

August 2006

THE FEDERAL WORKFORCE

Additional Insights Could Enhance Agency Efforts Related to Hispanic Representation



G A O

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Highlights of [GAO-06-832](#), a report to congressional requesters

Why GAO Did This Study

Hispanic representation in the federal workforce has historically been lower than in the Civilian Labor Force (CLF). Understanding factors affecting representation is important to developing and maintaining a high-quality and inclusive workforce. In this report, GAO identifies and analyzes factors affecting Hispanic representation in the federal workforce, examines oversight roles of EEOC and OPM, and provides illustrations of selected federal agencies' efforts with respect to Hispanic representation. GAO constructed a multivariate logistic regression model, with advice from experts, to determine how factors affected the likelihood of Hispanics and non-Hispanics being in the federal versus nonfederal workforce. GAO's analyses are not intended to and do not show the existence or absence of discrimination in the federal workforce.

What GAO Recommends

GAO recommends that EEOC and OPM take citizenship into account when comparing federal workforce representation to the CLF to provide a more complete picture of, and reasons for, differences in representation. In comments on a draft of this report, EEOC said citizenship data are important but EEOC did not address GAO's recommendations. OPM provided minor technical comments, which we incorporated as appropriate, but did not otherwise comment on the report or recommendations.

www.gao.gov/cgi-bin/getrpt?GAO-06-832.

To view the full product, including the scope and methodology, click on the link above. For more information, contact George H. Stalcup at (202) 512-9490 or stalcupg@gao.gov.

THE FEDERAL WORKFORCE

Additional Insights Could Enhance Agency Efforts Related to Hispanic Representation

What GAO Found

U.S. citizenship and educational attainment had the greatest effect, of the measurable factors we identified, on Hispanic representation in the federal workforce. Our statistical model showed that when accounting for citizenship, required for most federal employment, Hispanics were nearly as likely as non-Hispanics to be employed in the federal workforce, relative to the nonfederal workforce (the portion of the CLF excluding federal employees). In addition, the federal workforce has a greater proportion of occupations that require higher levels of education than the CLF. When we compared citizens with similar levels of education, Hispanics were more likely than non-Hispanics to be employed in the federal workforce relative to the nonfederal workforce. Other factors in our model, including age, gender, race, veteran's status, English proficiency, and geography (state where employed), had a more limited or almost no effect on the likelihood of Hispanics being in the federal workforce.

In addition to reporting and comparing representation levels overall and in subsets of the federal workforce to the CLF, EEOC and OPM require that agencies analyze their own workforces. However, the CLF benchmarks of representation that EEOC, OPM, and the agencies use do not differentiate between citizens and noncitizens, and therefore do not identify how citizenship affects the pool of persons qualified to work for the federal government. Where these analyses identify differences in representation, EEOC, for example, requires agencies to determine if there are barriers to participation and develop strategies to address them. OPM provides resources and guidance to assist agencies in implementing human capital strategies. Through these efforts, OPM has promoted the use of student employment programs as a source of qualified candidates. Analyzing agency use of these programs, including the extent to which agencies convert participants to permanent employment, could provide OPM with valuable information to assist agencies in maximizing the use of these programs in their strategic workforce planning.

The agencies we reviewed use a variety of approaches to address Hispanic representation, including recruiting at colleges and universities with large Hispanic populations, publicizing employment opportunities in Hispanic media, reaching out to Hispanic communities and Hispanic-serving organizations, and using student employment, internship, career development, and training programs. For example, the U.S. Air Force partners with vocational-technical schools to develop aircraft maintenance technicians, and staff at selected National Aeronautics and Space Administration facilities mentor and tutor students to encourage careers in science, technology, engineering, and math.

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Abbreviations

ACE	American Council on Education
ACS	American Community Survey
ASEC	Annual Social and Economic Supplement
BLS	Bureau of Labor Statistics
CFO	Chief Financial Officer
CFR	Code of Federal Regulations
CLF	Civilian Labor Force
CPDF	Central Personnel Data File
CPS	Current Population Survey
CSC	Civil Service Commission
CSRA	Civil Service Reform Act
DDCDP	District Director Candidate Development Program
DOJ	Department of Justice
DOL	Department of Labor
DRB	Disclosure Review Board
EEO	Equal Employment Opportunity
EEOC	Equal Employment Opportunity Commission
FAA	Federal Aviation Administration
FCIP	Federal Career Intern Program
FEORP	Federal Equal Employment Opportunity Recruitment Program
FNS	Food and Nutrition Service
HACU	Hispanic Association of Colleges and Universities
HCAAF	Human Capital Accountability and Assessment Framework
LULAC	League of United Latin American Citizens
MBA	Masters of Business Administration
MD	Management Directive
MSPB	Merit Systems Protection Board
NASA	National Aeronautics and Space Administration
NCLR	National Council of La Raza
NSPS	National Security Personnel System
OPM	Office of Personnel Management
PATCOB	Professional, Administrative, Technical, Clerical, Other White-Collar, and Blue-Collar
PMF	Presidential Management Fellows
PUMS	Public Use Microdata Sample
SBA	Small Business Administration
SCEP	Student Career Experience Program
SES	Senior Executive Service
SL/ST	Senior Level/Senior Technical
SSA	Social Security Administration

Contents

USAF United States Air Force
USPS United States Postal Service

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August 17, 2006

Congressional Requesters

Hispanics are the fastest-growing segment of the Civilian Labor Force (CLF),¹ with their representation having increased from 8.5 percent in 1990 to 12.6 percent in 2005. The Equal Employment Opportunity Commission (EEOC) and the Office of Personnel Management (OPM) have reported that Hispanic representation in the federal workforce has also increased, but remains lower in the federal workforce than in the CLF. For 2005, OPM reported that Hispanics were 7.4 percent of the federal workforce, up from 5.3 percent in 1990.²

Previous studies have identified factors that can affect Hispanic representation in the federal workforce but generally did not assess the extent to which these factors influence representation. Understanding how the factors affect Hispanic representation in the federal workforce is important to guiding agency efforts, under the leadership of OPM and EEOC, to develop approaches to recruit, develop, and retain a high-quality workforce that uses the talents of individuals from all segments of society. In this report, prepared in response to your request, we (1) identify and analyze the factors that are affecting Hispanic representation in the federal workforce, (2) examine the steps that EEOC and OPM, in their oversight roles, are taking related to Hispanic representation, and (3) illustrate the efforts within selected federal agencies related to Hispanic representation. We will also be providing additional data on Hispanic representation in the federal workforce under separate cover.

In accomplishing our objectives, we interviewed federal agency officials and representatives from Hispanic-serving organizations and reviewed previous studies to identify factors that can affect Hispanic representation. To determine the effect of these factors on Hispanic representation in the federal workforce, we constructed a multivariate logistic regression model

¹The CLF is defined as those 16 and older (including federal workers) who are employed or looking for work and not in the military or institutionalized.

²These percentages are based on the permanent federal workforce.

using 2000 Decennial Census data.³ Logistic regression analysis is a very common and widely accepted approach to analyze outcomes that have two possibilities (such as being in the federal vs. nonfederal workforce) when the interest is in determining the net effects of multiple factors that may be related to one another. We used the model to measure the extent to which the identified factors that could be reliably measured affected the likelihood of Hispanics and non-Hispanics being in the federal workforce, as opposed to the nonfederal workforce. In developing the model, we obtained the opinions of experts identified by the National Academy of Sciences as well as officials from EEOC, OPM, the Department of Justice (DOJ), and the Census Bureau. We also obtained the experts' views on the preliminary results of our analyses. Our analyses are not intended to and do not show either the existence or absence of discrimination against Hispanics or any other group in the federal workforce. Our analyses are at an aggregate level encompassing all occupations governmentwide and do not reflect factors that affect representation within individual agencies, individual occupations, different geographic areas, or any other subsets of the federal government.

To examine the steps that EEOC and OPM have taken in their oversight of Hispanic representation, we reviewed the statutes, regulations, and policies relating to Hispanic representation in the federal workforce; interviewed EEOC and OPM officials; reviewed relevant documents; and analyzed data on Hispanic representation governmentwide.

To illustrate the efforts related to Hispanic representation within federal agencies, we selected five agencies—the U.S. Air Force (USAF), Food and Nutrition Service (FNS) of the U.S. Department of Agriculture, National Aeronautics and Space Administration (NASA), Small Business Administration (SBA), and Social Security Administration (SSA)—representing different employee populations, geographic locations, and concentrations of jobs by grade level and occupational categories. We interviewed representatives from the selected agencies and reviewed relevant documents. We also reviewed documents provided by and spoke with officials from the White House Initiative on Educational Excellence for Hispanic Americans. We conducted our work from October 2004 to

³For purposes of our logistic regression models, we divided the CLF into two groups—the federal workforce and the nonfederal workforce, and we restricted our analyses to individuals 18 and older because, with a few exceptions, 18 years is the minimum age for federal employment.

June 2006 in accordance with generally accepted government auditing standards. The details of our objectives, scope, and methodology are in appendix I.

Results in Brief

U.S. citizenship and educational attainment had the greatest effect, of the measurable factors we identified, on Hispanic representation in the federal workforce, relative to the nonfederal workforce. Our statistical model showed that after accounting for citizenship, Hispanics were nearly as likely as non-Hispanics to be employed in the federal workforce, relative to the nonfederal workforce (the portion of the CLF excluding federal employees). Citizenship is required for most federal employment and, in 2005, 99.7 percent of executive branch employees were U.S. citizens or nationals. In addition, a greater proportion of federal occupations require higher levels of education than in the CLF. Our statistical model showed that, as a result, when we compared citizens with similar levels of education, Hispanics were 16 percent or 1.16 times more likely than non-Hispanics to be employed in the federal workforce than in the nonfederal workforce. Other factors in our model, including age, gender, race, veteran's status, English proficiency, and geography (state where employed), had a more limited or almost no effect on the likelihood of Hispanics being employed in the federal workforce. When all factors were considered, our analyses showed that Hispanic citizens were 24 percent or 1.24 times more likely than non-Hispanic citizens to be employed in the federal workforce than in the nonfederal workforce. Our analyses did not account for differences across and within individual agencies, by grade and pay level, occupational category, individual occupation, geographic location, or any other subset of the federal workforce.

In their respective oversight roles, both EEOC and OPM compare and report representation levels overall and in subsets of the federal workforce and require that agencies conduct analyses of their own workforces. EEOC, for example, requires that agencies compare representation of racial, ethnic, and gender groups in major occupations to representation in similar occupations in the CLF. Where these analyses identify differences in representation, EEOC requires agencies to determine if there are barriers to participation and, if so, develop strategies to address them. However, the CLF benchmarks that EEOC, OPM, and agencies use to compare representation do not differentiate between citizens and noncitizens, and therefore do not identify how citizenship affects the pool of persons qualified to work for the federal government. Such information can help to provide a more complete picture of where differences in representation

may exist. OPM provides guidance and resources to assist agencies in implementing human capital strategies. Through these efforts, OPM has promoted broad outreach to all segments of society and has promoted establishing relationships with colleges and universities and the use of student employment programs as a source of qualified candidates. Analyzing data on agency use of student employment programs, including conversion rates of participants to permanent employment, could provide OPM with valuable information to assist agencies in incorporating student employment programs into their strategic workforce planning as they seek to recruit and develop talented employees to support agency missions; ensure that they can meet their professional, technical, and administrative needs; and achieve a diverse, quality workforce.

The agencies we reviewed used a variety of approaches to address Hispanic representation at their agencies. These approaches included recruiting at colleges and universities with large Hispanic populations, publicizing employment opportunities in Hispanic media, reaching out to Hispanic communities and Hispanic-serving organizations, and using student employment, internship, career development, and training programs. For example, the USAF partnered with vocational-technical schools to develop aircraft maintenance technicians and NASA staff mentored and tutored students to encourage careers in science, technology, engineering, and math.

We recommend that the Chair of EEOC and the Director of OPM take citizenship into account in their comparisons of federal workforce representation to the CLF. We also recommend that the Director of OPM provide additional tools for agencies to assess the effectiveness of student employment programs, such as conversion rates to permanent employment by racial/ethnic group.

We provided the Chair of EEOC, the Director of OPM, the Attorney General, and the Secretary of Commerce with a draft of this report for their review and comment. DOJ and the Department of Commerce had no comments. In its written comments, EEOC said it found the report to be a useful addition to the ongoing examination of Hispanic representation in the federal workforce and plans to use the report as a resource. EEOC agreed that citizenship data are important. However, EEOC did not specifically address our recommendation that it take citizenship into account in its comparison of federal workforce representation to the CLF. EEOC also said that while citizenship data are a useful benchmark for broad trending, more refined analyses are necessary, including analyses of

applicant pools and participation rates for specific occupations. OPM provided minor technical comments but did not otherwise comment on the report or our recommendations.

Background

For more than 35 years, the federal government has implemented authorities—applicable to various demographic groups and some specific to Hispanics—calling for agencies to ensure equal opportunity in the federal workplace. EEOC and OPM or its predecessor agency, the Civil Service Commission (CSC), have leadership roles in furthering these authorities. Signed in 1969, Executive Order No. 11478, *Equal Employment Opportunity in the Federal Government*, stated that it is the policy of the U.S. government to provide equal opportunity in federal employment. Later, Congress passed the Equal Employment Opportunity Act of 1972, which extended to federal workers the protections of title VII of the Civil Rights Act of 1964 prohibiting employment discrimination on the basis of race, color, religion, gender, or national origin. This law requires each federal department and agency to prepare plans to maintain an affirmative program of equal employment opportunity and establish training and education programs. Pursuant to this and other authorities, EEOC establishes equal employment program standards, monitors federal agencies' compliance with equal employment opportunity laws and procedures, and reviews and assesses the effectiveness of agencies' equal employment programs. EEOC has carried out its responsibilities by issuing regulations and management directives providing guidance and standards to federal agencies for establishing and maintaining effective programs of equal employment opportunity.

The Civil Service Reform Act (CSRA) of 1978 established the merit principles governing employment in the federal workforce. The first merit principle states:

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 assures that all receive equal opportunity.⁴

The CSRA also created the Federal Equal Opportunity Recruitment Program (FEORP) to carry out the government's policy to ensure equal

⁴U.S.C. sec. 2301(b)(1).

employment opportunity. The act required OPM to evaluate and oversee agency programs and issue implementing regulations for the program. These regulations provide that recruitment processes prepare qualifiable applicants (those who have the potential but do not presently meet valid qualification requirements) for job openings through development programs.

Programs specific to Hispanics include the 16-Point Program for Spanish-Speaking citizens, established in 1970, which outlined steps agencies should take to ensure equal opportunity in federal employment for Hispanics. In 1997, OPM implemented the 9-Point Plan calling for agencies to recruit greater numbers of qualified Hispanic Americans for federal service and improve their opportunities for management and senior executive positions. More recently, Executive Order No. 13171, *Hispanic Employment in the Federal Government*, signed in 2000, provides that agencies, among other actions, (1) develop recruiting plans for Hispanics and (2) assess and eliminate any systemic barriers to the effective recruitment and consideration of Hispanics. The order requires OPM to take the lead in promoting diversity to executive agencies and for the director of OPM to establish and chair an Interagency Task Force on Hispanic employment in the federal government to review best practices, provide advice, assess overall executive branch progress, and recommend further actions related to Hispanic representation.⁵

As an indicator to Congress and the President of the government's progress toward ensuring equal employment opportunity, both EEOC and OPM, in their oversight roles, analyze and report on governmentwide and agency workforce data. The most recent data show that in September 2005, Hispanics constituted 7.4 percent of the permanent federal workforce while making up 12.6 percent of the CLF. While both EEOC and OPM report these data annually, neither agency has assessed on a governmentwide level the factors contributing to the differences in Hispanic representation between the two workforces.

⁵For further discussion on the government's policy framework for equal employment opportunity and EEOC's and OPM's roles and responsibilities, see GAO, *Equal Employment Opportunity: The Policy Framework in the Federal Workplace and the Roles of EEOC and OPM*, [GAO-05-195](#) (Washington, D.C.: Apr. 29, 2005) and *Equal Employment Opportunity: Improved Coordination Needed Between EEOC and OPM in Leading Federal Workplace EEO*, [GAO-06-214](#) (Washington, D.C.: June 16, 2006).

Citizenship and Education Had the Largest Effect on Hispanic Representation in the Federal Workforce

Citizenship and educational attainment had the most effect on the likelihood of Hispanics' representation in the federal workforce, relative to the nonfederal workforce.⁶ Other measurable factors in our statistical model—gender, veteran's status, race, English proficiency, age, disability status, school attendance (enrolled or not enrolled), employment status (full or part-time), and geography (state where employed)—had a more limited or almost no effect on the likelihood of Hispanics being in the federal workforce.⁷ When we analyzed the effect of all the factors simultaneously, we found that, among citizens, Hispanics were 24 percent or 1.24 times more likely than non-Hispanics to be employed in the federal workforce than in the nonfederal workforce. (See app. II for a detailed discussion of the steps we took to conduct our analyses and our results.)

Effect of Citizenship

Our analysis showed that citizenship had the greatest effect of the factors we analyzed on Hispanics' representation in the federal workforce. We analyzed the effect of citizenship before analyzing any other individual factor because of long-standing policy and practice to restrict federal government hiring to U.S. citizens and nationals—99.7 percent of federal executive branch employees were U.S. citizens or nationals in 2005. (See app. III for a discussion of the federal government's policy and practice on the employment of citizens.) Before accounting for the effect of citizenship, Hispanics 18 and older were 30 percent less likely than non-Hispanics to be employed (i.e., represented) in the federal workforce, relative to the nonfederal workforce. However, when we analyzed the likelihood of only citizens 18 and older being employed in the federal workforce, we found that Hispanics were 5 percent less likely than non-Hispanics to be employed in the federal workforce compared to their representation in the nonfederal workforce.

⁶Our multivariate analyses identifying citizenship and educational attainment as the primary factors accounting for Hispanics' lower levels of representation in the federal workforce compared to the nonfederal workforce was limited to the aggregate federal workforce. Our analyses did not account for differences across and within individual agencies, by grade and pay level, occupational category, occupation, geographic location, or any other subset of the federal workforce.

⁷Because of limitations in the data and the methods we used, we did not include in our analyses some variables that were identified during the course of our research that could potentially affect Hispanic representation in the federal workforce. These limitations are discussed in app. II.

Our analysis of 2000 Census data showed that Hispanics had lower citizenship rates than other racial/ethnic groups, with the exception of Asians who had similar rates. In 2000, of those 18 and older in the combined federal and nonfederal CLF, 65 percent of the Hispanics were U.S. citizens compared with 95 percent of blacks, 96 percent of whites, 65 percent of Asians, 87 percent of Hawaiians/Pacific Islanders, and 96 percent of American Indians/Native Alaskans. Additionally, Hispanic immigrants have lower naturalization rates than other immigrant groups. According to the Pew Hispanic Center, 27 percent of the adult foreign-born Hispanic population in the United States were naturalized citizens in 2004 compared with 54 percent of the adult foreign-born non-Hispanic population.

Hispanic-serving organizations have undertaken citizenship initiatives. For example, the League of United Latin American Citizens (LULAC) encourages legal residents of the United States to become citizens and reports that it conducts a national drive to have those eligible for citizenship apply for and attain citizenship.

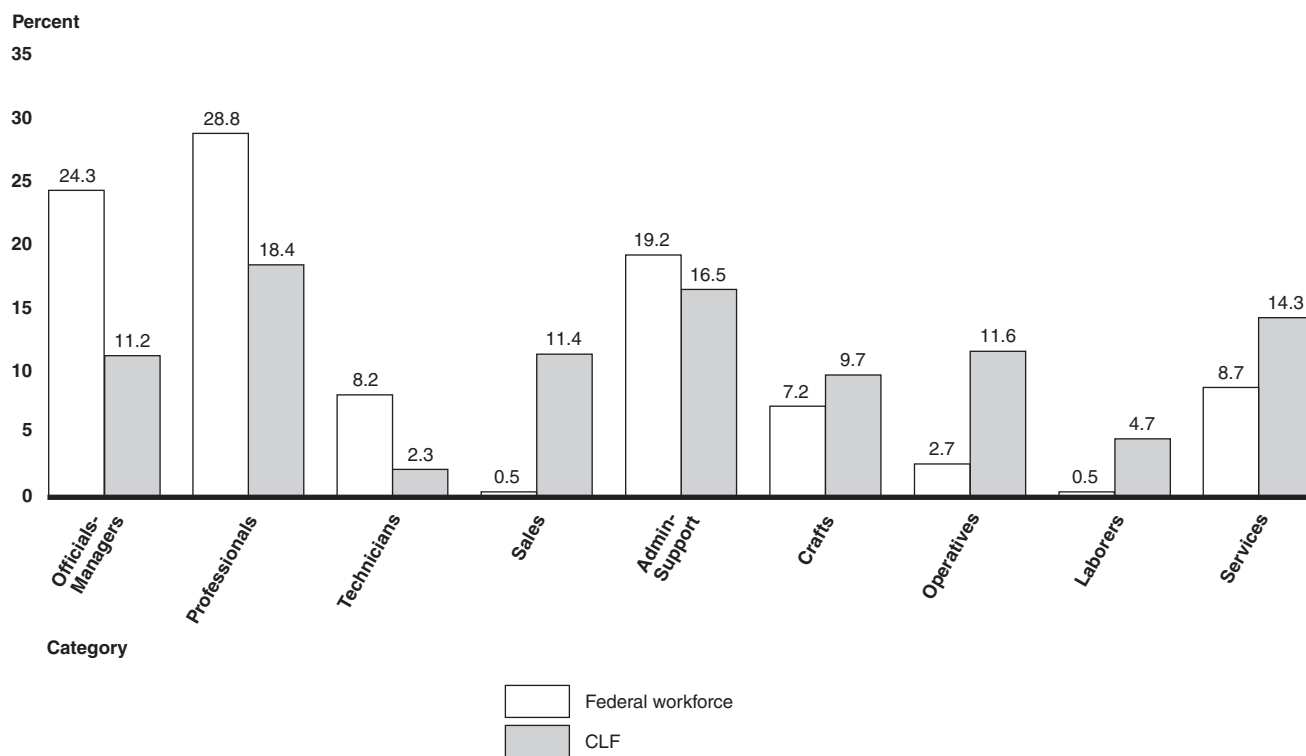
Effect of Education

After citizenship, education had the largest effect on Hispanic representation in the federal workforce. We compared Hispanic and non-Hispanic citizens with similar levels of education. We limited our examination of the effect of education to citizens because citizenship is a basic qualification for most federal employment. As discussed above, among citizens, Hispanics were 5 percent less likely to be employed in the federal government. After accounting for education, Hispanic citizens were 1.16 times or 16 percent more likely than similarly educated non-Hispanic citizens to be in the federal workforce than the nonfederal workforce.

The federal workforce contains a greater percentage of occupations that require higher levels of education than the CLF. EEOC divides occupations in the federal workforce and the CLF into nine categories, including among others professionals, operatives, and laborers. For example, in 2000, the year in which EEOC data on the CLF are based, occupations in the professional category—those occupations, such as lawyers, engineers, accountants, and registered nurses, requiring either college graduation or experience of such kind and amount as to provide a comparable background—constituted 29 percent of the federal workforce versus 18 percent of the CLF. Conversely, occupations in the operatives (semiskilled workers) and laborers (unskilled workers) categories, which generally do not require high education levels, constituted 3 percent of the federal

workforce compared to 16 percent of the CLF. Figure 1 shows the composition of the federal workforce and the CLF by EEOC's occupational categories.

Figure 1: Composition of Federal Workforce and CLF by EEOC's Nine Occupational Categories, 2000



Source: GAO analysis of the 2000 Central Personnel Data File (CPDF) and the Census 2000 Special EEO File.

Note: Federal workforce percentages do not reflect individuals that could not be classified into categories, and CLF percentages do not reflect individuals that were unemployed.

Our analyses showed that the likelihood of being a federal worker increased with higher levels of education. A person with some college was 1.7 times more likely to be a federal worker than a person with only a high school diploma, a person with a bachelor's degree was 2.2 times more likely, and a person with more than a bachelor's degree was 2.7 times more likely. OPM reported that in 2004, 42 percent of federal workers had a bachelor's degree or higher. In addition, approximately 60 percent of new permanent hires to the federal government in 2005 had at least some

college—20 percent with some college, 23 percent with a bachelor’s degree, and 17 percent with more than a bachelor’s degree.

Our analysis of 2000 Census data showed that regardless of citizenship status, Hispanics overall have lower educational attainment than other groups, with non-U.S. citizens having the lowest levels of educational attainment. Among citizens in the CLF 18 and older, as table 1 shows, Hispanics had a higher percentage of those without a high school diploma—26.4 percent—and lower percentage of those with a bachelor’s degree or higher—15.4 percent—than most other racial/ethnic groups.

Table 1: Highest Level of Educational Attainment among U.S. Citizens 18 and Older in the CLF by Ethnicity/Race, 2000

Percent						
Highest level of education	Hispanic	White	Black	Asian	Hawaiian/ Pacific Islander	American Indian/ Alaska Native
Less than high school diploma	26.4	10.1	18.0	10.5	12.5	17.6
High school diploma	27.0	27.9	30.7	15.8	33.1	29.6
Some college	31.2	33.2	34.5	29.7	37.0	37.3
Bachelor’s degree	10.6	18.8	11.5	28.3	12.4	10.1
Graduate degree	4.8	10.1	5.3	15.7	5.0	5.3

Source: GAO analysis of 2000 Census data.

When noncitizens were included, as table 2 below shows, the proportion of Hispanics with less than a high school diploma increased and the proportion having bachelor’s degree or higher decreased.

Table 2: Highest Level of Educational Attainment among U.S. Residents 18 and Older in the CLF by Ethnicity/Race, 2000

Percent						
Highest level of education	Hispanic	White	Black	Asian	Hawaiian/ Pacific Islander	American Indian/ Alaska Native
Less than high school diploma	39.0	11.3	18.4	13.2	15.3	19.3
High school diploma	24.2	27.5	30.5	15.8	32.4	29.2
Some college	24.6	32.6	34.2	25.8	35.4	36.3
Bachelor's degree	8.2	18.5	11.5	27.4	12.0	9.9
Graduate degree	4.0	10.1	5.4	17.9	4.9	5.3

Source: GAO analysis of 2000 Census data.

Educational attainment for Hispanics 18 and older in the CLF who were not citizens was lower compared with those who were U.S. citizens. Table 3 shows that, among Hispanics in the CLF who were not U.S. citizens, 62.8 percent had less than a high school diploma while 6.2 percent had a bachelor's degree or higher.

Table 3: Highest Level of Educational Attainment among Non-U.S. Citizens 18 and Older in the CLF by Ethnicity/Race, 2000

Percent						
Highest level of education	Hispanic	White	Black	Asian	Hawaiian/ Pacific Islander	American Indian/ Alaska Native
Less than high school diploma	62.8	39.9	26.2	18.4	32.9	54.9
High school diploma	19.0	20.2	26.3	15.8	27.8	20.4
Some college	12.0	18.1	28.4	18.4	25.3	14.7
Bachelor's degree	3.6	11.5	12.2	25.7	9.8	6.1
Graduate degree	2.6	10.3	6.8	21.8	4.2	3.9

Source: GAO analysis of 2000 Census data.

In addition to having lower educational attainment levels than other racial/ethnic groups, there were differences in Hispanics' educational patterns. For example, Hispanics have enrolled in 2-year colleges at a higher rate than other racial/ethnic groups. According to data reported in the American Council on Education's *Minorities in Higher Education*,

Twenty-First Annual Status Report, 2003–2004, 59 percent of Hispanics enrolled in postsecondary institutions are enrolled in community colleges, compared to 37 percent of whites, 43 percent of blacks, 41 percent of Asians, and 50 percent of American Indians. In addition, Hispanics are less likely than other groups to complete a bachelor's degree. According to data from the National Center for Education Statistics' *National Educational Longitudinal Study* beginning in 1988,⁸ by age 26, 47 percent of white students who had enrolled in postsecondary education had completed a bachelor's degree compared to 23 percent of Hispanics—lower than other racial/ethnic groups.⁹

The federal government and Hispanic-serving organizations have implemented initiatives to address gaps in Hispanics' educational achievement. In October 2001, Executive Order No. 13230 created the President's Advisory Commission on Educational Excellence for Hispanic Americans, within the U.S. Department of Education, to examine issues related to the achievement gap between Hispanic Americans and their peers. The commission issued an interim report in September 2002, *The Road to a College Diploma: The Complex Reality of Raising Educational Achievement for Hispanics in the United States*, and a final report in March 2003, *From Risk to Opportunity: Fulfilling the Educational Needs of Hispanic Americans in the 21st Century*. The commission's final report, concluding its work, contained six recommendations, which encompassed the entire education continuum, from early childhood through postsecondary, as well as federal accountability and coordination and research. According to the White House Initiative on Educational Excellence for Hispanic Americans, which provided the staff support and assistance to the commission and continues to work within the Department of Education, it is taking steps to implement the commission's six recommendations and is working with the Department of Education, other federal agencies, and public and private organizations.

In addition to federal government initiatives, Hispanic-serving organizations also have ongoing efforts to improve the educational

⁸The Longitudinal study tracked a sample of students from 1988, when they were in the eighth grade, to 2000.

⁹Watson Scott Swail, Alberto F. Cabrera, Chul Lee, *Latino Youth and the Pathway to College*, Educational Policy Institute (Washington, D.C.: June 23, 2004), www.pewhispanic.org, 38–39. The study was conducted through a grant from the Pew Hispanic Center.

attainment of Hispanics. According to LULAC, the organization has 16 counseling centers whose mission is to increase educational opportunities and attainment for Hispanic Americans through the development and implementation of programs in Hispanic communities throughout the United States. LULAC also reports that it provides educational counseling, scholarships, mentorships, leadership development, and literacy programs. According to its Web site, the National Council of La Raza (NCLR) works to build and strengthen community-based educational institutions, to improve the quality of instruction for Hispanic students, and to more effectively involve Hispanic families in the education of their children. NCLR reports that its education program services and activities are targeted to over 300 affiliated organizations while its education policy work addresses national issues in public education. NCLR also reports that it cochairs the Hispanic Education Coalition, an ad hoc coalition of national organizations dedicated to improving educational opportunities for Latinos living in the United States and Puerto Rico. Other organizations such as the Hispanic College Fund also work to provide college scholarships for Hispanic youth.

EEOC and OPM Have Taken Steps in Their Oversight Roles to Address Hispanic Representation

In their respective oversight roles, both EEOC and OPM report representation levels of racial, ethnic, and gender groups overall and in subsets of the federal workforce and require that agencies conduct analyses of their own workforces. However, the benchmarks that EEOC, OPM, and agencies use to compare federal workforce representation levels to the CLF do not differentiate between citizens and noncitizens, and therefore do not identify how citizenship affects the pool of persons qualified to work for the federal government. Where differences in representation occur, such as within occupations or by grade, agencies are to determine if there are barriers to participation and, if so, develop strategies to address any barriers. OPM provides human resource guidance and resources to agencies to assist agencies in implementing these strategies.

EEOC and OPM Reports on the Federal Workforce

In its *Annual Report on the Federal Workforce*, prepared pursuant to its oversight responsibilities, EEOC provides data on the representation of racial, ethnic, and gender groups, including Hispanics, compared to the CLF overall, by senior pay and average grade level, and for selected agencies with 500 or more employees. To make its comparisons, EEOC uses the Census 2000 Special EEO File, which provides workforce data on the CLF. The Census 2000 Special EEO File is a special tabulation

constructed by the U.S. Census Bureau according to the specifications of, and under a reimbursable agreement with, a consortium of agencies—EEOC, OPM, DOJ, and the Department of Labor (DOL). The Special EEO File, which has been prepared every 10 years since 1970 based on the Decennial Census, serves as the primary external benchmark to compare the racial, ethnic, and gender composition of each employer’s workforce to its available labor market. The datasets on the Census 2000 Special EEO Tabulation present data on race and ethnicity cross-tabulated by other variables such as detailed occupations, occupational groups, gender, worksite geography, residence geography, education, age, and industry. Data are available at the national level and by state, metropolitan area, county, and place.¹⁰

However, the Census 2000 Special EEO File data does not include citizenship data. According to a Census Bureau official, at DOJ’s request, the Census 2000 Special EEO File specifications originally included citizenship data for metropolitan statistical areas in four states for persons in the CLF 20 to 34 years of age, with 4 or more years of high school, by race and ethnicity. Because of narrow data specifications, concerns were raised about the privacy of Census respondents and the request was withdrawn. The consortium and Census are planning the 2010 Special EEO File, which will be based on 5 years (2005–2009) of American Community Survey (ACS) data—which is replacing the long form of the Decennial Census. Subsequent to the completion of our audit work, EEOC sent a letter requesting that the Census Bureau review the possibility of including citizenship data in the 2010 Special EEO File. According to the Census Bureau, citizenship data can be included but at an additional cost to consortium members based on the extent of data requested (e.g., geographic or occupational specificity) and amount of staff and programming resources to produce the requested data. In addition, the Census Bureau said that the extent of geographic or occupational specificity of citizenship data could be limited based on the risk of disclosing the identity of a respondent. Census Bureau officials also noted that because the 2010 Special EEO File will be based on a 5-year roll up of

¹⁰In order to protect the confidentiality of Census 2000 respondents, data are not provided for places of less than 50,000 population (or 100,000 in some instances). For counties of less than 50,000, data are not provided for more detailed occupational groupings. The Census Bureau’s Disclosure Review Board (DRB) reviews the specifications of all Census data products to determine that no product format is approved that contains any degree of risk to disclose the identity of Census 2000 respondents.

annual ACS data, current plans are to produce an updated Special EEO File every 5 years.

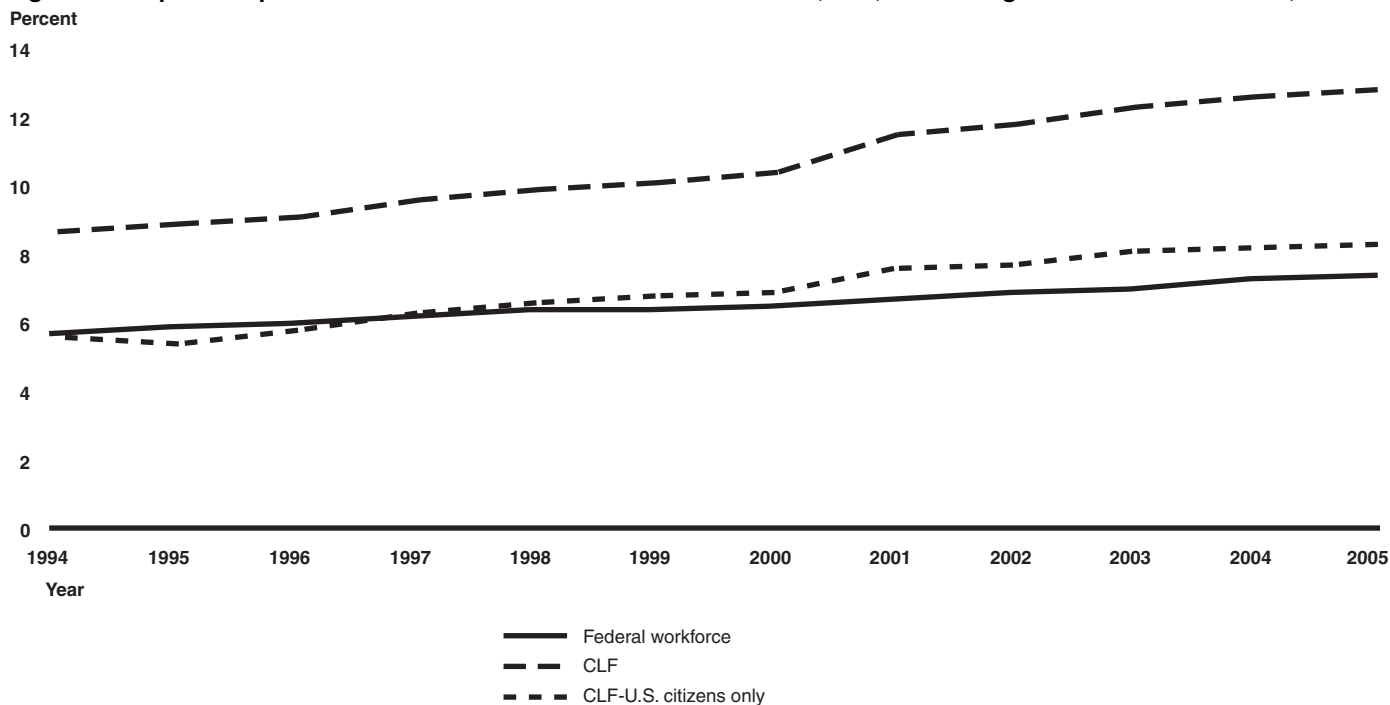
OPM also presents data on Hispanic representation in its reports to the President under Executive Order No. 13171 and to Congress under the FEORP. In its *Annual Report to the President on Hispanic Employment in the Federal Government*, prepared pursuant to Executive Order No. 13171, and in *Statistical Information on Hispanic Employment in Federal Agencies*, OPM has included data on Hispanic representation overall, for each agency, by pay plan/group, and among new hires.¹¹ The FEORP report compares overall representation levels in the federal workforce to the CLF and provides representation levels by pay group, in occupational categories, and within each agency. OPM also uses the Census 2000 Special EEO File when comparing representation of women and minorities within agencies to the relevant CLF (the labor force comprising only the particular occupations for the particular agency) for its FEORP report. However, in making comparisons of the demographic composition of the overall federal workforce to the CLF for the FEORP and the statistical reports on Hispanic employment, OPM has used the Current Population Survey (CPS). By using the CPS, OPM reports more-current CLF data than EEOC's and reflects the changing composition of the CLF. At the time of our review, OPM was benchmarking to the September 2005 CPS, which showed Hispanic representation in the CLF to be 12.6 percent. In its *Annual Report on the Federal Workforce*, EEOC uses the 2000 Special EEO File as its benchmark showing Hispanic representation in the CLF to be 10.7 percent. Although using the CPS enables OPM to report more-current data on Hispanic representation in the CLF, OPM does not distinguish between citizens and noncitizens in its analysis of the CPS data.

Figure 2 shows Hispanic representation in the permanent federal workforce compared to the CLF with and without noncitizens from 1994 to 2005, based on data from the CPS and OPM. These data show how citizenship affects the pool of Hispanics eligible for federal employment

¹¹Until June 2005, OPM had issued annually the *Statistical Information on Hispanic Employment in Federal Agencies*, which contained more detailed data on Hispanic representation than the *Annual Report to the President on Hispanic Employment in the Federal Government*. In commenting on a draft of this report, OPM said it plans to consolidate the *Statistical Information on Hispanic Employment in Federal Agencies* report into the *Annual Report to the President* beginning with the report to be issued at the end of calendar year 2006.

and that, when only citizens are considered in the CLF, Hispanic representation in both the federal workforce and CLF is more comparable.

Figure 2: Hispanic Representation in the Permanent Federal Workforce, CLF, and among U.S. Citizens in the CLF, 1994–2005



Source: OPM's *Hispanics in the Federal Government, A Statistical Profile*, for 1994 federal workforce data, and OPM's *Fifth Annual Report to the President on Hispanic Employment in the Federal Government* for 1995–2004 federal workforce data. GAO analysis of the Current Population Survey (CPS), 1994–2002 *Annual Demographic File* and CPS, 2003–2005 *Annual Social and Economic Supplement* for the CLF data.

Note: Prior to 1994, citizenship was not a variable in the CPS.

EEOC and OPM Guidance on Workforce Analyses

EEOC's Management Directive 715 (MD-715) provides guidance and standards to federal agencies for establishing and maintaining effective equal employment opportunity programs, including a framework for agencies to determine whether barriers to equal employment opportunity exist and to identify and develop strategies to mitigate the barriers to participation. EEOC defines barriers as agency policies, principles, or practices that limit or tend to limit employment opportunities for members of a particular gender, race, or ethnic background, or based on an individual's disability status. EEOC requires agencies to report the results of their analyses annually.

The initial step is for an agency to analyze its workforce data with designated benchmarks. As part of this analysis, in addition to comparing the overall workforce to the CLF, EEOC instructs agencies to compare major (mission-related and heavily populated) occupations to the CLF in the appropriate geographic area in order to get a more accurate picture of where differences in representation may exist and to guide further analysis. Agencies may use the Census 2000 Special EEO File and the Census 2000 EEO Data Tool, which allows agencies to tailor the Special EEO File data in accordance with EEOC instructions. In their analyses, agencies may find that Hispanic representation in some of their major occupations is higher than in similar occupations in the CLF, but lower in others. Similarly, our review of data on the 47 occupations with 10,000 or more federal employees showed that Hispanic representation was higher in the 2005 federal workforce than the 2000 CLF in 22 of those occupations and lower in 25.¹² (See app. IV.) EEOC also instructs agencies to analyze workforce data by grade level, applicants, new hires, separations, promotions, career development programs, and awards to identify where there may be barriers to participation. With respect to grade level, our review of data on Hispanic representation in the federal workforce showed that Hispanics are more highly represented in the lower grade levels than in higher grade levels (see app. IV). Our review was based on descriptive data and did not take into account citizenship, education, or other factors that can affect an individual's placement in the federal government.

When numerical measures indicate low representation rates, EEOC instructs that agencies conduct further inquiry to identify and examine the factors that contributed to the situation revealed by the data. Below is an example from EEOC's MD-715 instructions of such an analysis to determine the existence of limits or barriers to participation.

An agency has uncovered a lack of Black women in its program analyst occupation at the grade 13 level and above. However, below the grade 13 level the program analyst occupation is quite diverse, including a significant number of Black females. Further examination of the matter reveals that several years ago the agency instituted a requirement that program analysts hold a Masters of Business Administration (MBA) degree in order to be promoted to the grade 13 level or above. Few internal candidates, and none of the Black female program analysts employed by the agency, hold an MBA. Therefore, the agency was recruiting higher level program analysts from a local business school with a student population comprised of primarily White males. Over time, program analysts at the grade 13

¹²The 47 occupations were those with 10,000 or more federal employees as of September 30, 2004. Hispanic representation in similar occupations in the CLF is based on data from the Census 2000 Special EEO File.

and above did not reflect the racial diversity of the program analysts at the lower grade levels.

First, the agency should re-visit the issue of whether the skill set represented by an MBA is available by some alternative means such as years of work experience in certain areas. This experience might be substituted for holding an MBA in rendering an applicant qualified for consideration for a higher-graded position. If it is determined that the agency's requirement for an MBA is in fact job-related and consistent with business necessity, the agency should consider whether other alternatives exist which will have less impact on a particular group. Most obviously, the agency could recruit MBAs from other schools with more diverse student populations. In addition, the agency might consider steps it could take to facilitate its own lower-graded employees obtaining MBAs.

Under OPM's FEORP regulations and guidance under the Human Capital Accountability and Assessment Framework (HCAAF), agencies are also to analyze their workforces. Under FEORP, agencies are required to determine where representation levels for covered groups are lower than the CLF and take steps to address them. Agencies are also required to submit annual FEORP reports to OPM in the form prescribed by OPM. These have included (1) data on employee participation in agencywide and governmentwide career development programs broken out by race, national origin, gender, and grade level and (2) a narrative report identifying areas where the agencies had been most successful in recruiting, hiring, and formal training of minorities and women, and how they were able to achieve those results. The HCAAF, according to OPM, fuses human capital management with merit system principles and other civil service laws, rules, and regulations and consists of five human capital systems that together provide a consistent, comprehensive representation of human capital management for the federal government. According to recently proposed regulations, each system consists of standards against which agencies can assess their management of human capital and related metrics.¹³ The HCAAF practitioners guide outlines suggested performance indicators reflecting effective practices in meeting these standards. One suggested performance indicator, for example, is that agencies have systems that track and analyze workforce diversity trends in mission-critical occupations in order to continually adjust the agency's recruitment and retention strategy to its current state of need.

¹³71 Fed. Reg. 29,593 (May 23, 2006).

OPM Assistance to Agencies

OPM provides assistance to agencies in recruiting Hispanics as part of broad-based recruitment efforts and developing employees onboard through (1) governmentwide outreach and recruitment initiatives; (2) providing information on student employment programs; (3) disseminating information on leading practices; and (4) providing guidance on training and development of employees.

Governmentwide Outreach and Recruitment Initiatives

In 2003 and 2004, OPM held recruitment fairs in cities across the country, including those with high concentrations of Hispanics, such as Los Angeles, San Antonio, Tucson, Miami, and New York. Additionally, in 2005, OPM participated in 25 career fairs sponsored by others including LULAC, the National Association of Hispanic Federal Executives, and the University of New Mexico. Under its Veteran Invitational Program, launched in 2004, OPM has conducted career fairs, visited military installations and veterans' medical facilities, and provided information on employment opportunities for veterans on its Web site. In 2004, OPM signed a Memorandum of Understanding with the American GI-Forum—an organization that works on behalf of Hispanic veterans—in support of Executive Order No. 13171.

OPM has also taken steps to improve the USAJOBS Web site, the federal government's official source for jobs and employment information. As part of its Recruitment–One Stop Initiative, launched in 2003, OPM reports that the Web site contains improved search capability options, a more user-friendly resume builder, and a streamlined job application process. USAJOBS also links to OPM's Student Jobs Web site, which contains listings of federal student employment positions, and e-scholar, a listing of federal educational scholarships, fellowships, grants, internships, apprenticeships, and cooperative programs offered by federal departments and agencies and partnering organizations. The USAJOBS Web site provides information in both English and Spanish.

Student Employment Programs

According to OPM, student employment programs can help agencies recruit and develop talented employees to support agency missions; ensure that they can meet their professional, technical, and administrative needs;

and achieve a diverse, quality workforce.¹⁴ OPM assists agencies on the use of student employment programs by issuing regulations and providing technical assistance through its Web site. There are three federal student employment hiring programs that can lead to noncompetitive conversion to permanent employment—the Student Career Experience Program (SCEP), Federal Career Intern Program (FCIP), and Presidential Management Fellows Program (PMF).

Under SCEP, agencies may hire students as interns while they are pursuing high school diplomas or equivalent vocational or technical certificates, and associate's, bachelor's, graduate, or professional degrees. Upon completion of their degree program and SCEP requirements, agencies may noncompetitively convert participants to permanent employment. Recently revised SCEP regulations allow agencies to credit up to 320 hours of the 640 hours of career-related work experience required for conversion from active duty military service or from comparable nonfederal internship, work-study, or student volunteer programs where work is performed at federal agencies.¹⁵ Comparable work experience can include those internships sponsored by the Hispanic Association of Colleges and Universities' (HACU) National Internship Program. The regulations also permit agencies to waive up to 320 SCEP hours of required work experience for students who have demonstrated exceptional job performance and outstanding academic achievement.

Under FCIP, agencies may appoint individuals to 2-year internships in entry-level positions that would lend themselves to internal formal

¹⁴Other special hiring authorities available to agencies include the Bilingual-Bicultural Program and the Outstanding Scholar Program, which allow agencies to noncompetitively hire individuals for certain positions. The Merit Systems Protection Board (MSPB) has been critical of these programs, and GAO has recommended that OPM review their effectiveness. MSPB, *Restoring Merit to Federal Hiring: Why Two Special Hiring Programs Should be Ended*, (Washington, D.C.: January 2000), and GAO, *Human Capital: Opportunities to Improve Executive Agencies' Hiring Processes*, GAO-03-450 (Washington, D.C.: May 30, 2003). We further note that OPM is currently involved in litigation concerning the Outstanding Scholar Program as it relates to veterans' preference rights before the MSPB. *Dean v. Dept. of Agriculture*, 99 M.S.P.R. 533 (2005) and *Olson v. Dept. of Veterans Affairs*, 100 M.S.P.R. 322 (2005), request for reconsideration, No. AT-0330-03-0076-N-1 and CH-3443-01-0706-N-1.

¹⁵71 Fed. Reg. 181,161 (Apr. 11, 2006). 5 C.F.R. sec. 213.3202(b).

training/developmental programs.¹⁶ After 2 years, if program requirements are met, an agency can noncompetitively convert them to competitive civil service status. OPM issued final regulations on FCIP in 2005.¹⁷

The Presidential Management Fellows (PMF) Program is a 2-year internship program open to students who have completed graduate degree programs, been nominated by their school officials, and passed OPM's assessment. In 2005, OPM issued final regulations implementing Executive Order No. 13318, issued in 2003,¹⁸ removing the cap on the number of PMF appointments, providing agencies greater flexibility in promoting fellows, and establishing training and development requirements.¹⁹

Other organizations have also realized that various intern programs provide valuable recruitment sources. According to the Partnership for Public Service, a nonpartisan organization dedicated to revitalizing public service, internship programs such as SCEP provide agencies a pool of diverse, tested, and easy-to-hire potential employees.²⁰ Yet, the Partnership found that very few are drawn from the pool into permanent federal jobs. On the basis of the Partnership's analysis of the rates at which SCEP program participants are converted to permanent federal employment, agencies may not be realizing the full potential of this program. The Partnership reported that in 2001, agencies converted 17 percent of SCEP participants to permanent federal employment, and in 2000, 11 percent. In contrast, the Partnership's report stated that more than 35 percent of interns in the private sector accepted jobs with the companies for which they interned.

¹⁶In September 2005, MSPB issued *Building a High-Quality Workforce: The Federal Career Intern Program*, which reviewed the agency implementation and OPM oversight of the FCIP. Among other things, MSPB recommended that agencies vary their recruitment methods to ensure that interested applicants from all segments of society are given the opportunity to apply and make improvements to the training provided to participants in the program, and that OPM provide clearer guidance to agencies on how to implement and evaluate FCIP.

¹⁷70 Fed. Reg. 44,219 (Aug. 2, 2005), 5 C.F.R. sec. 213.3202(o).

¹⁸68 Fed. Reg. 66,317 (Nov. 25, 2003).

¹⁹70 Fed. Reg. 28,775 (May 19, 2005), 5 C.F.R. part 362.

²⁰Partnership for Public Service, *Tapping America's Potential: Expanding Student Employment and Internship Opportunities in the Federal Government* (Washington, D.C.: July 10, 2002).

While OPM has reported data on SCEP participants governmentwide by racial/ethnic group in its *Fact Book* and on SCEP new hires by agency in its statistical reports on Hispanic employment, OPM does not report demographic data on SCEP participants by agency and on FCIP and PMF participants governmentwide or by agency, or rates of conversion to permanent positions for SCEP, FCIP, and PMF either governmentwide or by agency. According to OPM, data on conversions to permanent employment by racial/ethnic group for SCEP and FCIP are available from the Central Personnel Data File (CPDF). Currently, OPM does not analyze these data. Similar data are available for the PMF. Analyzing data on conversion rates could provide OPM with valuable information on agencies that appear to be maximizing their use of these programs as well as those that are not fully utilizing them. With this information, OPM could then provide assistance to agencies to help them incorporate student employment programs into their strategic workforce planning as they seek to recruit and develop talented employees to support agency missions; ensure that they can meet their professional, technical, and administrative needs; and achieve a diverse, quality workforce. Such information from OPM could also enable agencies to perform more complete assessments of their programs.

Leading Practices

OPM disseminates leading-practices information through the reports it issues pursuant to FEORP and Executive Order No. 13171 and through the Interagency Task Force on Hispanic employment, chaired by the Director of OPM. In its annual FEORP reports, OPM presents a summary of agency practices on workforce planning, recruitment and outreach, mentoring, and career development based on the information agencies submit to OPM in their annual FEORP reports. In its *Annual Report to the President on Hispanic Employment*, OPM presents what agencies report as effective recruitment, outreach, career development, and accountability practices. To prepare the reports pursuant to the order, OPM annually asks agencies to submit information concerning steps taken related to these areas. OPM also shares information on leading practices at meetings of the Interagency Task Force. Through this guidance, OPM promotes broad outreach to all groups and encourages agencies to establish relationships with colleges and universities as a means to attract qualified candidates.

Training and Development

Once onboard, training and development programs can assist employees in further developing skills and helping them qualify for higher-level positions. OPM provides guidance to agencies on its training and development Web page and has issued regulations on training and development tools available to agencies, such as academic degree and other employee training

programs. In 2004, OPM finalized regulations²¹ on a training provision of the Chief Human Capital Officers Act of 2002 (Title XIII of the Homeland Security Act), which expanded agency authority to pay or reimburse employees for the cost of academic degree training when such training contributes significantly to meeting an identified agency training need, resolving an identified agency staffing problem, or accomplishing goals in an agency's human capital management strategic plan.²²

Agencies Take Steps to Recruit and Develop Hispanics in the Federal Workforce

The five agencies in our review have taken a variety of approaches to address issues concerning Hispanic representation in their workforces, particularly in competing for a limited number of qualified candidates and addressing Hispanic representation at higher levels. At NASA, where Hispanics represented 5.3 percent of the workforce in 2005, one of the major occupations is aerospace engineering.²³ There, Hispanics represented 5.0 percent of aerospace engineers, according to EEOC's *Annual Report on the Federal Workforce, 2004*. In the CLF, Hispanics represented 4.6 percent of aerospace engineers, according to the Census 2000 Special EEO File. NASA said it must compete with the private sector for the pool of Hispanics qualified for aerospace engineering positions, which is often attracted by more-lucrative employment opportunities in the private sector in more-preferable locations. FNS, where Hispanics represented 7 percent of the workforce in 2005,²⁴ reports that its ability to successfully recruit Hispanics was affected by low Hispanic representation in areas where some of its regional offices are located. Similarly, the USAF, with 7.4 percent of its workforce Hispanic in 2005, also reported difficulties in recruiting Hispanics at Wright-Patterson Air Force Base in Dayton, Ohio, where Hispanics represent approximately 2 percent of the local CLF, according to the USAF. Moreover, the USAF attributes, in part, the decrease in overall Hispanic representation levels (from 7.7 percent in 2000 to 7.4 percent in 2005) to the closure of Air Force bases in the southwestern United States where Hispanics were more highly represented than at other

²¹69 Fed. Reg. 33,271 (June 15, 2004).

²²Section 1331(a) of Pub. L. No. 107-296 (Nov. 25, 2002), amending 5 U.S.C. sec. 4107.

²³Hispanic representation at NASA, the USAF, SSA, and the SBA is based on the percentage of Hispanics in the permanent workforce, as reported by OPM in its FEORP reports.

²⁴Hispanic representation is based on the percentage of Hispanics in the permanent workforce, as reported by FNS.

bases. Finally, agencies also reported that Hispanic representation in mid- and upper-level positions was an issue they were addressing. While both SSA, where Hispanics represented 12.5 percent of the workforce in 2005, and the SBA, where Hispanics represented 10.8 percent in 2005, reported success recruiting Hispanics for lower-level positions, each noted that Hispanic representation in certain mid- or upper-level positions was lower.

Steps Agencies Have Taken

The agencies reported using a variety of approaches that enhanced their ability to recruit and develop Hispanic employees. These included outreach to the Hispanic community and Hispanic-serving organizations, including participating in conferences sponsored by LULAC and others; recruiting at Hispanic-Serving Institutions—defined by statute as an eligible institution having an undergraduate enrollment of at least 25 percent Hispanic full-time students and at least 50 percent of the institution’s Hispanics students qualifying as low income;²⁵ sponsoring interns through the HACU National Internship Program; use of student employment programs such as SCEP and FCIP; advertising in both English- and Spanish-language Hispanic media; and career development and training programs. Below we describe some of the specific approaches agencies in our study used to recruit and provide training and development opportunities for Hispanics. While data on the outcomes are limited and we have not assessed the effectiveness of these programs, the agencies reported that these approaches have enhanced their ability to recruit and develop qualified Hispanics.

Outreach to the Hispanic Community

NASA—Part of NASA’s strategy to recruit Hispanics centers on increasing educational attainment, beginning in kindergarten and continuing into college and graduate school, with the goal of attracting students into the NASA workforce and aerospace community. NASA centers sponsor, and its employees participate in, mentoring, tutoring, and other programs to encourage Hispanic and other students to pursue careers in science, engineering, technology, and math. For example, the Marshall Space Center in Huntsville, Alabama, annually sponsors a Hispanic Youth Conference attended by students from across Alabama that includes workshops on leadership development and pursuing NASA career fields and provides opportunities to establish mentoring relationships. NASA also provides grants to fund educational support programs including in locations where there are high concentrations of Hispanics. For example,

²⁵20 U.S.C. sec. 1101a(a)(5).

the Ames Research Center in Moffett Field, California, provided a grant for the development and implementation of a K-12 technology-awareness program designed to expose students to NASA and higher education through competitive team activities based on key aeronautic concepts. The program has been implemented in schools throughout California that have a high percentage of Hispanic students. Various centers also participate in high school and college internship programs, such as the Summer High School Apprenticeship Research Program where high school students spend 8 weeks working with engineers on scientific, engineering, mathematical, and technical projects. NASA centers also provide scholarships and research grants. For example, Ames provides scholarships to Hispanic college students at a community college and the Dryden Flight Research Center sponsors fellowships for students in engineering and science to continue their graduate studies. In addition, NASA has recently developed the Motivating Undergraduates in Science and Technology scholarship program designed to stimulate a continued interest in science, technology, engineering, and mathematics.

USAF—To reach potentially qualified Hispanics from all areas of the country, the USAF outreach strategy focuses on partnering and improving working relationships with Hispanic-serving organizations at the national, regional, and local levels. At the national level, the USAF has established relationships with professional, educational, and broad-based Hispanic-serving organizations. For example, it signed a memorandum of understanding with LULAC agreeing to collaborate on, among other things, increasing USAF career opportunities. Through the Department of Defense partnership with HACU, the USAF participates in a national working group that meets semiannually to develop initiatives to expand recruitment at Hispanic-Serving Institutions. At the local and regional levels, the USAF has a variety of outreach efforts that involve both providing information to, and gaining feedback from, the Hispanic community. It works with organizations to educate potential employees on the application process. For example, Kirtland Air Force Base in New Mexico has sponsored “train the trainer” workshops with area organizations, high schools, and colleges and universities. The USAF also participates in programs working directly with local students, such as serving as mentors for Hispanic students. In addition, the USAF regularly provides vacancy announcements to, and has ongoing dialogues with, local Hispanic community organizations.

Use of Student Hiring Authorities

NASA—During fiscal year 2004, NASA implemented the corporate college recruitment initiative using FCIP hiring authority to recruit individuals to mission-critical positions. As part of this strategy, NASA participates in

recruitment events at colleges and universities and conferences around the country, which it selects based on academic programs, diversity of attendee population, or involvement in NASA research. For each recruitment site, it invites academic institutions within reasonable geographical proximity, allowing it to maximize opportunities to reach students at Hispanic-Serving Institutions. In fiscal year 2004, 15 Hispanic-Serving Institutions participated from Arizona, California, Florida, New Mexico, New York, Puerto Rico, and Texas, which included universities with well-established engineering, science, and technology curricula. Prior to each event, NASA publishes event-specific vacancies and encourages students to apply in advance in order to create a pool of applicants from which to schedule interviews at the site. NASA reported that it was most successful in competing for top talent and filling critical competency positions at the earliest possible time when it extended job offers at the recruitment site or within 30 days after the conclusion of the recruitment visit.

USAF—The USAF uses student employment programs to attract Hispanics and other qualified applicants for positions ranging from those requiring training at the vocational-technical schools to the graduate level. The USAF—which employs approximately half of the federal government’s civilian aircraft maintenance workers—has implemented the “Grow Your Own” aircraft maintenance program at three of its Texas bases. In partnership with vocational-technical schools, the program includes both on-the-job training and classroom education. It provides the USAF with a pool of trained candidates to replace retiring federal employees and a vehicle to increase Hispanic representation. Students are initially appointed through SCEP, and upon completion of the educational program and 640 hours of career-related work, students may be converted to permanent employment within 120-days without further competition.

Using FCIP authority, the USAF hires recent college graduates into its PALACE Acquire and Copper Cap internship programs. The Copper Cap program is designed to train college graduates as contract specialists by assigning them to work with professional contracting officers. The PALACE Acquire program fills a variety of positions in approximately 20 career fields including logistics, civilian personnel, scientists and engineers, criminal investigator, intelligence specialists, public affairs, and education specialists. Participants may be promoted in 1-year intervals up to a certain level based on satisfactory or successful performance and are eligible for student loan repayment and tuition assistance for graduate school.

Career Development Programs

SBA—The SBA's District Director Candidate Development Program (DDCDP) is designed to recruit and develop a diverse group of highly qualified and trained managers at the General Schedule grade 13, 14, and 15 levels to fill district director positions on a noncompetitive basis as they become vacant. At the SBA, district director positions are key managerial career positions responsible for providing agency services to the small business community. The program is a 6- to 18-month development program and candidates who are competitively selected for, and successfully complete, the DDCDP program are eligible for noncompetitive selection for a period of 3 years from the time they have successfully completed the program.

FNS—Since 2000, FNS has sponsored the Leadership Institute, which is a 15-month full-time leadership training program. The program focuses on five core competencies: leading change, leading people, achieving results, business acumen, and building coalitions/communications. Participants, who are competitively selected from grades 11–14, attend core seminars on such topics as leading teams, problem solving, and decision making and participate in individual and team projects. As of February 2006, there were 98 graduates from five classes.

SSA—SSA sponsors national, headquarters, and regional career development programs for employees in grades 5 to 15. At the national level, the Leadership Development Program is an 18-month program designed to provide employees in grades 9 to 12 with developmental experiences through placement in designated trainee positions. The Advanced Leadership Program is an 18-month program designed to provide employees in grades 13 and 14 experience to become future agency leaders through rotational assignments, training, and other developmental experiences. Upon successful completion of these programs, participants receive a 3-year Certificate of Eligibility for a onetime, noncompetitive promotion, used at the discretion of SSA management. SSA also has a 12- to 18-month Senior Executive Service Candidate Development Program to prepare individuals in grade 15 or equivalent to assume senior executive-level responsibilities and develop their executive core qualifications. For employees in grades 5 through 8, SSA offers career development programs in its Office of Central Operations based in Baltimore and Office of Disability Adjudication and Review, which has regional and local hearing offices throughout the country. These, as well as other regional and headquarters component career development programs, are modeled after its three national programs for which employees are competitively selected.

Educational Assistance Programs

USAF—The USAF provides a variety of opportunities for current employees to increase their educational attainment through tuition assistance and degree completion programs, in-residence and distance-learning educational programs, and long-term academic programs. Its tuition assistance program covers mission-related coursework for designated positions toward degrees at a higher-level than the employee has already attained. Employees attend courses on a voluntary off-duty basis. Degree completion programs offer selected employees in designated career fields the opportunity to complete their degree during duty hours on a full- or part-time basis. In addition, the USAF also provides opportunities for employees to earn graduate degrees from its academic institutions, such as the Air Force Institute of Technology. Moreover, its professional military education programs—such as the Squadron Officer College and Air War College—are available for civilian employees depending upon grade level. These programs are offered in residence and by correspondence. Both provide opportunities for participants to earn credits toward degree programs.

The USAF has obtained the recommendations on college credit for these and other courses and training programs from the American Council on Education's (ACE) College Credit Recommendation service. ACE is an association of approximately 1,800 accredited, degree-granting colleges and universities as well as higher-education-related associations, organizations, and corporations. It reviews training programs and courses offered by government agencies and corporations and other training providers at the providers' request and makes recommendations concerning the type of academic credit, if any, appropriate for the program. Approximately 1,200 accredited colleges or universities have agreed to consider ACE recommendations for courses, apprenticeship programs, and examinations, including community colleges and universities such as the University of California at Berkeley, George Washington University, and Indiana University, Bloomington.²⁶ ACE has also recommended credit for various courses from NASA's Academy of Program and Project Leadership that may be used toward a graduate degree.

²⁶It is at the discretion of colleges and universities to accept credit recommendations as they consider appropriate.

Agencies Identify Lessons-learned in Addressing Hispanic Representation

In response to our inquiry, the agencies included in our review reported three primary lessons important to the success of their efforts—commitment of agency leadership, taking a strategic workforce planning approach, and working with the Hispanic community:

- **Commitment of agency leadership:** Agencies reported that their programs were most successful when agency leadership was committed to addressing Hispanic representation. As we found in our prior work on diversity management, leaders and managers within organizations are primarily responsible for the success of diversity management because they must provide the visibility and commit the time and necessary resources.²⁷ For example, SSA included diversity as part of its strategic and human capital plans and developed an agencywide marketing and recruitment strategy to address the representation of any underrepresented group, including Hispanics. Additionally, it tracks the outcomes of its recruitment and hiring initiatives.
- **Strategic workforce planning:** Agencies also recognized the importance of taking a strategic workforce planning approach in their efforts to recruit a diverse workforce. Strategic workforce planning addresses two critical needs: (1) aligning an organization’s human capital program with its current and emerging mission and programmatic goals and (2) developing long-term strategies for acquiring, developing, and retaining staff to achieve programmatic goals.²⁸ For example, NASA’s recruitment strategy focuses on both developing the pipeline to fill its mission-critical occupations by encouraging students to pursue degrees in science, technology, engineering, and math and attracting graduates into the NASA workforce and aerospace community. Additionally, SSA developed a business case for bilingual public contact employees in its field offices and bicultural employees in policy-making staff positions in its regional offices and headquarters components. Similarly, FNS said it began to realize the need for bilingual professionals, and as a result, has advertised positions requiring fluency in Spanish.

²⁷GAO, *Diversity Management: Expert-Identified Leading Practices and Agency Examples*, [GAO-05-90](#) (Washington, D.C.: Jan. 14, 2005).

²⁸GAO, *Human Capital: Key Principles for Effective Strategic Workforce Planning*, [GAO-04-39](#) (Washington, D.C.: Dec. 11, 2003).

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- Working with Hispanic communities: Finally, agencies told us that it is important to work with Hispanic communities to understand one another's needs and find mutually beneficial solutions. The USAF at Kirtland Air Force Base in Albuquerque, New Mexico, has taken steps in this regard. In this geographic area where Hispanics represented 41.6 percent of the population according to the 2000 Census, the base has an alliance with the local public schools and colleges and universities to ensure that it is providing career and mentoring opportunities for area students and that schools are producing a pipeline of qualified students to meet base needs. Base representatives also work with the Hispanic Chamber of Commerce on issues pertaining to Hispanic communities.

Conclusions

Providing federal agencies with benchmarks that consider citizenship would allow agencies to get a more accurate picture of differences in representation levels and more effectively identify and address barriers to equal employment opportunity. Current CLF benchmarks do not include citizenship; however, two annual official data sources—the CPS and ACS—are available that would allow EEOC and OPM to separate citizens and noncitizens in analyzing federal workforce representation by racial, ethnic, and gender groups. Additionally, agencies analyze their workforces using the Census Special EEO Files prepared at the direction of the consortium of agencies—EEOC, OPM, DOJ, and DOL. Although the 2000 Special EEO File did not contain citizenship data, EEOC and DOJ have expressed interest in and the need for including such data in the 2010 Special EEO File but must address issues including cost and privacy.

As part of their barrier analyses, where representation differences between occupations in their workforces and similar ones in the CLF exist, agencies are to determine whether the qualifications established for those occupations are appropriate. Additionally, agencies are required to determine whether they have considered all sources of qualified individuals. OPM currently provides guidance to federal agencies on recruiting at colleges and universities. Because the majority of Hispanics enrolled in postsecondary education attend community colleges and vocational schools, identifying effective outreach practices to such schools could help those agencies that have occupations requiring the education and training provided at these institutions to meet workforce needs and further equal employment opportunity. OPM already shares effective recruiting practices through its *Annual Report to the President* under Executive Order No. 13171.

OPM has recognized the importance of student employment programs, in particular SCEP, in providing a unique opportunity for agencies to recruit students from high school through graduate school, depending on agencies' needs. These programs not only serve as a mechanism to address future federal workforce needs, they offer students the incentive to complete their education as well. OPM has provided data on SCEP new hires in its statistical reports on Hispanic employment and SCEP participants governmentwide in its *Fact Book*. While data on conversation rates for SCEP and FCIP are available from the CPDF, OPM does not analyze these data by agency or governmentwide. Such analyses could provide OPM with valuable information to help agencies maximize their use of these programs as part of their overall strategic workforce planning. Additionally, such information from OPM could enable agencies to perform more complete assessments of their programs.

While federal agencies are taking steps to address Hispanic representation issues, as an employer, the federal government is limited in its ability to address the effects of citizenship and education on Hispanic representation throughout the federal workforce. As these are multifaceted issues, developing strategies to address them will require partnerships between Hispanic-serving organizations, federal agencies, state and local governments, educational institutions, and other interest groups.

Recommendations for Executive Action

We recommend that the Director of OPM and the Chair of EEOC do the following:

- Include citizenship in their annual comparisons of representation in the federal workforce to the CLF. To help ensure consistency, both agencies should agree upon a single source of citizenship data.
- Work with other Consortium agencies and the Census Bureau to incorporate citizenship data into the 2010 Census Special EEO File and incorporate such data into analyses under MD-715, FEORP, and Executive Order No. 13171.

We recommend that the Director of OPM do the following:

- Assess the extent of participation by racial and ethnic groups in student employment programs—SCEP, FCIP, and PMF—to help agencies maximize the use of these programs in their overall strategic workforce plan. This effort should include:

-
- analyzing participation in, and conversion rates to, permanent positions from these programs and
 - reporting governmentwide and agency-specific demographic data for the different racial and ethnic groups reflecting participation in, and rates of conversion to, permanent employment from these programs. These data are in addition to the data already reported on these programs in its reports, such as in its statistical reports on Hispanic employment and in the *Fact Book*.

Agency Comments and Our Evaluation

We provided the Chair of EEOC, the Director of OPM, the Attorney General, and the Secretary of Commerce with a draft of this report for their review and comment. In an e-mail, DOJ said it had no comments. In a written response, the Department of Commerce said it had no comments. (See app. V.) In its written comments, EEOC said it found the report to be an extremely interesting and useful addition to the ongoing examination of Hispanic representation in the federal workforce and indicated its plans to use the report as a resource. EEOC agreed that citizenship data are an important aspect that appears applicable not only to Hispanics, but to other census population groups as well. In this regard, EEOC has requested that the Census Bureau review the possibility of including citizenship data in the 2010 Special EEO File. The availability of citizenship data would enhance the analyses required under MD-715. However, EEOC did not address our recommendation that it include citizenship data in its annual comparisons of representation in the federal workforce to the CLF, which can be based on currently available CPS or ACS data. EEOC also said that while citizenship data are a useful benchmark for broad trending, more refined analyses are necessary, including analyses of applicant pools and participation rates for specific occupations. EEOC also said that analysis of the on-board federal workforce, such as analysis of promotions and participation in career development, employee recognition, and awards programs, is important in assessing equality of opportunity. We agree with EEOC that more refined analyses are necessary to assess equality of opportunity. EEOC's comments are reprinted in appendix VI. OPM provided minor technical comments via e-mail, which we incorporated as appropriate, but did not otherwise comment on the report or our recommendations.

As agreed with your offices, unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days after its issue date. We will then send copies of this report to the Chair of EEOC, the Director of OPM, the Attorney General, the Secretary of Commerce, and other interested parties. Copies will be made available to others upon request. This report will also be available at no charge on GAO's Web site at <http://www.gao.gov>.

If you or your staff have any questions concerning this report, please contact me at (202) 512-9490. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. Staff who made major contributions to this report are listed in appendix VII.

A handwritten signature in black ink that reads "George H. Stalcup". The signature is written in a cursive style with a large initial "G".

George H. Stalcup
Director, Strategic Issues

List of Requesters

The Honorable Henry A. Waxman
Ranking Minority Member
Committee on Government Reform
House of Representatives

The Honorable Danny K. Davis
Ranking Minority Member
Subcommittee on the Federal Workforce
and Agency Organization
Committee on Government Reform
House of Representatives

The Honorable Grace Flores Napolitano
House of Representatives

The Honorable Charles A. Gonzalez
House of Representatives

Objectives, Scope, and Methodology

Our objectives were to (1) identify and analyze the factors that are affecting Hispanic representation in the federal workforce, (2) examine the steps that the Equal Employment Opportunity Commission (EEOC) and the Office of Personnel Management (OPM), in their oversight roles, are taking related to Hispanic representation, and (3) illustrate the efforts within selected federal agencies related to Hispanic representation.

To answer our first objective, we interviewed representatives from Hispanic-serving and other relevant organizations,¹ and federal agency officials; reviewed previous studies; and obtained the opinions of experts identified by the National Academy of Sciences to identify possible factors that affect Hispanic representation in the federal workforce. Next, we researched available data sources that included sufficiently detailed data on Hispanic ethnicity, employer (federal or nonfederal), and the identified factors that could be reliably measured. We concluded that the 2000 Decennial Census Public Use Microdata Sample (PUMS) 5-Percent File was the best data source for our purposes. We conducted bivariate and multivariate analyses of data from the 2000 Decennial Census PUMS to determine the effect of the identified factors that could be reliably measured in this dataset on Hispanic representation in the federal workforce. Our methodology and results of these analyses are more specifically described in appendix II. We obtained opinions on our methodology from EEOC, OPM, the Census Bureau, and the Department of Justice (DOJ). The experts identified by the National Academy of Sciences also reviewed and provided comments on both our methodology for conducting these analyses and our preliminary results. Our analyses are not designed to prove or disprove discrimination in a court of law like analyses conducted by EEOC or DOJ, nor do they establish whether the differences would require corrective action by any federal agency. Rather, our analyses use a standard statistical method designed to provide information at an aggregate level about factors that explain levels of Hispanic representation in the federal workforce, relative to the nonfederal workforce.

To determine steps EEOC and OPM have taken related to Hispanic representation, we reviewed the statutes, regulations, executive orders,

¹These included, among others, the League of United Latin American Citizens, National Council of La Raza, National Council of Hispanic Employment Program Managers, National Association of Hispanic Federal Executives, Coalition for Fairness for Hispanics in Government, Hispanic Association of Colleges and Universities, and the Partnership for Public Service.

policies, guidance, program information, and reports issued related to Hispanic representation in the federal government. At EEOC, we met with officials and representatives, including from its Office of Federal Operations, Office of General Counsel—Research and Analytic Services, and Office of Legal Counsel. At OPM, we met with officials, including from the Human Capital Leadership and Merit System Accountability Division, Strategic Human Resources Policy Division, and the Office of General Counsel.

To illustrate the efforts of federal agencies, we selected five Chief Financial Officer (CFO) Act agencies or their subagencies of different sizes, geographic locations, concentrations of jobs by grade level, and OPM’s occupational categories.² They were the United States Air Force, Food and Nutrition Service of the U.S. Department of Agriculture, National Aeronautics and Space Administration, Small Business Administration, and Social Security Administration. We provided written questions and document requests to agency officials and reviewed the responses received from each of the five agencies. We also had discussions at each agency with officials that oversee offices and programs related to Hispanic representation. We also reviewed documents provided by, and spoke with officials from, the White House Initiative on Educational Excellence for Hispanic Americans.

In addition, we analyzed Hispanic representation in the federal workforce governmentwide (1) compared to the Civilian Labor Force (CLF), including and excluding noncitizens; (2) in federal occupations compared to similar occupations in the CLF;³ and (3) by pay plan/grade.

- To compare Hispanic representation in the federal workforce governmentwide⁴ to the CLF, we used data from 1994 to 2005. For the federal workforce, we used data reported by OPM on the permanent federal workforce. For the CLF, which includes both permanent and nonpermanent employees, we analyzed the March supplements to the

²OPM’s six occupational categories are Professional, Administrative, Technical, Clerical, Other White-Collar, and Blue Collar, collectively known as “PATCOB.”

³The CLF is defined as those 16 and older (including federal workers) who are employed or looking for work and not in the military or are institutionalized.

⁴We define “governmentwide” as the executive branch excluding the intelligence agencies, the U.S. Postal Service, and all active duty military personnel.

Current Population Survey (CPS)—the 1994–2002 *Annual Demographic Files* and the 2003–2005 *Annual Social and Economic Supplements* (ASEC).⁵

- To compare Hispanic representation in federal occupations to similar occupations in the CLF, we selected the occupations which in September 2004 had 10,000 or more federal employees, 47 occupations in total (see app. IV). For this analysis, we included both permanent and nonpermanent federal employees for comparability to the CLF. For Hispanic representation in these occupations in the federal workforce, we analyzed the Central Personnel Data File (CPDF) for 2000–2005. For Hispanic representation in these occupations in the CLF, we analyzed the Census 2000 Special EEO File, which was created from the 2000 Census.⁶ To determine occupations that are similar in the CLF and the federal workforce, we used the crosswalk for 2000 provided to us by EEOC to match federal occupations with similar occupations in the CLF.
- To examine Hispanic representation by grade governmentwide, we analyzed 1990–2005 CPDF data for permanent and nonpermanent employees in groupings of General Schedule grades 1–4, 5–8, and 9–12, separately for grades 13, 14, and 15, and separately for those in the Senior Executive Service, in Senior Level/Senior Technical positions, and under the Executive Schedule. (See app. IV.)

We believe the CPDF, CPS, and Census 2000 Special EEO File are sufficiently reliable for the purposes of this study. Regarding the CPDF, we have previously reported that governmentwide data from the CPDF for the key variables in this study—race/Hispanic origin, occupation, and pay plan/grade—were 97 percent or more accurate.⁷ We believe the CPDF data are sufficiently reliable for purposes of this study. Regarding the CPS, to assess the reliability of its data, we reviewed the technical documentation

⁵The CPS first included citizenship as a variable in 1994. The CPS, *Annual Demographic File* was renamed the ASEC in 2003. The ASEC provides annual tabulations of social, demographic, and economic characteristics of persons in U.S. households.

⁶The Census 2000 Special EEO File is a tabulation based on decennial Census data, which permits analysis of representation in the CLF by occupation, race, ethnicity, and gender. The Census Bureau prepares these files based on specifications set by EEOC, OPM, DOJ, and the Department of Labor.

⁷GAO, *OPM's Central Personnel Data File: Data Appear Sufficiently Reliable to Meet Most Customer Needs*, GAO/GGD-98-199 (Washington, D.C.: Sept. 30, 1998).

for these data files, including the coding and definition of variables of interest, the procedures for handling missing data, coding checks, and imputation procedures for missing data. We also interviewed Bureau of Labor Statistics (BLS) staff about how federal employment and race/ethnicity are reported and imputed and to determine how this would affect our analyses. We considered the response rate, allocation rate (or the rate at which responses are imputed for unanswered questions), and size of confidence intervals. Because the CPS had a very high response rate, a low allocation rate, and narrow confidence intervals, the 1994–2005 CPS data were sufficiently reliable. Regarding the Census 2000 Special EEO File, although we and others have cited a number of limitations of Census 2000 data, we believe these data are sufficiently reliable for the purposes of this study (see app. II for a full description of what we did to assess the reliability of Census data).

We conducted our work from October 2004 to June 2006 in accordance with generally accepted government auditing standards.

Logistic Regression Analyses of Factors Affecting Hispanic Representation in the Federal Workforce

This appendix describes our analyses of factors that are affecting Hispanic representation in the federal workforce. We included those factors identified by representatives of Hispanic-serving organizations, agency officials, outside experts, and previous studies, which could be reliably measured in the data set we used. These factors were citizenship, gender, education, veteran's status, race, English proficiency, age, disability status, in-school status, employment status (full- or part-time), and geography (state where employed). To assess the effect of these factors on Hispanic representation in the federal workforce, we analyzed how these factors affect the likelihood of Hispanics and non-Hispanics being employed in the federal workforce as opposed to the nonfederal workforce. We used logistic regression models to estimate likelihood of federal employment. This is a widely accepted method of analyzing dichotomous or binomial outcomes—like being in the federal versus nonfederal workforce—when the interest is in determining the effects of multiple factors that may be related to one another. In developing the model, we solicited the opinions of experts identified by the National Academy of Sciences as well as officials from OPM, EEOC, DOJ, and the Census Bureau. We also sought the experts' views on the preliminary results of our analysis.¹

Data Sets Used

We analyzed data from the 2000 Decennial Census Public Use Microdata Sample (PUMS) 5-Percent File because it (1) included variables needed for our analyses and (2) had the largest sample size of the datasets containing the variables in our analyses.² To confirm our results, we also analyzed data from the 2004 American Community Survey (ACS) because it contains more recent data. In this appendix, however, we present only the results using the PUMS data because its larger sample size makes it less prone to

¹We are grateful to the six experts who assisted us with our study by reviewing and providing comments on our methodology and preliminary results. Commenting on both the methodology and preliminary results were Katharine Abraham, Professor of Survey Methodology and Adjunct Professor of Economics, University of Maryland; Robert Bell, Statistics Research Department, AT&T Labs—Research; Cordelia W. Reimers, Professor Emerita of Economics, Hunter College and the Graduate Center of the City University of New York; Teresa A. Sullivan, Executive Vice Chancellor for Academic Affairs, the University of Texas System; Stephen Trejo, Associate Professor of Economics, University of Texas at Austin. Commenting on the methodology was Jeffrey Passel, Senior Research Associate at the Pew Hispanic Center. However, we take full responsibility for the accuracy of our analysis.

²We also considered the American Community Survey and the Annual Social and Economic Supplement to the Current Population Survey.

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sampling error than the ACS data.³ In addition, the results of the analyses of the ACS data were largely consistent with the results using the PUMS data.

To assess the reliability of the PUMS and ACS, we reviewed the technical documentation for these data files, including the coding and definition of variables of interest, the procedures for handling missing data, coding checks, and imputation procedures for missing data. We also interviewed Census Bureau staff about how federal employment and race/ethnicity are reported and imputed and to determine how this would affect our analyses. We considered the response rate, allocation rate (or the rate at which responses are imputed for unanswered questions), and size of confidence intervals. Because PUMS and ACS both had a very high response rate, a low allocation rate, and narrow confidence intervals, the 2000 PUMS and 2004 ACS were sufficiently reliable for our objectives.

The PUMS and ACS both contain self-reported data on whether someone is part of the CLF. The Bureau of Labor Statistics (BLS) defines the CLF as including persons 16 years of age and older residing in the 50 states and the District of Columbia, who are not institutionalized (i.e., in penal and mental facilities, or homes for the aged) and who are not on active duty in the Armed Forces.⁴ For purposes of our logistic regression models, we divided the CLF into two groups—the federal workforce and the nonfederal workforce.⁵ Further, we restricted our analyses to individuals 18 and older because, with a few exceptions, 18 years is the minimum age for federal employment and our analysis of the government’s official personnel data—the Central Personnel Data File (CPDF)—showed that in September 2004

³PUMS files have Census 2000 data containing records of characteristics for a 5-percent sample of housing units. The ACS is designed to provide estimates for population areas larger than 20,000 people whereas PUMS provides estimates for all areas because of its large sample size. Because both the ACS and the PUMS files are drawn from probability samples, GAO used the appropriate item weights prepared by the Census Bureau for each dataset.

⁴We included Puerto Rico in our definition of the CLF. When we compared the results of our logistic regression analyses including and excluding Puerto Rico, the results were virtually the same.

⁵We included employees of the United States Postal Service (USPS) as part of the nonfederal workforce because the USPS is an independent establishment and not an executive agency of the federal government and it is not subject to the government’s employee classification requirements and pay rates and pay systems. In addition, the government’s Central Personnel Data File does not include USPS data.

individuals under 18 years of age constituted only 0.10 percent of the federal workforce.

Methodology

We used bivariate and multivariate logistic regression models to estimate the likelihood of Hispanics and non-Hispanics being in the federal workforce relative to being in the nonfederal workforce. There were four steps to these analyses.

1. For the first step, we used bivariate logistic regression models to estimate the difference between Hispanics and non-Hispanics in the likelihood of being employed in the federal workforce, relative to the nonfederal workforce, before controlling for any of the identified factors.
2. For the second step, we used bivariate logistic regression models to determine how our estimated difference in likelihood of Hispanics and non-Hispanics being employed in the federal workforce relative to the nonfederal workforce was affected by U.S. citizenship. We estimated the difference in likelihood between Hispanic citizens and non-Hispanic citizens being employed in the federal workforce relative to the nonfederal workforce and compared it to the difference in likelihood of federal employment among both citizens and noncitizens combined, obtained in step 1. We analyzed the effect of citizenship before all other factors because the federal government has a general policy and practice of restricting hiring to U.S. citizens and nationals.
3. For the third step, we restricted our analyses to citizens only and used a series of multivariate logistic regression models, controlling for each factor one at a time, to estimate how each of the other factors affected the difference in the likelihood of Hispanic citizens and non-Hispanic citizens being in the federal workforce relative to the nonfederal workforce. Because of the large effect of education on the difference between Hispanics and non-Hispanics that was revealed in this step, we ran a bivariate model that estimated the effect of education among all individuals—citizens and noncitizens combined—on the likelihood of being in the federal workforce relative to the nonfederal workforce.
4. In the fourth step, we used a multivariate logistic regression model that estimated the difference in the likelihood of Hispanic and non-Hispanic citizens being employed in the federal workforce versus the nonfederal workforce after controlling for all other factors simultaneously. Among

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citizens, we controlled simultaneously for gender, education, veteran's status, race, English proficiency, age, disability status, school attendance (enrolled or not enrolled), employment status (full- or part-time), and geography (state where employed).

In our analyses, we express differences in the likelihoods of being in the federal workforce rather than the nonfederal workforce using odds ratios.⁶ An odds ratio is generally defined as the ratio of the odds of an event occurring in one group compared to the odds of it occurring in another group—the reference or comparison group. In our analyses, the event of interest to us was employment in the federal workforce versus employment in the nonfederal workforce. We computed odds ratios to indicate the difference between Hispanics and non-Hispanics in the likelihood of being employed in the federal workforce (1) before controlling for any of the other factors, (2) after controlling for all of the factors one at a time, and (3) controlling for all factors simultaneously.

In our analyses, an odds ratio of 1.0 would indicate that Hispanics and non-Hispanics were equally likely to be employed in the federal workforce as in the nonfederal workforce, or that the ratio of Hispanics to non-Hispanics was the same in the two workforces. An odds ratio of less than 1.0 would imply that Hispanics were less likely than non-Hispanics to be in the federal workforce as opposed to the nonfederal workforce, while an odds ratio greater than 1.0 would imply that Hispanics were more likely. For example, an odds ratio of 0.5 would indicate that Hispanics were only half or 50 percent as likely as non-Hispanics to be in the federal workforce as opposed to the nonfederal workforce. An odds ratio of 2.0 would indicate that Hispanics were twice as likely as non-Hispanics to be in the federal workforce as opposed to the nonfederal workforce. We also use odds ratios to indicate the effects of the other factors we considered (i.e., education, race, etc.), and they can be similarly interpreted.

Given the large sample size of the PUMS file, all of the results reported are statistically significant at the 95 percent confidence level. Thus, we concentrated our analysis on the size or magnitude of the odds ratio—that is, how much smaller or larger than 1.0 they were—rather than the statistical significance of the odds ratios.

⁶We used odds ratios rather than percentages because they are more appropriate for statistical modeling and multivariate analysis.

The Difference between Hispanics' and Non-Hispanics' Likelihood of Employment in the Federal Workforce versus the Nonfederal Workforce

We initially estimated the difference in the likelihood of Hispanics and non-Hispanics being employed in the federal workforce versus the nonfederal workforce before controlling for any of the identified factors. Table 4 shows the numbers, odds, and odds ratio derived from the PUMS to estimate the likelihood of Hispanics and non-Hispanics being employed in the federal workforce relative to being in the nonfederal workforce. The odds ratio of 0.698 indicates that the odds of Hispanics being in the federal workforce rather than the nonfederal workforce were about 30 percent lower than the corresponding odds for non-Hispanics.

Table 4: Weighted PUMS Numbers of Federal and Nonfederal Employees among Hispanics and Non-Hispanics, for Citizens and Noncitizens, and Odds and Odds Ratios Derived from Them, 2000

Ethnicity	Number in federal workforce	Number in nonfederal workforce	Odds of being in federal workforce	Odds ratio
Hispanic	219,893	15,228,215	0.0144	
Non-Hispanic	2,438,122	117,921,113	0.0207	0.698

Source: GAO analysis of 2000 PUMS data.

We calculated the odds ratio of 0.698 by first deriving the odds of being a federal employee rather than a nonfederal employee for both Hispanics and non-Hispanics. For Hispanics, we divided the number of the Hispanic federal employees by the number of Hispanic nonfederal employees, or $219,893/15,228,215$, which equals 0.0144. This implies that the odds of being a federal employee among Hispanics were 0.0144; that is, there were 14.4 Hispanics who are federal employees for every 1,000 Hispanics who were nonfederal employees. For non-Hispanics, by comparison, the odds were $2,438,122/117,921,113 = 0.0207$, which means that there were 20.7 non-Hispanics who were federal employees for every 1,000 non-Hispanics who are nonfederal employees. The odds ratio, or ratio of these two odds, which is $0.0144/0.0207 = 0.698$, indicates that the odds on being a federal employee (i.e., represented in the federal workforce) were lower for Hispanics than non-Hispanics, by a factor of 0.698.

**The Effect of
Citizenship on the
Difference between
Hispanics' and Non-
Hispanics' Likelihood
of Employment in the
Federal Workforce
versus the Nonfederal
Workforce**

We examined the effect of citizenship on the difference in the likelihood of Hispanics and non-Hispanics being employed in the federal workforce, relative to the nonfederal workforce, before examining the effect of all other factors because the federal government has a general policy and practice of restricting hiring to U.S. citizens and nationals. Table 5 shows the odds and odds ratio that are obtained when citizens only are used to estimate the likelihood of Hispanics and non-Hispanics being employed in the federal workforce relative to being in the nonfederal workforce. When these same odds and odds ratio were calculated for citizens only, the odds were similar (0.0200 and 0.0210), and the odds ratio of 0.953 implies that the odds of being a federal employee, among Hispanic citizens, were lower than for non-Hispanic citizens by about 5 percent. Comparing this to the odds ratio indicating the difference in the likelihood of Hispanics and non-Hispanics being employed in the federal workforce among the both citizens and non-citizens—0.698—indicates that citizenship accounts for much of the difference in the likelihood of federal employment between Hispanics and non-Hispanics, since the difference in the odds changes from about 30 percent to roughly 5 percent.

Table 5: Weighted PUMS Numbers of Federal and Nonfederal Employees among Hispanics and Non-Hispanics, for Citizens Only, and Odds and Odds Ratio Derived from Them, 2000

Ethnicity	Number in federal workforce	Number in nonfederal workforce	Odds of being in federal workforce	Odds ratio
Hispanic	198,603	9,905,447	0.0200	
Non-Hispanic	2,386,192	113,424,164	0.0210	0.953

Source: GAO analysis of 2000 PUMS data.

Effect of Remaining Factors among Citizens on the Difference between Hispanics’ and Non-Hispanics’ Likelihood of Employment in the Federal Workforce versus the Nonfederal Workforce

To determine the effect of the remaining factors on likelihood of Hispanics and non-Hispanics being in the federal workforce relative to being in the nonfederal workforce, we restricted our analysis to U.S. citizens because the federal government has a general policy and practice of hiring only U.S. citizens. We then controlled for each of the other factors one at a time among U.S. citizens in a series of multivariate logistic regression models. Table 6 shows the odds ratios representing the difference between Hispanics and non-Hispanics in the likelihood of being employed in the federal workforce relative to the nonfederal workforce, when the other factors are controlled one at a time. The effect that each factor has on the difference between Hispanics and non-Hispanics in the likelihood of being in the federal workforce as opposed to the nonfederal workforce can be discerned by comparing each of the odds ratios in Table 6 to 0.95—the odds ratio indicating the likelihood of Hispanic and non-Hispanic citizens being employed in the federal workforce before controlling for the other factors. For example, as table 6 shows, controlling for differences in education—or estimating the effect of being Hispanic on the likelihood of being in the federal workforce after allowing for the differences in education between Hispanics and non-Hispanics—changes the odds ratio from 0.95 to 1.16. That is, among similarly educated workers, Hispanic citizens were more likely than non-Hispanic citizens, by a factor of 1.16, or 16 percent, to be in the federal workforce as opposed to the nonfederal workforce. Controlling for race, veteran status, and to a lesser extent age also changed slightly the estimated difference between Hispanic and non-Hispanics in the likelihood of being a federal employee.

Table 6: Odds Ratios Indicating the Difference in Likelihood of Hispanic and Non-Hispanic Citizens Being Employed in the Federal Workforce After Controlling for Different Factors

Factor	Category	Reference group	Odds ratio
Gender	Female	Male	0.95
Level of education	<High school diploma Some college Bachelor’s degree >Bachelor’s degree	High school diploma	1.16
Veteran’s status	Veteran	Not veteran	1.04
Race	Black Other nonwhite	White	0.86
English proficiency	Not English-proficient ^a	English-proficient ^b	1.01

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Factor	Category	Reference group	Odds ratio
Age	^c	^c	1.03
Disability status	Disabled	Not disabled	0.96
School attendance	Enrolled in School	Not enrolled	0.96
Work status	Full-time	Part-time	0.97
State employed	Each state except reference group	Ohio	0.98

Source: GAO analysis of 2000 PUMS data.

^a“Not English-proficient” includes responses of “not very well” and “not at all” to Census questions about English proficiency.

^b“English-proficient” includes responses of “well” and “very well” to Census questions about English proficiency.

^cAge (in years) was entered in our models as a linear covariate; thus, the odds ratio for age represents the effect that a 1-year difference in age makes with respect to the likelihood of being a federal employee.

Because of the large effect of education on the difference between Hispanics and non-Hispanics, we also analyzed the effect of education among all individuals. The odds ratios indicating the differences in the likelihood of being in the federal workforce between workers who have some college, a bachelor’s degree, and more than a bachelor’s degree, relative to workers with a high school diploma, were 1.74, 2.15, and 2.69, respectively. In other words, each of those three categories of workers was almost twice as likely (1.74) or more than twice as likely (2.15 and 2.69) to be employed in the federal workforce relative to the nonfederal workforce as workers with only a high school diploma. Persons with less than a high school degree, by contrast, were less than half as likely as persons with a high school degree to be employed in the federal workforce relative to the nonfederal workforce.

Effect of All Factors Considered Simultaneously on the Difference between Hispanics' and Non-Hispanics' Likelihood of Employment in the Federal Workforce versus the Nonfederal Workforce

When we estimated the difference in the likelihood of being in the federal workforce between Hispanics and non-Hispanics using a multivariate model that accounted for all of the factors simultaneously among citizens, we found that the odds of being a federal rather than a nonfederal employee were higher for Hispanic citizens than for non-Hispanic citizens, by a factor of 1.24. That is, when all other factors we examined were controlled, the odds of being in the federal workforce relative to the nonfederal workforce were 24 percent higher for Hispanics than non-Hispanics.

Additional Explanatory Analyses

In response to comments from expert reviewers on a preliminary draft of these results, we conducted additional analyses to determine whether (1) our results were affected by the method we used to control for citizenship, (2) there was any difference between the effect of education for Hispanics and non-Hispanics, and (3) Hispanics' odds of federal employment were affected by changing the reference group from all non-Hispanics to white non-Hispanics.

First, we analyzed whether controlling for citizenship by excluding noncitizens produced different results than controlling for citizenship by including both groups in our model and introducing a control variable for citizenship status. We used a multivariate logistic regression model controlling for all the factors simultaneously among both citizens and noncitizens and controlled for citizenship status using a dummy variable (rather than excluding them). When we controlled for citizenship status using a dummy variable for citizenship status, the odds ratio indicating the difference between Hispanics and non-Hispanics in the likelihood of being in the federal workforce was 1.22, not appreciably different from the odds ratio of 1.24 reported above.

Second, we analyzed whether the effect of education on being employed in the federal workforce was different for Hispanics and non-Hispanics. We used an interaction model, which allowed us to assess whether the effect of education on the odds of federal employment varied between Hispanics and non-Hispanics. This model revealed that while education affected the

odds of federal employment for both Hispanics and non-Hispanics, the effect of education was generally more pronounced for Hispanics than non-Hispanics. For example, Hispanics with a bachelor's degree were 2.27 times more likely to be employed in the federal workforce than Hispanics with a high school diploma. Among non-Hispanics, those with a bachelor's degree were 2.04 times more likely than those with only a high school diploma to be employed in the federal workforce.

Third, to analyze whether Hispanics' odds of federal employment were affected by changing the reference group from all non-Hispanics to white non-Hispanics, we used dummy variables for race and ethnicity when comparing Hispanics, black non-Hispanics, and other nonwhite non-Hispanics, to white non-Hispanics as opposed to comparing Hispanics to non-Hispanics when controlling for all other factors. Including dummy variables for race and ethnicity yielded an odds ratio distinguishing Hispanics from white non-Hispanics of 1.55, which is greater than the odds ratio of 1.24 distinguishing Hispanics and non-Hispanics. The greater odds ratio resulted from black non-Hispanics and other nonwhite non-Hispanics—who were 1.82 and 1.89 times more likely to be employed in the federal workforce than white non-Hispanics—being taken out of the reference category. We did not analyze the effect of the interaction between race and Hispanic ethnicity; that is, comparing odds of federal employment among white Hispanics, black Hispanics, and other Hispanics because of differences in the reporting of race between Hispanics and non-Hispanics.⁷

Limitations

Due to limitations in the data and the methods we used, we did not include in our analyses some variables that were identified during the course of our research that could potentially affect Hispanic representation in the federal workforce. We did not analyze whether discrimination against or attitudes towards Hispanics or any other group affected representation in either the federal or nonfederal workforces because, using our data sources, it was not possible to conduct such an analysis. We did not analyze Hispanic subgroup data because of concerns we expressed in our prior work and

⁷U.S. Census Bureau, *Matched Race and Hispanic Origin Responses from Census 2000 and Current Populations Survey, February to May 2000*, Working Paper no. 79 (Washington, D.C.: December 2005), <http://www.census.gov/population/www/documentation/twps0079/twps0079.html>.

Appendix II
Logistic Regression Analyses of Factors
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those expressed by the Census Bureau and outside researchers.⁸ Additionally, some factors identified were not asked on the Census and we could not identify an adequate proxy suitable for our methodology; we cannot say how, or if, these factors would affect the results of our analyses. Variables for which we could not control include experience in a particular occupation, number of years naturalized U.S. citizens have been citizens of the United States, and an individual's preference for employment in either the federal or nonfederal workforce. Additionally, we did not control for Standard Metropolitan Statistical Area or other geographical units smaller than states because these would result in sample sizes too small to control for the full range of factors. For foreign-born respondents, we did not control for years since arrival in the United States because the data were insufficiently reliable. Finally, we could not control for how unemployment affects the likelihood of being in the federal workforce because unemployment perfectly predicts not being in the federal workforce; however, unemployed individuals are considered part of the CLF.

Additionally, with respect to race—one of the factors for which we controlled—some have suggested that many Hispanics view race differently than non-Hispanics and consider their ethnicity as a separate racial category.⁹ Such differences in the perception of race could affect our estimates on the effect of race on the likelihood of Hispanics and non-Hispanics being employed in the federal workforce relative to the nonfederal workforce. According to the U.S. Census Bureau, among Hispanics in the 2000 Decennial Census, 47.9 percent reported themselves as white, 2.0 percent as black, 1.2 percent as American Indian/Alaska

⁸See GAO, *Decennial Census: Methods for Collecting and Reporting Hispanic Subgroup Data Need Refinement*, GAO-03-228 (Washington, D.C.: January 2003); U.S. Census Bureau, *Identification of Hispanic Ethnicity in Census 2000: Analysis of Data Quality for the Question on Hispanic Origin*, Working Paper no. 75 (Washington, D.C.: July 2004), <http://www.census.gov/population/www/documentation/twps0075/twps0075.html>; Roberto Suro, *Counting the "Other Hispanics." How Many Colombians, Dominicans, Ecuadorians, Guatemalans and Salvadorans are there in the United States?*, Pew Hispanic Center (Washington D.C.: 2002), www.pewhispanic.org; John Logan, *Hispanic Populations and Their Residential Patterns in the Metropolis*, Lewis Mumford Center for Comparative Urban and Regional Research (Albany, N.Y.: University at Albany, 2002), <http://mumford.albany.edu/census/report.html>.

⁹Ruben G. Rumbaut, "The Making of a People," in *Hispanics and the Future of America*, ed. Marta Tienda and Faith Mitchell, Committee on Transforming Our Common Destiny, National Research Council (Washington, D.C.: National Academy Press, 2006), 39–43; see also U.S. Census Bureau, *Matched Race and Hispanic Origin Responses from Census 2000 and Current Population Survey February to May 2000*.

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Native, 0.3 percent as Asian, 0.1 percent as native Hawaiian and Other Pacific Islander, 6.3 percent as two or more races, and 42.2 percent as some other race.¹⁰ Among non-Hispanics, 79.1 percent reported themselves as white, 13.8 percent as black, 0.8 percent as American Indian/Alaska Native, 4.1 percent as Asian, 0.1 percent as native Hawaiian and Other Pacific Islander, 1.9 percent as two or more races, and 0.2 percent as some other race. Some studies suggest that the difference in the percentage of “other race” responses between Hispanics and non-Hispanics—42.2 and 0.2—reflects many Hispanics’ view that their race is Hispanic, rather than one of the racial categories listed in the Census.¹¹

Additionally, while assessing the reliability of the PUMS for our analysis, we found that the number of federal employees reflected in the PUMS was larger than the number reported in either OPM’s Central Personnel Data File (CPDF) as of September 2000 or OPM’s report *Employment and Trends* (March 2000). In the PUMS there were about 2,658,000 federal employees (excluding the Postal Service) compared to slightly less than 2 million reported by OPM for 2000 in either of its sources. There was also a similar discrepancy in 2004, with nearly 2 million federal employees reported by OPM (CPDF as of September 2004, *Employment and Trends*, March 2004) compared to about 2,757,000 identified in the ACS.

Although we were unable to fully account for these differences, we did identify some known sources for lower numbers of federal employees reported by OPM. Neither of OPM’s data sources include (1) federal employees working for the intelligence agencies such as the Central Intelligence Agency, National Security Agency, National Geospatial-Intelligence Agency, and Defense Intelligence Agency; (2) most personnel on federal installations paid from non-appropriated funds, such as workers in military commissaries; and (3) those in the Commissioned Corps of the Public Health Service and National Oceanic and Atmospheric Administration. In addition, OPM’s CPDF data do not include judicial and some legislative branch employees and employees of the Tennessee Valley Authority. Another potential source of the difference in the number of federal employees is that employees of federal contractors who work at federal agencies or on military installations might have responded on the

¹⁰U.S. Census Bureau, *Overview of Race and Hispanic Origin*, Census 2000 Issue Brief, (Washington, D.C.: March 2001), www.census.gov/prod/2001pubs/cenbr01-1.pdf.

¹¹Rumbaut, “The Making of a People,” 39–43.

Census that they were employees of the federal government. Several experts who commented on our methodology and results expressed a similar view.

To assess whether our results were affected by the difference in the number of federal employees in the PUMS and CPDF datasets, we substituted the federal employees from the CPDF for the federal employees in the PUMS. Our analysis, using the combined CPDF and PUMS data, confirmed that citizenship and education accounted for the difference in likelihood of Hispanics and non-Hispanics being employed in the federal workforce. Given these, the large sample size of PUMS, the high response rate to the Census 2000 long form that is the basis for PUMS, and the quality control measures Census uses in collecting the PUMS data, we believe our reported results are sound and the conclusions we reached are reasonable.

Like reported federal employment in PUMS, reports of citizenship in self-reporting surveys may be inflated. As we lacked benchmark data to assess the potential effect of misreporting of citizenship, we cannot say if or how the results would be affected by such misreports. Additionally, because we used data from a single census, we cannot make statements regarding future trends in the estimates. For example, changes in the number or geographic distribution of Hispanics might affect the likelihood of federal employment in future censuses.

Finally, our results are limited and intended to only reflect the effect of selected factors on Hispanic employment in the overall federal workforce and cannot be applied to individual occupations, grades, agencies, or other subsets of the federal government. We attempted to analyze the effect of selected factors on the federal occupations that employed 10,000 or more federal employees in 2004 and similar occupations in the nonfederal workforce, but we found that our results were not reliable. First, sample size within job categories is much smaller and subject to much greater sampling variability than in the full data set. Sample sizes this small preclude controlling for the full range of factors considered in our model. Second, PUMS data and our models cannot account for specific skills and certification, which might be particularly relevant for a given occupation. For example, the education categories do not distinguish between a bachelor's degree in chemistry or in English literature. Third, we could not account for the specific career paths required for certain occupations or those that can only be obtained on the job. For example, job seekers with a background in policing may be more qualified to be a federal officer.

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Fourth, we could not account for individuals who may be qualified for a given occupation, but holding a different one. For example, some of the individuals coded as accountants may be qualified to be financial specialists, a separate occupation. Restricting the sample to financial specialists might result in an understated pool of qualified workers.

Authorities Related to the Hiring of U.S. Citizens and Nationals

Various authorities have restricted hiring for most federal employment to U.S. citizens and nationals. Under Executive Order No. 11935, only U.S. citizens and nationals may be appointed into competitive service positions.¹ In 2005, 72 percent of executive branch employees were in the competitive service.² In rare cases, noncitizens may be appointed when necessary to promote the efficiency of the service, such as if an agency is unable to find a qualified citizen to fill a position (5 C.F.R. §7.3(c) and §338.101). Such appointments, however, must also be in compliance with other laws on federal hiring of noncitizens.³

For decades, Congress has passed an annual ban on the use of appropriated funds for compensating federal employees who are not U.S. citizens or nationals.⁴ Broader in scope than the Executive Order, the appropriation ban applies to all compensable positions within the federal government, not just to competitive service positions. There are exceptions to this ban that permit the compensation of non-U.S. citizens who are from certain countries or under special circumstances. For example, South Vietnamese, Cambodian, or Laotian refugees paroled in the United States after January 1, 1975, are excluded from the ban. Also, citizens from Ireland, Israel, or the Republic of the Philippines, or nationals of countries “allied with the United States in a current defense effort” are excluded from coverage of the appropriation ban. Even though the appropriation ban may not apply under a particular circumstance, the hiring of a noncitizen may nevertheless be prohibited because the position is within the competitive service and covered by the Executive Order ban.

¹41 Fed. Reg. 37,301 (1976). See 5 C.F.R. sec. 7.3. This executive order was issued after the Supreme Court invalidated a prior civil service restriction on appointment of noncitizens. The validity of the restriction on appointing noncitizens in Executive Order No. 11935 has been upheld by the courts. See, *Mow Sun Wong v. Campbell*, 626 F.2d 739 (9th Cir. 1980), cert. den. 450 U.S. 959 (1981).

²Federal civil service employees, other than those in the Senior Executive Service, are employed either in the competitive service or the excepted service. Employees in the competitive service are hired through the competitive examination process set forth in title 5 of the U.S. Code. Agencies are not required to follow the competitive examination process when hiring for excepted service positions.

³Although not unique to federal hiring, U.S. immigration law requires that employers must ensure that the individuals they hire are eligible to work in the United States.

⁴The fiscal year 2006 ban can be found at section 805 of Title VIII of Division A of Pub. L. No. 109-115, 119 Stat. 2396, 2496 (Nov. 30, 2005).

Appendix III
Authorities Related to the Hiring of U.S.
Citizens and Nationals

Congress has excluded some agencies (or certain types of positions within some agencies) from the restrictions on hiring or compensating noncitizens. For example, the Department of Defense is excluded from restrictions on employment and payment of noncitizens.⁵

⁵10 U.S.C. sec. 1584. Department of Defense's regulations for its National Security Personnel System (NSPS) provide that noncitizens may be appointed into excepted service positions in the absence of a qualified U.S. citizen and where immigration and security requirements are met. 5 C.F.R. sec. 9901.514.

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Hispanic Representation by Pay Plan/Grade and Federal Occupation

Table 7: Hispanic Representation in the Federal Workforce by Pay Plan and Grade, 1990–2005

Percent							
Pay plan/grade	1990	1991	1992	1993	1994	1995	1996
Blue collar	7.38	7.37	7.49	7.50	7.56	7.75	8.01
Grades 1–4	7.08	7.18	7.31	7.44	7.48	7.84	8.00
Grades 5–8	5.67	5.89	6.11	6.24	6.43	6.78	7.10
Grades 9–12	4.86	4.97	5.06	5.21	5.39	5.55	5.74
Grade 13	2.87	3.05	3.21	3.34	3.51	3.68	3.81
Grade 14	2.26	2.39	2.51	2.64	2.78	2.92	3.09
Grade 15	2.31	2.29	2.40	2.50	2.62	2.75	2.84
SES ^a	1.28	1.39	1.51	1.54	1.69	1.85	1.94
SL/ST ^b	0.62	1.30	1.19	0.90	1.22	1.49	1.49
Executives ^c	3.21	3.42	4.90	4.68	4.39	5.22	5.29
Other ^d	4.28	3.62	4.34	4.38	4.57	5.25	5.65

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1997	1998	1999	2000	2001	2002	2003	2004	2005
8.17	8.01	7.66	7.57	7.61	7.58	7.60	7.75	7.81
8.22	8.44	8.65	8.73	8.74	8.80	9.16	9.55	9.70
7.43	7.62	7.75	7.98	8.30	8.64	8.87	8.84	8.83
5.98	6.24	6.45	6.60	6.76	6.94	7.20	7.62	7.94
4.00	4.13	4.24	4.30	4.43	4.58	4.69	4.94	5.08
3.23	3.42	3.64	3.66	3.74	3.83	3.94	4.11	4.21
2.97	3.09	3.14	3.28	3.40	3.43	3.52	3.63	3.71
2.09	2.28	2.47	2.64	2.68	2.95	3.01	3.20	3.41
1.14	1.39	1.46	1.94	1.90	1.94	1.87	2.01	2.59
5.50	5.39	6.39	6.39	5.10	5.43	6.09	7.16	7.25
5.17	5.35	5.65	5.58	5.65	6.54	7.33	7.55	7.91

Source: GAO analysis of the Central Personnel Data File (CPDF), 1990–2005 for the permanent and nonpermanent federal workforce.

^aSES includes those in the Senior Executive Service and those in the Federal Aviation Administration (FAA) who have equivalent positions. These are the highest non-politically-appointed leaders in the federal workforce.

^bSL/ST includes those in the Senior Level and Senior Technical pay plans and those in FAA who have equivalent positions. These are primarily engineers, scientists, and other top-level professionals. They do not have the leadership roles of the SES.

^cExecutives include agency leaders who are political appointees above the General Schedule grade 15 level who are not in the SES.

^dOther includes those that could not be placed in one of the above pay plans or grades. From 1990 to 2005, the percentage of federal employees that could not be placed in a pay plan or grade increased from about 4 percent to 8 percent.

**Appendix IV
Hispanic Representation by Pay Plan/Grade
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Table 8: Hispanic Representation in the 2000 CLF and 2000–2005 Federal Workforce by Federal Occupation

Percent		
Federal occupational series and title ^a	2000 CLF	2000 Federal
Overall ^b	10.7	6.5
7 Correctional Officer	8.30	12.03
19 Safety Technician	5.39	4.02
83 Police	8.72	6.49
105 Social Insurance Administration	6.25	11.06
201 Human Resources Management	7.75	5.82
301 Miscellaneous Administration & Program	9.98	5.75
303 Miscellaneous Clerk & Assistant	8.06	7.55
318 Secretary	7.43	6.78
340 Program Management	9.98	4.10
343 Management Program Analysis	3.58	3.73
346 Logistics Management	6.32	4.44
401 General Biological Science	4.06	2.71
462 Forestry Technician	6.74	6.74
501 Financial Administration & Program	9.21	4.43
510 Accounting	5.13	4.05
511 Auditing	5.13	4.13
512 Internal Revenue Agent	7.59	5.46
525 Accounting Technician	6.74	6.06
560 Budget Analysis	5.27	4.49
592 Tax Examining	7.59	8.85
602 Medical Officer	5.12	5.78
610 Nurse	3.30	5.61
620 Practical Nurse	5.77	5.49
621 Nursing Assistant	10.46	5.83
640 Health Aid & Technician	10.66	6.10
679 Medical Support Assistance	9.56	6.49
801 General Engineering	3.78	4.51
802 Engineering Technician	7.65	4.39
810 Civil Engineering	4.30	4.77
830 Mechanical Engineering	3.33	3.55
855 Electronics Engineering	4.06	4.97
905 General Attorney	3.28	3.91

**Appendix IV
Hispanic Representation by Pay Plan/Grade
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2001 Federal	2002 Federal	2003 Federal	2004 Federal	2005 Federal
6.7	6.9	7.0	7.3	7.4
12.16	12.19	12.28	12.68	12.78
4.33	10.91	12.63	13.32	13.93
6.55	7.24	7.34	7.94	7.99
12.22	12.77	13.59	14.26	14.82
6.16	6.39	6.29	6.36	6.46
5.70	5.48	5.34	5.78	6.36
7.43	7.71	7.95	8.13	8.36
6.86	6.93	6.87	7.13	7.36
4.21	4.34	4.54	4.87	4.94
3.71	3.76	3.86	4.08	4.25
4.10	4.16	4.28	4.50	4.67
2.95	3.04	3.12	5.59	5.77
6.67	6.89	6.94	7.47	7.70
4.61	4.97	5.09	4.89	5.06
4.29	4.44	4.42	4.47	4.46
4.35	4.60	4.65	4.93	5.06
5.57	5.55	5.57	5.53	5.48
6.24	6.64	6.49	6.35	6.28
4.64	4.77	5.06	5.19	5.29
8.79	8.63	8.89	9.16	8.80
5.96	6.13	6.26	6.32	6.29
5.75	5.81	5.83	5.93	5.98
5.56	5.81	6.34	6.78	6.84
5.97	6.00	6.70	6.81	6.91
6.52	6.39	6.45	6.90	7.18
6.81	6.85	7.03	6.96	7.17
4.70	4.93	5.02	5.20	5.38
4.59	4.55	4.56	4.69	4.59
4.80	4.89	4.94	5.12	5.16
3.68	3.72	3.62	3.80	3.94
4.98	5.06	5.08	5.46	5.50
4.00	4.04	4.10	4.15	4.26

Appendix IV
Hispanic Representation by Pay Plan/Grade
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(Continued From Previous Page)

Percent			
Federal occupational series and title^a		2000 CLF	2000 Federal
962	Contact Representative	16.87	13.54
1101	General Business & Industry	9.98	5.80
1102	Contracting	6.02	4.19
1701	General Education & Training	7.25	3.20
1801	General Inspection, Investigation & Compliance	7.67	12.34
1811	Criminal Investigating	9.04	8.37
1895	Customs & Border Protection	7.67	c
1896	Border Patrol Agent	9.04	40.17
2005	Supply Clerical & Technician	7.27	7.83
2152	Air Traffic Control	4.77	3.79
2210	Information Technology Management	4.70	3.91
3566	Custodial Working	20.11	6.73
4749	Maintenance Mechanic	12.54	7.88
5803	Heavy Mobile Equipment Mechanic	8.66	7.66
8852	Aircraft Mechanic	9.85	8.89

**Appendix IV
Hispanic Representation by Pay Plan/Grade
and Federal Occupation**

2001 Federal	2002 Federal	2003 Federal	2004 Federal	2005 Federal
14.29	14.41	14.77	15.84	16.28
5.80	5.79	5.77	5.94	5.95
4.28	4.36	4.47	4.60	4.82
3.50	3.27	3.36	3.55	3.70
12.14	12.24	14.22	13.67	13.82
8.59	8.81	9.14	9.29	9.32
c	c	c	27.82	27.91
42.98	49.18	50.49	50.44	50.35
7.81	7.78	8.01	8.30	8.39
3.90	4.01	4.20	4.30	4.41
4.01	4.17	4.32	4.43	4.54
6.66	6.71	6.85	7.13	6.96
8.03	7.91	7.73	7.74	7.74
7.52	7.28	7.47	7.78	7.91
8.88	8.80	8.74	9.26	9.36

Source: GAO analysis of (1) the Census 2000 Special EEO File to determine Hispanic representation in the CLF, (2) the CPDF, 2000–2005, to determine Hispanic representation in the permanent and nonpermanent federal workforce for each occupation, and (3) OPM's *Fifth Annual Report to the President on Hispanic Employment in the Federal Government* for Hispanic representation in the overall 2000–2005 permanent federal workforce.

^aData are listed by OPM's occupational codes and OPM job titles. The EEOC crosswalk also contains Census job codes and job titles, and Bureau of Labor Statistics job codes. We analyzed federal occupations that had 10,000 or more federal employees as of September 2004.

^bThe overall Hispanic representation is based on all occupations in the CLF, according to the Census 2000 Special EEO File, and the permanent federal workforce, according to OPM.

^cFederal occupation code 1895 did not exist until 2004.

Comments from the Department of Commerce



UNITED STATES DEPARTMENT OF COMMERCE
The Under Secretary for Economic Affairs
Washington, D.C. 20230

JUL 07 2008

Mr. George Stalcup
Director
Strategic Issues
United States Government Accountability Office
Washington, DC 20548

Dear Mr. Stalcup:

The U.S. Department of Commerce appreciates the opportunity to comment on the United States Government Accountability Office draft report (GAO-06-832) entitled *The Federal Workforce: Additional Insights Could Enhance Agency Efforts Related to Hispanic Representation*. The Department has no comments on this report.

Sincerely,

A handwritten signature in black ink that reads "E. R. Anderson".

Elizabeth R. Anderson



Comments from the Equal Employment Opportunity Commission



U.S. EQUAL EMPLOYMENT OPPORTUNITY COMMISSION
Washington, D.C. 20507

July 11, 2006

Mr. George Stalcup
Director, Strategic Issues
U.S. Government Accountability Office
Washington, D.C. 20548

Dear Mr. Stalcup,

Thank you for giving us the opportunity to review and comment on your report, "*The Federal Workforce: Additional Insights Could Enhance Agency Efforts Related to Hispanic Representation*" (GAO-06-832). We found the report an extremely interesting and useful addition to the on-going examination of Hispanic representation in the federal workforce. Certainly, an important aspect of the report is the data on citizenship and although the focus of the report was on Hispanic representation, the report's essential findings will be very useful as they also appear applicable to other census population groups.

While data on the civilian labor force can serve as a benchmark, such data has flaws that limit its usefulness to broad trending. Therefore, under Management Directive 715, EEOC requires agencies to carefully assess the participation of all EEO groups in their workforce by conducting more refined analyses, including data on applicant pools and participation rates for specific occupations, where the appropriate benchmarks for relevant educational requirements are already incorporated.

In other refined analyses, the appropriate benchmark is not the civilian labor force but the on-board workforce, such as promotions and participation in career development, employee recognition and awards programs. Without these refined analyses called for under Management Directive 715, it would be imprudent to assess the degree to which any EEO group enjoys equality of opportunity.

Again, thank you for allowing us to review this report and to use it as a resource in the work that we do here at the EEOC.

Sincerely,

A handwritten signature in cursive script that reads "Carlton M. Hadden".

Carlton M. Hadden,
Director
Office of Federal Operations

GAO Contact and Staff Acknowledgments

GAO Contact

George H. Stalcup, (202) 512-9490 or stalcupg@gao.gov

Acknowledgments

In addition to the contact named above, Belva M. Martin, Assistant Director; Carl S. Barden; Jeffrey A. Bass; Benjamin A. Bolitzer; Karin K. Fangman; Anthony P. Lofaro; Anna Maria Ortiz; Rebecca Shea; Douglas M. Sloane; Tamara F. Stenzel; and Gregory H. Wilmoth made major contributions to this report.

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