements.\(^\text{11}\)

- **Pay system.** Employees are compensated through an outdated system that (1) rewards length of service rather than individual performance and contributions, and (2) automatically provides across-the-board annual pay increases, even to poor performers.\(^\text{12}\)

- **Performance management.** Federal agencies have faced long-standing challenges developing modern, credible, and effective

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employee performance management systems and dealing with poor performers.\(^{13}\)

- **Employee engagement.** Agencies can improve employee engagement and performance through analysis and sharing of promising practices.\(^{14}\) Employee engagement is generally defined as the sense of purpose and commitment employees feel toward their employer and its mission.

The administration is moving forward with broad efforts to address government-wide human capital challenges, improve government efficiency, and understand how key trends will affect the future of federal work and the workforce. For example, the President’s Management Agenda’s cross-agency priority goal on the 21st century workforce aims to (1) improve employee performance management and engagement, (2) train staff to develop new skills and redeploy human capital resources, and (3) enable simple and strategic hiring practices.

In 2018, OPM issued the first *Federal Workforce Priorities Report* to communicate key government-wide human capital priorities, suggest strategies, and help inform agency strategic and human capital planning.\(^{15}\) The report identifies changes in the external environment that will likely affect federal human capital management, including the evolving role of workers, changes in technology, employee health, and shifting generational demographics. In addition, OPM is developing a foresight program to help federal agencies navigate emerging strategic workforce challenges and harness potential opportunities. As part of its foresight efforts, OPM has also hosted a series of symposia that provide human


Federal Work Is Changing Amid Demographic and Technological Trends

We identified key trends in agency operations and attitudes toward work that are affecting how federal work is done and, consequently, the skills and competencies that workers need to accomplish agency missions, as illustrated by figure 1. These trends will require a federal workforce that can better adapt to and leverage constantly evolving technology and mission requirements. They will also require a federal workforce that can effectively collaborate and partner with workers both within and outside of the federal sector to achieve national policy objectives.

Foresight activities involve understanding evolving trends and evaluating emerging issues to inform agency decision-making in the present.

We identified these trends based on our review of literature, expert interviews, and analysis of OPM, BLS, and procurement data.
Technological advances will change the way work is done. Advances in automation, artificial intelligence, robotics, and information and communication technology have the potential to accelerate changes in federal work beyond any past experience, but they also involve risks. Advances in automation and robotics are changing the way that work is done by altering the balance between what tasks are completed by humans and those completed by machines. The federal workforce will need to develop new skill sets and expertise to effectively utilize and manage these technological advances.

In 2017, we convened a forum that highlighted several applications of artificial intelligence, many of which could affect agencies and federal work. For example, robots enabled by artificial intelligence could assist...
patients with medication management and mobility support in clinical settings; developments in automated vehicles could affect work related to government vehicle pools, safety, and transportation management; the use of artificial intelligence in criminal justice and cybersecurity applications could bring benefits but would need to be carefully managed with regard to privacy protection, among other concerns; and the accelerated pace of change associated with artificial intelligence may strain workforce systems’ capacity to train and hire individuals with appropriate skill sets.

Technology is also changing human capital management, according to experts we contacted. Experts stated that technology can help improve recruitment efforts, streamline hiring processes, and match employees to tasks. For example, they said that employers can develop mobile apps to make the hiring process easier to navigate and use artificial intelligence to better screen and align applicants with job positions. Experts also stated that employees will need to constantly update their digital literacy to stay current with emerging technology.

OPM has also explored the effect of technology on the federal workforce. In February 2018, OPM reported that, in most jobs, certain activities may be automated rather than the entire occupation.\(^\text{19}\) OPM also reported that machine assistance may amplify the value of expertise and may increase work capacity by providing employees time to focus on more important work. Further, OPM reported that it is seeking to acquire or develop enterprise technological solutions to improve the analytic capabilities of the federal human capital community. Improved data analytics should help support more informed and evidence-based planning and decision-making.

OPM suggested that the technological changes will require agencies to coordinate efforts to (1) fund technological experimentation and pilots; (2) promote acquisition of skills that are not replaced by technology (e.g.,

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\(^\text{19}\)Office of Personnel Management, 2018 Federal Workforce Priorities Report (Washington, D.C.: February 2018). We have also reported that while its use is expected to grow, artificial intelligence that is as intelligent as a human is not expected to occur in the next 20 years. See GAO-18-396SP. Also, in March 2018, we reported that there is no comprehensive federal data source with information on the employment effects artificial intelligence may have in manufacturing and other segments of the economy. In the absence of a comprehensive data-collection effort, it is unclear which jobs will be created, which jobs may be augmented, or which jobs are likely to be displaced by artificial intelligence. See GAO-18-142SP.
creativity, relationship building, and innovation); and (3) engage in strategic foresight activities. Relatedly, OPM, the Office of Management and Budget, and the Department of Defense are developing a plan to identify ways to provide employees impacted by automation with other work, and to identify skills needed in the future. The agencies’ efforts are part of the cross-agency priority goal on the 21st century workforce.

Federal work is also being affected by increased use of virtual communication, which provides flexibility in where employees can do their work. In both the workforce-at-large and the federal workforce, the percentage of employees who telework has increased. For example, OPM reported that the percent of eligible employees teleworking increased from 29 percent in 2012 to 51 percent in 2016.20

We have previously reported that the federal government has increasingly recognized telework as an important human capital strategy that can give employees more work-life balance and help agencies continue operations during emergency events.21 However, federal agencies also face costs associated with telework, including training staff, ensuring supervisors have the necessary skills to manage remote staff, and overseeing the telework program to ensure compliance and reduce the risk of fraud. In July 2016, we found that OPM provided resources to agencies to help them with their telework programs, but was missing other opportunities to help agencies better identify the net cost savings associated with their telework programs.22

We recommended that OPM work with the Chief Human Capital Officers Council to provide clarifying guidance on options for developing supporting data for benefits and costs associated with agency telework.

20Office of Personnel Management, Status of Telework in the Federal Government, Fiscal Year 2016 (Washington, D.C.: November 2017). According to OPM, situational telework (i.e., episodic or unscheduled telework) is the most common form of telework participation, with nearly half of teleworkers engaging in situational telework to some degree. OPM defines situational telework as telework that is approved on a case-by-case basis, where the hours worked are not part of a previously approved, ongoing, and regular telework schedule.


22GAO-16-551.
programs. OPM concurred with the recommendation and in October 2018 provided documentation showing it is developing draft guidance on evaluating work-life programs, including telework. To fully implement this recommendation, it will be important for OPM to finalize and provide this guidance to agencies.

Increased Reliance on Nonfederal Partners

An increased reliance on nonfederal partners to achieve policy goals will require new skills and competencies for which agencies will need to identify, recruit, and hire. Increasingly, the federal government works with state and local governments, as well as other partners, to achieve a wide range of policy goals. The federal government uses grants as a tool to achieve national priorities through nonfederal partners, including state and local governments, educational institutions, and nonprofit organizations.

Federal grant outlays to state and local governments have generally increased as measured in constant fiscal year 2015 dollars from $230 billion in fiscal year 1980 to $624 billion in fiscal year 2015. We previously reported that a range of skills are needed to manage the various tasks associated with the grants life cycle. For example, the grants workforce needs to notify grant awardees of the general terms and conditions of the grant, including statutory and regulatory requirements.

In support of their missions and activities, agencies also use contractors to procure a variety of services and products, including products that cannot be easily and clearly defined in advance and that are difficult to verify after delivery. In addition, agencies use contractors to provide the skills needed to help them manage complex operations. In fiscal year 2017, federal agencies obligated almost $306 billion for service contracts.


Contractors can help agencies meet surge capacity needs, among other benefits. However, the Office of Federal Procurement Policy and our prior work have identified risks of overreliance on contractors and the need for increased management attention on certain types of services, such as professional and management support services.26

In addition to using grants and contractors, Congress has given broad statutory authority across the executive branch to use various open innovation strategies.27 Open innovation involves using various tools and approaches to harness the ideas, expertise, and resources of those outside an organization to address an issue or achieve specific goals. Our October 2016 report highlighted cases where agencies are using open innovation strategies—such as crowdsourcing and prize competitions—to effectively engage and collaborate with each other, and to leverage knowledge outside the federal workforce to achieve their goals.28

For example, at the time we found that every 2 years since 2009 the Federal Highway Administration had engaged a broad range of public- and private-sector stakeholders to identify and implement innovative ideas that measurably improved highway construction projects. Federal workers in charge of such open innovation initiatives will need to be able to work in collaborative, cross-cutting environments. To that end, in June 2017, we identified various government-wide and agency-level resources—such as interagency communities of practice and dedicated staff.


positions—the executive branch has put into place to support effective implementation of open innovation initiatives.29

Fiscal Constraints

Increasing fiscal constraints require agencies to reevaluate and reprioritize what the federal government does, how it does business, and, as appropriate, who conducts its business. The nation is on a long-term, unsustainable fiscal path. We have previously reported that the federal government is spending far more money than it is collecting and is projected to do so going forward.30 Further, fiscal pressures have already begun to affect the management of the federal workforce, including decisions to hire, retain, train, contract, and collaborate. Without careful attention to strategic and workforce planning and other approaches to managing and engaging personnel, the reduced investments in human capital may have lasting, detrimental effects on the capacity of an agency’s workforce to meet its mission.

In May 2014, we identified strategies to help agencies maintain their human capital capacity while facing fiscal constraints.31 These strategies include strengthening coordination within the human capital community, using enterprise solutions to address shared challenges, and creating more agile talent management to address inflexibilities in the current system.32

Also, guidance from the Office of Management and Budget directs federal agencies to reconsider priorities, determine how to make trade-offs, and


30GAO, The Nation’s Fiscal Health: Action Is Needed to Address the Federal Government’s Fiscal Future, GAO-18-299SP (Washington, D.C.: June 21, 2018). In the long term, the key drivers of growing federal spending are healthcare programs and net interest.


32An agile workforce is one that ensures the right people, with the right skills, are assigned to the right roles at the right time and at the right cost. An agile workforce also can be quickly reconfigured to suit an organization’s needs.
evaluate the potential effects of these decisions. In June 2018, we reported that as federal agencies reexamine their role in carrying out specific missions and programs, they should determine whether the federal government is best suited to provide that service or if it can be provided by some other level of government or sector more efficiently or effectively.

Evolving Mission Requirements

Evolving mission requirements challenge agencies to adapt their work and workforces as they respond to policy shifts, technology changes, and resource constraints affecting their work.

Our previous work on the Census Bureau (Bureau) highlights this trend. The Bureau is redesigning its approach to the 2020 Census to address rising costs and declining response rates. In May 2017, we reported that the basic design of the enumeration—mail out and mail back of the census questionnaire with in-person follow-up for nonrespondents—has been in use since 1970. However, this traditional design is no longer capable of cost effectively counting the population, and the Bureau has fundamentally reexamined its approach for conducting the 2020 Census. For example, the Bureau is planning to offer households the option of responding to the survey through the internet.

The Bureau is also leveraging nonfederal partners and technology to respond to evolving mission requirements. For example, the Bureau plans to enhance its work with nonfederal partners to successfully complete the enumeration, particularly for hard-to-count groups, such as minorities, renters, and young children. In July 2018, we reported that to facilitate


this effort, the Bureau plans to hire nearly twice as many partnership specialists as it had planned for the 2010 Census.36

These partnership specialists will need core relationship-building skills and advanced knowledge of digital media. However, the Bureau faces a significant challenge in hiring staff with these skills because it is operating in a much tighter labor market than it did prior to the 2010 Census. Likewise, the Bureau has had difficulty filling key positions to oversee information technology contracts. In August 2018, we reported that a government program management office is managing the contractor that will integrate all of the Bureau’s key systems and infrastructure for the decennial.37 However, in June 2018, Bureau officials reported that 33 of the office’s 58 federal employee positions were vacant. These vacancies create risks for the program management office’s ability to oversee contractor cost, schedule, and performance.

Changing Demographics and Shifting Attitudes towards Work

Changing demographics and shifting attitudes towards work may require new skills to manage a diverse workforce that seeks purpose, autonomy, and career mobility. We found increases in the percentage of federal employees who had a disability, identified as a minority, were veterans, or who held an advanced degree over the past 10 years (see figure 2).38

Figure 2: The Federal Workforce Became More Diverse and More Likely to Hold an Advanced Degree, Fiscal Years 2008–2017

Percent

<table>
<thead>
<tr>
<th>Fiscal year</th>
<th>40 years old and older</th>
<th>Minorities</th>
<th>Veterans</th>
<th>Advanced Degree Holders</th>
<th>Employees with disabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>9.0</td>
<td>17.3</td>
<td>28.3</td>
<td>31.7</td>
<td>36.7</td>
</tr>
<tr>
<td>2009</td>
<td>10.4</td>
<td>18.6</td>
<td>28.3</td>
<td>31.7</td>
<td>36.7</td>
</tr>
<tr>
<td>2010</td>
<td>11.3</td>
<td>20.0</td>
<td>29.0</td>
<td>31.7</td>
<td>36.7</td>
</tr>
<tr>
<td>2011</td>
<td>12.1</td>
<td>21.3</td>
<td>29.9</td>
<td>31.7</td>
<td>36.7</td>
</tr>
<tr>
<td>2012</td>
<td>12.9</td>
<td>22.6</td>
<td>30.7</td>
<td>32.4</td>
<td>37.1</td>
</tr>
<tr>
<td>2013</td>
<td>13.6</td>
<td>24.0</td>
<td>31.5</td>
<td>32.4</td>
<td>37.1</td>
</tr>
<tr>
<td>2014</td>
<td>14.3</td>
<td>25.3</td>
<td>32.3</td>
<td>33.1</td>
<td>37.1</td>
</tr>
<tr>
<td>2015</td>
<td>15.0</td>
<td>26.6</td>
<td>33.1</td>
<td>33.1</td>
<td>37.1</td>
</tr>
<tr>
<td>2016</td>
<td>15.7</td>
<td>27.9</td>
<td>33.9</td>
<td>33.1</td>
<td>37.1</td>
</tr>
<tr>
<td>2017</td>
<td>16.4</td>
<td>29.2</td>
<td>34.7</td>
<td>33.4</td>
<td>37.1</td>
</tr>
</tbody>
</table>

Sources: GAO analysis of Office of Personnel Management data. 1 GAO-19-181

Notes: Minorities include those identified as American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and Hispanic or Latino ethnicity.
Advanced degrees include master’s, professional, and doctoral degrees.
Employees may be counted in multiple categories. For example, a veteran may also hold an advanced degree.

This increasing diversity should help provide agencies with the requisite talent and multidisciplinary knowledge to accomplish their missions. While the percentage of federal employees 40 years and older remained relatively flat, the federal workforce had a higher percentage of individuals who are 40 and older compared to the U.S. employed civilian labor force. The federal workforce had a higher percentage of people with a disability, who were veterans, or held an advanced degree (see figure 3).
Figure 3: The Federal Workforce Differed from the Employed Civilian Labor Force in Several Characteristics, 2017

Notes: The Office of Personnel Management (OPM) and the Bureau of Labor Statistics (BLS) use different categories for collecting data on race and ethnicity. OPM data for minorities include American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and Hispanic or Latino ethnicity. For BLS data, we defined minorities as the total employed civilian workforce less White non-Latinos/Hispanics.

For both OPM and BLS data, advanced degrees include master's, professional, and doctoral degrees.

BLS data are based on estimates derived from the Current Population Survey and have margins of error of +/- 4 percentage points or fewer at the 95 percent confidence level. Differences between the federal workforce and the estimated U.S. employed civilian labor force percentages are statistically significant at the 95 percent confidence level for all categories, except for minorities.

Employees may be counted in multiple categories. For example, a veteran may also hold an advanced degree.

Agencies face a potential risk related to retirement, particularly among the Senior Executive Service (SES). Specifically, we found that retirement rates for SES employees are higher than for all employees, with 7 to 8 percent of SES retiring every year for the past 6 years (see figure 4).
Cumulatively, 41 percent of the permanent SES workforce in fiscal year 2012 retired by fiscal year 2017. If turnover is not strategically managed and succession plans are not in place, gaps can develop in an agency’s institutional knowledge and leadership as experienced employees retire. While retirements can aggravate the problem of skill gaps, they also present an opportunity for agencies to realign their workforce with needed skills and leadership levels to better meet existing and newly emerging mission requirements.

Skills gaps can also be aggravated by separations other than retirements. We found that another 19 percent of SES left in separations other than retirement, leaving only 40 percent of the 2012 SES workforce still on board at the end of fiscal year 2017.
Figure 4: Retirement and Eligibility Rates for Senior Executive Service (SES) Employees Were Higher Than for All Employees, Fiscal Years 2012–2017

Note: We calculated the number of permanent employees on board at the start of the fiscal year who (1) would become eligible to retire at the end of another 1 to 5 fiscal years, (2) were eligible to retire with an unreduced annuity by the end of the fiscal year, and (3) retired over the course of the fiscal year.

Based on expert interviews, we also identified shifts in employee attitudes toward work, which present recruiting opportunities and challenges for the federal government. Experts said that employees seek

- meaningful work (i.e., work that can influence the greater society);
- autonomy within the workplace (i.e., opportunities to develop creative and innovative solutions to complex problems);
- control over their work environment (i.e., they want to set a schedule and to work in a location that provides work-life balance); and
career mobility, including opportunities for upward mobility (i.e., promotions) and lateral mobility (i.e., opportunities to rotate to different roles or projects within the same agency, a different agency, or outside of government). 40

Related to career mobility, experts said that employees are seeking greater developmental opportunities and would prefer longer-term employment where they can continue to build their skills and train. Experts noted that while employees change jobs more often than in the past, this phenomenon can be a result of employers investing less in employee development, which has led to greater turnover. OPM also recently reported that millennials are known for frequently transitioning from one job to the next. 41

While federal agencies offer unique opportunities to pursue meaningful work, achieve autonomy, and have a healthy work-life balance, experts also highlighted key challenges regarding perceptions surrounding federal work from the potential applicants. These challenges include perceptions that the government is too bureaucratic, federal work lacks innovation and involves maintaining the status quo, federal work is less prestigious than the private sector, and federal workers do not get to see the immediate effect of their work. Officials from federal employee and manager groups believed that furloughs, government shutdowns, pay freezes, and negative rhetoric from elected officials have all contributed to the negative perceptions among potential applicants. For example, from December 22, 2018, to January 25, 2019, a partial government shutdown occurred as a result of a lapse in appropriations affecting some, but not all federal agencies. It was the second multiweek lapse in appropriations causing a government shutdown since 2013 and the longest shutdown in American history. Federal employees at the affected agencies did not receive a

40 Themes discussed by experts are similar to those included in OPM’s Federal Employee Viewpoint Survey. This survey includes questions regarding satisfaction with meaningful work, autonomy within the workplace, and career development and mobility, among others.

41 OPM defined millennials as those individuals born between the early 1980s and the early 2000s. The agency also cautioned that when considering these topics, it should be recognized that every employee is an individual. Although generational trends may exist at a macro level, employers should keep in mind the strengths and preferences of each employee.
Experts we interviewed noted that the perception of job security offered by federal work is attractive to employees. However, prolonged shutdowns may alter this perception and harm the government’s recruitment and retention efforts.

Given the changing demographic composition of the federal workforce and shifting attitudes toward work, our analysis suggested that it may be important to select and train managers and supervisors who possess several leadership competencies. These competencies include fostering an inclusive workplace (valuing diversity and individual differences and leveraging these differences to achieve the agency’s mission); team building (inspiring and fostering team commitment, spirit, pride, and trust); interpersonal skills (treating others with courtesy, sensitivity, and respect); and managing conflict (encouraging differing opinions to be expressed and resolving disagreements in a constructive manner). Such competencies can help managers and supervisors develop an agency culture where all employees feel valued, respected, engaged, and able to contribute toward an agency’s mission.

Key Talent Management Strategies Can Help OPM and Agencies Better Manage the Current and Future Workforce

In light of trends discussed, we identified actionable strategies that agencies may be able to use to effectively manage the future federal workforce in key talent management areas (see table 1). While these strategies are not an exhaustive list, collectively they suggest basic steps that agencies can take within existing authorities to position themselves to meet their talent needs. Since, in some cases, agencies already use these strategies, focused attention to leadership, culture, and sound management practices can help agencies prepare for the future workforce.

### Table 1: Key Strategies and Practices for Managing the Current and Future Workforce

<table>
<thead>
<tr>
<th>Function</th>
<th>Strategy</th>
<th>Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Align human capital strategy with current and future mission requirements</td>
<td>Set workforce goals and assess skills and competencies needed to achieve them</td>
<td>Identify existing skills and competencies Assess gaps in existing and future skills and competencies Monitor progress toward closing skills gaps</td>
</tr>
<tr>
<td>Acquire and assign talent</td>
<td>Source and recruit talent</td>
<td>Cultivate a diverse talent pipeline Highlight agency mission Recruit continuously and start the hiring process early in the school year Strategically leverage available hiring flexibilities Write user-friendly vacancy announcements</td>
</tr>
<tr>
<td>Acquire and assign talent</td>
<td>Assess and screen candidates</td>
<td>Use relevant assessment methods and share hiring lists Improve the security clearance process</td>
</tr>
<tr>
<td>Acquire and assign talent</td>
<td>Assign employees where needed</td>
<td>Develop a culture of agility</td>
</tr>
<tr>
<td>Incentivize and compensate employees</td>
<td>Leverage benefits and incentives</td>
<td>Increase awareness of benefits and incentives, such as work-life programs Tailor benefits and incentives to employees’ needs Address barriers to telework</td>
</tr>
<tr>
<td>Incentivize and compensate employees</td>
<td>Leverage existing pay authorities</td>
<td>Use special payment authorities strategically</td>
</tr>
<tr>
<td>Engage employees</td>
<td>Manage employee performance and create a “line of sight” between individual performance and organizational results</td>
<td>Improve selection and training of supervisors and managers Link agency’s mission and employees’ work Implement meaningful rewards programs Share innovative approaches to performance</td>
</tr>
<tr>
<td>Engage employees</td>
<td>Involve employees in decisions</td>
<td>Increase support for an inclusive work environment</td>
</tr>
<tr>
<td>Engage employees</td>
<td>Develop employees</td>
<td>Prioritize training for employees and managers Encourage details, rotations, and other mobility opportunities</td>
</tr>
</tbody>
</table>

Source: GAO | GAO-19-181

Note: These strategies are not an exhaustive list.

For each strategy, we highlight some of the challenges agencies face, actions OPM can take to implement open, related recommendations from our prior work, and practices that may help agencies implement the strategy. These practices are based on our review of related reports.

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43The challenges, open GAO recommendations, and practices we identify are not an exhaustive list.
group interviews with federal Chief Human Capital Officers (CHCO), and interviews with selected private organizations and foreign governments.44

### Align Human Capital Strategy with Current and Future Mission Requirements

In our prior work, we reported that high-performing organizations define what they want to accomplish and what kind of organization they want to be.45 They then identify and analyze the personnel skills, competencies, numbers, and other factors needed to achieve those objectives. However, these steps are a challenge for agencies that lack the capacity for strategic workforce planning. Consequently, these agencies’ human capital efforts tend to focus on support and transactional activities and compliance with rules and regulations.46 While these functions are important, successful strategic human capital management requires human capital professionals to integrate human capital strategies with their agency’s core business practices.47 In addition, high-performing organizations recognize the fundamental importance of measuring both the outcomes of human capital strategies and how these outcomes have helped the organizations accomplish their missions and programmatic goals.48

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44Statements attributed to “officials” came from two or more officials, but do not necessarily reflect the views of all interviewed officials.


46GAO-14-168.


48GAO-02-373SP.
Set Workforce Goals and Assess Skills and Competencies Needed to Achieve Them

Identify existing skills and competencies. In May 2014, we reported that agencies should be aware of existing skills and competencies in their workforce to help inform workforce planning. According to the Department of the Treasury (Treasury) CHCO, establishing a skills inventory can help managers assign the right talent to the right place at the right time. For example, the CHCO told us that during the Puerto Rico debt crisis, Treasury needed to be able to identify the necessary skills to manage the crisis. The agency is now implementing an Integrated Talent Management System to facilitate workforce and succession planning as well as learning and performance management.

In May 2014, we recommended that OPM work with the CHCO Council to review the extent to which new capabilities are needed to develop tools that help identify existing skills. OPM agreed and took a number of actions to address this and other related recommendations. For example, OPM developed an action plan template for closing skills gaps that adheres to our selected best practices for project planning. However, as of November 2018, other actions were still needed to fully address this and other related recommendations.

Assess gaps in existing and future skills and competencies. With shifting attitudes toward work, technological advances, and increased reliance on nonfederal partners, agencies need to assess whether there are gaps in existing and future skills and competencies. We previously reported that most federal human resources (HR) systems—reflecting the General Schedule classification system—only identify employee skills and competencies by their occupational series, job title, and grade. This level of detail does not adequately address the multidisciplinary nature of modern work. For example, cybersecurity spans many occupational families. Similarly, with technological advances, agencies may need interdisciplinary talent such as workforce specialists in information technology.

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49GAO-14-168.

50The Treasury CHCO also said that establishing a skills inventory helps inform training needs. We will discuss training in our “Engage Employees” section.

51GAO-14-168.

52GAO-14-168.
technology. Agencies may be better able to assess gaps in such talent by defining, developing, and deploying workers based on skills and competencies, not by occupational series.

According to the Department of Defense Civilian Human Capital Officer, agencies can assess gaps in skills and competencies through functional communities, in which experienced leaders in areas such as acquisition or financial management define, assess, and determine how to distribute skills and competencies in the workforce. She said that although her department and other agencies have made progress in closing skills gaps, only functional communities themselves can define the skills and competencies needed for current and future work. She also said that a mature functional community can help align workforce planning to agency strategic goals and objectives.

In January 2015, we recommended that OPM work with agency CHCOs to (1) establish a schedule specifying when OPM will modify its Enterprise Human Resources Integration (EHRI) database to capture staffing data that it currently collects from agencies through its annual workforce data reporting process; and (2) bolster agencies’ ability to assess workforce skills and competencies by sharing competency surveys, lessons learned, and other tools and resources. In December 2018, OPM released a memorandum outlining plans for a phased, government-wide competency assessment of program and project managers beginning in May 2019. Additionally, in March 2019, OPM reported that it had identified a data source that was more efficient and accurate in identifying staffing gaps than EHRI data. We will continue to monitor OPM’s progress in implementing its planned actions.

**Monitor progress toward closing skills gaps.** We previously reported that the federal government faces skills and competencies gaps in a number of agency-specific and government-wide occupations. One such occupation is in the HR profession. Skills gaps in HR occupations can hamper both strategic and transactional HR activity, exacerbate additional skill gaps, and hinder agencies’ ability to accomplish their missions. For example, our December 2016 report highlighted how the Veterans Health

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54GAO-15-223.

55GAO-14-168.
Administration’s limited HR capacity undermined its ability to improve delivery of health care services to veterans.\(^{56}\)

Further, OPM officials said that a challenge to federal hiring efforts is high turnover among HR staff, and one CHCO said her HR staff is not up to date on hiring options. As a result, OPM officials noted that HR offices are missing specialists who understand the agencies’ specific hiring needs and flexibilities.

In January 2015, we recommended that OPM (1) work with the CHCO Council to develop a core set of metrics that all agencies should use to close mission-critical skills gaps, among other HR goals; and (2) coordinate with the interagency working group that identified the list of skills gaps to explore the feasibility of collecting necessary information during a CHCO-led review of HR goals.\(^{57}\) OPM concurred with the recommendation in 2015. In March 2019, OPM stated it had addressed the recommendation by developing a multifactor model consisting of core metrics. This model included quit rates and retirement rates. OPM said that it provides the model to agencies for identifying mission-critical occupations. OPM added that agencies should have the autonomy to determine which human capital metrics are important for achieving their missions. While this is an important step forward, to close the recommendation, OPM needs to provide evidence that agencies are using the multifactor model as a common set of metrics to close mission-critical skills gaps, regardless of other agency-specific metrics.


\(^{57}\)GAO-15-223.
According to OPM data, expert interviews, and our previous work, the federal government faces a range of challenges acquiring and assigning talent. These challenges include a lengthy hiring process and negative perceptions of government. In 2017, the average government-wide time-to-hire was 106 days, according to OPM. Candidates do not consider this time frame to be reasonable, according to human capital experts and federal employee and management groups. OPM’s government-wide goal is 80 days.

Further, only 42 percent of respondents to the 2017 Federal Employee Viewpoint Survey (FEVS) think their work unit can recruit the right skills. Human capital experts, CHCOs, and OPM officials reported that agencies face challenges (1) matching applicants with job positions best suited to their skills, and (2) moving existing employees with specific skills to address emerging, temporary, or permanent needs across an agency.

In the sections below, we highlight actions OPM can take to implement open recommendations from our prior work, and practices agencies can follow to address these challenges by (1) sourcing and recruiting talent, (2) assessing and screening candidates, and (3) assigning employees where needed.

Source and Recruit Talent

Sourcing and recruiting is the process of attracting strong applicants who are prepared to perform successfully on the job. Some practices agencies can use to better source and recruit include cultivating a talent pipeline, highlighting agency mission, recruiting continuously, starting the hiring process early in the school year, reviewing available hiring flexibilities, and writing user-friendly vacancy announcements.

Cultivate a diverse talent pipeline. In our prior work, we have noted the importance of active campus recruiting that goes beyond infrequent

Why Is Acquiring and Assigning Talent Important?
To ensure agencies have the capacity to address evolving mission requirements, agencies will need to compete with other sectors to acquire top talent, as well as have the flexibility to reassign existing talent to where they are most needed. This helps ensure the right people, with the right skills, are assigned to the right roles at the right time.

Source: GAO review of expert interviews and literature.
outreach to college campuses.\textsuperscript{59} Active campus recruiting includes developing long-term institutional relationships with faculty, administrators, and students. In addition, OPM guidance emphasizes that agencies should develop an inclusive approach to their talent acquisition strategies.\textsuperscript{60} This includes developing strategic partnerships with a diverse range of colleges and universities, trade schools, apprentice programs, and affinity organizations from across the country.

Likewise, representatives of consulting firms we interviewed stated they cultivate a talent pipeline by building a brand on campus, developing relationships with college students, and recruiting on campuses for entry-level positions and internship programs. One consulting firm representative said that the firm sends “brand ambassadors” to build relationships with college freshmen and sophomores, and to discuss working in the professional services industry. Another consulting firm representative said that the firm uses social media to develop relationships with students prior to a campus visit. Consulting firm representatives also noted that they expanded their talent pool by visiting technical conferences, veteran groups, and campuses with students of diverse backgrounds.

Consulting firm representatives stated that their internship programs are among their most successful practices for cultivating a talent pipeline because the firms can offer full-time positions to rising seniors during the internship. Similarly, CHCOs and federal employee and management


group representatives we interviewed noted that internships are important for establishing a pipeline for recruitment.61

**Highlight agency mission.** Agencies can help counter negative perceptions of federal work by promoting their missions and innovative work, according to expert and CHCO interviews. For example, the Department of Homeland Security (DHS) provides “Day in the Life” information on its work to promote public awareness of how its everyday tasks tie in with its mission of protecting the United States, according to the DHS CHCO. The DHS CHCO stated that promoting agency mission can be done while cultivating a talent pipeline and assessing applicants’ abilities. For example, the department holds recruitment events where potential candidates can participate in law enforcement-related activities such as fitness testing. The CHCO noted that in addition to promoting homeland security careers, these events help prospective candidates determine if a position is a good fit for them.

**Recruit continuously and start the hiring process early in the school year.** The ability to hire students is critical to ensuring that agencies have a range of experience levels for succession planning and a talent pipeline to meet mission requirements. One of the key challenges agencies face in recruiting students is managing the timing of recruitment. The federal fiscal year begins on October 1—about when private sector firms we interviewed start recruiting on campus. Frequently, however, federal agencies have been unable to hire at this time of year because of the limitations of continuing resolutions.62 Yet if agencies wait to start the

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61One CHCO noted that federal internship programs can only build relationships with schools if agencies can convert interns to full-time positions after graduation. CHCOs stated that this authority was removed when the Pathways Program replaced the Federal Career Intern Program in 2011. Exec. Order No. 13562. Recruiting and Hiring Students and Recent Graduates, 75 Fed. Reg. 82583 (Dec. 27, 2010). While agencies must hire based on merit principles and other considerations, they can also take advantage of existing hiring flexibilities, which we will address later. For example, in August 2018, Congress passed a law which gives civilian agencies expedited hiring authority for recent college graduates or post-secondary graduates. John S. McCain National Defense Authorization Act for Fiscal Year 2019, Pub. L. No. 115-232, div. A, title XI, § 1108, 132 Stat. 1636, (Aug. 13, 2018). Graduates are those who have received a baccalaureate or graduate degree from an institution of higher education within the last 2 years.

62Continuing resolutions keep government services in operation, often at prior funding levels, until final appropriations are enacted. We previously reported that continuing resolutions and lapses in appropriations leading to government shutdowns create inefficiencies and other management challenges for agencies. GAO, *Budget Issues: Continuing Resolutions and Other Budget Uncertainties Present Management Challenges, GAO-18-368T* (Washington, D.C.: Feb. 6, 2018).
recruiting and hiring process until they receive funding, many graduates
will have taken other job opportunities.

Agencies can overcome these timing challenges by recruiting
continuously and starting the hiring process early in the school year. To
recruit continuously, CHCOs from the U.S. Departments of Agriculture
and Homeland Security said they advertise funding-conditional positions
throughout the year. Similarly, representatives of some consulting firms
said they post positions that are contingent on funding and complete the
hiring paperwork, among other requirements, for these positions before
obtaining federal funding. This has helped navigate the timing of annual
appropriations because these organizations can onboard candidates as
soon as they receive funding.

Representatives of one federal management group also stated that
recruiting continuously and starting the hiring process earlier is a good
practice even when agencies receive funding in October, since it can
reduce stress from cumbersome recruiting and hiring work when a
position needs to be filled.

**Strategically leverage available hiring flexibilities.** CHCOs cited the
complex competitive examining process as a cause of the lengthy hiring
time.63 This has been a long-standing concern: In our 2002 report on
human capital flexibilities, we noted that for many years prior, federal
managers had complained that competitive examining procedures were
rigid and complex.64

However, agencies can use a number of additional hiring authorities
beyond competitive examining.65 These authorities can add flexibility to

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63The competitive examining process legally requires agencies to notify the public that the
government will accept applications for a job, screen applications against minimum
qualification standards, apply selection priorities such as veterans’ preference, and assess
applicants’ relative competencies or knowledge, skills, and abilities against job-related
criteria to identify the most qualified applicants. 5 U.S.C. §§ 3304-3319 and 5 C.F.R. parts
332 and 337.

64GAO, Human Capital: Effective Use of Flexibilities Can Assist Agencies in Managing

65A hiring authority is the statute, Executive Order, or, in some cases, OPM determination
through regulation that allows an agency to hire a person into the federal civil service.
Most positions in the Executive Branch are filled through the competitive examining
process unless specifically excepted by statute, Executive Order, or OPM determination.
the process and CHCOs expressed a desire for more. However, we previously found that agencies relied on only a small number of available authorities. In fiscal year 2014, 20 hiring authorities were used to make around 90 percent of the new appointments, although agencies used 105 hiring authority codes in total.

We recommended that OPM use information from its review of agencies’ use of certain hiring authorities to determine whether opportunities exist to refine, consolidate, or expand agency-specific authorities, and implement changes where OPM is authorized, including seeking presidential authorization or developing legislative proposals if necessary. OPM agreed with our recommendation and has made progress in these areas, although more work is needed. As of July 2018, OPM had started a project to review hiring authority data and to create an inventory of authorities used by agencies. In its July 2018 study on excepted service hiring authorities, OPM identified possible opportunities to streamline authorities and outlined planned actions to promote a more effective and efficient hiring process. As of December 2018, OPM said that it continues to research and examine these streamlining opportunities as part of the broader initiative to modernize federal hiring practices under the President’s Management Agenda. To fully implement the recommendation, OPM needs to complete these efforts and, as appropriate, develop legislative proposals in consultation with the CHCO Council.

Write user-friendly vacancy announcements. We previously reported that some federal job announcements were unclear. This can confuse applicants and delay hiring. In July 2018, OPM officials stated that

66 GAO-16-521.
67 GAO-16-521.
68 Office of Personnel Management, Excepted Service Hiring Authorities: Their Use and Effectiveness in the Executive Branch, (Washington, D.C.: July 2018). The excepted service provides a more flexible hiring approach to support agency mission needs when it is impracticable to apply competitive examining methods. Generally, the hiring authority for the excepted service is 5 U.S.C. § 2103 and consists of all positions in the Executive Branch that are specifically excepted from the competitive service either by statute, the President, or by OPM, and that are not in the Senior Executive Service. There are additional non-Title 5 authority exceptions to competitive hiring authority and they are typically agency unique because they are established by statutes or Executive Orders that support specific agency mission needs.
69 GAO-08-762T.
agencies can develop more effective vacancy announcements when hiring managers partner with HR staff. According to OPM, hiring managers can work with HR staff to identify the critical competencies needed in the job, develop a recruiting strategy, and ensure the job announcement accurately and clearly describes the required competencies and experience. To promote collaboration between hiring managers and HR staff, OPM is training agencies on the role of hiring managers in writing vacancy announcements, according to OPM officials.

As we reviewed human capital practices in foreign governments, Canadian officials told us that Canada's Public Service Commission shortened job announcements and reduced the number of qualifications required to apply for most positions. Canadian officials also noted that they simplified their job application portal, which reduced the time to apply for a job.

Assess and Screen Candidates

Assessing includes developing and implementing tests, structured interviews, and other evaluations to determine whether candidates are qualified for the position and to gauge their relative levels of knowledge, skills, and abilities. Screening involves reviewing qualified candidates for potential suitability concerns and conducting background investigations. Practices for assessing and screening include using relevant assessment methods, sharing hiring lists, and improving the security clearance process.

Use relevant assessment methods and share hiring lists. CHCOs and OPM officials stated that roadblocks to hiring the right skills include issues with assessment methods. Specifically, agencies may use methods that are less relevant for assessing the desired skills or agencies may experience issues incorporating multiple assessments in the hiring process. For example, one CHCO said that her agency uses multiple-choice questions to assess candidates, but essay questions more effectively assess the skills she seeks. OPM issued guidance to agencies on how to use additional assessment methods, including how to rank applicants.

Additionally, federal employee and management group representatives said agencies could reduce the time of the assessment process by sharing hiring lists. The Competitive Service Act of 2015 allows agencies
to share hiring lists, but agencies have only started to pilot the practice within departments, according to OPM officials. OPM and agencies discussed sharing hiring certificates with the CHCO Council, and OPM is planning virtual training sessions on this topic. However, one federal employee group representative noted that to be consistent with merit principles, agencies may need to refresh the list every 2-to-3 months to give new candidates the opportunity to enter the application pool.

In looking at human capital practices in foreign governments, we found that Australian agencies incorporated more relevant assessment methods and shared hiring certificates. According to officials from the Australian Public Service Commission, Australian agencies previously relied on interviews as the main assessment method. However, the Australian Public Service Commission encouraged agencies to use a range of different assessment methods, such as prescreening questionnaires, video interviews, and technical multiple-choice questions. As a result, officials stated that Australian agencies interview fewer but more suitable candidates, which can save time and resources. Also, Australian agencies can hire from a list of candidates that one agency already determined to be qualified in certain skills.

**Improve the security clearance process.** The security clearance process can contribute to onboarding delays, according to CHCOs. For example, at one agency, the CHCO said it takes applicants more than 400 days to receive their security clearances. Also, our previous work found that 98 percent of agencies did not meet the 60-day timeliness

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70The law permits sharing hiring lists, or a certificate of eligibles, with another appointing authority only if the announcement of the original position provided notice that the resulting list of eligible candidates may be used by another appointing authority. Competitive Service Act of 2015, Pub. L. No. 114-137, 130 Stat. 310 (Mar. 18, 2016).

71Generally, the merit principles assure that federal employees are hired, promoted, paid, and discharged only on the basis of merit.
objectives for initial secret clearances in fiscal year 2016, an increase of 25 percentage points since fiscal year 2012.\textsuperscript{72}

In January 2018, we added the security clearance process to our High-Risk List and reported a backlog of more than 700,000 background investigations as of September 2017. In December 2017, we made three recommendations to the National Background Investigations Bureau within OPM.\textsuperscript{73}

These recommendations included developing a plan for reducing the security clearance backlog, increasing total investigator capacity, and implementing a comprehensive strategic workforce plan that focuses on what workforce and organizational needs and changes will enable the National Background Investigations Bureau to meet the current and future demand for its services. OPM concurred with the recommendations, and officials reported in February 2019 that the National Background Investigations Bureau had taken steps to reduce backlog of pending security clearance investigations to approximately 565,000 and increase the number of investigators to almost 8,700. The National Background Investigations Bureau has also reported publicly on the security clearance background investigations, including investigator headcounts, in September 2018, and quarterly on performance.gov.\textsuperscript{74} While an

\textsuperscript{72}GAO, Personnel Security Clearances: Additional Actions Needed to Implement Key Reforms and Improve Timely Processing of Investigations, GAO-18-431T (Washington, D.C.: Mar. 7, 2018). The Intelligence Reform and Terrorism Prevention Act of 2004 required the development of a plan to reduce the length of the personnel security clearance process. To the extent practical, the plan was to require that each authorized adjudicative agency make a determination on at least 90 percent of all applications for a personnel security clearance within an average of 60 days after receipt of the completed application by an authorized investigative agency, including not longer than 40 days to complete the investigative phase and not longer than 20 days to complete the adjudicative phase. Pub. L. No. 108-458, tit. III, § 3001(g)(2)(A), 118 Stat. 3638, 3709 (Dec. 17, 2004) (codified at 50 U.S.C. § 3341(g)(2)(A)).


important step, OPM needs to complete the workforce plan and identify workforce goals to fully implement the recommendation.

The Department of Homeland Security (DHS) CHCO said DHS navigates this challenge by onboarding talented, qualified applicants as soon as possible, then, while waiting for their high-level clearance, assigning them tasks that do not require the clearances. She also said that DHS has issued more interim clearances and has redesignated some positions so they can be held by employees with a lower clearance classification.

Assign Employees Where Needed

Our previous work noted that it is important for agencies to be able to place employees where needed, especially since utilizing skills of employees already in the workforce could improve agencies’ ability to meet emerging or temporary mission needs more cost-effectively than hiring employees.\(^{75}\)

Develop a culture of agility. We previously reported that to develop a culture of agility, agencies need to be able to (1) identify the skills available in their existing workforces, and (2) move people with specific skills to address emergency, temporary, or permanent needs within and across the agencies.\(^{76}\) Agencies can develop a culture of agility to meet mission needs by supporting rotational assignments for employees. For example, the Nuclear Regulatory Commission established an oversight board when it faced a period of downsizing and could not hire externally as a result of contraction within the nuclear industry, according to the agency CHCO. This board helped ensure that employees with the required skill sets were considered first before an approval to hire would be granted. Through its active rotational program and hiring oversight, the commission met its mission amidst the downsizing, according to the agency’s CHCO.

Relatedly, Canada and two of the private government contractors we interviewed have used internal job application platforms to promote a culture of agility. Canada’s internal job platform, Career Marketplace, allows all government employees to share profiles and career opportunities, particularly for short-term projects. One company’s

\(^{75}\)GAO-14-168.

\(^{76}\)GAO-14-168.
representatives said their internal job platform posts openings in different countries and industries across the company. According to these representatives, this company established a culture where supervisors understand that staff work for the entire company, not just a particular unit or program. Another company supplements its internal job platform with tools to recognize employee skills and find opportunities that best fit those skills.

77 Rotation programs can also be used as a tool for engaging employees. For example, officials at one company also noted that establishing a culture of “one network” can directly impact retention of high-performing employees. We discuss employee engagement in a later section.
Incentivize and Compensate Employees

While federal agencies may face challenges implementing competitive compensation in certain labor markets, certain benefits and incentives other than pay can help federal agencies better compete in the labor market. However, agencies do not always promote these benefits and incentives as part of a total compensation package, in part because managers are not always aware of the importance of doing so. In the sections below, we highlight practices agencies can use to promote current benefits and incentives, and discuss our open recommendations to leverage existing pay flexibilities.

Leverage Benefits and Incentives

In cases where federal pay may not be competitive, certain benefits and incentives, such as work-life balance programs, tax-exempt health savings plans, and retirement savings plans, could give the government an edge to recruit and retain employees. Some practices agencies can use to leverage these benefits and incentives are as follows.

Increase awareness of benefits and incentives, such as work-life programs. In 2017, the majority of federal employees were satisfied with compensation, and employees who participated in work-life programs were satisfied with those incentives (see table 2 and figure 5). However, OPM’s 2018 Federal Work-Life Survey Governmentwide Report found that one of the most commonly reported reasons employees do not participate in work-life programs is lack of program awareness among employees and supervisors. For example, 23 percent of those who did not participate in the employee assistance program said they were unaware of the program services.

Why Is Incentivizing and Compensating Employees Important?

Changing mission requirements and technological trends requires the federal government to compete with other sectors for in-demand skill sets, and compensation and incentives are key determinants of where employees choose to work. While federal agencies may struggle to offer competitive compensation for highly skilled workers given fiscal constraints, leveraging existing incentives such as work-life balance programs can help agencies to better compete for top talent even in labor markets where federal pay may not be competitive.

Source: GAO analysis of expert interviews, Chief Human Capital Officer group interviews, and GAO reports. | GAO-19-181

78The 2017 FEVS is based on a generalizable sample of 1,139,882 employees. Unless otherwise noted, the margin of error for all estimates was within +/- 1 percent. See appendix I for details. Responses to satisfaction with work-life balance programs were recoded as missing if the respondent did not participate in the work-life balance program.

Table 2: The Majority of Federal Employees Are Satisfied with Pay and Supervisory Support for Work-Life Balance, 2017

<table>
<thead>
<tr>
<th>Federal Employee Viewpoint Survey (FEVS) question</th>
<th>Percent positive responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Considering everything, how satisfied are you with your pay?</td>
<td>61</td>
</tr>
<tr>
<td>My supervisor supports my need to balance work and other life issues.</td>
<td>80</td>
</tr>
<tr>
<td>Senior leaders demonstrate support for work-life programs.</td>
<td>57</td>
</tr>
</tbody>
</table>


Note: Neutral responses for FEVS questions ranged from 6.7 to 29.3 percent. The margin of error for all estimates was within +/- 1 percent. For more details, see appendix I.
Figure 5: Fewer Than Half of Survey Respondents Participate in Federal Work-Life Programs, but Those Who Participate Are Satisfied, 2017

Federal Work-life Programs

<table>
<thead>
<tr>
<th>Program</th>
<th>Participation Rate</th>
<th>Satisfaction Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health and Wellness Programs</td>
<td>26</td>
<td>81</td>
</tr>
<tr>
<td>Elder Care Programs</td>
<td>2</td>
<td>68</td>
</tr>
<tr>
<td>Child Care Programs</td>
<td>3</td>
<td>73</td>
</tr>
<tr>
<td>Employee Assistance Program⁴</td>
<td>13</td>
<td>78</td>
</tr>
<tr>
<td>Alternative Work Schedules</td>
<td>34</td>
<td>90</td>
</tr>
<tr>
<td>Telework</td>
<td>36</td>
<td>81</td>
</tr>
</tbody>
</table>

Source: GAO analysis of Office of Personnel Management Federal Employee Viewpoint Survey (FEVS) data. ¹ GAO-19-181

Note: Responses stating that work life programs were not available ranged from 5 to 20 percent. Neutral responses on satisfaction ranged from 6 to 30 percent. The margin of error for all estimates was within +/- 1 percent. For more details, see appendix I.

⁴The employee assistance program is a voluntary program that offers free counseling and assessments to employees who have personal or work-related problems.

Some agencies are addressing this issue by advertising and helping employees use available benefits, work-life balance programs, and other resources. For example, the National Science Foundation offers employees many opportunities to learn about existing benefits, according to the foundation’s CHCO. These opportunities include triannual retirement seminars where employees receive personalized retirement estimates, quarterly financial planning seminars where employees receive a free 1-hour consultation, and annual benefit fairs where employees can
learn about various health care providers, the work-life programs, and the employee assistance program.

**Tailor benefits and incentives to employees’ needs.** Our analysis of CHCO and expert interviews also found that employees may value different benefits and incentives depending on their stage in life. By better understanding the desires of the workforce at various life stages, agencies can better tailor benefits packages and incentives to their employees. For example, the Social Security Administration’s CHCO said that the agency’s younger workers value work-life and wellness programs, so the agency implemented a health-tracking program and a fitness discount program for all employees. CHCOs also suggested identifying and incorporating the benefits that would be most useful to various groups of employees, such as sabbaticals for midlevel employees or paid parental leave for employees starting families. One CHCO found that her cybersecurity workforce values subsidies for training and additional certifications more than bonus pay.

Further, OPM’s 2018 *Federal Work-Life Survey Governmentwide Report* found that the number of respondents who anticipate adult dependent care responsibilities in the next 5 years (31 percent) is double the number of number of respondents with current adult dependent care needs (15 percent). OPM officials stated in light of this change, agencies may need to provide greater workplace flexibilities and other support services to retain talent.

**Address barriers to telework.** Telework can serve as an important recruitment and retention tool. According to OPM’s 2018 *Federal Work-Life Survey Governmentwide Report*, 68 percent of employees who telework said they intended to remain at their agencies, compared to 62 percent of those who do not telework.\(^8\) However, our previous work and OPM’s 2018 *Federal Work-Life Survey Governmentwide Report* found that some supervisors discourage telework despite agency participation.

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\(^8\) According to the report, the difference between employees who telework and employees who do not was statistically significant at p<0.05. The response rate was 37 percent. Office of Personnel Management, *Federal Work-Life Survey Governmentwide Report*, (Washington, D.C.: March 2018).
goals and that managers may make telework decisions before taking relevant training.\(^\text{81}\)

In February 2017, we recommended that OPM develop tools to help agencies assess and analyze persistent barriers to telework, including managerial resistance. While OPM disagreed with our recommendation, it took steps consistent with the recommendation. For example, in 2017, OPM administered the first government-wide work-life survey. This survey included questions about a number of work-life programs, including telework, to help identify common barriers to participation in telework, including managerial resistance. Specifically, the survey discussed supervisory perceptions of employees' reported telework participation outcomes, supervisors' confidence to effectively manage telework performance, and key drivers for telework approvals and denials. OPM then provided individualized reports on results to agencies and agency components. OPM also developed and distributed a video tutorial to help agencies analyze their results. In 2019, following receipt and review of documentation from OPM, we determined that these actions will help agencies prioritize ways to improve their telework programs. We then closed the recommendation as implemented.

In our review of other countries’ human capital practices, we found that Australia encouraged managers to support telework by passing legislation outlining standards and developing a culture that supports work-life programs. For example, Australia’s Parliament passed legislation outlining standards for work-life programs, but Australian officials also stated that commitment from top management was instrumental in creating a culture that supported work-life programs, including telework. More than 80 percent of respondents to the Australian Public Service employee census reported that their supervisor actively supports work-life programs.\(^\text{82}\)

**Leverage Existing Pay Authorities**

It is the policy of Congress that pay for federal workers under the General Schedule (GS) classification system—the pay system covering the

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majority of federal employees—align with pay for comparable nonfederal workers. However, in 2012, we reported that recent studies comparing the compensation of federal employees to workers in other sectors arrived at different conclusions as to which sector had the higher pay and the size of the pay disparities, in part because each study included different sets of assumptions. When necessary, agencies can use special payment authorities strategically to help ensure pay is competitive.

**Use special payment authorities strategically.** A variety of authorities can help agencies compete in the labor market for top talent, but agencies only use them for a small number of employees. In December 2017, we reported that agencies can tap an array of special payments when they need to recruit or retain experts in engineering, cybersecurity, or other in-demand fields. These payments include, for example, payments for recruitment, retention, or critical positions. We found that agencies reported that these payments were helpful, but few documented their impacts, and OPM had not assessed their effectiveness. Further, we analyzed EHRI data and found that less than 5 percent of employees received payments for recruitment or retention annually in the past 10 years.

In December 2017, we recommended that OPM track the effectiveness of special payment authorities, provide guidance and tools to assess their effectiveness, and review and consider ways to streamline approval procedures. OPM partially concurred with the recommendation to track the effectiveness of special payment authorities, saying that agencies are in the best position to take this action. Moreover, in December 2018, OPM stated that it established a baseline to measure changes in the use of special payment authorities over time, and that it is focused on government-wide, mission-critical occupations to help identify trends.

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85Not all employees are eligible for special payments. We calculated the percentage of employees who received recruitment incentives as the number of recruitment incentives in a fiscal year divided by the total number of hires in a fiscal year. We calculated the percentage of employees who received retention incentives as the number of retention incentives divided by the average count of permanent employees at the beginning and end of the fiscal year.
where there may be recruitment and retention difficulties. OPM is also working with the CHCO Council to administer a survey to agencies to obtain input on possible improvements to special payment authorities and whether agencies have best practices to share on effective use of special payment authorities. OPM officials said that they plan to review approval procedures in 2019 for ways to streamline them; however, they have not yet provided documentation on how this and future reviews will identify ways to streamline the procedures. We will continue to monitor OPM’s actions to implement this recommendation.

Engage Employees

OPM’s study on engagement and our prior work found that what matters most in improving engagement levels is valuing employees by authentically focusing on their performance and career development. Specifically, our prior work found that the strongest drivers of engagement were similar across age groups and include constructive performance conversations and communication from management, career development and training, inclusion and involvement in decisions affecting employees’ work, and work-life balance.86

The challenge for agencies, then, is to (1) overcome weaknesses in the performance management process, including rewarding strong performers and dealing with poor performers; (2) create support for an inclusive work environment; and (3) develop and implement strategies for prioritizing training during times of fiscal constraint. In the sections below, we highlight actions OPM can take to implement open recommendations from our prior work and practices agencies can take to improve employee engagement.

Manage Employee Performance and Create a “Line of Sight” Between Individual Performance and Organizational Results

Experts said that employees desire an environment where they can collaborate with their peers and feel a sense of comradery. In contrast, even a small number of poor performers can negatively affect employee morale and agencies’ capacity to meet their mission, according to CHCOs

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86GAO-16-880T and GAO-15-585. Similar to our findings, OPM found that the strongest drivers of engagement were performance feedback, collaborative management, employee training and development, merit system principles, and work-life balance.
and our previous work. In the 2017 FEVS, 64 percent of federal employee respondents agreed that their supervisor provides them with constructive suggestions to improve job performance and 31 percent agreed that steps are taken to deal with poor performers. Without effective performance management, agencies risk not only losing the skills of top talent, they also risk missing the opportunity to effectively address increasingly complex and evolving mission challenges. Agencies can make performance management more effective with the following practices.

**Improve selection and training of supervisors and managers.** Agencies can improve employee engagement by having a strong management team that can provide constructive performance conversations and deal with poor performers. This can be done by selecting managers who (1) are inclined toward and interested in supervision, and (2) have the ability to coach staff and provide constructive performance feedback. One way agencies can ensure they are selecting managers who want to manage is to establish a dual career ladder structure, which allows advancement opportunities for employees who have technical skills but are not inclined to manage.

Representatives of private consulting firms we interviewed use the dual career ladder and said it helps expand opportunities for employees to move around internally. We recommended in 2015 that OPM determine if promising practices, such as the dual career ladder structure, should be more widely used across government. In November 2018, OPM officials said that the President’s Management Agenda requires agencies to ensure first-line supervisors possess critical leadership competencies within the first year of appointment, either through selection or development. We will continue to monitor OPM’s actions in this area.

Agencies can also train managers to ensure they have skills to address poor performance. In February 2015, we reported that supervisors may not possess confidence or experience in having difficult performance conversations, and they may not have skills or training on addressing poor performance. These factors point to the importance of effective selection, assessment, and development of new supervisors, as well as to the importance of providing refresher training for current supervisors.

Link agency’s mission and employees’ work. We have previously reported that high-performing organizations create a “line of sight” between individual performance and organizational results by aligning employees’ daily activities with broader results. Further, agencies can motivate and retain employees by connecting them to their agency’s mission, according to human capital experts and federal employee and management group representatives we interviewed. Employee responses to FEVS indicate the federal government appears to be performing well in this area. In 2017, 84 percent of employees knew how their work related to the agency goals and priorities.

Several private consulting firms we spoke with connect employees to their missions in various ways. One firm aligns individual performance expectations with the organization’s goal of serving federal clients objectively with the highest caliber of scientific and technical excellence. According to the firm’s representative, this effort has improved employee satisfaction scores. Other firms train employees on the firm’s core values and its clients’ missions. According to the firms’ talent directors, this practice helps keep employees interested in working for the firm.

Implement meaningful rewards programs. We have previously reported that high-performing organizations seek to create effective incentive and reward systems that clearly link employee knowledge, skills, and contributions to organizational results. However, agencies sometimes struggle to allocate limited resources between mission requirements and recognition, according to CHCOs and representatives of one federal management group. According to the representatives, some managers may not implement reward programs because they are time intensive, and managers may not understand the importance of reward programs to motivating the workforce. Among 2017 FEVS respondents, 50 percent reported that they were satisfied or greatly satisfied with the recognition received for doing a good job.

Further, our November 2018 report highlighted challenges in recognizing employee performance. We noted that approximately one-third of 2017

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89GAO-03-488.

90GAO-19-35.
FEVS respondents agreed or strongly agreed with the statement, “In my work unit, differences in performance are recognized in a meaningful way.” We also found that employees in supervisory roles responded more positively to statements related to rewarding performance than other employees. For example, in 2017, an estimated 69 percent of senior leaders agreed or strongly agreed with the statement. In contrast, an estimated 48 percent of supervisors and an estimated 33 percent of nonsupervisors and team leaders agreed or strongly agreed.91

Human capital experts and federal employee and management group representatives said that recognizing employees for their contribution to achieving the agency’s mission can be as strong an incentive as money. For example, according to the Social Security Administration CHCO, the agency offers a variety of awards programs. These programs include agency-wide monetary awards that are based on performance ratings, monetary awards that are not based on performance ratings, and nonmonetary awards, some of which are showcased in a virtual ceremony during Public Service Recognition Week. The Social Security Administration also incorporates office-level awards to recognize employee contributions. For example, in some offices, supervisors give “Life Saver” or “You Rock” certificates.

**Share innovative approaches to performance.** In November 2018, we found that opportunities exist to share innovative approaches to performance management.92 We recommended that OPM work with the CHCO Council to develop a strategic approach for identifying and sharing emerging research and innovations in performance management. Examples of innovations OPM has found include changes in performance ratings models and setting goals that are focused on growth. We also recommended that OPM develop and implement a mechanism for agencies to share promising practices, such as focusing on performance conversations and recognition to increase engagement and performance. OPM agreed with our recommendations and reported that it plans to formalize its processes for sharing emerging research and soliciting views from the CHCOs. We will monitor OPM’s efforts to implement the recommendations.

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91 The margin of error for all estimates was within +/- 1 percent, except for the response from senior leaders, where the margin was within +/- 4 percent.

92 GAO-19-35.
Involve Employees in Decisions

Our analysis of expert interviews found that employees seek autonomy in the workplace, meaningful work, and opportunities to achieve results by developing creative and innovative solutions. Also, experts noted that in some cases, connecting employees to a sense of inclusion and meaning can compensate for the opportunity to make higher salaries in other sectors. Having an inclusive work environment is one practice that can help increase employee involvement in decisions.

Increase support for an inclusive work environment. An increasingly diverse workforce can help provide agencies with the requisite talent and multidisciplinary knowledge to accomplish their missions. We previously reported that diversity in the workforce can help address complex challenges and foster innovation and creativity. We also reported that fostering a diverse and inclusive workplace could help organizations reduce costs by reducing turnover, increasing employee retention across demographic groups, and improving morale. To harness diverse talent, agencies need to continue using thoughtful strategies to engage employees. In 2017, almost 70 percent of FEVS respondents stated that supervisors work well with employees of different backgrounds, and about half were satisfied in other areas related to inclusiveness (see table 3).

Table 3: Responses to Federal Employee Viewpoint Survey (FEVS) Questions Related to Inclusiveness, 2017

<table>
<thead>
<tr>
<th>Question</th>
<th>Percent positive responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervisors work well with employees of different backgrounds.</td>
<td>68</td>
</tr>
<tr>
<td>How satisfied are you with your involvement in decisions that affect your work?</td>
<td>53</td>
</tr>
<tr>
<td>How satisfied are you with the information you receive from management on what is going on in your organization?</td>
<td>50</td>
</tr>
</tbody>
</table>


Note: Neutral responses for FEVS questions ranged from 6.7 to 29.3 percent. The margin of error for all estimates was within +/- 1 percent. For more details, see appendix I.

In January 2005, we reported that top management commitment is a fundamental element in the implementation of diversity management.

initiatives.\textsuperscript{94} We’ve also reported on the importance of diversity in the Senior Executive Service (SES) corps. In January 2003, we stated that diversity can bring a wider variety of perspectives to bear on policy development and decision-making that help agencies achieve results.\textsuperscript{95} Other practices that can help agencies support an inclusive environment include having a diversity strategy and plan that are developed and aligned with the organization’s strategic plan. Agencies should also involve employees in driving diversity throughout the organization (e.g., implementing mentoring programs or advisory groups).

Practices implemented by the United Kingdom (UK) and Australia emphasize the importance of setting an inclusive tone from the top. For example, according to country officials, the UK and Australia designate high-level agency officials to champion a particular government-wide initiative, such as increasing diversity and inclusion, work-life balance, and well-being. In the UK, champions promote the initiatives by blogging or chairing interagency groups of senior civil servants to share best practices, among other activities.

Agencies can promote an inclusive work environment by providing employees opportunities to share common interests and involving employees in decisions. Private consulting firms we interviewed help employees feel involved in the organization by sponsoring employee groups where employees can gather around common interests, such as community service, or skill sets, such as cybersecurity or acquisition management. One firm incorporates results of its annual employee survey into its decision-making and modified its career progression trajectory based on feedback from employee focus groups.

Develop Employees

Agencies can use career developmental opportunities, including training, details, and rotations, to (1) help the workforce develop skills to meet evolving mission requirements, (2) ensure managers are well qualified, and (3) appeal to current and future workers’ desires for career mobility. Some actions OPM can implement and practices agencies can take include prioritizing training and encouraging mobility opportunities.

\textsuperscript{94}GAO-05-90.

Prioritize training for employees and managers. CHCOs and federal employee and management group representatives said that more can be done to prioritize training, particularly given resource constraints. Further, our past work found that diversity training can help employees develop concrete skills to assist in communicating and increasing productivity. However, in 2017, only 55 percent of FEVS respondents were satisfied with training.

In 2012, we recommended that OPM include in its guidance steps and factors agencies should consider when prioritizing training. OPM partially agreed with our recommendation and has taken steps to implement it. In July 2017, OPM officials reported they were gathering information on agencies’ talent development processes, tools, and procedures, and would use the information they gathered to develop criteria for ranking training. We requested an update in December 2018 and will continue to monitor OPM’s actions to implement this recommendation.

As an example of agency training efforts, the Social Security Administration has national and regional development programs that offer 12 to 18 months of training and rotations for entry-, mid-, and senior-level employees to strengthen foundational, technical, and leadership knowledge and skills, according to the agency’s CHCO. For example, its Leadership Development Program assigns selected GS-9 through GS-12 employees to developmental assignments in new areas of work, and provides leadership training that broadens their perspective of the agency’s mission.

Encourage details, rotations, and other mobility opportunities. According to our group interviews with CHCOs and interviews with human capital experts and federal management groups, upward and lateral mobility opportunities are important for retaining employees. CHCOs also said that in some cases, lateral mobility opportunities such as rotations, details, and opportunities to gain experience in other sectors can help...

96GAO-05-90.


98According to the Social Security Administration CHCO, the new Leadership Development Program will expand to include GS-8 through GS-15 employees.
employees gain new skills more cost effectively than training, particularly for rapidly changing skill sets such as those related to the sciences. We previously reported that effective interagency rotational assignments can develop participants’ collaboration skills and build interagency networks.\(^9\) Further, providing supervisory candidates with details or rotational opportunities could help them develop and demonstrate supervisory competencies.

Regarding upward mobility, the 2017 FEVS found that only 37 percent of respondents were satisfied with opportunities to get a better job in their organization. Agencies can use details and rotations to meet employees’ desire for mobility, according to our CHCO group interviews and interviews with human capital experts and federal employee and management groups. However, according to OPM data, few federal employees moved horizontally in 2017 (see table 4).

<table>
<thead>
<tr>
<th>Horizontal Movement</th>
<th>Percent of permanent employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Details</td>
<td>0.01</td>
</tr>
<tr>
<td>Interagency transfers</td>
<td>0.6</td>
</tr>
</tbody>
</table>


Notes: EHRI captures details to state or local governments, international organizations, and higher grade positions or positions with promotion potential. Interagency transfers do not include Senior Executive Service transfers or transfers due to career assistance programs.

We calculated the number of permanent employees using the average count of permanent employees at the beginning and end of the fiscal year.

Few employees move horizontally because managers are sometimes reluctant to lose employees, according to federal manager group representatives and our previous work. Furthermore, federal budgeting and account structures create disincentives to share resources across agencies. Additionally, barriers to rotations in other sectors may include challenges identifying willing industry partners and addressing concerns regarding conflict of interest and access to sensitive information. Meanwhile, federal employees who have left for another sector must apply competitively to return at a higher level.

We have previously made recommendations that could help address these challenges. In 2014, we recommended that OPM review the extent to which new capabilities are needed to promote mechanisms for increasing employee mobility within an agency and government-wide. OPM agreed with the recommendation and since October 2016 has been exploring a pilot project, GovConnect, that tests models for workforce agility that includes cloud-based skill deployment across organizational components and employee-initiated innovation initiatives. In November 2018, OPM officials also stated that the President’s Management Council Interagency Rotations Program offers rotational assignments across agencies. We will continue to monitor OPM’s efforts in this recommendation.

In 2015, we recommended that OPM determine if promising practices, such as providing detail opportunities or rotational assignments to managerial candidates prior to promotion, should be more widely used across government. OPM partially concurred with this recommendation and agreed to work with the CHCO Council to explore more government-wide use of rotational assignments. However, OPM noted that agencies already have authority to take these actions. As of October 2018, OPM had not provided us with information regarding how it plans to implement the recommendation.

In looking at human capital practices in foreign governments, we found that the UK encourages rotation and promotion opportunities through its developmental programs for entry-, mid-, and senior-level employees. For example, participants in its entry-level program, called Fast Stream, are centrally employed in the UK Cabinet Office. For the first 3 to 4 years, Fast Stream participants rotate among agencies and receive technical training in a specific field, such as accounting, finance, or human capital. While evaluating Fast Stream’s feasibility in the federal workforce, one federal employee group representative emphasized the need to provide career development opportunities to all employees, not just selected program participants.

\[100\]GAO-14-168.
Agency Comments

We provided a draft of this report to the Acting Director of OPM for review and comment. OPM provided technical comments, which we incorporated as appropriate. We revised the report to further emphasize how agencies can use work-life programs to recruit, retain, and engage federal employees. We also added the concept of interpersonal skills to our discussion of the leadership competencies needed to manage the future workforce. OPM’s comments also included updates to prior recommendations on enterprise human capital solutions, skills gaps, telework, and special pay authorities. We incorporated these comments as appropriate.

As agreed with your offices, unless you publicly announce the contents of this report earlier, we plan no further distribution until 30 days from the report date. At that time, we will send copies to the appropriate congressional committees, the Acting Director of the Office of Personnel Management, and other interested parties. In addition, the report will be available at no charge on the GAO website at http://www.gao.gov.

If you or your staff 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 key contributions to this report are listed in appendix III.

Robert Goldenkoff
Director
Strategic Issues
Appendix I: Objectives, Scope, and Methodology

In this report, we identify (1) key trends affecting federal work and workers, and (2) key talent management strategies agencies can employ to achieve a high-performing federal workforce, given those trends.

To address both objectives, we reviewed our own reports as well as those from the Office of Personnel Management (OPM), academia, think tanks, and public opinion organizations related to human capital and the future of work. We also analyzed data from OPM’s Enterprise Human Resources Integration (EHRI) system. EHRI contains personnel action and onboard data for most executive branch and some legislative branch federal civilian employees.¹ We analyzed government-wide EHRI data on demographics, including veterans status; employee movement such as details and transfers; and retirement eligibility. We analyzed 10-year trends from fiscal years 2008 to 2017, the most recent, complete fiscal year of data available at the time of our review.

For our analysis of demographic trends, we included permanent, temporary, and term-limited employees. However, we focused on permanent employees in our analysis of personnel movement and retirement eligibility because these employees (1) comprise most of the federal workforce and (2) become eligible to retire with an annuity, for which temporary and term-limited employees are ineligible.

To calculate the number of federal civilian employees, we included all onboard staff, regardless of their pay status. Cases with missing values on a variable were excluded from the reported statistics for that variable. To calculate eligibility for retirement within the next 5 years, we computed the date at which the employee would be eligible for voluntary retirement with an unreduced annuity, using length of service, birth date, and retirement plan coverage. Since work schedule does not affect retirement eligibility, we included permanent employees with full-time schedules and part-time, seasonal, and other schedules in these results.

¹Among those agencies excluded from EHRI are the Central Intelligence Agency and other intelligence organizations; the U.S. Postal Service; Tennessee Valley Authority; and the White House.
We assessed the reliability of the EHRI data through electronic testing to identify missing data, out-of-range values, and logical inconsistencies. We also reviewed our prior work assessing the reliability of these data and corresponded with OPM officials knowledgeable about the data to discuss its accuracy and the steps OPM takes to ensure reliability. On the basis of this assessment, we believe the EHRI data we used are sufficiently reliable for the purpose of describing demographic trends and workforce management challenges facing the federal government.

Objective 1

To identify key trends in the workforce and workplace, we analyzed data from the U.S. Bureau of Labor Statistics (BLS) Current Population Survey (CPS) and Federal Procurement Data System – Next Generation, reviewed our prior work, and reviewed reports from OPM and selected think tanks and consulting firms.

Key trends in the workforce. To assess key trends in the workforce, we analyzed data from the CPS, a national survey designed and administered jointly by BLS and the Census Bureau. The CPS is a key source of official government statistics on employment and unemployment in the United States, and also contains data on poverty rates, earnings, and labor market demographics. We analyzed 2017 annual averages on age, racial or ethnic minority status, disability status, veteran status, and educational attainment of the U.S. civilian labor force.

The CPS uses a probability sample conducted monthly. As with all samples, estimates produced from the CPS are subject to sampling and nonsampling error. Sampling error results from the fact that the samples are one of a large number of random samples that might have been drawn. We followed the BLS technical guidance for estimating the standard errors of annual average totals from CPS data. We used the standard errors to construct 95 percent confidence intervals for each estimate presented in this report. This is the interval that would contain the actual population value for 95 percent of the CPS samples that the BLS could have drawn. All estimates from the CPS presented in this report have a margin of error of plus or minus 4 percentage points or fewer at the 95 percent confidence level. Nonsampling error results from issues such as inability to obtain information about all people in the sample, or the inability or unwillingness of respondents to provide correct information in the self-reporting process. We assessed the reliability of CPS data by reviewing related technical documentation from the BLS
website on the concepts and methodology of the CPS, and obtaining BLS feedback on our analysis. We conducted manual data testing for obvious errors and compared selected underlying data to CPS annual reports. We found the data were sufficiently reliable for the purposes of comparing characteristics of the federal workforce to those of the U.S. civilian labor force.

**Key trends in the workplace.** To assess key trends in the workplace, we reviewed our prior work on human capital management and trends in government and the workforce. We also reviewed OPM reports on human capital trends and management, including the 2018 *Work-Life Survey Governmentwide Report*, 2018 *Federal Workforce Priorities Report*, and 2016 *Federal Employee Benefits Survey Results*. We interviewed OPM officials knowledgeable on these topics to better understand the methodology used to obtain report findings, and to understand previous and current efforts to assess federal human capital policies. We also reviewed selected reports from think tanks, public opinion organizations, and consulting firms on workplace trends. For reports used in our analysis, we corresponded with knowledgeable staff to better understand the methodologies used to obtain findings in the report and we assessed the methodologies against our own standards.

**Service contracts.** To describe the size of service contract obligations in fiscal year 2017, we reviewed data from the Federal Procurement Data System – Next Generation. We found the data sufficiently reliable for this purpose based on our review of related documentation.

**Objective 2**

To identify key areas to help agencies manage the workforce, we analyzed employee responses to questions from OPM’s 2017 Federal Employee Viewpoint Survey (FEVS) and spoke with various groups. We interviewed human capital experts, federal employee and management

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groups, and held moderated group interviews with agency Chief Human Capital Officers (CHCO).

**Federal Employee Viewpoint Survey.** To obtain information on federal employee attitudes toward work and the workplace, we analyzed employee responses to questions from OPM’s 2017 FEVS, the most recent data available at the time of our analysis. The FEVS provides a snapshot of employees’ perceptions about how effectively agencies manage their workforce. The FEVS includes a core set of 84 questions. Agencies have the option of adding questions to the surveys sent to their employees. The 84 questions address the following areas: (1) work experience, (2) work unit, (3) agency, (4) supervisor, (5) leadership, (6) satisfaction, (7) work-life, and (8) demographics. OPM has administered the FEVS annually since 2010.4

The FEVS is based on a sample of full- and part-time, permanent, nonseasonal employees of departments and large, small, and independent agencies.5 The total sample size for the 2017 FEVS was 1,139,882 employees and the response rate was 45.5 percent. According to OPM, the 2017 sample size was sufficient to ensure a 95 percent chance that the true population value would be between within 1 percent of any estimated percentage for the total federal workforce. Since each sample could have provided different estimates, we express our confidence in the precision of the FEVS statement estimates using the margin of error at the 95 percent level of confidence. This margin of error is the half-width of the 95 percent confidence interval for a FEVS estimate. A 95 percent confidence interval is the interval that would contain the actual population value for 95 percent of the samples that could have been drawn.

For our analysis, we selected FEVS questions related to work unit recruitment, satisfaction with compensation and incentives, management, employee involvement, and career opportunities. We categorized responses into three categories—positive, neutral, and negative, as shown in table 5. In our findings, we included the percent of positive

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4From 2002 to 2010, OPM administered the survey biennially. Prior to 2010, the survey was known as the Federal Human Capital Survey.

5According to OPM, the 2017 sample included 37 departments and large agencies as well as 43 small and independent agencies.
responses to FEVS questions. Neutral responses ranged from 6.7 to 29.3 percent, as shown in table 5 below.
Table 5a: Breakdown of Positive, Neutral, and Negative Responses for Reported 2017 FEVS Questions

Responses by percentage

<table>
<thead>
<tr>
<th>Federal Employee Viewpoint Survey (FEVS) question</th>
<th>Positive responses (strongly agree / agree; very satisfied / satisfied)</th>
<th>Neutral responses (neither agree nor disagree; neither satisfied nor dissatisfied)</th>
<th>Negative responses (strongly disagree / disagree; very dissatisfied / dissatisfied)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I know how my work relates to the agency’s goals and priorities. (Q12)</td>
<td>84.2</td>
<td>9.5</td>
<td>6.3</td>
</tr>
<tr>
<td>My work unit is able to recruit people with the right skills. (Q21)</td>
<td>42.3</td>
<td>25.4</td>
<td>32.4</td>
</tr>
<tr>
<td>In my work unit, steps are taken to deal with a poor performer who cannot or will not improve. (Q23)</td>
<td>30.9</td>
<td>27.5</td>
<td>41.5</td>
</tr>
<tr>
<td>My supervisor supports my need to balance work and other life issues. (Q42)</td>
<td>79.9</td>
<td>10.0</td>
<td>10.2</td>
</tr>
<tr>
<td>My supervisor provides me with constructive suggestions to improve my job performance. (Q46)</td>
<td>64.3</td>
<td>18.5</td>
<td>17.2</td>
</tr>
<tr>
<td>Supervisors work well with employees of different backgrounds. (Q55)</td>
<td>68.5</td>
<td>19.4</td>
<td>12.1</td>
</tr>
<tr>
<td>Senior leaders demonstrate support for Work/Life programs. (Q62)</td>
<td>56.8</td>
<td>25.3</td>
<td>17.9</td>
</tr>
<tr>
<td>How satisfied are you with your involvement in decisions that affect your work? (Q63)</td>
<td>52.7</td>
<td>22.3</td>
<td>25.0</td>
</tr>
<tr>
<td>How satisfied are you with the information you receive from management on what’s going on in your organization? (Q64)</td>
<td>50.3</td>
<td>23.0</td>
<td>26.8</td>
</tr>
<tr>
<td>How satisfied are you with the recognition you receive for doing a good job? (Q65)</td>
<td>50.1</td>
<td>23.5</td>
<td>26.4</td>
</tr>
<tr>
<td>How satisfied are you with your opportunity to get a better job in your organization? (Q67)</td>
<td>37.1</td>
<td>27.7</td>
<td>35.3</td>
</tr>
<tr>
<td>How satisfied are you with the training you receive for your present job? (Q68)</td>
<td>54.5</td>
<td>22.8</td>
<td>22.7</td>
</tr>
<tr>
<td>Considering everything, how satisfied are you with your pay? (Q70)</td>
<td>60.6</td>
<td>16.7</td>
<td>22.7</td>
</tr>
<tr>
<td>How satisfied are you with the telework program in your agency? (Q79)</td>
<td>80.8</td>
<td>10.9</td>
<td>8.3</td>
</tr>
<tr>
<td>How satisfied are you with the Alternative Work Schedules Program in your agency? (Q80)</td>
<td>90.3</td>
<td>6.7</td>
<td>3.0</td>
</tr>
<tr>
<td>How satisfied are you with the Health and Wellness Programs (for example, exercise, medical screening, quit smoking programs) in your agency? (Q81)</td>
<td>81.3</td>
<td>15.1</td>
<td>3.6</td>
</tr>
<tr>
<td>How satisfied are you with the Employee Assistance Program in your agency? (Q82)</td>
<td>77.6</td>
<td>18.3</td>
<td>4.1</td>
</tr>
<tr>
<td>How satisfied are you with the Child Care Programs (for example, daycare, parenting classes, parenting support groups) in your agency? (Q83)</td>
<td>73.0</td>
<td>22.2</td>
<td>4.7</td>
</tr>
</tbody>
</table>
Appendix I: Objectives, Scope, and Methodology

Federal Employee Viewpoint Survey (FEVS) question | Positive responses (strongly agree / agree; very satisfied / satisfied) | Neutral responses (neither agree nor disagree; neither satisfied nor dissatisfied) | Negative responses (strongly disagree / disagree; very dissatisfied / dissatisfied)
---|---|---|---
How satisfied are you with the Elder Care Programs (for example, support groups, speakers) in your agency? (Q84) | 67.9 | 29.3 | 2.7

Table 5b: Breakdown of Positive, Neutral, and Negative Responses for Reported 2017 FEVS Questions

Responses by percentage

<table>
<thead>
<tr>
<th>Federal Employee Viewpoint Survey (FEVS) question</th>
<th>Yes</th>
<th>No</th>
<th>Not available to me</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you participate in the Alternative Work Schedules Program? (Q74)</td>
<td>33.7</td>
<td>47.0</td>
<td>19.3</td>
</tr>
<tr>
<td>Do you participate in the Health and Wellness Programs (for example, exercise, medical screening, quit smoking programs)? (Q75)</td>
<td>26.4</td>
<td>61.9</td>
<td>11.7</td>
</tr>
<tr>
<td>Do you participate in the Employee Assistance Program? (Q76)</td>
<td>13.4</td>
<td>81.5</td>
<td>5.1</td>
</tr>
<tr>
<td>Do you participate in the Child Care Programs (for example, daycare, parenting classes, parenting support groups)? (Q77)</td>
<td>3.4</td>
<td>79.8</td>
<td>16.8</td>
</tr>
<tr>
<td>Do you participate in the Elder Care Programs (for example, support groups, speakers)? (Q78)</td>
<td>2.2</td>
<td>81.1</td>
<td>16.7</td>
</tr>
</tbody>
</table>


Note: The margin of error for all estimates was within +/- 1 percent. Totals may not add to 100 percent due to rounding error.

To assess the reliability of the FEVS data, we reviewed FEVS technical documentation. On the basis of these procedures, we believe the data were sufficiently reliable for our purposes.

Interviews with experts. To identify key strategies for managing a high-performing workforce, we conducted semistructured interviews with 22 experts in the areas of human capital, strategic foresight, and the future of work. See appendix II for a list of experts interviewed. We selected these experts using a nonprobability sample based on our literature review, suggestions from OPM officials and our own human capital experts, and relevance of their expertise to our objectives. We selected experts from a range of organizations to ensure our analysis included a variety of viewpoints. During these interviews, we asked about, among other things, future trends that are likely to affect the federal workforce and innovative practices to recruit and retain a high-performing workforce.
We analyzed the interviews using qualitative analysis software to describe employees’ shifting attitudes toward work, and to categorize the practices into key strategies for managing a high-performing workforce. We corroborated these practices with federal human capital experts, CHCOs, and federal employee and management groups, and reflected their input in our report.

**Interviews with private organizations and foreign governments.** To identify examples of human capital practices for managing a high-performing workforce, we conducted semistructured interviews with human capital managers from four private organizations (Noblis, Deloitte, Accenture, and NetImpact Strategies) and officials from three foreign governments (Australia, Canada, and the United Kingdom). We selected the private organizations based on (1) the similarities of their talent pool to that of the federal government, (2) accolades received for being a good place to work, and (3) size of the organization and types of services offered. We selected foreign governments based on (1) similarities to the United States in terms of percent of the labor force in civil service, and (2) the country having recently improved human capital policies or practices, or having been recognized for having human capital practices that positively affect recruitment and retention. In our report, we included examples of human capital practices that managers and officials told us were helpful to improving their organization, and that could feasibly be implemented within the federal government.

**Interviews with federal employee and management group representatives.** We interviewed representatives from federal employee and management groups to assess the feasibility of applying the identified examples to the federal sector, including identifying any opportunities or challenges. We selected employee groups that represented the broadest population of blue- and white-collar federal employees from all 24 Chief Financial Officers Act agencies: the American Federation of Government Employees and the National

---

6 We restricted our selection to English-speaking countries to limit translation costs and also considered the logistical feasibility of interviewing these countries.
Treasury Employees Union.\textsuperscript{7} We selected the Federal Managers Association due to its representation of federal managers, supervisors, and executives.

**Group Interviews with CHCOs.** We also held two virtual, moderated group interviews with a nongeneralizable sample of CHCOs. We invited 23 CHCOs from the 24 Chief Financial Officers Act agencies; of those, nine were available and participated (see table 6).\textsuperscript{8} To ensure the questions were valid and understandable, we pretested the questions with our CHCO and Deputy CHCO. During each group interview, one of our own moderators used a standard set of discussion questions to ask participants to (1) assess the feasibility of specific examples for improving employee recruitment and retention, (2) explain challenges to implementing these examples in specific agencies, and (3) identify other agency examples. At the group interviews, at least two analysts took and reconciled their notes to summarize the results. We reviewed our summaries of the group interviews to identify key themes discussed. When highlighting examples from CHCOs, we provided summaries of the examples to the CHCOs for comment and incorporated technical edits, where appropriate. Because of the dynamics inherent in a group interview setting, we cannot be sure whether the participating CHCOs discussed the same information in the group format with other CHCOs present that they might have discussed in individual interviews without other CHCOs present.

<table>
<thead>
<tr>
<th>Table 6: Chief Human Capital Officers Participating in Group Interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>June 1, 2018</strong></td>
</tr>
</tbody>
</table>

\textsuperscript{7}The 24 agencies included under the Chief Financial Officers Act of 1990, as amended, are generally the largest federal agencies. They are the Departments of Agriculture, Commerce, Defense, Education, Energy, Health and Human Services, Homeland Security, Housing and Urban Development, the Interior, Justice, Labor, State, Transportation, the Treasury, and Veterans Affairs, as well as the Agency for International Development, Environmental Protection Agency, General Services Administration, National Aeronautics and Space Administration, National Science Foundation, Nuclear Regulatory Commission, Office of Personnel Management, Small Business Administration, and Social Security Administration. 31 U.S.C § 901(b).

\textsuperscript{8}To encourage full and frank conversation, we did not extend an invitation to the OPM CHCO.
Appendix I: Objectives, Scope, and Methodology

<table>
<thead>
<tr>
<th>June 1, 2018</th>
<th>June 5, 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Agriculture</td>
<td>Department of Commerce</td>
</tr>
<tr>
<td>Department of Homeland Security</td>
<td>Department of Defense(^a)</td>
</tr>
<tr>
<td>Department of the Treasury</td>
<td>Department of Energy</td>
</tr>
<tr>
<td></td>
<td>National Science Foundation</td>
</tr>
<tr>
<td></td>
<td>Nuclear Regulatory Commission</td>
</tr>
<tr>
<td></td>
<td>Social Security Administration</td>
</tr>
</tbody>
</table>

Source: GAO. | GAO-19-181

\(^a\)We interviewed the Civilian Human Capital Officer in the Department of Defense.
We conducted this performance audit from April 2017 to March 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.
Appendix II: Experts We Interviewed

Miguel Joey Aviles
Former President
Young Government Leaders

Roy Bahat
Head of Bloomberg Beta
Shift Commission on Work, Workers, and Technology

Andrew G. Biggs
Resident Scholar
American Enterprise Institute

Peter Cappelli
Professor of Management
Director, Center for Human Resources, Wharton School, University of Pennsylvania

Heather Devine
Strategic Lead
Behavioural Insights Group, British Columbia Government

Evren Esen
Director of Workforce Analytics
Society for Human Resource Management

Angela Evans
Dean, Fellow of J. J. “Jake” Pickle Regents Chair in Public Affairs, and Clinical Professor of Public Policy Practice
Lyndon B. Johnson School of Public Affairs, The University of Texas at Austin

Marina Gorbis
Executive Director
Institute for the Future

Katherine Green
Appendix II: Experts We Interviewed

Owner
Futures at Work

Rachel Greszler
Research Fellow in Economics, Budget and Entitlements
Heritage Foundation

Maria Heidkamp
Director, Program Development and Technical Assistance
Director, New Start Career Network
Edward J. Bloustein School of Planning and Public Policy, Rutgers University

Thomas Kochan
George Maverick Bunker Professor of Management
Co-director, Sloan Institute for Work and Employment Research
Massachusetts Institute of Technology

Roger Kodat
Project Director
National Academy of Public Administration

Elizabeth Linos
Assistant Professor of Public Policy
University of California, Berkeley, Goldman School of Public Policy

Laurel McFarland
Executive Director
Network of Schools of Public Policy, Affairs, and Administration

Dianna M. Saxman
Deputy Associate Director
Human Resources Solutions, Federal Staffing Group
Office of Personnel Management
Kristin Sharp
Director
Initiative on Work, Workers, and Technology
New America

J. Bruce Stewart
Former Deputy Director, Training, Compliance, and Strategic Initiatives
Office of Diversity and Inclusion
Office of Personnel Management
Appendix II: Experts We Interviewed

Paul R. Verkuil  
Senior Fellow  
Center for American Progress

Reginald Wells  
Former Deputy Commissioner, Office of Human Resources, Social Security Administration  
Senior Adjunct Professorial Lecturer  
Department of Public Administration and Policy, American University

Ashley Whillans  
Assistant Professor of Business Administration  
Harvard Business School

Amy Zalman  
Global Security Futurist  
Strategic Narrative Institute
Appendix III: GAO Contact and Staff Acknowledgments

GAO Contact

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

Staff Acknowledgments

In addition to the individual named above, Shannon Finnegan, Assistant Director; Shelby Kain, Analyst-in-Charge; Justine Augeri; Jehan Chase; Arpita Chattopadhyay; Ann Czapiewski; Robert Gebhart; John Hussey; Krista Loose; Meredith Moles; Rachel Stoiko; Jessica Walker, and Edith Yuh made major contributions to this report. James Ashley, Chelsa Gurkin, Elizabeth Hennemuth, and Walter Vance also contributed to the report.
Appendix IV: Accessible Data

Data Tables

Accessible Data for Figure 2: The Federal Workforce Became More Diverse and More Likely to Hold an Advanced Degree, Fiscal Years 2008–2017

<table>
<thead>
<tr>
<th>Year</th>
<th>40 years old &amp; older</th>
<th>Minorities</th>
<th>Veterans</th>
<th>Advanced Degree Holders</th>
<th>Employees with disabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>70.69</td>
<td>33.10</td>
<td>28.28</td>
<td>17.27</td>
<td>8.96</td>
</tr>
<tr>
<td>2009</td>
<td>69.74</td>
<td>33.17</td>
<td>27.99</td>
<td>17.88</td>
<td>8.98</td>
</tr>
<tr>
<td>2010</td>
<td>69.48</td>
<td>33.39</td>
<td>29.02</td>
<td>18.54</td>
<td>9.13</td>
</tr>
<tr>
<td>2011</td>
<td>69.83</td>
<td>33.65</td>
<td>29.56</td>
<td>19.30</td>
<td>9.74</td>
</tr>
<tr>
<td>2012</td>
<td>69.99</td>
<td>34.09</td>
<td>30.31</td>
<td>20.18</td>
<td>10.40</td>
</tr>
<tr>
<td>2013</td>
<td>70.51</td>
<td>34.55</td>
<td>30.71</td>
<td>21.05</td>
<td>11.13</td>
</tr>
<tr>
<td>2014</td>
<td>70.40</td>
<td>34.95</td>
<td>31.30</td>
<td>21.64</td>
<td>11.65</td>
</tr>
<tr>
<td>2015</td>
<td>69.83</td>
<td>35.39</td>
<td>31.49</td>
<td>22.42</td>
<td>12.44</td>
</tr>
<tr>
<td>2016</td>
<td>69.25</td>
<td>35.91</td>
<td>31.71</td>
<td>22.97</td>
<td>13.18</td>
</tr>
<tr>
<td>2017</td>
<td>69.29</td>
<td>36.71</td>
<td>31.74</td>
<td>23.43</td>
<td>14.07</td>
</tr>
</tbody>
</table>

Accessible Data for Figure 3: The Federal Workforce Differed from the Employed Civilian Labor Force in Several Characteristics, 2017

<table>
<thead>
<tr>
<th>Category</th>
<th>40 years old (percent)</th>
<th>Employees with disabilities (percent)</th>
<th>Minorities (percent)</th>
<th>Veterans (percent)</th>
<th>Advanced Degree Holders (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employed U.S. civilian labor force</td>
<td>54</td>
<td>4</td>
<td>36</td>
<td>6</td>
<td>13</td>
</tr>
<tr>
<td>Federal workforce</td>
<td>69</td>
<td>14</td>
<td>37</td>
<td>32</td>
<td>23</td>
</tr>
</tbody>
</table>

Accessible Data for Figure 4: Retirement and Eligibility Rates for Senior Executive Service (SES) Employees Were Higher Than for All Employees, Fiscal Years 2012–2017

All Employees

<table>
<thead>
<tr>
<th>Fiscal year</th>
<th>Retired</th>
<th>Eligible Not Retired</th>
<th>Eligible 1 to 5 yrs.</th>
</tr>
</thead>
</table>
### Appendix IV: Accessible Data

#### Federal Workforce

<table>
<thead>
<tr>
<th>Fiscal year</th>
<th>Retired</th>
<th>Eligible Not Retired</th>
<th>Eligible 1 to 5 yrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012'</td>
<td>3.4</td>
<td>13.4</td>
<td>17.1</td>
</tr>
<tr>
<td>2013'</td>
<td>3.2</td>
<td>13.7</td>
<td>17.2</td>
</tr>
<tr>
<td>2014'</td>
<td>3.4</td>
<td>13.8</td>
<td>17.5</td>
</tr>
<tr>
<td>2015'</td>
<td>3.2</td>
<td>14.2</td>
<td>17.6</td>
</tr>
<tr>
<td>2016'</td>
<td>3.1</td>
<td>14.4</td>
<td>17.5</td>
</tr>
<tr>
<td>2017'</td>
<td>3</td>
<td>14.5</td>
<td>17.3</td>
</tr>
</tbody>
</table>

#### Senior Executive Service (SES)

<table>
<thead>
<tr>
<th>Fiscal year</th>
<th>Retired</th>
<th>Eligible Not Retired</th>
<th>Eligible 1 to 5 yrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012'</td>
<td>7.7</td>
<td>30.8</td>
<td>26.3</td>
</tr>
<tr>
<td>2013'</td>
<td>7.6</td>
<td>31</td>
<td>26.2</td>
</tr>
<tr>
<td>2014'</td>
<td>8</td>
<td>30.4</td>
<td>27.4</td>
</tr>
<tr>
<td>2015'</td>
<td>7.3</td>
<td>31.6</td>
<td>27.4</td>
</tr>
<tr>
<td>2016'</td>
<td>7.3</td>
<td>31.5</td>
<td>27.5</td>
</tr>
<tr>
<td>2017'</td>
<td>7.9</td>
<td>30.6</td>
<td>27.2</td>
</tr>
</tbody>
</table>

#### Accessible Data for Figure 5: Fewer Than Half of Survey Respondents Participate in Federal Work-Life Programs, but Those Who Participate Are Satisfied, 2017

<table>
<thead>
<tr>
<th>Federal work life programs</th>
<th>Participation / satisfaction rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health and Wellness Programs</td>
<td>26 Participation rate percentage</td>
</tr>
<tr>
<td>Health and Wellness Programs</td>
<td>81 Satisfaction rate percentage</td>
</tr>
<tr>
<td>Elder Care Programs</td>
<td>2 Participation rate percentage</td>
</tr>
<tr>
<td>Elder Care Programs</td>
<td>68 Satisfaction rate percentage</td>
</tr>
<tr>
<td>Child Care programs</td>
<td>3 Participation rate percentage</td>
</tr>
<tr>
<td>Child Care programs</td>
<td>73 Satisfaction rate percentage</td>
</tr>
<tr>
<td>Employee Assistance programs</td>
<td>13 Participation rate percentage</td>
</tr>
<tr>
<td>Employee Assistance programs</td>
<td>78 Satisfaction rate percentage</td>
</tr>
<tr>
<td>Alternative Work Schedules</td>
<td>34 Participation rate percentage</td>
</tr>
<tr>
<td>Alternative Work Schedules</td>
<td>90 Satisfaction rate percentage</td>
</tr>
<tr>
<td>Telework</td>
<td>36 Participation rate percentage</td>
</tr>
<tr>
<td>Telework</td>
<td>81 Satisfaction rate percentage</td>
</tr>
</tbody>
</table>
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