The Occupational Compensation Surveys: A Retrospective

BY JOHN BUCKLEY AND ELIZABETH DIETZ

In July 1997, the Bureau of Labor Statistics (BLS) concluded 6 years of locality pay and Service Contract Act surveys collected under the umbrella of the Occupational Compensation Survey (OCS) program. The OCS program has been discontinued as the first step in phasing in the new National Compensation Survey program. During these 6 years, the Bureau of Labor Statistics refined its methods for collecting occupational wage data on a local level, and compiling them into regional and national estimates. It also developed means of quickly adapting to the needs of major data users, and providing them with rich, high quality, timely data. Now at the close of the OCS program, it is time to review its accomplishments.

Legislative underpinnings

In the middle and late 1980s, Federal agencies were having increasing difficulty recruiting and retaining high-caliber employees in certain localities. Most Federal white-collar workers were paid according to a national pay scale, the so-called "General Schedule." And because some local labor markets were paying wages higher than the national average for certain occupations, General Schedule wages were falling short of the wages sought by qualified employees. After several attempts at partial solutions and much discussion among Congress and other parties, it became evident that the Federal Government needed a pay system that was more flexible and responsive to local labor markets.

John Buckley and Elizabeth Dietz are economists in the Division of Compensation Data Analysis and Planning, Bureau of Labor Statistics. Telephone (202) 606-6287. In November 1990, Congress passed the Federal Employees Pay Comparability Act (FEPCA) as a means of effecting the needed changes. A primary feature of the act was the creation of a locality-based pay system to replace the single General Schedule that largely disregarded locality pay differences found in the private sector. The President's Pay Agent² was given primary responsibility for administering FEPCA. FEPCA named the Bureau of Labor Statistics as the agency to conduct surveys for use in determining locality pay levels.

Development of the OCS design

The Bureau created the OCS program to fulfill its part in implementing FEPCA. When FEPCA was signed into law, BLS was concurrently collecting data under its Area Wage Survey (AWS) program, the White-collar Pay Survey (WCP) program, the Industry Wage Survey (IWS) program, and surveys for the Service Contract Act (SCA) under contract with the Employment Standards Administration (ESA). Area wage surveys provided wage data on a list of blue-collar and mostly clerical white-collar occupations in 90 metropolitan statistical areas; industry wage surveys provided industry-specific data on most of the occupations found in each industry surveyed; and national data on specific white-collar occupations were provided by the Whitecollar Pay Survey. These existing occupational wage surveys fulfilled the needs of data users as well as a variety of legislative requirements.

At the inception of the OCS program, BLS was facing tight budget restrictions. Given these conditions, the Bureau developed three major goals: Provide data required by FEPCA; continue to provide as much of the traditional data as possible; and streamline and cut back on the overall costs of collecting occupational wage data.

Rather than duplicate the work of the existing surveys, it became apparent that the way to fulfill FEPCA requirements and produce much of the data that had been traditionally provided was to retain many features of the existing programs and merge them into one larger, improved survey program. After consultations with industry and labor groups and reviewing its resources, BLS created a hybrid design for the OCS, implementing features from the existing AWS and the WCP surveys and dropping some features from the IWS. SCA surveys were continued under contract with the Employment Standards Administration. Collection of OCS data started in 1991 and the first publications were issued in 1992.

Accomplishments

In addition to providing the Pay Agent with data necessary to produce locality-based pay schedules, OCS data have been used by private industry groups and State and local governments for such varied purposes as wage and salary administration, selection of locations for new plants or facilities, labor-management negotiations, mediation, evaluation of the suitability of job offers related to unemployment compensation, formulation of public policy on minimum wage legislation, academic research, and development of wage determinations under the Service Contract Act.

The OCS program introduced several improvements in scope, which greatly benefited data users. It:

- Added State and local government establishments³;
- · Added administrative and public safety jobs;
- Expanded the number of professional and technical jobs covered by the survey;
- Increased the representation of the civilian labor force⁴;
 and
- Increased the number of localities surveyed.

The OCS program has been publishing data since 1991. Each of the 298 SCA surveys conducted under OCS from 1991 through 1997 yielded a published summary of results. During the same period, 405 locality pay bulletins were published.

The results of most locality pay surveys were published in locality bulletins. Some locality pay survey data, however, were collected only for compilation of national and regional estimates in a national summary. These national summaries were published annually, at the end of each survey round.⁵

The national summaries included data on mean occupational wages6 for the United States (excluding Alaska and Hawaii), metropolitan areas, non-metropolitan areas, geographic regions, goods-producing industries, service-producing industries, and various establishment sizes. (See tables 1 and 2 for examples.) Data also included median wages, interquartile ranges, horizontal distribution of pay, average standard weekly hours per week worked, and number of workers by occupation. Many of the occupations were surveyed by level of expertise and responsibility.7 Additionally, pay relatives, or an index of occupational wage rates by locality as a proportion of the national average, were included in the national publications. All annual national and regional data were based on about 160 locality surveys. SCA survey data were included only in the locality portions of the national publication.

As an example of the kinds of information provided by tables 1 and 2, note that:

- Some of the blue-collar occupations earned more in the Northeast than in the Nation as a whole;
- Some blue-collar occupations were paid less in smaller establishments than in all establishments as a whole;
- Many of the average wages in metropolitan areas were about the same as those for the Nation as a whole*;
- Computer systems analysts earned about the same regardless of location or size of establishment;
- Police officers level 1 earned a large premium working in the Northeast, and they earned much less, on average, working in smaller establishments;
- Secretaries level 3 earned more working in the Northeast than they did in the Nation as a whole;
- Engineers level 4 earned roughly the same in the Northeast as they did in other regions of the country; earnings in smaller establishments were close to those in all establishments as a whole; and
- Accountants level 3 averaged about the same in the Northeast as in the Nation as a whole.

This is only a small sample of the types of comparisons and contrasts presented in the OCS national summaries⁹.

Change is the constant factor

Throughout the 6-year course of its surveys, OCS was in a state of flux. The areas, occupations, and industries changed over time. The following sections describe the design and contents of the emergent OCS and how it changed over time.

Table 1. Average weekly wage rates for selected occupations and characteristics, 1995

Occupation	United States, all establish- ments	Northeast	Metropolitan areas	Establishments with fewer than 500 workers
Accountants, level 3	\$797	\$795	\$801	\$789
Engineers, level 4	1,149	1,134	1,152	1,148
Computer systems analysts, level 2	926	929	928	923
Police officers, level 1	688	775	713	598
Secretaries, level 3	547	570	550	548

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Occupational Compensation Survey, National Summary, 1995, Bulletin 2487, May, 1997

Table 2. Average hourly wage rates for selected occupations and characteristics, 1995

Occupation	United States, all establish- ments	Northeast	Metropolitan areas	Establishments with fewer than 500 workers
General maintenance workers Janitors Guards, level 1 Guards, level 2 Tractor-trailer truckdrivers	\$10.31	\$12.43	\$10.69	\$9.63
	7.83	9.69	7.93	6.82
	7.01	7.67	6.95	6.31
	11.86	13.35	11.79	11.30
	14.07	15.68	14.58	13.17

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Occupational Compensation Survey, National Summary, 1995, Bulletin 2487, May, 1997

Areas sampled. Area wage surveys produced estimates for all metropolitan areas combined and for four regions—Northeast, South, Midwest, and West. The Area Wage Survey sample of metropolitan areas was used as the basis for the new OCS area sample design because of the emphasis on locality comparability under FEPCA.

"Critical" metropolitan areas, those required for FEPCA, were to be surveyed each year. "Non-critical" metropolitan areas were scheduled to be surveyed every other year, with two separate groups of non-critical areas being rotated year by year. Of the 90 metropolitan areas traditionally surveyed under the Area Wage Survey program, 32 were deemed critical. The remaining 58 were divided into two groups of 29 areas, each of which would be surveyed biennially on a rotating schedule.

OCS also collected data from 70 non-metropolitan areas to produce wage estimates representing the non-metropolitan portion of the country. These non-metropolitan data were combined with data from non-critical metropolitan areas to represent the "Rest of United States." To assure the statistical quality of the Rest of United States data, a dozen additional metropolitan area surveys were conducted. These data provided the President's Pay Agent with a means of comparing pay of Federal and non-Federal workers in localities that were not separately surveyed. By combining all metropolitan and non-metropolitan areas, BLS was able

to produce national and regional estimates of wage rates.

Over time, the Pay Agent's list of critical survey areas changed, as some metropolitan areas were dropped and others added. Some areas were combined with others, which also affected the total number of areas surveyed. Appendix I shows a list of all areas surveyed at least once and whose results were published under OCS.

In December 1992, the Office of Management and Budget issued revised definitions for the Nation's metropolitan areas based on the 1990 Decennial Census. To reflect the changes, BLS selected a new sample of areas for the 1995 round of surveys to replace the AWS-based/model. This new area sample design was used from 1995 through the end of the OCS locality pay surveys, and was adapted for use in the new National Compensation Survey program.

Occupations surveyed. OCS merged the AWS's blue-collar job list and the WCP's job list to create a combined list covering professional, administrative, technical, clerical, protective service, maintenance and toolroom, and material movement and custodial occupations. These job descriptions were adopted with little revision to the wording, because both of these older surveys contained job descriptions that were not industry specific, but rather applied to jobs found across industries. The job lists for the IWS's could not be used because they changed with each industry

surveyed, and they were highly industry-specific.

For the 1991 and 1992 OCS locality pay survey rounds, 41 occupations were surveyed. The list remained the same for the 1993 surveys, but in 1994, registered nurse (including specialists and anesthetists), licensed practical nurse, and nursing assistant were added. These new occupations had originally appeared in the WCP surveys but due to budget restrictions were dropped from the 1991-93 rounds. In 1995, OCS added director of personnel to the job list, another job resurrected from the WCP survey. OCS also added two newly defined jobs, scientist and skilled multi-craft maintenance worker. Meanwhile, OCS dropped budget analyst supervisor and reorganized some of its material movement and storage occupations. By the 1995 round of surveys and continuing through the end of OCS locality pay surveys in 1997, the job list had grown to 45 occupations.

In contrast, most of the SCA surveys were based on a smaller list, 27 occupations, using the same job descriptions as those used in the locality pay surveys. The SCA surveys, which were targeted for special industries, for example the fast food industry, had special lists specific to each of the industries surveyed. (See appendix 2 for locality pay and SCA job lists.)

Industries covered. OCS expanded upon the private industry coverage of white-collar pay and area wage surveys, to include State and local government establishments. This made possible the publication of salaries of government workers and their comparisons with private industry workers.¹¹

Over the course of the OCS survey years, several special SCA and locality pay industry studies were conducted in addition to the regular surveys. From 1990-93, two SCA surveys were conducted for the fast food industry. Eating and drinking establishments had been surveyed for about 15 years by BLS, and under OCS, a special SCA survey of this industry was conducted in 1993. Both the fast food and the eating and drinking establishments surveys used job lists unique to their respective industries.

SCA surveys had been conducted since the mid-1980s for the national deep sea transportation industry and for several States in the forestry and logging industries. Under OCS, these SCA surveys continued to be produced for ESA. Deep sea freighters were surveyed in 1991, 1993, and 1996, and deep sea tankers were surveyed in 1991 and 1993 under OCS. In 1993 and 1994, forestry and logging surveys were conducted in Oregon, Washington, Montana, Idaho, Arkansas, and Mississippi. In 1994, OCS also conducted

a special SCA survey of certificated air carriers in Alaska.¹⁵ Each of these surveys contained a job list unique to the industry surveyed.

OCS conducted two special locality pay series in response to current trends in the labor market. With the aging population and increased costs of medical care, many data users began looking for industry wage data on the health services industry. In response to this need, OCS increased its sample of health services establishments for locality pay surveys in 1994. The full locality pay job list, which as of 1994 included registered nurses, licensed practical nurses, and nursing assistants, was surveyed in these health services establishments. This made possible the publication of wages for over 40 occupations across all industries, and wages for these same occupations specific to the health services industry.16 Locality bulletins and summaries included the usual data on average wages for all industries and additional data on average wages of the same job list specific to the health services industry. The 1994 national bulletin summarized the survey findings on health service industry wages for the Nation as a whole.

Another rapidly emerging issue in the labor market was the increasing use of temporary help workers in an everwidening array of occupations. More and more data users were looking for wage information on all types of workers in the temporary help services industry. OCS responded with a nationwide survey in 1994. National and regional estimates were published in addition to summaries for 21 metropolitan areas. Average wages for several white-collar, blue-collar, and service occupations common to the temporary help services industry were collected.¹⁷

Looking to the future

Change was the hallmark of the Occupational Compensation Survey program throughout its life. There were changes in the areas and occupations surveyed, and there were occasional additions of special studies. OCS produced over 700 publications of timely locality wage data as well as annual summaries of its national and locality data. OCS fulfilled its original purpose of providing data for Federal pay on a locality basis, but the data produced by this program also filled some 3,000 data requests per year. 18 From this point forward, the new National Compensation Surveys (NCS), which started in mid-1997, will supplant OCS. NCS is designed to fulfill the requirements of FEPCA and improve upon the OCS design.¹⁹ If the OCS experience is any indication of the future, NCS will, without doubt, face many changes and challenges over the course of its life.

See, for example, the National Commission of the Public Service, Leadership for America: Rebuilding the Public Service, Washington, DC, 1989.

²The President's Pay Agent consists of the Secretary of Labor, the Director of the Office of Management and Budget, and the Director of the Office of Personnel Management.

3 Locality pay surveys covered State and local government establishments

while SCA surveys did not.

⁴ The scope of locality pay surveys covered 65 percent of all civilian workers, based on Unemployment Insurance records.

⁵ As of this printing, BLS published national summaries for 1992, 1993, 1994, and 1995 OCS data. A national summary for 1996 is forthcoming.

⁶ Based on straight-time average weekly or hourly pay, depending on occupation. Straight-time weekly pay for white-collar workers relates to regular mean straight-time salaries that are paid for standard work weeks.

⁷ For a complete collection of job descriptions by occupation and level, see Manual of OCSP Job Descriptions, Bureau of Labor Statistics, Wash-

ington, DC, January 1995.

* A reason for this is that the metropolitan sample was 85 percent of the total employment.

⁹ Occupational Compensation Survey National Summary, 1995, Bu-

reau of Labor Statistics, Bulletin 2487, May 1997.

10 "Rest of United States" consists of all metropolitan areas and non-metropolitan counties not designated by the Pay Agent for locality based rates.

Alaska and Hawaii are not part of "Rest of United States" or locality pay.

"Buckley, John E., "Pay in Private Industry and State and Local Governments," Compensation and Working Conditions, September 1996, pp. 22-26; and Miller, Michael A., "State and Local Government Workers: Are They Overpaid?," Monthly Labor Review, May 1996, pp. 18-29.

12 VanGiezen, Robert W., "Occupational Wages in the Fast-food Restau-

rant Industry," Monthly Labor Review, August 1994, pp. 24-30.

13 Dietz, Elizabeth, "Wages in the Deep Sea Transportation Industry: Freighters and Tankers," Compensation and Working Conditions, Summer 1997, pp. 66-71.

¹⁴ Dietz, Elizabeth, "Wages in Forestry and Logging," Compensation

and Working Conditions, Spring 1997, pp. 51-54.

¹⁵ VanGiezen, Robert W., "Occupational Wages and Employee Benefits Among Small Certificated Air Carriers in Alaska," Compensation and Working Conditions, December 1996, pp. 37-39.

¹⁶ Miller, Michael A., "Nursing Pay in Private Industry, 1994," Com-

pensation and Working Conditions, Spring 1997, pp. 11-22.

¹⁷ Dietz, Elizabeth, "A Look at Temporary Help Wage Rates," Compensation and Working Conditions, September 1996, pp. 46-50.

Based on 1994 BLS internal records of requests for OCS data.

¹⁹ See, for example, Hoffmann, Kenneth, "New Approach to Measuring Occupational Wages," *Compensation and Working Conditions*, December 1996, pp. 4-8.

Appendix 1. Published SCA and Locality Pay Surveys Conducted Under the Occupational **Compensation Survey Program**

Corpus Christi, TX Lincoln County, WY Abilene, TX Cumberland, MD-WV Little Rock-North Little Rock, AR Acadia Parrish. LA Dallas TX Livinaston II Alaska Statewide Dallas-Fort Worth, TX CMSA Logansport-Peru, IN Albany, GA Albany-Schenectady-Troy, NY Danbury, CT Longview-Marshall, TX Davenport-Rock Island-Moline, IA-IL Lorain-Elvria, OH Albugiuerque, NM Dayton-Springfield, OH Alexandria-Leesville, LA Alpena-Standish-Tawas City, MI Davtona Beach, FL Louisville, KY-IN Decatur County, GA Anaheim-Santa Ana. CA Decatur, IL Anchorage, AK Delaware County, NY Madison, WI Ann Arbor, Mi Denver, CO Maine Statewide Apache, AZ Denver-Boulder-Greely CO CMSA Appleton-Green Bay, WI Des Moines, IA Mansfield OH Appleton-Oshkosh-Neenah, WI Asheville, NC Detroit, MI Dodge County, NE Atlanta GA Dothan, AL Atlantic City, NJ Duluth, MN-Wi Meridian, MS Augusta-Columbia, GA-SC Dver County, TN Austin, TX Bakersfield, CA Eau Claire-La Crosse, WI-MN Baltimore, MD El Paso-Las Cruces-Alamogordo, TX-NM Elkhart-Goshen. IN Milwaukee, WI Bannock County, ID Elmira, NY Baton Rouge, LA Eugene-Springfield, OR Battle Creek, MI Beaufort County, SC Evansville-Clarksville, IN-KY-TN Mobile, AL Favetteville, NC Beaumont-Port Arthur, TX Finney, KS Bergen-Passaic, NJ Florence, SC Billings, MT Fort Lauderdale-Hollywood, FL Montgomery, AL Biloxi-Gulfport-Pascagoula, MS Fort Myers-Cape Coral, FL Binghamton, NY Fort Smith, AR-OK Nashville, TN Birmingham, AL Fort Wayne, IN Bloomington-Normal, IL Fort Worth, TX New Britain, CT Bloomington-Vincennes, IN Fresno-Visalia, CA Boise City, ID Gadsden-Anniston, AL Boston, MA New Orleans, LA Boston-Worcester, MA CMSA Gainesville, FL Gallia, OH New York, NY Box Elder, UT Gary-Hammond, IN Newark, NJ Bradenton, FL Goldsboro, NC Bremerton-Shelton WA Grand Island-Hastings, NE Brunswick, GA Green Bay, WI Buffalo, NY Greensboro-Winston-Salem-High Point. Burlington, VT NC Butler, MO Greenville-Spartanburg, SC Carroll, IA Greenwood County, SC Carroll County, NH Hagerstown-Cumberland, MD-PA Northwest Texas Cedar Rapids, IA Harrisburg-Lebanon-Carlisle, PA Oakland, CA Central Illinois Hartford, CT Central Louisiana Hawaii Statewide Central Nebraska Honolulu, HI Omaha, NE-IÁ Central New York Houston, TX Orlando, FL Champaign-Urbana-Rantoul, IL Houston-Galveston-Brazoria, TX CMSA Charleston, SC Huntsville, AL Charlotte-Gastonia-Rock Hill, NC-SC Indianapolis, IN Chattanooga, TN-GA Cheyenne, WY Jackson, MS Jacksonville, FL Chicago, IL Peoria, IL Jacksonville-New Bern, NC Chicago-Gary-Kenosha, IL-IN-WI CMSA Joliet, IL Cincinnati, OH-KY-IN Juneau County, WI Cincinnati-Hamilton, OH-KY-IN CMSA Clarksville-Hopkinsville, TN-KY Kalamazoo-Battle Creek, MI Kansas City, MO-KS Phoenix, AZ Cleveland, OH Knoxville, TN Pine Bluff, AR Cleveland-Akron, OH CMSA Kokomo, IN Pittsburgh, PA Colorado Springs, CO LaCrosse-Sparta, WI Columbia-Sumter, SC Columbus, GA-AL Las Vegas-Tonopah, NV Polk County, TX Lawrence-Haverhill, MA-NH Portland, ME Columbus, MS Lexington-Fayette, KY Columbus, OH Portland, OR Lima, OH Connecticut Statewide

Los Angeles-Long Beach, CA Lower Eastern Shore, MD-VA-DE Macon-Warner Robins, GA Manitowoc County, WI Melbourne-Titusville-Palm Bay, FL Memphis, TN-AR-MS Mercer County, OH Miami-Ft Lauderdale, FL CMSA Miami-Hialeah, FL Middlesex-Somerset-Hunterdon, NJ Milwaukee-Racine, WI CMSA Minneapolis-St. Paul. MN-WI Monmouth-Ocean, NJ Monroe County, FL Montana Statewide Nacogdoches County TX Nassau-Suffolk, NY New Hampshire Statewide New London-Norwich, CT Norfolk-Virginia Beach-Newport News, VA North Dakota Statewide Northeastern Iowa Northeastern Tennessee-West Virginia Northern Lower Peninsula, MI Northern New York Northwest Florida Obion County, TN Oklahoma City, OK Oxford County, ME Oxnard-Ventura, CA Panola County, TX Parkersburg-Marietta, WV-OH Pawtucket-Woonsocket-Attleboro, RI-MA Philadelphia, PA-NJ Philadelphia-Wilmington-Atlantic City, PA-NJ-DE-MD CMSA Pittsburg County, OK Portland-Salem, OR-WA CMSA

Appendix 1. Published SCA and Locality Pay Surveys Conducted Under the Occupational Compensation Survey Program—Continued

Portsmouth-Chillicothe-Gallipolis, OH

Poughkeepsie-Orange, NY Providence, RI Pueblo, CO

Raleigh-Durham, NC

Reading, PA Reno, NV

Puerto Rico

Rhode Island Statewide Richmond-Petersburg, VA Rio Grande Valley, TX Riverside-San Bernardino, CA

Rochester, NY

Sacramento, CA

Sacramento-Yolo, CA CMSA Saginaw-Bay City-Midland, MI

St. Louis, MO-IL St. Cloud, MN Salem, OR

Salinas-Seaside-Monterey, CA

Salt Lake City-Ogden, UT San Angelo, TX

San Antonio, TX San Diego, CA San Francisco, CA

San Francisco-Oakland-San Jose, CA **CMSA**

San Juan, PR CMSA

San Juan County, NM San Jose, CA

San Luis Obispo County, CA

Sandusky, OH

Santa Barbara-Santa Maria-Lompoc, CA

Savannah, GA Scioto County, OH Scotts Bluff County, NE Scranton-Wilkes-Barre, PA

Seattle, WA

Seattle-Tacoma-Bremerton, WA CMSA

Selma, AL

Shreveport, LA

South Bend-Mishawaka, IN South Dakota Statewide Southeastern Massachusetts Southeastern North Carolina

Southern Missouri Southwestern Virginia

Spokane, WA Springfield, MA Springfield, IL Stockton, CA

Sweetwater County, WY Syracuse-Utica-Rome, NY

Tacoma, WA

Tampa-St. Petersburg-Clearwater, FL

Toledo, OH

Topeka, KS Trenton, NJ

Tucson-Douglas, AZ

Tulsa, OK

Upper Peninsula, MI Utica-Rome, NY Valleio-Fairfield-Napa, CA Van Buren County, MI Vermilion County, IL Vermont Statewide

Virgin Islands

Visalia-Tulare-Porterville, CA Waco-Killeen-Temple, TX

Ward County, ND

Washington, DC-MD-VA

Waterloo, IA

West Palm Beach, FL West Virginia Statewide Western Massachusetts Wichita, KS

Wichita Falls-Lawton-Altus, TX-OK

Wilmington, DE-NJ-MD Worcester, MA

Wyoming Statewide Yakima-Richland—Kennewick-Pasco-Walla

Walla-Pendleton, WA-OR

York, PA

Appendix 2. Occupational Compensation Survey Program Occupational List

Nursing assistants³

Professional and administrative

Accountants (six levels)

Accountants, public (four levels)

Attornevs (six levels)

Budget analysts (four levels) Budget analyst supervisors (two levels)1 Buyers/contracting specialists (five levels) Computer programmers (five levels)2

Computer systems analysts (five levels)2 Computer systems analyst supervi -

sors/managers (four levels)

Engineers (eight levels) Personnel specialists (six levels)

Personnel supervisors/managers (five levels)

Registered nurses (four levels, plus specialties)2,3

Scientists (eight levels)1 Tax collectors (three levels)

Technical

Computer operators (five levels)2 Drafters (four levels)2

Engineering technicians (six levels)2 Engineering technicians, civil or survey technicians/construction inspectors (six Licensed practical nurses3

Clerical

Clerks, accounting (four levels)2 Clerks, general (four levels)2 Clerks, order (two levels)2 Key entry operators (two levels)2 Personnel assistants (employment) (four Secretaries (five levels)2 Switchboard operator-receptionists² Word processors (three levels)2

Protective service

Corrections officers **Firefighters**

Police officers, uniformed (two levels)

Maintenance and toolroom

General maintenance workers2 Maintenance electricians² Maintenance electronics technicians (three levels)2 Maintenance machinists²

Maintenance mechanics, machinery2 Maintenance mechanics, motor vehicle² Maintenance pipefitters²

Skilled multi-craft maintenance worker1, 2

Tool and die makers2

Material movement and custodial

Forklift operators² Guards (two levels)2 Janitors² Material handling laborers² Order fillers Shipping/receiving clerks Truckdrivers (four categories of trucks)2

Warehouse specialists

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¹Occupation added in 1995.

²Occupation surveyed for Service Contract Act surveys.

³ Occupation added in 1994 round of surveys.