

FOOTNOTES

¹ The Mountain States include Arizona, Colorado, Idaho, Montana, New Mexico, Utah, and Wyoming.

² For details of both studies, see *Industry Wage Survey: Bituminous Coal, July 1982*, Bulletin 2185, and *Industry Wage Survey: Bituminous Coal, January 1976—March 1981*, Bulletin 1999 (Bureau of Labor Statistics). Each survey covered establishments employing 10 workers or more which were classified in Industry Group 1211, as defined in the 1972 edition of the *Standard Industrial Classification Manual* prepared by the U.S. Office of Management and Budget. Included were underground, strip, and auger mines, and coal cleaning, crushing, screening, and sizing plants operated in conjunction with the mine served. Separate auxiliary units such as central offices were excluded, as were establishments limited to coal cleaning and/or preparation.

Wage data reported in this article exclude premium pay for overtime and for work on weekends, holidays, and late shifts. The coal centers studied separately were Alabama, Illinois, Kentucky, East Kentucky, West Kentucky, Ohio, Pennsylvania, Virginia, West Virginia, and the Mountain States.

³ For reports on union activity in the soft coal industry in Western States, see Everett M. Kassalow, "Labor-Management Relations and the Coal Industry," *Monthly Labor Review*, May 1979, pp. 23-27; William H. Miernyk, "Coal," in Gerald G. Somers, ed., *Collective Bargaining: Contemporary American Experience* (Madison, Wis., Industrial Relations Research Association, 1980), pp. 1-48; and Susan Carey, "UMW Organizing Bids Are Blunted by Aggressive Nonunion Operators," *Wall Street Journal*, Aug. 3, 1983, section 2, p. 21.

Wages in the paper industries among highest in manufacturing

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Average hourly earnings of production workers in pulp, paper, and paperboard mills are among the highest found in manufacturing industries covered by the Bureau's industry wage survey program.¹ Straight-time earnings of the 134,113 production workers in the three industries averaged \$10.22 an hour in July 1982.² Among the individual industries, average pay levels were \$11.59 an hour in separate pulp mills, \$10.30 in paperboard mills, and \$10.10 in paper mills. Contributing to the relatively high wages paid in these industries are the many skilled workers in both production and maintenance occupations. Also, nearly all production workers (96 percent) were employed in mills operating under labor-management agreements. Agreements with the United Paperworkers International Union (AFL-CIO) were predominant, with the exception of mills in the Pacific States. There, employees were represented by the independent Western Pulp and Paper Workers Union.

Average hourly earnings in July 1982 were 56 percent above the \$6.54 level recorded in a similar survey conducted in the summer of 1977—a 9.3-percent annual rate of increase.³ By comparison, the wage and salary component of the Bureau's Employment Cost Index for nondurable goods

manufacturing rose 46 percent (7.9 percent a year) from the second quarter of 1977 to the second quarter of 1982.

For the six regions studied separately, average hourly earnings in July 1982 ranged from \$12.43 in the Pacific States to \$8.92 in the Middle Atlantic region. Pay in the Southeast, where three-tenths of the production workers were employed, averaged \$10.53. Production worker employment in the Great Lakes area accounted for about one-fourth of the total while one-tenth each were found in New England, the Middle Atlantic States, the Southwest, and the Pacific States.

About three-eighths of the workers were located in metropolitan areas⁴ in July 1982. On a regional basis, the proportion ranged from 85 percent in the Middle Atlantic States to 26 percent in New England. Nearly nine-tenths of the workers were employed in mills with 250 employees or more, and nearly one-half were in establishments with 1,000 workers or more.

Forty-nine occupations containing approximately one-half of the production work force, were selected as representative of the industries' wage structures and manufacturing activities. Average hourly earnings in these jobs ranged from \$13.14 for general maintenance mechanics to \$8.45 for janitors. (See table 1 for information on 23 of the 49 survey occupations.) Pulp and paper millwrights, numerically the largest survey occupation with 6,015 employees, averaged \$11.82. Averages of \$11.74 or more were also attained by other skilled maintenance workers including machinists, electricians, and pipefitters.

With relatively few exceptions, production workers were paid time rates, under formal plans providing single rates for individual occupations. As a result, hourly earnings for specific categories usually clustered within relatively narrow ranges. Also contributing to the high degree of wage concentration was the predominance of labor-management agreements.

Wage rates within overall job categories varied by processes used in pulp making, grade of paper, or paperboard produced, and size and speed of the machine used in making the product. For example, workers using the *sulphite* process to make pulp generally had earnings higher than those working with the *sulphate* process. Many of the machine room pay levels were higher as the machine wire width increased from 100 inches to 301 inches or more.

In July 1982, the most common form of work schedule was rotating shifts, affecting seven-tenths of the production workers. Workers typically alternated among day, evening, and night shifts, changing shifts every 7 days. Workers on evening and night shifts almost always received cents-per-hour differentials over day-shift work, typically between 10 and 20 cents on evening shifts and between 20 and 30 cents on night shifts. Day-shift work schedules of 42 hours per week were found in mills employing slightly less than one-half of the production workers. Schedules of 40 hours applied in mills with just over one-third of the workers, while

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Table 1. Number of production workers and average hourly earnings¹ in pulp, paper, and paperboard mills, by selected characteristics, United States and selected regions,² July 1982

Characteristic	United States ³		New England		Middle Atlantic		Southeast		Southwest		Great Lakes		Pacific	
	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings
All production workers ⁴	134,113	\$10.22	17,831	\$ 9.18	11,691	\$ 8.92	39,802	\$10.53	14,264	\$10.87	31,358	\$ 9.42	14,944	\$12.43
Type of mill: ⁵														
Pulp mills	6,251	11.59	—	—	—	—	3,829	11.19	—	—	—	—	1,612	12.65
Paper mills	94,637	10.10	16,682	9.22	10,516	9.03	19,259	10.69	8,444	10.95	27,654	9.52	9,709	12.32
Paperboard mills	33,225	10.30	913	8.09	1,175	7.96	16,714	10.20	5,407	10.67	3,704	8.73	3,623	12.60
Size of community:														
Metropolitan areas ⁶	49,768	9.95	5,156	8.51	9,633	9.02	12,937	10.32	6,250	10.59	9,594	9.34	4,494	12.19
Nonmetropolitan areas	84,345	10.38	12,675	9.45	2,058	8.43	26,865	10.64	8,014	11.08	21,764	9.46	10,450	12.53
Size of mill:														
100 to 249 workers	14,694	8.40	3,889	8.12	2,108	7.67	1,760	7.90	702	7.47	4,071	8.11	1,553	12.03
250 to 999 workers	58,045	10.45	5,107	8.98	6,702	8.98	15,843	10.68	5,869	11.34	13,602	9.37	8,703	12.46
1,000 workers or more	61,374	10.45	8,835	9.76	2,881	9.68	22,199	10.63	7,693	10.81	13,685	9.86	4,688	12.50
Pulp														
Woodyard and wood preparation:														
Crane operators	910	11.31	67	9.99	38	9.31	494	11.62	145	11.70	91	10.35	44	12.18
Pulp making:														
Cooks, batch digester	414	12.51	17	9.72	15	9.44	207	12.38	46	13.70	33	11.33	76	13.76
Grinder operators	404	9.93	—	—	—	—	88	10.74	—	—	64	9.25	—	—
Bleach-plant operators	537	11.51	48	9.37	43	9.60	174	12.14	48	12.74	115	9.70	80	13.69
Pulp testers	718	9.51	104	8.78	58	8.81	251	9.30	82	9.60	139	9.58	62	11.39
Paper and paperboard														
Stock preparation:														
Head stock preparers, group I	667	10.83	106	10.44	54	9.21	190	11.40	54	10.59	182	9.61	77	13.91
Head stock preparers, group II	941	10.05	166	9.35	143	8.89	114	10.83	46	11.73	350	9.64	84	12.56
Beater-operator helpers	1,447	9.25	279	8.41	216	8.32	257	9.95	109	9.85	374	8.71	145	11.70
Hydrapulper operators	1,518	8.79	216	8.01	116	8.36	148	8.21	81	7.78	707	8.67	212	11.20
Machine room:														
Paper-machine tenders	3,595	11.81	605	10.36	467	10.00	622	12.96	268	13.60	1,132	10.69	411	15.79
Backtenders	3,555	10.88	627	9.49	462	9.42	621	11.92	257	12.42	1,091	9.91	407	14.43
Third hands	3,316	10.16	489	9.36	414	8.70	564	11.42	263	11.16	1,100	9.24	389	12.76
Fourth hands	2,996	9.49	428	8.89	357	8.37	532	10.17	251	10.03	997	8.88	349	11.64
Finishing, roll:														
Rewinder operators	1,714	9.40	230	9.45	249	8.29	240	9.19	64	10.08	706	9.29	165	11.32
Rewinder helpers	1,111	8.85	211	8.82	209	7.87	120	8.53	41	9.19	439	9.15	52	10.40
Laboratory:														
Paper testers	2,055	9.45	220	8.49	242	8.52	536	9.61	190	9.79	640	9.19	172	11.70
Miscellaneous⁷														
Janitors, porters, or cleaners	1,570	8.45	203	7.86	186	8.00	450	8.31	112	8.19	455	8.53	136	10.34
Maintenance electricians	3,606	12.00	563	10.82	255	10.34	1,042	12.30	227	12.94	843	10.63	544	14.67
Maintenance mechanics, general	5,635	13.14	389	9.24	336	9.43	2,693	13.81	1,241	14.37	327	10.42	285	14.70
Maintenance machinists	1,360	11.74	219	10.80	186	10.40	390	12.07	71	12.71	297	10.81	167	14.70
Maintenance pipefitters	3,066	11.87	492	10.69	231	9.97	949	12.09	217	12.61	641	10.57	479	14.68
Millwrights, pulp and paper	6,015	11.82	950	10.84	362	9.96	1,726	12.25	281	12.03	1,533	10.45	999	14.52
Power-truck operators	5,716	9.19	607	8.32	734	8.43	1,100	9.11	436	9.53	2,086	9.02	562	11.38

¹Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.

²The regions used in this study include **New England**—Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont; **Middle Atlantic**—New Jersey, New York, and Pennsylvania; **Border States**—Delaware, District of Columbia, Kentucky, Maryland, and West Virginia; **Southeast**—Alabama, Florida, Georgia, Mississippi, North Carolina, South Carolina, Tennessee, and Texas; **Great Lakes**—Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin; **Middle West**—Iowa, Kansas, Missouri, Nebraska, North Dakota, and South Dakota; **Mountain**—Arizona, Colorado, Idaho, Montana, New Mexico, Utah, and Wyoming; and **Pacific**—California, Nevada, Oregon, and Washington. Alaska and Hawaii were not included in the study.

³Includes data for regions in addition to those shown separately.

⁴Includes data for approximately 16,000 workers in converted paper product departments of paper and paperboard mills.

⁵Data for pulp mills are limited to workers in separate pulp making establishments; data for paper and paperboard mills include workers in pulp making departments of these mills.

⁶Standard metropolitan statistical areas as defined by the U.S. Office of Management and Budget through February 1974.

⁷Includes workers in all departments, including converted paper products departments of paper and paperboard mills.

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

the remaining mills had longer day-shift schedules, usually 48 hours.

Nearly all workers were in mills providing paid holidays, paid vacations, and at least part of the cost of life, sickness and accident, hospitalization, surgical, and basic and major medical insurance, and retirement pension plans. Workers generally received 11 to 13 paid holidays annually, as well as from 1 to 6 weeks of vacation pay, depending on length of service. A large majority of workers were also eligible for dental insurance and paid funeral and jury-duty leave. Two-fifths could receive technological severance pay.

A comprehensive report on the survey providing additional data on occupational earnings and employee benefits, *Industry Wage Survey: Pulp, Paper, and Paperboard Mills, July 1982* (Bulletin 2180) is for sale by the Bureau's regional offices and the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402. Price, \$4.50. □

—FOOTNOTES—

¹Of 34 industry groupings studied regularly, average hourly earnings in pulp, paper, and paperboard mills ranked seventh highest in July 1982, according to data from the Bureau's employment and earnings series. Industry groupings with higher average hourly earnings were petroleum refining, basic iron and steel, motor vehicles, cigarettes, industrial chemicals, and motor vehicle parts.

²The survey excluded establishments employing fewer than 100 workers. Earnings data exclude premium pay for overtime and for work on weekends, holidays, and late shifts. The 364 mills within the scope of the survey employed 150,200 production workers in July 1982, including 16,087 in converted paper products departments of paper and paperboard mills. The basic survey tabulations do not include separate data for workers in these departments.

³For an account of the earlier study, see *Industry Wage Survey: Pulp, Paper, and Paperboard Mills, Summer 1977*, BLS Bulletin 2008; and for a summary, see "Occupational pay and benefits in the papermaking industries," *Monthly Labor Review*, May 1979, pp. 46-47.

⁴Standard metropolitan statistical areas as defined by the U.S. Office of Management and Budget through February 1974.

Special jobs, special problems

It is obvious that excessive hours create far more serious problems for people in arduous or dangerous occupations, and for special categories of workers such as young persons and pregnant women, than for other workers. For this reason, it would seem that to demand, say, a 30-hour week for all—and the demand is not a pure invention—is perhaps to miss the point that something should be done urgently for those who most need relief, and for whom a real working week of 40 hours would seem like paradise. Nor should the needs of workers outside industry be overlooked. Some of the worst examples of overwork are to be found in hotels, restaurants, shops, offices, and small workshops, not to mention agriculture, where conditions can be worse than in any factory.

—INTERNATIONAL LABOR ORGANIZATION
*Working Conditions and Environment:
 A Workers' Education Manual*
 (Washington, International Labor
 Organization, 1983), p. 24.
