with COLA's. (Settlement data include specified first-year and deferred wage changes but exclude potential wage changes resulting from COLA clauses.) Another difference is that pensions are frequently prescribed by law in State and local governments and are not subject to bargaining, but in private industry, pensions may be a bargaining issue.

State and local government settlements in 1984 were generally of shorter duration (averaging 20 months) than those negotiated in private industry (31 months). Thirty-five percent of the State and local government workers were under settlements lasting 12 months or less, compared with 9 percent in private industry.[4]

Bargaining activity, first half of 1985

Approximately 400,000 workers were under 84 contracts that expired or reopened prior to January 1, 1985, but had not been renegotiated as of December 31, 1984. In addition, 880,000 workers are under 200 agreements due to expire or reopen for wage negotiation between January and June 1985. Nearly half the workers are employed in general government and about a third in education. □

FOOTNOTES

[1] Settlement data include specified first-year and deferred wage changes but exclude potential wage changes resulting from cost-of-living adjustment clauses which are based on unknown future changes in the Consumer Price Index.

[2] Percent changes in compensation (wage and benefit costs) are calculated by dividing the newly negotiated changes in the wage and benefit package by existing average hourly compensation, which includes the cost of previously negotiated benefits, legally required social insurance programs, and average hourly earnings.

In calculating compensation change, a value is put on the wage and benefit portions of the settlements at the time they are reached. The cost estimates are based on the assumption that conditions existing at the time of settlement will not change (for example, composition of the labor force will remain constant). The data, therefore, are measures only of negotiated change, and not of total changes in employer cost.

[3] See John J. Lacombe II and James R. Conley, "Major agreements in 1984 provide record low wage increases," *Monthly Labor Review*, April 1985, pp. 39–45.

[4] Additional data on State and local government agreements appears in the May 1985 issue of *Current Wage Developments*.

Wages at motor vehicle plants outpaced those at parts factories

HARRY B. WILLIAMS

Average wages of blue-collar workers in factories producing motor vehicles exceeded those in independent motor vehicle parts plants by 48 percent in May 1983, according to the latest occupational wage surveys of motor vehicles and motor vehicle parts. The surveys are part of the regular Industry Wage Survey program conducted by the Bureau of Labor Statistics and are the first occupational wage surveys of these industries in nearly a decade.

Harry B. Williams is a labor economist in the Division of Occupational Pay and Employee Benefit Levels, Bureau of Labor Statistics.

At the five major producers of passenger cars and light trucks (motor vehicle manufacturers) studied, hourly earnings of production and related workers averaged $12.13, compared with $8.20 an hour for the motor vehicle parts work force. Among the jobs permitting comparison in the North Central region (the region with the largest concentration of motor vehicle manufacturing), workers in motor vehicles manufacturing consistently averaged more per hour than their counterparts making parts. The earnings edge for motor vehicle workers in maintenance and toolroom jobs typically averaged between 10 and 20 percent; in custodial and material movement jobs, between 25 and 35 percent; and for other production jobs, up to 50 percent. Earnings differences between the two industries reflect a combination of factors, including location, differences in products produced, mix of occupational classifications, and extent of labor-management agreement coverage. Virtually all workers in the auto plants studied were covered by such agreements, compared with about three-fifths of the parts production workers.

Motor vehicles

Straight-time earnings of 424,134 production and related workers in motor vehicle manufacturing averaged $12.13 an hour in May 1983.[1] Nearly nine-tenths of the work force earned between $11 and $14 an hour; one-third had earnings within a 20-cent range—$11.80 to $12.

Average earnings within individual regions were near the nationwide average, ranging from $11.84 an hour in the South to $12.33 in the Northeast. Hourly earnings of workers in Michigan, where just over two-fifths of the industry's work force was employed, averaged $12.18; in the rest of the North Central region, earnings averaged $12.08. Such differences in average pay by location reflect variations in the occupational mix within individual factories and some differences in wage scales among establishments in this highly unionized industry.

The $12.13 average for all production and related workers in May 1983 was 119 percent higher than the $5.54 average recorded in a similar study conducted in December 1973.[2] On an annual basis, the average rate of increase was 7.7 percent.

Thirty-five occupations, selected to represent the industry's wage structure, worker skills, and manufacturing operations, accounted for about two-thirds of the production work force. Nationwide, average hourly pay among these jobs ranged from $14.79 for metal and wood patternmakers and $14.70 for die sinkers (drop-forge dies) to $11.20 for janitors, porters, and cleaners. Maintenance jobs, such as carpenters, electricians, millwrights, and pipefitters, typically had averages between $13.50 and $13.75 an hour.

Table 1. Average hourly earnings[1] of production workers in selected occupations, motor vehicle and motor vehicle parts plants, May 1983

Occupation	United States		North Central[2]	
	Motor vehicles	Motor vehicle parts	Motor vehicles	Motor vehicle parts
All production workers[3]	$12.13	$8.20	$12.13	$9.01
Maintenance				
Carpenters	13.50	10.77	13.50	11.12
Electricians	13.76	11.32	13.75	12.05
Mechanics (machine repairers)	13.78	10.00	13.76	11.27
Millwrights	13.51	11.99	13.51	12.11
Pipefitters	13.52	12.74	13.50	12.86
Sheet-metal workers	13.60	12.15	13.60	12.13
Toolroom				
Die-sinkers, drop-forge dies	14.70	8.37	14.58	—
Machine-tool operators, toolroom	13.71	11.39	13.72	11.58
Patternmakers, metal and wood	14.79	9.22	14.81	9.08
Tool and die makers	13.80	11.26	13.77	11.85
Custodial and material movement				
Checkers, receiving and shipping	11.73	7.90	11.73	9.31
Janitors, porters, and cleaners	11.20	7.97	11.18	8.79
Material handling laborers	11.27	7.98	11.29	8.37
Miscellaneous plant				
Assemblers, major	11.61	—	11.58	—
Assemblers, minor	11.49	—	11.53	—
Assemblers, class A	—	8.94	—	9.26
Assemblers, class B	—	6.96	—	7.65
Assemblers, class C	—	6.33	—	6.84
General foundry laborers	11.84	7.25	11.84	—
Heat treaters	11.48	10.45	11.46	11.04
Inspectors	11.79	8.62	11.75	9.34
Machine-tool operators, production	11.67	9.45	11.65	10.28
Metal finishers	11.72	7.46	11.65	7.71
Molders, machine	12.12	7.62	12.11	8.10
Punch-press operators	11.70	8.52	11.67	8.95
Welders, hand	11.98	9.37	11.96	10.26
Welders, machine	11.69	8.50	11.61	9.13

[1]Earnings exclude premium pay for overtime and for work on weekends, holidays, and late shifts. Incentive payments, if any, and cost-of-living adjustments through the end of May 1983 were included as part of the workers' regular pay.

[2]The North Central region includes Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin.

[3]Includes data for regions and occupations in addition to those shown separately. The comprehensive report on the study includes data for additional regions and occupations.

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

Major assemblers, accounting for the most workers (71,242), averaged $11.61 an hour. Minor assemblers, who make components and subassemblies for motor vehicles, averaged $11.49.

All companies included in the study provided a variety of supplementary wage benefits, including paid holidays and vacations; hospitalization, surgical, and medical plans; life and sickness and accident insurance; retirement plans; and supplemental unemployment benefits, among others.

The survey of motor vehicle manufacturing included all automotive operations, including motor vehicle parts manufacturing, of five major producers of passenger cars and light trucks. The survey excluded divisions producing heavy trucks and steel and glass operations. Plants engaged primarily in producing tractors and industrial engines, parts depots, and separate auxiliary units, such as central offices, were also excluded.

Motor vehicle parts

Hourly earnings of production workers in motor vehicle parts manufacturing averaged $8.20 in May 1983.[3] This average was 84 percent above the $4.45 recorded in a similar study conducted in April 1974.[4] On an annual basis, the rate of increase averaged 7.1 percent.

Among the major industry branches studied separately in May 1983, average pay levels were $8.86 in miscellaneous machinery; $8.46 in parts and accessories; $7.98 in automotive stampings; $7.65 in automotive hardware; and $7.18 in engine electrical equipment. Earnings also varied by region, community and establishment size, unionization status, and occupation. (See table 2.)

Among the four regions of the country, average hourly earnings of production workers ranged from $6.58 in the South to $9.01 in the North Central—the largest in terms of employment, with 56 percent of the production workers. In the other two regions, average hourly earnings were $7.63 in the West and $8.38 in the Northeast. Averages were also developed separately for four areas of industry concentration: Toledo, $11.25; Cleveland, $9.81; Detroit, $8.43; and Chicago, $8.22.

The 33 production and related occupations selected to represent the range of skills required in the industries and the diversity of their operations accounted for two-thirds of the production work force. Nationwide, hourly earnings averages ranged from $12.74 for pipefitters to $6.79 for assemblers. With 40,231 incumbents, assembler was, by far, the largest occupation studied. Averages were $8.94 for top level work (class A), $6.96 for intermediate work (class B), and $6.33 for entry level work (class C).

Twelve office clerical jobs were also surveyed in this industry. They covered approximately 25 levels of work and accounted for one-fourth of the office workers within scope of the study. Weekly clerical pay averaged from $222.50 for entry level file clerks to $403 for top level secretaries. Averages for the remaining classifications, including accounting clerks, key entry operators, messengers, order clerks, receptionists, stenographers, and typists, typically ranged from $250 to $350 a week. Most clerical workers were scheduled to work 40 hours per week.

Paid holidays were granted to virtually all production and office workers in motor vehicle parts establishments in May 1983. For both employee groups, workers typically received at least 10 days. Provisions for office workers tended to be somewhat more liberal than for production workers.

Paid vacations, after qualifying periods of service, also were provided to virtually all production and office workers. Typical provisions for production workers were 1 week of vacation pay after 1 year of service, 2 weeks after 3 years, 3 weeks after 10 years, and at least 4 weeks after 20 years. For office workers, typical provisions were 2 weeks after 1 year, 3 weeks after 8 years, and at least 4 weeks after 15 years. Slightly more than one-half of the office workers and

Table 2. Number of production workers and average straight-time hourly earnings by selected characteristics, motor vehicle parts, United States and selected regions,[1] May 1983

Characteristic	United States		Northeast		South		North Central		West	
	Number of workers	Average hourly earnings[2]	Number of workers	Average hourly earnings[2]	Number of workers	Average hourly earnings[2]	Number of workers	Average hourly earnings[2]	Number of workers	Average hourly earnings[2]
All production workers[3]	170,825	$8.20	18,368	$8.38	48,912	$6.58	97,183	$9.01	6,362	$7.63
Men	110,963	8.94	12,950	9.12	25,915	7.09	66,408	9.73	5,690	7.77
Women	52,088	6.60	5,418	6.59	19,848	5.83	26,150	7.19	672	6.45
Size of community:										
Metropolitan areas[4]	102,664	8.65	16,659	8.68	22,063	6.8	57,823	9.44	6,119	7.68
Nonmetropolitan areas	68,161	7.52	1,709	5.46	22,849	6.39	39,360	8.38	—	—
Size of establishment:										
50–249 employees	56,280	7.33	4,511	6.40	15,456	6.38	31,854	7.73	4,459	8.65
250–499 employees	42,867	7.84	2,673	8.67	14,262	6.09	24,966	8.87	—	—
500 employees or more	71,678	9.09	11,184	9.10	19,194	7.11	40,363	10.11	—	—
Labor-management contract coverage:										
Establishments with—										
Majority of workers covered	99,755	9.16	16,166	6.76	10,160	6.89	71,985	9.54	1,444	10.74
None or minority covered	71,070	6.84	2,202	5.54	38,752	6.50	25,198	7.50	4,918	6.72
Motor vehicle parts industry branches[5]										
Parts and accessories	103,699	8.46	7,530	8.76	33,504	6.88	57,604	9.37	5,001	8.12
Automotive hardware	7,311	7.65	—	—	2,320	5.20	4,484	8.05	—	—
Automotive stampings	18,870	7.00	2,820	11.12	4,104	6.01	11,800	7.02	—	—
Engine electrical equipment	18,584	7.18	3,222	7.58	5,422	5.38	9,776	8.08	—	—
Miscellaneous machinery	14,838	8.86	—	—	—	—	10,344	9.77	—	—

[1]The regions are defined as follows: *Northeast*: Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont; *South*: Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia; *North Central*: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin; and *West*: Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming. Alaska and Hawaii were not included in the study.

[2]Earnings exclude premium pay for overtime and for work on weekends, holidays, and late shifts. Incentive payments, if any, and cost-of-living adjustments through the end of May 1983 were included as part of the workers' regular pay.

[3]Includes data for workers not identified by sex.

[4]Standard Metropolitan Statistical Areas as defined by the U.S. Office of Management and Budget through October 1979.

[5]The production worker total above includes data for workers in industry branches not shown separately.

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

about three-tenths of the production workers could receive at least 5 weeks of vacation after 25 years of service.

Various health insurance plans—including life, hospitalization, surgical, and medical insurance—at least partly paid for by the employer, also were available to a large proportion of workers. Major exceptions were long-term disability insurance plans which covered just over one-fourth of the production workers and nearly two-thirds of the office staff. Retirement pension plans—other than Federal Social Security—applied to about seven-eighths of each group.

The 852 establishments within scope of the survey employed 170,825 production workers. Regionally, the North Central employed nearly three-fifths of the production workers and the South had nearly three-tenths. The Northeast employed one-tenth and the remaining 4 percent were located in the West. Among the four areas of industry concentration studied separately, production employment ranged from 3,276 workers in Toledo to 9,378 in Detroit. Chicago employed 5,409 workers and Cleveland, 3,453 workers.

The motor vehicle parts industry, as defined for this survey, includes establishments that manufacture a wide variety of parts and accessories for motor vehicles, and is composed of all or part of 11 separate industries, as defined in the *Standard Industrial Classification Manual*, prepared by the U.S. Office of Management and Budget. Among products included are door locks, handles, and hinges; stamped or pressed metal body parts; wheel covers; springs, pistons, piston rings, valves, and carburetors; lights and electrical and mechanical instruments; exhaust systems, gears, radiators, and shock absorbers; and electrical engine equipment such as alternators and spark plugs.

A national summary of findings for motor vehicle manufacturing and area reports for motor vehicle parts in Chicago, Cleveland, Detroit, and Toledo were issued in late 1983, and are available from the Bureau or any of its regional offices. A comprehensive report, *Industry Wage Survey: Motor Vehicles and Parts, May 1983*, Bulletin 2223 (Bureau of Labor Statistics, 1985), is for sale by the Superintendent of Documents, Washington, DC, 20402, and by the Bureau's regional offices. □

FOOTNOTES

[1]Earnings data exclude premium pay for overtime and for work on weekends, holidays, and late shifts. Incentive payments, if any, and cost-of-living adjustments through the end of May 1983 are included as part of the workers' regular pay.

[2]For an account of the earlier survey, see Philip M. Doyle "Wages of auto assembly plants top those at parts factories," *Monthly Labor Review*, June 1976, pp. 45–47.

[3]Earnings data exclude premium pay for overtime and for work on weekends, holidays, and late shifts. Also excluded were motor vehicle parts plants operated by passenger car manufacturers (which are included in the motor vehicles segment of the survey) and establishments employing fewer than 50 workers.

[4]Doyle, "Wages of auto assembly plants."

Child-care assistance as a benefit of employment

Child care is increasingly becoming a major employee concern. Rapid changes in the labor force—particularly the entrance of large numbers of female workers—have also resulted in growing *employer* awareness of the need for child-care benefits. Still, while many employers are considering such benefits, few are providing them. But the situation may be changing: the number of employers offering some child-care benefit to employees has doubled since 1982. In a recent comprehensive report, labor information specialists with The Bureau of National Affairs (BNA) examine the issues and options in the field of child-care benefits.

Highlights of the report:

- As noted, the number of employers providing a child-care benefit to workers has doubled since 1982. But only about 1,000 employers provide child-care assistance to their employees, representing only a minute fraction of all U.S. firms.
- In general, employers worry about the expense of child care, and are seeking minimal-cost approaches.
- Employer-operated, onsite child-care centers are the exception rather than the rule.
- Large employers are making increasing use of flexible benefit plans to provide child-care benefits. This approach is favored because it allows childless employees to select alternative benefits.
- Many employers are now revising their personnel practices to facilitate child care through such measures as flextime, paternity leave, and adoption leave.
- One popular approach to providing child-care assistance, the zero-balance reimbursement account, has encountered serious objections from the Internal Revenue Service.
- Labor unions generally have not pushed for child-care benefits in contract negotiations because of the cost and the relatively small number of members who would benefit.
- Little sound analysis of the costs and benefits of child-care assistance has been conducted, despite the great interest in the issue. Experts say many employers cannot correctly calculate the cost of providing the benefit because they do not know the value of space, employee time, and in-kind services that may be involved. The gains, such as improved morale and greater job satisfaction, generally have been documented subjectively. Some companies may provide benefits that do not meet their employees' needs because of inadequate needs assessment. The most popular method of determining needs, an employee survey, may be misrepresentative unless it is supplemented with other approaches.
- In general, fewer than 4 percent of an employer's work force will use child-care assistance supported by the employer.

The report also presents 10 case studies of different approaches to providing child-care benefits to employees. The approaches vary from onsite centers, to supporting a network of family child-care homes, to information and counseling services only. In addition, the study gives Internal Revenue Service rulings, State tax laws, union bargaining proposals, employer policies, a bibliography, and a directory of resource organizations.

The full BNA report, entitled *Employers and Child Care: Development of a New Employee Benefit*, is available from The Bureau of National Affairs, Inc., Customer Service, 9401 Decoverly Hall Road, Rockville, MD 20850. The cost is $25 per copy. □

A report on the status of the health care labor force

The number of health care personnel in the Nation continued to rise during the 1970–82 period, but from 1980–82, the increase eased, according to a report from the Department of Health and Human Services, Bureau of Health Professions. This report includes information on the supply, occupational and geographical distribution, and demographic characteristics of health practitioners. It also examines current educational trends among these workers, and projects relative supply and demand for health professionals through the year 2000.

The overall increase in the supply of registered nurses (83 percent), veterinarians (50 percent), and physicians (43 percent) surpassed that of other major groups of practitioners during 1970–82. These increases also outpaced the growth in the population (14 percent), resulting in higher overall provider-to-population ratios.

According to the report, the proportion of women among all medical doctors increased from 9.1 percent in 1975 to 11.6 percent in 1980 and to 12.2 percent in 1981. Women increased their number and proportion in many traditionally male-dominated occupations in the profession during 1980–82, and they are expected to continue this course into the future. Large increases were reported in the number of women who practice internal medicine, surgery, radiology, and obstetrics/gynecology.

The relatively small proportion of the health care work force composed of minorities is not expected to change greatly in the future. Asian-Pacific Islanders, the largest group of minority physicians, accounted for 10 percent of all doctors, according to the 1980 census. For the same year, the Bureau of Health Professions estimates that blacks made up about 3.4 percent of Doctors of Medicine, and

were more likely than others to set up general or family practices in urban areas.

One persistent problem has been the shortage of health care personnel in very sparsely populated areas in the Nation. However, the increase in the number of general practitioners, physician assistants, and nurses who relocate into rural areas may relieve this situation. In addition, the report speculates that the overall increase in the supply of physicians—resulting in greater competition—might further entice more of them into practicing in the rural counties.

In recent years, the number of students enrolled in some fields has declined or leveled off, but the smaller additions to the supply of health care professionals are projected to outweigh the losses through the year 2000. For most of the occupations, the supply of and demand for health care personnel will be closely balanced. However, the report projects that the demand for full-time equivalent registered nurses with baccalaureate degrees will be higher than the projected supply by 1990 and 2000.

In addition, the Bureau of Health Professions estimates that in the future the supply of physicians will be greater than the number required—35,000 or 6 percent more by 1990, and 51,800 or 7 percent more by the year 2000. The advantages of this oversupply, the Bureau predicts, might curb the number of aliens and U.S. citizens who attend foreign medical schools and come to the United States to practice, improve service, and shift more personnel into rural areas. It is also predicted to have negative effects such as increased costs and unnecessary health care.

FOR A DETAILED REPORT on this occupational group, see *Report to the President and Congress on the Status of Health Personnel in the United States May 1984*, vols. 1 and 2 (U.S. Department of Health and Human Services, Bureau of Health Professions, 1984), on sale ($17.00) by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. □

Women in the labor picture

Two-thirds of labor force growth from now to 1995 will be made up of women. This increasing proportion of working-age women entering the labor force continues a dramatic shift. In 1970, women's labor force participation was 43 percent, in 1983 it was 53 percent, and in 1995 it will be 60 percent.

Women will be more likely to be single, separated, divorced, or widowed, instead of being married with a spouse present, in the years to come. Many of these single women presently face serious economic pressure to enter the labor force, and that pressure will continue. More and more women, even those with preschool-age children, are looking for work and finding jobs outside the home, and they are taking less time out of the labor force for child raising.

—MARKLEY ROBERTS
"The Future Demographics of American Unionism,"
The Annals of the American Academy of Political and Social Science,
May 1984, p. 27.