Women in the Federal Government: AMBITIONS AND ACHIEVEMENTS

MAY 2011

A Report to the President and the Congress of the United States by the U.S. Merit Systems Protection Board
The President
President of the Senate
Speaker of the House of Representatives

Dear Sirs:

In accordance with the requirements of 5 U.S.C. 1204(a)(3), it is my honor to submit this Merit Systems Protection Board (MSPB) report, *Women in the Federal Government: Ambitions and Achievements*. The purpose of this report is to examine changes in the employment and treatment of women in the civilian Federal Government.

Much has changed for the better since MSPB’s 1992 study, *A Question of Equity: Women and the Glass Ceiling in the Federal Government*. The representation of women in professional and administrative occupations and the Senior Executive Service has increased. Within the Federal workforce, differences between women and men in experience and education have diminished, which bodes well for continued progress. Fewer women report that they are subjected to discrimination or stereotypes that hinder their advancement, and women and men express comparable levels of satisfaction with Federal employment and their treatment at work.

Although that progress is commendable, the vision of a workforce in which women are fully represented and utilized has not been wholly achieved. For example, the representation of women at higher levels continues to lag behind their representation at lower levels. Also, many employees believe that personnel actions are often influenced by non-merit factors such as favoritism. Therefore, agencies must sustain efforts to recruit highly-qualified women, strive for openness and fairness in personnel decisions, and remain vigilant against prohibited discrimination.

Yet, more is needed to address contemporary challenges to achieving a high-performing, diverse workforce. For example, the shift to knowledge-based work means that agencies must help employees understand the skills, education, and accomplishments needed to advance and select supervisors who can effectively manage knowledge workers. Continuing occupational differences between women and men, in both the civilian labor force and the Federal Government, may hinder efforts to recruit women in some occupations. Those differences may also create “glass walls”—barriers to lateral movement and career growth for employees in lower-paying or non-mission-critical occupations—which may require agencies to reexamine their approaches to recruitment, work assignment, and leadership development. I believe you will find this report valuable in our collective pursuit of a fair and effective workforce.

Respectfully,

Susan Tsui Grundmann

Enclosure
Women in the Federal Government: AMBITIONS AND ACHIEVEMENTS

MAY 2011

A Report to the President and the Congress of the United States by the U.S. Merit Systems Protection Board
# Table of Contents

Executive Summary ............................................................... i

Introduction ................................................................................ 1

The Employment Status of Women in the Federal Government ........ 5

Factors Affecting the Advancement, Recruitment,
and Representation of Women .............................................. 11

Employees’ Career Interests and Actions ................................. 29

Employee Perceptions of Work and the Workplace ................. 45

Conclusions and Recommendations ................................. 53

Appendix A.
Discussion Group Questions ................................................. 61

Appendix B.
The 2007 Career Advancement Survey (CAS) .......................... 63

Appendix C.
Occupational Categories and Definitions ........................... 75

Appendix D.
Occupational Groups in the Federal Government .................. 77

Appendix E.
Use of Information from OPM’s Central Personnel Data File.......... 79

Appendix F.
Achieving a Representative Workforce—The Vision and the Standard ... 81

Appendix G.
Enter Requirements for Selected Professional
and Administrative Occupations ........................................ 85

Appendix H.
Shattering the Glass Ceiling: Actions for
Federal Agencies and Managers ......................................... 89

Appendix I.
Career Advancement Suggestions for Federal Employees ........... 93
Executive Summary

In its 1992 report *A Question of Equity: Women and the Glass Ceiling in the Federal Government*, the U.S. Merit Systems Protection Board (MSPB) concluded that there was a “glass ceiling” that limited the advancement of women in the Federal Government. Evidence of that glass ceiling included (1) inadequate representation of women in supervisory and executive positions; (2) lower promotion rates for women from General Schedule (GS) grades GS-9 and GS-11; and (3) differences in grade level (and thus pay) that could not be explained fully by differences in experience and education. MSPB found that this glass ceiling consisted of factors that women could control, such as education, experience, and geographic mobility, as well as factors outside of their control such as employer expectations, assumptions, or stereotypes that could limit the opportunities available to women. Although employees generally agreed that the Federal Government had made considerable progress in its employment of women, many employees believed that the “playing field” for women and men seeking advancement was far from level.

There have been many changes in American society since then, and those changes have been mirrored in the Federal Government. Over the past two decades, the Federal Government has made substantial progress in hiring and advancing women in the Federal workforce. More women are employed in positions in professional and administrative occupations, which offer the greatest opportunities for pay and advancement. Increases in the representation of women in the executive ranks have outpaced projections from MSPB’s 1992 study. Pay differences between women and men have been considerably reduced.

These tangible gains have been accompanied by substantial, if less visible, improvements in Federal workplaces and the work lives of Federal employees. Fewer women believe that they have been subjected to overt or subtle discrimination at work. MSPB’s analysis of General Schedule promotion rates supports a belief that the prevalence and force of stereotypical assumptions about the abilities and appropriate roles of women have greatly diminished. Although women and men can differ in career factors such as occupation, family responsibilities, geographic mobility, and interest in supervisory roles, women are about as likely as men to be promoted when factors such as occupation, experience, and education are held equal.

Contributors to this progress include changes in American society that have expanded the opportunities available to women and changes in the civilian labor force that have expanded the pool of highly-qualified women in many occupations.
Within the Federal Government, those changes are reflected in diminishing differences between women and men in important characteristics such as education and experience. That trend, combined with a continued interest in career advancement among women in the Federal Government, bodes well for future gains in the representation of women at the highest levels of pay and responsibility, including the Senior Executive Service. Much credit is also due to agency efforts to recruit and advance women, to reduce the incidence of prohibited discrimination, to provide greater flexibility in work arrangements, and to focus on contributions and skills—rather than on indirect and unreliable indicators of performance and dedication such as time spent in the office or irrelevant factors such as marital status and family responsibilities—when evaluating and promoting employees.

Still, progress toward full equality is not yet complete. Women remain less likely than men to be employed in high-paying occupations and supervisory positions. That reflects, in part, continuing occupational differences between women and men in the Federal workforce and the broader civilian labor force. Women have made great strides in entering occupations such as physician and attorney, but remain relatively scarce in fields such as law enforcement, information technology, and engineering—fields important to the current and future Federal workforce. Also, even within a given occupation, women often have lower salaries than men, and those salary differences cannot be fully explained by differences in measurable factors such as experience and education.

Agencies and stakeholders should also be aware that future progress may come less easily than past progress. First, occupational differences persist between women and men in both American society and Federal workplaces. Such occupational differences can complicate recruitment and create glass walls—barriers to movement across organizations, functions, or occupations—within the Federal workforce, resulting in different opportunities for women and men even if they are comparable in terms of educational attainment, years of experience, and performance. Second, agencies have increased their use of external hiring and upper-level hiring to fill positions in professional and administrative occupations. Women are increasingly successful in employment competitions of all types, reflecting diminishing differences in critical factors such as education, experience, and career interests. Nevertheless, for a variety of reasons, women are generally less likely to be hired when an agency fills a position through external (as opposed to internal) recruitment or fills a position at upper-level instead of entry-level.

Also, sex-based discrimination and stereotypes have not yet completely disappeared. Even in the absence of overt discrimination, many employees continue to believe that women are subjected to unfounded assumptions about their abilities or dedication to work. However, most issues that are critical to the fair treatment and advancement of women are universal. For example, concerns about the role of favoritism in personnel decisions are widespread and shared equally by women and men. Other issues important to both women and men include the recruitment and selection of supervisors, career management (e.g., helping employees understand what is required to advance), and balancing demanding jobs with life/family responsibilities.
Actions that agencies and managers can take to further progress in the representation and advancement of women and increase fairness for all employees include—

◆ Provide continuing feedback and development to employees, so that employees understand and can develop the competencies and behaviors that are important to job success and career advancement;

◆ Improve the recruitment, selection, and development of supervisors. Enhanced supervisory effectiveness will create a cadre of supervisors who are better able to focus on results, support work/life balance, and ensure fairness in work assignment and other aspects of human resources management;

◆ Make informed and appropriate use of both internal and external sources of talent. When used appropriately, internal hiring can provide a “bridge” from technical, clerical, or blue-collar occupations to professional and administrative occupations, to the benefit of both agencies and employees. However, agencies should also recognize that internal and external talent pools can differ in ways that have significant implications for assessment, development, and advancement;

◆ Recognize, and avoid reliance on, stereotypes and assumptions in day-to-day human resources management. Agencies should consciously focus on ability and results, rather than surface characteristics and impressions, when assigning work, allocating developmental opportunities, and evaluating employee performance and potential;

◆ Remain vigilant against sex-based discrimination, including sexual harassment, and ensure that avenues for reporting and addressing such discrimination are accessible and trusted; and

◆ Maximize flexibility in work arrangements and job requirements. Flexible work arrangements can help agencies attract diverse pools of qualified applicants, retain employees, and sustain engagement without compromising teamwork and productivity. Conversely, unnecessary inflexibility in matters such as geographic mobility, work hours, and travel may result in the loss of highly capable applicants and employees who have life/family responsibilities and can find competing employers that are more accommodating.

We note that the subjects and recommendations of this report are not purely or even primarily “women’s issues.” Effective, merit-based human resources practices—including outreach and recruitment, workplace fairness, and effective supervision—matter to everyone and can yield positive dividends in workforce quality and organizational performance. All employees and all segments of the American public benefit from workplaces that are “representative of all segments of society” and fully utilize and recognize the talents of every employee.
Introduction

Purpose

The mission of the MSPB is to protect merit systems in the Federal civil service. To that end, MSPB conducts special studies to assess how effectively Federal Government human resources (HR) policies and practices serve the public interest, to determine whether Federal agencies are managing employees in accordance with the laws and principles that govern the Federal civil service, and to identify and recommend improvements.

Fundamental values of the civil service, codified in the merit system principles, include a workforce that is “representative of all segments of society” and selection and advancement “determined solely on the basis of relative ability, knowledge and skills.”¹ That includes an affirmative responsibility to treat all employees fairly and equitably, ensure that human resources management decisions are not influenced by personal characteristics that are not job-related, and identify and remove any barriers to the employment of historically underrepresented groups, including women.

Accordingly, in the early 1990s, MSPB conducted research on the employment, experiences, and advancement of women in the Federal Government. The results of that research, which focused on employees in professional and administrative occupations, were published in the 1992 report A Question of Equity: Women and the Glass Ceiling in the Federal Government.²

This study follows up on that research, to examine the progress that has been made; analyze differences in the representation, career interests, and treatment of women and men in the Federal Government; identify and discuss any remaining barriers to a workforce in which women are fully represented at all levels; and to make recommendations to eliminate those barriers and ensure that the talents of women in Federal agencies are appropriately utilized and recognized.

¹ Title 5, United States Code, § 2301(b)(1).
² That study, like this study, focused on professional and administrative occupations because they account for all positions in the Senior Executive Service and the vast majority of positions at higher pay and grade levels, such as General Schedule grades GS-12 through GS-15.
Methodology

The issues, findings, and recommendations in this report are based on—

- A review of literature on topics such as workforce fairness, diversity, and gender differences related to career and work. We also reviewed research conducted by other organizations that examined the fair treatment of a variety of demographic groups, within the private and public sectors, as well as books and articles from academic journals and the popular press;

- Meetings with Federal managers and employees, including representatives from HR offices and employee affinity groups to better understand employee perceptions of their experiences and treatment at work and to outline areas where improvement was desired. We also discussed the research topic with colleagues from the U.S. Government Accountability Office and the U.S. Equal Employment Opportunity Commission;

- Discussion groups of Federal employees to explore the degree to which agencies operate within the merit system principles and to gather suggestions for improvement. To obtain a wide range of perspectives, we selected participants based on characteristics such as geographic location, agency, ethnicity/race, gender, occupation, and grade. Occasionally, employees volunteered or were nominated by their agencies to participate in these sessions. Appendix A lists the discussion group questions. In addition to scheduled discussion groups, we collected employee input in conjunction with presentations at numerous conferences;

- A survey of Federal employees (the Career Advancement Survey or CAS). Approximately half the items on this survey replicated items that appeared in previous MSPB surveys to permit trend analysis. The CAS also included new questions to build upon preceding questions or to explore emerging issues. MSPB utilized a stratified random sample to ensure that results were representative of employee opinion Governmentwide and to permit analysis of results by ethnicity and race, gender, and pay level. The survey was administered in 2007 in a web-based format. Appendix B provides a copy of the paper version of the CAS;

---

3 The discussion groups supported this study and a preceding MSPB study focusing on diversity issues, including ethnicity and race. We received input from Blacks in Government, the Federal Asian Pacific American Council, Federally Employed Women, National IMAGE, and the Society of American Indian Government Employees.

4 Discussion group locations included Oklahoma City, OK; Chicago, IL; Long Beach, CA; and Albuquerque, NM.


6 A paper survey was made available to approximately 5 percent of sampled employees who did not have internet access.
Introduction

- Results from previous administrations of MSPB’s Merit Principles Survey (MPS). The MPS, which has been administered periodically since 1983, contains core items (including demographic items and questions related to job satisfaction and workplace fairness) that have appeared in several separate administrations of the survey. The MPS has been administered on sufficient scale to permit comparison of employee responses over time and across demographic groups.

- Analyses of workforce data from the Central Personnel Data File (CPDF). We used CPDF data to examine changes in the demographic and occupational composition of the workforce over time, with particular attention to professional and administrative occupations. Appendix C provides a definition of these occupational categories and Appendix D describes the occupational families (broad lines of work) that the Federal Government uses for staffing, pay, and other purposes. We also used CPDF data for two special analyses: an analysis of promotion rates and factors affecting likelihood of promotion for employees under the General Schedule pay system and an analysis of how Federal employees enter professional and administrative occupations. Appendix E describes CPDF data and its use in this report.

- Comparisons of the Federal workforce to the civilian labor force using data from the Current Population Survey as reported by the Department of Commerce, U.S. Census Bureau and the Department of Labor, Bureau of Labor Statistics. These sources of information provided insight into trends in the employment of women and men in the Federal workforce and a better understanding of how Federal employees view their jobs, coworkers, and supervisors; manage their careers; and perceive their work experiences and the human resources management policies and practices of Federal agencies and the Federal Government.

---


8 The terms “professional” and “administrative” refer to the corresponding occupational categories. Professional occupations include occupations that require specialized education or credentials for entry, such as physician, nurse, attorney, and biologist. Administrative occupations include occupations such as human resources management, criminal investigation, and budget analysis. In this report, the term “administrative employees” does not include employees in clerical and technical occupations, even though such work is often considered administrative in nature.
The representation of women in professional and administrative occupations has increased.

The data in Figure 1 show that women have made considerable progress in the Federal Government. Women now hold approximately 44 percent of the positions in both professional and administrative occupations, which constitute the pipeline for positions at the highest grade and pay levels, including the Senior Executive Service.

Figure 1. Representation of women in professional and administrative occupations, 1976-2009

Women are also increasingly visible at the highest levels of the Federal service, as illustrated in Figure 2.9 Women now account for approximately 30 percent of the Senior Executive Service, reflecting—and building on—the increased representation of women in supervisory and high-graded positions.

9 We present figures for employees paid under the General Schedule for comparability with our 1992 study. Readers should be aware that the coverage of the General Schedule has declined considerably since that time; many employees are now paid under systems that are not readily comparable to the General Schedule. However, the trend line shown here is quite similar to trend lines for broader populations that include employees at grade levels similar to GS-13 through GS-15 and employees receiving pay at or above the GS-13 level.
In fact, progress has outpaced the projections of MSPB’s 1992 study,¹⁰ and the representation of women in the SES compares favorably with their representation in similar positions in the civilian labor force.¹¹

**Differences in pay have narrowed.**

The progress that women have made is evident in pay as well as representation. **Figure 3** shows that differences in pay (pay gaps) between women and men have narrowed. The gains have been greatest in administrative occupations, where the median salary for women is now almost 93 percent of that for men, up from just over 83 percent in 1991. This progress reflects, in part, convergence between women and men in characteristics such as length of service and educational attainment and the increased employment of women at higher grade levels.

---


That convergence is not yet complete. As we discuss later in this report, there are continuing occupational differences between women and men that contribute to pay differences. Nevertheless, salary differences are not explained solely by occupational differences. Statistical analysis of employee salaries for populous professional and administrative occupations revealed that there are often significant differences between the salaries of women and men within an occupation. For the occupations we analyzed, the salaries of women were lower than those of men in more than three-fourths of professional occupations and more than half of administrative occupations.

The existence of such differences is not, in itself, evidence of discrimination or inequitable human resources policies or practices. Pay differences can reflect many factors, both position-based (such as skill requirements and grade level) and individual (such as experience, tenure, education, and performance). However, research on pay differences, both inside and outside the Federal Government, continues to find that pay differences cannot be fully explained by measurable.

---

12 We conducted statistical analyses of employee salaries for professional and administrative occupations that had 50 or more permanent full-time employees of each sex as of September 30, 2009. Ninety-nine professional occupations and 102 administrative occupations met that criterion.

13 These pay analyses did not control for factors such as pay system, grade level, supervisory status, length of service, or education. Thus, the analyses simply confirmed the existence of pay differences; they did not indicate why those differences existed or whether those differences could be fully explained.
factors such as occupation, education, and experience. Clearly challenges remain in understanding pay differences and eliminating unwarranted pay differences. Nevertheless, those challenges should not overshadow the progress that has been made.

Women are increasingly successful in competing for employment.

Figure 4 shows that women account for an increasing percentage of upper-level entrants in both professional and administrative occupations. At entry-level and mid-level, the percentages of women and men are relatively balanced, although women are less frequently selected into upper-level positions than men. As we discuss later in this report, the proportion of women entrants is influenced by factors such as the specific occupations filled and the use of internal or external recruitment. Therefore, decreases in the proportion of women among entry-level applicants should not be interpreted as indications that Federal agencies have become less willing to hire women or that women are less, rather than more, able to compete.

14 See, for example, U.S. Government Accountability Office, Women’s Pay: Gender Pay Gap in the Federal Workforce Narrows as Differences in Occupation, Education, and Experience Diminish, GAO 09-279, Washington, DC, March 2009, p. 3, and U.S. Government Accountability Office, Work Patterns Partially Explain Difference between Men’s and Women’s Earnings, GAO 04-35, Washington, DC, pp. 3 and 21-22. GAO reported that measurable factors accounted for approximately 4 cents of an 11-cent pay gap between men and women in the Federal workforce in 2007. An unexplained difference is only that: unexplained; it is not conclusive evidence of discrimination. GAO notes that the differences they found may reflect “inability to account for certain factors that cannot effectively be measured or for which data are not available.”

15 We note that the Administration has created a National Equal Pay Enforcement Task Force (summarized at www.whitehouse.gov/sites/default/files/rss_viewer/equal_pay_task_force.pdf) to better enforce equal pay laws. The task force’s recommendations include “Implement a strategy to improve the federal government’s role as a model employer” and indicate that “The EEOC and OPM will request to work with GAO to identify the reasons for [the wage gap between men and women in the Federal workforce] and ways to close it.”

16 Entry-level corresponds to grades GS-7 and below, mid-level corresponds to grades GS-9 through GS-11, and upper-level corresponds to grades GS-12 and above. Levels were assigned using General Schedule (GS) grade, General Schedule-related grade, or pay level (basic pay) for positions in non-GS-related pay systems. Our “slotting” based on pay level used comparison to minimum (step 1) GS pay rates and may assign positions to a level higher than would result from application of GS classification standards, especially for pay systems with rates higher than typical GS rates.
Progress will continue.

As discussed above, the statistics show continued movement toward equality for women, both in the positions they hold and in the pay they receive. We do recognize, however, that movement has slowed. For example, although the representation of women in professional occupations has increased since 1991, the representation of women in administrative occupations—the fastest-growing segment of the workforce—has not risen as rapidly. Similarly, pay gaps continue to diminish, if less slowly than in the 1970s and 1980s.

These developments are, to some extent, a natural consequence of success. The initial steps toward equity—such as reducing overt discrimination—are easier to identify and produce more immediate and visible results than the final steps. Also, the changes in American society and the civilian labor force that facilitated a rapid increase in the presence and status of women in the workplace have slowed. For example, the labor force participation and educational attainment of women increased quite rapidly in the 1970s and 1980s. Since then, labor force participation has changed little;17 educational attainment is still increasing, but at a reduced pace.18

---


Readers should keep the possibility of gradual future progress in perspective. Substantial progress has been made, to the benefit of Federal agencies, Federal employees, and the American public. Women will continue to make inroads into high-paying occupations and the supervisory and executive ranks. For their part, Federal agencies should be neither discouraged nor complacent. Continued attention to the hiring, advancement, and fair treatment of women remains important, both to sustain the progress that has been made and to fully achieve the vision of a representative workforce and an equitable workplace. As in a long-distance race, the last few miles may prove more challenging than the first few miles. The following sections explore factors that have contributed to the progress women have made and that may affect the future recruitment and advancement of women in the Federal Government, discuss Federal employees’ career intentions and perceptions of the workplace, and outline actions for Federal agencies, managers, and employees to consider.
Factors Affecting the Advancement, Recruitment, and Representation of Women

This section discusses four factors—experience, education, occupation, and recruitment patterns—that affect Federal employees’ career opportunities and progress and shape Federal agencies’ hiring practices and outcomes.

Experience

Although Federal agencies are placing increased emphasis on performance and results, experience remains important.

For a variety of reasons, the Federal Government has sought to reduce the role of length of service (which corresponds roughly with years of Federal experience) in personnel decisions such as advancement, pay, and retention. Nevertheless, experience continues to be extremely important to career advancement. As of September 2009, approximately three-fourths of Federal employees at grades GS-13 through GS-15 had 10 or more years of service, and three-fourths of employees in the Senior Executive Service had 16 or more years of service. Although those proportions are lower than in 1991, the fact remains that very few Federal employees make it to the top without extensive Federal experience.

The “experience gap” between men and women has narrowed.

As shown in Figure 5, the difference in average length of service between women and men in professional occupations has decreased considerably. In administrative occupations, women now have, on average, more Federal experience than their male colleagues.

---

19 Illustrations include proposals to eliminate time-in-grade restrictions, initiatives that increase the weight given to performance (and thus reduce the weight given to time) in pay increases, and proposals to give greater weight to performance when determining an employee’s standing in a reduction-in-force.

20 Source: U.S. Office of Personnel Management, CPDF. Length of service at the 25th percentile for employees in the specified groups as of September 2009, rounded to the nearest full year. As of September 1991, the figures were 13 years for employees at grades GS-13 through GS-15 and 18 years for employees in the SES.
Thus, an increasing percentage of women have sufficient Federal experience to establish a “track record” in the Federal Government. Beyond that, it is not apparent that either women or men have any systematic or clear advantage in terms of experience. First, previous analysis of promotion rates indicates that experience is a career asset that yields diminishing returns.21 Beyond some point, more experience is not necessarily better. Second, quality of experience should matter more than quantity of experience. “Quality” reflects both level of performance (how well a job was done) and relevance (how well a job’s competencies and accomplishments transfer to a new role or position). There is no easy way to gauge differences among employees in quality of experience, and available indicators of quality of experience (such as performance ratings22 and positions held23) are mixed.

Figure 5. Average years of service of employees in professional and administrative occupations, by sex, 1991 and 2009

<table>
<thead>
<tr>
<th>Year</th>
<th>Professional</th>
<th>Administrative</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991</td>
<td>Women: 10.4</td>
<td>Men: 15.6</td>
</tr>
<tr>
<td></td>
<td>Women: 15.1</td>
<td>Men: 16.7</td>
</tr>
<tr>
<td>2009</td>
<td>Women: 12.9</td>
<td>Men: 15.3</td>
</tr>
<tr>
<td></td>
<td>Women: 15.8</td>
<td>Men: 18.7</td>
</tr>
</tbody>
</table>

21 U.S. Merit Systems Protection Board, *Fair and Equitable Treatment: Progress Made and Challenges Remaining*, Washington, DC, December 2009, p. 35. Further analyses indicate that experience, like education, has similar effects on the likelihood of promotion for both women and men.

22 See U.S. Merit Systems Protection Board, *A Question of Equity: Women and the Glass Ceiling in the Federal Government*, Washington, DC, October 1992, pp. ix-x. That study reported that women received performance ratings comparable to or better than those received by men. We did not attempt to analyze performance ratings for this study because such analysis is confounded by marked differences in rating systems and rating distributions within and across agencies.

23 For example, as noted previously, women remain less likely than men to hold supervisory positions. That suggests that women, as a group, might be at a disadvantage when competing for positions where supervisory experience is required or desired.
Factors Affecting the Advancement, Recruitment, and Representation of Women

Education

There is a strong positive relationship between formal education and career advancement.

Previous MSPB studies have consistently found a strong relationship between education and advancement. Obviously, formal education is required for entry into many of the Federal Government’s highest-paying occupations, such as attorney and medical officer (physician). But the relationship between education and advancement is also present in occupations that do not have positive educational requirements.24 Figure 6 illustrates the relationship between educational attainment and General Schedule grade level for several populous administrative occupations.

Figure 6. Percentage of employees in selected occupations who have completed a four-year or higher degree, by General Schedule grade level

MSPB analysis of Federal employee promotion data confirms the value of education. Although degrees and credentials do not guarantee promotion—and a lack thereof does not preclude promotion—we found a positive relationship between formal education and promotion rates for both professional and administrative occupations as suggested by Figure 6.25

24 A "positive educational requirement" is a requirement that an individual have a specific amount and type of education to qualify for the occupation, even at entry-level. Generally, a positive educational requirement is met through completion of a bachelor's or professional degree in a particular field.

25 U.S. Merit Systems Protection Board, Fair and Equitable Treatment: Progress Made and Challenges Remaining, Washington, DC, December 2009, p. 36. Additional analyses confirm that formal education increases the likelihood of promotion for both women and men, but also indicate that (as suggested by Figure 6) the effect may vary by occupation.
Differences between men and women in educational attainment have diminished.

In our 1992 study on women in the Federal Government, we reported that women were less likely than men to hold a four-year degree.\textsuperscript{26} As illustrated in Figure 7,\textsuperscript{27} those differences are now much smaller, which bodes well for the continued progress of women.

Figure 7. Percentage of Federal employees in professional and administrative occupations with a four-year or higher degree, by sex, 1991 and 2009

Furthermore, trends in the Federal workforce and in American society indicate that differences in educational attainment will continue to diminish. Table 1 shows that differences in educational attainment are smaller among employees with fewer years of service. Among professional and administrative employees with fewer than 10 years of service, the “education gap” between women and men has shifted and now favors women. A similar shift has occurred outside the Federal workforce: in the United States, women now account for a majority of college students and a majority of the college degrees conferred each year.\textsuperscript{28, 29}


\textsuperscript{27} We selected 1991 as the “base year” to show changes since our previous report on women in the Federal Government, which was published in 1992 and used survey and workforce data collected in 1991. We caution that the workforce statistics presented in this report often cannot be directly compared to those in that report because the data source differs. This report relies solely on the Central Personnel Data File, while the previous report sometimes used self-reported survey data.


\textsuperscript{29} We note that women and men continue to differ in academic areas of specialization. Notably, men continue to outnumber women in the areas of science and technology. See U.S. Department of Commerce, Economics and Statistics Administration and Executive Office of the President, Office of Management and Budget, \textit{Women in America: Indicators of Social and Economic Well-Being}, March 2011, p. 18.
Table 1. Percentage of Federal professional and administrative employees who had completed a four-year or higher degree, by sex and length of service, 1991 and 2009

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fewer than 5 years</td>
<td>80%</td>
<td>83%</td>
<td>77%</td>
<td>70%</td>
</tr>
<tr>
<td>5-9 years</td>
<td>67%</td>
<td>74%</td>
<td>71%</td>
<td>67%</td>
</tr>
<tr>
<td>10-19 years</td>
<td>45%</td>
<td>73%</td>
<td>64%</td>
<td>69%</td>
</tr>
<tr>
<td>20 or more years</td>
<td>26%</td>
<td>70%</td>
<td>46%</td>
<td>71%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>52%</td>
<td>74%</td>
<td>60%</td>
<td>69%</td>
</tr>
</tbody>
</table>

Some differences remain, particularly among employees with the most years of Federal service. Women with 10 or more years of service are less likely to have completed a four-year degree than are comparable men, and the difference is greatest among employees with 20 or more years of service. Thus, there are still fewer women than men who combine extensive Federal experience with advanced educational credentials. Consequently, increases in the representation of women at entry-level and mid-level may not translate immediately into increases in representation at the highest levels of the career Federal service. Yet the trend is clear: the number of women who have both extensive work experience and a four-year or higher degree will continue to rise, and it is quite possible that any education gap may soon favor women rather than men.

**Occupation**

There are continuing occupational differences between men and women, both inside and outside the Federal Government.

Although they may have diminished, historical differences between women and men in societal norms and expectations, career interests and options, and education endure. As illustrated in Figure 8 and Figure 9, that history is reflected in vast differences across occupations in the representation of women in both the civilian labor force and Federal Government. Change is occurring, but on a field-by-field and occupation-by-occupation basis, numerical parity between men and women is the exception rather than the norm.

---

30 Readers may notice patterns that suggest that a stable or declining trend in the percentage of Federal employees who have completed a four-year (“college degree”) or higher degree. These patterns reflect the fact that growth in employment in administrative occupations, which do not require such a degree, has outpaced growth in professional occupations. Within each occupational category, the percentage of employees who hold a college degree has increased.
Factors Affecting the Advancement, Recruitment, and Representation of Women

Figure 8. Women as a percentage of total employment in selected occupations in the civilian labor force, 2003 and 2009\textsuperscript{31}

- Registered nurse
- Paralegals and legal assistants
- Human resources specialists
- Accountants and auditors
- Management analysts
- Lawyer
- Physicians and surgeons
- Computer scientists and systems analysts
- Detectives and criminal investigators
- Electrical and electronics engineers

Figure 9. Percentage of Federal Government professional and administrative positions held by women in selected occupational families, 2009

- Human Resources: 70%
- Medical and Public Health: 69%
- Finance and Accounting: 58%
- Social Insurance and Social Science: 58%
- General Management and Administration: 54%
- Business and Industry: 53%
- Law and Adjudication: 53%
- Information Technology: 35%
- Natural and Biological Science: 34%
- Security, Protection, and Miscellaneous: 33%
- Physical Science: 26%
- Investigation and Enforcement: 22%
- Transportation: 17%
- Engineering and Architecture: 14%

Women in the Federal Government are still much more likely than men to be employed in fields such as human resources, medicine and public health, and social insurance and social science. Conversely, women remain much less likely than men to be employed in engineering and architecture, transportation (e.g., air traffic control), and investigation and enforcement.

Women tend to be less represented in higher-paying professional and administrative occupations.

Given the differences in the distribution of women across occupations, it is important to also note that opportunities differ across occupations. Some occupations, such as accountant and human resources specialist, can be found in nearly every Federal agency, while others exist in only one or a few agencies. Some occupations are geographically dispersed, while others are concentrated in specific regions or locations. Some occupations involve frequent travel, while others involve little or none. One particularly important difference among occupations is pay. In some occupations, positions at high grade and salary levels (such as GS-14, GS-15, or the equivalent) are common; in others, such positions are rare or nonexistent. To illustrate, in 2009 the median salary of a Federal attorney exceeded $130,000, while the median salary of a budget analyst was just under $75,000.

Table 2 shows that women are much less likely than men to be employed in the highest-paying occupations. While women are a majority of employees in professional and administrative occupations that have a median salary between $70,000 and $79,999, they remain a distinct minority in occupations with a median salary of $90,000 or above. Women have made inroads into higher-paying occupations such as psychologist, internal revenue agent, attorney, and statistician. However, men still account for more than 80 percent of the employees in populous higher-paying occupations such as general engineer, electronics engineer, air traffic controller, and criminal investigator. That pattern does much to explain the continuing differences between the median salaries of women and men shown in the preceding section.

---

32 In this report, a career “field” refers to a broad line of work and generally corresponds to a combination of occupational category (professional or administrative) and occupational group or family. OPM’s classification system categorizes white-collar occupations into occupational families (that is, groups of occupations with related functions). For example, the social science “field” includes professional occupations in the 0100 occupational family, such as economist (series 0110), social work (0185), and psychology (0180). The social insurance “field” includes administrative occupations in the 0100 occupational family, such as social insurance administration (0105). As in the example, the names of the fields and occupational groups are broadly descriptive, but do not necessarily reflect the full range of occupations they cover.


34 This pattern also appears outside the Federal Government. See U.S. Department of Commerce, Economics and Statistics Administration and Executive Office of the President, Office of Management and Budget, Women in America: Indicators of Social and Economic Well-Being, March 2011, p. 18, which reports that “While women are more likely than men to work in professional and related occupations, they are more highly represented in the lower-paying jobs in this category.”

35 Id. The representation of women in these four occupations ranged from 44 percent to 50 percent.

36 Id. These four occupations alone account for approximately 105,000 Federal employees.
Table 2. Employment of women in professional and administrative occupations, with occupations grouped by median salary, 2009\textsuperscript{37}

<table>
<thead>
<tr>
<th>Median Salary</th>
<th>Employees (1,000s)</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>$69,999 and below</td>
<td>104</td>
<td>42%</td>
</tr>
<tr>
<td>$70,000–$79,999</td>
<td>405</td>
<td>58%</td>
</tr>
<tr>
<td>$80,000–$89,999</td>
<td>245</td>
<td>45%</td>
</tr>
<tr>
<td>$90,000–$99,999</td>
<td>161</td>
<td>29%</td>
</tr>
<tr>
<td>$100,000 and above</td>
<td>188</td>
<td>28%</td>
</tr>
</tbody>
</table>

The effects of occupational differences are not limited to salary. Occupational differences can also create glass walls\textsuperscript{38} within agencies—barriers to movement across occupations, organizations, or functions—which can limit an employee’s opportunities for development and advancement.\textsuperscript{39} In particular, employees who are in mission-critical occupations will generally have greater long-term opportunities for development and advancement than employees who work in occupations that provide staff services or mission support. Often, although not always, those mission-critical occupations are also the higher-paying occupations.

The level at which women will be fully represented in an agency’s workforce depends on its occupational mix and will vary by agency.

As discussed previously, women and men are increasingly similar in terms of overall educational attainment and years of work experience. However, the occupational differences between women and men mean that full representation of women in an occupation or agency—as measured by comparison to the relevant civilian labor force—is often quite distinct from equal representation of women and men in an occupation or agency. These occupational differences also affect agency efforts to achieve diversity at all levels, from front-line positions to executive leadership. Agencies may often find that the applicant pools for their mission-critical occupations and supervisory and executive positions are composed mostly of men or mostly of women. Appendix F provides a fuller discussion of the merit system principles related to recruitment and diversity, guidelines for assessing representation in the Federal workforce, and their implications for Federal agencies.

\textsuperscript{37} Id.

\textsuperscript{38} This term is not original to MSPB. See, for example, Will Miller, Brinck Kerr, and Margaret Reid, “A National Study of Gender-Based Occupational Segregation in Municipal Bureaucracies: Persistence of Glass Walls?” Public Administration Review, v. 59, no. 3, May 1999, p. 218.

\textsuperscript{39} The phenomenon of occupational differences across lines of sex or other factors is sometimes referred to as “occupational segregation.” We use the term “glass walls” because it encompasses barriers to lateral movement resulting from factors in addition to occupation and because it emphasizes the fact that occupational differences can limit the movement of employees across functions and organizations and result in different opportunities for men and women, even when their length of experience and educational attainment are otherwise comparable. However, our definition of “glass walls” is narrower than that used by some researchers and observers. In particular, we do not use the term to imply that Federal agencies or Federal managers have deliberately created barriers to the entry of women into the occupations that provide the greatest opportunities for pay, career growth, and advancement.
Shifts in Federal employment have produced both opportunities and challenges for increasing the proportion of women in the Federal workforce.

The composition of the Federal workforce is not static. Although the shift toward “knowledge work” inside and outside the Federal Government is well known, changes in the types of knowledge work performed by Federal employees have received much less attention. However, as shown in Table 3, there have been some significant changes in the composition of the Federal professional and administrative workforce. The increasing prominence of knowledge work has not produced increases in every line of work. Employment in some fields has grown substantially, while employment in other fields—such as physical science, engineering, and architecture—has declined.

Table 3. Federal civilian professional and administrative employment in populous occupational families, 2009

<table>
<thead>
<tr>
<th>Occupational Family (Code)</th>
<th>Employment Level (1000s)</th>
<th>Change Since 1991</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Management and Administration (0300)</td>
<td>180.4</td>
<td>52%</td>
</tr>
<tr>
<td>Medical and Public Health (0600)</td>
<td>114.2</td>
<td>60%</td>
</tr>
<tr>
<td>Investigation and Enforcement (1800)</td>
<td>106.7</td>
<td>87%</td>
</tr>
<tr>
<td>Engineering and Architecture (0800)</td>
<td>95.6</td>
<td>-17%</td>
</tr>
<tr>
<td>Finance and Accounting (0500)</td>
<td>82.6</td>
<td>12%</td>
</tr>
<tr>
<td>Business Industry (1100)</td>
<td>74.9</td>
<td>5%</td>
</tr>
<tr>
<td>Social Insurance and Social Science (0100)</td>
<td>71.6</td>
<td>39%</td>
</tr>
<tr>
<td>Information Technology (2200)</td>
<td>69.9</td>
<td>36%</td>
</tr>
<tr>
<td>Law and Adjudication (0900)</td>
<td>58.5</td>
<td>40%</td>
</tr>
<tr>
<td>Natural and Biological Science (0400)</td>
<td>37.7</td>
<td>8%</td>
</tr>
<tr>
<td>Transportation (2100)</td>
<td>35.6</td>
<td>12%</td>
</tr>
<tr>
<td>Security, Protection, and Miscellaneous (0000)</td>
<td>30.2</td>
<td>36%</td>
</tr>
<tr>
<td>Human Resources (0200)</td>
<td>29.2</td>
<td>-1%</td>
</tr>
<tr>
<td>Physical Science (1300)</td>
<td>25.6</td>
<td>-23%</td>
</tr>
</tbody>
</table>

Grey shading indicates occupational families which are primarily professional. Most occupational families are predominantly professional or administrative; exceptions include the 0100 and 0500 occupational families, which have significant numbers of both.

These dynamics have had mixed effects on the representation of women in the Federal Government. For professional occupations, trends have facilitated increased employment of women. Growth has been concentrated in fields where women are highly represented or predominant, such as medicine and public health, and in medical occupations where they were once relatively scarce, such as physician and pharmacist and are in the majority in occupations such as registered nurse, physical therapist, and medical technologist.

Data for permanent full-time employees from U.S. Office of Personnel Management, Central Personnel Data File, September 1991 and September 2009. To facilitate comparison, we assigned the former Computer Specialist (0334) occupation to the Information Technology (2200) occupational family.

In the Federal workforce, women have made inroads into medical occupations where they were once relatively scarce, such as physician and pharmacist and are in the majority in occupations such as registered nurse, physical therapist, and medical technologist.
resulting in expanded opportunities for women to enter the Federal workforce and corresponding gains in their representation.

Trends in administrative occupations have been less conducive to increased representation of women. Growth in the area of general management and administration, which employs roughly equal numbers of men and women, has been accompanied by substantial growth in information technology, investigation, and enforcement. Men tend to predominate in these fields, in both the civilian labor force and the Federal Government.

**Recruitment Patterns and Practices**

Recruitment is central to the Federal Government’s efforts to achieve a competent, representative workforce; fully utilize the skills and abilities of its employees; and retain ambitious, high-performing employees. Figure 10 illustrates three different methods that agencies can use to fill positions in professional and administrative occupations. As shown, only the first two methods (labeled “External Hiring” and “Internal Hiring”) result in a new professional and administrative employee. The third method simply redeploys an existing professional or administrative employee; thus, it does not constitute a means of entry into professional and administrative occupations.

![Figure 10. Methods for filling positions in the Federal professional and administrative workforce](image)

To better understand patterns and trends in Federal hiring and how they might affect the representation and advancement of women in the Federal Government, we analyzed data from the CPDF to identify new entrants (i.e., internal or external hires) to positions in professional and administrative occupations for fiscal years 1980 through 2008. That analysis indicates that opportunities for women can be affected by how an agency fills a position.
Recruitment decisions—such as candidate source and the level at which a position is filled—can affect the proportion of women among new hires.

Women are increasingly successful in competing for employment, reflecting the gains they have made in experience and education. Nevertheless, as shown in Table 4, it appears that women are still somewhat more likely to be hired when an agency fills a position through internal hiring instead of external hiring, or fills a position at entry-level or mid-level instead of upper-level. The pattern is clearest in administrative occupations, but also appears in professional occupations. Below, we discuss some possible reasons for this pattern to help agencies and managers better understand the potential implications of recruitment decisions.

Table 4. Women as a percentage of new entrants into professional and administrative occupations, by position level and source, 2000-2008

<table>
<thead>
<tr>
<th>Occupational Category and Position Level</th>
<th>Source (Hiring Method)</th>
<th>(\text{External})</th>
<th>(\text{Internal})</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional</td>
<td>Entry-level</td>
<td>41%</td>
<td>54%</td>
</tr>
<tr>
<td></td>
<td>Mid-level</td>
<td>56%</td>
<td>55%</td>
</tr>
<tr>
<td></td>
<td>Upper-level</td>
<td>43%</td>
<td>41%</td>
</tr>
<tr>
<td>Professional (excluding nurse)</td>
<td>Entry-level</td>
<td>40%</td>
<td>59%</td>
</tr>
<tr>
<td></td>
<td>Mid-level</td>
<td>47%</td>
<td>52%</td>
</tr>
<tr>
<td></td>
<td>Upper-level</td>
<td>31%</td>
<td>33%</td>
</tr>
<tr>
<td>Administrative</td>
<td>Entry-level</td>
<td>42%</td>
<td>61%</td>
</tr>
<tr>
<td></td>
<td>Mid-level</td>
<td>32%</td>
<td>61%</td>
</tr>
<tr>
<td></td>
<td>Upper-level</td>
<td>27%</td>
<td>34%</td>
</tr>
</tbody>
</table>

External Hiring vs. Internal Hiring

In many occupations, external applicant pools will often have a lower proportion of women than internal applicant pools. First, internal entrants to professional and administrative occupations are frequently drawn from employees in technical and clerical occupations, in which women often predominate. Also, internal competitions are usually restricted to agency or Federal employees. External

---

42 Data excluding the nursing occupation is presented here to more clearly illustrate the interaction between recruitment source and position level and the proportion of women hired. That interaction is not apparent when the nursing occupation is included because of its special characteristics. The nursing occupation is populous, with a high level of employment and hiring; over 90 percent of registered nurses in the civilian labor force and in the Federal Government are women (which means that women account for the vast majority of hires in this occupation, regardless of source or position level), and most nurses are paid under a non-General Schedule pay system with a distinctive grade structure and pay rates.

43 There are some exceptions to this pattern. For example, an administrative occupation that draws from blue-collar or other (security and protective) occupations may have a high proportion of men among internal applicants and entrants. Three such occupations are equipment services, quality assurance, and criminal investigation.

44 Internal competitions under merit promotion procedures are not always restricted solely to current agency or Federal employees. Other groups that may be eligible to apply and be considered for appointment include persons with recent military service and persons eligible for reinstatement or appointment based on service in the executive, legislative, or judicial branches of the Federal Government. See 5 CFR Part 335.
applicant pools are not limited in this way: agencies usually solicit applications from the general public when recruiting externally, and the resulting applicant pool can be large and deep. For example, an announcement for an entry-level position might attract many applicants who have extensive job-related education and specialized experience.

Second, procedures for external hiring may tend to reduce the proportion of qualified women who can be selected. As noted above, external recruitment can produce a much larger pool of applicants than internal recruitment, including candidates with extensive and varied training and experience. Yet external hiring is often conducted under rules that may afford the hiring manager limited choice. In contrast to internal hiring, where a hiring manager can usually choose from among several (or more) best-qualified candidates, the “rule of three” that has usually applied in a competitive examination requires a selecting official filling a single vacancy to select from among the three highest-ranked applicants. Moreover, when an agency uses evaluations of training and experience to assess applicants’ relative qualifications, the highest-ranked applicants will often be those with the most training and experience. In occupations where men were historically predominant, those applicants are more likely to be men than women. The rule of three and its potentially detrimental effects may soon become a thing of the past, as Federal agencies have been directed to discontinue use of the rule of three in favor of category rating as part of the Administration’s hiring reform initiative.

However, external hiring will continue to differ from internal hiring in several aspects. One important aspect is veterans’ preference, which applies in a competitive examination and many forms of excepted service hiring. In recognition of the sacrifices that members of the U.S. armed services have made for the Nation, public

---


46 5 CFR Part 335, which governs merit promotion (i.e., internal competitions) in the competitive service, provides that “Selection procedures will provide for management’s right to select or not select from among a group of best qualified candidates.”

47 The Homeland Security Act of 2002 authorized the use of category rating as an alternative to the “rule of three” in competitive examinations. Under category rating, an agency uses job-related criteria to assign applicants to two or more quality groups and a selecting official may select any candidate in the highest quality group, consistent with veterans’ preference requirements. However, until very recently, few agencies have made significant use of category rating. A complete description of assessment, referral, and selection procedures under both category rating and the rule of three can be found in OPM’s *Delegated Examining Operations Handbook*.

48 Quantity of training and experience is distinct from both quality of training and experience and quality of performance.


50 Veterans’ preference does not apply to internal hiring through intra-agency transfers or the merit promotion process. See 5 C.F.R. § 335.103(b) and, e.g., Abell v. Department of the Navy, 343 F.3d 1378, 1380 (Fed. Cir. 2003) and Brown v. Department of Veterans Affairs, 247 F.3d 1222, 1224-25 (Fed. Cir. 2001).
policy strongly encourages the employment and retention of veterans in the civil service. Provisions in support of that policy include veterans’ preference and special appointing authorities for veterans. When veterans’ preference applies, a selecting official may not pass over a qualified veteran to select a non-veteran with the same or lower score.\textsuperscript{51} Also, special appointing authorities expand the opportunities for veterans to apply for Federal jobs and for selecting officials to hire veterans.\textsuperscript{52}

Accordingly, veteran status strongly influences outcomes in external hiring. As shown in Table 5, veterans account for a substantial percentage of external entrants,\textsuperscript{53} especially in administrative occupations, and the proportion of veterans is higher at mid-level and upper-level than at entry-level.

Table 5. Veterans as a percentage of external entrants in professional and administrative occupations, by position level, 2000-2008

<table>
<thead>
<tr>
<th>Position Level</th>
<th>Occupational Category</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Professional</td>
<td>Administrative</td>
</tr>
<tr>
<td>Entry-level</td>
<td>9%</td>
<td>22%</td>
</tr>
<tr>
<td>Mid-level</td>
<td>15%</td>
<td>44%</td>
</tr>
<tr>
<td>Upper-level</td>
<td>18%</td>
<td>43%</td>
</tr>
<tr>
<td>Total (all levels combined)</td>
<td>15%</td>
<td>38%</td>
</tr>
</tbody>
</table>

While women account for an increasing proportion of military service members,\textsuperscript{54} the overwhelming majority of current members of the U.S. armed services\textsuperscript{55} and veterans in the Federal civil service are men.\textsuperscript{56} The demographics of the U.S. military

\textsuperscript{51} Veterans’ preference is not only a tie-breaker among otherwise equal applicants. First, when a competitive examination is conducted under “rule of three” procedures, preference eligible applicants receive additional points. Second, with the exception of professional positions at or above the GS-9 level, veterans with a compensable service-connected disability of 10 percent or more who meet minimum qualification requirements are placed at the top of the certificate (under the rule of three) or in the highest quality group (under category rating). See 5 U.S.C. §§ 3309, 3313, and 3318; and 5 CFR 302.

\textsuperscript{52} For example, the Veterans Employment Opportunities Act (VEOA; Pub. L. 105-339, amended by Pub. L. 106-117) enabled certain veterans to apply and be considered for competitive appointment under agency merit promotion procedures.

\textsuperscript{53} In 2009, veterans accounted for approximately eight percent of the U.S. civilian labor force. See U.S. Department of Labor, Bureau of Labor Statistics, “Table 1. Employment status of persons 18 years and over by veteran status, period of service, sex, race, and Hispanic or Latino ethnicity, 2009 annual averages,” accessed via http://www.bls.gov/cps/demographics.htm#vets.

\textsuperscript{54} U.S. Department of the Army, demographics on the members of the armed services, accessed in August 2010 at www.armyg1.army.mil/hr/demographics.asp. A slide presentation available through the site, “Active-Duty Army: Then and Now,” includes a table showing that 15.2% of active-duty members of the U.S. Army in 2003 were women, up from 9.8% in 1983 and 12.5% in 1993.

\textsuperscript{55} Id. As of fiscal year 2009, in the active-duty U.S. Army women accounted for approximately 17% of commissioned officers, 9% of warrant officers, and 13% of enlisted soldiers. As of fiscal year 2004, the percentage of women in the commissioned officer corps ranged from 5.8% in the Marine Corps to 18.3% in the Air Force.

\textsuperscript{56} U.S. Office of Personnel Management, Central Personnel Data File. As of September 2009, men accounted for approximately 84% of veterans and approximately 85% of preference eligibles (based on military service) in the permanent full-time Executive Branch workforce.
Factors Affecting the Advancement, Recruitment, and Representation of Women

and the veteran population mean that goals for the employment of women and veterans can be difficult to reconcile.\(^\text{57}\)

**Agencies have increased their use of external hiring to fill positions, especially in administrative occupations.**

**Figure 11** shows Federal agency use of external hiring to fill positions in professional and administrative occupations. Two patterns are apparent. First, external hiring plays a much greater role in professional occupations than it does in administrative occupations. Professional occupations have positive educational requirements. That means that an applicant must have specific education (usually a four-year or higher degree in a specific field) to qualify, even at entry-level. That greatly limits the ability of an individual to qualify for professional occupations solely through work experience. In contrast, administrative occupations do not have positive educational requirements. For many administrative occupations, general experience or a four-year degree in any field is qualifying, and an employee may be able to qualify for entry through work in a support or technician position. (Appendix G outlines entry requirements for selected professional and administrative occupations, illustrating that entry requirements can range from open (non-restrictive) to highly restrictive.) Second, except for a temporary decrease during the 1990s\(^\text{58}\) there is a clear trend toward increased use of external hiring to fill positions in administrative occupations.\(^\text{59}\)

**Figure 11. External hires as a percentage of new entrants to professional and administrative occupations, fiscal years 1980 through 2008**

---

\(^{57}\) For example, Federal agencies made over 28,000 permanent full-time appointments to positions in professional and administrative occupations under VEOA during fiscal year 2009. Women accounted for 17 percent of those appointments. Source: MSPB analysis of data from OPM’s Central Personnel Data File.

\(^{58}\) The increased share of internal hiring during the 1990s likely reflects staff reductions and restructuring in Federal Government, notably the Department of Defense and its component agencies.

\(^{59}\) In professional occupations, it is not clear whether the increase in external hiring since the 1990s is a long-term trend or simply a recovery to the norm.
This trend reflects, in part, the changing demographics of the Federal workforce. **Figure 12** shows that employment in professional and administrative occupations has increased, while employment in other occupational categories has decreased.

**Figure 12. Permanent full-time Federal employment by occupational category, 1991 and 2009**

Thus, while the Federal Government has more professional and administrative positions to fill, it also has fewer employees that it can “bridge” into those occupations. Another possible reason for greater use of external hiring is that agencies may be seeking attributes, such as a four-year college degree, specialized technical skills, or recent non-Federal experience, that they believe to be more common among external applicants.

**Entry-Level Hiring vs. Upper-Level Hiring**

An applicant may qualify for an entry-level position solely on the basis of education or experience. In administrative occupations, it is often possible to qualify for an entry-level position by working in a clerical, technical, or blue-collar occupation. It is much more difficult to “work one’s way up” into professional occupations because of those occupations’ positive educational requirements. Even so, entry-level positions are, as the label indicates, entry-level. An agency that fills a position at entry-level, especially in an administrative occupation, can recruit from a (comparatively) broad talent pool that may include recent (and less-recent) college graduates and individuals with relevant, but not directly-related, experience. Women are often particularly well-represented among these pools.61

---

60 Possible contributors to Federal agency interest in hiring college graduates include a desire to "professionalize" the Federal workforce and ensure that new entrants possess general competencies such as analytical ability, writing, and conscientiousness that are not amenable to assessment through evaluations of training and experience. Past agency use of appointing authorities (such as the now-defunct Outstanding Scholar Program) aimed at college graduates, and current plans to replace the recently-discontinued Federal Career Intern Program with appointing authorities that facilitate the hiring of students and recent graduates, indicate that this interest is both widespread and continuing.

61 We note that entry-level hiring can also enable agencies to consider and hire veterans whose military service has provided them with strong general competencies and relevant, but not specialized, experience.
In contrast, to qualify for placement in an upper-level position, an applicant must have specialized experience. Such experience is typically obtained by working in a professional or administrative occupation identical, or closely related, to that of the job being filled; experience in a clerical, technical, blue-collar, or “other” occupation is usually not sufficient. Consequently, the applicant pools (both internal and external) will often be composed primarily or exclusively of individuals who are already employed in a professional or administrative occupation. As noted previously, in most occupations, the proportion of women will tend to be lower among the applicants with the most years of experience.

**Recruitment in professional and administrative occupations is shifting from entry-level toward upper-level.**

*Figure 13* shows that new entrants to professional and administrative occupations are increasingly likely to be hired at mid-level or upper-level. Although the distribution of entrants by level has varied from year to year, and entry-level hiring remains the norm in some occupations, the long-term trend is clear. Hiring at upper-level is now more common than hiring at entry-level.

63 This trend may seem surprising given that funding in many organizations may be static or decreasing in real terms. We note, however, that mission requirements or resource limitations may make it impractical or impossible to reduce salary expenditures through entry-level hiring.

62 This discussion greatly simplifies the content and effect of OPM-established qualification standards for professional and administrative occupations. It is possible, if atypical, for an individual who has not worked in a professional or administrative occupation to meet qualification requirements for a position above entry-level through education or experience. Readers seeking a fuller understanding of qualification requirements should refer to OPM-published standards and guidelines for their application, which are available through www.opm.gov.
One result of the trends toward external hiring and upper-level hiring is that equal representation of women at the highest grade levels may take some time to achieve, given shifts in the occupational composition of the Federal workforce and the continuing occupational differences between men and women in both the Federal workforce and civilian labor force.

**Recruitment strategies and decisions have long-term implications.**

As discussed above, how agencies recruit can affect both the diversity and qualifications of the resulting hires. Recruitment decisions also have implications for development and advancement. To the extent that internal and external hires differ in attributes such as experience and education, they may also differ in job-related competencies, developmental needs, and preparedness for advancement. Therefore, agencies should take a strategic approach to the development of new employees as well as their recruitment.

Agencies should, for any employee, communicate competencies that are important to long-term success and work with the employee to identify and close any gaps in proficiency in those competencies. As discussed previously, formal education appears to be strongly correlated with advancement. Thus, a systematic approach aimed to training and mentoring may be especially useful to new professional and administrative recruits who lack career-specific experience or education. When counseling and training a new professional or administrative employee, of any background, agencies should understand that the competencies requiring development may be general (such as analytical ability, writing, and flexibility) as well as technical or occupation-specific.

To completely shatter the glass ceiling, it will not suffice to merely recruit women into professional and administrative occupations. The Federal Government will also need to recruit and select women for positions at the highest levels—and this means that women must be competitive at the highest levels. Federal agencies’ historic reliance on internal hiring as a source of new administrative employees makes it particularly important that agencies identify and minimize any competency gaps between internal and external hires. Internal hiring has many potential benefits for both agencies and employees. However, the transition from a non-professional or administrative occupation can present special challenges, because the employee’s previous experience and education were not necessarily targeted to the new occupation. It would be unfortunate if external hires were to progress faster or farther than internal hires (or vice versa), with attendant negative effects on organizational performance, diversity, and morale, as a result of competency gaps that could have been closed through better initial assessment, training, or mentoring.

---

64 In administrative occupations, 33 percent of internal entrants from fiscal years 2000 through 2008 had a four-year or higher degree at the time of entry, compared to 59 percent of external entrants. In professional occupations, the difference between internal and external entrants was much smaller (69 percent vs. 87 percent), consistent with those occupations’ positive educational requirements.
The Federal Government has strengths that can be used to recruit and retain highly qualified women.

The demographics of external entrants to administrative occupations suggests that the Federal Government’s hiring patterns and systems are not always conducive to the hiring of women. However, there are also aspects of Federal employment that could help the Federal Government attract and retain women. These include opportunities for challenging work and advancement,\(^{65}\) a commitment to fairness,\(^ {66}\) benefit and work/life programs, and relatively predictable pay and stable employment.\(^ {67}\) In two high-profile, high-paying occupations, attorney and physician, the Federal Government employs women at rates well above their employment in the civilian labor force.\(^ {68}\)

A strategic approach to workforce planning and recruitment is essential.

A Federal agency’s talent requirements are driven by its assigned missions and functions; it may not allow the important—but nevertheless secondary—public policy goal of a representative workforce to dictate its occupational mix or staffing patterns. Yet agencies also have objectives when filling positions beyond the timely acquisition of a competent employee. Agencies must also comply with requirements such as nondiscrimination and support public policy goals such as employment of veterans and a representative workforce. At times, there can be some tension between those goals.

Therefore, agencies should attempt to understand how their workforce requirements, recruitment plans, assessment methods, and appointing authorities can affect hiring outcomes. Unthinking approaches to workforce planning, recruitment, and hiring may produce undesired outcomes. As noted in a previous MSPB report, success in achieving the various goals of Federal hiring requires thought and planning: “We believe that agencies can meet their obligations to veterans and achieve a workforce that is representative of all segments of society by addressing both in their strategic recruitment plans…. Additionally, agencies should make strategic use of other hiring authorities available to them to ensure that they have a representative workforce at all grade levels.”\(^ {69}\)

\(^{65}\) An interest in challenging work and advancement is not limited to women, but women may be more likely to encounter glass ceilings or stereotypes that limit their opportunities and encourage them to seek a new employer.

\(^{66}\) Although fairness matters to both men and women, an emphasis on fairness and merit may be particularly important to applicants who have experienced, or fear they may be subjected to, discrimination or other forms of mistreatment. Consistent with this possibility, in our 2005 Merit Principles Survey, women and minorities were more likely to agree with the statement “I would recommend the Government as a place to work” than were men and nonminorities.

\(^{67}\) See Suzanne Scotchmer, Risk Taking and Gender in Hierarchies, NBER Working Paper 14464, National Bureau of Economic Research, Cambridge, MA, November 2008, p. 3. This paper cites research indicating that women are, on average, more risk-averse (i.e., less risk-seeking) than men in areas such as investment and examination strategies. Risk aversion in employment and pay could be reflected in a desire for job security and predictable pay.

\(^{68}\) In fiscal year 2005, women accounted for 32% of upper-level medical officer (physician) hires, although women accounted for 24.3% of physicians in the civilian labor force. For the attorney (lawyer) occupation, the figures were 46.7% and 26.3%, respectively. This pattern also appeared in data for several preceding and following fiscal years.

Experience, education, occupation, and agency workforce requirements and hiring patterns are not the only factors that affect the representation and advancement of women in the Federal Government. Individual interests and actions play an important role. This section examines Federal employees’ career intentions and commitment and gauges the Federal Government’s progress toward an equitable environment in which employees are managed, recognized, and advanced on their merits. Survey results indicate that women and men are, in general, much more alike than different in their ambitions and their perceptions of their treatment at work.

Interest in Career Advancement

Both women and men are interested in advancement.

As shown in Figure 14, a majority of employees at all pay levels expressed an interest in further advancement. In fact, at the highest pay level, women were somewhat more likely than men to indicate that they were likely to seek a higher-level job.70

Figure 14. Federal employees indicating that they were “very likely” or “somewhat likely” to apply for a higher-level job within the next five years, by pay level and sex, CAS 2007

70 This may reflect differences in stage of career or life, rather than a difference in ambition. Men tend to have more years of service and higher pay levels than women. Consequently, there may be differences in career prospects (men may be more likely to be at or near the top of their career fields, and thus have limited opportunities for promotion) and in eligibility and readiness for retirement.
Most noteworthy, however, were the high percentages of employees at lower pay levels who plan to seek promotion. Clearly, many Federal employees desire opportunities greater than those afforded by their current position or their current line of work.

**Many employees plan to strive for high-level leadership positions, but the responsibilities and stresses are deterrents for many others.**

Not surprisingly, the proportion of employees who aspire to the Senior Executive Service (SES) was smaller than the proportion of employees who seek higher-level positions. As shown in **Figure 15**, women and men at higher pay levels were equally likely to strive for the SES, although women at lower pay levels were less likely than men to express such ambitions.

**Figure 15. Federal employees indicating that they were “very likely” or “somewhat likely” to strive for a position in the Senior Executive Service, by pay level and sex, CAS 2007**

[Graph showing distribution of employees striving for SES by pay level and sex]

**Women and men have similar reasons for not seeking advancement.**

**Figure 16** shows that there was much common ground among women and men who indicated that they did not intend to seek a higher-level position. The broad reasons cited, in descending order of frequency, were: (1) satisfaction with the current position; (2) desire to avoid a requirement or feature of a higher-level position; (3) belief that selection was unlikely; and (4) work-life concerns.

---

71 In the CAS 2007, we asked respondents who indicated that it was “somewhat unlikely” or “very unlikely” that they would apply for a higher-level position to select the reason(s) for that unlikelihood. We did the same for respondents who indicated that they were unlikely to strive for the SES during their Federal career.

72 The pattern of reasons for not striving for the SES was somewhat different. Job requirements and satisfaction with the current position were cited with similar frequency. However, lack of qualifications, cited by fewer than 10 percent of men as a reason for not applying for a higher level position, was cited by over 20 percent of women.
Figure 16. Federal employees’ reasons for not seeking a higher-level position, by sex, CAS 2007

Within this general agreement, there were some differences between women and men. Women were somewhat more likely to cite stress or supervisory responsibilities as a reason not to seek advancement, while men were more likely to cite relocation or poor chances of selection.

That pattern points to some actions for agencies to consider. First, improvements in supervisory recruitment could produce a deeper, more diverse applicant pool. Agencies cannot force employees to seek supervisory roles. However, the survey results suggest that many talented employees may be declining to seek supervisory roles because they perceive the transition to supervision as unclear or unacceptably risky in personal or professional terms. Providing realistic job previews might help employees make better-informed choices about careers in supervision and leadership. Providing timely, comprehensive training for new supervisors—and support in the form of timely, constructive feedback and mentoring—could reduce the risks of new supervisors underperforming or failing, and encourage more talented employees to apply for supervisory positions. Second, a review of supervisory, managerial, and executive roles and responsibilities might reveal unnecessary expectations or stresses that deter otherwise qualified and interested individuals from seeking leadership positions.

CAS question 16a: responses are paraphrased from the original.
Managing the Responsibilities and Rewards of Leadership

Supervisory, managerial, and executive positions are not for everyone. As discussed in previous MSPB reports, such positions involve achieving work through others. That may be unattractive or unrewarding to employees who are attracted to the technical challenges of their chosen occupations. Leadership positions also require competencies that even an interested employee may lack. Finally, leadership positions are often stressful and may impose demands—including work time, personal commitment and accountability, travel, and geographic mobility—that an employee cannot or will not meet.

Nevertheless, agencies should consider whether unnecessary requirements and expectations may be deterring high-potential employees from seeking leadership roles. Agencies should also consider whether lack of appropriate training, support, or recognition is making the jobs of supervisors more difficult or less rewarding than they could be. Previous MSPB research has found that agencies often fail to provide supervisors with sufficient training, and that the challenges that supervisors face leading and motivating employees are exacerbated by a lack of communication, feedback, and support from higher-level managers.

To summarize, supervision is not easy, and agencies cannot eliminate many of the demands or stresses inherent in leadership. But agencies that want diverse and highly qualified pools of candidates must do their best to ensure that “demanding” does not mean “all-consuming,” that “stressful” does not mean “thankless,” and that “accountability” does not mean “responsibility without resources.”

Third, agencies may need to emphasize—to both selecting officials and employees—that efforts to reduce underrepresentation (such as targeted recruitment) do not mean that qualified employees in “non-targeted” groups should not apply, or that non-merit factors will influence assessment, consideration, or selection.

Commitment to Career Advancement

Career advancement requires accomplishment and dedication, not merely ambition. Accordingly, in addition to asking employees about their career intentions, the CAS asked employees about their personal commitment to their jobs and their advancement. Employees’ responses, shown in Table 6, provide several insights.
Table 6. Federal employees’ agreement with statements related to career commitment, by sex, CAS 2007

<table>
<thead>
<tr>
<th>Survey Item</th>
<th>Women</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>I volunteer for difficult assignments.</td>
<td>75%</td>
<td>76%</td>
</tr>
<tr>
<td>I am willing to devote whatever time is necessary to my job to advance my career.</td>
<td>70%</td>
<td>74%</td>
</tr>
<tr>
<td>I am willing to develop myself professionally on my own time or money.</td>
<td>70%</td>
<td>71%</td>
</tr>
<tr>
<td>I am willing to relocate to advance my career.</td>
<td>37%</td>
<td>45%</td>
</tr>
</tbody>
</table>

Men and women are equally committed to their careers.

First, most Federal employees—both men and women—take their careers quite seriously. On the job, they are willing to take on difficult assignments and work hard. Off the job, they are willing to supplement often-limited agency training funds with their own time or money.

Even among ambitious and hard-working employees, geographic mobility cannot be assumed.

Second, dedication to career and agency mission does not necessarily translate into geographic mobility. As shown in Figure 17, less than half of survey respondents indicated readiness to relocate for career advancement.

Figure 17. Federal employees indicating that they were willing to relocate to advance their career, by pay level, 1993 and 2007

75 Percentage responding “strongly agree” or “agree” to the statement “I volunteer for difficult assignments.” Percentages responding “To a Great Extent” or “To a Moderate Extent” for the remaining statements.

76 Pay levels for 2007 shown. The 1993 groupings were based on grade level, as follows: GS-9 and below, GS-10 through GS-12, and GS-13 and above. The correspondence between the 2007 pay levels and the 1993 grade levels is quite close, although not perfect.
As in 1993, fewer women (37 percent) than men (45 percent) indicated willingness to relocate. But the data illustrate a new development: a decreasing willingness to relocate among employees at higher pay and grade levels. Also, although the percentage of employees who would consider relocation has changed relatively little, there has been a notable decline in those who were willing to relocate “to a great extent.” This pattern is not unique to Federal employees, but may surprise many agency leaders and managers.⁷⁷

There are several possible reasons for this pattern. First, the Federal workforce has aged. Employees in the middle or latter stages of a Federal career may calculate that the potential benefits of relocation—such as a pay increase, greater status and responsibility, and increased promotability—are outweighed by its immediate costs, such as moving, uprooting a family, and adjusting to a new locale and workplace. Second, changes in economic conditions may have increased the actual or perceived costs of relocation. Third, employee values and priorities may be changing, in both the Federal and non-Federal workforce. Research suggests that American workers have become less geographically mobile⁷⁸ and, perhaps, less inclined to automatically accommodate an employer’s wishes.

Whatever the reasons, agencies should understand that requirements for geographic mobility can adversely affect recruitment and retention, with the greatest effects on high-level employees and women. The accompanying discussion outlines some potential benefits and costs of geographic mobility, for both agencies and employees.

---

⁷⁷ See Jeanne M. Brett, Linda K. Stro, and Anne H. Reilly, “Pulling up roots in the 1990s: Who’s willing to relocate?” *Journal of Organizational Behavior*, 14(1), 2006. The article reports that employees who were most willing to relocate were younger and lower-paid than employees who were less willing to relocate.

Geographic Mobility: Consider the Side Effects

Agencies that desire a well-stocked pipeline of “high-potential” employees for high-level positions should take care to distinguish situations where geographic mobility is essential from situations where geographic mobility is desirable.

Certain jobs and roles demand short-term or long-term geographic mobility. We also note that the creators of the SES envisioned a corps of versatile leaders who could function successfully in a wide range of organizational settings. Clearly, mobility—occupational, organizational, and geographic—was implicit in that vision. Experience in different roles, cultures, and locations can broaden an employee’s skills and perspective. Also missions and crises do not necessarily observe geographic boundaries. Organizations understandably want the ability to deploy their best employees to the locations where they are most needed.

However, agencies should also understand that the costs of relocation and geographic mobility are not borne solely by the employee. Agencies that routinely require relocation or geographic mobility may bear costs much greater than the expenses associated with travel, transportation, and real estate. Such requirements may reduce the quantity and quality of candidates for job vacancies. In particular, results from our Career Advancement Survey suggest that such requirements may deter many women and more-experienced employees from applying. That outcome may be precisely what agencies seeking a diverse, high-performing workforce do not want. Moreover, the undesired effects will not necessarily be limited to the applicant pool. Another possible outcome is undesired turnover: high-performing employees may conclude that they have little future in the agency and take jobs with more flexible competing employers.

For their part, employees should appreciate that the geographic mobility can be beneficial, even when it is not explicitly or implicitly required. Federal employees who have relocated often report that relocation was ultimately career-enhancing. Employees who are willing to move have more opportunities, both in terms of job vacancies and professional growth and development, than comparable employees who are not. MSPB strongly encourages agencies to be judicious about requiring geographic mobility and to take a “results-oriented” approach to when and where employees work. Yet there are limits to what can be accomplished with telework or technology. Positions with the highest levels of pay and responsibility tend to be concentrated in regional and headquarters offices or major installations. For example, approximately 72 percent of positions in the career Senior Executive Service are located in the greater Washington, DC metropolitan area. Accordingly, employees—especially those in organizationally or geographically remote areas—should understand that a lack of mobility may be career-limiting.

---

Interest in advancement, although typical, is not universal.

The survey results show that some Federal employees have chosen to place (or believe that circumstances have placed) limits on their career ambitions and their work commitments. At the lowest pay levels, women were more likely than men to indicate limited (or no) willingness to relocate or devote extra time for career advancement.

This is not necessarily a matter for concern. It is perfectly acceptable for an employee to choose not to seek advancement. We also recognize that agencies cannot eliminate the stresses and demands inherent in high-level positions. Yet agencies and managers should realize that an undue emphasis on traditional indicators of dedication (such as “face time” in the office, willingness to relocate, and availability to work irregular hours) may discourage capable employees from seeking jobs that they could perform with distinction.

Managing Work Relationships

In almost every high-level job, an employee must cultivate good interpersonal skills and functional work relationships to succeed. To determine how employees managed their work relationships, and to determine whether women and men approached or viewed those relationships differently, we asked employees several questions related to communication and conflict at work. The responses, shown in Table 7, offer some insights to both managers and employees.

Table 7. Federal employees’ agreement with statements on managing work relationships, CAS 2007

<table>
<thead>
<tr>
<th>Survey Item (Survey)</th>
<th>Women</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>I try to get along with my supervisors and managers even if I don’t agree with their decisions.</td>
<td>97%</td>
<td>95%</td>
</tr>
<tr>
<td>I speak up whenever I suspect that I’ve been treated unfairly.</td>
<td>71%</td>
<td>70%</td>
</tr>
<tr>
<td>I “tell it like it is” even if my supervisor doesn’t like what I have to say.</td>
<td>50%</td>
<td>61%</td>
</tr>
<tr>
<td>I have experienced frustration (such as communication problems) in the workplace when trying to deal with a coworker of the opposite sex.</td>
<td>24%</td>
<td>15%</td>
</tr>
</tbody>
</table>

First, both women and men appreciate the importance of working relationships with agency leaders. Second, although most employees are willing to assert themselves if they have been treated unfairly, nearly one-third of employees are reluctant to voice concerns about their treatment or to express their opinions (or communicate uncomfortable truths) about work matters. Finally, although differences between men and women are not large, the survey results indicate that women are somewhat more likely than men to perceive problems in communication with the opposite sex and somewhat less likely than men to openly express opinions or facts their supervisor might dislike.
In summary, agency leaders should understand that stereotypes about men and women in the workplace are overstated at best and misleading at worst. More broadly, agency leaders should recognize that most employees strive to maintain good working relationships and that employees may be reluctant to raise concerns about their treatment or about agency operations and policies, even when they should. Therefore, agency leaders should be particularly attentive to and seek to mitigate aspects of organizational culture or their own behavior that may discourage employees from speaking openly about work matters or participating fully in discussions about agency programs, policies, and initiatives.

Employees should recognize that success in high-level positions requires more than technical competence and contribution. OPM competency models for supervisory and executive positions clearly show that technical competence or credibility is only one element, albeit an important one, of effective leadership. But OPM research and guidance also confirm that competencies such as interpersonal skills, conflict management, flexibility, and resilience are also essential to advancement to high-level nonsupervisory positions.

Balancing Work and Personal Commitments

To better understand how employees balance work and personal responsibilities, the 2007 CAS included questions asking employees (1) whether they have ever taken specific actions to help balance work and life/family responsibilities and (2) how those actions had affected their careers. Employee responses are shown in Figure 18 and Figure 19.

---

80 See U.S. Office of Personnel Management, Supervisory Qualification Guide, accessed in August 2010 at www.opm.gov/Qualifications/standards/Specialty-stds/gs-supv.asp, and U.S. Office of Personnel Management, Guide to Senior Executive Service Qualifications, accessed in August 2010 at www.opm.gov/ses/references/GuidetoSESQuals_2010.pdf. The Supervisory Qualification Guide states that a position may require technical subject-matter knowledge, requiring application of an appropriate occupational qualification standard, but the competencies that the guide indicates are most important to supervisory work, such as decisiveness, resilience, and interpersonal skills, are not technical. The Executive Core Qualifications (ECQs) comprise five broad ECQs (leading change, leading people, results driven, business acumen, and building coalitions) and technical credibility is simply one of six competencies in the results driven ECQ.

81 See U.S. Office of Personnel Management, Looking to the Future: Human Resource Competencies, MSE-99-6, Washington, DC, September 1999. The appendix to this report contains several different competency models, including one developed by OPM staff. The OPM-developed model indicates that consulting and strategic roles require competency in areas such as influencing/negotiating, conflict management, oral communication, and stress tolerance.

82 U.S. Office of Personnel Management, Job Family Standard for Administrative Work in the Information Technology Group, 2200, revised September 2008, accessed in August 2010 at www.opm.gov/fedclass/GS2200A.pdf, pp.22, 40, 48, and 72-73. In addition to technical knowledge associated with particular specializations (such as enterprise architecture or systems analysis), positions at higher levels typically require skill in acquisition management, project management, and cost-benefit analysis. At the highest levels, “mastery” in oral and written communication may be necessary to “present, justify, defend, negotiate, or settle matters involving significant or controversial issues.” That clearly implies the requirement for competencies such as interpersonal skills, conflict management, and resilience at a high level of proficiency, and the standard notes that, in addition to the competency-oriented factor of knowledge required by the position, “other classification factors and factor levels, with their implications about the behaviors and characteristics that performing successfully at a given level requires, also strongly reflect a systematic foundation of competencies.”
The differences between women and men do not simply reflect differences in the availability of work/life flexibilities\textsuperscript{83} or differences in career prospects.\textsuperscript{84} Clearly, career considerations influence how employees balance work and personal responsibilities. For example, employees at higher pay levels were more likely than employees at lower pay levels to indicate that their spouse had adjusted his or her work schedule. Yet it is also clear that when work and personal life come into conflict, women are more likely than men to adjust their work commitments.

\textsuperscript{83} Men were not only less likely to have taken a specified action; they were also less likely than women to indicate that they would like to take an action (such as use a flexible work schedule) or take it more frequently.

\textsuperscript{84} Within salary group, women were more likely than men to indicate that they had adjusted their work commitments.
Employee perspectives on the career effects of efforts to balance work and life/family responsibilities provide several insights. First, flexible work arrangements appear to be a “win-win” proposition for both agencies and employees. A vast majority of employees who had used flexible work schedules or telework indicated that the effects on their career were neutral or positive. This suggests that such arrangements do not compromise—and may even enhance—an employee’s productivity or availability for work. Second, actions that reduce an employee’s availability for work appear much more likely to have negative long-term career consequences than actions that permit an employee to remain fully employed and “connected” to coworkers and the agency. Third, agencies and managers appear to be generally understanding and supportive of employees’ life/family responsibilities. A majority of employees, including those employees who had taken significant amounts of leave, indicated that the action(s) they had taken had no adverse effect on their careers. Finally, although we encourage agencies to make full use of flexible work arrangements, we also note that changing jobs or changing agencies may be a viable option for employees who cannot readily reconcile their current jobs and life/family responsibilities.

---

85 The descriptions of the actions in the figure are paraphrased. The action labeled “used intermittent leave” was “Took significant blocks of leave intermittently (as needed to handle family responsibilities),” and the action labeled “ Took leave for more than 4 weeks” was “Took leave for more than 4 consecutive weeks.”
The Extent and Effect of Family Responsibilities

Family responsibilities are the norm, rather than the exception, for all employees.

As illustrated in Figure 20, most employees have family responsibilities. Men were more likely than women to report that they had family responsibilities. Also, employees at lower pay levels were slightly less likely to report that they had family responsibilities. That may reflect the fact that employees at lower pay levels tend to be younger, and thus less likely to have dependents needing care, than employees at higher pay levels.

Figure 20. Federal employees indicating that they have family responsibilities, by pay level and sex, CAS 2007

As we discuss below, survey results suggest that “family responsibilities” can vary considerably in nature and extent. One employee may be responsible for providing financial support to an aging parent, while another employee may be responsible for caregiving. But clearly, family responsibilities of some sort are the norm rather than the exception for employees at all levels.
Family responsibilities and their effects are complex.

Figure 21 shows the perceived effect of family responsibilities on career advancement. Employees’ views may be eye-opening for any reader who believes that work and family are fundamentally incompatible. Notably, significant percentages of both women and men believed that family responsibilities had been a positive factor in their career advancement. Thus, agencies and managers should understand that family responsibilities are not necessarily a distraction from work; for many employees, such responsibilities increase ambition and focus at work. Nevertheless, women were much more likely than men to believe that their family responsibilities had hindered their career advancement.

Figure 21. Perceived effect of family responsibilities on career advancement, by pay level and sex, CAS 2007

Survey results suggest that a primary reason for this pattern is that the family responsibilities of men and women often differ, in both nature and extent. As shown in Figure 22, women were much more likely than men to report that caring for a family member had affected their availability for work.

86 In particular, women may have greater responsibility for household management and caregiving. See, for example, U.S. Department of Commerce, Economics and Statistics Administration and Executive Office of the President, Office of Management and Budget, Women in America: Indicators of Social and Economic Well-Being, March 2011, p. 35. The report notes that “On an average workday in 2009, employed married women spent 1.6 hours in household activities and an additional hour caring for family members. In contrast, employed married men spent nearly one hour in household activities and about 40 minutes caring for household members.”
However, the survey results also show that family responsibilities affect every segment of the workforce, and that those responsibilities are not limited to child care. Notably, employees at higher salary levels were more likely than employees at lower pay levels to report that family obligations had affected their availability for work. Also, over 12 percent of respondents—approximately one in eight—reported that caring for an adult family member had affected their availability for work. It is not surprising, then, that more women (23 percent) than men (18 percent) agreed that family responsibilities were disadvantageous when being considered for a job. Yet the difference is quite small considering that women, at all pay levels, remain much more likely to have caregiving responsibilities in addition to their work responsibilities. Also, the survey results suggest that Federal agencies have improved at helping employees balance work and family responsibilities, or become more accepting of employee “balancing acts.” Respondents to our 2007 survey were less likely to believe that family responsibilities are disadvantageous when competing for a job than were respondents to our 1991 survey.88

---

87 CAS 2007 questions 40 and 42 combined.

88 In MSPB’s 1991 Career Development Survey, 51% of men and 30% of women agreed with the statement “In my organization, it is a disadvantage to have family responsibilities when being considered for a job.” In the 2007 CAS, the levels of agreement declined to 17% and 23% for comparable men and women, respectively. One plausible interpretation of these results is that it has become more acceptable for all employees (including men) to have family responsibilities that occasionally impinge upon work, but that family responsibilities that substantially interfere with work schedules or commitments remain problematic.
Agencies and managers should not make assumptions about the extent or effects of an employee’s life/family responsibilities.

Our intent in presenting these survey results is not to encourage agencies and managers to replace one easy but erroneous assumption (such as “family responsibilities are a distraction from work”) with another (such as “family responsibilities make employees more dedicated at work”). The survey results caution agencies and managers against making unfounded judgments about the nature, extent, or effects of employees’ family responsibilities. For example, managers should not assume that employees with dependent care responsibilities do not seek, or cannot successfully hold, challenging and responsible positions. Nor should they assume that “high-potential” employees can (or should) avoid or “delegate” family responsibilities.

Flexible work arrangements can be beneficial to retention and career advancement as well as productivity.

In an ideal world, an employee can utilize flexible work arrangements to be at least as productive as a comparable employee working under traditional “inflexible” arrangements. As discussed above, employee perspectives—supported by research on the organizational effects of well-managed workplace flexibility programs—indicate that the real world often mirrors this ideal world: employees receive flexibility, and employers receive productivity, attendance, and morale equal to, or better than, that attained under traditional working arrangements. Unfortunately, the ideal is not always attainable. A full-time, fixed-schedule, on-site employee is not always an option. Survey results confirm that employees can be faced with difficult choices. Many employees have taken extended leave, changed jobs, or left Federal service to deal with non-work responsibilities. That might indeed have been the best or only option for the employee. But in some instances, greater agency flexibility might have produced a better outcome for both employee and employer. Sometimes, employers must choose between an employee working under nonstandard conditions—ranging from alternative work schedules to a reduced schedule to intermittent leave—and no employee at all.

We are not saying that agencies can, or should, accommodate every employee who requests working conditions different from the norm. We further note that not every employee will be equally productive under alternative work arrangements, and that agencies may lack the infrastructure (including effective supervisors) needed to support and manage alternative work arrangements. However, policies and practices that help high-quality employees remain in their jobs and at work may benefit both the agency (which avoids the need to replace or “cover for” a valuable employee) and the employee (who can continue to contribute, build skills, and maintain work relationships).
Women and men in the Federal Government hold comparable views of most aspects of their employment.

As illustrated in Table 8, women and men expressed similar levels of satisfaction with Federal employment and their treatment at work. On most survey items, differences between the responses of women and men were small, and those differences that do exist are mostly related to factors other than gender, such as occupation and organization. Restated, perceptions of work and the work environment depend more on “where you work” and “what you do” than “who you are.” For example, the fact that women were slightly less likely than men to agree that they were treated with respect, or that their work opinions count, may reflect the fact that women remain more likely than men to hold support positions and less likely than men to hold supervisory and managerial positions.

Table 8. Federal employees’ perceptions of their employer and their jobs, MPS 2005

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>Percent Agreeing</th>
</tr>
</thead>
<tbody>
<tr>
<td>I would recommend the Federal Government as a place to work.</td>
<td>79%</td>
</tr>
<tr>
<td>I would recommend my agency as a place to work.</td>
<td>74%</td>
</tr>
<tr>
<td>I am treated with respect at work.</td>
<td>80%</td>
</tr>
<tr>
<td>My opinions count at work.</td>
<td>52%</td>
</tr>
<tr>
<td>My job makes good use of my skills and abilities.</td>
<td>69%</td>
</tr>
<tr>
<td>Information is shared freely in my work unit.</td>
<td>59%</td>
</tr>
</tbody>
</table>

89 U.S. Merit Systems Protection Board, 2005 Merit Principles Survey, except for “I am treated with respect at work,” which is from the 2007 Merit Principles Survey.
Fewer employees believe that they have experienced discrimination based on sex.

As shown in Figure 23, the percentage of Federal employees who believe that they have experienced discrimination based on sex has declined.\(^{90}\) Consistent with this trend, a majority of respondents believed that discrimination against women in the Federal Government occurs less often than in the past.\(^{91}\)

Figure 23. Federal employees reporting denial of a job, promotion, or other job benefit on the basis of sex, by sex, 1992-2007

This trend suggests that efforts to educate Federal agencies and Federal managers about prohibited discrimination, eliminate sex-based discrimination, and remove subtle biases and stereotyping from day-to-day human resources decisions have been successful. We further note that such efforts have benefited men as well as women—showing that measures to eliminate discrimination and stereotyping do not simply replace one form of prohibited discrimination with another.

However, this positive trend does not mean that sex-based discrimination has completely disappeared or that agencies should divert attention or resources from efforts to prevent and rectify such discrimination. First, discrimination is a serious matter whenever it occurs. A decreasing frequency of discrimination does not excuse or reduce the harm to an employee who has been denied a job, promotion, or award on the basis of sex. Second, previous MSPB research indicates that sexual harassment—another form of discrimination on the basis of sex—may be more


\(^{91}\) Source: U.S. Merit Systems Protection Board, 2007 Career Advancement Survey, question 23 (“In your opinion, does discrimination against women in the Federal Government occur more or less often than it did 10 years ago?”). Among respondents who expressed an opinion, 61 percent indicated that “discrimination occurs less often now” and 19 percent indicated that “discrimination against women has not been a problem in the last 10 years.”
common than the figures above might suggest. The consequences of sexual harassment are severe: “For employees who experience it, sexual harassment takes its toll in the form of mental and emotional stress and even loss of income, if victims leave their jobs or take leave without pay as a result of their experiences. For the Government as an employer, the dollar costs attributable to lost productivity and sick leave are very high.”

Women have a less optimistic view than men of the Federal Government’s progress toward a “gender neutral” work environment in which women and men are treated equally.

Women and men continue to have differing perceptions of the nature and extent of discriminatory practices. As shown in Table 9, women were more likely to perceive discriminatory practices against women, while men were more likely to perceive discriminatory practices against men.

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>Women</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>To what extent do you believe that women are subjected to flagrant or obviously discriminatory practices that hinder their career advancement?</td>
<td>21%</td>
<td>6%</td>
</tr>
<tr>
<td>To what extent do you believe that men are subjected to flagrant or obviously discriminatory practices that hinder their career advancement?</td>
<td>5%</td>
<td>14%</td>
</tr>
</tbody>
</table>

Not surprisingly, a “gender gap” also remains in employee perceptions of the treatment of women in Federal workplaces, as illustrated in Figure 24. The percentage of women who believe that women and men are equally respected has increased, but the percentage of men holding that belief remains substantially higher.

---

92 U.S. Merit Systems Protection Board, Sexual Harassment in the Federal Workplace: Trends, Progress, Continuing Challenges, Washington, DC, October 1995, p. 15. In a 1994 MSPB survey of Federal employees, 44 percent of women and 19 percent of men indicated that they had experienced sexual harassment. Those figures are much higher than the percentages of employees who reported denial of a job, promotion, or other job benefit in the 1992 and 1996 Merit Principles Surveys.

93 Id. Chapter 4 of the report describes the organizational costs and personal harm that can result from sexual harassment, including lost individual and organizational productivity, illness and sick leave, and job turnover.
The differences in perception concerning the existence of a “double standard” are even more striking. Although very few men believe that women are held to a higher standard than men, a substantial minority of women still do.

**Women and men have similar perceptions of the fairness of their treatment in most employment matters.**

The differences in how women and men perceive the work environment are not apparent in employees’ perceptions of their personal experiences. **Table 10** shows that women and men held remarkably similar beliefs about the effects of discrimination, either flagrant or subtle, on their personal career advancement.

**Table 10. Federal employees indicating that their career advancement had been hindered by discrimination or subtle barriers to a “great extent” or “moderate extent,” CAS 2007**

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>Women</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have experienced flagrant discrimination (based on non-job related characteristics) that has hindered my career advancement.</td>
<td>19%</td>
<td>19%</td>
</tr>
<tr>
<td>I have experienced subtle barriers based on non-job related characteristics that have hindered my career advancement.</td>
<td>26%</td>
<td>25%</td>
</tr>
</tbody>
</table>

As illustrated in **Figure 25**, women and men were also equally likely to indicate that they had been treated fairly in employment matters, with one exception: work assignments.

94 The 1991 survey was limited to employees in the SES and grades GS-9 though GS-15. To provide comparability with responses from the 1991 survey, the 2007 percentages are for respondents with salaries of $50,000 and above.
As shown in Figure 26, that difference is not completely explained by differences in job level. When we asked employees whether it was likely that their supervisor would assign a critical work project to them, employees at lower pay levels were (unsurprisingly) less likely to agree. Yet women were less likely than men to believe that a critical assignment would be directed to them, at any given pay level.

Figure 26. Federal employees indicating that it was “somewhat likely” or “very likely” that a critical work project would be assigned to them, by pay level and sex, CAS 2007.

Employees responding “yes” to the question “Have you been treated fairly in the past 2 years in each area listed below?” Responses of “Not Applicable” were excluded when calculating percentages.
These results suggest that agencies should pay close attention to how they assign work. In particular, managers should consider how they assign work to ensure that demanding and career-enhancing assignments are provided to those able to perform them, regardless of sex. Obviously, important work (or any work worth doing, for that matter) should be done by conscientious, capable employees. And, in a merit system, personnel decisions—including the assignment of work—should be driven by organizational mission and individual merit. Yet it is all too easy to give the most challenging work assignments to the most assertive or visibly ambitious employee; to give unpleasant and unrewarding assignments to the reliable and uncomplaining employee; and to assign (or not assign) demanding, high-profile projects based on unwarranted assumptions about an employee's willingness to commit the necessary time and effort.

**Employees lack confidence that agencies will respond to grievances or complaints in a timely and constructive manner.**

As illustrated in Table 11, Federal employees are both uncertain that grievance and complaint procedures would rectify discrimination or other wrongs and apprehensive that using those procedures would be career-limiting.\(^{96}\)

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>Agree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>If I filed an action charging discrimination, it would be resolved justly.</td>
<td>44%</td>
<td>27%</td>
</tr>
<tr>
<td>Management would take appropriate action against a supervisor who discriminated.</td>
<td>57%</td>
<td>22%</td>
</tr>
<tr>
<td>Filing a grievance would hurt my career.</td>
<td>57%</td>
<td>19%</td>
</tr>
<tr>
<td>Filing an EEO complaint would hurt my career.</td>
<td>53%</td>
<td>21%</td>
</tr>
</tbody>
</table>

In summary, it appears that the Federal Government has succeeded in reducing the incidence of sex-based discrimination in Federal workplaces. However, agency leaders must recognize that such discrimination has not been entirely eliminated and that women are more likely to be affected when it does occur. Agencies must also ensure that grievance and complaint procedures are accessible, timely, and trusted because employees who experience discrimination, harassment, or forms of mistreatment should be able to seek redress—yet may be reluctant to do so. Many Federal employees believe that hiring and promotion decisions are inappropriately influenced by favoritism and personal relationships. The survey results in Table 12 show that the apparent decrease in prohibited discrimination has not, to date, translated into employee confidence that agencies and managers always base selections on merit (i.e., job-related characteristics such as knowledge, proficiency, and accomplishments).

Table 12. Federal employees’ agreement with statements related to favoritism, nepotism, and the merit basis of promotion decisions, by sex, CAS 2007

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>Women</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>Some supervisors in my agency practice favoritism (giving an unfair advantage to friends or favorite employees).</td>
<td>74%</td>
<td>67%</td>
</tr>
<tr>
<td>Some supervisors in my agency practice nepotism (giving an unfair advantage to relatives).</td>
<td>35%</td>
<td>28%</td>
</tr>
<tr>
<td>People are promoted because of their competence.</td>
<td>40%</td>
<td>39%</td>
</tr>
<tr>
<td>People are promoted because of how hard they work.</td>
<td>36%</td>
<td>36%</td>
</tr>
<tr>
<td>People are promoted because of who they know.</td>
<td>72%</td>
<td>72%</td>
</tr>
</tbody>
</table>

These results should greatly concern agencies and managers. Favoritism is not only inconsistent with the merit principles of selection based on ability and efficient and effective use of the Federal workforce. Favoritism in hiring and other aspects of human resources management could also perpetuate the glass ceiling by subtly yet systematically disadvantaging women, even if favoritism is not consciously based on sex. Research indicates that people tend to form close relationships (social and work) with people they see as similar to themselves in background, life experiences, interests, and values. Often, those characteristics are correlated with demographic characteristics such as sex, age, education, and ethnicity and race. If managers—who are still disproportionately likely to be men—allow personal relationships to influence decisions regarding work assignments, pay, or promotion, the adverse effects on women will probably, on average, be greater than the adverse effects on men.

---

97 Although the prohibited personnel practices (title 5, United States Code, § 2302) do not explicitly mention “favoritism,” 5 U.S.C. § 2302(b)(6) prohibits “grant[ing] any preference or advantage not authorized by law, rule, or regulation to any employee or applicant for employment (including defining the scope or manner of competition or the requirements for any position) for the purpose of improving or injuring the prospects of any particular person for employment.” The Office of the Special Counsel has pursued and obtained disciplinary action against Federal employees who abetted the promotion of a preselected, albeit qualified, individual. See Special Counsel v. Richard F. Lee and Diane L. Beatiez, 114 M.S.P.R. 57 (2009).

98 Relationships can have effects even when they do not directly influence any personnel action. MSPB’s previous study on women and the glass ceiling noted that “Studies in the private sector have found evidence that women are often excluded from networks dominated by men, and therefore could have less access to information and contacts which could enhance their advancement potential,” and “Direct access to a promotion is not the only benefit that a network can provide, in the long run, to career advancement. Discussions…indicated that many women believe men are able to take advantage of the informal relationships that develop with other men to gain access to information or superiors in the chain of command. It is possible that greater access can help the man do a better job or gain recognition that may ultimately indirectly enhance his potential for advancement.” U.S. Merit Systems Protection Board, A Question of Equity: Women and the Glass Ceiling in the Federal Government, Washington, DC, October 1992, pp. 24 and 26.
Women and men share broad concerns about leadership and the merit basis of personnel decisions.

The preceding discussion has focused on gender equity and the differing perceptions of men and women. Although continued attention to those issues is necessary, that should not distract agencies from broader systemic concerns. As discussed in previous MSPB reports, Federal employees have concerns that transcend lines of sex and ethnicity and race. The survey responses in Table 13 show that many Federal employees of both sexes remain doubtful that merit-based personnel decisions are the norm, even though they work under merit systems.

### Table 13. Federal employees’ agreement with statements regarding the merit basis of personnel decisions, supervisory skills, and trust in leadership

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>Women</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>My performance appraisal is a fair and accurate reflection of my performance.</td>
<td>63%</td>
<td>60%</td>
</tr>
<tr>
<td>Recognition and rewards are based on performance in my work unit.</td>
<td>50%</td>
<td>48%</td>
</tr>
<tr>
<td>My supervisor has good management skills. (MPS 2005)</td>
<td>55%</td>
<td>56%</td>
</tr>
<tr>
<td>I have trust and confidence in my supervisor.</td>
<td>60%</td>
<td>65%</td>
</tr>
<tr>
<td>I can express my point of view to management without fear of negative...</td>
<td>41%</td>
<td>44%</td>
</tr>
</tbody>
</table>

Although MSPB plans to conduct further research on workplace fairness, with particular attention to prohibited personnel practices and favoritism, previous research makes it clear that one contributor to this doubt is employee uncertainty about the competence and motivation of some of the supervisors, managers, and executives who are authorized to make those decisions.

Therefore, agency efforts to promote workplace fairness and shatter the glass ceiling must go beyond preventing and rectifying overt, prohibited discrimination. Agencies also must pay close attention to how they select, train, guide, and monitor the supervisors and managers who are responsible for making decisions about areas such as work assignment, performance evaluation, promotion, and pay. It is essential that managers be able to exercise judgment and discretion when making personnel decisions. It is also essential that agencies provide policies, training, guidelines, and safeguards to ensure that judgments are based on mission- and job-related criteria and that discretion is exercised in a deliberative and systematic manner. The alternative is increased risk of error, inequitable outcomes, and employee distrust in human resources decisions such as promotions and pay.

---


Conclusions and Recommendations

The recent report *Women in America: Indicators of Social and Economic Well-Being* describes a nation that has greatly reduced longstanding disparities in the opportunities available to women and men—but also a nation in which women have not yet attained full economic equality. As summarized below, the experience of women in the Federal Government closely parallels that of women in American society. Women in the Federal Government have made substantial progress, yet differences between women and men remain, in both inputs (such as education and occupation) and outcomes (such as pay and attainment of executive-level positions).

Conclusions

**Women have made substantial progress in the Federal Government.** Much has changed for the better since MSPB’s 1992 study on the employment and advancement of women in the Federal Government. The representation of women in professional and administrative occupations has increased; the “pay gap” has narrowed; the accession of women to the Senior Executive Service has outpaced our past projections.

Progress made has been cultural as well as statistical. Fewer women believe that they have experienced sex-based discrimination. Women are now about as likely as men to believe that they have been treated fairly in matters such as pay, discipline, and awards. Also, the stereotypes and biases that can result in managers or agencies overlooking or devaluing the abilities and achievements of women appear to be less prevalent and less powerful than in the past.

**Women are increasingly competitive in terms of experience and education.** The reduction in the influence of stereotypes and biases has been accompanied by an increase in the pool of women who are prepared for entry into professional and administrative occupations and for advancement to high-level positions. More women in the Federal workforce now have both extensive experience and formal educational credentials, meaning that women are not only more fully represented, but also better-positioned to compete for promotion.

---

The glass ceiling has been fractured, but it has not been shattered. The progress described above shows that the glass ceiling is not unbreakable. However, women remain less likely than men to be employed in the highest-paying occupations, in supervisory positions, or in executive-level positions. Also, a recent study by the Government Accountability Office confirms the continued existence of a pay gap between women and men in the Federal Government, despite the Federal Government’s longstanding emphasis on fair treatment and internal equity. MSPB analysis of employee salaries indicates that women often have lower salaries than men, even when they are in the same occupation. Those salary differences can be partially, but not fully, explained by factors that directly affect job classification (such as supervisory responsibilities) and factors that can affect an employee’s pay level and ability to compete for promotion, such as experience and education.

Discrimination and stereotypes have diminished, but have not yet disappeared. Women remain more likely than men to believe that they have experienced sex-based discrimination. Even in the absence of overt discrimination, many employees continue to believe that women are adversely affected by unfounded assumptions or unreasonable expectations. Also, some perceived or actual differences between women and men—such as the presence or absence of high-profile assignments and accomplishments in an employee’s work history—may be the product of agency decisions. For example, women are somewhat less likely than men to believe that their supervisors would assign a critical project to them.

The glass ceiling persists for reasons other than discrimination. Discrimination and stereotypes do not appear to be the primary reason for the persistence of a glass ceiling. An analysis of factors influencing likelihood of promotion indicates that demographic factors such as sex and ethnicity and race are much less important than factors such as the occupation held (and its inherent promotion potential), education level, and supervisory experience. When all else is equal, it appears that gender—whether female or male—has little effect on an employee’s chances of promotion. However, as noted above, “all else” is not always equal. Women and men often differ in terms of occupation, extent or nature of experience, and educational attainment or field of study. They may also differ in terms of geographic mobility, work/life responsibilities, or interest in supervisory and managerial roles.

Agencies may face demographic challenges to achieving gender balance in their workforces. In many professional and administrative occupations, women or men predominate. That has implications for representation, recruitment, and advancement. First, full representation of women in an occupation or organization—that is, employing women at a level equal to the relevant civilian labor force—may entail employing women at a level considerably higher or lower than their representation in the total civilian labor force or the general population. Second, the ease or difficulty of recruiting qualified women will vary greatly by occupation and occupational specialty. For example, agencies recruiting accountants, attorneys, and psychologists should find it relatively easy to recruit highly-qualified women; while agencies filling positions in fields such as law enforcement,
engineering, and information technology may find that qualified women are comparatively scarce. Finally, occupational differences between women and men can create glass walls which limit the movement of employees within organizations, with an attendant negative effect on access to cross-functional assignments, professional growth, and career advancement.

**Recruitment decisions can affect the employment and advancement of women in the Federal Government.** Analysis of workforce data shows that internal hiring and entry-level hiring have aided the entry of women into professional and administrative occupations. However, agency recruitment patterns are shifting toward external hiring for administrative occupations and upper-level hiring for both professional and administrative occupations. Although women are increasingly successful in all types of employment competition, external and upper-level hiring are often less conducive to the recruitment and selection of women for reasons that include the demographics of the labor force and public policies related to the veterans’ employment. Agencies and managers must approach workforce planning and recruitment strategically to attain a representative, high-performing workforce in a manner consistent with merit system principles and public policies.

**Federal employees—both women and men—are ambitious and dedicated.** Survey results show that many employees intend to seek advancement and that most employees are willing to work hard for that advancement. Federal agencies and managers should realize that stereotypes about unambitious Federal employees are indeed stereotypes and that current employees may be excellent prospects for higher-level positions.

**Work/life issues are increasingly important to all employees, although these issues may have special relevance to the recruitment, retention, and advancement of women.** Survey results show that work/life issues and life/family responsibilities are not unique to women. Employees of both sexes, at all levels, have lives and responsibilities outside work. Although current economic conditions may have temporarily increased employers’ leverage over job applicants and employees, research indicates that American workers place increasing importance on work/life balance. Agencies must deal openly and constructively with work/life issues, not only because the Federal Government strives to be a “model employer,” but because failure to provide employees with necessary flexibility and support will harm recruitment, retention, and productivity and perpetuate the glass ceiling.

**Many issues relevant to the fair treatment, full utilization, and advancement of women are universal.** Many barriers to the employment and advancement of women are not “women’s issues.” For example, deficient job analysis and assessment, insufficient attention to performance management and employee development, and suboptimal use of flexible work arrangements are, fundamentally, management problems. Such problems are not rooted in gender differences and affect all employees. Similarly, employee concerns about favoritism and the merit basis of personnel decisions are shared by men and women alike.
Conclusions and Recommendations

Recommendations

This report does not include specific recommendations to the President or to Congress. First, the statutory framework for managing the Federal service, including the merit system principles and prohibited personnel practices, establishes clear and appropriate requirements regarding the employment of women in the Federal service. Second, our recommendations to Federal agencies can be accomplished within the existing statutory framework and Federal agencies’ delegated authorities for human resources management.

We note, however, that the decisions and priorities of the Nation, as reflected in laws, Executive Orders, or other directives or initiatives, can directly affect the recruitment and advancement of women in the Federal service. For example, because of occupational differences between women and men in the civilian labor force, actions that affect the level of employment in particular agencies or occupations may increase or decrease both the level at which women would be “fully represented” in the Federal Government and the percentage of women in the Federal Government. Similarly, public policies to promote the employment of particular groups, such as displaced Federal employees or veterans, may have differential effects on women and men.

Recommendations for Federal agencies and managers

**Develop and implement a strategic approach to staffing, with particular attention to mission-critical and “pipeline” occupations.** Hiring is about more than filling individual vacancies with capable employees as quickly as possible within the confines of law and regulation. Hiring practices and decisions also have long-term implications for retention, individual and organizational performance, and achievement of public policy goals. Accordingly, agencies should pay particular attention to (1) how they define their talent needs, in terms of both level and competencies, and (2) how they use internal and external sources to meet those needs.

Agencies may need to establish, expand, or rethink their recruitment programs in order to reach and attract women or other underrepresented groups. However, efforts to eliminate underrepresentation should encompass workforce planning and assessment, not just recruitment.

**Think broadly about talent needs and recruitment methods.** Hiring for general competencies such as analytical ability, interpersonal skills, conscientiousness, and initiative will often enable agencies to attract and select from an applicant pool that is more diverse, in terms of gender, ethnicity and race, and age than an applicant pool defined by highly specific education, experience, and skill requirements.

**Make informed and balanced use of internal and external sources of talent.** Internal hiring, which can provide a “bridge” for employees in technical, clerical, or blue-collar occupations to move into professional and administrative occupations, can benefit both agencies and employees. However, agencies should also recognize
that internal and external talent pools can differ in ways that have significant implications for assessment, development, and advancement.

There is considerable evidence that formal education can be useful even when it is not mandatory. However, when identifying candidate sources, recruitment methods (including appointing authorities), and selection criteria, agencies should be particularly cautious about practices that may exclude qualified applicants who do not possess four-year degrees or are not recent graduates. Although formal education may confer (or be an indicator of) important competencies, agencies should not use recruitment methods (such as exclusive reliance on college recruitment) or job requirements to “screen” candidates for competencies that they can and should assess directly.

Provide continuing feedback and development to employees to help them understand and develop the competencies needed for long-term job success and career advancement. The competencies that are required to ascend to the highest levels of the Federal service are not only technical. Even at entry-level, professional and administrative positions require proficiency in general competencies such as problem solving, writing, and analytical ability. At higher levels, proficiency in competencies such as project management, organizational awareness, and influencing/negotiation may be helpful or essential.

Accordingly, agencies should understand that training and development activities that help an employee develop or sharpen general competencies may be important to an employee’s job performance and career prospects, even when such activities do not convey specific subject matter knowledge or have immediate applicability to an employee’s day-to-day assignments. Also, structured feedback and development may be particularly important for employees who “work their way up” into professional and administrative occupations, as those employees may lack the education or specialized experience of other entrants into those occupations.

Agencies should also educate employees about the distinct roles, responsibilities, and requirements of leadership positions. Employees seeking supervisory, managerial, or executive positions must recognize that a successful transition from individual contributor to leader of people demands competencies that their past education and experience may have neither required nor developed. Appendix G outlines specific actions that agencies and managers can take to recruit, develop, and advance a diverse, high-performing workforce.

Maximize flexibility in work arrangements and job requirements. Flexible work arrangements can help agencies attract a diverse pool of qualified applicants and help agencies retain employees and sustain engagement without compromising teamwork or individual productivity. Agencies should also limit requirements such as geographic mobility, irregular or inflexible hours, and extensive travel to those situations or positions where they are truly essential, as opposed to desirable, and reexamine such requirements in light of advances in communication, technology, and policy. Inflexibility may have the undesired effect of deterring highly capable applicants who have life/family responsibilities and can find competing employers who are more accommodating.
Remain vigilant against prohibited discrimination and ensure that avenues for identifying and remedying discrimination are trusted and accessible. Although sex-based discrimination, including sexual harassment, appears to have become less frequent, such discrimination can be devastating to employees and the organization when it does occur—and survey results show that it remains more likely to affect women than men.

Recognize, and avoid reliance on, stereotypes and assumptions in day-to-day human resources management. Agencies should consciously focus on ability and results—rather than demographic characteristics or potentially misleading indicators of performance and dedication such as time spent at work—when assessing employees, assigning work, allocating developmental opportunities, and evaluating employee performance and potential. For their part, supervisors must do more than merely avoid prohibited practices such as discrimination. Supervisors should strive for fairness in all aspects of human resources management, understanding that “human resources management” is not limited to formal decisions in matters such as appointment, promotion, and separation. Human resources management also encompasses day-to-day decisions on matters such as work assignment, performance feedback, coaching and counseling, and on-the-job training and development. Those day-to-day decisions can have long-term consequences for an employee’s engagement, advancement, and retention.

Aim for openness in dealings with all employees, ranging from routine work meetings to performance feedback to career counseling. This openness has two aspects. One is organizational, dealing with how agencies and managers share and receive information about the organization and how agencies and managers debate, communicate, and examine agency policies and operations. The other aspect is interpersonal, dealing with communication between and among supervisors and employees and the acknowledgement and management of differences at the individual level. Diversity can bring a valuable range of perspectives and ideas to the workplace. However, differences across lines of sex (as well as ethnicity and race, culture, religion, sexual orientation, and other dimensions) may also inhibit or complicate difficult yet necessary discussions between supervisors and employees and among employees. It is vital that managers and employees work together effectively regardless of those differences.

Strengthen the merit basis of human resources management decisions on both a systemic and individual level. This recommendation includes several measures discussed in previous MSPB reports, such as ensuring that “fair and open” competition is truly fair and open; using the best practicable methods to assess and select job candidates; and improving performance evaluation and performance management practices. Employee concerns about the role of favoritism in personnel decisions, from hiring to work assignment to recognition to promotion, are widespread. Such concerns can be damaging to organizational effectiveness and efficiency, and may be particularly detrimental to the engagement and retention of groups, including women, that have often been excluded from positions of status and influence in the workplace.
Improve the recruitment, selection, and development of supervisors. Supervisors will bear much of the responsibility for implementing the recommendations discussed above. Unfortunately, previous MSPB research has found deficiencies in how agencies recruit, select, develop, and manage their first-level supervisors. Improvement in supervisory selection and development will both improve the quality and diversity of candidate pools for supervisory positions and help agencies take the actions needed to shatter the glass ceiling. For example, realistic job previews can help employees make informed decisions about pursuing careers in supervision and leadership. Improving the training and mentoring of new supervisors may encourage high-potential employees who are apprehensive about the transition from a technical role to a supervisory role to actively consider or apply for a supervisory position. Finally, improvements in supervisory effectiveness will help build a cadre of supervisors who appreciate, and are better able to implement, the preceding recommendations related to workforce planning, focusing on results, supporting work/life balance, and assuring fairness in work assignment and other aspects of human resources management.

Recommendations for Federal employees

Establish career goals, learn what is required to achieve those goals, and act accordingly. The glass ceiling in the Federal Government cannot be shattered in a single blow. It can only be dismantled over time, through the merit-based hiring and advancement of individual employees. However, there are limits to what Federal agencies can or should do to help employees succeed in their jobs and careers. Advancement to the highest levels requires dedication and effort from the employee, not only to perform well in the current position, but also to set career goals, identify and pursue developmental and promotional opportunities, and acquire and sharpen the competencies needed to compete successfully for those opportunities. Specific steps for employees who seek advancement include:

- Recognize the importance of educational and occupational choices. Select careers and opportunities with long-term goals in mind;
- Develop foundational competencies such as writing, analytical ability, and interpersonal skills in addition to technical, occupational-specific competencies;
- Cultivate good working relationships with your supervisor and higher-level managers;
- Maintain a high level of performance;
- Seek challenging assignments, both to demonstrate your abilities and to broaden your skills and experiences;
- Seek guidance on what is required to succeed in your chosen field and to attain your career goals, and solicit honest feedback on your performance, competencies, and developmental needs. Consider obtaining a mentor; and
- Make an informed decision about pursuing a career in supervision and leadership. If you seek a supervisory or leadership role, develop the experiences and competencies needed to perform successfully in those roles.
Appendix I provides a Federal employee perspective on how specific career-related experiences and attributes have aided or hindered their advancement, discusses the steps above in greater detail, and outlines additional suggestions for Federal employees to consider.

**Make the effort to understand individual differences and work effectively with others regardless of those differences.** Effective working relationships are not necessary work relationships that are free of conflict or other obvious problems. In most organizations, an employee who is merely tolerated, or left to her or his own, is unlikely to survive or thrive. The benefits of diversity—such as bringing a range of perspectives to bear on agency problems, courses of action, and how those actions may be perceived—can only be realized when employees act to attain them.

It can be challenging to work with individuals who differ in characteristics such as ethnicity and race, sex, and age. It can be even more challenging to work with individuals whose interests, values, or beliefs differ from our own. Those challenges are particularly likely to arise when women or men move into occupations, work units, or organization cultures that have historically lacked balance between the sexes. We acknowledge these challenges can be uncomfortable for both new and long-time employees. However, it is imperative that personal discomfort—with the differences themselves, or with the effort needed to bridge them—not be allowed to interfere with the sharing of work-related information and the accomplishment of work unit and agency goals.
Appendix A.
Discussion Group Questions

1. As noted in the merit principles, one of the ideals of the Federal service is a workforce that represents “all segments of society.” How close is your agency to that vision? How well has it recruited and managed a diverse workforce? Where is it lacking?

2. “Fair and equitable treatment” is also mandated by the merit system principles.
   - Despite this ideal, in your agency, do personal characteristics that are not job-related, (e.g., sex, race, national origin, religion, age, marital status) create challenges for employees in the workplace? (In other words, does discrimination still occur?)
   - Which personal characteristics have created challenges? Do certain groups have unique challenges in specific areas?
   - What kinds of challenges (e.g., recruitment, hiring, advancement, training, pay, awards, performance appraisal, discipline, retention) do you see?
   - Based on your own observations, do you think the amount of discrimination has remained the same, increased, or decreased over the past 10 years? Are things better, worse, or the same compared to 10 years ago?

3. How can agencies better manage a diverse workforce? Will these strategies differ by particular group (e.g., race/national origin, sex)?
   - Recruit
   - Hire
   - Train/prepare
   - Advance/promote
   - Manage performance (pay, performance management, awards, discipline)
   - Retain

4. Do you feel that changes in the Federal civil service systems (e.g. pay for performance, changes in appeals and labor relations, changes in job descriptions and classifications) will affect fairness in the workplace? How? If so, what do you recommend to preserve the merit principles and ensure that employees are managed efficiently and effectively?

5. In the spring [of 2007], we plan to administer a Fair and Equitable Treatment survey of Federal Government employees to cover a number of the topics we’ve discussed today. What topics would you recommend that we cover in this survey?

6. What can we (MSPB) do to ensure fair and equitable treatment of a diverse workforce?
Appendix B.
The 2007 Career Advancement Survey (CAS)

Dear Federal Colleague:

You are part of a small group of Federal employees who have been randomly selected to participate in a survey conducted by the U.S. Merit Systems Protection Board (MSPB). This survey is part of a study examining Federal employees’ career advancement strategies and work experiences. This study will also review whether career advancement opportunities vary for different groups of employees. For the survey to reflect the true thoughts and experiences of all groups of Federal employees, it is extremely important that you complete and return this survey. We value your opinions!

The U.S. Merit Systems Protection Board, an independent Federal agency, is responsible for monitoring the health of Federal merit systems by conducting studies of the Federal civil service and other merit systems in the Executive Branch to ensure they are free of prohibited personnel practices. For example, the study supported by this survey examines how Federal employees move through their Government careers, and what factors may help or hinder their career advancement. This research has combined a variety of information sources, such as this survey and data from the Office of Personnel Management’s Central Personnel Data File, interviews of key management officials and representatives of employee groups, discussions with groups of Federal employees in a variety of locations, and data from other MSPB surveys. We will summarize our findings and recommendations in a report to the President and the Congress.

Your responses to this survey are voluntary and will be kept strictly confidential. The survey should take about 30 minutes and may be completed at your worksite or from another computer with Internet access. If you have any questions about this survey, please send your question in an email to CareerSurvey@mspb.gov or call our survey hotline at 1-888-260-4798. Additional information on this survey is available by clicking on the "MSPB Studies" tab on MSPB’s website (www.mspb.gov).

Thank you in advance for answering this survey. Your input will help us make recommendations to improve the ability of the Federal Government to recruit, retain, and effectively manage a top quality workforce.

Sincerely,

John Crum, Ph.D.
Acting Director, Policy and Evaluation
GENERAL INSTRUCTIONS:
The Career Advancement Survey is divided into different sections containing a variety of questions. We would appreciate your response to each question. Some of the questions ask for your opinion regarding sensitive topics. We assure you that your responses will be kept confidential. Please answer these questions as truthfully as possible.

Thank you for participating in this very important survey.

MARKING INSTRUCTIONS:
- Place an \( \checkmark \) in the box next to your response.
- Use a blue or black pen. Do not use a pencil or a felt-tipped pen.
- Please print where applicable.
- To change your answer, cross out the incorrect answer and put an \( \checkmark \) in the correct box. Also draw a circle around the correct answer.

Sometimes you will be asked to Mark all that apply. When this instruction appears, you may mark more than one answer.
- Please follow any arrows or instructions that direct you to the next question.

MAILING INSTRUCTIONS:
Please return your completed survey in the business reply envelope. If you misplaced the envelope, mail the survey to:

U.S. Merit Systems Protection Board
c/o Westat
1650 Research Boulevard
Rockville, Maryland 20850

PRIVACY NOTICE:
Collection of this information is authorized by Title 5, U.S. Code, Section 1204. This survey has been approved by the Office of Management and Budget in accordance with 5 CFR 1320.

Only MSPB staff and our survey support contractor staff will have access to the individually completed surveys. In accordance with the Privacy Act (PL-93-579, Title 5 U.S. Code, Section 552a), no data will be disclosed that could be used to identify individual participants.

A. WORK SATISFACTION
1. Please indicate your level of agreement or disagreement with each of the following statements.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree Nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. In general, I am satisfied with my job ....................................................

b. I am satisfied with my career advancement so far ........................................

c. Overall, I am satisfied with my supervisor .............................................

d. I would recommend my agency as a place to work ..................................

e. I would recommend the Federal Government as a place to work ................

2. How many years have you been employed on a full-time permanent basis as a civilian (not military) with the Federal Government?

   - Less than 1 year.
   - NUMBER OF YEARS

3. Thinking back to when you applied for your first job with the Federal Government,

   a. In the first column, what obstacles did you face when searching for a Federal job?

   - Finding out about job opportunities ........................................
   - The complexity of the hiring process ........................................
   - The length of the hiring process .............................................
   - Qualifying for a Federal position ...........................................
   - Finding a job offer with good pay and benefits ...........................
   - I don’t remember the application process for my first job ..............
   - I didn’t face any obstacles ......................................................
   - Other - Please specify: ________________________________________

   b. If you encountered obstacles, which ONE was the worst? Mark the ONE worst obstacle in the second column.

   - Finding out about job opportunities ........................................
   - The complexity of the hiring process ........................................
   - The length of the hiring process .............................................
   - Qualifying for a Federal position ...........................................
   - Finding a job offer with good pay and benefits ...........................
   - I don’t remember the application process for my first job ..............
   - I didn’t face any obstacles ......................................................
   - Other - Please specify: ________________________________________
### B. CAREER EXPERIENCES

4. For the items listed below, please indicate the following:

**Step 1.** In the first column, mark whether or not you have this or have done this, and

**Step 2.** The impact you think the presence or absence of each has had on your career advancement in the Federal Government.

<table>
<thead>
<tr>
<th>HAVE (✓)</th>
<th>Not Applicable/Don’t Know</th>
<th>Very Negative</th>
<th>Somewhat Negative</th>
<th>Neutral</th>
<th>Somewhat Positive</th>
<th>Very Positive</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Formal educational qualifications (e.g., a college degree or higher)</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>b. Specialized or technical training</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>c. Leadership development program or managerial training</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>d. Developmental assignments to improve the depth of my experience</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>e. Taken a lateral transfer (at the same grade) within my agency</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>f. Taken a lateral transfer (at the same grade) to another agency</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>g. Extensive past work experience</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>h. High quality past work performance</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>i. Acting in a position prior to appointment</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>j. Contacts who knew the selecting official and recommended me</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>k. A supportive supervisor to encourage my development and advancement</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>l. Senior person/mentor (other than my supervisor) looking out for my interests</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>m. Networking through a professional association or other formal network</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>n. Ability/willingness to take on challenging assignments</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>o. Ability/willingness to work long hours</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>p. Ability/willingness to travel whenever needed</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>q. Ability/willingness to relocate as needed</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>r. Other – Please specify:</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

5. Listed below are some personal characteristics.

**Step 1.** In the first column, mark whether or not you have this, and

**Step 2.** For the remainder, rate only the impact on your career advancement. We’re not asking for the specific nature of these personal characteristics.

<table>
<thead>
<tr>
<th>HAVE (✓)</th>
<th>Not Applicable/Don’t Know</th>
<th>Very Negative</th>
<th>Somewhat Negative</th>
<th>Neutral</th>
<th>Somewhat Positive</th>
<th>Very Positive</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. A foreign accent</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>b. A disability</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>c. Family responsibilities</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>d. My gender</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>e. My race/national origin/ethnicity</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>f. My marital status</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>g. My sexual orientation</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>h. My political affiliation</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>i. My religion</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>j. My age</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>k. Other – Please specify:</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

6. From the list of factors shown in Questions 4 and 5, please indicate the one factor (by writing in the question number and letter) that has had the greatest positive impact and the one factor that has had the greatest negative impact on your advancement.

Please write the question number in the first box and the letter in the second box.

<table>
<thead>
<tr>
<th>GREATEST POSITIVE IMPACT</th>
<th>GREATEST NEGATIVE IMPACT</th>
</tr>
</thead>
</table>

7. How many jobs within the Federal Government have you applied for within the past 3 years?

- NUMBER OF JOBS APPLIED FOR

- Not applicable – I’ve been with the Federal Government less than 3 years.

Skip to Question 10 on the next page.
Appendix B. The 2007 Career Advancement Survey (CAS)

7a. How many of these jobs for which you applied in the past 3 years did you not receive a job offer?
   - JOB OFFER(S) NOT RECEIVED
   - Not applicable. I haven't applied for any jobs or I've been offered every job that I've applied for within the past 3 years.
   SKIP TO QUESTION 10

8. How important do you believe the following factors were in explaining why you did not get the most recent job you applied for but did not receive?

   Not Applicable/Don’t know/Can’t judge
   Of No Importance
   Of Little Importance
   Somewhat Important
   Very Important

   a. Another candidate was equally or better qualified in terms of work experience
   b. I did not have enough education
   c. I don’t interview well
   d. Someone else had already been "preselected"
   e. I did not have great references
   f. I was not a friend or relative of the selecting official
   g. The selecting official did not like me
   h. My past performance
   i. My past conduct
   j. My gender
   k. My ethnicity/race/national origin
   l. My marital status
   m. My family responsibilities
   n. My sexual orientation
   o. My political affiliation
   p. My religion
   q. My age (too old)
   r. My age (too young)
   s. My disability
   t. Other – Please specify:

9. From the list of reasons shown in Question 8, which do you believe is the most important reason you did not get the job?
   Please write in the letter corresponding to the most important reason.
   - MOST IMPORTANT REASON

10. In the last 3 years, did you choose not to apply for any promotion or developmental opportunity (for example, assignment to a high visibility task force or group project) because you thought that someone of your ethnicity or race or national origin had no chance of being selected for the job or assignment?
   - Yes
   - No
   - Not applicable – There were not any promotions or developmental opportunities available during this time frame.
   - Not applicable – I’ve been with the Federal Government less than 3 years.

11. In the last 3 years, did you choose not to apply for any promotion or developmental opportunity (for example, assignment to a high visibility task force or group project) because you thought that someone of your gender had no chance of being selected for the job or assignment?
   - Yes
   - No
   - Not applicable – There were not any promotions or developmental opportunities available during this time frame.
   - Not applicable – I’ve been with the Federal Government less than 3 years.

12. How many times in your Federal civil service career have you been temporarily promoted or detailed to a higher graded job for at least 30 days?
   - # TIMES TEMPORARILY PROMOTED OR DETAILED

13. How often in your Federal civil service career have you voluntarily made a lateral transfer to advance your career; that is, moved from one permanent job to another permanent job without getting a raise in pay?
   - # TIMES VOLUNTARILY MADE LATERAL TRANSFER

14. How often in your Federal civil service career have you voluntarily taken a downgrade to advance your career; that is, moved from one permanent job to another permanent job at a lower grade or pay level?
   - # TIMES VOLUNTARILY TAKEN DOWNGRADE

U.S. Merit Systems Protection Board - 3 - FOR INFORMATION ONLY

Women in the Federal Government: Ambitions and Achievements
15. When your supervisor is away for a short period of time, is the responsibility to serve as the “acting supervisor” always assigned to employees at a higher grade than yourself?

☐ Yes => GO TO QUESTION 16
☐ No => GO TO QUESTION 15a
☐ Not applicable – no one acts for my supervisor when he or she is away. => GO TO QUESTION 16

15a. How often are you asked to serve as the “acting supervisor” when your supervisor is away for a short period of time?

☐ Almost always
☐ Regularly
☐ Occasionally
☐ Very rarely
☐ Never

16. If your supervisor had a critical project, how likely is it that it would be assigned to you?

☐ Very likely
☐ Somewhat likely
☐ Somewhat unlikely
☐ Very unlikely

17. Is it likely that you will apply for a higher level position within the next 5 years?

☐ Very likely => GO TO QUESTION 18
☐ Somewhat likely => GO TO QUESTION 18
☐ Somewhat unlikely
☐ Very unlikely
☐ Not applicable – I am already a member of the Senior Executive Service. => GO TO QUESTION 19

17a. If somewhat unlikely or very unlikely, why?

MARK ALL THAT APPLY.

☐ I enjoy my current job.
☐ I am comfortable with my current level of responsibility.
☐ I like working with my current supervisor.
☐ I don’t want the stress of working at that level.
☐ I don’t want supervisory responsibilities (if applicable).
☐ I don’t want to work more hours.
☐ I don’t want to relocate.
☐ I have family responsibilities that would conflict with job requirements (such as travel, or longer work hours).
☐ I don’t have the qualifications/ability.
☐ I don’t think I would be selected.
☐ The application process is too burdensome.
☐ I plan to retire soon.
☐ Other – Please specify:

__________________________________
C. PERCEPTION OF THE WORK ENVIRONMENT

The following questions ask about your perceptions of the work environment in the Federal Government.

19. Based on your experience in your current organization, please mark whether you agree or disagree with each of the following statements.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree nor Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Don't Know/Can't Judge</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. People are promoted because of their competence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. People are promoted because of how hard they work</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. People are promoted because of the number of hours they work</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. People are promoted because of whom they know</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Women and men are respected equally</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. The viewpoint of a woman is often not heard at a meeting until it is repeated by a man</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. In selecting among well-qualified men and women job candidates, the selecting official should consider whether women are under-represented in the work unit as one of the important factors in his or her decision</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>h. Standards are higher for women than men</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i. My organization is reluctant to promote women to supervisory or managerial positions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>j. Minorities and nonminorities are respected equally</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>k. The opinions and insights of minority employees are often ignored or devalued</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>l. In selecting among well-qualified minority and nonminority job candidates, the selecting official should consider whether minorities are under-represented in the work unit as one of the important factors in his or her decision</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>m. Standards are higher for minorities than nonminorities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>n. My organization is reluctant to promote minorities to supervisory or managerial positions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o. In my organization, members of some minority groups receive preferential treatment compared to other minority groups</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>p. In my organization, nonminorities receive preferential treatment compared to minorities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>q. Minority women face extra obstacles in their careers because they are both minority and female</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>r. My agency has been successful in recruiting a diverse workforce</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>s. My organization only pays lip service to actively supporting the goal of equal employment opportunity for all employees</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>t. If a supervisor or manager in my organization was found to have discriminated based on prohibited factors (e.g., race/national origin or gender), management would take appropriate action against that person</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>u. If I filed an action charging discrimination, I am confident that it would be resolved in a fair and just manner by my organization</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
20. In your organization, to what extent do you believe that employees from the following groups are subjected to flagrant or obviously discriminatory practices that hinder their career advancement?

- Don’t Know/Can’t Judge
- To No Extent
- To a Minimal Extent
- To a Moderate Extent
- To a Great Extent

a. African Americans/Blacks
b. Asians/Pacific Islanders
c. Hispanics/Latinos
d. American Indians
e. Whites
f. Women
g. Men
h. People with disabilities
i. People over age 40
j. I have experienced flagrant discrimination (based on non-job related characteristics) that has hindered my career advancement
k. I have experienced subtle barriers based on non-job related characteristics that have hindered my career advancement

21. If you’ve been a Federal Government employee for at least 10 years, what is your general impression of the amount of progress each of the following groups has made in moving into top-level positions in the Federal Government in the last 10 years?

- Not Applicable/Don’t Know/Can’t Judge
- Negative Progress (Things are worse now.)
- No Progress
- Minimal Progress
- Some Progress
- Considerable Progress

a. African Americans/Blacks
b. Asians/Pacific Islanders
c. Hispanics/Latinos
d. American Indians
e. Minority Men
f. Minority Women
g. Nonminority Men
h. Nonminority Women
i. People with disabilities

22. In your opinion, does discrimination against minorities in the Federal Government occur more or less often than it did 10 years ago?

- I wasn’t in the Federal Government 10 years ago.
- Discrimination occurs more often now.
- Discrimination occurs with about the same frequency.
- Discrimination occurs less often now.
- Not applicable – discrimination against minorities has not been a problem in the last 10 years.
- Don’t know/can’t judge.

23. In your opinion, does discrimination against women in the Federal Government occur more or less often than it did 10 years ago?

- I wasn’t in the Federal Government 10 years ago.
- Discrimination occurs more often now.
- Discrimination occurs with about the same frequency.
- Discrimination occurs less often now.
- Not applicable – discrimination against women has not been a problem in the last 10 years.
- Don’t know/can’t judge.

24. Do you agree or disagree with each of the following statements?

- Don’t Know/Can’t Judge
- Strongly Disagree
- Disagree
- Neither Agree nor Disagree
- Agree
- Strongly Agree

a. Some supervisors in my agency practice favoritism (giving an unfair advantage to friends or favorite employees)
b. Some supervisors in my agency practice nepotism (giving an unfair advantage to relatives)
c. Filing a grievance would harm my future career
d. Filing an equal employment opportunity (EEO) complaint would harm my future career
e. I have been disadvantaged by the emphasis on diversity
f. In my organization, it is a disadvantage to have family responsibilities when being considered for a job

g. A diverse workforce produces better services and products than a workforce that is not diverse
h. Agencies should ensure that their workforce is representative of the public they serve
Appendix B. The 2007 Career Advancement Survey (CAS)

24. (Continued) Do you agree or disagree with each of the following statements?

- I try to get along with my supervisors and managers even if I don’t agree with their decisions.
- I speak up whenever I suspect that I’ve been treated unfairly.
- I “tell it like it is” even if my supervisor doesn’t like what I have to say.
- If I work hard, I will succeed in my organization.
- I volunteer for difficult assignments.
- To be successful in my organization, it’s important to maintain a physical appearance that is similar to others.
- If I want to advance my career, I will have to play down my own ethnic and cultural customs.
- I have experienced frustration (such as due to communication problems) in the workplace while trying to deal with a coworker of another race or ethnicity.
- I have experienced frustration (such as due to communication problems) in the workplace when trying to deal with a coworker of the opposite sex.

25. If you think people are treated less favorably based on their race/ethnicity, gender, or age of 40+, please mark off the ways in which they are treated less favorably.

26. To what extent does your supervisor provide constructive feedback on your job performance?

- To a great extent
- To a moderate extent
- To a minimal extent
- To no extent

27. Compared to what I deserved, the performance appraisal rating that I received during my last appraisal was:

- Too high
- About right
- Too low
- I have not received a performance appraisal

28. Do you feel you are usually expected to do work that is above, at, or below your current pay level?

- Work that is above my pay level
- Work that is at my pay level
- Work that is below my pay level

29. Do you feel that you are paid more, about the same, or less compared to other employees in your agency who do similar work?

- More
- About the same
- Less
- Don’t know

E. WORK/LIFE ISSUES

30. Did you relocate geographically to take your first job with the Federal civilian service?

- Yes
- No

31. How many times have you voluntarily relocated (moved geographically) for the sake of your career since you have been employed as a civilian with the Federal Government?

- 0
- 1
- 2
- 3
- 4
- 5 or more times

32. Have you ever relocated to follow the career of your spouse or significant other?

- Yes
- No
33. For each of the following statements, indicate the extent to which each applies to you.

Don't Know/Can't Judge
To No Extent
To a Minimal Extent
To a Moderate Extent
To a Great Extent

a. I am willing to relocate to advance my career
b. I am willing to devote whatever time is necessary to my job to advance my career
c. I am willing to develop myself professionally (e.g., attend classes/training) on my own time and/or money

34. How many days per month, on average, have you spent on Government travel during the past year?
- None
- 1-2 days
- 3-5 days
- 6-10 days
- 11-15 days
- 16-20 days
- 21 or more days

35. How many hours, on average, have you worked each week during the past year?
- 40 hours or less
- 41-45 hours
- 46-50 hours
- 51-55 hours
- 56-60 hours
- 60+ hours

36. Which option most closely reflects how frequently you telework from an office within your home or from a telework center?
- Five days a week
- Twice a week
- Once a week
- Once every two weeks
- Once a month
- Twice a year
- Never

37. Have you ever done any of the following to help balance work and life/family responsibilities? Second, what impact did this have on your subsequent career? MARK ALL THAT APPLY.

Not Applicable/Don’t Know
Very Negative
Somewhat Negative
Neutral
Somewhat Positive
Very Positive

a. Used flexible work schedules (alternate work schedules)
b. Used flexi-place (telework or telecommute) options
c. Took significant blocks of leave intermittently (as needed to handle family responsibilities)
d. Took leave for more than 4 consecutive weeks
e. Switched to a less than full-time schedule (less than 40 hours a week)
f. Quit Federal job, but returned after a break in service
g. Changed jobs within my agency
h. Changed jobs by going to another agency
i. My spouse adjusted his/her schedule
j. Other: ____________________

38. Which of these would you like to do (or do more frequently) to help balance work and life/family responsibilities? MARK ALL THAT APPLY.

a. Flexible work schedules
b. Telework (also known as telecommute or flexi-place)
c. Take leave intermittently (as needed)
d. Take leave for more than 4 consecutive weeks
e. Switch to a less than full-time schedule (less than 40 hours a week)
f. Quit Federal job, but return after a break in service
g. Change jobs within my agency
h. Change jobs by going to another agency
i. Have my spouse adjust his/her schedule
j. Other: ____________________
Appendix B. The 2007 Career Advancement Survey (CAS)

39. If you were to be promoted, how many additional hours per week would you be willing to work in your new job?

- [ ] 0 hours
- [ ] 1-5 hours
- [ ] 6-10 hours
- [ ] 11-15 hours
- [ ] 16-20 hours
- [ ] 20+ hours

40. Has caring for children significantly impacted your availability for work?

- [ ] Yes
- [ ] No  ➔ GO TO QUESTION 41

40a. If so, for how many years (combining time if it was intermittent)?

- [ ] One year or less
- [ ] 2-3 years
- [ ] 4-5 years
- [ ] More than 15 years.
- [ ] 6-7 years

41. Have you had children (under the age of 18) living with you at any time during your Federal career?

- [ ] Yes
- [ ] No  ➔ GO TO QUESTION 42

41a. What was the greatest number of children (under the age of 18) you had living with you (at one time) during your Federal career?

- [ ] # CHILDREN

42. Has caring for elderly family members or other adult dependent family members significantly impacted your availability for work?

- [ ] Yes
- [ ] No  ➔ GO TO QUESTION 43

42a. If so, for how many years (combining time if it was intermittent)?

- [ ] One year or less
- [ ] 2-3 years
- [ ] 4-5 years
- [ ] More than 15 years.
- [ ] 6-7 years

43. If you have/had any dependents (e.g., children, elderly or disabled family members) requiring care, would you say that you have/had primary responsibility for their day-to-day care?

- [ ] I have not been responsible for caring for any dependents.
- [ ] My spouse or another adult in the household had primary responsibility for caring for dependents.
- [ ] Responsibility was/split 50/50 with another adult.
- [ ] I have/had primary responsibility.

44. Are you Hispanic/Latino?

- [ ] Yes
- [ ] No

45. Are you: MARK ALL THAT APPLY

- [ ] American Indian or Alaska Native
- [ ] Asian
- [ ] Black or African American
- [ ] Native Hawaiian or Other Pacific Islander
- [ ] White

46. What is your gender?

- [ ] Male
- [ ] Female

47. Is your immediate supervisor the same gender as you?

- [ ] Yes
- [ ] No

48. Is your immediate supervisor the same race/national origin/ethnicity as you?

- [ ] Yes
- [ ] No

49. What is the highest level of education (a) that you had completed at the time you got your first, full-time, permanent, civilian job with the Government, and (b) that you have now?

a. At the time hired for first, full-time permanent civilian Government job

- [ ] Less than high school
- [ ] High school diploma or equivalent (e.g., GED)
- [ ] Some college, no degree
- [ ] Completed associate’s degree (e.g., AA)
- [ ] Completed bachelor’s degree (e.g., BA)
- [ ] Some graduate school, no graduate degree
- [ ] Completed master’s degree (e.g., MA, MS)
- [ ] Completed professional degree (e.g., JD, MD, DDS)
- [ ] Completed doctorate (e.g., PhD)

b. That you have now

- [ ] Less than high school
- [ ] High school diploma or equivalent (e.g., GED)
- [ ] Some college, no degree
- [ ] Completed associate’s degree (e.g., AA)
- [ ] Completed bachelor’s degree (e.g., BA)
- [ ] Some graduate school, no graduate degree
- [ ] Completed master’s degree (e.g., MA, MS)
- [ ] Completed professional degree (e.g., JD, MD, DDS)
- [ ] Completed doctorate (e.g., PhD)
OPEN-ENDED QUESTIONS

50. What advice would you offer to someone from a similar background as yours who is interested in a career with the Federal Government?

________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________

51. What does the Federal Government need to do to better recruit and hire a diverse workforce?

________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________

52. What does the Federal Government need to do to better retain a diverse workforce?

________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________

53. Excluding the legally protected areas of race/national origin, sex, age, disability, religion, marital status, political affiliation, and sexual orientation, are there other characteristics that are not related to job performance that impact the way employees are treated—either positively or negatively?

________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________

54. Please provide any additional comments that you have regarding the fairness of employment practices within the Federal Government.

________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________

THANK YOU FOR PARTICIPATING IN OUR SURVEY!
PLEASE MAIL YOUR COMPLETED SURVEY IN THE ENCLOSED ENVELOPE.

If you have questions or need assistance, please contact the MSPB Survey Support Center
Toll-free: 1-888-260-4798 (Monday through Friday 8:00am – 5:00pm ET)
Email: CareerSurvey@mspb.gov
Appendix C. Occupational Categories and Definitions

The Federal Government categorizes positions into six broad occupational categories. This study focuses closely on professional and administrative occupations, because those occupations generally offer the greatest pay and advancement potential and constitute the pipeline for the Senior Executive Service.

**Professional** work requires knowledge in a field of science or learning characteristically acquired through education or training equivalent to a bachelor's or higher degree with major study in or pertinent to the specialized field, as distinguished from general education. Work is professional when it requires the exercise of discretion, judgment, and personal responsibility for the application of an organized body of knowledge that is constantly studied to make new discoveries and interpretations, and to improve data, materials, and methods, e.g., mathematics or engineering.

**Administrative** work involves the exercise of analytical ability, judgment, discretion, and personal responsibility, and the application of a substantial body of knowledge of principles, concepts, and practices applicable to one or more fields of administration or management. While these positions do not require specialized education, they do involve the type of skills (analytical, research, writing, judgment) typically gained through a college level education, or through progressively responsible experience.

**Technical** work is typically associated with and supportive of a professional or administrative field. It involves extensive practical knowledge, gained through experience and/or specific training less than that represented by college graduation. Work in these occupations may involve substantial elements of the work of the professional or administrative field, but requires less than full knowledge of the field involved.

**Clerical** occupations involve structured work in support of office, business, or fiscal operations. Clerical work is performed in accordance with established policies, procedures, or techniques; and requires training, experience, or working knowledge related to the tasks to be performed. Clerical occupational series follow a one-grade interval pattern.

**Other** white-collar occupations. There are some occupations in the General Schedule that do not clearly fit into one of the above groupings. Included among these are series such as the Fire Protection and Prevention Series, GS-081, and Police Series, GS-083.

**Blue-collar** occupations are occupations whose paramount requirements are trades, crafts, and labor experience and knowledge.

---

Appendix D. Occupational Groups in the Federal Government

For reference, this appendix lists the 22 occupational groups used to categorize and classify positions in professional and administrative occupations. The listing is adapted from the U.S. Office of Personnel Management’s Handbook of Occupational Groups and Series. For each group (family), we list sample occupations to illustrate the range of work covered by the group. In some cases, we have modified or paraphrased the official name of an occupational series for clarity or readability. We also provide, from OPM’s Central Personnel Data File, the number of permanent full-time Executive Branch employees in professional (P) and administrative (A) positions as of September 2009. Readers will note that most, but not all, occupational groups are composed primarily of professional or administrative occupations and employees.

Table 14. OPM occupational groups and employment levels by occupational group and category

<table>
<thead>
<tr>
<th>OPM Occupational Group</th>
<th>Employment</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Code</td>
<td>Group Title and Sample Occupational Series</td>
<td>(P)</td>
</tr>
<tr>
<td>0000</td>
<td>Miscellaneous Occupations</td>
<td>1,496</td>
</tr>
<tr>
<td></td>
<td>0007A Correctional Institution Administrator</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0028A Environmental Protection</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0060P Chaplain</td>
<td></td>
</tr>
<tr>
<td>0100</td>
<td>Social Science, Psychology, and Welfare</td>
<td>30,448</td>
</tr>
<tr>
<td></td>
<td>0105A Social Insurance Administration</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0110P Economist</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0180P Social Worker</td>
<td></td>
</tr>
<tr>
<td>0200</td>
<td>Human Resources Management</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>0201A Human Resources Specialist</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0260A Equal Employment Opportunity</td>
<td></td>
</tr>
<tr>
<td>0300</td>
<td>General Administrative, Clerical, and Office Services</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>0340A Program Manager</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0343A Management Analyst</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0346A Logistics Management</td>
<td></td>
</tr>
<tr>
<td>0400</td>
<td>Natural Resources Management and Biological Sciences</td>
<td>37,778</td>
</tr>
<tr>
<td></td>
<td>0403P Microbiologist</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0460P Forester</td>
<td></td>
</tr>
<tr>
<td>0500</td>
<td>Accounting and Budget</td>
<td>38,507</td>
</tr>
<tr>
<td></td>
<td>0505A Financial Manager</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0510P Accountant</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0512P Internal Revenue Agent</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0560P Budget Analyst</td>
<td></td>
</tr>
<tr>
<td>0600</td>
<td>Medical, Hospital, Dental, and Public Health</td>
<td>104,124</td>
</tr>
<tr>
<td></td>
<td>0602P Medical Officer (Physician)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0610P Nurse</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0670A Health System Administrator</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0690A Industrial Hygienist</td>
<td></td>
</tr>
</tbody>
</table>
# Appendix D. Occupational Groups in the Federal Government

<table>
<thead>
<tr>
<th>Code</th>
<th>OPM Occupational Group</th>
<th>Group Title and Sample Occupational Series</th>
<th>Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>0700</td>
<td>Veterinary Medical Science</td>
<td>0701P Veterinary Medical Officer</td>
<td>(P) 1,858 (A) 0</td>
</tr>
<tr>
<td>0700</td>
<td>Engineering and Architecture</td>
<td>0810P Civil Engineer</td>
<td>(P) 95,799 (A) 170</td>
</tr>
<tr>
<td>0900</td>
<td>Legal and Kindred</td>
<td>0950A Paralegal</td>
<td>(P) 31,382 (A) 27,270</td>
</tr>
<tr>
<td>1000</td>
<td>Information and Arts</td>
<td>1015P Museum Curator</td>
<td>(P) 479 (A) 13,765</td>
</tr>
<tr>
<td>1100</td>
<td>Business and Industry</td>
<td>1102P Contracting</td>
<td>(P) 32,459 (A) 42,766</td>
</tr>
<tr>
<td>1200</td>
<td>Copyright, Patent, and Trademark</td>
<td>1224P Patent Examiner</td>
<td>(P) 7,178 (A) 0</td>
</tr>
<tr>
<td>1300</td>
<td>Physical Sciences</td>
<td>1340P Meteorologist</td>
<td>(P) 25,380 (A) 261</td>
</tr>
<tr>
<td>1400</td>
<td>Library and Archives</td>
<td>1410P Librarian</td>
<td>(P) 1,626 (A) 1,178</td>
</tr>
<tr>
<td>1500</td>
<td>Mathematical Sciences</td>
<td>1510P Actuary</td>
<td>(P) 14,943 (A) 10</td>
</tr>
<tr>
<td>1600</td>
<td>Equipment, Facilities, and Services</td>
<td>1630A Cemetery Administrator</td>
<td>(P) 13,302</td>
</tr>
<tr>
<td>1700</td>
<td>Education</td>
<td>1710P Education and Vocational Training</td>
<td>(P) 8,623 (A) 7,869</td>
</tr>
<tr>
<td>1800</td>
<td>Inspection, Investigation, Enforcement, and Compliance</td>
<td>1811A Criminal Investigator</td>
<td>(P) 0 (A) 107,386</td>
</tr>
<tr>
<td>1900</td>
<td>Quality Assurance, Inspection, and Grading</td>
<td>1910A Quality Assurance</td>
<td>(P) 0 (A) 8,668</td>
</tr>
<tr>
<td>2000</td>
<td>Supply</td>
<td>2010A Inventory Management</td>
<td>(P) 0 (A) 11,566</td>
</tr>
<tr>
<td>2100</td>
<td>Transportation</td>
<td>2152A Air Traffic Controller</td>
<td>(P) 0 (A) 35,781</td>
</tr>
<tr>
<td>2200</td>
<td>Information Technology</td>
<td>2210A Information Technology Management</td>
<td>(P) 0 (A) 70,454</td>
</tr>
</tbody>
</table>
Appendix E. Use of Information from OPM’s Central Personnel Data File

The Central Personnel Data File (CPDF) is a repository of information on civilian Executive Branch employees maintained by the U.S. Office of Personnel Management. The CPDF contains several different files. The two CPDF files that provided the Federal workforce statistics presented in this report are (1) the status file, a file containing information on an employee’s appointment, position, and demographics at a particular point in time; and (2) the dynamics file, a file containing information on personnel actions taken by Federal agencies, such as appointments, position and pay changes, awards, and separations.

Coverage

The CPDF covers most, but not all, of the Executive Branch; for security reasons, some agency components (such as the National Geospatial Intelligence Agency in the Department of Defense) or workforces (such as the Foreign Service in the Department of State) are excluded.

Reporting Criteria

Population. The statistics presented in this report are for permanent full-time employees; employees holding nonpermanent appointments (such as temporary and term appointments) and employees on intermittent or part-time work schedules were excluded.

Valid data. Calculations that are based on specific data elements (such as sex, pay grade, and supervisory status) were limited to records containing valid data.

Time frame. Statistics are presented on a fiscal year basis. For example, “1991” means “as of September 30, 1991” for information from the CPDF status file, and “for the period beginning October 1, 1990 and ending on September 30, 1991” for information from the CPDF dynamics file.

Pay and grade levels. Pay statistics were calculated using adjusted basic pay. Adjusted basic pay, which corresponds to “salary,” includes locality pay adjustments. It does not include premium pay, awards, or other nonrecurring or discretionary payments.

Grade levels generally reflect an employee’s grade level under the General Schedule (GS) or a GS-related pay system. However, the coverage of the General Schedule has declined in recent years, and OPM has not established “GS-equivalent” grade levels for recently-created non-GS pay systems. To aid in analysis of the entire white-collar workforce, we estimated a General Schedule level for those white-collar employees whose records did not contain a GS or GS-related grade. That approximation was based on comparison of the employee’s basic pay to the minimum (step 1) non-locality General Schedule rates in effect during the applicable calendar year.
Appendix E. Use of Information from OPM’s Central Personnel Data File

Special Analyses

In addition to tabulations using variables such as agency, occupation, sex, age, education, and pay or grade level, we conducted two special analyses.

Analysis of promotion factors. This analysis, which was initially conducted as part of a preceding MSPB study, used CPDF data to track permanent full-time employees in professional and administrative positions at grades GS-5 through GS-14 for a succession of one-year periods. Based on personnel actions and the employee’s grade level at the beginning and the end of the one-year period, we determined whether the employee had been promoted. We then conducted a series of regression analyses to determine how various factors affected the likelihood of promotion. Those factors included sex, ethnicity and race, education level, supervisory status, length of service, and the modal full-performance grade level of the employee’s occupation (an indicator of the occupation’s promotion potential).

Analysis of entry into professional and administrative occupations. To better understand how the Federal Government recruits professional and administrative employees and how entry patterns and characteristics influence career advancement, we reviewed records from successive CPDF status files to identify “new entrants” to professional and administrative occupations. An employee was considered a “new entrant” in a given fiscal year if the employee—

- Held a position in a professional or administrative occupation; and
- Held or attained, by the end of the following year, a permanent, full-time position;\(^{103}\) and
- Was not employed in the same occupational category, or in the same occupational series, at the end of the preceding fiscal year.\(^{104}\)

A new entrant who was previously employed by the Federal Government in a non-professional or administrative position was categorized as an “internal” entrant. A new entrant who was not previously employed by the Federal Government (based on the absence of a CPDF status file record) was categorized as an “external” entrant. For each new entrant, we recorded information about the position entered (such as occupational category, occupational series, pay plan, pay grade, and agency) and the entrant (including sex, age, length of service, and education level). Our analysis, which used CPDF files from fiscal years 1979 through 2009, produced information on entrants for fiscal years 1980 through 2008.

---

\(^{103}\) This criterion allowed us to focus on permanent full-time employees, while allowing for the possibility that an employee entered a professional or administrative occupation through temporary or term employment.

\(^{104}\) For example, we did not consider a Federal employee in a professional occupation who was employed in a professional occupation at the end of the preceding fiscal year to be a “new entrant.” Similarly, we did not consider an employee whose occupational series did not change to be a new entrant, even if the employee’s occupational category changed (e.g., from technical to administrative, or administrative to professional).
Appendix F. Achieving a Representative Workforce—The Vision and the Standard

When discussing issues of recruitment and representation, identifying barriers, and considering affirmative employment and other initiatives, it is essential that agencies and stakeholders accurately understand what a “representative workforce” entails. Without that understanding, agencies may set goals that are too high or too low and stakeholders may have inappropriate or unrealistic expectations of Federal agencies. The Federal Government has a vision of a workforce and society free of divisions and inequities along lines of sex, ethnicity and race, and religion. However, American society and the American labor force do not yet fully reflect that vision, and that directly affects what it means to have a “representative workforce” and how quickly or readily agencies can achieve a workforce that fully reflects the diversity of American society.

The Vision: “A Work Force from All Segments of Society”

The merit system principles establish a broad vision for agency employment practices and workforces:

(1) Recruitment should be from qualified individuals from appropriate sources in an endeavor to achieve a work force from all segments of society, and selection and advancement should be determined solely on the basis of relative ability, knowledge and skills, after fair and open competition which ensures that all receive equal opportunity.

(2) All employees and applicants for employment should receive fair and equitable treatment in all aspects of personnel management without regard to political affiliation, race, color, religion, national origin, sex, marital status, age, or handicapping condition, and with proper regard for their privacy and constitutional rights.  

A reader unfamiliar with the demographics of the American labor force might read these principles and conclude that every agency can and should have a workforce whose demographic profile mirrors that of the nation. However, the general population is not an appropriate standard for assessing workforce representation. Even the total civilian labor force (CLF) is usually not a realistic source of candidates for agency positions or an appropriate benchmark for goal-setting.

The Standard: The Relevant Civilian Labor Force

EEOC guidance states that agencies should assess representation with regard to the relevant civilian labor force (RCLF).  

The relevant civilian labor force is defined by both the job (the occupation of the position being filled and the skills required) and the applicant pool. Agencies have influence over both. For example,

---

105 Title 5, United States Code, §§ 2301(b)(1) and 2301(b)(2).

106 U.S. Equal Employment Opportunity Commission, Equal Employment Opportunity Management Directive 715, accessed in August 2010 at www.eeoc.gov/federal/directives/md715.cfm. The directive states that “In conducting its self-assessment, agencies shall compare their internal participation rates with corresponding participation rates in the relevant civilian labor force (CLF),” and defines “relevant labor force” as “The source from which an agency draws or recruits applicants for employment or an internal selection such as a promotion.”
the RCLF for a human resources (HR) specialist position obviously includes HR specialists. But an agency that fills a human resources specialist position at entry-level might reasonably define the RCLF much more broadly, to include HR assistants and other occupations (such as management analysts) in which employees are highly likely to possess essential fundamental competencies. Similarly, the RCLF for a position may be local or national, depending on the agency’s recruitment efforts. Nevertheless, there are limits to what agencies can do to expand the portion of the labor force that is “relevant.” The RCLF for a nursing position cannot include electrical engineers; the RCLF for a computer scientist position cannot include human resources specialists.

EEOC notes that “the representation of any gender, racial or ethnic group among a particular occupational group may be quite different from their representation in the overall civilian labor force (CLF).” As illustrated in Table 15, that is also true of women.

### Table 15. Employment of women in selected occupations in the civilian labor force, 2009

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrical and electronics engineers</td>
<td>9%</td>
</tr>
<tr>
<td>Computer scientists and systems analysts</td>
<td>27%</td>
</tr>
<tr>
<td>Lawyers</td>
<td>32%</td>
</tr>
<tr>
<td>Total CLF (employed persons 16 years and over)</td>
<td>47%</td>
</tr>
<tr>
<td>Accountants and auditors</td>
<td>62%</td>
</tr>
<tr>
<td>Human resources, labor relations, and training specialists</td>
<td>71%</td>
</tr>
<tr>
<td>Registered nurses</td>
<td>92%</td>
</tr>
</tbody>
</table>

### Implications for Goal-Setting, Recruitment, and Assessing Progress

Agencies must use the RCLF when measuring and reporting their progress in achieving a representative workforce. Given the persistence of occupational differences between women and men, an agency in which women are a distinct minority may find that women are fully represented. Conversely, an agency in which women are a majority may find that women are nevertheless underrepresented. The point is that, in any given occupation or agency, it may be neither appropriate nor realistic to strive for 50/50 balance between women and men.

However, agencies should also recognize that the vision of the merit principles—a workforce “from all segments of society” that is both efficient and effective—may demand more than simply accepting and replicating the differences and disparities that exist in American society. Accordingly, agencies should define their talent requirements broadly and recruit widely, to the extent practical. Agencies should also examine

---

107 See U.S. Equal Employment Opportunity Commission, *Instructions to Federal Agencies for Equal Employment Opportunity Management Directive 715 (EEO MD 715)*, accessed in August 2010 at www.eeoc.gov/federal/directives/md715instruct.cfm. Guidance on tabulating participation rates and applicant flow for mission-critical occupations states that “…the appropriate or relevant CLF availability data generally depends on the employer’s area of recruitment. If a job is recruited nationally, then it may be appropriate to use the national CLF for that occupation…. On the other hand, if an agency’s announcement is limited to a particular geographic area (e.g. region, state, county or city)…then it may be more appropriate to consider the local area CLF.”


whether their development and promotion practices are creating an adequate pipeline of candidates, in terms of both quality and diversity, for mission-critical occupations and leadership positions.

Stakeholders should recognize that the vision of a Federal Government in which women and minorities are equally represented in all occupations and at all levels cannot be attained through agency action alone. All too often, Federal agencies are faced with talent pools that are far from “representative of all segments of society” when recruiting and filling mission-critical positions. Until that situation is addressed, progress toward a Federal Government that fully reflects “the tapestry of America”\textsuperscript{110} will remain incomplete.

Appendix G. Entry Requirements for Selected Professional and Administrative Occupations

This appendix outlines entry requirements for two administrative occupations and three professional occupations. The information presented below is digested from qualification standards developed and published by the U.S. Office of Personnel Management. Readers needing detailed information or guidance must refer to published OPM standards and instructions. For brevity, we outline requirements for the lowest entry-level only; however, many professional and administrative occupations permit entry at two levels (typically GS-5 and GS-7).

We provide this information to illustrate that requirements for entry into professional and administrative occupations can range from general and non-restrictive to highly specific and restrictive. As a general rule, administrative occupations are easier to enter than professional occupations because they do not have positive educational requirements, although many administrative occupations have individual occupational requirements (requirements for specific knowledge or experience). Professional occupations also vary; for some, a four-year degree with some specialized coursework is sufficient; for others, advanced degrees and specific credentials are mandatory. We also note that occupations or positions, especially those involving law enforcement or public safety, may also have other requirements (such as physical ability or maximum age) that are not described here.

Entry requirements have implications for applicants and employees seeking advancement. It is possible for employees to “work their way into” most administrative occupations. It is also possible for employees to “work and study their way into” some professional occupations, given completion of certain course work and a particular type of experience. However, there are many professional occupations for which there is little alternative to a particular degree or licensure.

Entry requirements also have implications for agencies and for the representation and advancement of women in the Federal Government. In some occupations, it may be feasible and cost-effective for an agency to expand the pool of possible applicants and to “bridge” employees from technical, support, or trades occupations into the occupation. In other occupations, agencies may have very limited ability to expand the applicant pool or to create opportunities for employees who lack specific and extensive education and training.

Management and Program Analysis Series, 0343
Occupational category: Administrative
Entry-level: GS-5

This occupation is covered by a group coverage qualification standard that applies to nearly 120 different administrative and management occupations. Under that standard, an individual may qualify at the GS-5 level through the education or experience described below.

---

Appendix G. Entry Requirements for Selected Professional and Administrative Occupations

Education: A 4-year course of study in any field leading to a bachelor's degree.

Experience: 3 years of general experience, 1 year of which was equivalent to at least GS 4. This general experience must be progressively responsible and demonstrate the ability to (1) Analyze problems to identify significant factors, gather pertinent data, and recognize solutions; (2) Plan and organize work; and (3) Communicate effectively orally and in writing.

Education and experience may be combined to qualify for entry. An individual with specialized experience, graduate education, or superior academic achievement may qualify for entry at the GS-7 level.

Safety and Occupational Health Program Management Series, 0018
Occupational category: Administrative
Entry-level: GS-5

This occupation is also covered by the group coverage qualification standard for administrative and management positions that applies to the management and program analysis series. However, this occupation is also subject to the individual occupational requirements outlined below. Those requirements define what constitutes qualifying education, experience, and certification.\(^{112}\)

Education: A 4-year course of study leading to a bachelor’s degree with major study in safety or occupational health fields (safety, occupational health, industrial hygiene), or degree in other related fields that included or was supplemented by at least 24 semester hours of study from among the following (or closely related) disciplines: safety, occupational health, industrial hygiene, occupational medicine, toxicology, public health, mathematics, physics, chemistry, biological sciences, engineering, and industrial psychology.

Experience: General experience in scientific or technical work that provided an understanding of the basic principles and concepts of the safety and occupational health field. Creditable general experience must have demonstrated the achievement of knowledge equivalent to the education described above.

Certification: Certification as a Certified Safety Professional (CSP), Certified Industrial Hygienist (CIH), or Certified Health Physicist (CHP), or similar certification that included successful completion of a written examination.

Economist Series, 0110
Occupational category: Professional
Entry-level: GS-5

This occupation is covered by a group coverage qualification standard that covers over 110 different professional and scientific occupations. Individual occupational requirements, outlined below, describe what constitutes qualifying education and experience for entry.

Education: four-year (i.e., bachelor's) degree in economics, with course work that included at least 21 semester hours in economics and 3 semester hours in statistics, accounting, or calculus.

Appendix G. Entry Requirements for Selected Professional and Administrative Occupations

Combination of education and experience: courses equivalent to a major in economics, as described, plus appropriate experience or additional education. Examples of qualifying experience include:

- Individual economic research assignments requiring planning, information assembly, analysis and evaluation, conclusions and report preparation;
- Supervisory or project coordination assignments involving a staff of professional economists, and requiring the evaluation and interpretation of economic information; or
- Teaching assignments in a college or university that included both class instruction in economics subjects and one of the following (1) personal research that produced evidence of results, (2) direction of graduate theses in economics, or (3) service as a consultant or advisor on technical economics problems.

Chemistry Series, 1320
Occupational category: Professional
Entry-level: GS-5

This occupation is covered by a group coverage qualification standard that covers over 110 different professional and scientific occupations. Individual occupational requirements, outlined below, describe what constitutes qualifying education and experience for entry.

Education: four-year (i.e., bachelor’s) degree in physical sciences, life sciences, or engineering that included 30 semester hours in chemistry, supplemented by course work in mathematics through differential and integral calculus, and at least 6 semester hours of physics.

Combination of education and experience: course work equivalent to a major as described above, plus appropriate experience or additional education.

Medical Officer Series, 0602
Occupational category: Professional
Entry-level: GS-11

To qualify for entry, an individual must meet the following education, training, and licensure requirements. The training and licensure requirements may be waived, at the agency's discretion, for positions that do not involve direct patient care.

Education: Degree—Doctor of Medicine or Doctor of Osteopathy from a school in the United States or Canada approved by a recognized accrediting body in the year of the applicant's graduation.

Graduate Training: Subsequent to obtaining a Doctor of Medicine or Doctor of Osteopathy degree, a candidate must have had at least 1 year of supervised experience providing direct service in a clinical setting, i.e., a 1-year internship or the first year of a residency program in an institution accredited for such training.

Licensure: For positions involving patient care, candidates must have a permanent, full, and unrestricted license to practice medicine.
Appendix H.
Shattering the Glass Ceiling:
Actions for Federal Agencies
and Managers

This appendix describes actions for Federal agencies and managers to consider related to recruitment, performance management, and career development. The actions are geared to three issues with special relevance to the employment and advancement of women: (1) encouraging entry into occupations where there are issues of underrepresentation, or gender balance; (2) assuring that employees have the qualifications (e.g., competencies, educational attainment, or experience) needed for short- and long-term job success; and (3) recruiting and preparing employees for higher-level jobs, either in a technical contributor or supervisory/leadership capacity.

The actions are organized into four categories:

- Recruitment and Selection—actions to generate interest in Federal careers, build diverse and qualified applicant pools, and select employees who are likely to perform well, both in the short and long term;
- Development—actions to help employees develop competencies required for entry or advancement, through on-the-job learning, classroom training, or other means;
- Communication and Support—actions to educate employees on requirements for job success and advancement, help employees identify career goals, and provide employees with feedback on their performance, strengths, and developmental needs;
- Mentoring and Networking—actions to help employees establish relationships that can advance their development and careers.

The sections below link these actions to three distinct career goals or stages of an employee’s career: entry, advancement to a high-level technical contributor or expert role, and advancement to a supervisory or leadership role. Although there is considerable overlap between the suggested actions for the technical contributor and supervisory roles, the roles and requisite competencies are quite distinct. That has particular relevance to identifying and preparing high-potential employees: an employee who seeks, and is ideally suited to, one role may be uninterested in or ill-suited to another.

Readers should note that the list of actions is illustrative rather than exhaustive. Also, some actions (such as using valid assessments) are universally important or are generally good practice. Others are simply options to consider; their value and practicality will differ by organization and occupation. Agencies and managers should consider resource availability and return on investment when evaluating actions, especially those that require substantial commitment of resources.

Career Goal/Stage: Entry into a professional or administrative occupation

Recruitment and Selection

- Identify competencies (including proficiency levels) required for short- and long-term job success, giving appropriate weight to foundational general competencies such as analytical ability, writing, and interpersonal skills. Use those competencies as a basis for outreach, recruitment, and selection.
Seek to expand the scope and diversity of the applicant pipeline—
- Establish relationships with both traditional groups (e.g., professional societies and colleges), and non-traditional groups (e.g., diversity-focused associations and secondary schools) to market Federal careers.
- Foster relationships with educational and vocational institutions to inform them about Federal careers and help them align their programs with agency talent requirements.

Help applicants understand and prepare for Federal careers—
- Offer realistic job previews through recruitment visits, information sessions, “job-shadowing” days, and other means.
- Develop and distribute tools that help potential recruits assess their skills and interest and match them to agency jobs and careers.
- Involve line managers and employees in outreach and recruitment.

Establish tracks into professional and administrative occupations, especially mission-critical occupations, through outreach and strategic, judicious use of hiring methods such as student employment programs and special appointing authorities.

Use valid assessments to assess applicants—
- Assess for ability or potential; minimize reliance on indirect measures of ability such as educational attainment and length of experience.
- Focus on attributes that are (1) important to short- and long-term job success and (2) not amenable to acquisition through on-the-job development or training.
- Avoid use of recruitment methods or appointment authorities as proxies for formal assessment.

Development
- Support acquisition of essential competencies through developmental assignments, training classes, and tuition support.
- Provide employees with substantive assignments to help them acquire essential knowledge and competencies and to enable them to contribute meaningfully to the agency mission.
- To the extent practical, involve employees in higher-level discussions about work priorities and issues.
- Establish developmental programs, with formal assessment and competition for entry, for selected occupations.

Communication, Feedback, and Support
- From the beginning, articulate requirements for success, including results (job performance), competencies, and important behaviors such as organizational citizenship or continuing education.
- Outline long-term career opportunities—both technical and leadership—in the employee’s organization and career field.
- Provide candid and constructive feedback on the employee’s progress and success. Use the probationary period (if applicable).
- Respect boundaries—but take a genuine interest in employee’s job satisfaction, engagement, and work/life balance.
- Establish formal career counseling programs.
- Establish an on-boarding program.

Mentoring and Networking
- Pair the employee with higher-level employees who can serve as a resource and provide a safe environment for testing skills.
- Encourage the employee to seek one or more mentors.
Encourage the employee to acquire and share knowledge within the organization and through professional organizations or associations.

**Career Goal/Stage: Advancement to a high-level technical contributor role**

**Recruitment and Selection**

- Encourage high-potential employees to consider seeking advancement. Take care to avoid assumptions about an employee's potential based on personal characteristics, including sex, marital status, and life/family responsibilities, that are not relevant to job performance.
- Consider past contribution and performance when assessing and selecting candidates—but take care to assess candidates on the competencies needed to take on new roles and responsibilities and to give those competencies due weight in hiring decisions.
- Use valid assessments to select employees for promotion or formal developmental opportunities. Consider the use of assessment tools such as job simulations (including assessment centers), work samples, and knowledge tests as additions or alternatives to evaluation of training and experience.

**Development**

- Provide assignments, training, or other opportunities that help the employee acquire and demonstrate necessary competencies. Necessary competencies may include existing competencies at a higher level of proficiency and new competencies.
- Consider rotational assignments, leadership training, and other activities to broaden functional knowledge or develop leadership skills. Such knowledge and skills may be particularly helpful when higher-level roles involve working across functions or organizations, responsibility with limited authority, or competing values and priorities.
- Encourage continued professional development, including formal education to convey necessary skills or make the employee more competitive when applying for promotion.
- Consider establishing formal training or certification programs to prepare employees for advancement. Such programs should be developed in consultation with subject matter experts and training and assessment professionals.

**Communication, Feedback, and Support**

- Communicate the competencies needed to attain and succeed in higher-level roles. Often, technical expertise and personal effort will not suffice to complete projects and meet goals. Competencies such as project management, influencing/negotiating, and organizational awareness may matter as much as, or more than, technical competence.
- Encourage employees to articulate career goals; provide feedback on the employee's strengths and developmental needs in relation to the roles or positions that the employee is seeking.
- Provide career counseling; inform employees of what is needed for further advancement to help them make informed decision about pursuing further education and development and making any personal sacrifices required.

**Mentoring and Networking**

- Encourage the employee to seek a mentor who has worked in a leadership role.
- Encourage participation in professional or management organizations, for both learning and leadership opportunities.
Career Goal/Stage: Advancement to a supervisory or managerial role

Recruitment and Selection

✦ Encourage high-potential employees to consider seeking supervisory and managerial positions. Take care to avoid assumptions about an employee’s potential based on personal characteristics such as sex, marital status, religion, or life/family responsibilities that are not relevant to job performance.

✦ Provide realistic job previews of supervisory, managerial, and executive positions.

✦ Provide opportunities for employees to assess their interest in and aptitude for supervisory and leadership roles.

✦ Give due weight to supervisory potential and competence in both assessment and selection.

✦ Reexamine technical experience and skill requirements for supervisory positions, especially second-level and higher positions.

✦ Use valid assessments when identifying high-potential employees and selecting employees for promotion. Consider the use of assessment tools such as job simulations (including assessment centers), work samples, and knowledge tests as additions or alternatives to evaluation of training and experience.

Development

✦ Provide assignments, training, or other opportunities that help the employee acquire and demonstrate supervisory and leadership competencies such as conflict management, influencing/negotiating, and oral and written communication.

✦ Provide rotational assignments to mission and management functions.

✦ Encourage high-potential employees to consider participating in intra- or interagency training and development programs, such as SES Candidate Development Programs.

✦ Establish developmental programs for supervisory, managerial, or executive positions.

✦ Be attentive to fairness when allocating opportunities for performance (such as high-profile assignments) and development (such as nominations for training programs).

Communication, Feedback, and Support

✦ Provide focused feedback on assignments and competencies related to supervision and leadership.

✦ Emphasize the differences between leadership roles and line/technical contributor roles.
  • Describe competencies required for success in supervisory and leadership roles.
  • Communicate the importance and limitations of technical competence and credibility.

✦ Inform employees of any special expectations or requirements (such as travel, fixed or unpredictable work hours, or geographic mobility) associated with supervisory, managerial, or executive positions.

✦ Accept that a high-potential employee may need to look outside the organization or agency for development or promotion.

Mentoring and Networking

✦ Encourage the employee to seek a mentor who has worked in a leadership role.

✦ Encourage participation in professional or management organizations, for both learning and leadership opportunities.
Appendix I.
Career Advancement Suggestions
for Federal Employees

This appendix provides suggestions for Federal employees seeking advancement, based on information discussed in the body of the report and additional data from our 2007 Career Advancement Survey (CAS). The information presented here has special relevance for women, because the representation of women at the highest levels continues to lag that of men, and because women are more likely than men to enter professional and administrative occupations from other occupations.\textsuperscript{113} However, the information and suggestions are applicable to any employees seeking career advancement.

Results from the 2007 Career Advancement Survey

In the CAS, we asked employees about whether they had, or did not have, certain experiences or attributes (“career factors”). We then asked employees to indicate how the presence or absence of the career factor had affected their career advancement. The CAS listed seventeen career factors (“career accelerators”) that, if present, might enhance promotability or accelerate advancement.\textsuperscript{114} Those factors fell into five broad categories: education and skills, experience, performance, relationships, and availability. The first table shows the career accelerators by category;\textsuperscript{115} the second table shows the prevalence of each career accelerator among upper-level respondents.\textsuperscript{116}

---

\textsuperscript{113} As discussed in the report, internal entry from a non-professional/administrative occupation has several possible implications. First, an internal entrant’s experience may be less directly applicable to the new occupation than the experience of external entrants who possess occupation-specific specialized experience. Second, internal entrants—especially entrants to administrative occupations—are less likely than external entrants to hold four-year or higher degrees. Finally, because internal entrants tend to be older and have more years of Federal service than external entrants, they may have fewer years remaining (i.e., less time to advance) in their Federal careers.

\textsuperscript{114} The CAS also included an “other” factor which employees were asked to describe and several factors that would be non-merit factors in most circumstances.

\textsuperscript{115} Factors are paraphrased for brevity. Factors are assigned to categories to aid discussion and interpretation of the survey results; some factors could reasonably be assigned to more than one category.

\textsuperscript{116} The sample for the CAS was stratified by pay level (salary); at the time of the survey, the salary threshold used to define the highest salary group corresponded roughly to the GS-13 level. Survey responses for this group are shown more to provide the perspective of employees who have attained upper-level positions in the Federal service.
### Table 16. Career accelerators and categories from the CAS 2007

<table>
<thead>
<tr>
<th>Category</th>
<th>Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education and Skills</td>
<td>• Formal educational qualifications&lt;br&gt;• Specialized or technical training&lt;br&gt;• Leadership or managerial training</td>
</tr>
<tr>
<td>Experience</td>
<td>• Developmental assignments&lt;br&gt;• Lateral move—within the agency&lt;br&gt;• Lateral move—to another agency&lt;br&gt;• Extensive work experience&lt;br&gt;• Acting in a position</td>
</tr>
<tr>
<td>Performance</td>
<td>• High quality past performance&lt;br&gt;• Willingness to take on challenging assignments</td>
</tr>
<tr>
<td>Relationships</td>
<td>• Contacts who knew selecting official&lt;br&gt;• Supportive supervisor&lt;br&gt;• Mentor (other than supervisor)&lt;br&gt;• Professional networking</td>
</tr>
<tr>
<td>Availability</td>
<td>• Willingness to work long hours&lt;br&gt;• Willingness to travel&lt;br&gt;• Willingness to relocate</td>
</tr>
</tbody>
</table>

### Table 17. Prevalence of career accelerators among upper-level respondents, CAS 2007

<table>
<thead>
<tr>
<th>Prevalence</th>
<th>Career Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Universal (90% or more)</td>
<td>• Willingness to take on challenging assignments&lt;br&gt;• Willingness to work long hours&lt;br&gt;• Willingness to travel&lt;br&gt;• High quality of past performance</td>
</tr>
<tr>
<td>Very High (80% to 89%)</td>
<td>• Formal educational qualifications&lt;br&gt;• Specialized or technical training&lt;br&gt;• Extensive work experience</td>
</tr>
<tr>
<td>High (60% to 79%)</td>
<td>• Supportive supervisor&lt;br&gt;• Leadership or managerial training&lt;br&gt;• Developmental assignments</td>
</tr>
<tr>
<td>Moderate (40% to 59%)</td>
<td>• Lateral move—within agency&lt;br&gt;• Acting in a position&lt;br&gt;• Contacts who knew selecting official&lt;br&gt;• Willingness to relocate&lt;br&gt;• Mentor (other than supervisor)&lt;br&gt;• Professional networking</td>
</tr>
<tr>
<td>Low (Fewer than 40%)</td>
<td>• Lateral move—to another agency</td>
</tr>
</tbody>
</table>
Importance of Career Accelerators

Some career accelerators were nearly universal, such as willingness to take on challenging assignments, which was claimed by 99 percent of respondents. Many were typical; most employees had them, now or in the past. Others, such as willingness to relocate, a mentor, and professional networking were less common.

Although prevalence varied considerably, respondents indicate that all the accelerators have the potential to aid career advancement. For every factor, over 60 percent of employees who possessed the factor indicated that its effect had been positive. However, that does not mean that every factor is equally important. Some factors appear to be essential; others may be desirable, or vary in importance depending on the organization, occupation, work situation, or the employee’s other factors. The table below groups the career factors by their perceived importance.

Table 3. Perceived importance of career accelerators among upper-level respondents

<table>
<thead>
<tr>
<th>Importance</th>
<th>Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Essential</strong></td>
<td>• Willingness to take on challenging assignments</td>
</tr>
<tr>
<td></td>
<td>• High quality of past performance</td>
</tr>
<tr>
<td></td>
<td>• Willingness to work long hours</td>
</tr>
<tr>
<td><strong>Important</strong></td>
<td>• Developmental assignments</td>
</tr>
<tr>
<td></td>
<td>• Supportive supervisor</td>
</tr>
<tr>
<td></td>
<td>• Mentor (other than supervisor)</td>
</tr>
<tr>
<td></td>
<td>• Formal educational qualifications</td>
</tr>
<tr>
<td></td>
<td>• Specialized or technical training</td>
</tr>
<tr>
<td></td>
<td>• Willingness to travel</td>
</tr>
<tr>
<td><strong>Potentially Valuable or Important</strong></td>
<td>• Leadership training</td>
</tr>
<tr>
<td></td>
<td>• Extensive work experience</td>
</tr>
<tr>
<td></td>
<td>• Acting in a position</td>
</tr>
<tr>
<td></td>
<td>• Contacts who knew selecting official</td>
</tr>
<tr>
<td></td>
<td>• Willingness to relocate</td>
</tr>
<tr>
<td></td>
<td>• Lateral move—withins the agency</td>
</tr>
<tr>
<td></td>
<td>• Lateral move—to another agency</td>
</tr>
<tr>
<td></td>
<td>• Professional networking</td>
</tr>
</tbody>
</table>

Next, we briefly discuss the career factors and their relevance to advancement. The intent of this discussion is to help employees understand the potential benefits of an activity or attribute and decide whether it is essential or important to their career goals.

**Willingness to take on challenging assignments and high quality of past performance.** There is no substitute for commitment and contribution. Despite concerns about favoritism, CAS respondents clearly believe that they earned their current positions through their accomplishments.

**Willingness to work long hours.** Endorsement of this career accelerator does not necessarily mean that an employee must work 80-hour weeks and forgo work/life balance to advance; relatively few employees believe that agencies base promotion decisions on how many hours employees work. Another interpretation is that an employee must be willing to do what is needed to complete high-priority projects and challenging assignments. In most circumstances, it may be possible to perform at a high level while working reasonable hours and maintaining a boundary between work and personal life. But it may also be necessary, on occasion,
to give priority to the organization's needs. In organizations or occupations where work is especially time-sensitive, those occasions may be quite frequent.

Developmental assignments. As discussed in the report, higher-level positions often involve new roles and competencies. Developmental assignments provide an opportunity for employees to develop and demonstrate those competencies and show that they can adapt to new stresses and responsibilities.

Supportive supervisor and mentor (other than supervisor). As stated in a previous MSPB report, “[employees should] appreciate the power and value of supervisors and mentors in career development. Employees who establish good working relationships with supervisors and mentors can enhance their access to developmental opportunities, communicate their interest in further advancement, and obtain valuable insights into their career options, strengths and developmental needs, and strategies for career growth.”117 A majority of employees who lacked a supportive supervisor viewed that absence as a hindrance.

Formal educational qualifications and specialized or technical training. Formal education may convey competencies and perspectives of enduring value. Employees seeking advancement, in both administrative and professional occupations, should seriously consider pursuing the education needed to put them on at least an equal footing with likely competitors. Specialized training and skills may be helpful in distinguishing an employee from her or his peers, both on the job and during competition for promotion. However, training and skills can become outdated or obsolete. Therefore, continuing education, through self-development, training courses, or professional networks may be necessary to maintain skills and visibility. Degrees and certificates may open doors, but they do not guarantee ascent to the top.

Willingness to travel. Even in positions that typically require little or no travel, occasional travel may be necessary to complete a challenging assignment, meet with high-level officials or stakeholders, or participate in a training program. Despite advances in technology and increasing acceptance of “virtual meetings,” there is not always a satisfactory substitute for a personal presence or a face-to-face meeting.

Leadership or management training. Research shows that supervisory and leadership roles require distinctive competencies and behaviors, in addition to a high level of proficiency in interpersonal skills, conflict management, and communication. Therefore, leadership and management training are likely essential for employees in, or seeking, supervisory and leadership roles. Even for employees who do not seek supervisory responsibilities, training in leadership-related subjects such as change management and conflict management may be useful.

Extensive work experience. Employees appear to indicate that, consistent with results from MSPB’s analysis of promotions, quality of experience matters more than quantity. Although some experience is needed to establish a track record and (for high-level positions) to meet qualification requirements, “more” is not necessarily better than “enough.” For example, extensive work experience may not be important in an emergent field, or extensive work experience may be less important for employees with outstanding credentials or a short but impressive resume.

Willingness to relocate. The importance of this factor may depend greatly on an employee’s ambitions, career field, and location. In some locations (such as the Washington, DC area and other metropolitan areas with a concentration of Federal installations), advancement opportunities may be ample; in others, opportunities will be scarce or nonexistent. Employees aspiring to an executive position should understand that geographic

---

mobility may be mandatory and that agencies typically have considerable discretion to reassign or relocate executives and other high-level officials.

**Lateral moves, within the agency or to another agency.** Relatively few employees had made a lateral move, but those who did so usually found it beneficial. Lateral moves may be particularly important when an employee needs skills or experience that cannot be readily acquired in the current position or line of work, or when promotional or developmental opportunities are lacking.

**Acting in a position and contacts who knew the selecting official.** These factors can help make an employee known to decision-makers. Observation of an employee, whether direct or indirect, may make hiring officials more confident about a candidate’s competencies and “fit” with the organization’s culture, improving the chances of selection. An acting assignment can also provide a realistic job preview and help an employee decide whether the acting position is a good fit for her or his interests and talents.

**Professional networking.** Professional networking can serve several purposes. First, it can support continuing professional education. Second, it can provide opportunities to assume leadership and technical expert roles. Third, it can signal an employee’s commitment to the profession or career field and increase an employee’s visibility. Finally, it can provide resources for both day-to-day work (through access to a community of practice) and career development. Although professional networking may be especially important in fields such as science, engineering, and medicine, it may also be useful in other fields.

### Differences in Career Accelerators between Women and Men

Women and men differed little on most career factors. There were some exceptions, which are summarized below.

**Table 19. Differences in career factors between women and men**

<table>
<thead>
<tr>
<th>Prevalence</th>
<th>More women than men had these factors—</th>
<th>Fewer women had these factors—</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Mentor (other than supervisor)</td>
<td>• Formal educational qualifications</td>
</tr>
<tr>
<td></td>
<td>• Developmental assignments</td>
<td>• Willingness to relocate</td>
</tr>
<tr>
<td></td>
<td>• Lateral move—within agency</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Lateral move—to another agency</td>
<td></td>
</tr>
<tr>
<td>Effect</td>
<td>Women reported a stronger effect\textsuperscript{118} than men for the following factors:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• High quality of past performance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Supportive supervisor</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Developmental assignments</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Lateral move—within agency</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Lateral move—to another agency</td>
<td></td>
</tr>
</tbody>
</table>

The reasons for these differences are not completely clear; they may include differences in occupation, career path (e.g., timing and method of entry into the current occupation), work/life issues and how they are managed, and approaches to career development and advancement. One possibility is that more women than men have followed a nontraditional career path—for example, entered an occupation in which members of the opposite sex predominate, or entered a professional or administrative occupation from a technical or clerical occupation—and that the factors listed above assume increased importance when trying to “break in” to a career field or organization.

\textsuperscript{118} Compared to men, more women who had the factor reported that it had positively affected their career, more women who did not have the factor reported that its absence had negatively affected their career, or both.
Summary

There is no single route to career success. The importance of a particular career accelerator will depend on the employee’s career goals, previous education and accomplishments, and the unique requirements and demands of an employee’s organization, occupation, and position. But clearly, any employee seeking advancement should demonstrate—through performance, expressions of interest, and personal development—readiness for higher-level responsibilities. Any employee seeking advancement should identify the specific requirements for success in her or his chosen career field and strive to meet them.
Women in the Federal Government:
AMBITIONS AND ACHIEVEMENTS

MAY 2011