

When It Comes To Pay, Does Location Matter?

When it comes to pay, does it matter where you work? Do metropolitan workers receive higher wages than their nonmetropolitan counterparts? National Compensation Survey data provide some interesting answers.

SIDNEY W. SAMUEL

The National Compensation Survey¹ (NCS) provides data on occupational earnings, rates of change in compensation costs, the availability of benefits, and detailed benefit provisions. The survey provides local, regional, and national estimates, as well as wage data for metropolitan and nonmetropolitan areas. Nationwide, workers in metropolitan areas earned an average of \$15.73 per hour in 1997, while their counterparts in nonmetropolitan areas earned an average of \$11.84 per hour. (See table 1.)

The NCS program collects data in 154 areas,² although data are not published for all areas separately.³ Of these areas, 81 are metropolitan and 73 are nonmetropolitan areas.

NCS uses the U.S. Office of Management and Budget's area definitions, which include:

- **Metropolitan Statistical Areas** (MSAs), areas with a central city of 50,000 or more inhabitants and a total area population of at least 100,000. An MSA usually consists of one or more counties with close economic and social ties, as defined by commuting patterns and population density.
- **Primary Metropolitan Statistical Areas** (PMSAs), a large urbanized county or cluster of counties that demonstrate very strong

internal economic and social links, with a population of 250,000 to 999,999 people.

- **Consolidated Metropolitan Statistical Areas** (CMSAs), large, integrated areas of 1 million people or more consisting of two or more contiguous PMSAs. There are 18 CMSAs in the United States.
- **Nonmetropolitan areas**, areas of population that consist of individual counties or parishes that are not included in any of the above areas.

This article highlights 1997 NCS estimates of occupational pay in metropolitan and nonmetropolitan areas. It examines average hourly pay for workers by worker, establishment, and geographic characteristics and by selected occupations. While the article considers many factors in comparing pay in metropolitan and nonmetropolitan areas, it does not look at the interactions of these factors or at any differences in the occupational mix between geographic areas.

The 1997 NCS covered 16,046 establishments chosen to represent 335,300 establishments employing nearly 67 million workers, 83.7 percent of whom worked in metropolitan areas, with the remaining 16.3 percent working in nonmetropolitan areas.⁴

Sidney W. Samuel is an economist in the Division of Compensation Data Analysis and Planning, Bureau of Labor Statistics.
Telephone: (202) 691-6280
E-mail: Samuel_S@bls.gov

TABLE 1. Mean hourly earnings and weekly hours worked in metropolitan and nonmetropolitan areas, by selected worker and establishment characteristics, National Compensation Survey, August 1997

Worker and establishment characteristics and geographic areas	Total			Metropolitan areas ¹			Nonmetropolitan areas ¹		
	Number of workers ³	Mean ²		Number of workers ³	Mean ²		Number of workers ³	Mean ²	
		Hourly earnings	Weekly hours worked		Hourly earnings	Weekly hours worked		Hourly earnings	Weekly hours worked
Total	66,970,200	\$15.09	36.5	56,056,300	\$15.73	36.3	10,913,900	\$11.84	37.1
Private industry	52,053,400	14.39	36.4	44,040,800	15.06	36.3	8,012,600	10.84	37.2
State and local government	14,916,900	17.82	36.5	12,015,600	18.46	36.5	2,901,300	15.07	36.5
Worker characteristic:									
White collar	35,582,800	18.59	36.7	31,176,000	19.07	36.6	4,406,800	15.15	37.0
Professional specialty and technical	13,598,200	22.89	36.3	11,858,700	23.34	36.3	1,739,500	19.63	36.5
Executive, administrative, and managerial	5,682,700	27.00	40.1	5,143,700	27.40	40.1	539,100	23.15	39.7
Sales	4,810,400	12.78	33.0	4,099,500	13.55	32.6	710,900	8.72	35.3
Administrative support	11,491,400	11.53	36.9	10,074,100	11.73	36.9	1,417,400	10.10	37.4
Blue collar	18,852,100	12.36	38.3	14,963,600	12.78	38.2	3,888,400	10.74	38.8
Precision production, craft, and repair	5,332,100	15.86	39.8	4,366,700	16.44	39.7	965,400	13.27	39.9
Machine operators, assemblers, and inspectors ..	6,018,000	11.03	39.6	4,430,400	11.39	39.6	1,587,500	10.04	39.7
Transportation and material moving	2,629,700	13.24	37.5	2,252,800	13.46	37.6	376,900	11.85	36.7
Handlers, equipment cleaners, helpers, and laborers	4,872,300	9.34	35.5	3,913,700	9.48	35.1	958,600	8.81	37.0
Service	12,535,400	9.09	33.0	9,916,700	9.40	32.6	2,618,700	8.00	34.5
Full time ⁴	55,141,300	15.77	39.6	45,770,800	16.51	39.6	9,370,500	12.15	39.7
Part time ⁴	11,829,000	8.89	21.0	10,285,500	9.01	21.1	1,543,400	8.09	20.6
Union	15,256,500	16.91	36.9	13,289,800	17.32	36.7	1,966,700	14.20	38.1
Nonunion	51,713,700	14.56	36.3	42,766,600	15.25	36.2	8,947,200	11.32	36.8
Time ⁵	64,759,800	15.05	36.4	54,081,300	15.69	36.3	10,678,400	11.87	37.0
Incentive ⁵	2,210,500	16.21	38.3	1,975,000	16.87	38.2	235,500	10.74	38.8
Establishment characteristic: ⁶									
Goods producing	15,997,200	15.45	39.8	12,526,200	16.40	39.8	3,471,000	12.06	39.9
Service producing	36,056,200	13.85	34.9	31,514,500	14.44	34.9	4,541,700	9.77	35.2
Establishment size: ⁷									
50-99	11,149,100	12.52	35.3	9,142,900	13.02	35.3	2,006,200	10.23	35.3
100-499	25,141,100	13.68	36.2	20,538,600	14.10	36.1	4,602,500	11.78	36.5
500-999	8,816,800	16.15	37.4	6,984,600	16.65	37.2	1,832,200	14.29	38.2
1000-2499	10,117,900	15.54	36.7	7,812,200	17.03	36.0	2,305,700	10.91	38.6
2500 or more	11,745,300	19.32	37.2	11,578,000	19.34	37.2	167,300	18.23	39.3
Geographic areas: ⁸									
New England	3,217,600	16.96	35.1	2,799,900	17.42	35.2	417,700	13.75	34.0
Middle Atlantic	10,364,000	17.42	35.7	9,749,200	17.75	35.7	614,700	12.22	36.1
East North Central	12,243,100	15.45	36.2	10,347,800	15.90	36.2	1,895,300	12.98	36.4
West North Central	5,118,000	14.44	36.3	3,730,900	15.40	36.3	1,387,100	11.82	36.2
South Atlantic	11,953,400	13.73	37.0	9,948,400	14.17	36.9	2,005,000	11.56	37.4
East South Central	5,046,800	11.88	37.8	2,546,200	13.60	37.0	2,500,500	10.22	38.7
West South Central	6,694,400	13.82	37.2	5,752,800	14.13	37.2	941,600	11.88	37.3
Mountain	3,559,800	14.04	36.5	2,845,800	14.17	36.4	714,000	13.51	36.6
Pacific	8,773,100	16.88	36.2	8,335,200	17.06	36.2	437,900	13.37	36.1

¹ A metropolitan area can be a Metropolitan Statistical Area (MSA), a Primary Metropolitan Statistical Area (PMSA), or a Consolidated Metropolitan Statistical Area (CMSA), as defined by the Office of Management and Budget, 1994. Nonmetropolitan areas are counties that do not fit the definitions above.

² 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. Mean hourly earnings are computed by totaling the pay of all workers and dividing by the number of workers, weighted by hours. Mean weekly hours worked are computed by totaling the hours worked by all workers and dividing by the number of workers.

³ Estimates of the number of workers provide a description of size and composition of the labor force included in the survey. However, estimates are not intended for comparison with other statistical series to measure employment trends or levels.

⁴ Employees are classified as working either a full- or part-time schedule

based on the definition used by each establishment.

⁵ Wages of time workers are based solely on an 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.

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

⁷ Establishment size is determined by the number of workers. Establishments classified with 50 to 99 workers may contain establishments with fewer than 50 workers due to reduction in staff between the time of sampling and data collection.

⁸ For a complete breakout of the census divisions, see "Appendix E: Census Division and Survey Areas," *National Compensation Survey: Occupational Wages in the United States, 1997, Bulletin 2519 (Bureau of Labor Statistics, September, 1999)*. This appendix lists the 9 census divisions, the States included in each division, and the 149 metropolitan and nonmetropolitan areas surveyed.

TABLE 2. Percent and number of workers by selected characteristics, National Compensation Survey, 1997

Characteristic	Total		Metropolitan		Nonmetropolitan	
	Number	Percent	Number	Percent	Number	Percent
Total workers	66,970,235	100.0	56,056,315	83.7	10,913,920	16.3
Private industry	52,053,375	77.8	44,040,751	65.8	8,012,623	12.0
State and local government	14,916,840	22.3	12,015,564	18.0	2,901,296	4.3
Worker characteristic:						
White collar	35,582,750	53.2	31,175,959	46.6	4,406,791	6.6
Blue collar	18,852,080	28.2	14,963,635	22.4	3,888,445	5.8
Service	12,535,405	18.8	9,916,722	14.8	2,618,683	4.0
Census division:						
New England	3,217,612	4.8	2,799,926	4.2	417,686	0.6
Middle Atlantic	10,363,969	15.5	9,749,240	14.6	614,729	.9
West South Central	6,694,424	10.0	5,752,782	8.6	941,642	1.4
East South Central	5,046,758	7.5	2,546,221	3.8	2,500,537	3.7
South Atlantic	11,953,396	17.8	9,948,433	14.9	2,004,963	3.0
West North Central	4,109,340	6.1	2,722,197	4.1	1,387,143	2.1
East North Central	13,251,782	19.8	11,356,470	17.0	1,895,313	2.8
Pacific	8,773,132	13.1	8,335,227	12.4	437,906	.7
Mountain	3,559,821	5.3	2,845,819	4.2	714,002	1.1

NOTE: Because of rounding, sum of individual items may not equal totals.

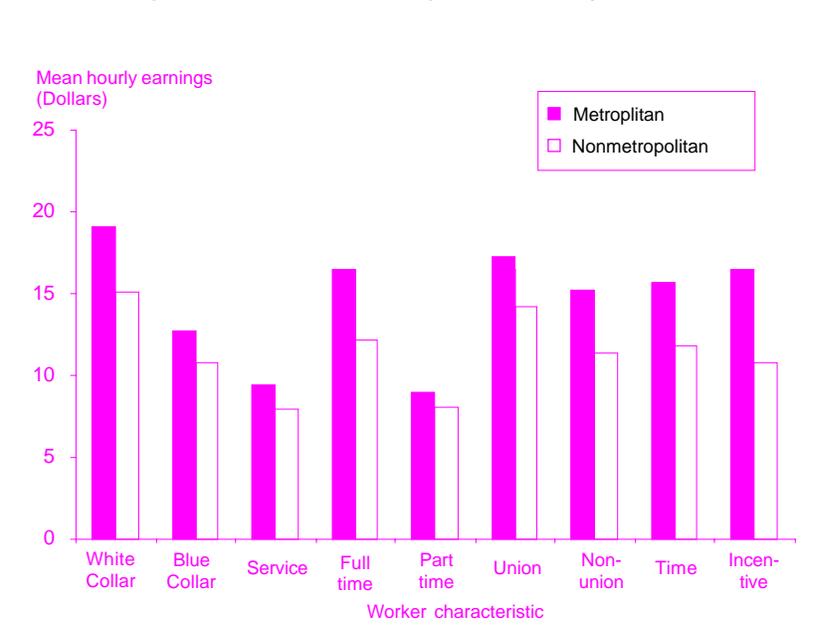
(See table 2.) Private industry workers in metropolitan areas (who constituted 66 percent of all workers) earned \$15.06 per hour, on average; their nonmetropolitan counterparts (12 percent of all workers) averaged \$10.84 an hour. State and local government workers in metropolitan areas (18 percent of all workers) earned an average \$18.46 per hour, while their nonmetropolitan counterparts (4 percent of all workers) earned \$15.07.

Worker characteristics

The NCS classifies data on workers into three broad occupational categories: White collar, blue collar, and service. Data are further categorized into full or part time, union or nonunion, and time or incentive.⁵

Workers in white-collar occupations received higher average hourly earnings than did those in blue-collar and service occupations. (See chart 1.) In metropolitan areas, wages of workers in all three occupational classifications were higher than those of their counterparts in nonmetropolitan areas. White-collar workers in metropolitan areas, who made up nearly 47 percent of the total workforce, averaged \$19.07 per hour, while their counterparts in

CHART 1. Mean hourly earnings by selected worker characteristics in metropolitan and nonmetropolitan areas, National Compensation Survey, 1997



nonmetropolitan areas made up nearly 7 percent of the total workforce and averaged \$15.15 per hour. Blue-collar workers in metropolitan areas (22 percent of the total work force) averaged \$12.78 per hour, compared with \$10.74 per hour for workers in nonmetropolitan areas (6 percent of

the total work force). Service workers in metropolitan areas (15 percent of the workforce) averaged \$9.40 an hour, compared with \$8 per hour for workers in nonmetropolitan areas (4 percent of the workforce). Among occupational groups, service occupations had the smallest difference between

metropolitan and nonmetropolitan area pay.

Pay in metropolitan areas for full- and part-time, union, nonunion, time, and incentive workers was higher than that for their counterparts in nonmetropolitan areas. In metropolitan areas, full-time workers made up 68 percent of the total workforce and averaged \$16.51 per hour; their counterparts in nonmetropolitan areas (14 percent) averaged \$12.15. Part-time employees, on average, were paid higher wages in metropolitan areas than in nonmetropolitan areas, \$9.01 and \$8.09, respectively. One reason is that part-time employees in State and local governments made nearly \$4 an hour more (\$12.27) than their counterparts in private industry (\$8.37).⁶ Out of nearly 15 million State and local government workers, 81 percent were in metropolitan areas. Union workers' average hourly earnings were higher in metropolitan areas (\$17.32) than in nonmetropolitan areas (\$14.20). Nonunion workers, who made less than their union counterparts, averaged \$15.25 an hour in metropolitan areas and \$11.32 in nonmetropolitan areas. Time workers in metropolitan areas averaged \$15.69 an hour, and their counterparts in nonmetropolitan areas averaged \$11.87. Workers receiving incentive pay averaged \$16.87 an hour in metropolitan areas and \$10.74 in nonmetropolitan areas.

Establishment characteristics

Data for private sector employees are classified into two broad industry groupings—goods producing and service producing. Workers in goods-producing industries made up 31 percent of private industry workers, while the remaining 69 percent were in service-producing industries. (Data for State and local governments are not categorized by goods- and service-producing industries.) Average hourly rates for private sector workers in goods-producing industries in metropolitan (\$16.40) and nonmetropolitan (\$12.06) areas were higher than those for workers in service-producing industries (\$14.44 and \$9.77, respectively).

In metropolitan areas, as the establishment size increased, so did the earnings, except for establishments employing 500 to 999 workers and 1,000 to 2,499 workers; the differences in the estimates for these two establishment sizes were not statistically significant.⁷ When pay is compared by establishment size, establishments with 50 to 99 workers had the lowest average hourly pay rates in both metropolitan (\$13.02) and nonmetropolitan (\$10.23) areas. Establishments employing 2,500 workers or more had the highest average pay rates in both metropolitan (\$19.34) and nonmetropolitan (\$18.23) areas.

When it comes to measuring change in pay or comparing wages, a well-used tool is the Employment Cost Index (ECI).⁸ The ECI measures the change in the cost of labor, free from the influence of employment shifts among occupations and industries. The December 1997 ECI for total compensation for private industry workers by bargaining status, region, and area showed that, since 1989, when the index equaled 100, pay for workers in metropolitan areas increased 35.1 percent, compared with a 35.3-percent increase for workers in nonmetropolitan areas. For the 5-year period 1994 through 1998, the ECI for metropolitan and nonmetropolitan areas showed differences no larger than 0.4 percent between the two types of areas. Based on ECI historical data, there were no significant changes that might have affected the pay between metropolitan and nonmetropolitan workers.

Geographic characteristics

One could ask, "For pay purposes, does it matter where I work?" Of course the answer would be yes, if you were comparing New York and Iowa. This section examines average earnings in various geographic areas.

The NCS provides occupational pay data for nine census divisions: New England, Middle Atlantic, East North Central, West North Central, South Atlantic, East South Central, West South Central, Mountain, and Pacific.⁹ Pay in metropolitan and nonmetro-

politan areas varied among the census divisions. (See charts 2 through 4.) For metropolitan areas, the Middle Atlantic, New England, and Pacific census divisions had the highest average hourly earnings; the East South Central division had the lowest average hourly earnings for both metropolitan and nonmetropolitan areas.

Overall, average hourly pay in metropolitan areas in the nine census divisions ranged from \$13.60 (East South Central) to \$17.75 (Middle Atlantic). In nonmetropolitan areas, it ranged from \$10.22 (East South Central) to \$13.75 (New England). On average, in all nine census regions, white-collar workers were paid more than blue-collar workers and blue-collar workers were paid more than service workers. Within these groups, metropolitan workers earned more than their nonmetropolitan counterparts.

NCS data also provide a view of average hourly earnings nationally (metropolitan and nonmetropolitan areas combined). Within white-collar occupations, the highest paid occupation in both metropolitan and nonmetropolitan areas generally was airplane pilots and navigators, for which pay ranged from \$53.85 to \$85.98 per hour.¹⁰ In contrast, the lowest paid white-collar occupations generally were sales clerks and cashiers, at around \$7 per hour. Within blue-collar occupations, supervisors of electricians and power transmission installers generally were the highest paid workers in both metropolitan and nonmetropolitan areas, with pay ranging from around \$23 to \$29 per hour. Laundry and dry cleaning machine operators generally made the least, at roughly \$6 to \$7 an hour. In service occupations, supervisors of police and detectives generally had the highest average wage (\$17 to \$29 an hour), and waiters and waitresses had the lowest (\$3 to \$4.50 an hour) in both metropolitan and nonmetropolitan areas.

Selected occupations

Other populous occupations also offered insight into geographic wage differences. For example, data on pay

for registered nurses was available for all the metropolitan areas and most of the nonmetropolitan areas. (See chart 2.) Registered nurses in metropolitan areas averaged hourly wages roughly \$2 to \$3 higher than those of their counterparts in nonmetropolitan areas. This pay differential between metropolitan and nonmetropolitan areas was smallest in the Mountain division, \$1.50. In metropolitan areas, average hourly pay was the highest in the Pacific (\$23.51) and the Middle Atlantic (\$23.17) census divisions, and the lowest in the East South Central (\$17.50) and West North Central (\$18.14) divisions.

Secretaries in metropolitan areas were paid \$1.55 to \$3.45 an hour more than those in nonmetropolitan areas, except in the South Atlantic division, where secretaries in nonmetropolitan areas averaged higher hourly wages

than did those in metropolitan areas (\$12.56 and \$12.26, respectively). (See chart 3.) In metropolitan areas, secretarial pay was highest in the New England and Middle Atlantic divisions (both averaging \$14.58 an hour) and in the Pacific division (\$14.22) and lowest in the East South Central division (\$11.35). In nonmetropolitan areas, the New England division had the highest average pay at \$13.03 an hour and the West South Central division, the lowest (\$8.99).

Within the census divisions, average hourly pay for janitors and cleaners was roughly the same in both metropolitan and nonmetropolitan areas. (See chart 4.) For example, in the Middle Atlantic division, hourly pay averaged \$10.30 (the highest rate) for workers in metropolitan areas, compared with \$8.71 for their nonmetro-

politan counterparts. In contrast, in the West South Central division, janitors and cleaners in metropolitan areas earned less than did their nonmetropolitan counterparts, \$6.67 (the lowest rate) compared to \$7.07.

Conclusion

When it comes to pay, location matters.¹¹ Overall, pay in metropolitan areas was higher than pay in nonmetropolitan areas. Among the census divisions, the Middle Atlantic and New England divisions had the highest pay for workers in metropolitan areas, while the East South Central had the lowest pay for such workers. In nonmetropolitan areas, workers in the New England division again had the highest average hourly pay, while their counterparts in the East South Central division again had the lowest. ■

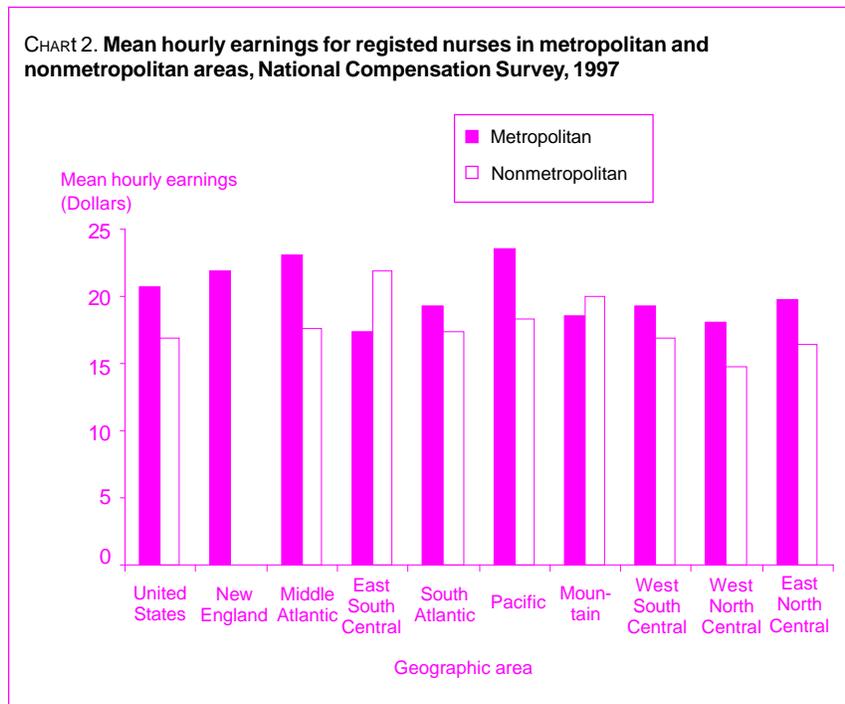


CHART 3. Mean hourly earnings for secretaries in metropolitan and nonmetropolitan areas, National Compensation Survey, 1997

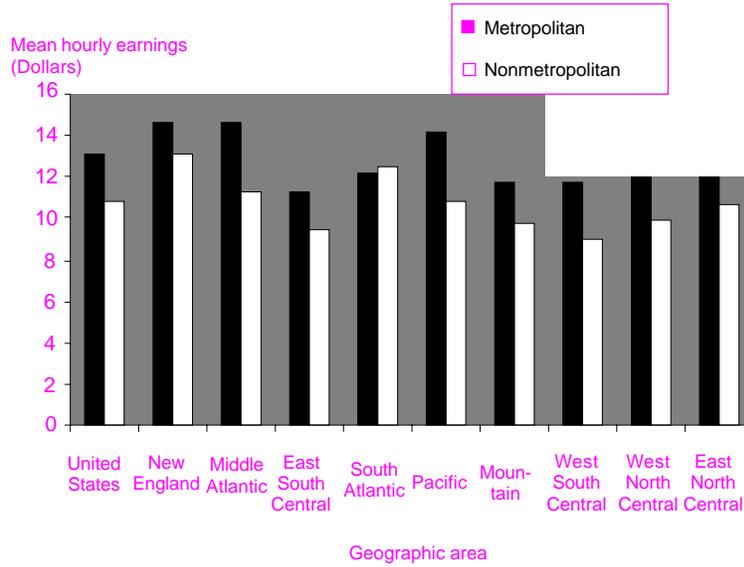
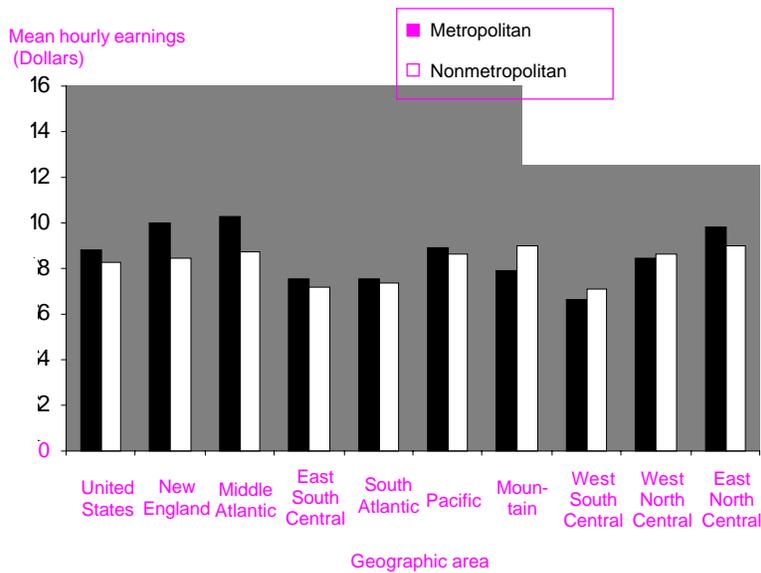


CHART 4. Mean hourly earnings for janitors and cleaners in metropolitan and nonmetropolitan areas, National Compensation Survey, 1997



¹ Information on procedures and concepts of the National Compensation Survey can be found in Appendixes A through E of the *National Compensation Survey: Occupational Wages in the United States, 1997*, Bulletin 2519 (Bureau of Labor Statistics, September 1999).

² In the 1997 National Compensation Survey, only 149 areas were included. Since then, five areas have been added (two in Hawaii and three in Alaska).

³ Data for some areas were not published because they were unavailable or represented too small a number of establishments. Also, the sample may have been reduced due to refusals and nonresponse.

⁴ Estimates of the number of workers provide a description of size and composition of the labor force included in the survey. However, estimates are not intended for comparison with other statisti-

cal series to measure employment trends or levels.

⁵ Each establishment defines which workers are full or part time. Union workers are classified as such when they meet the following conditions: (1) a labor organization is recognized as the bargaining agent for all workers in the occupation; (2) wage and salary rates are determined through collective bargaining or negotiations; and (3) settlement terms, which must include earnings provisions and may include benefit provisions, are embodied in a signed, mutually binding collective bargaining agreement. Time-based workers are employees whose earnings are tied to an hourly rate or salary, and not to a specific level of production. Incentive workers are employees whose earnings are tied, at least in part, to commissions, piece rates, production bonuses, or other incentives based on production or sales.

⁶ See *National Compensation Survey*, table 1-1.

⁷ For detailed information on data reliability, see Appendix A of the *National Compensation Survey*.

⁸ For detailed information on the Employment Cost Index, see Appendix A of *Employment Cost Indexes, 1975-98*, Bulletin 2514 (Bureau of Labor Statistics, August 1999).

⁹ For a complete breakout of the census divisions, see "Appendix E: Census Division and Survey Areas," *National Compensation Survey*. This appendix lists the nine census divisions, the States included in each division, and the 149 metropolitan and nonmetropolitan areas surveyed.

¹⁰ For complete breakout of data, see *National Compensation Survey*, table 8-2.

¹¹ For a comprehensive analysis of interarea comparisons of compensation and prices, see *Report on the American Workforce* (U.S. Department of Labor, 1997), chap. 2.

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