PART THREE

Technical Notes

Definitions

Effective Date. Effective dates for data in this report are as of September 30th of the year in reference. All data are extracted from the Statistical Data Mart (SDM). See **Data Base Population Coverage** for information regarding SDM Status files.

Agency. An agency is any department or independent establishment of the Federal Government, including a Government-owned or controlled corporation, whose civilian employees are paid from appropriated funds. All tables with agency level data also include selected agency sub elements shown below department or major agency level. Sub elements are bureaus or the first administrative subdivision of an agency.

Minority. The minority race/national origin groups for Federal statistics and program administrative reporting are defined as follows:

* American Indian or Alaska Native. A person having origins in any of the original peoples of North America, and who maintains cultural identification through tribal affiliation or community recognition.

* Asian or Pacific Islander. A person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands. This area includes, for example, China, India, Japan, Korea, the Philippine Islands, and Samoa.

* **Black** (not of Hispanic origin). A person having origins in any of the black racial groups of Africa.

* **Hispanic.** A person of Mexican, Puerto Rican, Cuban, Central or South American or Spanish culture or origin, regardless of race.

Disabled. For the purposes of Federal employment and this report, a person is disabled if he or she: has a physical or

mental impairment which substantially limits one or more major life activities, or is regarded as having such impairment or has a record of such an impairment.

EEOC Targeted Disability. In addition to the standard definition of disability, the Equal Employment Opportunity Commission (EEOC) has identified certain impairments that classify employees as severely disabled. The following are among those impairments which are listed as EEOC specified disabilities: total deafness in both ears (with or without understandable speech); blindness in both eyes; missing arms or legs; paralysis; convulsive disorders (e.g., epilepsy); mental retardation; and mental or emotional illness.

Work Schedule. The time basis on which an employee is scheduled to work. Work schedule identifies full-time, part-time, and intermittent employees as follows:

* **Full-time.** Employees who are regularly scheduled to work the number of hours and days required by the administrative work week for their employment group or class. Most full-time employees have an administrative work week of 5 days of 8 hours each.

* **Part-time.** Employees who are regularly scheduled to work less than the number of hours and/or days required by the administrative work week for their employment group or class.

* **Intermittent.** Employees who work on an irregular or occasional basis, whose hours or days of work are not on a prearranged schedule, and who receive compensation only for the time actually employed or for services actually rendered.

On-board Employment. All employees in pay status at a given point in time, regardless of work schedule or tenure.

White-Collar Occupational (PATCO) Category. White-collar occupations are

classified according to five major occupational categories referred to as PATCO (**P**rofessional, **A**dministrative, **T**echnical, **C**lerical, and **O**ther). The definitions of these categories are based on the subject matter of work, the level of difficulty or responsibility involved, and the educational requirements of each occupation. PATCO categories are defined as follows:

* **Professional.** Occupations that require knowledge in a field of science or learning typically acquired through education or training pertinent to the specialized field, as distinguished from general education. The work in a professional occupation requires the exercise of discretion, judgment, and personal responsibility for the application of an organized body of knowledge that is constantly studied to make discoveries and interpretations, and to improve the data, materials, and methods.

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

* **Technical.** Occupations involving work which is non-routine in nature and is typically associated with, and supportive of, a professional or administrative field. Such occupations involve extensive practical knowledge gained through on-the-job experience, or specific training less than that represented by college graduation. Work in these occupations may involve substantial elements of the work in a professional or administrative field, but requires less than full competence in the field involved. * **Clerical.** Occupations that involve structured work in support of office, business, field, or fiscal operations. Duties are performed in accordance with established policies and require training, experience, or working knowledge related to the tasks to be performed.

* **Other.** Miscellaneous white-collar occupations that do not fall into the above Professional, Administrative, Technical, or Clerical categories.

Blue-Collar Occupation. Occupations comprising the trades, crafts, and manual labor (unskilled, semi-skilled, and skilled), including foreman and supervisory positions entailing trade, craft, or laboring experience and knowledge as the paramount requirement.

Pay Plan. A particular table or array of pay rates prescribed by law or other authoritative source that establishes the basic pay rates for most employees.

General Schedule (GS). The basic compensation schedule for most Federal civilian white-collar employees. The General Schedule was established by the Classification Act of 1949 and amended by 5 U.S.C. 51. GS data also include employees in the GM pay plan; these employees were formerly classified under the Performance Management and Recognition System (Merit Pay) which was abolished in 1993. The Performance Management and Recognition System Termination Act of 1993 called for a gradual transition from the GM to the GS pay plan. The GW pay plan which covers employment under the Youth Opportunity Stay-in-School Program was terminated and those employees are now reported in the GS pay plan.

GS and Related Pay Plans. (1) Pay plans that follow the GS grade structure and job evaluation methodology; (2) Foreign Service pay plans whose grades are converted to GS grades based on job evaluation or statute; (3) Department of Veterans Affairs pay plans for physicians, dentists, podiatrists, and optometrists whose grades are converted to GS grades based on job evaluation or statute; (4) pay plans, such as those in demonstration projects in Navy, Air Force, and National Institutes of Standards and Technology (NIST) whose grades are related to GS grades based partly on the GS grades that are encompassed by a pay band and partly on the salary-to-grade relationship within the pay band. GS and related pay plans are used for statistical purposes only and are not sanctioned by the Office of Personnel Management for administrative use.

Grade. An indicator of hierarchial relationships among positions covered by the same pay plan. For example, the General Schedule is divided into 15 grades, with a salary range of 10 steps for each grade. Grade data in this publication are for GS and related pay plans.

Average Grade. The weighted average is obtained by multiplying each grade times employment in that grade, summing all such products, and dividing that sum by the total number of employees.

Senior Pay Levels. A pay category which includes the following pay plans: Senior Executive Service, Executive Level, Senior Foreign Service, pay plans equivalent to the Senior Executive Service, Administrative Law Judges, Board of Contract Appeals, Senior Level (formerly GS 16-18), Foreign Service Chiefs of Mission, and Scientific and Professional (5 U.S.C. 3104). Also included are employees paid more than the salary rate for GS grade 15, step 10, who are in the following pay plans: Administratively Determined, Statutory Rate, Senior Biomedical Service, and Defense Nuclear Facilities Safety Board Executive Service.

Other White-Collar. White-Collar pay plans which do not fall into the General Schedule, GS and Related or Senior Pay Level pay categories. **Wage Systems.** The Federal Wage System (FWS) covers most blue-collar employees who are generally paid at rates prevailing in the localities where they are employed.

Average Salary. The average salary figures in Part Two, Table 3 of this report are derived by calculating the arithmetic means from employees adjusted base salaries. Adjusted base salaries include annualized base salaries plus locality adjustments and law enforcement officer (LEO) adjustments authorized under the Federal Employees Pay Comparability Act of 1990. Excluded from salary data are pay for Sundays, holidays, or nightwork; expense payment for employees in travel status; extra pay for hazardous working conditions or post differentials to certain employees; premium pay for overtime; awards; cost-of-living allowances; uniform expenses; and severance pay. Annualized salaries are computed by multiplying an individual's hourly pay rate by the number of hours in a full-time work year, generally 2,087 hours. This procedure leads to somewhat inflated salaries for part-time and intermittent employees covered in this report.

Statistical Data Mart (EHRI-SDM)

The Statistical Data Mart (EHRI-SDM), which was established in 2010 and uses data from the Enterprise Human Resources Integration (EHRI), is the Federal Government's primary source of detailed information about its employees.

The SDM is an automated file covering about 96 percent of all Federal civilian non-Postal Executive Branch employees. The data elements in SDM include those reflected on the employee's Standard Form 50, Notification of Personnel Action. The SDM system includes information about individuals such as date of birth, sex, race/national origin (maintained along with disabled data under strict precautions to protect identification of individuals in personnel records), service computation date, tenure, educational level, veterans preference, geographic location of duty, pay plan, grade, salary, occupational series, and supervisory status.

Data Base - Population Coverage

Data Base. All data used in this study are drawn exclusively from the Statistical Data Mart (SDM). The following is the scope of coverage in SDM as of September 30, 2010:

Executive Branch All agencies except the U.S. Postal Service, Postal Rate Commission, Central Intelligence Agency, National Security Agency, Tennessee Valley Authority, White House Office, Office of the Vice President, Board of Governors of the Federal Reserve System, National Imagery and Mapping Agency, and Defense Intelligence Agency.

Legislative Branch Includes only the Government Printing Office, U.S. Tax Court, and selected commissions. The CPDF also excludes Government Accountability Office, members and employees of Congress, Congressional Budget Office, Library of Congress, Architect of the Capitol, U.S. Botanic Gardens, and the Office of Technology Assessment.

Judicial Branch Excluded.

Other Exclusions Nonappropriated fund employees in Defense activities, Commissioned Corps employees, and Foreign Nationals employed outside of the U.S. or its territories.

Population Coverage. This publication covers **total employment,** including fulltime, part-time, and intermittent workers in those Executive Branch agencies participating in the SDM. SDM coverage is limited to Federal civilian employees.

Executive Branch coverage includes all agencies **except** the following: Board of Governors of the

Federal Reserve, Central Intelligence Agency, Defense Intelligence Agency, Foreign Service personnel at the State Department (included until March 2006) National Geospatial-Intelligence Agency, National Security Agency, Office of the Director of National Intelligence, Office of the Vice President, Postal Regulatory Commission, Tennessee Valley Authority, U.S. Postal Service, White House Office. Other **exclusions** include: Public Health Service's Commissioned Officer Corps, Non-appropriated fund employees and foreign nationals overseas. The Federal Bureau of Investigations (FBI) did not provide dynamics data until Fiscal Year 2007.

Legislative Branch coverage is limited to the Government Printing Office, U.S. Tax Court, and selected commissions. The **Judicial Branch** is entirely excluded. SDM coverage can differ from that of other Office of Personnel Management (OPM) data sources.

Agencies Added to or Deleted from the SDM

Newly established or terminated agencies are processed as part of the SDM data base. Some independent agencies were created or terminated since September 30, 2008. The newly created agencies were: Air Force Global Strike Command, Air Force Agency for Modeling/Simulation, Office of Advocacy and Outreach, Office of Environmental Markets, U.S. Army Accession Command, U.S. Military Entrance Processing Command, U.S. Army Cyber Command, Defense Acquisition University, Northern Border Regional Commission, Office of Federal Contract Compliance Programs, Office of Labor-Management Standards, Office of Workers' Compensation Programs, Employee Benefits Security Administration, Wage and Hour Division, Bureau of Consumer Finance Programs, Federal Housing Finance Agency, Office of Inspector General, Office of Sustainable Housing and Community, Office of Strategic Planning and Management, Council of Inspector General on Integ. And Effic., Bureau of Safety and Environmental Enforcement, Bureau of Ocean Energy Management, National Commission on Fiscal Responsibility and Reform, Financial

Stability Oversight Council, Dep. Asst. Secretary for Corp Senior Executive Management, Dean for VA Learning University, Financial Crisis Inquiry Commission, and the Ronald Reagan Centennial Commission.

Data Collection and Editing

Before September 2010, the U.S. Office of Personnel Management maintained a Central Personnel Data File (CPDF) system via monthly agency submissions of Notification of Personnel Action transaction data. Input was either in hardcopy form (keyed or data entry) or, for 99 percent of employment, in automated form (punched cards or magnetic tape). All input transactions were edited for validity. If errors were found in the control fields or date of birth or social security number, the transaction was rejected. All transactions not rejected in validity edits were further examined through relationship edits. Functional blanks were inserted into data fields having errors detected by these later edits, but transactions containing usable data fields were not rejected. A master file was created following each monthly update of the CPDF. Starting in October 1986, the CPDF was redesigned with a change in reporting procedures. Input is automated with agencies submitting current status data replacement files each month along with transaction data. Editing procedures like those described above are incorporated in the new system with greater emphasis on agencies' editing before submission.

Collection of Race/National Origin Data.

In June 2006, OPM instructed agencies to begin reporting ethnicity and race information for all accessions, based on the new Standard Form (SF) 181 dated July 2005. Agencies were instructed that their submissions must include a data element for existing employees "Race and National Origin" (RNO), and a new data element to indicate new employees ethnicity and race indicator (ERI).

OPM has instituted a bridging methodology to perform trend and historical analysis. This new methodology prescribes the specific recoding necessary to convert "Race and National Origin (RNO)" to "Ethnicity and Race Indicators (ERI)". In the future, Enterprise Human Resources Initiative (EHRI), will be fully populated with the new ethnicity and race codes and bridging will not be necessary. The recoding was as follows: American Indian or Alaskan Native remained the same. The previous category for Asian included both "Asian and Pacific Islander", the new category for "Asian" is used and the number of "Pacific Islanders" who fall into this category will remain unknown until the data matures. "Black not of Hispanic Origin" is now "Black or African American". "Hispanic" is "unspecified", "White" will remain the same.

Collection of Reportable Disability Data.

The collection of handicap data into the SDM also follows self-identification methodology. Using the Standard Form 256, employees are provided the opportunity either to identify or choose not to identify whether they have a reportable disability. No inference can be made as to disability or non-disability status for employees choosing not to identify. In case of multiple disabilities, the employee is asked to choose the code which describes the impairment most likely to cause the employee to experience difficulty in obtaining, maintaining or advancing in employment. The records of those choosing not to indicate whether they had a reportable disability, along with records with erroneous (missing) disability data, are grouped together and shown as Not Identified which accounted for small percentage of the covered workforce.

Study Edits. The records for active Executive Branch employees were extracted from the SDM. Critical data fields are pay plan, sex, ethnicity/race, occupation, grade, disability status, veteran status, veteran preference and work schedule.

These records underwent an additional set of validity edits on data fields considered critical for this report. However, a few records do exist in Blue-Collar occupations, but have White-Collar pay plans. 2.5% of records with missing data in the critical fields and/or because they were non-Executive Branch were rejected.

Acknowledgments

This report was prepared by Theresa E. Pinkney, Planning and Policy Analysis, Data Analysis Group. Questions concerning the data in this report should be addressed to Theresa E. Pinkney at 202-606-2942 or email at Fedstats@opm.gov.

We gratefully acknowledge the contributions of Carol Goodroe, the Applications Programming Section, Macon Data Processing Center.