

National Compensation Survey: Post-Katrina Occupational Wage Data for New Orleans

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The Bureau of Labor Statistics recently released the results of its first post-Katrina [National Compensation Survey \(NCS\)](#) on occupational wages in the New Orleans metropolitan area. Hurricane Katrina devastated coastal areas of Louisiana, Mississippi, and Alabama, dramatically impacting the lives of the people who lived there. Katrina also affected the collection and publication of NCS data--those collected after the hurricane, as well as those collected shortly before the storm occurred. This article explains the differences in the pre- and post-Katrina New Orleans surveys, differences that are due not only to the effects of the hurricane itself, but also to unrelated changes in the scope and methodology of the survey.

Timing Of Data Collection

The collection of [NCS](#) occupational wage data for the most recent New Orleans metropolitan area survey began in September 2005, shortly after the onslaught of Hurricane Katrina, and continued through October 2006. The payroll reference month for this survey is April 2006.¹ As one would expect, the number of establishments unable to participate in the post-Katrina collection period increased, compared with earlier surveys, but the problem was mitigated by the application of a larger initial sample than that used in the previous survey. The larger sample--which reflected changes in the scope of the survey to include establishments with fewer than 50 employees--resulted in the reliability of the estimates for the post-Katrina survey being comparable to estimates produced by surveys conducted prior to the hurricane. Smaller establishments were excluded from previous wage surveys (although they were included in other outputs from the National Compensation Survey).

The survey conducted immediately prior to the hurricane included data collected between June 2004 and July 2005, with an average payroll reference month of December 2004.² Originally, this survey was scheduled to include data collected between September 2004 and October 2005. But the survey could not be completed as planned--mainly because the human resource professionals and related staff who typically provide the data for these surveys were often the same people handling the personnel-related issues resulting from the natural disaster (such as health care, disability, and survivor benefits). Because this survey uses 13 consecutive months of data to achieve publication-quality estimates, BLS decided to move the 13-month collection period back 3 months, to June 2004 through July 2005, which allowed the estimates to reflect wage rates as they were prior to the hurricane.

Pre- And Post-Katrina Surveys

As expected, the number of establishments that did not participate in the post-Katrina survey-- either because they were out of business or because they were unable or unwilling to participate--was considerably larger than in previous surveys.

However, because the overall number of establishments in the sample was larger than in previous years, the net number of usable establishments was not very different from what it had been in earlier surveys. For the survey conducted prior to Katrina, the sample consisted of 200 establishments, of which 43 were unable or unwilling to participate and 22 were either out of business or outside the scope of the survey. This left 135 establishments (67.5 percent) that provided usable data for the survey. For the post-Katrina survey, the size of the initial sample was increased by 35 percent, to 270 establishments. Of these, 100 were unable or unwilling to participate and 39 were either out of business or out of scope. This left 131 establishments (48.5 percent) that provided data to the survey.

For both surveys, the relative standard errors--a measure of the statistical accuracy of the data--were similar.³ For the post-Katrina survey, the relative standard error for all civilian workers⁴ was 5.3 percent; for the pre-Katrina survey, it was 5.0 percent. For all workers in private industry, the relative standard errors from the two surveys were about the same (6.3 and 6.4 percent). In State and local government, there was a decrease--2.0 percent for the post-Katrina survey, compared with

3.0 percent for the pre-Katrina survey. For other comparable aggregate series, the relative standard errors were varied, with some larger in the post-Katrina survey and some larger in the pre-Katrina survey. (See table 1.)

Other Factors Affecting Survey Comparability

Other changes introduced with the current round of NCS surveys, including the post-Katrina survey, limit the ability to compare relative standard errors between the two surveys. First, the [2000 Standard Occupational Classification \(SOC\)](#) system replaced the Occupational Classification System (OCS), which was based on the 1990 Census of the Population. Second, the [2002 North American Industry Classification System \(NAICS\)](#) replaced the Standard Industrial Classification (SIC) system.

These changes to the occupation and industry classification systems were made to reflect structural changes that have occurred in the economy over time and to be consistent with other government statistical data. As a result of these changes, many of the data series produced from the two surveys are not comparable. In addition to the changes in classification systems, the scope of establishments included in the survey was expanded. Previously, only establishments with 50 or more employees were included. Now, establishments with 1 to 49 employees are also included. This change increased the number of workers in the universe from 261,600 for the pre-Katrina survey to 415,600 for the post-Katrina survey--an increase of 59 percent.

Wage Estimates From The Post-Katrina Survey

The NCS data for April 2006 showed that the average hourly wage for all workers in the New Orleans metropolitan area civilian economy was \$18.42. (See table 2.) The average wage for private industry workers and for State and local government workers was about the same as it was for all workers. Full-time workers in the civilian economy averaged \$19.44 per hour, while part-time workers averaged \$8.77 per hour. Union workers averaged \$19.65 per hour, compared with \$18.30 for nonunion workers. Workers paid on a time basis (either per hour or on a salaried basis) averaged \$18.17 per hour, while those paid on an incentive basis (either piece rate or commission) averaged \$23.33 per hour.⁵ Establishments with 1 to 99 workers averaged \$15.72 per hour, those with 100 to 499 workers averaged \$20.03 per hour, and those with 500 or more workers averaged \$21.25 per hour.

Because each survey is based on a different set of establishments, the results are designed to provide a snapshot of wage rates at a given point in time, rather than a means for comparing wage rates between time periods. Therefore, the data are most useful for comparing estimates for different series within the same survey, such as comparing the wages of engineering managers in April 2006 with those of engineers in the same time period. By contrast, data for different time periods cannot reliably be compared.

NOTE: For more information on pre- and post-Katrina NCS wage data for New Orleans, see the [NCS Published Areas](#) page on the BLS website at <http://www.bls.gov/ncs/ocs/compub.htm>.

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Notes

¹ The payroll reference month reflects the average date of this information for all sample units. For more information on NCS data for April 2006, see [New Orleans, LA, National Compensation Survey, April 2006](#), Bulletin 3135-26 (Bureau of Labor Statistics, December 2006).

² For more information on NCS data for December 2004, see [New Orleans, LA, National Compensation Survey, December 2004](#), Bulletin 3130-18 (Bureau of Labor Statistics, September 2005).

³ The relative standard error is the standard error divided by the estimate. The standard error indicates the precision with which an estimate from a particular sample approximates the average result of all possible samples. When determining data reliability, a lower relative standard error means a more reliable estimate.

4 The National Compensation Survey defines civilian workers as the sum of all private industry and State and local government workers. Members of the U.S. military, Federal Government employees, and agricultural workers are excluded.

5 Because of its volatility, the average wage based on incentive pay had a large relative standard error (31.3 percent).

Table 1. National Compensation Survey: Relative standard errors for selected wage series for New Orleans, LA, April 2006 and December 2004(1)
(In percent)

Series	Post-Katrina survey, April 2006	Pre-Katrina survey, December 2004
All civilian workers	5.3	5.0
Total private	6.3	6.4
State and local government	2.0	3.0
Full time	5.3	4.6
Part time	4.6	9.6
Union	7.9	8.5
Nonunion	5.6	5.2
Paid on time basis	5.5	5.1
Paid on incentive basis	31.3	25.4
Establishments with 1 to 99 workers	7.1	n.a.
Establishments with 50 to 99 workers	n.a.	11.9
Establishments with 100 to 499 workers	8.2	11.5
Establishments with 500 or more workers	9.0	6.9

Footnote:
(1) Unless otherwise noted, these data are for civilian workers, which are defined here as private industry and State and local government workers. Members of the U.S. military, Federal Government employees, and agricultural workers are excluded.

NOTE: n.a. = not applicable

Table 2. National Compensation Survey: Mean hourly earnings for New Orleans, LA, by selected worker and establishment characteristics, April 2006

Characteristic	Civilian workers(1)	Private industry	State and local government
All workers	\$18.42	\$18.42	\$18.41
Full time	19.44	19.59	18.64
Part time	8.77	8.32	14.03
Union	19.65	18.94	22.91
Nonunion	18.30	18.37	17.87
Paid on time basis	18.17	18.13	18.42

Footnote:
(1) The National Compensation Survey defines civilian workers as private industry and State and local government workers. Members of the U.S. military, Federal Government employees, and agricultural workers are excluded.

Note: Dash indicates that no data were reported or that data did not meet publication criteria.

Characteristic	Civilian workers ⁽¹⁾	Private industry	State and local government
Paid on incentive basis	23.33	23.38	–
Establishments with 1 to 99 workers	15.72	15.73	13.02
Establishments with 100 to 499 workers	20.03	20.34	15.49
Establishments with 500 or more workers	21.25	23.28	18.80

Footnote:

(1) The National Compensation Survey defines civilian workers as private industry and State and local government workers. Members of the U.S. military, Federal Government employees, and agricultural workers are excluded.

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