National Compensation Survey: Occupational Wages in the West North Central Census Division, 1998



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Preface

The National Compensation Survey (NCS) provides comprehensive measures of occupational earnings, compensation cost trends, and detailed benefit provisions. It integrates three Bureau of Labor Statistics (BLS) programs—the Occupational Compensation Survey (OCS), the Employment Cost Index (ECI), and the Employee Benefits Survey (EBS). OCS provides data on occupational earnings; the ECI measures changes in labor costs, as well as average hourly employer costs for employee compensation; and the EBS provides information on detailed benefit provisions. When fully integrated, the NCS will provide data on benefit costs and provisions as well as wages. This bulletin, a product of the first phase of the NCS, focuses on occupational earnings.

The NCS replaced the Occupational Compensation Survey (OCS) with the release of the 1997 data. The major difference between these two surveys is that the OCS used the same preselected list of occupations for all localities. The NCS uses a probability-based sample of establishments and occupations that is intended to more fully represent the employment patterns and occupational mix of each locality.

This bulletin presents aggregate pay data from the metropolitan and nonmetropolitan local area surveys conducted in the West North Central census division. (See Technical Note). It provides estimates of occupational pay for the census division, as well as selected data on worker and establishment characteristics.

NCS bulletins are published for each of the nine census divisions: New England, Middle Atlantic, East North Cen-

tral, West North Central, South Atlantic, East South Central, West South Central, Mountain, and Pacific. (See Technical Note.) Data also are published for some individual localities, as well as for the entire United States. The census division publications may be useful to NCS data users in localities for which separate data were not published.

For additional information regarding the National Compensation Survey, contact the information staff in the BLS National Office at (202) 691-6199. You can also write to the Bureau of Labor Statistics, Division of Compensation Data Analysis and Planning, 2 Massachusetts Avenue, NE, Room 4175, Washington, DC 20212-0001, or send e-mail to OCLTINFO@bls.gov.

The Bureau's Office of Compensation and Working Conditions developed and produced this bulletin. The Directorate of Survey Processing coordinated the data file formation and tabulations. Field economists from the Bureau's regional offices, under the direction of the Assistant Regional Commissioners for Operations, collected the survey data. The Bureau thanks all survey respondents for their cooperation, without which this bulletin would not have been possible.

The data presented in this bulletin also are displayed in a Portable Document Format (PDF) on the BLS Internet site (http://stats.bls.gov/comhome.htm). Material in the bulletin is in the public domain and, with appropriate credit, may be reproduced without permission. This information will be made available to sensory impaired individuals upon request. Voice phone: (202) 691-5200; Federal Relay Service: 1-800-326-2577.

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Occupational Wages in the West North Central Census Division, 1998

Overview

This bulletin provides 1998 National Compensation Survey (NCS) estimates of occupational pay in the West North Central census division. The bulletin highlights average (mean) hourly pay for workers by seven characteristics:

- Private industry and State and local government
- Metropolitan and nonmetropolitan areas
- · Selected occupations and major occupational groups
- · Full-time and part-time status
- · Bargaining status
- · Size of establishment
- Work level

Wages in the West North Central census division averaged \$14.85 per hour during 1998. Workers in private industry in the West North Central region averaged \$14.05 per hour; pay of workers in State and local government averaged \$17.87 per hour. The nationwide hourly average for all workers covered by the survey was \$15.72.

Table 1 in this bulletin provides an overview of average pay for workers in private industry and State and local government, by selected worker and establishment characteristics. For example, white-collar workers in private industry averaged \$16.75 per hour; blue-collar workers averaged \$12.72; and service workers, \$7.87. Corresponding averages in State and local government were \$19.93, \$14.16, and \$12.54. Generally, average hourly earnings for private industry workers were lower than those for State and local government workers. Part of this difference can be explained by differences in the occupational and industrial mix of the two sectors. For example, professional specialty and technical occupations are proportionately more prevalent in State and local government than in private industry. With the exception of the construction industry, few State and local government workers are in goods-producing industries.

Full-time workers in the West North Central region averaged \$15.59 per hour, while part-time workers averaged \$8.47. In private industry, full-time workers averaged \$14.82 an hour

and part-time workers averaged \$8.04. For workers in State and local government, average hourly pay was \$18.38 and \$11.10, respectively. Full-time or part-time designation is determined by the employer.

Workers in large establishments in the West North Central region, that is, establishments with 2,500 or more employees, had the highest average hourly pay at \$19.15. Workers in the smallest establishment-size category studied (50-99 employees) averaged \$12.38.

Table 2 shows that workers in metropolitan areas averaged \$15.83 per hour, more than the average pay for workers in nonmetropolitan areas, \$12.10. Table 2 also shows that for most of the worker and establishment characteristics presented, average pay for metropolitan area workers was higher than for their counterparts in nonmetropolitan areas. See the Technical Note for definitions of metropolitan and nonmetropolitan areas.

Among the nine census divisions, average earnings were generally highest in the New England, Middle Atlantic, and Pacific regions. Average earnings for all census divisions, and for other characteristics, can be seen in tables 1 and 2.

Full-time, part-time, and combined average pay rates for occupations in private industry and in State and local governments are shown in tables 3, 4, and 5. These tables contain wage rates and mean weekly hours for individual occupations and for major occupational groups. All registered nurses, for example, averaged \$18.32 per hour (table 3). Registered nurses in private industry averaged \$18.05 (table 4), while their counterparts in State and local government averaged \$19.24 per hour (table 5). Laborers, except construction, averaged \$9.84 in private industry and \$10.95 in State and local governments. Janitors and cleaners, a service occupation, averaged \$8.19 in private industry and \$10.35 in State and local government.

Earnings by occupational group and work level are shown in table 6. In determining the work level, the Bureau applies a "generic leveling" technique to all occupations selected during the collection process, using 10 criteria to level occupations. Usually, the levels tend to show higher pay at higher levels. In this region, average hourly earnings of white-collar workers ranged from \$6.82 for work level 1 to \$60.57 for level 15. Average earnings of blue-collar workers ranged

from \$7.41 for level 1 to \$29.77 for level 10. Service workers' average earnings ranged from \$6.66 for level 1 to \$26.44 for level 11. The Technical Note has more information on generic leveling.

Table A in the Technical Note shows the number of establishments studied in the West North Central census division by employment size; more establishments were studied

in the 100- to 499-worker group than in any other size category. This table also shows the number of establishments represented. Table B shows the number of workers represented by the surveys in the West North Central census division by major occupational groups such as professional specialty and technical, sales, and transportation and material moving.

Table 1. Summary, West North Central: Mean hourly earnings1 and weekly hours by selected characteristics, private industry and State and local government, National Compensation Survey, 2 1998

		Total		Priv	ate industry	/	State and	d local gover	nment
Worker and establishment characteristics,	Hourly 6	earnings		Hourly ea	arnings		Hourly e	arnings	
and geographic areas	Mean	Relative error (percent)	Mean weekly hours	Mean	Relative error (percent)	Mean weekly hours	Mean	Relative error (percent)	Mean weekly hours
Total	\$14.85	1.6	36.5	\$14.05	1.9	36.3	\$17.87	1.2	37.0
Worker characteristics: ³									
White-collar occupations ⁴	17.63 21.76 25.71	2.4 1.3 2.5	36.9 36.9 41.0	16.75 21.21 25.66	3.1 2.2 3.1	36.8 36.9 41.4	19.93 22.55 25.87	1.2 1.1 3.1	37.2 37.0 39.7
	12.46	4.7	32.3	12.48	4.7		7.74	9.9	22.4
Sales				-	1	32.3			36.7
Administrative support	10.85	3.0	37.1	10.54	3.6	37.2	11.86	1.9	
Blue-collar occupations ⁴	12.81	1.6	38.8	12.72	1.7	38.9	14.16	1.7	37.0
Precision production, craft, and repair Machine operators, assemblers, and	15.14	2.2	40.1	15.06	3.9	40.1	15.82	2.0	40.0
inspectors	12.03	1.5	39.2	12.03	1.5	39.2	_	_	_
Transportation and material moving Handlers, equipment cleaners,	14.23	3.1	41.2	14.40	3.3	42.7	13.04	2.4	33.3
helpers, and laborers	9.92	1.8	35.3	9.80	1.9	35.2	11.99	4.7	36.7
Service occupations ⁴	9.23	1.6	31.1	7.87	1.6	29.3	12.54	2.5	36.3
Full time	15.59	1.6	40.0	14.82	1.9	40.1	18.38	1.1	39.4
Part time	8.47	1.6	20.8	8.04	1.6	20.9	11.10	2.3	20.2
r art unie	0.47	1.0	20.0	0.04	1.0	20.3	11.10	2.5	20.2
Union	16.72	1.8	37.1	15.92	2.4	37.0	18.17	3.7	37.4
Nonunion	14.35	1.9	36.3	13.66	2.3	36.2	17.70	1.1	36.8
Time	14.79	1.6	36.2	13.92	1.9	36.0	17.87	1.2	37.0
Incentive	16.16	6.0	42.5	16.16	6.0	42.5	-	-	-
Establishment characteristics:									
Goods producing	(5)	(5)	(⁵)	15.00	2.2	39.7	(5)	(5)	(5)
Service producing	(⁵) (⁵)	(⁵)	(5)	13.56	2.3	34.8	(⁵) (⁵)	(⁵) (⁵)	(⁵)
				40.40					
50-99 workers ⁶	12.38	2.3	34.1	12.10	2.3	34.1	17.18	14.0	34.3
100-499 workers	13.28	2.0	36.0	12.89	2.3	36.0	15.99	1.9	36.1
500-999 workers	15.68	2.7	38.6	15.27	3.0	39.0	18.54	3.9	35.6
1000-2499 workers	15.96 19.15	5.7 2.0	37.1 37.8	15.32 19.88	7.1 3.8	37.4 37.1	18.09 18.65	2.4 2.0	35.9 38.2
Geographic areas: ⁷									
Metropolitan	15.83	2.4	36.5	15.09	2.8	36.2	18.39	1.6	37.4
Nonmetropolitan	12.10	2.3	36.4	11.31	1.7	36.6	15.94	3.5	35.6
New England	17.38	1.4	35.1	16.50	1.7	35.0	21.35	1.3	35.5
Middle Atlantic	18.10	1.5	35.8	17.14	1.8	35.8	21.72	1.6	35.5
East North Central	16.08	.8	36.2	15.44	.9	36.3	19.32	1.5	35.7
West North Central	14.85	1.6	36.5	14.05	1.9	36.3	17.87	1.2	37.0
South Atlantic	14.40	1.0	37.1	13.82	1.1	36.9	16.22	1.4	38.0
East South Central	11.87	2.3	37.7	11.21	2.6	37.9	15.93	2.2	36.8
West South Central	14.62	1.8	37.2	14.27	2.3	36.9	15.63	1.2	38.0
Mountain	14.58	2.7	36.4	13.30	2.9	36.4	18.32	2.9	36.4
Pacific	17.86	1.3	36.2	16.82	1.7	36.4	21.26	1.0	35.5

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

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

the number of workers, weighted by hours.

In this census division, collection was conducted between April 1998 and April

^{1999.} The average reference period was September 1998.

3 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.

⁴ A classification system including about 480 individual occupations is used to cover all workers in the civilian economy. See Technical Note for more information.

⁵ Classification of establishments into goods-producing and service-producing industries applies to private industry only.

⁶ Establishments classified with 50-99 workers may contain establishments with fewer than 50 due to staff reductions between survey sampling and collection.

⁷ Data are presented for metropolitan and nonmetropolitan area divisions as See Technical Note for a list of survey areas in

well as 9 census area divisions. See Technical Note for a list of survey areas in each census area division and the States comprising the 9 census area divisions.

Table 2. Summary, West North Central: Mean hourly earnings1 and weekly hours by selected characteristics, metropolitan and nonmetropolitan areas,² National Compensation Survey,³ 1998

		Total		Metro	opolitan are	as	Nonme	tropolitan a	reas
Worker and establishment characteristics,	Hourly e	earnings		Hourly ea	arnings		Hourly e	arnings	
and geographic areas	Mean	Relative error (percent)	Mean weekly hours	Mean	Relative error (percent)	Mean weekly hours	Mean	Relative error (percent)	Mean weekly hours
Total	\$14.85	1.6	36.5	\$15.83	2.4	36.5	\$12.10	2.3	36.4
Private Industry	14.05	1.9	36.3	15.09	2.8	36.2	11.31	1.7	36.6
State and local government	17.87	1.2	37.0	18.39	1.6	37.4	15.94	3.5	35.6
Worker characteristics: ⁴									
White-collar occupations ⁵	17.63	2.4	36.9	18.57	2.1	37.0	14.03	6.8	36.7
Professional specialty and technical	21.76	1.3	36.9	22.31	1.7	36.8	19.43	1.9	37.2
Executive, administrative, and									_
managerial	25.71	2.5	41.0	26.65	3.0	41.1	20.72	8.4	40.3
Sales	12.46	4.7	32.3	13.09	5.3	31.4	10.20	3.7	35.7
Administrative support	10.85	3.0	37.1	11.67	2.3	37.6	8.28	5.9	35.7
Blue-collar occupations ⁵	12.81	1.6	38.8	13.53	2.2	39.0	11.47	3.3	38.4
	15.14	2.2			2.2			4.4	40.7
Precision production, craft, and repair	15.14	2.2	40.1	16.33	2.2	39.8	12.73	4.4	40.7
Machine operators, assemblers, and	40.00	4.5	00.0	40.00		00.5	44.40	4.0	000
inspectors	12.03	1.5	39.2	12.66	2.8	39.5	11.12	1.3	38.8
Transportation and material moving Handlers, equipment cleaners,	14.23	3.1	41.2	14.23	2.7	42.4	14.22	9.1	38.1
helpers, and laborers	9.92	1.8	35.3	10.36	2.3	35.2	9.16	3.4	35.6
Service occupations ⁵	9.23	1.6	31.1	9.46	2.1	31.0	8.61	4.1	31.3
Full time	15.59	1.6	40.0	16.64	2.3	40.1	12.65	2.7	39.7
Part time	8.47	1.6	20.8	8.84	2.3	20.6	7.44	2.7	21.4
Union	16.72	1.8	37.1	16.87	2.1	36.9	16.13	4.5	38.1
Nonunion	14.35	1.9	36.3	15.53	2.7	36.4	11.32	3.6	36.1
Time	14.79	1.6	36.2	15.77	2.3	36.2	12.12	2.3	36.2
Incentive	16.16	6.0	42.5	17.14	6.1	42.2	11.39	8.4	44.3
Establishment characteristics:									
Goods producing ⁶ Service producing ⁶	15.00	2.2	39.7	16.57	3.1	39.6	12.14	3.6	39.9
Service producing ⁶	13.56	2.3	34.8	14.45	3.0	34.9	10.67	1.9	34.4
50-99 workers ⁷	12.38	2.3	34.1	12.68	3.0	33.9	11.69	4.1	34.6
100-499 workers	13.28	2.0	36.0	14.05	3.0	35.8	12.01	3.6	36.4
500-999 workers	15.68	2.7	38.6	16.26	3.6	38.8	14.15	1.4	38.0
1000-2499 workers	15.96	5.7	37.1	17.45	3.1	36.8	10.13	6.5	38.1
2500 workers or more	19.15	2.0	37.8	19.15	2.0	37.8	-	_	_
Geographic areas:8									
New England	17.38	1.4	35.1	17.75	1.2	35.2	14.75	3.6	34.2
Middle Atlantic	18.10	1.5	35.8	18.39	1.6	35.7	13.58	1.6	36.2
East North Central	16.08	.8	36.2	16.55	.8	36.2	13.55	1.3	36.5
West North Central	14.85	1.6	36.5	15.83	2.4	36.5	12.10	2.3	36.4
South Atlantic	14.40	1.0	37.1	14.89	.7	37.0	12.00	4.4	37.7
East South Central	11.87	2.3	37.7	13.88	2.2	36.9	9.97	4.3	38.6
West South Central	14.62	1.8	37.2	14.86	2.1	37.2	13.08	5.6	37.1
Mountain	14.58	2.7	36.4	14.73	3.4	36.5	13.99	3.3	36.0
Pacific	17.86	1.3	36.2	18.04	1.3	36.2	14.96	2.8	35.6
			55.2	. 5.5 1		55.2			55.5

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.

Metropolitan areas can be a Metropolitan Statistical Area or Consolidated

are at least partially based on productivity payments such as piece rates,

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

Metropolitan Statistical Area as defined by the Office of Management and Budget, 1994. Nonmetropolitan areas are counties that do not fit the definitions above. For more information, see Technical Note.

3 In this census division, collection was conducted between April 1998 and April 1999. The average reference period was September 1998.

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

commissions, and production bonuses.

5 A classification system including about 480 individual occupations is used to cover all workers in the civilian economy. See Technical Note 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 establishment with fewer than 50 workers due to reduction in staff from the time of sampling to

with fewer than 50 workers due to reduction in staff from the time of sampling to

data collection.

See Technical Note for a list of survey areas in each census area division and the States comprising the 9 census area divisions.

Table 3. Selected occupations, West North Central: Mean hourly earnings¹ and weekly hours for full-time and part-time workers,² National Compensation Survey,³ 1998

		Total			Full time		Į į	Part time	
	Hourly e	arnings		Hourly e	arnings		Hourly e	arnings	
Occupation ⁴	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mear weekl hours
II	\$14.85	1.6	36.5	\$15.59	1.6	40.0	\$8.47	1.6	20.8
All excluding sales	15.01	1.5	36.8	15.66	1.5	40.0	8.77	1.7	20.8
White collar	17.63	2.4	36.9	18.34	2.3	39.8	10.23	2.9	21.0
White collar excluding sales	18.31	2.1	37.6	18.75	2.0	39.8	12.02	4.0	21.3
Professional specialty and technical	21.76	1.3	36.9	22.15	1.4	39.3	16.35	2.0	20.0
Professional specialty Engineers, architects, and surveyors	23.47 27.32	1.2 3.3	37.1 40.6	23.70 27.32	1.2 3.3	39.4 40.8	19.22	2.1	18.0
Civil engineers	28.34	5.1	39.2	28.34	5.2	40.8	_	_	_
Electrical and electronic engineers	26.75	2.5	40.9	26.75	2.5	40.9	_	_	_
Industrial engineers	27.36	14.9	40.4	27.36	14.9	40.4	_	_	_
Mechanical engineers	25.45	2.7	40.4	25.45	2.7	40.4	_	_	-
Engineers, n.e.c.	26.75	3.8	41.7	26.75	3.8	41.8	_	-	-
Mathematical and computer scientists	24.27	2.8	40.1	24.28	2.8	40.2	_	-	-
Computer systems analysts and scientists Operations and systems researchers and	24.84	3.1	40.1	24.86	3.1	40.2	_	_	-
analysts	21.91	4.8	39.8	21.91	4.8	39.8	_	_	_
Natural scientists	20.72	3.3	40.1	20.70	3.4	40.1	_	_	_
Chemists, except biochemists	21.78	11.2	40.6	21.78	11.2	40.6	_	_	-
Physical scientists, n.e.c.	25.46	8.7	39.7	25.46	8.7	39.7	_	_	-
Agricultural and food scientists	28.65	19.9	37.7	<u> </u>	<u> </u>		_	_	-
Biological and life scientists	18.35	8.9	40.0	18.35	8.9	40.0			l
Health related	21.04	2.4	35.1	21.12	2.9	39.8	20.54	2.3	20.6
Physicians	36.24	11.1	41.3	35.89	11.4	42.1	-	_	
Registered nurses	18.32	1.4	33.7	18.04	1.4	39.3	19.61	1.9	20.6
Pharmacists Dietitians	26.19 15.28	1.3 4.3	38.7 32.3	26.11 15.55	1.4 4.4	40.1 39.7	_		_
Respiratory therapists	16.13	4.9	39.0	16.12	4.9	39.4	_		
Occupational therapists	22.07	5.2	36.2	20.99	4.9	39.5	_	_	_
Physical therapists	20.50	7.3	36.3	19.81	7.8	40.0	_	_	_
Speech therapists	25.92	3.7	32.7	26.20	3.8	36.7	_	_	-
Therapists, n.e.c.	14.22	3.7	39.4	14.21	3.7	40.0	_	_	-
Physicians' assistants	25.11	8.5	40.0	25.11	8.5	40.0	_	-	-
Teachers, college and university	31.72	2.9	35.8	32.05	2.9	39.6	21.56	6.5	9.1
Social science teachers, n.e.c.	32.95	7.8	38.8	33.01	7.8	39.1	_	_	-
Mathematical science teachers	20.78	26.8	39.9	20.78	26.8	39.9	_	-	-
Medical science teachers	32.26	16.0	39.7	32.29	16.0	40.1	_	_	-
Health specialities teachers	22.86	3.5 9.2	38.2	23.01	3.8 9.6	40.3 39.9	_	_	_
Business, commerce, and marketing teachers Art, drama, and music teachers	35.60 30.78	12.4	34.1 34.1	36.23 32.23	11.3	40.2	_ 17.45	19.9	14.3
Education teachers	23.77	4.1	26.0	JZ.ZJ _	-	40.2	17.43	19.9	14.0
English teachers	26.21	7.6	29.9	_	_	_	_	_	_
Theology teachers	33.34	2.6	39.8	33.34	2.6	39.8	_	_	_
Trade and industrial teachers	28.67	1.7	33.2	28.79	1.7	37.4	_	_	-
Teachers, post secondary, subject not specified	26.44	12.2	35.9	26.33	13.0	38.8	28.08	11.1	16.8
Teachers, post secondary, n.e.c	28.18	5.7	23.7	29.80	4.8	39.0	20.75	9.5	8.5
Teachers, except college and university	24.22	1.6	34.9	24.46	1.6	37.2	16.52	14.7	12.1
Prekindergarten and kindergarten	19.67	13.2	35.9	19.71	13.8	37.4		- .	
Elementary school teachers	25.73	2.1	36.6	25.75	2.1	36.7	20.61	1.4	21.6
Secondary school teachers	24.98	1.8	36.5	24.82	1.8	37.3	33.08	8.7	17.0
Teachers, special education Teachers, n.e.c	23.50 22.94	3.2 6.9	37.5 32.6	23.50 23.66	3.2 7.0	37.5 38.0	- 15.23	9.4	12.9
Substitute teachers	9.18	3.1	9.6	25.00	7.0	30.0	9.18	3.1	9.6
Vocational and educational counselors	17.86	8.2	36.7	17.82	8.3	39.2	9.10	3.1	5.0
Librarians, archivists, and curators	23.98	4.5	37.3	24.11	4.5	37.9	14.82	8.3	18.2
Librarians	23.99	4.5	37.3	24.13	4.5	37.9	14.82	8.3	18.2
Social scientists and urban planners	22.06	6.0	39.7	22.15	6.1	39.9	_	-	-
Economists	24.03	10.4	39.8	24.03	10.4	39.8	_	-	-
Psychologists	22.31	5.6	39.5	22.45	5.7	40.0	<u> </u>		-
Social, recreation, and religious workers	15.05	3.2	37.8	15.22	3.1	39.7	12.80	6.8	22.
Social workers	15.06	3.3	37.9	15.24	3.1	39.7	12.45	6.6	22.
Recreation workers	12.25	10.5	37.3	_		-	_	-	-
Lawyers and judges	31.14	8.0	41.9	31.33	8.1	43.6	_	-	-
Lawyers	30.72	8.7	42.0	30.91	8.8	43.7	_	-	-

Table 3. Selected occupations, West North Central: Mean hourly earnings¹ and weekly hours for full-time and part-time workers,² National Compensation Survey,³ 1998–Continued

		Total			Full time		Part time		
<u>,</u>	Hourly e	arnings		Hourly e	arnings		Hourly e	arnings	
Occupation ⁴	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mea weel hou
White collar -Continued									
Professional specialty and technical –Continued									
Professional specialty –Continued									
Writers, authors, entertainers, athletes, and									
professionals, n.e.c.	\$19.65	4.6	38.3	\$19.90	4.7	40.1	\$14.00	9.7	19
Designers	18.35	6.2	40.0	18.42	6.2	40.2	_	_	-
Painters, sculptors, craft artists, and artist printmakers	16.22	7.9	39.9	16.22	7.9	39.9	_	_	_ ا
Photographers	17.11	10.5	40.0	17.11	10.5	40.0	_	I _	
Editors and reporters	18.57	4.7	39.1	18.69	5.4	40.0	_	_	-
Public relations specialists	13.97	14.1	39.2	13.87	14.1	40.2	_	_	-
Athletes	26.89	43.8	28.5	30.10	48.1	40.1	9.52	10.5	11
Professional, n.e.c.	25.00	6.7	40.0	25.09	6.7	40.1	_	_	-
Technical	16.16	4.4	36.3	16.69	4.7	38.9	12.05	3.1	23
Clinical laboratory technologists and									
technicians	13.81	2.1	38.1	13.76	2.1	39.9	14.61	7.4	21
Health record technologists and technicians	10.01	3.9	33.9	_			-		
Radiological technicians	16.47	6.9	32.2	17.03	8.1	39.5	14.18	3.9	18
Licensed practical nurses	11.63	1.4	34.6	11.79	1.4	39.4	11.11	3.1	24
Health technologists and technicians, n.e.c	11.66	2.6	35.5	11.71	4.9	40.0	11.48	5.8	25
Electrical and electronic technicians	18.00	5.6	40.0	18.00	5.6	40.1	-	_	
Mechanical engineering technicians	19.19 17.16	12.0 3.5	40.3 39.4	_ 17.27	3.5	39.9	_	_	'
Engineering technicians, n.e.c Drafters	14.84	5.0	38.9	14.73	5.2	39.9	_	_	
Chemical technicians	15.57	4.9	37.8	15.83	5.3	40.0	_	_	
Science technicians, n.e.c.	13.33	5.5	39.0	13.30	5.6	40.0	_	_	
Airplane pilots and navigators	79.49	26.1	19.5	79.49	26.1	19.5	_	_	
Computer programmers	20.55	4.3	40.0	20.74	4.2	40.4	_	_	
Legal assistants	17.64	6.0	38.4	17.78	6.0	39.1	_	_	
Technical and related, n.e.c.	15.70	6.8	35.7	16.10	8.0	40.0	13.39	5.8	21
Executive, administrative, and managerial	25.71	2.5	41.0	25.74	2.5	41.2	14.99	7.5	15
Executives, administrators, and managers	29.70	3.3	41.2	29.76	3.3	41.5	13.84	9.9	13
Legislators	10.11	18.5	18.4	_	-	-	_	_	-
Administrators and officials, public	00.04	4.7	400	00.70	4.7	44.0			
administration	23.81	4.7	40.8	23.78	4.7	41.0	_	_	'
Financial managers Personnel and labor relations managers	30.26 30.31	10.0 10.2	40.8 41.6	30.26 30.31	10.0 10.2	40.8 41.6	_	_	
Purchasing managers	24.10	14.2	42.5	24.10	14.2	42.5	_	_	
Managers, marketing, advertising, and public	24.10	14.2	42.5	24.10	14.2	42.5	_		
relations	33.08	5.7	40.9	33.08	5.7	40.9	_	_	
Administrators, education and related fields	27.91	3.7	40.1	28.09	3.6	40.3	_	_	
Managers, medicine and health	26.61	6.3	40.5	26.61	6.3	40.5	_	_	
Managers, food servicing and lodging									
establishments	18.27	10.5	42.4	18.58	10.8	43.4	_	_	-
Managers, properties and real estate	18.63	18.1	39.6	18.63	18.1	39.6	_	_	
Managers, service organizations, n.e.c	23.55	4.9	40.6	23.55	4.9	40.6	_	_	-
Managers and administrators, n.e.c.	30.93	5.2	42.5	30.94	5.2	42.5	-		ز. ا
Management related	19.03	2.9	40.5	19.04	2.9	40.6	17.26	6.4	19
Accountants and auditors Underwriters	19.63 17.48	4.8 10.6	39.8 39.7	19.64 17.48	4.9 10.6	40.2 39.7	_	_	
Other financial officers	22.13	6.3	42.0	22.13	6.3	42.0	_	1 -	
Management analysts	22.13	8.8	40.7	22.13	8.8	40.8	_	_	
Personnel, training, and labor relations		3.5	,		3.0				1
specialists	16.41	8.1	40.3	16.41	8.2	40.5	_	_	-
Buyers, wholesale and retail trade, except farm									
products	22.51	6.2	42.5	22.51	6.2	42.5	-	-	-
Purchasing agents and buyers, n.e.c	20.80	7.7	40.4	20.80	7.7	40.4	-	-	-
Construction inspectors	17.51	10.2	39.8	17.51	10.2	39.8	-	-	-
Inspectors and compliance officers, except	47.00		40 7	47.00		40 7			
construction	17.90	5.1	40.7	17.90	5.1	40.7	-	-	-
Management related, n.e.c	18.15	4.7	40.4	18.16	4.7	40.5	_	_	-

Table 3. Selected occupations, West North Central: Mean hourly earnings¹ and weekly hours for full-time and part-time workers,² National Compensation Survey,³ 1998–Continued

		Total			Full time		1	Part time	
	Hourly e	arnings		Hourly e	arnings		Hourly e	arnings	
Occupation ⁴	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mear week hour
White collar –Continued									
Sales	\$12.46	4.7	32.3	\$14.42	6.3	40.4	\$6.81	1.8	20.4
Supervisors, sales	15.94	6.6	40.2	16.06	6.5	41.1	-	-	-
Insurance sales	15.27	14.5	29.8	17.16	11.8	36.1	_	-	-
Securities and financial services sales	41.34	27.5	42.6	41.34	27.5	42.6	-	-	-
Advertising and related sales	23.22	13.1	38.9	24.00	13.0	40.2	-		-
Sales, other business services	15.84	18.1	35.5	16.18	19.2	37.0	8.18	2.7	18.
Sales engineers Sales representatives, mining, manufacturing,	20.80	9.8	40.8	20.80	9.8	40.8	_	_	_
and wholesale	23.63	9.5	40.4	24.89	8.2	41.4	-	-	-
Sales workers, motor vehicles and boats	17.61	18.0	45.9	17.78	18.2	46.3	-	-	
Sales workers, apparel	7.60	6.9 22.1	25.3	- 16.01	21.0	20.0	6.62	3.1	15.
Sales workers, hardware and building supplies Sales workers, parts	14.24	3.2	34.1 42.9	16.01 11.85	21.0	39.8	6.76	6.8	21.
Sales workers, parts	11.85 8.85	4.5	30.7	9.42	3.2 6.6	42.9 41.5	- 7.58	2.0	19
Sales counter clerks	7.73	3.3	27.0	8.55	6.3	37.6	6.96	3.2	21
Cashiers	7.01	2.0	27.3	7.60	2.0	39.6	6.46	2.0	21
Demonstrators, promoters, and models, sales	7.68	4.9	19.6	-		-	6.82	3.0	15
Sales support, n.e.c.	11.79	8.8	38.6	12.13	8.7	41.3	-	-	-
Administrative support, including clerical	10.85	3.0	37.1	11.10	2.9	39.6	8.32	3.7	22
Supervisors, general office	15.07	3.6	40.3	15.07	3.6	40.3	-	-	-
Supervisors, financial records processing Supervisors, distribution, scheduling, and	15.51	4.4	41.1	15.51	4.4	41.1	-	_	-
adjusting clerks	14.66	10.9	39.8	14.66	10.9	39.8	-	_	-
Computer operators	12.70	3.9	39.5	12.73	3.9	40.0	-	_	-
Peripheral equipment operators	9.85	5.2	39.8	9.85	5.2	39.8	_	-	-
Secretaries	12.58	1.9	38.5	12.67	1.9	39.6	10.42	4.4	23
Stenographers	11.19	5.1	35.9	11.76	3.5	39.4	-	-	-
Typists	10.76	3.8	39.6	10.76	3.8	39.8	- 0.14	10.4	-
Interviewers	8.09 7.43	3.9 2.3	32.7 36.9	7.89 7.47	2.6 2.4	35.6 39.3	9.14	12.1	23
Hotel clerks Receptionists	8.46	4.7	33.6	8.82	5.2	39.8	- 7.58	5.9	24
Information clerks, n.e.c.	9.94	6.8	36.0	9.70	7.5	40.1	11.81	6.5	20
Correspondence clerks	15.35	7.6	40.0	15.35	7.6	40.0	-	0.5	20
Order clerks	11.39	9.6	37.8	11.83	9.6	39.7	7.77	12.3	27
Personnel clerks, except payroll and									
timekeeping	11.75	3.6	39.2	11.77	3.6	39.5	-	_	-
Library clerks	9.23	4.1	27.0	9.78	4.0	38.8	8.61	8.4	20
File clerks	8.75	4.7	36.5	8.81	5.1	39.6	-	-	-
Records clerks, n.e.c.	9.24	3.2	38.1	9.33	3.3	39.6	8.04	3.4	25
Bookkeepers, accounting and auditing clerks	10.76	2.3	37.5	10.81	2.4	39.7	10.00	9.1	19
Payroll and timekeeping clerks	12.69	7.6	39.8	12.69	7.6	39.8	_	-	-
Billing clerks	11.03	5.5	38.5	11.09	5.3	39.6	-	-	-
Office machine operators, n.e.c.	7.79	4.6	33.6	7.91	5.4	40.0	- 7.60	-	10
Telephone operators	10.89	9.5	33.5	11.55	9.4	39.7	7.68	3.8	19
Mail clerks, except postal service	7.43 8.18	9.3 5.2	37.0 33.0	7.10	10.1	39.9	_	_	
Messengers Dispatchers	14.17	18.0	39.2	- 14.23	18.2	40.2	_	-	
Production coordinators	14.17	3.4	38.0	14.23	3.9	40.2	_	_	
Traffic, shipping and receiving clerks	10.21	4.0	38.8	10.25	4.1	39.4	_	_	-
Stock and inventory clerks	10.41	4.2	36.4	10.64	4.4	39.9	7.77	5.4	18
Weighers, measurers, checkers, and samplers Expeditors	15.36 14.73	22.0 12.1	23.9 34.9	_ 15.74	11.1	40.0	_	_	-
Material recording, scheduling, and distribution	10.34	7.4	36.4	10.70		40.0			21
clerks, n.e.c Insurance adjusters, examiners, and					7.8		7.41	2.8	21
investigators	13.88	4.6	39.1	13.88	4.6	39.1	-	-	-
Investigators and adjusters, except insurance	10.61	4.8	38.2	10.88	4.8	40.3	-	-	-
Eligibility clerks, social welfare	11.40	9.3	38.3	11.42	9.4	38.8	-	-	-
Bill and account collectors	11.32	4.4	39.1	11.40	4.4	40.0	- 7.00	-	
General office clerks	10.98	2.2	36.6	11.31	2.4	39.7	7.88	6.6	20
Bank tellers	8.51	3.6	34.3	8.71	4.1	40.0	7.49	5.1	19

Table 3. Selected occupations, West North Central: Mean hourly earnings¹ and weekly hours for full-time and part-time workers,² National Compensation Survey,³ 1998–Continued

		Total			Full time		Part time			
,	Hourly e	earnings		Hourly e	arnings		Hourly e	arnings		
Occupation ⁴	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mear weekl hours	
White collar -Continued										
Administrative support, including clerical										
-Continued										
Proofreaders	\$9.10	7.4	29.9		-	-		-	-	
Data entry keyers	9.37	3.1	38.3	\$9.45	3.1	39.9	\$8.50	8.5	26.2	
Statistical clerks	10.04	8.3	36.6	10.28	8.0	39.6		I -	l	
Teachers' aides	8.59	3.8	30.9	8.58	4.9	35.2	8.61	5.8	24.6	
Administrative support, n.e.c	10.40	7.2	36.4	10.54	7.8	40.1	8.80	5.1	17.6	
Blue collar	12.81	1.6	38.8	13.08	1.6	40.5	7.85	2.3	21.9	
Precision production, craft, and repair	15.14	2.2	40.1	15.15	2.2	40.2	10.50	15.7	23.9	
Supervisors, mechanics and repairers	18.47	5.6	43.5	18.47	5.6	43.5	-	-	-	
Automobile mechanics	14.89	13.5	40.3	14.89	13.5	40.3	_	_	-	
Bus, truck, and stationary engine mechanics	12.86	3.2	41.3	12.79	3.1	41.3	-	-	-	
Automobile body and related repairers	13.65	8.9	42.9	13.65	8.9	42.9	_	-	-	
Aircraft mechanics, except engine	18.01	5.1	40.0	18.01	5.1	40.0	-	-	-	
Heavy equipment mechanics	17.78	7.9	40.1	17.78	7.9	40.1	-	-	-	
Industrial machinery repairers	14.53	3.4	39.6	14.53	3.4	39.6	_	-	-	
Machinery maintenance	15.19	4.5	39.6	15.19	4.5	39.6	_	-	-	
Electronic repairers, communications and	16 11	F 2	400	16.44	F 4	40.2				
industrial equipment Data processing equipment repairers	16.41 13.11	5.3 8.2	40.2 35.5	16.44 13.69	5.4 9.6	40.3 40.0	_	_	_	
Heating, air conditioning, and refrigeration	13.11	0.2	35.5	13.09	9.6	40.0	_	-	_	
mechanics	13.67	8.6	39.8	13.67	8.6	39.8	_	l _	l _	
Millwrights	19.67	6.4	40.0	19.67	6.4	40.0	_	l _	_	
Mechanics and repairers, n.e.c.	15.52	2.5	39.9	15.55	2.5	40.0	_	_	_	
Supervisors, construction trades, n.e.c	18.28	3.5	40.9	18.28	3.5	40.9	_	_	_	
Carpenters	19.59	5.2	39.8	19.55	5.3	40.0	_	_	_	
Electricians	17.68	2.3	40.0	17.68	2.3	40.0	_	-	-	
Painters, construction and maintenance	16.58	17.6	40.0	16.58	17.6	40.0	-	-	-	
Plumbers, pipefitters and steamfitters	22.35	4.4	40.0	22.35	4.4	40.0	_	-	-	
Structural metal workers	17.36	8.0	40.0	17.36	8.0	40.0	-	-	-	
Construction trades, n.e.c.	14.22	2.1	40.4	14.22	2.1	40.4	_	-	-	
Supervisors, production	17.36	7.5	41.0	17.36	7.5	41.0	_	-	-	
Tool and die makers	20.50	3.2	40.0	20.50	3.2	40.0	-	_	-	
Precision assemblers, metal Machinists	15.30 18.02	11.6 4.0	40.0 39.9	15.30 18.02	11.6 4.0	40.0 39.9	_	_	_	
Sheet metal workers	17.63	7.0	39.9	17.63	7.0	39.9	_	_		
Electrical and electronic equipment assemblers	9.04	7.0	39.6	9.06	7.0	40.0	_	_	_	
Miscellaneous precision workers, n.e.c.	12.78	7.1	40.0	12.78	7.1	40.0	_	l _	_	
Bakers	8.89	3.6	37.7	9.06	3.1	40.0	_	_	-	
Inspectors, testers, and graders	14.99	6.4	40.8	14.99	6.4	40.8	_	_	_	
Water and sewer treatment plant operators	17.15	2.7	40.0	17.15	2.7	40.0	_	-	-	
Power plant operators	19.89	4.8	40.0	19.89	4.8	40.0	_	-	-	
Stationary engineers	16.67	3.8	40.0	16.67	3.8	40.0	-	-	-	
Machine operators, assemblers, and inspectors	12.03	1.5	39.2	12.13	1.6	39.9	7.95	4.8	22.5	
Punching and stamping press operators	11.08	4.0	39.3	11.13	3.9	40.0	-	-	-	
Drilling and boring machine operators Grinding, abrading, buffing, and polishing	11.78	12.5	40.0	11.78	12.5	40.0	_	_	_	
machine operators	11.85	9.2	40.0	11.85	9.2	40.0	-	-	-	
Forging machine operators	12.01	5.6	40.0	12.01	5.6	40.0	_	-	-	
Numerical control machine operators	13.17	8.2	40.0	13.17	8.2	40.0	-	-	-	
Fabricating machine operators, n.e.c.	11.19	3.1	40.0	11.19	3.1	40.0	-	_	-	
Molding and casting machine operators	11.15 13.47	5.3	39.6	11.17 13.47	5.2	39.8 40.0	_	_	-	
Metal plating machine operators Printing press operators	13.47 16.52	6.6	40.0 39.3	13.47 16.52	6.6 6.2	39.3	_	_	-	
Photoengravers and lithographers	17.90	7.0	38.2	17.90	7.0	39.3	_	_	_	
Laundering and dry cleaning machine operators	6.32	2.9	24.0	6.41	3.1	38.6	6.22	4.5	17.	
Packaging and filling machine operators	11.46	4.9	39.4	11.50	5.1	39.9	-	4.5	'/-	
Extruding and forming machine operators	10.87	12.4	39.3	10.87	12.4	39.3	_	_	_	
Mixing and blending machine operators	13.10	3.7	40.0	13.10	3.7	40.0	_	_	_	
g and stonding machine operators	. 3. 10	0		. 5. 10]					

Table 3. Selected occupations, West North Central: Mean hourly earnings¹ and weekly hours for full-time and part-time workers,² National Compensation Survey,³ 1998–Continued

		Total			Full time		F	Part time	
,	Hourly e	arnings		Hourly e	arnings		Hourly e	arnings	
Occupation ⁴	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mea week hour
Blue collar –Continued									
Machine operators, assemblers, and inspectors									
-Continued	4			.					
Painting and paint spraying machine operators Slicing and cutting machine operators	\$14.72 12.66	5.5 8.7	40.0 39.6	\$14.72 13.13	5.5 7.2	40.0 39.9	_	_	-
Photographic process machine operators	9.69	12.1	37.4	13.13	7.2	39.9	_	_	
Miscellaneous machine operators, n.e.c	12.21	5.0	39.7	12.24	5.1	39.9	\$9.73	5.2	33.
Welders and cutters	12.39	5.3	40.0	12.39	5.3	40.0	-		-
Assemblers	12.74	5.4	39.0	12.94	5.5	40.0	_	_	-
Miscellaneous hand working, n.e.c	11.16	7.0	40.0	11.16	7.0	40.0	_	-	-
Production inspectors, checkers and examiners	12.60 13.76	6.4 7.2	38.9 40.0	12.82 13.76	6.5 7.2	40.1 40.0	-	_	1 =
Production testers	13.70	1.2	40.0	13.70	1.2	40.0	_	_	-
Transportation and material moving	14.23	3.1	41.2	14.48	3.2	43.7	10.40	5.8	22
Supervisors, motor vehicle operators	16.63	10.4	40.7	16.63 14.52	10.4	40.7 48.5	_ 11.95	14.5	22
Truck drivers Driver-sales workers	14.47 12.43	3.6 13.5	47.5 32.1	14.52	3.7 14.3	48.5	11.95	14.5	22
Bus drivers	12.51	3.5	26.7	13.63	6.2	34.7	11.30	4.4	21
Taxicab drivers and chauffeurs	8.45	8.1	32.8	-	_	-	_	_	-
Motor transportation, n.e.c.	6.11	6.7	36.1	_	_	-	6.43	4.9	23
Supervisors, material moving equipment	19.52	4.2	40.2	19.52	4.2	40.2	-	-	-
Operating engineers	15.34	6.1	40.0	15.34	6.1	40.0	_	_	-
Excavating and loading machine operators	18.19	7.9	40.0	18.19	7.9	40.0	_	_	-
Grader, dozer, and scrapper operators Industrial truck and tractor equipment operators	12.44 12.49	9.4 2.3	40.0 39.7	12.44 12.50	9.4 2.4	40.0 39.8	_		
Miscellaneous material moving equipment	12.10	2.0	00.7	12.00		00.0			
operators, n.e.c.	13.78	7.8	39.9	13.79	7.8	40.0	-	_	-
Handlers, equipment cleaners, helpers, and									
laborers	9.92	1.8	35.3	10.43	1.5	39.6	7.00	2.9	21
Groundskeepers and gardeners, except farm	11.00	6.2	37.3	11.36	5.9	40.0	8.55	20.1	25
Supervisors, handlers, equipment cleaners, and									
laborers, n.e.c.	12.74	8.2	40.4	12.74	8.2	40.4	_	-	-
Construction laborers	13.43	6.7	39.6	13.39	6.7	39.9	_	_	-
Production helpers	9.69	5.1	38.1	9.91	4.7	39.1	-	_	
Stock handlers and baggers Machine feeders and offbearers	9.25 9.10	6.6 10.0	28.9 38.2	11.24 9.08	5.0 10.4	39.9 39.3	6.29	3.5	20
Freight, stock, and material handlers, n.e.c.	11.13	5.4	35.0	11.69	6.4	39.1	8.53	4.9	23
Garage and service station related	9.27	13.8	32.9	9.80	15.0	40.0	-	4.9	23
Vehicle washers and equipment cleaners	8.41	9.2	39.3	8.42	9.3	40.0	_	_	-
Hand packers and packagers	8.57	7.3	38.1	8.67	8.2	39.8	7.55	6.1	26
Laborers, except construction, n.e.c	9.92	4.2	37.6	10.08	4.3	39.4	7.37	8.4	22
Service	9.23	1.6	31.1	10.20	1.6	39.3	6.70	1.8	20
Protective service	14.75	2.9	39.1	15.07	2.9	41.5	8.27	7.4	18
Supervisors, firefighters and fire prevention	15.70	5.0	48.3	15.70	5.0	48.3	_	_	-
Supervisors, police and detectives	22.67	2.5	40.0	22.67	2.5	40.0	_	-	-
Supervisors, guards	19.40	17.1	40.0	19.40	17.1	40.0	_	_	-
Firefighting Police and detectives, public service	13.04 17.31	3.6 3.1	46.8 39.8	13.08 17.32	3.6 3.1	49.4 40.0	_		1]
Sheriffs, bailiffs, and other law enforcement	17.01	3.1	55.6	17.02] 3.1	70.0	=		
officers	15.70	3.5	37.7	16.03	3.6	40.1	_	_	-
Correctional institution officers	13.11	6.4	38.9	13.17	6.5	39.8	-	_	-
Guards and police, except public service	9.18	6.5	34.7	9.43	6.0	39.3	7.80	12.9	21
Protective service, n.e.c.	7.81	10.5	26.5	8.45	14.5	39.3	6.91	7.7	18
Food service	7.01	2.1	26.4	8.01	2.6	38.3	5.84	1.8	19
Supervisors, food preparation and service	11.17 7.05	6.7 3.6	35.5	11.68 7.71	7.3 4.7	40.1 39.9	8.44	7.0	22
Bartenders	7.05 3.62	5.5	28.9 22.9	3.70	7.8	39.9	6.06 3.58	7.9 6.7	20 19
Cooks	8.61	2.4	33.4	8.97	2.4	38.9	7.43	3.0	23
Food counter, fountain, and related	6.46	4.2	23.5	7.31	9.5	38.2	6.13	2.6	20
Kitchen workers, food preparation	7.38	3.3	26.8	7.65	3.3	39.4	7.14	4.5	21

Table 3. Selected occupations, West North Central: Mean hourly earnings1 and weekly hours for full-time and part-time workers,2 National Compensation Survey, 3 1998-Continued

		Total		ı	Full time		F	Part time	
4	Hourly e	arnings		Hourly e	Hourly earnings		Hourly earnings		
Occupation ⁴	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours
ervice –Continued Food service –Continued									
Waiters'/Waitresses' assistants	\$5.94	7.0	26.2	\$7.01	9.1	38.9	\$5.23	9.4	21.5
Food preparation, n.e.c	6.75	2.4	23.7	7.31	3.3	36.5	6.21	2.2	17.7
Health service	8.22	1.6	31.4	8.37	2.0	39.3	7.83	1.3	20.6
Health aides, except nursing	8.82	5.2	30.8	9.30	4.9	38.9	7.60	10.2	20.0
Nursing aides, orderlies and attendants	8.13	1.8	31.6	8.24	2.3	39.4	7.84	1.3	20.8
Cleaning and building service	9.61	2.1	35.0	10.04	2.0	39.5	6.95	3.1	20.4
Supervisors, cleaning and building service									
workers	15.10	7.3	39.3	15.20	7.4	39.8	_	_	-
Maids and housemen	7.12	2.1	34.4	7.13	2.4	39.1	7.06	3.9	20.5
Janitors and cleaners	9.13	2.2	34.4	9.56	2.1	39.5	6.87	3.5	20.4
Personal service	9.12	3.6	29.6	10.18	4.4	37.0	7.28	3.9	21.9
Supervisors, personal service	13.61	4.9	38.5	13.96	4.7	40.9	_	_	-
Attendants, amusement, and recreation									
facilities	7.35	6.9	34.3	7.81	9.0	39.8	6.39	8.3	26.7
Public transportation attendants	21.60	11.8	19.3	_	_	-	_	_	-
Welfare service aides	8.96	7.2	26.6	9.39	12.0	39.8	8.47	4.4	19.4
Early childhood teachers' assistants	7.71	5.6	27.5	8.38	5.9	35.7	7.44	7.3	25.2
Child care workers, n.e.c.	7.74	2.8	25.4	8.10	3.0	39.8	6.95	3.0	14.2
Service, n.e.c.	8.35	4.0	29.8	8.92	3.9	39.6	6.93	6.8	18.4

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,

NOTE: Dashes indicate that no data were reported or that data did not meet publication criteria, and n.e.c. means "not elsewhere classified." Overall occupational groups may include data for categories not shown separately.

weighted by hours.

All workers include full-time and part-time workers. Employees are classified as working either a full-time or a part-time schedule based on the definition used by each establishment. Therefore, a worker with a 35-hour-per-week schedule might be considered a full-time employee in one establishment, but classified as part-time in another firm, where

a 40-hour week is the minimum full-time schedule.

3 In this census division, collection was conducted between April 1998 and April 1999.

The average reference period was September 1998.

4 A classification system including about 480 individual occupations is used to cover all workers in the civilian economy. For more information, see Technical Note.

5 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 Technical Note.

Table 4. Selected occupations, West North Central, private industry: Mean hourly earnings¹ for full-time and part-time workers,² National Compensation Survey,³ 1998

		Total			Full time		Į į	Part time	
_	Hourly e	arnings		Hourly e	arnings		Hourly e	arnings	
Occupation ⁴	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours
II	\$14.05	1.9	36.3	\$14.82	1.9	40.1	\$8.04	1.6	20.9
All excluding sales	14.18	1.9	36.7	14.84	1.9	40.1	8.30	1.8	21.0
White collar	16.75	3.1	36.8	17.55	3.1	40.1	9.69	2.8	21.3
White collar excluding sales	17.57	2.9	37.8	18.03	2.8	40.1	11.66	4.7	21.9
Professional specialty and technical	21.21	2.2	36.9	21.69	2.4	39.8	16.02	2.1	20.7
Professional specialty Engineers, architects, and surveyors	23.40 27.69	2.0 3.5	37.3 40.8	23.68 27.69	2.1 3.5	40.3 40.9	19.65	2.1	18.8
Civil engineers	28.31	5.5	39.2	28.31	5.6	40.4	_	_	_
Electrical and electronic engineers	26.63	2.7	40.9	26.63	2.7	40.9	_	-	-
Industrial engineers	27.56	15.2	40.4	27.56	15.2	40.4	_	_	-
Mechanical engineers	25.18	3.3	40.4	25.18	3.3	40.4	_	_	-
Engineers, n.e.c.	27.76	3.7	42.0	27.76	3.8	42.1	_	-	_
Mathematical and computer scientists	25.61	2.9	40.1	25.63	2.9	40.2	_	_	-
Computer systems analysts and scientists Operations and systems researchers and	26.70	3.0	40.2	26.73	3.0	40.3	_	_	-
analysts	22.33	4.5	39.8	22.33	4.5	39.8	_	_	_
Natural scientists	24.03	7.9	40.2	24.00	7.9	40.5	_	_	_
Chemists, except biochemists	21.78	11.2	40.6	21.78	11.2	40.6	_	_	_
Agricultural and food scientists	28.65	19.9	37.7	_	_	-	_	_	_
Biological and life scientists	25.54	14.6	40.0	25.54	14.6	40.0	<u> </u>		
Health related	21.63	3.1	34.0	21.91	3.8	39.8	20.28	2.3	19.9
Physicians	54.23	17.1	43.3	54.20	17.4	44.7	-	_	-
Registered nurses Pharmacists	18.05 27.03	1.6 1.0	32.8 38.4	17.69 26.98	1.6	39.1 40.3	19.52	2.0	19.8
Dietitians	15.23	5.0	31.2	15.55	1.0 5.4	39.6	_	_	_
Respiratory therapists	16.13	4.9	39.0	16.12	4.9	39.4	_	_	_
Occupational therapists	22.64	6.9	35.4	_	_	_	_	_	_
Physical therapists	20.39	7.7	36.5	19.88	8.1	40.0	_	_	-
Therapists, n.e.c.	15.38	7.7	40.0	15.38	7.7	40.0			_
Teachers, college and university	28.19	4.8	29.9	29.14	4.4	38.8	17.71	4.4	8.5
Health specialities teachers Art, drama, and music teachers	21.78 25.19	2.9 8.7	38.9 28.9	_	_	_	_ 17.19	20.6	15.9
Teachers, post secondary, subject not specified	24.97	5.5	26.1	25.78	5.1	38.6	- 17.13	20.0	-
Teachers, post secondary, n.e.c.	28.49	10.6	33.6	29.27	9.9	39.5	_	_	_
Teachers, except college and university	14.39	8.0	33.2	14.19	8.3	38.7	17.04	11.8	11.4
Prekindergarten and kindergarten	9.08	6.7	37.6	9.05	6.8	38.2	_	-	-
Elementary school teachers	20.04	5.7	38.2	20.00	5.8	39.1	_	-	-
Secondary school teachers	19.84	8.3	34.5	20.28	8.8	39.0	_ 47.04	45.7	145
Teachers, n.e.cVocational and educational counselors	13.85 16.97	7.7 10.5	27.9 33.0	12.78 16.85	5.6 10.5	39.4 38.8	17.21	15.7	14.5
Librarians, archivists, and curators	18.19	13.5	38.0	18.35	14.0	39.0	_	_	_
Librarians	18.01	13.9	37.9	18.17	14.5	38.9	_	_	_
Social scientists and urban planners	22.35	8.2	39.8	22.51	8.5	40.2	_	-	_
Economists	24.03	10.4	39.8	24.03	10.4	39.8	_	_	-
Social, recreation, and religious workers	13.84	4.2	38.0	13.78	4.4	39.6	15.03	4.4	20.8
Social workers	13.66	3.6	38.1	13.60	3.7	39.6	_	_	_
Lawyers and judges Lawyers	37.18 37.18	10.0 10.0	46.8 46.8	37.14 37.14	10.2 10.2	48.0 48.0	_	_	-
Writers, authors, entertainers, athletes, and	07.10	10.0	10.0	07.11	10.2	10.0			
professionals, n.e.c.	19.40	6.5	38.2	19.63	6.7	40.1	13.70	12.2	17.6
Designers	18.52	6.3	40.0	18.59	6.3	40.2	_	-	-
Painters, sculptors, craft artists, and artist	45.00		00 0	45.00		00.0			
printmakers	15.89	8.1	39.9	15.89	8.1	39.9	-	_	-
Editors and reporters Public relations specialists	18.57 13.89	4.7 14.7	39.1 39.2	18.69	5.4	40.0	_	_	1 -
Athletes	-	'-'		_		_	9.52	10.5	11.2
Professional, n.e.c.	25.95	7.6	40.1	25.95	7.6	40.1		-	-
Technical	16.68	5.2	36.0	17.36	5.6	38.7	11.54	2.4	23.7
Clinical laboratory technologists and									
technicians	14.52	4.4	36.5	14.51	4.7	39.7	14.61	7.4	21.9
Health record technologists and technicians	10.01	3.9	33.9	- 17.00	9.7	- 20 F	1414		100
Radiological technicians Licensed practical nurses	16.49 11.62	7.3 1.5	32.2 33.8	17.08 11.96	8.7 1.7	39.5 39.2	14.14 10.72	4.0 2.0	18.6 24.8
Liverised pravilval nuises	11.02	1.5	00.0	11.50	1 '.'	00.2	10.72	2.0	24.0

Table 4. Selected occupations, West North Central, private industry: Mean hourly earnings¹ for full-time and part-time workers,² National Compensation Survey,³ 1998–Continued

		Total			Full time			Part time	
	Hourly 6	earnings		Hourly e	arnings		Hourly e	arnings	
Occupation ⁴	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mea wee hou
hite collar -Continued									
Professional specialty and technical –Continued									
Technical –Continued									
Health technologists and technicians, n.e.c		2.8	35.8	\$11.68	5.2	39.9	\$11.43	6.3	26
Electrical and electronic technicians		5.7	40.1	18.00	5.7	40.1	_	_	-
Mechanical engineering technicians Engineering technicians, n.e.c		12.0 4.4	40.3 38.9	_ 17.71	4.2	40.0	_	_	
Drafters		5.3	39.5	14.72	5.5	39.9	_	-	
Chemical technicians	15.74	5.8	40.0	15.74	5.8	40.0	_	_	
Science technicians, n.e.c.		5.4	39.0	13.15	5.5	40.0	_	-	
Airplane pilots and navigators	79.49	26.1	19.5	79.49	26.1	19.5	_	-	
Computer programmers		4.5	40.1	21.03	4.4	40.4	_	-	
Legal assistants		6.5	39.0	17.99	6.5	39.0	_	l <u>-</u> .	_
Technical and related, n.e.c.	15.97	7.8	37.1	16.21	8.4	40.0	13.34	7.1	2
Executive, administrative, and managerial	25.66	3.1	41.4	25.68	3.1	41.4	15.46	9.5	2
Executives, administrators, and managers	29.90	4.3	41.8	29.93	4.3	41.9	_	-	
Financial managers		11.3	41.1	24.70	11.3	41.1	_	-	
Personnel and labor relations managers	28.80	12.9	41.8	28.80	12.9	41.8	_	-	
Purchasing managers	24.35	14.7	42.6	24.35	14.7	42.6	_	_	
Managers, marketing, advertising, and public relations	33.08	5.7	40.9	33.08	5.7	40.9	_	_	
Administrators, education and related fields	22.96	4.7	39.9	23.25	4.5	40.3	_	1 _	
Managers, medicine and health		6.7	40.6	26.92	6.7	40.6	_	_	
Managers, food servicing and lodging	20.02	0		20.02	"				
establishments	18.44	10.7	42.9	18.58	10.8	43.4	_	-	
Managers, service organizations, n.e.c	25.65	5.7	40.9	25.65	5.7	40.9	_	-	
Managers and administrators, n.e.c		5.0	42.6	31.54	5.1	42.6	_	-	
Management related		3.4	40.7	19.28	3.4	40.8	_	-	
Accountants and auditors		5.4	39.8	19.86	5.5	40.3	_	_	
Underwriters		10.6 6.9	39.7 42.3	17.48 22.05	10.6 6.9	39.7 42.3	_	_	
Other financial officers		9.2	40.9	23.42	9.2	41.0	_	_	
Personnel, training, and labor relations	20.41	3.2	40.5	20.72	3.2	71.0			
specialists	16.20	8.7	40.3	16.20	8.7	40.6	_	_	
Buyers, wholesale and retail trade, except farm									
products	22.51	6.2	42.5	22.51	6.2	42.5	_	-	
Purchasing agents and buyers, n.e.c.	20.12	9.1	40.5	20.12	9.1	40.5	_	-	
Inspectors and compliance officers, except	18.01	5.4	42.1	18.01	5.4	42.1			
construction		4.8	40.6	18.68	4.8	40.7	_	_	
•									
Sales		4.7	32.3	14.43	6.4	40.4	6.81	1.8	2
Supervisors, sales	15.96	6.6	40.2	16.09	6.5	41.2	_	-	
Insurance sales Securities and financial services sales		14.5	29.8	17.16	11.8	36.1	_	_	
Advertising and related sales	41.34 23.22	27.5 13.1	42.6 38.9	41.34 24.00	27.5 13.0	42.6 40.2	_	_	
Sales, other business services		18.1	35.5	16.18	19.2	37.0	8.18	2.7	1
Sales engineers		9.8	40.8	20.80	9.8	40.8	-		'
Sales representatives, mining, manufacturing,									
and wholesale	23.63	9.5	40.4	24.89	8.2	41.4	_	-	
Sales workers, motor vehicles and boats		18.0	45.9	17.78	18.2	46.3			
Sales workers, apparel	7.60	6.9	25.3	-		-	6.62	3.1	1:
Sales workers, hardware and building supplies	14.24	22.1	34.1	16.01	21.0	39.8	6.76	6.8	2
Sales workers, parts		3.2 4.5	42.9 30.7	11.85 9.42	3.2 6.6	42.9 41.5	- 7.59	2.1	1:
Sales counter clerks	7.73	3.3	27.0	9.42 8.55	6.3	37.6	6.96	3.2	2
Cashiers		2.0	27.4	7.60	2.0	39.6	6.44	2.0	2
Demonstrators, promoters, and models, sales	7.68	4.9	19.6	-		-	6.82	3.0	1:
Sales support, n.e.c.	11.79	8.8	38.6	12.13	8.7	41.3	-	-	
	40.54		07.0	10.70	0.4	20.7	0.00	4.5	
Administrative support, including clerical	10.54 15.03	3.6 5.5	37.2 40.5	10.79 15.03	3.4 5.5	39.7 40.5	8.09 —	4.5	23
Supervisors, general office	10.00	5.5	40.5	13.03	3.5	40.5	_	1 -	

Table 4. Selected occupations, West North Central, private industry: Mean hourly earnings¹ for full-time and part-time workers,² National Compensation Survey,³ 1998–Continued

		Total			Full time		Part time		
	Hourly e	arnings		Hourly e	arnings		Hourly e	arnings	
Occupation ⁴	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mea week hou
Vhite collar –Continued									
Administrative support, including clerical									
-Continued									
Supervisors, financial records processing Supervisors, distribution, scheduling, and	\$15.37	4.8	41.2	\$15.37	4.8	41.2	-	-	-
adjusting clerks	16.89	6.1	39.7	16.89	6.1	39.7	_	_	_
Computer operators	12.74	3.9	39.5	12.77	4.0	40.0	_	_	_
Peripheral equipment operators	9.85	5.2	39.8	9.85	5.2	39.8	_	_	-
Secretaries	11.83	2.1	38.1	11.89	2.1	39.5	\$10.84	5.8	24
Stenographers	11.19	5.1	35.9	11.76	3.5	39.4	_	_	-
Typists	10.63	8.4	39.0	10.64	8.7	39.4	_	_	-
Interviewers	8.05	3.8	32.6	7.82	2.3	35.6	9.14	12.1	23
Hotel clerks	7.43	2.3	36.9	7.47	2.4	39.3		_	-
Receptionists	8.38	4.8	33.6	8.74	5.4	39.7	7.58	6.0	25
Information clerks, n.e.c.	9.89	7.7	36.8	10.05	8.5	40.1	8.29	6.1	20
Correspondence clerks	15.35	7.6	40.0	15.35	7.6	40.0	-	-	-
Order clerks	11.39	9.6	37.8	11.83	9.6	39.7	7.77	12.3	27
Personnel clerks, except payroll and	11 71	3.6	39.2	11 72	3.7	39.5			
timekeeping File clerks	11.71 8.78	4.7	36.5	11.73 8.84	5.2	39.5	_		
Records clerks, n.e.c.	9.11	3.6	38.2	9.21	3.8	39.6	7.73	3.2	25
Bookkeepers, accounting and auditing clerks	10.32	2.6	37.2	10.35	2.6	39.7	9.78	9.8	18
Payroll and timekeeping clerks	12.57	9.0	39.8	12.57	9.0	39.8	-	- 0.0	``.
Billing clerks	10.66	6.1	38.3	10.72	6.0	39.5	_	_	
Office machine operators, n.e.c.	7.79	4.6	33.6	7.91	5.4	40.0	_	_	-
Telephone operators	10.91	9.6	33.6	11.55	9.4	39.7	7.69	3.9	18
Mail clerks, except postal service	7.40	9.6	36.9	7.05	10.4	39.9	_	_	-
Messengers	8.15	5.7	32.4	_	_	_	_	_	-
Dispatchers	17.05	26.3	39.2	17.26	26.4	40.4	_	_	-
Production coordinators	14.57	3.4	38.0	14.89	3.9	40.2	_	_	-
Traffic, shipping and receiving clerks	10.23	4.0	38.8	10.26	4.2	39.4	-	–	-
Stock and inventory clerks	10.27	4.5	36.4	10.50	4.8	40.0	7.72	5.6	18
Weighers, measurers, checkers, and samplers	16.11	20.2	34.1	-		-	_	_	-
Expeditors Material recording, scheduling, and distribution	14.73	12.1	34.9	15.74	11.1	40.0	_	_	-
clerks, n.e.c.	10.33	7.4	36.4	10.69	7.9	40.0	7.41	2.8	21
Insurance adjusters, examiners, and	10.00	4.7	200	12.06	4.7	200			
investigators	13.86 10.61	4.7 4.9	39.0 38.2	13.86 10.88	4.7 4.9	39.0 40.3	_	_	-
Bill and account collectors	11.14	4.9	39.1	11.22	4.9	40.3	_		
General office clerks	10.45	2.8	36.2	10.78	3.1	39.6	7.09	9.6	19
Bank tellers	8.51	3.6	34.3	8.71	4.1	40.0	7.49	5.1	19
Proofreaders	9.10	7.4	29.9	-		-	-	_	``-
Data entry keyers	9.49	3.3	38.0	9.60	3.4	39.9	8.50	8.5	26
Statistical clerks	10.04	8.3	36.6	10.28	8.0	39.6	_	_	-
Teachers' aides	8.47	4.7	37.8	8.29	4.8	39.1	_	_	-
Administrative support, n.e.c.	10.36	7.8	37.9	10.48	8.4	40.1	8.58	6.7	21
lue collar	12.72	1.7	38.9	12.99	1.7	40.5	7.50	2.5	22
Precision production, craft, and repair	15.06	3.9	40.1	15.08	3.9	40.2	10.41	16.5	23
Supervisors, mechanics and repairers	18.36	6.2	43.9	18.36	6.2	43.9	_	-	-
Automobile mechanics	14.90	14.3	40.3	14.90	14.3	40.3	-	-	-
Bus, truck, and stationary engine mechanics	12.25	3.1	41.7	12.15	2.9	41.7	_	-	-
Automobile body and related repairers	13.65	8.9	42.9	13.65	8.9	42.9	_	-	-
Aircraft mechanics, except engine	18.01	5.1	40.0	18.01	5.1	40.0	-	_	-
Heavy equipment mechanics	18.37	11.4	40.2	18.37	11.4	40.2	-	-	-
Industrial machinery repairers	14.48	3.4	39.6	14.48	3.4	39.6	-	_	-
Machinery maintenance	15.19	4.5	39.6	15.19	4.5	39.6	-	_	-
Electronic repairers, communications and	16.77	4.9	40.4	16.77	4.9	40.4	_	_	1
industrial equipment			1			40.4	_	-	-
Data processing equipment repairers	13.11	8.2	35.5	13.69	9.6	40.0	_	_	-

Table 4. Selected occupations, West North Central, private industry: Mean hourly earnings¹ for full-time and part-time workers,² National Compensation Survey,³ 1998–Continued

		Total		I	Full time		F	Part time	
	Hourly e	arnings		Hourly e	arnings		Hourly e	arnings	
Occupation ⁴	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mea week hou
lue collar –Continued									
Precision production, craft, and repair -Continued									
Heating, air conditioning, and refrigeration	¢4.4.40	44.0	20.7	* 4440	44.0	20.7			
mechanics Millwrights	\$14.12 19.67	11.8 6.4	39.7 40.0	\$14.12 19.67	11.8 6.4	39.7 40.0	_	_	
Mechanics and repairers, n.e.c	15.68	2.7	39.9	15.71	2.7	40.0	-	_	-
Supervisors, construction trades, n.e.c	20.12	3.4	42.6	20.12	3.4	42.6	-	_	-
Carpenters Electricians	20.26 19.50	5.5 4.0	39.7 40.0	20.22 19.50	5.6 4.0	40.0 40.0	_	_	-
Plumbers, pipefitters and steamfitters	22.67	4.0	40.0	22.67	4.0	40.0	_	_	-
Structural metal workers	17.36	8.0	40.0	17.36	8.0	40.0	_	_	-
Supervisors, production	17.58	8.2	41.1	17.58	8.2	41.1	_	_	-
Tool and die makers	20.50	3.2	40.0	20.50	3.2	40.0	_	_	-
Precision assemblers, metal Machinists	15.30 18.00	11.6 4.0	40.0 39.9	15.30 18.00	11.6 4.0	40.0 39.9	_	_	
Sheet metal workers	17.63	7.0	39.9	17.63	7.0	39.9	_	_	-
Electrical and electronic equipment assemblers	9.04	7.0	39.6	9.06	7.1	40.0	-	_	-
Miscellaneous precision workers, n.e.c	12.78	7.1	40.0	12.78	7.1	40.0	_	_	-
Bakers	8.89	3.6	37.7	9.06	3.1	40.0	-	_	-
Inspectors, testers, and graders Stationary engineers	14.99 17.03	6.4 5.0	40.8 40.0	14.99 17.03	6.4 5.0	40.8 40.0	_	_	-
Machine operators, assemblers, and inspectors	12.03	1.5	39.2	12.13	1.6	39.9	\$7.93	4.8	22
Punching and stamping press operators	11.08	4.0	39.3	11.13	3.9	40.0	_	_	-
Drilling and boring machine operators	11.78	12.5	40.0	11.78	12.5	40.0	-	_	-
Grinding, abrading, buffing, and polishing machine operators	11.85	9.2	40.0	11.85	9.2	40.0	_	_	١.
Forging machine operators	12.01	5.6	40.0	12.01	5.6	40.0	_	_	١.
Numerical control machine operators	13.17	8.2	40.0	13.17	8.2	40.0	_	_	-
Fabricating machine operators, n.e.c	11.19	3.1	40.0	11.19	3.1	40.0	_	_	-
Molding and casting machine operators	11.15 13.47	5.3 6.6	39.6 40.0	11.17 13.47	5.2 6.6	39.8 40.0	_	_	-
Metal plating machine operators Printing press operators	16.52	6.2	39.3	16.52	6.2	39.3	_	_	
Photoengravers and lithographers	17.90	7.0	38.2	17.90	7.0	38.2	_	_	-
Laundering and dry cleaning machine operators	6.32	2.9	24.0	6.41	3.1	38.6	6.22	4.5	17
Packaging and filling machine operators	11.46	4.9	39.4	11.50	5.1	39.9	_	_	-
Extruding and forming machine operators Mixing and blending machine operators	10.87 13.10	12.4 3.7	39.3 40.0	10.87 13.10	12.4	39.3 40.0	_	_	-
Painting and paint spraying machine operators	14.72	5.5	40.0	14.72	5.5	40.0	_	_	
Slicing and cutting machine operators	12.66	8.7	39.6	13.13	7.2	39.9	_	_	-
Photographic process machine operators	9.69	12.1	37.4	. –					l
Miscellaneous machine operators, n.e.c	12.21	5.0	39.8	12.24	5.1	39.9	9.68	5.3	33
Welders and cutters Assemblers	12.39 12.74	5.3 5.4	40.0 39.0	12.39 12.94	5.3 5.5	40.0 40.0	_	_	
Miscellaneous hand working, n.e.c.	11.16	7.0	40.0	11.16	7.0	40.0	_	_	١ -
Production inspectors, checkers and examiners	12.60	6.4	38.9	12.82	6.5	40.1	-	_	-
Production testers	13.76	7.2	40.0	13.76	7.2	40.0	-	_	-
Transportation and material moving	14.40	3.3	42.7	14.63	3.3	44.3	9.42	10.0	24
Supervisors, motor vehicle operators Truck drivers	16.82 14.52	12.3 3.7	40.9 47.7	16.82 14.57	12.3 3.7	40.9 48.8	_ 11.95	14.5	22
Driver-sales workers	12.43	13.5	32.1	12.70	14.3	42.3	-	-	
Bus drivers	9.90	2.8	27.5	-	-	-	9.51	4.6	25
Taxicab drivers and chauffeurs	8.47	8.1	35.6	-	-	-	-	_	-
Motor transportation, n.e.c	6.11 19.52	6.7 4.2	36.1 40.2	- 19.52	4.2	- 40.2	6.43	4.9	23
Excavating and loading machine operators	15.62	18.2	40.2	15.62	18.2	40.2	_	_	-
Industrial truck and tractor equipment operators	12.49	2.3	39.7	12.50	2.4	39.8	_	_	-
Miscellaneous material moving equipment operators, n.e.c.	14.53	9.4	39.9	14.55	9.4	40.0	_	_	_
	1 7.00	5.4	55.5	1 7.00	5.4	10.0			
Handlers, equipment cleaners, helpers, and laborers	9.80	1.9	35.2	10.31	1.6	39.6	6.95	3.1	21

Table 4. Selected occupations, West North Central, private industry: Mean hourly earnings1 for full-time and part-time workers,2 National Compensation Survey, 3 1998-Continued

		Total		F	Full time		F	Part time	
0 4	Hourly ea	arnings		Hourly ea	arnings		Hourly ea	arnings	
Occupation ⁴	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours
Blue collar -Continued									
Handlers, equipment cleaners, helpers, and laborers –Continued									
Groundskeepers and gardeners, except farm Supervisors, handlers, equipment cleaners, and	\$9.47	10.2	36.3	\$10.05	9.4	40.0	_	_	_
laborers, n.e.c. Construction laborers	12.33 13.89	7.5 8.2	40.4 39.5	12.33 13.83	7.5 8.2	40.4 39.8	_ _	_ _	_ _
Production helpers Stock handlers and baggers Machine feeders and offbearers	9.69 9.26 9.10	5.1 6.6 10.0	38.1 28.9 38.2	9.91 11.25 9.08	4.7 5.0 10.4	39.1 39.9 39.3	\$6.29 -	3.6	20.6
Freight, stock, and material handlers, n.e.c Garage and service station related Vehicle washers and equipment cleaners	11.13 9.27 8.41	5.4 13.8 9.2	35.0 32.9 39.3	11.69 9.80 8.42	6.4 15.0 9.3	39.1 40.0 40.0	8.53 - -	4.9 - -	23.5
Hand packers and packagersLaborers, except construction, n.e.c.	8.57 9.84	7.3 4.6	38.1 37.8	8.67 9.99	8.2 4.7	39.8 39.3	7.55 7.45	6.1 9.1	26.9 23.5
Service	7.87	1.6	29.3	8.61	1.6	38.6	6.41	2.0	19.9
Protective service	10.30 8.64 6.89	10.3 6.5 2.3	34.6 35.0 26.6	11.06 9.01 7.98	11.0 6.1 2.8	39.3 39.2 38.4	6.60 6.63 5.60	5.2 6.9 2.0	21.9 22.3 19.5
Supervisors, food preparation and service Bartenders	11.07 7.05	7.3 3.6	36.2 28.9	11.53 7.71	7.6 4.7	40.3 39.9	7.71 6.06	4.1 7.9	20.9 20.5
Waiters and waitresses Cooks Food counter, fountain, and related	3.61 8.61 6.42	5.5 2.5 4.1	22.9 33.6 23.8	3.67 9.02 7.37	7.8 2.5 9.6	37.8 39.1 38.2	3.58 7.37 6.05	6.7 3.0 1.8	19.0 23.4 20.7
Kitchen workers, food preparation	7.11 5.95	3.4 7.1	28.0 26.4	7.67 7.01	3.4 9.1	39.4 38.9	6.50 5.23	4.1 9.5	21.3 21.6
Food preparation, n.e.c. Health service Health aides, except nursing	6.66 7.91 8.73	2.6 1.2 5.4	23.6 30.6 30.3	7.28 8.00 9.24	3.6 2.9 5.1	36.5 39.3 38.9	6.07 7.70 7.54	2.1 1.4 10.2	17.5 20.2 19.9
Nursing aides, orderlies and attendants	7.79 8.36	1.3 2.4	30.8 32.7	7.82 8.77	2.9 2.5	39.3 39.1	7.70 6.83	1.4 3.1	20.5 20.3
workers	12.05 7.13	6.3 2.2	38.8 34.4	12.14 7.14	6.6 2.5	39.7 39.2	- 7.06	- 3.9	_ 20.5
Janitors and cleaners Personal service Supervisors, personal service	8.19 9.20 13.61	2.7 4.2 4.9	31.5 30.0 38.5	8.69 10.16 13.96	2.9 5.3 4.7	39.0 36.9 40.9	6.77 6.86 –	3.6 4.5 –	20.3 20.5
Attendants, amusement, and recreation facilities	7.35	6.9	34.3	7.81	9.0	39.8	6.39	8.3	26.7
Public transportation attendants Welfare service aides Early childhood teachers' assistants	21.60 7.67 6.70	11.8 1.9 5.0	19.3 26.6 27.0	- - 7.37	- - 4.2	- - 35.9	7.68 6.11	4.7 2.7	18.9 22.1
Child care workers, n.e.c. Service, n.e.c.	7.66 8.05	3.4 4.3	26.5 29.2	8.01 8.58	3.1 4.0	39.9 39.6	6.61 6.90	3.2 7.2	13.1 18.8

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.

All workers include full-time and part-time workers. Employees are classified as

NOTE: Dashes indicate that no data were reported or that data did not meet publication criteria, and n.e.c. means "not elsewhere classified." Overall occupational groups may include data for categories not shown separately.

working either a full-time or a part-time schedule based on the definition used by each establishment. Therefore, a worker with a 35-hour-per-week schedule might be considered a full-time employee in one establishment, but classified as part-time in another firm, where a 40-hour week is the minimum full-time schedule. $^3\,$ In this census division, collection was conducted between April 1998 and April 1999.

The average reference period was September 1998.

4 A classification system including about 480 individual occupations is used to cover all workers in the civilian economy. For more information, see Technical Note.

5 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 Technical Note.

Table 5. Selected occupations, West North Central, State and local government: Mean hourly earnings¹ and weekly hours for full-time and part-time workers,² National Compensation Survey,³ 1998

		Total			Full time			Part time	
	Hourly 6	earnings		Hourly e	arnings		Hourly e	arnings	
Occupation ⁴	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mea weel hou
	\$17.87	1.2	37.0	\$18.38	1.1	39.4	\$11.10	2.3	20.
All excluding sales	17.88	1.2	37.0	18.38	1.1	39.4	11.12	2.3	20.
White collar	19.93	1.2	37.2	20.29	1.2	39.1	13.08	3.7	19.
White collar excluding sales	19.95	1.2	37.2	20.30	1.2	39.1	13.16	3.7	19
Professional specialty and technical	22.55	1.1	37.0	22.77	1.1	38.7	17.32	4.1	18
Professional specialty	23.54	1.1	36.9	23.72	1.1	38.6	18.26	5.1	16
Engineers, architects, and surveyors	24.39	4.6	39.9	24.39	4.6	39.9	_	-	-
Civil engineers	28.55	13.7	39.1	28.55	13.7	39.1	_	-	-
Mathematical and computer scientists	20.32	2.7	40.0	20.32	2.7	40.0	_	-	-
Computer systems analysts and scientists	20.53	2.6	40.0	20.53	2.6	40.0	_	_	-
Natural scientists Physical scientists, n.e.c.	19.07 22.17	1.2 10.0	40.0 39.2	19.07 22.17	1.2	40.0 39.2	_	-	
Health related	19.56	2.4	38.0	19.36	2.6	39.7	21.86	7.7	25
Physicians	19.96	12.0	39.6	19.43	10.5	40.0	21.00		23
Registered nurses	19.24	1.9	37.3	19.11	2.2	39.8	20.10	4.2	26
Speech therapists	26.53	3.8	36.5	26.53	3.8	36.5	20.10		-
Teachers, college and university	32.41	3.4	37.2	32.58	3.6	39.7	24.50	7.7	9
Health specialities teachers	23.35	4.6	37.9	23.54	5.0	40.4	-	-	-
English teachers	26.87	8.6	36.0	_	_	_	_	_	١.
Trade and industrial teachers	28.76	1.7	33.4	28.84	1.7	37.4	_	_	١.
Teachers, post secondary, subject not specified	26.56	13.2	37.0	26.37	14.0	38.8	_	_	-
Teachers, post secondary, n.e.c.	27.99	6.5	20.2	30.17	4.7	38.7	21.30	10.3	8
Teachers, except college and university	24.82	1.6	35.1	25.07	1.6	37.1	16.44	16.9	12
Prekindergarten and kindergarten	25.80	5.2	34.9	26.10	5.5	36.9	_	-	-
Elementary school teachers	25.83	2.1	36.6	25.84	2.1	36.7	_	-	-
Secondary school teachers	25.10	1.8	36.5	24.92	1.8	37.3	_	-	-
Teachers, special education	23.96	3.1	37.5	23.96	3.1	37.5	_	-	-
Teachers, n.e.c.	23.76	6.9	33.1	24.46	7.0	37.9	14.62	15.2	12
Substitute teachers	9.18	3.1	9.9		l		9.18	3.1	9
Vocational and educational counselors	18.41	14.4	39.5	18.41	14.4	39.5	_	-	-
Librarians, archivists, and curators	25.61	6.5	37.1	25.70	6.5	37.6	_	-	-
Librarians	25.61	6.5	37.1	25.70	6.5	37.6	_	_	-
Social scientists and urban planners	21.53	7.2	39.5	21.53	7.2	39.5	_	-	
Psychologists	23.68 15.69	6.6 3.9	39.3 37.6	23.68 16.01	6.6 3.7	39.3 39.8	_		-
Social, recreation, and religious workers Social workers	15.72	4.0	37.6	16.01	3.8	39.8	_	_	
Lawyers and judges	25.35	6.1	38.0	25.65	6.1	39.9	_	_	
Lawyers	24.17	5.8	37.9	24.44	5.7	39.9	_	_	
Writers, authors, entertainers, athletes, and	24.17	0.0	07.5	2-71-7	0.7	00.0			
professionals, n.e.c.	21.26	7.6	39.2	21.66	7.8	40.0	_	_	١.
Professional, n.e.c.	22.91	11.1	39.7	23.15	11.4	40.0	_	_	١.
Technical	13.80	2.2	37.6	13.70	2.4	40.0	14.63	6.3	24
Clinical laboratory technologists and									
technicians	13.04	4.8	40.0	13.04	4.8	40.0	_	-	-
Radiological technicians	16.11	7.6	32.8	_	_	_	_	-	-
Licensed practical nurses	11.69	4.0	37.9	11.31	3.3	39.9	15.48	13.6	25
Health technologists and technicians, n.e.c	12.05	6.2	31.6	12.12	8.5	41.6	_	-	-
Engineering technicians, n.e.c	16.84	5.2	39.9	16.84	5.2	39.9	_	-	-
Computer programmers	16.71	6.9	39.7	16.71	6.9	39.7	_	-	-
Technical and related, n.e.c.	13.67	6.4	27.8	14.07	8.2	40.0	-	_	-
Executive, administrative, and managerial	25.87	3.1	39.7	25.95	3.1	40.4	14.42	12.3	11
Executives, administrators, and managers	29.10	3.4	39.6	29.24	3.5	40.6	14.44	12.5	11
LegislatorsAdministrators and officials, public	10.11	18.5	18.4	_	_	_	_	_	-
administration	23.87	4.7	40.9	23.83	4.7	41.1	_	-	-
Administrators, education and related fields	28.97	3.9	40.2	29.10	3.8	40.3	_	-	-
Managers, service organizations, n.e.c	19.44	10.3	40.0	19.44	10.3	40.0	_	-	-
Managers and administrators, n.e.c	24.29	14.3	41.9	24.29	14.3	41.9	_	-	-
Management related	17.91	5.4	39.8	17.91	5.4	39.8	_	-	-
Accountants and auditors	18.39	6.6	39.6	18.39	6.6	39.6	_	-	-
Management analysts	19.18	14.7	39.8	19.18	14.7	39.8	_	-	-

Table 5. Selected occupations, West North Central, State and local government: Mean hourly earnings¹ and weekly hours for full-time and part-time workers,² National Compensation Survey,³ 1998–Continued

		Total			Full time		F	Part time	
	Hourly 6	earnings		Hourly 6	earnings		Hourly e	arnings	
Occupation ⁴	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mear weekl hours
White collar -Continued									
Executive administrative and managerial									
Executive, administrative, and managerial -Continued									
Management related –Continued									
Personnel, training, and labor relations	# 40.00		000	040.00		000			
specialists	\$18.28	7.7	39.8	\$18.30	7.7	39.9	_	_	-
Construction inspectors	15.80	5.4	39.8	15.80	5.4	39.8	_	-	_
construction	17.83	7.7	39.9	17.83	7.7	39.9	_	_	l _
Management related, n.e.c.	15.81	11.2	39.8	15.81	11.2	39.8	_	_	_
3									
Sales	7.74	9.9	22.4	_	_	-	\$7.79	4.3	15.
Cashiers	7.72	12.0	21.7	_	_	-	-	-	-
Administrative cupport including classes	14.00	1.0	26.7	10.40	1.0	20.4	0.42	2.0	24
Administrative support, including clerical Supervisors, general office	11.86 15.14	1.9 4.1	36.7 40.0	12.12 15.14	1.9 4.1	39.4 40.0	9.13	2.9	21.
Secretaries	13.14	3.2	39.0	13.14	3.3	39.8	9.61	1.9	22.
Typists	10.80	3.8	39.8	10.80	3.8	39.8	-	_	
Receptionists	9.77	5.7	33.8	9.94	5.8	40.0	_	_	-
Information clerks, n.e.c.	10.06	12.7	34.6	9.00	13.0	40.0	_	_	-
Library clerks	9.19	4.4	26.1	9.81	4.9	38.6	8.61	8.4	20.
Records clerks, n.e.c.	10.55	4.8	38.0	10.64	4.9	39.8	-	-	-
Bookkeepers, accounting and auditing clerks	13.11	4.9	39.4	13.15	5.1	39.9	_	-	-
Dispatchers	11.48	6.1	39.2	11.46	6.2	40.1	_	_	-
Stock and inventory clerks	13.51 13.06	10.0 4.8	37.6 40.0	13.57 13.06	10.2 4.8	38.2 40.0	_	_	-
Eligibility clerks, social welfare	11.76	2.3	37.1	12.09	2.5	39.9	8.86	4.4	23.
Teachers' aides	8.59	3.8	30.8	8.59	5.0	35.0	8.60	5.8	24.
Administrative support, n.e.c.	10.77	6.1	26.5	11.14	7.6	39.6	-	-	-
Blue collar	14.16	1.7	37.0	14.37	1.9	39.8	11.42	5.3	19.
Precision production, craft, and repair	15.82	2.0	40.0	15.82	2.0	40.0	_	_	_
Bus, truck, and stationary engine mechanics	14.78	3.4	40.0	14.78	3.4	40.0	_	_	_
Heavy equipment mechanics	16.84	4.2	40.0	16.84	4.2	40.0	_	_	-
Mechanics and repairers, n.e.c.	13.97	6.6	39.8	13.98	6.6	40.0	_	_	-
Supervisors, construction trades, n.e.c	17.22	3.9	40.0	17.22	3.9	40.0	_	-	-
Electricians	15.42	2.4	40.0	15.42	2.4	40.0	_	-	-
Construction trades, n.e.c.	13.41	3.6 2.7	40.0	13.41	3.6	40.0	_	_	-
Water and sewer treatment plant operators	17.15	2.7	40.0	17.15	2.7	40.0	_	_	_
Machine operators, assemblers, and inspectors	-	_	-	-	_	-	_	_	-
Transportation and material moving	13.04	2.4	33.3	13.26	3.4	39.3	12.07	5.1	19.
Truck drivers	12.55	5.5	40.0	12.55	5.5	40.0	-		_
Bus drivers	13.58	3.0	26.4	14.95	2.2	37.3	12.08	5.1	20.
Operating engineers Grader, dozer, and scrapper operators	14.73 11.36	5.9 5.8	40.0 40.0	14.73 11.36	5.9 5.8	40.0 40.0	_	_	_
Miscellaneous material moving equipment	11.30	3.6	40.0	11.30	3.6	40.0	_	-	-
operators, n.e.c.	11.49	5.1	40.0	11.49	5.1	40.0	-	_	-
Handlers, equipment cleaners, helpers, and									
laborers	11.99	4.7	36.7	12.23	4.4	40.0	8.68	16.1	17.
Groundskeepers and gardeners, except farm	12.96	7.6	38.6	12.96	8.4	40.0	_	_	-
Construction laborers	11.70	8.2	39.9	11.75	8.1	40.0	_	-	-
Laborers, except construction, n.e.c	10.95	6.1	35.0	11.25	6.5	40.0	_	_	-
Service	12.54	2.5	36.3	13.17	2.4	40.6	8.46	3.0	21.
Protective service	15.65	3.7	40.2	15.75	3.7	41.9	10.95	7.2	14.
Supervisors, firefighters and fire prevention	15.93	6.4	52.1	15.93	6.4	52.1	-	-	-
Supervisors, police and detectives	22.59 13.04	2.7	40.0 46.8	22.59 13.08	2.7	40.0 49.4	_	_	-
Firefighting Police and detectives, public service	17.29	3.6	39.8	13.08 17.30	3.6	49.4	_	-	-
i olioc and detectives, public service	11.23] 3.1	55.6	17.50] 3.1	70.0	_	_	-

Table 5. Selected occupations, West North Central, State and local government: Mean hourly earnings1 and weekly hours for full-time and part-time workers,² National Compensation Survey,³ 1998-Continued

		Total		I	Full time		F	Part time	
0 4	Hourly e	arnings	.,	Hourly e	arnings		Hourly e	arnings	
Occupation ⁴	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours
Service –Continued Protective service –Continued Sheriffs, bailiffs, and other law enforcement officers	\$15.70 13.11 12.89 8.80 8.31 12.29 8.54 8.82	3.5 6.4 8.8 13.6 1.9 16.4 3.8 3.6	37.7 38.9 32.4 30.8 25.1 29.2 32.0 22.1	\$16.03 13.17 12.18 8.77 8.39 - 8.51	3.6 6.5 8.7 15.3 5.8 - 4.4	40.1 39.8 39.6 40.0 37.0 - 37.3	- - - \$8.23 - 8.71 9.18	- - - 3.2 - 7.5 1.2	- - - 19.3 - 16.8 20.1
Food preparation, n.e.c. Health service	7.37 9.83 9.90 9.84 11.58	4.0 4.8 7.8 5.2 2.2	24.3 36.4 37.2 36.3 39.2	7.56 9.95 - 9.98 11.65	5.7 5.5 - 5.9 2.0	36.4 39.6 - 39.7 40.0	7.20 9.13 - 9.10 8.61	5.7 2.2 - 2.1 11.1	18.5 25.1 - 25.2 21.9
workers	18.32 10.35 8.77 10.85 8.23 8.22 10.15	1.7 2.4 6.5 8.8 8.0 8.0	39.8 39.1 27.9 26.7 27.8 20.7 33.6	18.42 10.41 10.33 - 9.69	1.7 2.3 5.9 - 11.2	40.0 40.0 38.0 - 35.5 -	- 8.16 7.98 - 7.89	- 11.8 7.7 - 9.1	21.2 24.6 - 26.5

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 All workers include full-time and part-time workers. Employees are classified as working either a full-time or a part-time schedule based on the definition used by each establishment. Therefore, a worker with a 35-hour-per-week schedule might be considered a full-time employee in one establishment, but classified as part-time in another firm, where

NOTE: Dashes indicate that no data were reported or that data did not meet publication criteria, and n.e.c. means "not elsewhere classified." Overall occupational groups may include data for categories not shown separately.

a full-time employee in one establishment, but classified as part-time in another firm, where a 40-hour week is the minimum full-time schedule.

3 In this census division, collection was conducted between April 1998 and April 1999.

The average reference period was September 1998.

⁴ A classification system including about 480 individual occupations is used to cover all workers in the civilian economy. For more information, see Technical Note.

⁵ 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 Technical Note.

Table 6. Occupations ¹ and levels,² West North Central: Mean hourly earnings³ and weekly hours, private industry and State and local government, National Compensation Survey,⁴ 1998

		Total		Priv	ate industry			te and local overnment	
Occupations and level	Hourly	earnings		Hourly e	arnings		Hourly e	arnings	
·	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mea week hour
I	\$14.85	1.6	36.5	\$14.05	1.9	36.3	\$17.87	1.2	37.0
All excluding sales		1.5	36.8	14.18	1.9	36.7	17.88	1.2	37.0
White collar	17.63	2.4	36.9	16.75	3.1	36.8	19.93	1.2	37.2
1		3.0	28.1	6.73	3.1	28.3	7.58	5.4	26.5
2		2.2	31.2	7.48	1.9	30.7	8.99	5.6	33.6
3		4.5	33.5	8.27	4.6	33.6	9.80	3.9	32.3
4		1.9	37.2	10.18	2.2	37.3	10.74	2.2	36.9
5		1.1	37.9	12.53	1.3	37.8	13.30	1.6	38.
<u>6</u>		1.8	38.2	13.96	1.8	38.9	13.87	5.0	36.
7		1.7	37.4	16.79	1.8	37.9	19.85	2.6	36.
8		1.5	37.5	18.75	2.5	37.7	22.65	2.0	37.
9 10		1.4	39.2	21.70	1.4	39.5	23.46	1.8	38.
10	_	3.1 2.5	40.2 40.5	24.51 29.01	3.6	40.1 40.6	24.64 28.46	5.5 3.2	40. 40.
12		2.5	40.5	35.89	3.0	40.6	28.32	5.5	39.
13		4.2	39.9	48.63	6.2	39.6	33.99	2.0	40.
14		4.1	42.6	56.70	4.1	43.4	38.70	2.5	39.
15		29.6	39.6	142.58	45.9	40.0	-		55.
Not able to be leveled		6.9	36.4	21.46	8.8	36.7	22.45	7.2	35
White collar excluding sales		2.1	37.6	17.57	2.9	37.8	19.95	1.2	37.
1		7.0	30.9	6.57	7.4	32.7	7.67	5.4	26
2	8.15	2.2	34.1	7.90	1.9	34.1	9.00	5.8	34
3	8.56	5.8	35.4	8.41	6.1	35.8	9.82	3.9	32
4	10.56	1.3	37.9	10.50	1.4	38.2	10.74	2.2	37
5	12.69	1.2	37.7	12.41	1.4	37.5	13.30	1.6	38
6		1.8	37.9	13.84	1.8	38.5	13.87	5.0	36
7		1.7	37.2	16.51	1.6	37.6	19.85	2.6	36
8		1.5	37.3	18.44	2.4	37.3	22.65	2.0	37
9		1.3	39.0	21.55	1.3	39.3	23.46	1.8	38
10		3.0	40.2	23.55	3.4	39.9	24.64	5.5	40
11		1.3	40.4	28.09	1.3	40.4	28.46	3.2	40
12 13		3.0 4.2	40.5 39.9	35.76 48.63	3.5 6.2	40.8 39.6	28.32 33.99	5.5 2.0	39 40
14		4.2	42.6	56.70	4.1	43.4	38.70	2.5	39
15		29.6	39.6	142.58	45.9	40.0	-		33
Not able to be leveled		7.1	36.4	21.42	9.3	36.7	22.45	7.2	35.
But and a state of the state of	04.70	4.0	000	04.04		000	00.55	,,	0.7
Professional specialty and technical Professional specialty		1.3 1.2	36.9 37.1	21.21 23.40	2.2 2.0	36.9 37.3	22.55 23.54	1.1	37
4		5.0	21.6	8.36	7.5	32.2	9.81	2.6	14
5		2.3	36.0	13.10	3.9	37.5	14.15	1.4	34
6		7.3	32.6	13.12	3.5	37.3	15.99	13.2	27
7	19.61	2.3	35.5	17.43	2.3	34.2	21.10	2.9	36
8	04.07	1.8	36.2	18.68	4.2	35.1	23.60	2.1	36
9	22.96	1.9	37.9	21.56	1.9	37.9	24.56	2.1	37
10	23.10	4.7	40.3	23.27	5.8	40.5	22.51	5.5	39
11		1.7	40.1	27.91	1.9	40.2	25.82	4.1	39
12		4.4	40.2	34.07	4.7	40.8	24.26	5.0	38
13		5.6	40.1	48.36	6.5	40.1	25.23	5.5	40
14		7.2	42.3	55.09	9.5	44.5	39.02	2.8	40
15		1.0	39.6	_ 24.0F	12.0		_ 	7.4	20
Not able to be leveled		7.6 3.3	35.7 40.6	21.05	12.9	34.0 40.8	23.51	7.1 4.6	38
Engineers, architects, and surveyors		1	40.5	27.69	3.5 6.4	40.8	24.39	4.0	39
7 8		4.8 4.6	40.5	21.85 23.50	4.7	40.8	_	_	1 -
9		1.8	40.1	22.27	2.1	40.1	20.64	3.0	39
10		4.1	40.3	25.86	4.1	40.3	-		59
11		2.0	41.8	28.70	2.1	41.9	_	_	-
12		5.7	40.6	35.84	5.7	40.7	_	_	-
13		5.4	40.0	39.99	5.6	40.1	_	_	-
Civil engineers		5.1	39.2	28.31	5.5	39.2	28.55	13.7	39
9		5.5	39.7	_	-	-	-	-	-
11	28.72	4.3	37.6	28.72	4.3	37.6	_	l _	1 -

Table 6. Occupations ¹ and levels,² West North Central: Mean hourly earnings³ and weekly hours, private industry and State and local government, National Compensation Survey,⁴ 1998–Continued

		Total		Priv	ate industry			te and local overnment	
Occupations and level	Hourly 6	earnings		Hourly e	arnings		Hourly e	arnings	
,	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mea week hour
nite collar –Continued									
Professional specialty and technical –Continued Professional specialty –Continued Engineers, architects, and surveyors –Continued Civil engineers –Continued									
13	\$39.87	3.1	40.0		-	-	-	-	-
Electrical and electronic engineers	26.75	2.5	40.9	\$26.63	2.7	40.9	_	-	-
9	24.76	6.3	41.2	24.76	6.3	41.2	_	_	-
11 12	25.78 32.10	4.4 2.8	42.6 40.0	25.68 32.38	5.1 3.2	43.1 40.0	_	_	-
Industrial engineers	27.36	14.9	40.4	27.56	15.2	40.4	_	_	
9	21.01	1.5	40.5	20.89	1.4	40.6	_	_	-
11	26.16	4.9	41.6	26.16	4.9	41.6	-	-	-
Mechanical engineers	25.45	2.7	40.4	25.18	3.3	40.4	_	-	-
_ 10	23.11	5.0	41.5	23.11	5.0	41.5	_	-	-
Engineers, n.e.c	26.75 21.03	3.8 4.8	41.7 40.3	27.76 22.39	3.7 7.4	42.0 40.6	_	_	-
9	21.75	1.7	41.2	22.39	2.7	41.8	_	-	
10	25.67	5.1	39.7	25.67	5.1	39.7	_	_	_
11	29.72	3.2	43.9	29.72	3.2	43.9	-	-	-
12	33.78	4.6	43.2	33.78	4.6	43.2	<u> </u>	_	-
Mathematical and computer scientists	24.27	2.8	40.1	25.61	2.9	40.1	\$20.32	2.7	40
5	14.82 18.22	6.3 2.9	39.6 40.0	- 18.84	5.5	40.0	- 17.81	2.3	40
7 8	20.29	3.2	40.0	20.29	3.2	40.0	-	2.3	40
9	23.60	1.4	40.1	23.38	2.0	40.2	24.00	1.2	40
10	25.30	3.1	40.6	26.06	2.5	40.7	_	_	-
11	27.23	2.8	40.5	27.57	2.9	40.5	-	-	-
12	30.92	4.8	39.7	30.92	4.8	39.7			
Computer systems analysts and scientists	24.84	3.1	40.1	26.70	3.0 4.2	40.2	20.53	2.6 2.3	40
7 8	18.49 21.61	3.0 2.1	40.0 40.4	19.93 21.61	2.1	40.0 40.4	17.81 –	2.3	40
9	23.54	1.6	40.2	23.24	2.4	40.3	24.00	1.2	40
10	25.06	3.5	40.7	25.87	2.8	40.8	_		-
11	28.02	3.3	40.8	28.63	3.4	40.9	_	-	-
12	30.92	4.8	39.7	30.92	4.8	39.7	-	-	-
Operations and systems researchers and	04.04	4.0	000	00.00	4.5	000			
analysts 9	21.91 24.13	4.8 2.7	39.8 39.9	22.33 24.13	4.5 2.7	39.8 39.9	_	_	-
11	25.57	5.9	39.7	25.57	5.9	39.7	_	-	
Natural scientists	20.72	3.3	40.1	24.03	7.9	40.2	19.07	1.2	40
7	23.88	6.9	40.0	_	-	-	-	-	-
9	23.33	4.6	39.8	24.30	4.4	40.0	-	-	-
11	27.07	11.7	40.3	30.60	5.2	40.4	-	-	-
12 Chemists, except biochemists	28.27 21.78	10.3	41.2 40.6	31.71 21.78	4.2 11.2	41.6 40.6	_	_	-
Physical scientists, n.e.c.	25.46	8.7	39.7	21.76	11.2	- 40.0	22.17	10.0	39
Agricultural and food scientists	28.65	19.9	37.7	28.65	19.9	37.7	_	-	-
Biological and life scientists	18.35	8.9	40.0	25.54	14.6	40.0	_	-	-
Health_related	21.04	2.4	35.1	21.63	3.1	34.0	19.56	2.4	38
5	13.10	2.1	35.8	13.03	3.6	33.3	-	-	-
6 7	15.56 17.99	3.0	34.6 33.2	15.60 17.71	3.0 3.2	34.6 32.0	- 18.57	2.4	35
8	17.99	4.7	34.3	17.71	5.5	33.2	19.08	2.4	38
9	20.62	2.7	35.1	20.40	2.9	34.6	21.74	4.1	37
10	19.24	16.9	43.4	15.92	20.0	45.9	25.31	8.3	39
11	29.88	9.3	35.0	30.15	11.0	34.6	28.66	10.6	36
12	23.69	24.7	39.6	-		-	-	-	-
13	40.02 66.54	12.0	40.3	74.21	5.2	40.9	-	-	-
Not able to be leveled	66.54 17.20	8.9 10.9	42.5 37.6	66.54 17.20	8.9 10.9	42.5 37.6	_		-
	11.40	1 10.0	00	11.20	1 10.0	00	-	_	1 -

 $\label{thm:control} \begin{tabular}{ll} Table 6. Occupations 1 and levels, 2 West North Central: Mean hourly earnings 3 and weekly hours, private industry and State and local government, National Compensation Survey, 4 1998—Continued 3 and weekly hours, private industry and State and local government, National Compensation Survey, 4 1998—Continued 3 and 4 1998—Continued 4 19$

		Total		Priv	ate industry			te and local overnment	
Occupations and level	Hourly 6	arnings		Hourly e	arnings		Hourly e	arnings	
	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mea weel hou
hite collar -Continued									
Professional specialty and technical –Continued Professional specialty –Continued Health related –Continued Physicians –Continued									
13	\$40.10	12.0	40.3	\$75.09	5.3	40.9	_	_	_
14	66.54	8.9	42.5	66.54	8.9	42.5	_	-	-
Registered nurses	18.32	1.4	33.7	18.05	1.6	32.8	\$19.24	1.9	37.
5	13.06	5.0	31.6	13.06	5.0	31.6	_	-	-
6	15.82	1.3	32.5	15.89	1.3	32.5		T	
7	18.19	2.9	32.7	17.99	3.6	31.5	18.62	4.7	35
8 9	17.41	4.3	34.2	17.15	5.3	33.0	18.33	1.7	39
10	19.85 23.84	3.1	34.4 34.7	19.57 23.04	3.1 4.7	33.8 33.5	21.40 –	5.3	30
11	26.68	5.9	34.3	25.67	6.3	33.3	_	_	
Pharmacists	26.19	1.3	38.7	27.03	1.0	38.4	_	_	-
9	25.36	1.9	39.8	26.35	1.3	39.7	_	-	-
Dietitians	15.28	4.3	32.3	15.23	5.0	31.2	-	-	
Respiratory therapists	16.13	4.9	39.0	16.13	4.9	39.0	-	-	'
Occupational therapists Physical therapists	22.07 20.50	5.2 7.3	36.2 36.3	22.64 20.39	6.9 7.7	35.4 36.5	_	_	
Speech therapists	25.92	3.7	32.7	20.55		-	26.53	3.8	36
Therapists, n.e.c.	14.22	3.7	39.4	15.38	7.7	40.0	_	-	".
Physicians' assistants	25.11	8.5	40.0	_	-	-	_	-	.
Teachers, college and university	31.72	2.9	35.8	28.19	4.8	29.9	32.41	3.4	37
7	26.13	6.1	24.7				26.97	3.8	32
8	20.81 25.76	16.8 3.3	36.3 36.5	20.64 24.58	2.7 5.1	33.1 32.9	20.88 25.94	24.5 3.6	37
9 10	25.76	5.9	37.0	28.08	10.2	25.1	25.39	6.8	40
11	28.10	4.3	39.6	-	-	-	27.97	5.5	40
12	31.32	3.8	36.8	_	_	-	_	_	-
13	31.04	4.0	40.1	_	-	-	30.17	4.5	40
Social science teachers, n.e.c.	32.95	7.8	38.8	_	-	-	_	-	.
Mathematical science teachers	20.78	26.8	39.9	_		_	_	_	
Medical science teachers Health specialities teachers	32.26 22.86	16.0 3.5	39.7 38.2	21.78	2.9	38.9	23.35	4.6	37
Business, commerce, and marketing teachers	35.60	9.2	34.1	_		-	-		"
Art, drama, and music teachers	30.78	12.4	34.1	25.19	8.7	28.9	_	_	.
Education teachers	23.77	4.1	26.0	_	-	-	_	-	.
English teachers	26.21	7.6	29.9	_	-	-	26.87	8.6	36
Trade and industrial topology	33.34 28.67	2.6 1.7	39.8 33.2	_	_	-	- 28.76	1.7	33
Trade and industrial teachers Teachers, post secondary, subject not specified	26.44	12.2	35.2	24.97	5.5	26.1	26.76	13.2	37
10	27.70	6.0	30.7	-	_	_	_	-	".
Teachers, post secondary, n.e.c.	28.18	5.7	23.7	28.49	10.6	33.6	27.99	6.5	20
_ 7	21.31	8.4	16.4	-			-	<u> </u>	l
Teachers, except college and university	24.22	1.6	34.9	14.39	8.0	33.2	24.82	1.6	35
4 5	9.14 12.84	3.6 8.3	19.1 22.6	8.23	6.7	30.9	9.81 13.47	2.6 8.3	14
6	16.12	20.0	29.4	9.49	10.1	35.7	21.21	5.4	25
7	22.16	3.2	35.5	15.19	3.5	32.6	22.35	3.2	35
8	25.53	2.4	35.9	16.19	9.8	32.8	25.80	2.4	36
9	26.69	2.5	36.9	20.74	4.7	39.0	26.99	2.8	36
Prekindergarten and kindergarten	19.67	13.2	35.9	9.08	6.7	37.6	25.80	5.2	34
8	25.31	5.5	35.0	20.04	5.7	20.2	25.31	5.5	35
Elementary school teachers5	25.73 20.28	2.1	36.6 38.4	20.04 18.56	5.7 4.1	38.2 40.8	25.83	2.1	36
6	22.12	1.7	37.0	-		- 40.6	22.12	1.7	37
7	23.84	4.1	36.2	_	_	_	23.89	4.1	36
8	25.70	2.3	36.5	18.06	10.0	39.1	25.82	2.3	36
9	27.87	3.8	37.1	24.19	8.9	36.7	27.95	3.9	37
Secondary school teachers	24.98	1.8	36.5	19.84	8.3	34.5	25.10	1.8	36

Table 6. Occupations ¹ and levels,² West North Central: Mean hourly earnings³ and weekly hours, private industry and State and local government, National Compensation Survey,⁴ 1998–Continued

		Total		Priv	ate industry			te and local overnment	
Occupations and level	Hourly	earnings		Hourly 6	earnings		Hourly e	arnings	
,	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mea weel hou
ite collar –Continued									
Professional specialty and technical –Continued									
Professional specialty -Continued									
Teachers, except college and university									
-Continued									
Secondary school teachers –Continued 5	\$19.43	19.7	37.7	_	_	_	_	_	Ι.
6	l '	3.0	34.6	_		_	\$23.10	3.0	34
7		2.9	37.1	\$15.19	5.3	33.6	22.16	3.0	37
8	26.19	2.8	36.5	19.19	12.7	35.9	26.32	2.7	36
9	27.30	4.9	35.6	-	_	- 1	27.32	4.9	35
Teachers, special education	23.50	3.2	37.5	_	-	-	23.96	3.1	37
7		6.8	38.0	-	_	-	20.89	6.8	38
8		3.1	36.0	_	-	-	24.65	3.1	36
9		4.0	39.3	-		-	27.14	4.1	39
Teachers, n.e.c.		6.9	32.6	13.85	7.7	27.9	23.76	6.9	33
5 6		5.5 5.9	20.5 20.7	_ 12.39	8.1	32.5	-	_	-
7		4.8	36.9	15.27	4.9	31.9	23.23	4.9	37
8		10.6	36.6	-		-	26.94	10.5	37
9		12.0	36.7	_	_	_	23.82	12.1	36
Substitute teachers		3.1	9.6	_	_	-	9.18	3.1	
5		5.0	10.5	_	_	-	8.35	5.0	10
Vocational and educational counselors		8.2	36.7	16.97	10.5	33.0	18.41	14.4	39
8		14.9	38.0	_	_	-	21.08	17.2	39
9		7.8	39.5	-		-	_		-
Librarians, archivists, and curators		4.5	37.3	18.19	13.5	38.0	25.61	6.5	37
7 8		13.6 5.8	36.8 36.0	_	_	_	21.75 29.46	14.1	36
9		11.2	38.5	17.83	4.6	38.0	29.40	3.7	".
Librarians		4.5	37.3	18.01	13.9	37.9	25.61	6.5	37
7		14.2	36.7	_	-	_	21.75	14.1	36
8	29.31	5.8	36.0	_	_	-	29.46	5.7	36
9	22.13	11.2	38.5	17.83	4.6	38.0	_	-	-
Social scientists and urban planners		6.0	39.7	22.35	8.2	39.8	21.53	7.2	39
7		5.0	37.9	_	-	-	-	-	-
8		15.0	38.5	-		-	_	-	'
9 11		5.3 5.9	39.9 40.0	22.10	5.0	39.8	_	_	'
Economists		10.4	39.8	24.03	10.4	39.8	_	1 _	
9		5.0	39.8	22.10	5.0	39.8	_	_	.
Psychologists		5.6	39.5		_	_	23.68	6.6	39
Social, recreation, and religious workers	15.05	3.2	37.8	13.84	4.2	38.0	15.69	3.9	37
5	11.01	4.7	39.2	11.01	4.7	39.2	_	-	-
6		2.2	36.4	11.62	4.3	38.6	11.92	2.5	35
7	_	5.3	35.6	13.09	3.0	39.1	15.27	8.1	32
8		2.6	38.5	13.63	4.6	34.4	14.09	3.1	39
9 10		4.4 6.6	38.8 40.0	16.03 –	5.8	35.3	18.86	5.5	39
Social workers		3.3	37.9	13.66	3.6	38.1	15.72	4.0	37
5		4.5	39.7	11.22	4.5	39.7	-	_	3
6		2.3	36.2	11.63	5.1	38.4	11.92	2.5	35
7		5.9	35.6	12.87	1.7	39.2	15.38	9.0	32
8		2.7	38.9	13.68	4.8	36.2	14.09	3.1	39
9		4.5	38.7	15.38	5.8	34.7	18.86	5.5	39
10	-	6.7	40.0	-	-	-	-	-	-
Recreation workers		10.5	37.3			-			1 .
Lawyers and judges		8.0	41.9	37.18	10.0	46.8	25.35	6.1	38
12		21.7	44.0	39.34	26.5	48.6	- 04.47		-
Lawyers		8.7	42.0	37.18	10.0	46.8	24.17	5.8	37
12	34.68	21.7	44.0	39.34	26.5	48.6	_	_	1 '

Table 6. Occupations ¹ and levels,² West North Central: Mean hourly earnings³ and weekly hours, private industry and State and local government, National Compensation Survey,⁴ 1998–Continued

		Total		Priv	ate industry			te and local overnment	
Occupations and level	Hourly 6	earnings	Moon	Hourly e	arnings	Moon	Hourly e	arnings	Me
	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	wee
White collar -Continued									
Professional specialty and technical –Continued Professional specialty –Continued Writers, authors, entertainers, athletes, and									
professionals, n.e.c	\$19.65	4.6	38.3	\$19.40	6.5	38.2	\$21.26	7.6	39
5	12.63	8.8	40.2	12.44	8.9	40.2	Ψ <u>Ε</u> 1.20	-	"-
7	16.16	3.7	39.8	16.07	4.0	39.8	_	_	Ι.
8	17.91	5.1	39.0	17.05	4.8	38.8	_	l _	l .
9	19.83	6.2	40.5	19.89	6.4	40.5	_	l _	
11	23.74	4.0	39.8	23.74	4.0	39.8	_	l _	
12	34.98	4.3	39.7	34.98	4.3	39.7	_	_	
Not able to be leveled	21.49	17.2	33.6	20.76	25.0	31.7	23.07	11.1	3
Designers	18.35	6.2	40.0	18.52	6.3	40.0	-		-
7	15.36	3.7	40.0	15.36	3.9	40.0	_	_	
9	24.79	11.6	41.1	24.79	11.6	41.1	-	_	
11	23.95	5.2	39.5	23.95	5.2	39.5	-	_	
Painters, sculptors, craft artists, and artist									
printmakers	16.22	7.9	39.9	15.89	8.1	39.9	-	-	
Not able to be leveled	16.22	7.9	39.9	15.89	8.1	39.9	_	-	
Photographers	17.11	10.5	40.0		I -		-	-	
Editors and reporters	18.57	4.7	39.1	18.57	4.7	39.1	_	-	
7	15.85	11.9	39.7	15.85	11.9	39.7	_	-	
9	17.29	6.8	40.6	17.29	6.8	40.6	_	-	
Public relations specialists	13.97	14.1	39.2	13.89	14.7	39.2	_	_	
9 Athletes	18.25 26.89	7.9 43.8	41.0 28.5	18.52	7.7	41.0	_	-	
Not able to be leveled	26.89	43.8	28.5	_	_	_	_	_	
Professional, n.e.c.	25.00	6.7	40.0	25.95	7.6	40.1	22.91	11.1	3
7	17.47	2.4	39.7	17.42	3.5	39.5	_		"
9	23.28	4.3	39.5	23.81	4.2	39.4	_	_	
11	23.90	5.7	40.0	23.90	5.7	40.0	_	_	
Not able to be leveled	28.41	14.6	40.0	_	-	-	_	-	
Technical	16.16	4.4	36.3	16.68	5.2	36.0	13.80	2.2	3
2	8.17	13.3	24.4	8.17	13.3	24.4	_	-	
3	8.73	2.7	28.9	8.73	2.7	28.9	_	-	
4	10.61	3.4	36.9	10.86	4.6	36.4	9.98	2.1	3
5	12.44	1.9	35.3	12.24	1.8	35.0	13.67	4.9	3
6	14.27	4.6	36.2	14.41	4.4	36.1	13.60	6.7	3
7	16.61	6.0	38.0	16.79	6.8	38.6	15.78	6.7	3
8	18.05	3.0	39.3	18.58	2.8	39.3	16.35	2.6	3
9	21.94	1.8	38.0	22.20	2.0	38.1	19.60	2.8	3
11Clinical laboratory technologists and	29.57	6.1	33.9	29.61	6.1	33.9	-	-	
technicians	13.81	2.1	38.1	14.52	4.4	36.5	13.04	4.8	4
4	10.15	1.7	40.0	8.95	4.4	39.9	13.04	4.0	4
5	13.61	7.0	34.5	12.62	6.1	32.5	_	1 _	
7	15.78	10.8	38.5	15.65	11.2	38.4	_	l _	
8	16.57	2.1	39.8	16.02	5.3	39.5	_	_	
Health record technologists and technicians	10.01	3.9	33.9	10.01	3.9	33.9	-	_	
Radiological technicians	16.47	6.9	32.2	16.49	7.3	32.2	16.11	7.6	3
5	13.89	4.6	24.2	13.89	4.6	24.2	-	-	
6	15.55	4.1	34.4	15.65	4.4	34.2	-	-	
8	16.50	5.3	39.6	16.52	6.0	39.5	-	- <u>.</u>	_
Licensed practical nurses	11.63	1.4	34.6	11.62	1.5	33.8	11.69	4.0	3
4	10.24	7.6	35.7	10.72	8.6	35.1	7.86	4.5	3
5	11.97	2.1	34.6	11.81	2.5	33.8	12.59	4.0	3
6	12.16	5.9	34.2	12.14	6.0	33.2	12.21	7.3	3
7Health technologists and technicians, n.e.c.	12.59 11.66	3.8	35.4	11 62	2.8	35.0	12.05	6.2	3
Health technologists and technicians, n.e.c 4	11.66 9.77	2.6 6.9	35.5 34.6	11.63 9.76	7.6	35.8 36.0	12.05 –	0.2	3
5	12.13	3.0	36.3	12.08	3.1	36.3	_	1 -	
6	13.09	10.0	36.6	13.14	11.4	36.8	_	1 <u>-</u>	
V	13.08	10.0	55.6	13.14	''.4	30.0	-	1 -	1

Table 6. Occupations ¹ and levels,² West North Central: Mean hourly earnings³ and weekly hours, private industry and State and local government, National Compensation Survey,⁴ 1998–Continued

		Total		Priv	ate industry			te and local overnment	
Occupations and level	Hourly 6	earnings		Hourly e	arnings		Hourly e	arnings	
,	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mea wee hou
White collar -Continued									
Professional specialty and technical –Continued Technical –Continued Health technologists and technicians, n.e.c. –Continued									
7		6.0	36.7	\$13.39	6.6	36.1	_	_	-
Electrical and electronic technicians		5.6	40.0	18.00	5.7	40.1	_	_	-
6		6.6	38.9	- 16.92		41.7	_	_	-
7 8		4.9 6.7	41.6 39.7	17.79	5.4 6.7	40.4	_	_	-
Mechanical engineering technicians		12.0	40.3	19.19	12.0	40.4	_	_	1 .
Engineering technicians, n.e.c.		3.5	39.4	17.48	4.4	38.9	\$16.84	5.2	39
7		5.7	40.0	17.50	3.6	40.0	Ψ10.01 -		~.
8		6.9	40.1	20.52	3.4	40.1	_	_	١.
Drafters	. 14.84	5.0	38.9	14.65	5.3	39.5	_	_	.
4	. 13.47	4.7	38.2	13.47	4.7	38.2	_	_	
5	_	5.1	38.8	_	-	-	-	_	
7		3.8	40.0	17.29	4.1	40.0	_	_	
Chemical technicians		4.9	37.8	15.74	5.8	40.0	-	-	'
Science technicians, n.e.c		5.5 26.1	39.0 19.5	13.19 79.49	5.4 26.1	39.0 19.5	_	_	'
Computer programmers		4.3	40.0	20.83	4.5	40.1	16.71	6.9	39
6		4.5	40.0	17.62	4.6	40.0	-		"
7		13.2	40.0	-	_	-	_	_	.
8	. 19.11	4.1	41.1	19.27	4.0	41.1	_	_	.
9		2.9	40.2	23.19	2.4	40.3	_	-	.
Legal assistants		6.0	38.4	17.99	6.5	39.0	-		
Technical and related, n.e.c.		6.8	35.7	15.97	7.8	37.1 39.2	13.67	6.4	2
5 6		5.0 5.7	39.3 37.8	12.32 13.13	4.8 5.3	39.2	_	_	
7		8.4	30.9	17.91	5.4	36.1	_	_	.
8		5.4	33.1	17.91	4.7	33.5	_	_	
Executive, administrative, and managerial		2.5 3.2	41.0 41.2	25.66 11.95	3.1 3.8	41.4 41.7	25.87 12.30	3.1 5.1	39
6		4.4	40.3	13.48	4.7	40.3	14.90	3.2	39
7	. 15.66	1.7	40.4	15.47	1.9	40.5	17.02	2.9	39
8		2.1	40.9	18.07	2.4	41.4	17.79	4.6	3
9		1.7	40.9	21.43	2.0	41.2	20.76	2.4	4
10 11		3.6 2.0	41.6 41.6	23.97 28.17	2.4 1.9	41.3 41.7	26.61 31.42	8.9 3.9	4:
12		2.0	42.5	34.85	2.1	42.7	35.81	6.9	4
13		2.6	40.8	43.40	3.4	41.0	48.31	7.2	40
14		4.5	42.8	57.23	4.4	43.0	_	_	
15	. 180.79	46.3	40.0	180.79	46.3	40.0	_	_	.
Not able to be leveled		9.6	36.2	28.02	15.3	40.1	22.56	12.1	32
Executives, administrators, and managers		3.3	41.2	29.90	4.3	41.8	29.10	3.4	39
5 6		16.0 8.9	44.8 41.8	11.10 13.52	17.4 11.6	46.3 42.4	_	_	
7		4.9	40.5	13.70	4.8	40.5	17.38	7.6	40
8		2.9	40.6	18.35	3.2	41.0	18.33	6.5	39
9		2.4	41.5	21.79	3.4	42.1	20.65	1.7	40
10		4.2	42.0	23.81	2.7	41.7	27.76	9.1	42
11		2.0	41.7	28.69	2.3	41.8	31.89	4.3	41
12		2.1	42.5	35.53	2.1	42.7	36.71	6.8	4
13 14	_	2.6 4.4	40.9	43.45 58.55	3.5	41.0	48.31 –	7.2	40
14 15		4.4	43.0 40.0	58.55 180.79	4.3 46.3	43.2 40.0	_	_	[
Not able to be leveled		10.0	36.0	28.45	16.1	40.1	22.56	12.1	32
Legislators		18.5	18.4	-	_	-	10.11	18.5	18
Not able to be leveled		18.5	18.4	_	_	_	10.11	18.5	18

Table 6. Occupations ¹ and levels,² West North Central: Mean hourly earnings³ and weekly hours, private industry and State and local government, National Compensation Survey,⁴ 1998–Continued

		Total		Priv	ate industry			te and local overnment	
Occupations and level	Hourly 6	earnings		Hourly e	earnings		Hourly e	arnings	
· 	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mea weel hou
/hite collar -Continued									
Executive, administrative, and managerial									
 Continued Executives, administrators, and managers 									
-Continued									
Administrators and officials, public	¢00.04	4.7	400				¢00.07	4.7	1,0
administration	\$23.81 21.22	4.7 3.6	40.8 40.0	_	_	_	\$23.87 21.22	4.7 3.6	40
11	28.37	5.4	42.3	_		_	29.71	4.7	42
Financial managers	30.26	10.0	40.8	\$24.70	11.3	41.1	_		".
8	16.36	8.9	40.7	16.36	8.9	40.7	_	_	
9	20.10	10.1	40.8	20.07	10.2	40.8	_	_	
10	25.27	2.3	41.0	25.66	3.2	41.3	_	-	
11	27.16	5.4	41.8	27.07	5.5	41.9	_	-	
12	32.45	7.3	41.8	32.45	7.3	41.8	-	-	
13 14	51.72 49.47	2.2 7.9	40.5 41.4	- 49.47	7.9	41.4	_	_	'
Personnel and labor relations managers	30.31	10.2	41.6	28.80	12.9	41.8	_		
9	20.11	4.2	43.5	20.11	4.2	43.5	_	_	
12	33.05	5.6	41.8	33.05	5.6	41.8	_	_	
Purchasing managers Managers, marketing, advertising, and public	24.10	14.2	42.5	24.35	14.7	42.6	-	_	
relations	33.08	5.7	40.9	33.08	5.7	40.9	_	_	
9	23.18	5.9	41.9	23.18	5.9	41.9	_	-	
11	30.51	6.4	40.7	30.51	6.4	40.7	_	-	
12	38.01	3.7	41.0	38.01	3.7	41.0	_	-	
13	38.12 27.91	5.5 3.7	38.2	38.12 22.96	5.5 4.7	38.2 39.9	-	3.9	
Administrators, education and related fields 7	11.99	5.7	40.1 40.0	11.99	5.3	40.0	28.97	3.9	4
8	17.24	11.2	34.9	14.70	7.8	36.2	_	_	
9	20.24	1.1	40.2	21.07	10.5	39.3	20.22	1.1	4
10	32.86	9.5	39.8	18.46	13.5	42.5	34.61	8.8	3
11	31.01	8.0	40.2	_	_	-	33.73	5.4	4
12	35.50	8.2	41.1	29.03	21.5	41.6	36.44	9.0	4
13	39.35	5.8	39.7	_	_	-	_	_	
Managers, medicine and health	26.61 23.30	6.3 3.6	40.5 40.0	26.92 23.78	6.7 4.0	40.6 40.0	-	-	
9 10	23.20	7.7	41.0	23.76	8.0	41.1	_		
11	29.89	7.6	41.9	29.95	7.7	41.9	_	_	
Managers, food servicing and lodging	20.00		'''	20.00	'''				
establishments	18.27	10.5	42.4	18.44	10.7	42.9	_	-	
Managers, properties and real estate	18.63	18.1	39.6						
Managers, service organizations, n.e.c	23.55	4.9	40.6	25.65	5.7	40.9	19.44	10.3	40
11	24.48 30.93	4.7	40.0	- 31.54	5.0	12.6	- 24.29	14.3	4
Managers and administrators, n.e.c	14.55	5.2 7.5	42.5 41.6	14.55	7.5	42.6 41.6	24.29	14.3	4
8	20.48	3.7	41.9	20.11	4.6	42.5	_	_	
9	22.22	3.2	43.1	22.44	3.4	43.3	_	_	
10	24.45	4.5	42.1	24.42	4.5	42.1	_	-	
11	29.31	2.3	42.8	29.73	2.1	42.5	_	-	.
12	36.28	3.0	43.6	36.20	3.1	43.5	-	-	
13 14	41.71	2.9	41.9	42.86	2.0	41.5	-	-	
14 15	61.80 76.01	5.5 7.9	43.5 40.0	61.80 76.01	5.5 7.9	43.5 40.0	_	_	
Not able to be leveled	24.93	16.3	40.0	27.72	17.3	40.0	_	_	
Management related	19.03	2.9	40.5	19.27	3.4	40.7	17.91	5.4	3
5	12.19	2.3	40.5	12.14	2.5	40.8	12.38	5.7	3
6	13.58	4.9	40.0	13.48	5.2	40.0	14.57	3.3	3
7	16.81	1.9	40.4	16.79	2.2	40.5	16.91	3.2	3
8	17.64	2.9	41.2	17.76	3.2	41.8	17.43	6.2	4
9	20.99	1.9	40.1	20.99	1.7	40.1	21.01	6.3	4
10	23.21	5.7	39.5	24.76	4.4	39.4	-	_	

Table 6. Occupations ¹ and levels,² West North Central: Mean hourly earnings³ and weekly hours, private industry and State and local government, National Compensation Survey,⁴ 1998–Continued

		Total		Priv	ate industry			te and local overnment	
Occupations and level	Hourly 6	earnings		Hourly e	arnings		Hourly e	arnings	
·	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mea week hour
hite collar -Continued									
Executive, administrative, and managerial -Continued									
Management related –Continued									
11	\$26.80	3.0	41.3	\$26.90	3.2	41.4	_	_	_
12	31.64	4.4	42.5	32.00	4.7	42.9	_	-	_
Accountants and auditors	19.63	4.8	39.8	19.85	5.4	39.8	\$18.39	6.6	39.
5	14.47	4.4	40.0	14.26	4.1	40.0	_	_	-
7	17.32	4.5	39.6	17.10	5.7	39.4	_	-	-
8	16.61	3.8	42.5	16.55	4.2	42.8	-	-	-
9	21.12	4.2	38.6	21.45	3.9	38.6	-	_	-
11	28.01	6.4	40.0	28.01	6.4	40.0	-	_	-
Underwriters	17.48	10.6	39.7	17.48	10.6	39.7	-	_	-
9 Other financial officers	20.56	5.5 6.3	39.6	20.56 22.05	5.5	39.6	_	-	_
6	22.13 11.65	5.5	42.0 40.0	11.65	6.9 5.5	42.3 40.0	_	_	_
7	17.26	4.2	44.9	17.32	4.2	45.0	_	_	
8	16.89	8.2	44.5	17.32	- 4.2	45.0	_		
9	23.03	3.7	40.9	22.38	4.1	41.2	_		
11	30.55	4.5	41.7	30.55	4.5	41.7	_	_	_
Management analysts	22.57	8.8	40.7	23.41	9.2	40.9	19.18	14.7	39
8	15.26	2.6	39.5	_	_	-	-	_	_
9 Personnel, training, and labor relations	21.75	5.0	41.3	21.22	6.4	41.6	-	-	-
specialists	16.41	8.1	40.3	16.20	8.7	40.3	18.28	7.7	39.
7	15.53	5.3	41.1	15.54	5.4	41.1	_	-	-
8	19.84	6.8	39.9	20.45	8.4	39.9	-	-	-
9	19.93	4.6	39.1	19.91	4.2	38.8	_	-	-
11	21.84	7.5	40.0	22.13	8.1	40.0	-	-	_
Buyers, wholesale and retail trade, except farm	22.51	6.2	42.5	22.51	6.2	42.5			
products Purchasing agents and buyers, n.e.c	20.80	7.7	40.4	20.12	9.1	40.5	_	_	
7	16.29	7.7	40.0	16.29	7.7	40.0	_	_	
9	22.75	5.5	41.2	21.12	3.1	41.5	_	_	
Construction inspectors	17.51	10.2	39.8	_	_		15.80	5.4	39
Inspectors and compliance officers, except									
construction	17.90	5.1	40.7	18.01	5.4	42.1	17.83	7.7	39
8	18.69	6.7	41.5	_	_	-	18.79	9.8	40
Management related, n.e.c.	18.15	4.7	40.4	18.67	4.8	40.6	15.81	11.2	39
5	11.97	1.8	40.1	12.03	2.0	40.3	_	_	-
6	15.51	8.8	40.2	15.51	8.8	40.2	_	-	-
7	17.00	3.5	39.5	17.01	4.0	39.5	16.94	6.1	39
8	15.55	4.1	39.9	15.64	5.1	39.9	_	_	-
9	20.62	4.1	40.2	21.11	4.1	40.2	_	_	-
11	25.47	4.4	41.3	24.93	4.2	41.8	_	_	-
Sales	12.46	4.7	32.3	12.48	4.7	32.3	7.74	9.9	22.
1	6.82	2.1	26.4	6.82	2.0	26.3			22.
2	6.66	2.3	25.5	6.65	2.3	25.7	_		1 =
3	7.72	2.5	27.4	7.73	2.5	27.5	_	-	-
4	8.98	4.6	34.4	8.98	4.6	34.4	_	_	-
5	13.18	4.3	39.9	13.17	4.3	39.9	-	_	-
6	15.06	8.2	42.2	15.06	8.2	42.2	-	-	-
7	19.23	11.2	41.1	19.23	11.2	41.1	-	-	-
8	21.32	9.1	41.2	21.32	9.1	41.2	-	-	-
9	23.94	13.6	44.2	23.94	13.6	44.2	-	-	-
10	30.89	9.6	40.9	30.89	9.6	40.9	-	-	-
11	38.68	19.6	42.5	38.68	19.6	42.5	-	_	-
Not able to be leveled	40.28	9.1	42.3	40.28	9.1	42.3	-	_	-
Not able to be leveled	22.04	19.9	36.4	22.04	19.9	36.4	_	_	-
Supervisors, sales	15.94	6.6	40.2	15.96	6.6	40.2	-	_	-
4	8.55	6.6	36.0	8.55	6.7	36.0	_	-	-

Table 6. Occupations ¹ and levels,² West North Central: Mean hourly earnings³ and weekly hours, private industry and State and local government, National Compensation Survey,⁴ 1998–Continued

		Total		Priv	ate industry			te and local overnment	
Occupations and level	Hourly 6	earnings	Maan	Hourly e	earnings	Maan	Hourly e	arnings	Mas
	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mea weel hou
hite collar –Continued									
Sales -Continued									
Supervisors, sales -Continued									
5	\$11.69	4.8	36.8	\$11.69	4.8	36.8	-	-	-
8 11	17.41 29.34	5.1 11.1	41.9 40.3	17.41 29.34	5.1	41.9	_	_	-
Insurance sales	29.3 4 15.27	14.5	29.8	29.34 15.27	14.5	29.8	_	-	1 -
Securities and financial services sales	41.34	27.5	42.6	41.34	27.5	42.6	_	1 _	
Advertising and related sales	23.22	13.1	38.9	23.22	13.1	38.9	_	l _	l _
8	17.47	4.2	41.4	17.47	4.2	41.4	_	_	-
Sales, other business services	15.84	18.1	35.5	15.84	18.1	35.5	_	_	_
5	16.37	13.8	40.4	16.37	13.8	40.4	_	_	-
6	16.46	7.3	40.0	16.46	7.3	40.0	_	_	-
7	19.55	17.2	40.0	19.55	17.2	40.0	_	_	-
8	29.43	23.3	40.7	29.43	23.3	40.7	-	_	-
10	35.57	12.9	41.4	35.57	12.9	41.4	-	_	-
Sales engineers	20.80	9.8	40.8	20.80	9.8	40.8	-	-	-
Sales representatives, mining, manufacturing,									
and wholesale	23.63	9.5	40.4	23.63	9.5	40.4	_	-	-
7	19.23	6.8	40.1	19.23	6.8	40.1	_	-	-
8	19.97	7.7	40.7	19.97	7.7	40.7	_	-	-
10	33.48	15.3	41.0	33.48	15.3	41.0	_	-	'
12	38.35	8.8	43.8	38.35	8.8	43.8	_	-	-
Sales workers, motor vehicles and boats 5	17.61 14.77	18.0 7.6	45.9 47.6	17.61 14.77	18.0 7.6	45.9 47.6	_	_	'
Sales workers, apparel	7.60	6.9	25.3	7.60	6.9	25.3	_	1 [
Sales workers, hardware and building supplies	14.24	22.1	34.1	14.24	22.1	34.1	_	1 _	
4	9.87	3.3	37.0	9.87	3.3	37.0	_	l _	١.
Sales workers, parts	11.85	3.2	42.9	11.85	3.2	42.9	_	_	-
5	14.41	14.9	40.0	14.41	14.9	40.0	_	_	-
Sales workers, other commodities	8.85	4.5	30.7	8.85	4.5	30.7	_	_	-
3	7.81	3.7	25.5	7.83	3.7	25.6	_	-	-
4	8.12	7.5	33.1	8.12	7.5	33.1	_	-	-
5	12.18	8.1	37.5	12.18	8.1	37.5	-	_	-
Sales counter clerks	7.73	3.3	27.0	7.73	3.3	27.0	-	-	-
1	6.49	2.7	25.4	6.49	2.7	25.4	-	-	-
3	8.30	2.4	26.3	8.30	2.4	26.3		-	-
Cashiers	7.01	2.0	27.3	7.00	2.0	27.4	\$7.72	12.0	21
1	6.65	2.5	28.6	6.66	2.5	28.5	_	-	-
2	6.46	2.9	24.0	6.43	3.1	24.2	_	-	-
3	7.62	3.4	27.5	7.62	3.4	27.6	_	_	-
A	8.66	2.7	33.6	8.66	2.8	33.9	_	_	-
Demonstrators, promoters, and models, sales	7.68 6.79	4.9 2.8	19.6 13.4	7.68	4.9	19.6	_	-	-
1 Sales support, n.e.c	11.79	8.8	38.6	6.79 11.79	2.8 8.8	13.4 38.6	_	_	-
Administrative support, including clerical	10.85	3.0	37.1	10.54	3.6	37.2	11.86	1.9	36
1	6.82	7.0	30.9	6.57	7.4	32.7	7.67	5.4	26
2	8.15	2.2	34.4	7.89	1.9	34.4	9.00	5.8	34
3	8.56	5.8	35.4	8.41	6.1	35.8	9.82	3.9	32
4	10.57	1.3	38.3	10.46	1.4	38.5	10.91	2.6	37
5	12.67	1.5	38.8	12.46	1.7	38.3	13.03	1.8	39
6	13.60	2.7	39.6	13.79	3.1	39.7	13.22	4.5	39
7 8	15.95 16.73	1.8 3.5	39.5	15.97 16.82	2.2 3.6	40.1	15.91	2.9	38
	16.73	3.5 4.5	40.8			40.8	_	_	:
9 10	21.03 22.12	4.5	40.0 39.0	20.97 22.12	4.1 4.7	39.0	_	_	'
Not able to be leveled	15.37	25.8	39.0	15.91	29.0	39.0	_	-	
Supervisors, general office	15.07	3.6	40.3	15.03	5.5	40.5	- 15.14	4.1	40
5	12.44	4.6	40.3	12.20	5.4	40.0	-	4.1	
	14.61	4.7	40.0	14.10	6.2	40.0	_	_	.
6									

Table 6. Occupations ¹ and levels,² West North Central: Mean hourly earnings³ and weekly hours, private industry and State and local government, National Compensation Survey,⁴ 1998–Continued

		Total		Priv	ate industry			te and local overnment	
Occupations and level	Hourly 6	earnings		Hourly e	arnings		Hourly earnings		
	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mea weel hou
hite collar -Continued									
Administrative support, including clerical -Continued									
Supervisors, general office –Continued									
8	\$14.22	9.4	40.6	\$14.35	10.0	40.6	_	_	-
9	19.24	6.8	41.2	19.24	6.8	41.2	_	-	-
Supervisors, financial records processing	15.51	4.4	41.1	15.37	4.8	41.2	-	_	-
6	13.04	3.5	39.7	13.04	3.5	39.7	-	-	-
7	14.85	7.5	40.1	14.85	7.5	40.1	-	-	-
Supervisors, distribution, scheduling, and									
adjusting clerks	14.66	10.9	39.8	16.89	6.1	39.7	-	-	-
5	12.52	16.3	39.9	. =			-	-	-
Computer operators	12.70	3.9	39.5	12.74	3.9	39.5	-	-	-
4	10.87	4.8	38.0	10.87	4.8	38.0	-	_	-
6	13.57	3.7	40.0	-			_	_	-
Peripheral equipment operators Secretaries	9.85 12.58	5.2 1.9	39.8 38.5	9.85 11.83	5.2 2.1	39.8 38.1	_ ¢12.25	3.2	39
2	8.17	8.1	35.2	7.53	10.7	38.1	\$13.25 8.67	12.4	33
3	9.48	6.2	34.2	9.02	5.8	33.4	11.63	9.6	38
4	11.21	2.1	38.9	10.94	2.5	39.0	11.48	3.2	38
5	13.16	1.9	38.9	12.45	3.2	37.9	13.77	3.5	39
6	13.45	6.3	39.6	14.38	6.3	39.0	12.97	7.2	39
7	16.46	1.5	39.4	15.22	2.9	40.1	17.35	1.4	39
Stenographers	11.19	5.1	35.9	11.19	5.1	35.9		_	.
4	10.32	6.0	32.7	10.32	6.0	32.7	_	-	-
5	12.01	6.5	36.9	12.01	6.5	36.9	_	_	-
Typists	10.76	3.8	39.6	10.63	8.4	39.0	10.80	3.8	39
3	9.60	5.1	38.7	8.77	10.6	35.7	-	-	-
4	9.64	4.7	39.7	_	_	-	9.60	5.2	39
5	12.83	2.3	40.0	-	_	-	-	_	-
Interviewers	8.09	3.9	32.7	8.05	3.8	32.6	_	_	-
3	7.87	3.9 2.3	34.0	7.85	3.9	33.9 36.9	_	_	-
Hotel clerks	7.43 7.17	2.3	36.9 33.8	7.43 7.17	2.3 2.0	33.8	_	-	-
Receptionists	8.46	4.7	33.6	8.38	4.8	33.6	9.77	5.7	33
1	8.09	5.5	31.0	8.07	5.6	30.9	-	J -	".
2	8.13	4.5	32.8	8.13	4.8	32.6	_	_	Ι.
3	8.17	6.8	34.2	8.05	6.9	34.1	10.70	8.3	34
4	9.31	5.2	33.5	9.28	5.7	33.7	-	_	
Information clerks, n.e.c.	9.94	6.8	36.0	9.89	7.7	36.8	10.06	12.7	34
2	7.77	8.0	37.3	_	_	-	_	_	-
3	7.77	7.0	37.5	8.61	2.0	35.4	-	-	-
4	11.51	5.8	38.1	11.63	8.8	37.1	-	-	-
Correspondence clerks	15.35	7.6	40.0	15.35	7.6	40.0	-	-	-
Order clerks	11.39	9.6	37.8	11.39	9.6	37.8	-	_	-
3	8.27	6.3	33.6	8.27	6.3	33.6	-	_	-
4	11.13	9.8	39.8	11.13	9.8	39.8	_	_	-
5 6	12.42 14.01	6.2 17.1	39.8 40.0	12.42 14.01	6.2 17.1	39.8 40.0	_	1 -	
Personnel clerks, except payroll and	14.01	''.'	1 40.0	14.01	17.1	40.0	_	_	
timekeeping	11.75	3.6	39.2	11.71	3.6	39.2	_	l _	١.
4	11.22	3.7	38.5	11.12	3.7	38.5	_	-	-
Library clerks	9.23	4.1	27.0	-	-		9.19	4.4	26
1	6.51	10.0	15.5	-	-	-	6.51	10.0	15
3	8.48	7.6	30.2	-	-	-	8.47	7.8	30
4	9.73	6.6	24.4	-	-	-	9.72	8.2	22
File clerks	8.75	4.7	36.5	8.78	4.7	36.5	-	-	-
2	8.17	2.5	35.8	8.19	2.6	35.8	-		_:
Records clerks, n.e.c.	9.24	3.2	38.1	9.11	3.6	38.2	10.55	4.8	38
3	9.13	2.3	35.7	9.14	2.4	35.8	40.00		
4	10.63	5.5	38.5	10.67	6.0	38.5	10.29	6.0	38
5	12.05	4.3	40.5	12.30	4.9	40.6	-	-	-

Table 6. Occupations ¹ and levels,² West North Central: Mean hourly earnings³ and weekly hours, private industry and State and local government, National Compensation Survey,⁴ 1998–Continued

		Total		Priv	ate industry			te and local overnment	
Occupations and level	Hourly 6	earnings		Hourly e	arnings		Hourly e	arnings	
	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mea week hour
e collarContinued									
ministrative support, including clerical Continued									
Records clerks, n.e.cContinued									
6	. \$13.87	9.4	39.7	\$15.20	11.0	39.5	_	-	-
Bookkeepers, accounting and auditing clerks		2.3	37.5	10.32	2.6	37.2	\$13.11	4.9	39.
2		7.1	39.1	8.41	7.7	39.0	_	-	-
3		2.8	34.4	9.30 9.89	2.9	34.3 39.1	40.00	5.8	38.
4 5	_	3.4 2.4	39.0 37.4	11.36	3.5 2.3	37.2	12.26 –	3.6	30.
6		5.1	39.5	11.62	3.6	39.3	_	_	_
7		5.0	39.0	16.41	6.3	38.4	14.87	3.8	40.
Payroll and timekeeping clerks		7.6	39.8	12.57	9.0	39.8	_	_	-
4	. 10.63	7.1	39.8	10.63	7.1	39.8	_	-	-
Billing clerks		5.5	38.5	10.66	6.1	38.3	_	-	-
3		3.5	35.6	8.73	3.5	35.6	-	-	-
4	-	4.4	39.1	10.17	4.4	39.1	_	-	-
Office machine operators, n.e.c.		4.6	33.6	7.79	4.6	33.6	_	_	-
Telephone operators		9.5 4.0	33.5 31.5	10.91 8.66	9.6 4.0	33.6 31.5	_	_	
Mail clerks, except postal service		9.3	37.0	7.40	9.6	36.9	_	<u>-</u>	[
3		3.6	33.4	8.58	3.8	32.9	_	_	_
Messengers		5.2	33.0	8.15	5.7	32.4	_	_	_
Dispatchers		18.0	39.2	17.05	26.3	39.2	11.48	6.1	39
³3	. 10.53	15.3	36.8	_	-	-	_	-	-
4	. 9.56	4.3	40.0	_	-	-	_	-	-
5		11.6	38.9	_	-	-	-	-	-
6		5.4	35.5	-		-	-	_	-
Production coordinators5		3.4 4.6	38.0 40.2	14.57 14.21	3.4 4.6	38.0 40.2	_	_	-
6		5.7	40.2	15.23	5.7	40.2	_	1 _	1 -
7		5.3	40.3	16.68	5.3	40.3	_	_	-
Traffic, shipping and receiving clerks		4.0	38.8	10.23	4.0	38.8	_	_	-
3		2.9	39.3	8.12	2.8	39.3	_	_	-
4		4.9	38.5	10.42	4.9	38.5	-	-	-
5		5.0	40.0	14.07	5.0	40.0	_	-	-
6		2.4	41.4	13.61	2.4	41.4	-	-	-
Stock and inventory clerks		4.2 4.9	36.4 34.5	10.27	4.5	36.4	13.51	10.0	37
3		5.7	32.0	9.20	5.7	32.0	_	<u>-</u>	1 =
4		7.9	39.4	10.12	8.0	39.3	_	_	_
5		6.7	40.0	11.81	6.7	40.0	_	_	-
Weighers, measurers, checkers, and samplers	15.36	22.0	23.9	16.11	20.2	34.1	_	_	-
Expeditors	. 14.73	12.1	34.9	14.73	12.1	34.9	_	-	-
Material recording, scheduling, and distribution				40.00					
clerks, n.e.c.		7.4	36.4	10.33	7.4	36.4	_	_	-
4 Insurance adjusters, examiners, and	. 8.99	6.0	32.3	8.93	6.3	32.2	_	-	-
investigators	. 13.88	4.6	39.1	13.86	4.7	39.0	_	_	l _
4		3.2	39.0	10.74	3.2	39.0	_	_	_
5		2.7	40.0	12.40	2.7	40.0	_	_	-
6	. 13.60	2.9	39.3	13.69	3.2	39.2	_	_	-
7		2.4	39.4	16.22	2.6	39.3	-	-	-
Investigators and adjusters, except insurance		4.8	38.2	10.61	4.9	38.2	-	-	-
3		3.8	36.9	8.97	3.8	36.9	-	-	-
4		3.5	40.5	10.49	3.6	40.5	-	-	-
			1 1		1	1 1		1 -	-
		I		-	4.0	40.0			40
			1 1	_		_	-	-	-
6		4.6	40.0	_	_	_	12.69	4.6	40
Bill and account collectors		4.4	39.1	11.14	4.7	39.1	-	-	-
	. 13.52 . 11.40 . 8.50 . 12.69		1 1	-		_		1	

Table 6. Occupations ¹ and levels,² West North Central: Mean hourly earnings³ and weekly hours, private industry and State and local government, National Compensation Survey,⁴ 1998–Continued

		Total		Priv	ate industry			te and local overnment	
Occupations and level	Hourly	earnings	Mean	Hourly 6	arnings	Mean	Hourly e	arnings	Mea
	Mean	Relative error ⁵ (percent)	weekly	Mean	Relative error ⁵ (percent)	weekly	Mean	Relative error ⁵ (percent)	week
White collar –Continued									
Administrative support, including clerical									
-Continued									
Bill and account collectors –Continued	¢0.03	4.0	400	¢ 0.02	1.0	40.0			
3 5	·	1.8	40.0 40.0	\$9.03	1.8	40.0	_	_	
6		2.6	40.0	_	_	_	_	_	-
General office clerks		2.2	36.6	10.45	2.8	36.2	\$11.76	2.3	37
1		5.5	23.8	-		_	7.48	8.8	23
2		7.9	33.3	7.75	8.0	29.7	10.06	11.7	39
3 4		3.6	37.5 37.9	9.59 10.96	4.5 3.6	38.3 38.7	10.33 11.99	5.9 6.7	35
5		1.5	40.0	13.58	4.6	40.0	13.23	1.1	40
6		4.4	39.0	-	_	-	-	_	-
Bank tellers	8.51	3.6	34.3	8.51	3.6	34.3	-	-	-
2		3.0	27.6	6.92	3.0	27.6	-	-	-
3		3.2	35.1	8.37	3.2	35.1	_	-	-
4 Proofreaders		3.0 7.4	38.4 29.9	9.00 9.10	3.0 7.4	38.4 29.9	_		1 :
Data entry keyers		3.1	38.3	9.49	3.3	38.0	_	_	
2		3.0	36.9	8.11	3.0	36.9	-	-	
3		3.1	37.6	9.16	3.3	37.4	_	-	-
4		3.1	39.2	9.55	1.8	38.9	-	-	-
5		4.4 8.3	38.3	11.46 10.04	4.4 8.3	38.3 36.6	_	_	'
Statistical clerks		8.3	36.6 36.8	8.97	8.3	36.8	_]
Teachers' aides		3.8	30.9	8.47	4.7	37.8	8.59	3.8	30
1		8.2	27.0	_	_	-	7.67	8.2	27
2		8.6	33.5	-	-	-	8.43	8.6	33
3		8.3	26.9	_	-	-	8.89	8.3	26
4 5		4.5 9.3	33.7 33.9	_	_	_	8.96 10.30	4.7 10.2	33
Administrative support, n.e.c.		7.2	36.4	10.36	7.8	37.9	10.30	6.1	26
2		5.8	28.5	8.92	5.8	28.5	-	_	-:
3	9.54	2.9	30.3	9.26	2.8	38.5	10.16	4.9	20
4		2.1	39.4	11.00	2.0	39.4	-	-	-
5		5.3	38.9	11.29	5.3	38.9	_	_	-
6 7		2.2 5.6	40.1 42.0	13.74 14.40	2.2 5.7	40.2 42.0	_	_	[
Not able to be leveled		6.1	39.5	10.93	6.1	39.5	-	-	-
Blue collar		1.6	38.8	12.72	1.7	38.9	14.16	1.7	37
1	7.41	1.4	33.6	7.40	1.4	33.7	8.96	14.4	23
3		2.8 2.7	35.8 39.4	9.48 11.38	2.9 2.8	36.4 39.6	10.64 12.06	10.3 5.7	35
4		1.3	38.9	12.21	1.4	39.1	11.94	2.6	35
5		2.1	40.9	13.63	2.4	41.1	14.02	3.9	39
6		1.7	43.9	14.69	2.3	44.4	13.20	2.3	39
7 8		1.8 2.1	40.0 40.0	17.31	2.2	40.0 40.0	15.03	4.1	39
9		3.7	41.6	19.70 21.62	2.3 3.9	41.7	20.74 19.66	1.9	40
10		7.8	40.0	31.16	7.4	40.0	-	-	-
Not able to be leveled		17.0	39.1	13.71	17.0	39.1	-	_	-
Precision production, craft, and repair		2.2	40.1	15.06	3.9	40.1	15.82	2.0	40
1		5.6	34.4	7.69	5.6	34.4	-	-	-
2 4		2.9 3.6	40.0 39.8	8.62 11.11	2.9 3.8	40.0 39.7	_	_	
5		5.5	39.8	12.92	6.0	39.8	15.06	3.8	40
6		4.6	41.4	14.19	5.0	41.5	14.29	3.0	40
7	17.18	1.3	40.0	17.47	2.0	40.0	15.60	2.0	39
8	20.09	1.6	39.9	19.91	2.0	39.9	20.86	4.0	40

Table 6. Occupations ¹ and levels,² West North Central: Mean hourly earnings³ and weekly hours, private industry and State and local government, National Compensation Survey,⁴ 1998–Continued

		Total		Priv	ate industry			te and local overnment	
Occupations and level	Hourly 6	earnings		Hourly e	arnings		Hourly e	arnings	
·	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mea weel hou
ue collar –Continued									
Precision production, craft, and repair –Continued									
9	\$20.87	1.3	41.8	\$20.93	1.4	41.9	\$19.78	1.6	40.
10	29.80	8.3	40.0	_	_	_	_	-	-
Not able to be leveled	14.75	20.0	40.0	14.75	20.0	40.0	_	_	-
Supervisors, mechanics and repairers	18.47	5.6	43.5	18.36	6.2	43.9	_	_	-
7	17.85	11.0	40.3	18.17	11.6	40.4	_	_	_
9	19.18	3.3	45.0	19.23	3.6	45.4	_	l _	_
Automobile mechanics	14.89	13.5	40.3	14.90	14.3	40.3	_	_	
		20.1	40.3	13.28	1	40.3	_		
5	13.27				20.8				-
7	17.74	7.8	40.7	17.98	8.6	40.8	- 1170		40
Bus, truck, and stationary engine mechanics	12.86	3.2	41.3	12.25	3.1	41.7	14.78	3.4	40
6	12.41	3.7	42.9	. =	1	<u>-</u>	_	-	-
7	15.57	5.6	40.0	15.17	8.4	40.0	-	-	-
Automobile body and related repairers	13.65	8.9	42.9	13.65	8.9	42.9	_	-	-
Aircraft mechanics, except engine	18.01	5.1	40.0	18.01	5.1	40.0	_	_	-
Heavy equipment mechanics	17.78	7.9	40.1	18.37	11.4	40.2	16.84	4.2	40
7	18.47	8.4	40.1	18.97	11.8	40.2	_	-	-
Industrial machinery repairers	14.53	3.4	39.6	14.48	3.4	39.6	_	-	-
5	14.78	9.2	39.7	14.78	9.2	39.7	_	-	-
6	14.94	6.5	40.0	14.94	6.5	40.0	_	_	-
7	15.10	1.7	39.5	15.05	1.6	39.5	_	_	
Machinery maintenance Electronic repairers, communications and	15.19	4.5	39.6	15.19	4.5	39.6	-	-	-
industrial equipment	16.41	5.3	40.2	16.77	4.9	40.4	_	_	-
7	16.89	9.9	39.8	18.68	5.9	40.0	_	_	
Data processing equipment repairers Heating, air conditioning, and refrigeration	13.11	8.2	35.5	13.11	8.2	35.5	-	-	-
mechanics	13.67	8.6	39.8	14.12	11.8	39.7	_	-	-
Millwrights	19.67	6.4	40.0	19.67	6.4	40.0	_	-	-
Mechanics and repairers, n.e.c	15.52	2.5	39.9	15.68	2.7	39.9	13.97	6.6	39
4	13.53	6.3	40.0	13.53	6.3	40.0	_	_	-
5	13.38	3.7	39.1	13.37	4.1	38.9	_	_	
6	13.88	5.3	40.0	14.40	6.2	40.0	_	_	١.
7	15.68	3.3	40.0	15.67	3.5	40.0	15.84	5.9	39
Supervisors, construction trades, n.e.c.	18.28	3.5	40.9	20.12	3.4	42.6	17.22	3.9	40
9	19.76	2.2	42.9	20.12			-	- 5.5	-
Carpenters	19.70	5.2	39.8	20.26	5.5	39.7	_		
6	18.94	12.2		18.94	12.2	40.0	_	-	-
			40.0		1				-
7	19.51	5.8	39.7	20.87	5.1	39.6	_ 45.40		1
Electricians	17.68	2.3	40.0	19.50	4.0	40.0	15.42	2.4	40
7	16.93	2.4	40.0	19.01	3.5	40.0	_	-	-
9	20.66	3.2	40.0	_	_	-	_	_	-
Painters, construction and maintenance	16.58	17.6	40.0	·			_	-	-
Plumbers, pipefitters and steamfitters	22.35	4.4	40.0	22.67	4.2	40.0	_	-	-
7	22.00	5.5	40.0	22.00	5.5	40.0	_	-	-
8	25.06	1.7	39.7	25.06	1.7	39.7	_	-	-
Structural metal workers	17.36	8.0	40.0	17.36	8.0	40.0	_	-	-
Construction trades, n.e.c.	14.22	2.1	40.4	_	-	-	13.41	3.6	40
5	14.26	2.1	40.0	_	-	-	-	-	-
7	14.71	4.5	41.5	_	-	-	_	-	-
Supervisors, production	17.36	7.5	41.0	17.58	8.2	41.1	_	-	-
7	16.87	4.3	40.4	17.66	3.6	40.5	_	-	-
8	19.86	5.8	40.0	19.27	5.7	40.0	_	_	-
9	21.54	2.5	42.8	21.54	2.5	42.8	_	_	-
Tool and die makers	20.50	3.2	40.0	20.50	3.2	40.0	_	-	-
Precision assemblers, metal	15.30	11.6	40.0	15.30	11.6	40.0	_	-	-
Machinists	18.02	4.0	39.9	18.00	4.0	39.9	_	-	-
6	16.92	3.3	40.0	16.72	3.2	40.0	_	-	-
7	18.22	5.1	40.0	18.22	5.1	40.0	_	_	.
8	20.75	2.5	39.8	20.75	2.5	39.8	_	I -	-
Sheet metal workers	17.63	7.0	39.9	17.63	7.0	39.9	_	_	Ι.
C.100t 110tal 1101to10		1 7.0	1 55.5	17.00	1 7.0	00.0		1	1

Table 6. Occupations ¹ and levels,² West North Central: Mean hourly earnings³ and weekly hours, private industry and State and local government, National Compensation Survey,⁴ 1998–Continued

		Total		Priv	ate industry			te and local overnment	
Occupations and level	Hourly 6	earnings		Hourly e	arnings		Hourly e	arnings	
	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative weel	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mea week hour
lue collar -Continued									
Precision production, craft, and repair -Continued									
Electrical and electronic equipment assemblers	\$9.04	7.0	39.6	\$9.04	7.0	39.6	_	_	-
4 Miscellaneous precision workers, n.e.c	11.31 12.78	2.3 7.1	40.0 40.0	11.31 12.78	2.3 7.1	40.0 40.0	_		_
5	11.62	2.3	40.0	11.62	2.3	40.0	_		
Butchers and meat cutters	11.02	2.0	10.0	11.02	2.0	40.0			
5	10.57	3.8	40.0	10.57	3.8	40.0	_	l _	_
7	16.05	10.3	39.5	16.05	10.3	39.5	_	_	_
Bakers	8.89	3.6	37.7	8.89	3.6	37.7	_	_	_
Inspectors, testers, and graders	14.99	6.4	40.8	14.99	6.4	40.8	_	_	-
6	15.83	10.9	42.0	15.83	10.9	42.0	_	_	-
7	17.42	5.3	40.9	17.42	5.3	40.9	_	_	-
Water and sewer treatment plant operators	17.15	2.7	40.0	_	-	-	\$17.15	2.7	40
7	16.84	2.6	40.0	-	-	-	16.84	2.6	40
Power plant operators	19.89	4.8	40.0	-	-	-	_	-	-
Stationary engineers	16.67	3.8	40.0	17.03	5.0	40.0	_	-	-
7	16.79	4.5	40.0	16.61	4.9	40.0	-	_	-
Machine operators, assemblers, and inspectors	12.03	1.5	39.2	12.03	1.5	39.2	_	_	-
1	7.62	5.0	36.4	7.62	5.0	36.4	_	_	-
2	9.53	2.0	38.2	9.53	2.0	38.2	_	-	-
3	12.21	3.9	39.8	12.21	3.9	39.8	_	-	-
4	12.24	2.0	39.9	12.24	2.0	39.9	_	-	-
5	13.07	3.4	39.9	13.07	3.4	39.9	-	-	-
6	14.35	3.5	39.8	14.35	3.5	39.8	_	-	-
7	16.42	4.3	39.8	16.42	4.3	39.8	_	-	-
9	20.18	5.6	38.6	20.18	5.6	38.6	_	-	-
Punching and stamping press operators	11.08	4.0	39.3	11.08	4.0	39.3	_	-	-
5 Drilling and boring machine operators	11.37 11.78	8.4 12.5	40.0 40.0	11.37 11.78	8.4 12.5	40.0 40.0	_	_	-
Grinding, abrading, buffing, and polishing	44.05	9.2	40.0	44.05	0.0	40.0			
machine operators	11.85 11.48	14.1	40.0	11.85 11.48	9.2 14.1	40.0 40.0	_	_	-
3 Forging machine operators	12.01	5.6	40.0	12.01	5.6	40.0	_	_	
Numerical control machine operators	13.17	8.2	40.0	13.17	8.2	40.0	_	_	
Fabricating machine operators, n.e.c.	11.19	3.1	40.0	11.19	3.1	40.0	_	_	_ ا
5	13.07	3.4	40.0	13.07	3.4	40.0	_	l _	١.
Molding and casting machine operators	11.15	5.3	39.6	11.15	5.3	39.6	_	_	
Metal plating machine operators	13.47	6.6	40.0	13.47	6.6	40.0	_	_	١ -
Printing press operators	16.52	6.2	39.3	16.52	6.2	39.3	_	_	-
5	12.48	6.5	39.7	12.48	6.5	39.7	_	-	-
7	20.94	5.2	39.8	20.94	5.2	39.8	_	-	-
Photoengravers and lithographers	17.90	7.0	38.2	17.90	7.0	38.2	_	-	-
Laundering and dry cleaning machine operators	6.32	2.9	24.0	6.32	2.9	24.0	-	-	-
1	6.33	3.8	23.9	6.33	3.9	23.9	_	_	-
Packaging and filling machine operators	11.46	4.9	39.4	11.46	4.9	39.4	-	-	-
1	8.13	4.0	40.0	8.13	4.0	40.0	_	_	-
3 4	10.01	4.5	39.4	10.01	4.5	39.4	_	_	-
Extruding and forming machine operators	13.32	5.2	39.5	13.32	5.2	39.5	_	_	-
Mixing and blending machine operators	10.87 13.10	12.4 3.7	39.3 40.0	10.87 13.10	12.4 3.7	39.3 40.0	_	_	-
3	12.08	9.8	40.0	12.08	9.8	40.0	_	_	
Painting and paint spraying machine operators	14.72	5.5	40.0	14.72	5.5	40.0	_	_	
5	12.97	5.6	40.0	12.97	5.6	40.0	_	_	-
Slicing and cutting machine operators	12.66	8.7	39.6	12.66	8.7	39.6	_	_	-
Photographic process machine operators	9.69	12.1	37.4	9.69	12.1	37.4	_	_	-
Miscellaneous machine operators, n.e.c.	12.21	5.0	39.7	12.21	5.0	39.8	_	_	-
1	7.87	2.9	36.7	7.87	2.9	36.7	_	_	-
2	10.03	4.7	39.3	10.03	4.7	39.3	_	-	-
3	8.86	13.3	40.0	8.86	13.3	40.0	_	-	-
4	12.16	4.4	40.0	12.16	4.4	40.0	_	l –	1 _

Table 6. Occupations ¹ and levels,² West North Central: Mean hourly earnings³ and weekly hours, private industry and State and local government, National Compensation Survey,⁴ 1998–Continued

		Total		Priv	ate industry			te and local overnment	
Occupations and level	Hourly e	earnings		Hourly e	arnings		Hourly e	arnings	
, i	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mea weel hou
Blue collarContinued									
Machine operators, assemblers, and inspectors									
-Continued Miscellaneous machine operators, n.e.c.									
-Continued									
5	\$14.31	2.7	40.0	\$14.31	2.7	40.0	-	-	-
Welders and cutters	12.39	5.3	40.0	12.39	5.3	40.0	-	-	-
4	9.79	7.4	40.0	9.79	7.4	40.0	-	-	-
5	12.91	4.4	40.0	12.91	4.4	40.0	-	_	-
6	13.55	4.2 3.9	40.0	13.55	4.2 3.9	40.0 40.0	_	_	-
7 Assemblers	15.83 12.74	5.4	40.0 39.0	15.83 12.74	5.4	39.0	_	1 -	
1	7.72	11.3	35.5	7.72	11.3	35.5	_	_	
2	9.37	4.6	39.5	9.37	4.6	39.5	_	_	Ι.
3	17.50	6.1	40.0	17.50	6.1	40.0	_	_	
4	13.60	3.3	40.0	13.60	3.3	40.0	_	_	
5	12.77	3.4	39.8	12.77	3.4	39.8	_	_	
6	13.80	3.4	40.0	13.80	3.4	40.0	_	-	
Miscellaneous hand working, n.e.c	11.16	7.0	40.0	11.16	7.0	40.0	-	-	
2	9.04	7.9	40.0	9.04	7.9	40.0	-	_	
Production inspectors, checkers and examiners	12.60 11.62	6.4 7.2	38.9 36.7	12.60 11.62	6.4 7.2	38.9 36.7	_	_	
4 5	13.34	8.8	40.5	13.34	8.8	40.5	_	-	
6	13.69	6.9	39.6	13.69	6.9	39.6	_	_	
Production testers	13.76	7.2	40.0	13.76	7.2	40.0	_	-	
Transportation and metavial marriage	14.23	3.1	41.2	14.40	3.3	40.7	\$13.04	2.4	33
Transportation and material moving	6.67	7.8	33.2	6.43	7.4	42.7 34.3	φ13.04 —	2.4	3
2	11.04	6.2	33.6	10.84	7.1	36.4	12.90	11.2	19
3	12.74	4.2	39.1	12.68	5.0	41.2	13.06	5.2	3
4	12.76	3.1	38.2	12.79	3.3	38.5	12.44	2.5	3
5	15.43	6.2	45.3	15.66	6.9	46.6	13.77	1.6	3.
6	15.10	2.8	52.4	15.41	2.4	54.7	12.20	9.4	3
7	18.83	14.1	40.3	21.89	7.5	40.7	12.05	9.7	3
8	22.93	9.8	42.0	22.93	9.8	42.0	_	-	
9	25.27	13.9	41.3	25.98	15.3	41.5	-	_	
Supervisors, motor vehicle operators Truck drivers	16.63 14.47	10.4 3.6	40.7 47.5	16.82 14.52	12.3 3.7	40.9 47.7	_ 12.55	5.5	4
2	11.78	9.8	38.7	11.66	10.2	38.6	12.55	5.5	4
3	10.82	5.1	49.7	10.95	4.8	50.7	_	_	
4	13.38	3.7	39.3	13.43	4.0	39.2	12.87	2.6	4
5	16.10	7.8	48.4	16.14	7.8	48.5	_	_	
Driver-sales workers	12.43	13.5	32.1	12.43	13.5	32.1	-	-	
Bus drivers	12.51	3.5	26.7	9.90	2.8	27.5	13.58	3.0	2
2	10.96	7.8	22.9				12.43	12.5	1
3	13.34	5.6	29.3	9.03	3.8	29.2	14.18	5.9	2
4 5	11.21 14.28	5.4 1.9	22.7 35.9	_	_	_	- 14.42	1.3	3
Taxicab drivers and chauffeurs	8.45	8.1	32.8	8.47	8.1	35.6	14.42	-	٥
Motor transportation, n.e.c.	6.11	6.7	36.1	6.11	6.7	36.1	_	_	
Supervisors, material moving equipment	19.52	4.2	40.2	19.52	4.2	40.2	_	_	
Operating engineers	15.34	6.1	40.0	_	_	-	14.73	5.9	4
Excavating and loading machine operators	18.19	7.9	40.0	15.62	18.2	40.0	-	-	
Grader, dozer, and scrapper operators	12.44	9.4	40.0	_	-	-	11.36	5.8	4
Industrial truck and tractor equipment operators	12.49	2.3	39.7	12.49	2.3	39.7	-	-	
2	10.33	9.6	39.4	10.33	9.6	39.4	-	-	
3	12.51	2.9	39.6	12.51	2.9	39.6	_	-	
4 5	13.11 12.74	3.0 6.8	40.0 39.7	13.11 12.74	3.0 6.8	40.0 39.7	_	_	
Miscellaneous material moving equipment	12.14	0.0	33.1	14.14	0.0	33.1	-	_	'
operators, n.e.c.	13.78	7.8	39.9	14.53	9.4	39.9	11.49	5.1	4
2	11.90	8.3	40.0	11.90	8.3	40.0	-	-	

Table 6. Occupations ¹ and levels,² West North Central: Mean hourly earnings³ and weekly hours, private industry and State and local government, National Compensation Survey,⁴ 1998–Continued

		Total		Priv	ate industry			te and local overnment	
Occupations and level	Hourly 6	earnings		Hourly e	arnings		Hourly e	arnings	
	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mea week hour
lue collar –Continued									
Transportation and material moving –Continued Miscellaneous material moving equipment operators, n.e.c. –Continued									
5	\$12.06 15.16	13.2 6.4	40.0 40.0	\$12.17 -	15.2 -	40.0	_ _	_	_
Handlers, equipment cleaners, helpers, and laborers	9.92	1.8	35.3	9.80	1.9	35.2	\$11.99	4.7	36.
1	7.36	2.1	32.1	7.36	2.1	32.2	φ11.99 —	4.7	30.
2	9.29	4.9	34.2	9.33	5.0	34.4	7.08	7.0	23.
3	10.67	5.4	38.8	10.64	5.5	38.7	11.09	7.3	40.
4	12.02	2.5	36.8	12.08	3.2	37.0	11.03	5.3	33
5	13.29	2.7	39.0	13.24	2.2	38.6	13.43	8.9	40
6	15.00	4.3	39.6	15.30	4.8	39.5	13.45	5.3	40
Groundskeepers and gardeners, except farm 3	11.00 10.91	6.2 5.1	37.3 38.7	9.47 -	10.2	36.3	12.96 -	7.6	38
Supervisors, handlers, equipment cleaners, and									
laborers, n.e.c.	12.74	8.2	40.4	12.33	7.5	40.4	_	-	-
5	14.44	7.2	40.0	12.94	4.0	40.0	_	-	-
6	13.64	12.5	39.8	-	_	20.5	- 11.70	-	20
Construction laborers	13.43 10.39	6.7 8.1	39.6 39.8	13.89 10.39	8.2 8.1	39.5 39.8	11.70	8.2	39
4	15.20	8.5	39.7	17.46	4.2	39.6	11.25	5.7	39
5	14.22	6.4	38.5	-	_	-	-	_	-
Production helpers	9.69	5.1	38.1	9.69	5.1	38.1	_	_	-
1	7.80	7.6	36.0	7.80	7.6	36.0	_	-	-
2	9.49	4.5	37.6	9.49	4.5	37.6	_	-	-
3	10.65	5.7	40.0	10.65	5.7	40.0	_	-	-
Stock handlers and baggers	9.25 6.81	6.6 6.2	28.9 24.7	9.26 6.81	6.6 6.3	28.9 24.8	-	_	-
1 2	8.58	11.8	25.7	8.58	11.8	25.7	_		[
3	11.70	7.9	37.5	11.72	7.9	37.5	_	_	[
4	11.89	5.4	37.5	11.89	5.4	37.5	_	_	_
5	13.11	3.1	38.4	13.11	3.1	38.4	_	_	-
Machine feeders and offbearers	9.10	10.0	38.2	9.10	10.0	38.2	_	-	-
1	9.84	9.5	40.0	9.84	9.5	40.0	-	-	-
2	10.97	10.4	35.2	10.97	10.4	35.2	_	-	-
Freight, stock, and material handlers, n.e.c	11.13	5.4	35.0	11.13	5.4	35.0	_	_	-
1	8.37 8.45	4.7 6.3	34.2	8.37 8.45	4.7 6.3	34.2 30.6	_	_	-
3	13.10	10.0	38.8	13.10	10.0	38.8	_	_	1]
4	12.25	6.2	37.5	12.25	6.2	37.5	_	_	١.
5	13.13	3.6	35.3	13.13	3.6	35.3	_	_	-
Garage and service station related	9.27	13.8	32.9	9.27	13.8	32.9	_	-	-
Vehicle washers and equipment cleaners	8.41	9.2	39.3	8.41	9.2	39.3	_	-	-
1	6.55	6.7	38.2	6.55	6.7	38.2	_	-	-
2	8.37	3.9	40.0	8.37	3.9	40.0	_	_	-
3 Hand packers and packagers	9.53 8.57	13.0 7.3	40.0 38.1	9.53 8.57	13.0 7.3	40.0 38.1	_	1 -	1 -
1	7.48	9.6	37.9	7.48	9.6	37.9	_		-
2	8.91	5.7	37.3	8.91	5.7	37.3	-	-	-
4	9.80	4.6	39.0	9.80	4.6	39.0	- 10.05	6.1	25
Laborers, except construction, n.e.c	9.92 7.19	4.2 8.7	37.6 37.3	9.84 7.18	4.6 8.7	37.8 37.3	10.95 –	6.1	35
2	9.77	7.9	37.5	9.82	8.0	38.3	_	<u>-</u>	1 -
3	10.57	2.4	39.5	10.57	2.3	39.3	10.59	7.3	40
4	12.25	6.2	35.0	12.28	6.3	34.8	-	-	-
5	13.42	6.5	40.0	13.19	8.9	40.0	-	-	-
6	13.60	4.0	40.0	_	l –	1		1	1 _

Table 6. Occupations ¹ and levels,² West North Central: Mean hourly earnings³ and weekly hours, private industry and State and local government, National Compensation Survey,⁴ 1998–Continued

		Total		Priv	ate industry		State and local government		
Occupations and level	Hourly e	arnings		Hourly e	arnings		Hourly e	arnings	Mea
	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mea week hou
ervice	\$9.23	1.6	31.1	\$7.87	1.6	29.3	\$12.54	2.5	36.
1	6.66	1.7	25.2	6.51	2.0	25.0	7.77	4.3	27.
2	7.51	2.4	30.2	6.92	2.9	29.1	8.91	3.6	33.
3	7.77	2.2	31.0	7.42	2.3	30.6	10.06	3.1	33.
4	9.60	2.1	35.3	8.89	1.9	34.3	11.34	3.7	37
5	11.64	3.9	36.1	11.38	5.9	34.3	11.98	3.4	38
6	12.00	3.3	39.4	11.61	5.8	38.9	12.45	3.9	40
7	16.87	2.6	39.1	17.42	11.1	28.1	16.78	2.1	42
8	17.01	4.3	40.1	16.49	4.2	38.9	17.42	6.6	41
9	18.37	2.6	39.9	_	_	-	18.33	2.6	39
10	19.93	5.8	45.0	_	_	_	19.93	5.8	45
11	26.44	5.0	40.0	_	_	_	_	_	-
Protective service	14.75	2.9	39.1	10.30	10.3	34.6	15.65	3.7	40
2	7.76	11.2	32.9	6.81	5.3	32.1	11.06	7.3	35
3	8.59	3.8	26.6	8.38	3.7	30.1	9.31	10.1	18
4	11.79	3.2	36.5	9.87	4.2	39.0	12.85	5.5	35
5	11.49	3.4	40.7	_	_	_	11.39	3.7	41
6	12.39	3.7	40.3	_	_	_	12.46	4.0	40
7	16.14	3.2	42.8	_	_	_	16.20	3.2	42
8	17.23	6.5	40.6	_	_	_	17.51	6.9	41
9	18.35	2.6	39.9	_	_	_	18.33	2.6	39
10	19.86	5.9	45.2	_	_	_	19.86	5.9	45
11	26.44	5.0	40.0	_	_	_	-	_	-
Supervisors, firefighters and fire prevention	15.70	5.0	48.3	_	l _	_	15.93	6.4	52
Supervisors, police and detectives	22.67	2.5	40.0	_	_	_	22.59	2.7	40
9	21.35	2.9	40.0	_	_	_	21.35	2.9	40
10	23.74	4.8	40.0	_	_	_	23.74	4.8	40
Supervisors, guards	19.40	17.1	40.0	_	_	_	20.74	10	-0
Firefighting	13.04	3.6	46.8	_	_	_	13.04	3.6	46
7	13.60	3.3	51.9	_	_	_	13.60	3.3	51
Police and detectives, public service	17.31	3.1	39.8	_	_	_	17.29	3.1	39
6	14.25	5.8	40.2	_	_	_	14.25	5.8	40
7	17.45	3.3	39.6	_	_	_	17.45	3.3	39
8	18.97	10.0	40.0	_	_	_	18.97	10.0	40
9	17.56	3.0	39.9	_			17.56	3.0	39
Sheriffs, bailiffs, and other law enforcement	17.50	3.0	33.3	_	_		17.50	3.0	55
officers	15.70	3.5	37.7			_	15.70	3.5	37
7	16.40	4.9	40.0	_	_	_	16.40	4.9	40
Correctional institution officers	13.11	6.4	38.9	_	_		13.11	6.4	38
5	10.83	1.9	40.0	_	_	_	10.83	1.9	40
				_	_	_		1	
6 Guards and police, except public service	12.27 9.18	5.5 6.5	36.6	- 0.64		25.0	12.27	5.5	36
			34.7	8.64	6.5	35.0 34.9	12.89	8.8	32
2	6.90	6.2	34.9	6.86	6.2		_	_	-
3	8.76	3.0	30.3	8.56	3.0	29.8	_	_	-
4	9.91	4.2	36.5	9.87	4.2	39.0	_	_	-
5	11.78	5.6	39.5	_	_	_		I	
Protective service, n.e.c.	7.81	10.5	26.5	_	-	-	8.80	13.6	30
2	6.46	5.0	22.5						
Food service	7.01	2.1	26.4	6.89	2.3	26.6	8.31	1.9	25
1	6.23	2.3	22.8	6.10	2.5	22.6	7.42	4.9	23
2	6.32	4.1	25.9	6.04	4.8	26.4	8.22	3.5	23
3	6.39	5.1	28.1	6.31	5.3	27.9	8.87	5.1	37
4	8.14	2.7	33.1	8.12	2.8	33.0			
5	10.74	9.1	37.3	10.73	10.3	38.8	10.85	5.5	28
6	11.77	5.0	39.5	11.77	5.0	39.5	_	-	-
7	14.99	5.0	40.9						-
Supervisors, food preparation and service	11.17	6.7	35.5	11.07	7.3	36.2	12.29	16.4	29
4	8.07	1.5	34.2	8.07	1.5	34.2	-	-	-
5	12.26	11.7	36.0	12.63	12.7	38.8	_	-	-
6	11.72	7.1	39.1	11.72	7.1	39.1	_	-	-
7	14.99	5.0	40.9	_	-	-	_	-	-
Bartenders	7.05	3.6	28.9	7.05	3.6	28.9	_	-	-
3	6.93	3.8	29.0	6.93	3.8	29.0	_	-	-

Table 6. Occupations ¹ and levels,² West North Central: Mean hourly earnings³ and weekly hours, private industry and State and local government, National Compensation Survey,⁴ 1998–Continued

		Total		Priv	ate industry			te and local overnment	
Occupations and level	Hourly 6	earnings		Hourly e	arnings		Hourly e	arnings	
	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mea wee hou
ervice -Continued									
Food service –Continued									
Waiters and waitresses		5.5	22.9	\$3.61	5.5	22.9	_	-	-
1		9.9	17.6	4.05	10.1	17.5	_	-	-
2		12.5 7.9	24.9 25.4	3.63 3.29	12.5 7.9	24.9 25.4	_	-	-
3 Cooks		2.4	33.4	8.61	2.5	33.6	\$8.54	3.8	32
1		4.7	30.8	6.69	4.6	34.8	8.64	6.7	19
2		3.9	34.0	8.07	4.7	34.0	7.16	1.8	34
3		3.2	31.6	8.36	3.5	31.0	8.76	5.5	38
4		2.9	33.4	8.45	3.0	33.4	_	_	-
5	9.80	3.0	39.1	9.66	2.9	39.4	_	-	-
Food counter, fountain, and related	6.46	4.2	23.5	6.42	4.1	23.8	_	-	-
1	6.20	2.2	23.1	6.13	1.6	23.4	_	-	-
Kitchen workers, food preparation	7.38	3.3	26.8	7.11	3.4	28.0	8.82	3.6	22
1		3.6	24.1	6.43	2.5	24.1	_	-	-
2		4.0	28.8	7.32	6.3	34.1	_	-	-
3		7.7	30.4	7.66	7.9	30.4	_	-	
Waiters'/Waitresses' assistants		7.0	26.2	5.95	7.1	26.4	_	-	
1		9.5	26.0	5.32	9.5	26.0	_	_	
2		18.8	20.1	- 7.22	-	-	_	-	-
3		11.1	30.0	7.32	11.1	30.0	- 7.07	_	
Food preparation, n.e.c.		2.4	23.7	6.66	2.6	23.6	7.37	4.0	24
1		3.2	22.7	6.54	3.6	22.4	7.00	5.3	24
3		3.8 3.4	24.3 26.7	6.48 7.17	3.6	24.5 26.7	8.09	7.5	23
Health service		1.6	31.4	7.17	1.2	30.6	9.83	4.8	36
1		2.0	28.6	6.86	2.3	28.5	9.00	4.0	".
2		4.2	30.7	7.71	5.3	29.1	8.87	2.9	35
3		3.4	31.2	7.71	3.4	31.3	9.09	7.7	29
4	9.28	2.2	33.7	9.06	2.8	31.9	9.84	1.4	39
5	11.37	7.0	36.4	10.29	7.9	32.1	_	-	
7	14.12	5.3	19.4	_	_	-	_	-	
Health aides, except nursing		5.2	30.8	8.73	5.4	30.3	9.90	7.8	37
1		4.7	26.1	7.64	4.7	26.1	_	-	
2		7.8	32.6	9.36	7.7	32.8	_	-	
3		6.1	29.6	7.66	6.3	29.4	_	-	'
4		3.8	31.0	9.16	3.8	31.0	_	_	'
5 Nursing aides, orderlies and attendants		6.9 1.8	33.5	10.32 7.79	8.1 1.3	32.3	0.84	5.2	2
1		2.4	31.6 29.0	7.79 6.76	2.7	28.8	9.84	5.2	36
2		4.3	30.6	7.57	5.4	28.8	8.88	2.9	35
3		3.1	31.4	7.71	3.1	31.5	9.21	8.9	29
4		2.3	33.9	9.05	3.0	31.9	9.84	1.4	39
Cleaning and building service		2.1	35.0	8.36	2.4	32.7	11.58	2.2	39
1		2.4	29.9	7.05	2.6	28.9	8.18	6.8	38
2	8.89	2.5	37.2	8.34	3.7	35.9	9.41	3.4	38
3	9.63	3.8	38.4	8.50	3.3	37.4	10.71	3.2	39
4		4.5	39.2	10.64	7.6	38.4	12.06	3.5	40
5		3.6	39.6	11.13	3.8	40.0	13.24	3.9	39
7	18.12	1.4	40.0	_	-	-	_	-	
Supervisors, cleaning and building service	45.40	7.0	000	40.05		000	40.00	1 4 7	١ ,,
workers		7.3	39.3	12.05	6.3	38.8	18.32	1.7	39
5 Maids and housemen		5.4 2.1	38.8 34.4	10.63 7.13	5.6 2.2	40.0 34.4	_	_	'
1		3.0	33.2	6.73	3.1	33.0	_	_	Ι΄
2		2.8	34.4	7.53	2.8	34.4	_	_	[
Janitors and cleaners		2.2	34.4	8.19	2.7	31.5	10.35	2.4	39
1		2.8	29.2	7.15	3.0	27.8	8.25	6.9	38
2		3.1	37.9	8.89	5.5	36.9	9.41	3.4	38
3		4.3	38.2	8.74	4.9	36.9	10.71	3.2	39
4		4.8	39.8	10.90	8.8	39.6	12.11	3.6	40
5		4.5	40.0	11.50	4.9	40.0	13.13	7.5	40

Table 6. Occupations 1 and levels,2 West North Central: Mean hourly earnings3 and weekly hours, private industry and State and local government, National Compensation Survey, 4 1998-Continued

		Total		Priv	ate industry			e and local overnment	
Occupations and level	Hourly e	arnings	Mean	Hourly e	arnings	Mean	Hourly e	arnings	Mean
	Mean	Relative error ⁵ (percent)	weekly	Mean	Relative error ⁵ (percent)	weekly	Mean	Relative error ⁵ (percent)	weekly hours
Service –Continued Personal service	6.62 6.79 7.98 9.13 13.89 16.53 13.61 7.35 6.86 6.04 21.60 8.96 8.01 7.71 6.25 7.56 7.84 7.74 6.63 7.00 7.46	3.6 3.9 4.0 2.9 5.5 10.9 7.5 4.9 6.9 5.2 2.8 11.8 7.2 2.5 5.6 7.1 8.6 6.8 2.8 4.7 6.2 5.4	29.6 21.9 29.0 29.2 37.0 26.4 40.0 38.5 34.3 22.8 35.5 19.3 26.6 26.2 27.5 21.5 21.5 21.5 21.5 21.5 36.6 26.2 27.5 21.5 21.5 21.5 21.5 21.5 21.5 21.5 21	\$9.20 6.41 6.30 7.91 8.88 14.13 16.53 13.61 7.35 6.89 6.04 21.60 7.67 - 6.70 5.52 7.05 7.27 7.66 6.84	4.2 3.6 2.8 3.1 6.5 14.2 7.5 4.9 6.9 5.2 2.8 11.8 1.9 - 5.0 6.6 6.1 6.6 3.4 3.6	30.0 22.7 28.8 30.8 37.5 24.1 40.0 38.5 34.3 22.6 35.5 19.3 26.6 - 27.0 23.9 25.8 25.3 26.5 14.7 -	\$8.77 7.58 7.82 8.36 9.97 10.85 - 8.23 - 7.69 8.22 8.22	6.5 11.3 9.5 6.7 10.2 - - - 8.8 - 8.0 - 10.8 9.3 8.0	27.9 18.9 29.5 22.7 35.4 - - - 26.7 - 27.8 - 30.2 24.2 20.7 -
Service, n.e.c	6.90 6.92 7.86	4.0 6.3 8.4 3.3 5.2	29.8 30.7 23.0 30.5 35.0	8.05 6.54 6.41 7.86 10.33	4.3 4.2 2.4 3.3 5.7	29.2 30.5 21.8 30.7 34.2	10.15 - - - -	6.7 - - - -	33.6 - - - -

A classification system including about 480 individual occupations is used to cover all workers in the civilian economy. For more information, see Technical Note.
Each occupation for which data are collected in an establishment is evaluated based

NOTE: Dashes indicate that no data were reported or that data did not meet publication criteria, and n.e.c. means "not elsewhere classified." Overall occupational groups may include data for categories not shown separately.

² Each occupation for which data are collected in an establishment is evaluated based on 10 factors, including knowledge, complexity, work environment, etc. Points are assigned based on the occupation's rank within each factor. The points are summed to determine the overall level of the occupation. See the Technical Note for more information.
³ 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,

In this census division, collection was conducted between April 1998 and April 1999.
 The average reference period was September 1998.
 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 Technical Note.

Technical Note

The data in this bulletin are based on the National Compensation Survey (NCS) conducted by the Bureau of Labor Statistics throughout the year. The surveys are locality-based and cover establishments in private industry and State and local governments. Bulletins are issued for individual localities, when sufficient data meet publication standards. Agriculture, private households, and the Federal Government are excluded from the scope of the survey.

Survey scope. In the West North Central census division, the NCS studied 1,463 establishments with 50 or more workers, representing about 25,300 establishments within the scope of the survey. (See Table A.) The number of workers represented by the survey is shown in table B. 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 is usually at a single physical location. For State and local governments, an establishment is defined as all locations of a government entity.

Sampling frame. The list of establishments from which the survey sample was selected (sampling frame) was developed from the State unemployment insurance reports. The reference month for the public sector is June 1994. 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. The reference month for the private sector is March 1996.

Sample design and data collection. The sample for this survey was selected using a three stage design. The first stage consisted of the selection of areas. The nationwide NCS sample consists of 154 metropolitan and nonmetropolitan areas that represent the Nation's 326 metropolitan statistical areas and the remaining portions of the 50 States. Metropolitan areas are designated Metropolitan Statistical Areas (MSA) or Consolidated Metropolitan Statistical Areas (CMSA), as defined in 1994 by the Office of Management and Budget. Nonmetropolitan areas are counties that do not fit the metropolitan area definition.

The NCS locality areas that contribute to the West North Central census division are:

Clinton County, IA Des Moines County, IA Freeborn County, MN Goodhue County, MN Griggs County, ND Iowa City, IA MSA Kansas City, MO-KS MSA Lewis County, MO Lincoln, NE MSA Logan County, NE Madison County, NE Minneapolis-St. Paul, MN-WI MSA Seward County, NE Springfield, MO MSA St. Louis, MO-IL MSA Tama County, IA Ward County, ND

In the second stage, the sample of establishments was drawn by first stratifying the sampling frame by ownership and industry. The number of sample establishments allocated to each stratum is approximately proportional to the stratum employment. Each sampled establishment is selected within a stratum with a probability proportional to its employment. Use of this technique means that the larger an establishment's employment, the greater its chance of selection. Weights were applied to each establishment when the data were tabulated so that the establishment represents similar units (by industry and employment size) in the economy which were not selected for collection.

The third stage of sample selection was a probability sample of occupations within a sampled establishment. In the West North Central region, collection was conducted between April 1998 and April 1999 with an average reference period of September 1998. Additional information about the area sample and method of estimation is available in the *National Compensation Survey: Occupational Wages in the United States*, 1998, Bulletin 2529.

Occupational selection and classification. Identification of the occupations for which wage data were collected was a four-step process:

- Probability-proportional-to-size selection of establishment jobs
- Classification of jobs into occupations based on the Census of Population system
- 3. Characterization of jobs as full-time vs. part-time, union vs. nonunion, and time vs. incentive

¹ Establishments classified as employing between 50 and 99 workers may include establishments with fewer than 50 workers because staff reductions may have taken place between the time of sampling and the time of data collection.

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. Special procedures were developed for jobs for which a correct classification or level could not be determined.

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. As with the selection of establishments, the selection of a job was based on probability proportional to its size in 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.

In step three, certain other job characteristics of the chosen workers 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, depending on whether any part of pay was directly based on the actual production of the workers, rather than solely on hours worked. Finally, the worker was identified as being in a union or a nonunion job.

The fourth step in the job classification procedure was to determine the work level of each of the establishment's selected jobs, using a *generic leveling* process. This process, involving discussions between the Bureau's field economist and the respondent, ranks and compares all selected establishment occupations using 10 leveling factors. For more information on generic leveling and an example of how to use the criteria for leveling a job, see appendix C and appendix D at http://www.bls.gov/compub.htm or any of our published NCS locality bulletins. This website also has a link to the NCS job descriptions.

Data reliability. The data in this bulletin 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 the 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. Tables in this bulletin provide RSE data for indicated series.

The relative standard error can be used to calculate a "confidence interval" around a sample estimate. As an example, suppose the mean hourly earnings for all workers was \$15.09 per hour with a relative standard error of 0.6 percent for this estimate. At the 90-percent level, the confidence interval for this estimate is \$15.24 to \$14.94 (\$15.09 x 1.645 x 0.006 = \$0.149, rounded to \$0.15); (\$15.09 + .15 = \$15.24; \$15.09 - .15 = \$14.94). 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 also were not specifically measured, efforts were made to minimize nonsampling errors by the extensive training of field economists who gathered survey data by personal visit, computer editing of the data, and detailed data review.

Census area divisions. Data are tabulated by census divisions defined as follows: New England - Connecticut, Massachusetts, New Hampshire, Maine, Vermont, and Rhode Island; Middle Atlantic — New Jersey, New York, and Pennsylvania; East North Central – Illinois, Indiana, Michigan, Ohio, and Wisconsin; West North Central — Iowa, Kansas, Minnesota, Missouri, North Dakota, South Dakota, and Nebraska; South Atlantic — Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, and West Virginia; East South Central — Alabama, Kentucky, Mississippi, and Tennessee; West South Central — Arkansas, Louisiana, Oklahoma, and Texas; **Mountain** – Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, and Nevada; and Pacific - Washington, Oregon, California, Hawaii, and Alaska. Some census divisions include Consolidated Metropolitan Statistical Areas (CMSAs) and Metropolitan Statistical Areas (MSAs) that cross State lines.

Table A. Number of establishments represented by the survey and number studied by industry group and establishment employment size, West North Central, National Compensation Survey, 1998

Industry division	Number of establish- ments rep- resented ¹	Number of establishments studied						
		Total	50 - 99 workers	100 - 499 workers	500 - 999 workers	1000 - 2,499 workers	2,500 - 4,999 workers	5,000 o more workers
All	25,300	1.463	432	653	168	129	57	24
Private Industry	,	1,403	405	560	140	96	36	11
Goods-producing industries		358	87	173	58	21	13	6
Mining	′ ^	9	7	2] 30	21	13	"
Construction		41	20	18	_ 2	1		
Manufacturing		308	60	153	56	20	13	_ 6
Durable goods		179	30	89	36	11	9	"
Fabricated metal products, except machinery and	2,900	179	30	09	30		9	"
transportation equipment	600	30	9	18	1	1	1	_
Industrial and commercial machinery and computer	000	30	"	10	'	'	'	_
equipment	800	39	6	19	11	2	1	_
Electronic and electrical equipment		27	4	12	10	1	_ '	_
Transportation equipment		26	5	8	3	2	5	
Measuring, analyzing, and controlling instruments		17	2	8	3	2	1)
Nondurable goods		129	30	64	20	9	4	
Food and kindred products		42	11	20	6	5		^
Printing, publishing, and allied industries		38	10	19	5	1	2	4
Chemicals and allied products		18	2	9	3	3	1	_ '
Service-producing industries		890	318	387	82	75	23	5
Transportation and utilities		97	34	36	12	11	1	
Wholesale trade	,	54	24	18	9	3	_ '	_ `
Retail trade		206	106	86	11	2	1	_
Finance, insurance and real estate		74	24	23	8	13	5	4
Depository institutions		22	12	5	2	1	2	_ '
Insurance carriers		27	5	9	5	5	2	
Services		459	130	224	42	46	16	
Business services	,	92	28	47	8	8	1	_ '
Educational services		68	28	36	3	1		_
Health services		170	32	75	21	28	13	1
Hospitals	,	67	1	13	14	25	13	1
Engineering, accounting, research, management, and		"		.0	''			
related services	300	22	4	13	2	2	1	_
State and local government		215	27	93	28	33	21	13
Health services		24	3	9	3	4	3	2
Hospitals		14	1	2	3	3	3	

¹ Number of establishments represented by the survey rounded to the nearest 100. 2 Number of establishments represented by the survey is fewer than 50.

NOTE: Dashes indicate that no data were reported. Overall industry and industry groups may include data for categories not shown separately.

 $\label{thm:control} \mbox{Table B. Number of workers1 represented by the survey, by occupational group,2 West North Central, National Compensation Survey,3 1998}$

Occupational group	All industries	Private industry	State and local government	
All	5,096,600	3,942,200	1,154,400	
	4,746,500	3,595,100	1,151,500	
	2,713,700	1,899,600	814,100	
	2,363,600	1,552,400	811,200	
Professional specialty and technical Professional specialty occupations Technical occupations Executive, administrative, and managerial Sales Administrative support, including clerical	1,103,300	599,400	503,800	
	862,200	400,800	461,400	
	241,100	198,600	42,500	
	371,400	283,000	88,400	
	350,100	347,200	2,900	
	888,900	669,900	219,000	
Blue collar Precision production, craft, and repair Machine operators, assemblers, and inspectors Transportation and material moving Handlers, equipment cleaners, helpers, and laborers	1,502,500	1,395,100	107,300	
	418,000	374,100	43,900	
	479,200	479,200	-	
	231,700	192,400	39,300	
	373,500	349,500	24,100	
Service	880,500	647,500	232,900	

¹ Number of workers represented by the survey are rounded to the nearest 100. Estimates of the number of workers provide a description of size and composition of the labor force included in the survey. Estimates are not intended, however, for comparison with other statistical series to measure employment trends or levels. Both full-time and part-time workers were included in the survey.

2 A classification system including about 480 individual

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

occupations is used to cover all workers in the civilian economy. For more information, see Technical Note.

³ In this census division, collection was conducted between April 1998 and April 1999. The average reference period was September 1998.