

COMP2000: Designing a New Wage Survey

BY BETH LEVIN CRIMMEL

COMP2000—the Bureau's new compensation survey—will produce information on compensation by occupation for many of the Nation's metropolitan areas and for the Nation as a whole. Data will be published on compensation—wages and salaries and benefits—for different work levels within occupational groups for private industry, State and local governments, full- and part-time workers, and other workforce characteristics.

Background

Changes in the types of compensation, new patterns in the industries and occupations that make up the economy, and improvements in statistical measurement mean that surveys need periodic revision. This is one impetus behind COMP2000, the Bureau's new compensation survey that integrates three existing BLS compensation surveys into a single one.

It will also provide an ever wider range of outputs, improving the timeliness, comparability, accuracy, and relevance of data produced by BLS.

Minimizing respondent burden is also a key COMP2000 goal. Responding firms lose both time and money when they use their resources to respond to surveys. BLS has increased outreach efforts in an effort to help respondents realize the tangible benefits gained by cooperating with the survey collection. This article provides insight into the

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evolution of the design of this new BLS compensation survey.

Sample design

The three current compensation series—Employment Cost Index (ECI), Employee Benefits Survey (EBS), and Occupational Compensation Survey (OCS)—are collected from two separate establishment samples. ECI and EBS data are obtained from the same sample; OCS has its own sample, selected by area to provide data on a locality basis.

The ECI/EBS sample reflects the Nation's economy as a whole. Changes in and levels of wage and benefits costs are produced, as are information on benefit provisions and incidence rates. The OCS sample also is designed so that the areas chosen can be used to generate valid data for the Nation as a whole. The area sample is used to meet the needs of the primary user of the OCS data—the President's Pay Agent. The President's Pay Agent consists of the Directors of the Office of Management and Budget and the Office of Personnel Management,

and the Secretary of Labor. The Pay Agent analyzes the information as part of the process of determining comparability between local civil service pay scales for white-collar workers and those in the rest of the economy.

The COMP2000 program will use an area-based establishment sample. To represent the Nation, 154 localities (81 metropolitan areas and 73 nonmetropolitan counties) have been selected via probability sampling techniques that resulted in the largest metropolitan areas having the greatest chance of being included. The design will allow for the release of data for most metropolitan areas chosen (and some nonmetropolitan areas), by region, and for the U.S. The detail available will vary by geographic coverage.

This sample will be implemented in stages. In the initial phase of COMP2000, an area-based sample of about 24,000 establishments with 50 or more employees will be implemented beginning in Fall 1996 and culminate in 1997. This first sample will replace the OCS sample. COMP2000 will collect wage rates

by occupation and by work levels.

In 1998, one-third of all establishments in the COMP2000 survey will be re-visited to collect data on employer-provided benefits. The introduction of benefit collection will mean that ECI and EBS can be produced from the COMP2000 sample, eliminating both as separate surveys. In 1999, a full sample of establishments with fewer than 50 employees will be introduced. Sample rotation, with one-fifth of establishments being replaced each year, begins in 2000.¹ This allows the sample to be kept current, while minimizing the time most units are asked to respond to the survey, thereby reducing respondent burden. Both wage and benefit data will be collected from one-third of the new units; the other two-thirds will report wage data only.

The new sample will have more units than either of the existing ones. However, the cost advantages of a single sample are significant, both for BLS and cooperating establishments. It eliminates the need for duplicate visits to the same establishment to collect similar compensation data. This minimizes respondent burden, particularly for large establishments that were often in both samples. It will also reduce the high cost to BLS establishment visits, which typically are done at least once for each unit. Also, less information is requested from the smallest companies, minimizing their cost.

Finally, the new sample has been designed to allow for release of additional statistical series. Because of the area design, indexes of compensation change will be available for some of the largest metropolitan areas in the U.S.²

Identification of occupations

There is a similarity among the three compensation series in that they gather information by occupation. Both ECI and OCS collect data on wages rates by occupation; the

EBS and ECI programs gather benefit data by occupation.

But there are also major differences in the types of information gathered. All three series collect data by occupation, but use different systems to classify those occupations. ECI and EBS use a method based on that of the 1990 Census. This method identifies about 480 individual occupations, which are assigned to 1 of 9 occupational groups. The occupations for which data are to be collected are randomly selected, with the jobs having the most workers having the highest possibility of selection.

In contrast, OCS collects data for occupations that are identified from a fixed list of occupations. The list, composed of occupations commonly found in the Federal white-collar civil service, reflects the use of the data for comparing Federal and nonfederal pay rates. The occupations in the job list are also divided into work levels. Because the description of the work levels is tailored to each specific occupation, it is difficult to compare work levels across occupations.

The new COMP 2000 method, which is still being tested, relies on the current ECI/EBS procedures in its initial stages. Using an employee list, a number (increasing with establishment size) of workers are randomly chosen. Each selected worker is classified into 1 of 480 Census-derived occupations, and is further identified as to union or nonunion and full- or part-time status, and by straight-time earnings or incentive pay.

In the last step of the process, the selected occupations are assigned a work level. This step has the same intent as the OCS leveling process—to classify occupations according to their duties and responsibilities. For COMP2000, however, there is a generic set of 10 factors used to rank and compare all occupations. These generic leveling factors, based on an evaluation system used by the Office

of Personnel Management (OPM) to rank Federal jobs, include: Knowledge, supervisory controls, guidelines, complexity, scope and effect, personal contacts, purpose of contacts, physical demands, work environment, and supervisory duties.

Within each factor, there are a number of levels, each with a description and points. The number and range of points differ by factor.³ A level that best describes the job is selected for each factor. Summing the points across factors yields the overall points for the job. The total points determine which of 15 work levels (as defined by OPM) the job fits.

The new methods of determining work levels have important implications for COMP2000. In the OCS, wages by level were available for a limited number of occupations and were not comparable across occupations. In contrast, the COMP2000 leveling procedure increases the likelihood of the most common occupations in each locality being selected, which greatly increases the relevance of the data. It also allows for comparisons of levels across occupations. In addition, procedures to determine the level of any job are available from BLS so that data users can replicate the technique. This leveling technique also lessens the burden on responding establishments because the same generic factors are used for each surveyed job. For the same reasons, generic factors also speed (and lower the cost of) the training of the BLS field economists who collect the data.

A series of tests has begun to determine how well the new generic leveling method works. The first of these pilot studies took place in the Albuquerque, New Mexico metropolitan statistical area in February and March 1996. Other areas in the test include Allentown, Pennsylvania; Rochester, NY; Salt Lake City, Utah; Raleigh, North Carolina; and New Orleans, Louisiana.

Table 1: Selected data for full- and part-time workers, private industry and State and local governments, Albuquerque, NM, February—March 1996

Occupation group and level	Mean hourly earnings	Employment
All workers	\$12.84	273,889
White-collar workers	15.82	151,204
Professional specialty and technical workers	20.63	52,436
Professional specialty	22.66	38,423
Level 11	21.00	4,120
Level 12	24.53	4,791
Level 13	35.71	3,693
Computer systems analysts and scientists	20.36	2,961

Albuquerque pilot test. The table above highlights some of the data available from the Albuquerque pilot. It shows mean hourly wages and employment for a variety of occupation classifications. Data also are available for private industry and State and local governments, by full- and part-time status, union and nonunion status, straight-time earnings and incentive payments, and by establishment size.

Benefit collection

While the OCS program collects little information on employee benefits, the EBS survey is designed solely to provide data on benefit provisions and incidence rates. The ECI also heavily relies on benefit costs as part of its total compensation measure.

Collection of benefit information can pose considerable respondent burden. Companies are more likely to refuse to supply benefit data for an occupation than the corresponding wage information. This problem is compounded for the ECI where quarterly updates of costs are needed. For the new COMP2000 program, a preliminary plan for the collection of benefits has been developed. Testing of some techniques will begin in early 1997. The methods that follow will be evaluated during those tests and therefore are subject to change.

Certain benefits, such as severance pay, that are both low in cost and difficult to collect, are likely to be excluded from the COMP2000 program. For other benefits, outside sources may be used to obtain basic data needed to determine their cost. For example, rather than determining actual overtime worked for an occupation in a particular establishment, average overtime hours from BLS' Current Employment Statistics (CES) survey may be substituted. Cost can then be determined by multiplying the CES hours by the occupation's hourly overtime wage rate. Statistical modeling may be used for other benefits to estimate their costs. In that way, they would not have to be collected in every establishment.

The ECI program has always attempted to hold the usage of benefits constant over time, so that the quarterly indexes only reflected changes in rates and plan provisions, not in elements like seniority, which affects vacation plan costs, or employee choice, which affects health care costs. During the initial collection at an establishment, this required that companies report figures for both the rate charged for the benefit (for example, the family coverage premium for a health maintenance organization) and the number of employees with this coverage (often difficult to obtain).

In quarterly updates, only rate changes would be reflected. COMP2000 may replace the collection of rates and constant usage with the collection of simple expenditures—figures taken from current period usage and cost. Such data requirements may simplify collection significantly.

Another new procedure concerns the frequency with which benefit costs will be updated. For the ECI, each benefit's cost is reviewed quarterly. Under COMP2000, some benefits will be updated that often; others will be updated annually. Still others will only be updated under special circumstances. Updating benefits will depend on past experience as to the frequency of cost change. For instance, with ECI collection it has been found that, in a given establishment, the health plan premiums are usually changed on an annual basis. So updates to health care costs may only be sought once a year.

The Bureau expects these changes in benefit collection methods will result in a reduction of the time spent by firms responding to the survey. The reduction in time is expected to increase response rates. In addition, costs will be reduced for BLS as staff spends less time and resources collecting, processing, and analyzing data.

—Endnotes—

¹ The current ECI/EBS sample rotation is done on an industry basis, while COMP2000 units will be rotated across all industries and areas. This method smoothes the effect on the data of intro-

ducing new establishments.

² A detailed description of the new area design will appear in a future issue of *Compensation and Working Conditions*.

³ Supervisory duties is a new factor developed by BLS. It is not included in the OPM point factor system. At the present time, no points are assigned for supervisory duties.