Andrews County, TX
National Compensation Survey
June 1999

U.S. Department of Labor
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This summary provides results of a June 1999 survey of occupational pay in Andrews County, TX. Data shown in this summary were collected as part of the Bureau of Labor Statistics' (BLS) National Compensation Survey (NCS). The NCS provides data on the occupational wages and employee benefits for localities, broad geographic regions, and the Nation as a whole. The Employment Cost Index, a quarterly measure of the change in employer costs for wages and benefits, will be derived from the NCS. This summary is limited to data on occupational wages and salaries.

Table 1-1 presents mean hourly earnings, weekly hours, and relative standard errors for all industries, private industry, and State and local government for selected worker and establishment characteristics. The worker characteristics include major occupational group, full-time or part-time status, union or nonunion status, and time or incentive pay. Establishment characteristics include goods and service producing (within private industry) and size of establishment. Not all estimations met the criteria for publication. Also contained in this summary is a technical note describing survey procedures.

The survey could not have been conducted without the cooperation of the many private firms and government jurisdictions that provided pay data included in this summary. The Bureau thanks these respondents for their cooperation. Field economists of the Bureau of Labor Statistics collected and reviewed the survey data. The Office of Compensation and Working Conditions, in cooperation with the Office of Field Operations and the Office of Technology and Survey Processing in the BLS National Office, designed the survey, processed the data, and prepared the survey for publication.

Where to find more information

For additional information regarding this survey, including a list of occupational classifications, please contact any BLS regional office at the address and telephone number listed on the back cover of this summary. You may also write to the Bureau of Labor Statistics at: Division of Compensation Data Analysis and Planning, 2 Massachusetts Avenue, NE, Room 4175, Washington, DC 20212-0001, or telephone (202) 691-6199, or send e-mail to **ocltinfo@bls.gov**.

The data contained in this summary are also available at **http://stats.bls.gov/comhome.htm**, the BLS Internet site. Data are in three formats: an ASCII file containing the published table formats; an ASCII file containing positional columns of data for manipulation as a data base or spreadsheet; and a Portable Document Format (PDF) file containing the entire summary.

 This information will be made available to sensory impaired individuals upon request. Voice phone: (202) 606-5886; Federal Relay Service 1-800-877-8339.

Table 1-1. **Summary: Mean hourly earnings[1] and weekly hours by selected characteristics, private industry and State and local government, National Compensation Survey, Andrews County, TX, June 1999**

Worker and establishment characteristics	Total			Private industry			State and local government		
	Hourly earnings		Mean weekly hours[3]	Hourly earnings		Mean weekly hours[3]	Hourly earnings		Mean weekly hours[3]
	Mean	Relative error[2] (percent)		Mean	Relative error[2] (percent)		Mean	Relative error[2] (percent)	
Total	$16.40	9.5	39.2	$15.98	17.6	39.9	$16.73	11.1	38.6
Worker characteristics:[4]									
White-collar occupations[5]	19.78	9.7	38.0	–	–	–	19.81	10.5	37.9
Professional specialty and technical	20.73	7.3	37.6	–	–	–	20.97	7.4	37.5
Executive, administrative, and managerial	–	–	–	–	–	–	–	–	–
Administrative support	11.74	8.2	38.2	–	–	–	11.74	8.2	38.2
Blue-collar occupations[5]	15.64	18.4	40.0	–	–	–	–	–	–
Precision production, craft, and repair	18.17	17.2	40.0	–	–	–	–	–	–
Machine operators, assemblers, and inspectors	–	–	–	–	–	–	–	–	–
Transportation and material moving	–	–	–	–	–	–	–	–	–
Handlers, equipment cleaners, helpers, and laborers	–	–	–	–	–	–	–	–	–
Service occupations[5]	9.48	10.1	39.8	–	–	–	–	–	–
Full time	16.40	9.5	39.2	15.98	17.6	39.9	16.73	11.1	38.6
Nonunion	16.40	9.5	39.2	15.98	17.6	39.9	16.73	11.1	38.6
Time	16.40	9.5	39.2	15.98	17.6	39.9	16.73	11.1	38.6
Establishment characteristics:									
Goods producing	([6])	([6])	([6])	–	–	–	([6])	([6])	([6])
Service producing	([6])	([6])	([6])	–	–	–	([6])	([6])	([6])
50-99 workers[7]	–	–	–	–	–	–	–	–	–
100-499 workers	–	–	–	–	–	–	–	–	–
500 workers or more	–	–	–	–	–	–	–	–	–

[1] Earnings are the straight-time hourly wages or salaries paid to employees. They include incentive pay, cost-of-living adjustments, and hazard pay. Excluded are premium pay for overtime, vacations, and holidays; nonproduction bonuses; and tips. The mean is computed by totaling the pay of all workers and dividing by the number of workers, weighted by hours.

[2] The relative standard error (RSE) is the standard error expressed as a percent of the estimate. It can be used to calculate a "confidence interval" around a sample estimate. For more information about RSEs, see appendix A.

[3] Mean weekly hours are the hours an employee is scheduled to work in a week, exclusive of overtime.

[4] Employees are classified as working either a full-time or a part-time schedule based on the definition used by each establishment. Union workers are those whose wages are determined through collective bargaining. Wages of time workers are based solely on hourly rate or salary; incentive workers are those whose wages are at least partially based on productivity payments such as piece rates, commissions, and production bonuses.

[5] A classification system including about 480 individual occupations is used to cover all workers in the civilian economy. See appendix B for more information.

[6] Classification of establishments into goods-producing and service-producing industries applies to private industry only.

[7] Establishments classified with 50-99 workers may contain establishments with fewer than 50 due to staff reductions between survey sampling and collection.

NOTE: Dashes indicate that no data were reported or that data did not meet publication criteria.

Appendix: Technical Note

Survey scope

This survey of Andrews County, TX, covered establishments employing 50 or more workers in goods-producing industries (mining, construction and manufacturing); service-producing industries (transportation, communications, electric, gas, and sanitary services; wholesale trade; retail trade; finance, insurance, and real estate; and services industries); and State and local governments. Agriculture, private households, and the Federal Government are excluded from the scope of the survey. For purposes of this survey, an establishment is an economic unit that produces goods or services, a central administrative office, or an auxiliary unit providing support services to a company. For private industries in this survey, the establishment was usually at a single physical location. For State and local governments, an establishment was defined as all locations of a government entity.

The list of establishments from which the survey sample was selected (sampling frame) was developed from State unemployment insurance reports. Due to the volatility of industries within the private sector, sampling frames were developed using the most recent month of reference available at the time the sample was selected.

Sample design

The sample for this survey area was selected using a two-stage stratified design with probability proportional to employment sampling at each stage. The first stage of sample selection was a probability-proportional-to-size sample of establishments. Use of this technique means that the larger an establishment's employment, the greater its chance of selection. The second stage of sample selection, detailed below, was a probability sample of occupations within a sampled establishment.

Occupational selection and classification

Identification of the occupations for which wage data were to be collected was a multi-step process:

1. Probability-proportional-to-size selection of establishment jobs
2. Classification of jobs into occupations based on the Census of Population system
3. Characterization of jobs as full-time v. part-time, union v. nonunion, and time v. incentive
4. Determination of the level of work of each job

For each occupation, wage data were collected for those workers who met all the criteria identified in the last three steps. In step one, the jobs to be sampled were selected at each establishment by the BLS field economist during a personal visit. A complete list of employees was used for sampling, with each selected worker representing a job within the establishment. The greater the number of people working in a job in the establishment, the greater its chance of selection.

The second step of the process entailed classifying the selected jobs into occupations based on their duties. The National Compensation Survey occupational classification system is based on the 1990 Census of Population. A selected job may fall into any one of about 480 occupational classifications, from accountant to wood lathe operator. In cases where a job's duties overlapped two or more census classification codes, the duties used to set the wage level were used to classify the job. Classification by primary duties was the fallback.

Each occupational classification is an element of a broader classification known as a major occupational group (MOG). Occupations can fall into any of the following MOG's:

- Professional specialty and technical
- Executive, administrative, and managerial
- Sales
- Administrative support including clerical
- Precision production, craft, and repair
- Machine operators, assemblers, and inspectors
- Transportation and material moving
- Handlers, equipment cleaners, helpers, and laborers
- Service occupations

A complete list of all individual occupations, classified by the MOG to which they belong, is available from BLS.

In step three, certain other job characteristics of the chosen worker were identified. First, the worker was identified as holding either a full-time or part-time job, based on the establishment's definition of those terms. Then the worker was classified as having a time versus incentive job and also identified as being in a union or a nonunion job.

Generic leveling through point factor analysis

In the last step before wage data were collected, the work level of each selected job was determined using a "generic

leveling" process. Generic leveling ranks and compares all occupations randomly selected in an establishment using the same criteria. This is a major departure from the method used in the past in the Bureau's Occupational Compensation Surveys which studied specifically defined occupations with leveling definitions unique to each occupation.

For this survey, the level of each occupation in an establishment was determined by an analysis of each of 10 leveling factors. Nine of these factors are drawn from the U.S. Government Office of Personnel Management's Factor Evaluation System, which is the underlying structure for evaluation of General Schedule Federal employees. The tenth factor, supervisory duties, attempts to account for the effect of supervisory duties. It is considered experimental. The 10 factors are:

- Knowledge
- Supervision received
- Guidelines
- Complexity
- Scope and effect
- Personal contacts
- Purpose of contacts
- Physical demands
- Work environment
- Supervisory duties

Each factor contains a number of levels and each level has an associated written description and point value. The number and range of points differ among the factors. For each factor, an occupation was assigned a level based on which written description best matched the job. Within each occupation, the points for nine factors (supervisory duties was excluded) were recorded and totaled. The total determines the overall level of the occupation.

Tabulations of levels of work for occupations in the survey follow the Federal Government's white-collar General Schedule. Point ranges for each of the 15 levels and a guide to help data users evaluate jobs in their firm are available from BLS.

Collection period

Survey data were collected over a 4-month period. For each establishment in the survey, the data reflect the establishment's most recent information at the time of collection. The payroll reference month shown in the table reflects the average date of this information for all sample units.

Earnings

Earnings were defined as regular payments from the employer to the employee as compensation for straight-time hourly work, or for any salaried work performed. The following components were included as part of earnings:

- Incentive pay, including commissions, production bonuses, and piece rates
- Cost-of-living allowances
- Hazard pay
- Payments of income deferred due to participation in a salary reduction plan
- Deadhead pay, defined as pay given to transportation workers returning in a vehicle without freight or passengers

The following forms of payments were *not* considered part of straight-time earnings:

- Shift differentials, defined as extra payment for working a schedule that varies from the norm, such as night or weekend work
- Premium pay for overtime, holidays, and weekends
- Bonuses not directly tied to production (e.g., Christmas and profit-sharing bonuses)
- Uniform and tool allowances
- Free room and board
- Payments made by third parties (e.g., tips, bonuses given by manufacturers to department store salespeople, referral incentives in real estate)
- On-call pay

In order to calculate earnings for various time periods (hourly, weekly, and annual), data on work schedules were also collected. For hourly workers, scheduled hours worked per day and per week, exclusive of overtime, were recorded. Annual weeks worked were determined. Because salaried workers, exempt from overtime provisions, often work beyond the assigned work schedule, their typical number of hours actually worked was collected.

Weighting and nonresponse

Sample weights were calculated for each establishment and occupation in the survey. These weights reflected the relative size of the occupation within the establishment and of the establishment within the sample universe. Weights were used to aggregate the individual establishments or occupations into the various data series.

If data were not provided by a sample member, the weights of responding sample members in the same or similar "cells" were adjusted to account for the missing data. This technique assumes that the mean value of the nonrespondents equals the mean value of the respondents at some detailed "cell" level. Responding and nonresponding establishments were classified into these cells according to industry and employment size. Responding and nonresponding occupations within responding establishments were classified into cells that were additionally defined by major occupation group and job level.

Establishments that were determined to be out of business or outside the scope of the survey had their weights changed to zero.

Some surveys may have a high nonresponse rate for the all industries or private industry iterations. Such instances are noted in the bulletin table footnotes.

Survey response

	Establishments
Total in sample	10
Responding	8
Out of business or not in survey scope	1
Unable or refused to provide data	1

Estimation

The wage series in the table are computed by combining the wages for each sampled occupation. Before being combined, individual wage rates are weighted by number of workers; the sample weight adjusted for nonresponding establishments and other factors; and the occupation work schedule, varying depending on whether hourly, weekly, or annual rates are being calculated.

Not all calculated series met the criteria for publication. Before any series was published, it was reviewed to make sure that the number of observations underlying it was sufficient. This review prevented publishing a series that could have revealed information about a specific establishment.

Data reliability

The data in this summary are estimates from a scientifically selected probability sample. There are two types of errors possible in an estimate based on a sample survey, sampling and nonsampling.

Sampling errors occur because observations come only from a sample and not from an entire population. The sample used for this survey is one of a number of possible samples of the same size that could have been selected using the sample design. Estimates derived from the different samples would differ from each other.

A measure of variation among these differing estimates is called the standard error or sampling error. It indicates the precision with which an estimate from a particular sample approximates the average result of all possible samples. The relative standard error (RSE) is the standard error divided by the estimate. RSE data are provided alongside the earnings in the bulletin table.

The standard error can be used to calculate a "confidence interval" around a sample estimate. As an example, suppose a table shows that mean hourly earnings for all workers was $12.79 with a relative standard error of 3.6 percent for this estimate. At the 90-percent level, the confidence interval for the estimate is $13.55 to $12.03 (1.645 times 3.6 percent times $12.79 = $0.76, plus or minus $12.79). If all possible samples were selected to estimate the population value, the interval from each sample would include the true population value approximately 90 percent of the time.

Nonsampling errors also affect survey results. They can stem from many sources, such as inability to obtain information for some establishments, difficulties with survey definitions, inability of the respondents to provide correct information, or mistakes in recording or coding the data obtained. A Technical Reinterview Program done in all survey areas will be used in the development of a formal quality assessment process to help compute nonsampling error. Although they were not specifically measured, the nonsampling errors were expected to be minimal due to the extensive training of the field economists who gathered the survey data by personal visit, computer edits of the data, and detailed data review.