Occupational Wages in the West North Central Census Division, 1997

Summary 00-2

This report provides estimates of occupational pay from the 1997 National Compensation Survey (NCS)in the West North Central census division. It highlights average (mean) hourly pay for workers in six areas.

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

Wages in the West North Central (WNC) census division averaged \$14.44 per hour during 1997. Workers in private industry in the WNC region averaged \$13.70 per hour, whereas pay of workers in State and local government averaged \$17.24. Nationwide pay of all workers covered by the survey was \$15.09 an hour.

NCS summary reports are published for each of the nine census regions: New England, Middle Atlantic, East North Central, West North Central, South Atlantic, East South Central, West South Central, Mountain, and Pacific. Data also are published for some individual localities. These summary reports are a new product of the National Compensation Survey and may be useful to NCS data users in localities where separate NCS studies are not published.

Table 1 in this summary provides an overview of average pay data for worker and establishment characteristics and geographic area by private industry and State and local government. For example, white-collar workers in private industry averaged \$16.53 per hour; blue-collar workers averaged \$12.36; and service workers averaged \$7.40. Corresponding averages in State and local government were \$19.25, \$13.38, and \$12.07. Generally, average hourly earnings for private industry workers were lower than 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. In State and local government, for example, professional specialty and technical occupations are proportionately more prevalent 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 WNC region averaged \$15.19 per

hour, whereas part-time workers averaged \$8.29. In private industry, full-time workers averaged \$14.47 an hour, and part-time workers averaged \$7.91. For workers in State and local government, average hourly pay was \$17.77 and \$10.59, respectively, for full- and part-time workers based on the employer's classification. NCS classifies employees as full or part time based on the employer's classification.

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 \$18.46. Workers in the smallest establishment-size category studied (50-99 employees) averaged \$11.73.

Table 2 shows that workers in metropolitan areas averaged \$15.40 per hour, more than the average pay for workers in nonmetropolitan areas, \$11.82. Table 2 also shows that, most of the time, regardless of employee or establishment characteristics, pay tends to be higher in metropolitan areas than 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 government are shown in tables 3, 4, and 5. These tables contain wage rates and mean weekly hours for the individual occupations and for major occupational groups. All registered nurses, for example, averaged \$17.78 per hour (table 3). Registered nurses in private industry averaged \$17.43 (table 4), whereas their counterparts in State and local government averaged \$18.95 per hour (table 5). Laborers, except construction, averaged \$9.19 in private industry and \$9.70 in State and local government. Janitors and cleaners, a service occupation, averaged \$7.84 in the private industry and \$10.24 in State and local government.

Earnings by occupational group and level are shown in table 6. Generally, the levels tend to show higher pay at higher work levels. The Bureau uses a generic leveling technique with 10 criteria to assign a level to an occupation. The Technical Note has more information on generic leveling and generic leveling criteria. Table A in the Technical Note shows

the number of establishments studied in the WNC census division by employment size; most companies were in the 100-499 worker size class. It also shows the number of establishments represented. Table B in the Technical Note shows

the number of workers represented by the surveys in the WNC 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 1997

		Total		Priv	ate industry	,	State and	local gover	nment
Worker and establishment characteristics,	Hourly ea	arnings		Hourly ea	arnings		Hourly e	arnings	
and geographic areas	Mean	Relative error ³ (percent)	Mean weekly hours	Mean	Relative error ³ (percent)	Mean weekly hours	Mean	Relative error ³ (percent)	Mean weekly hours
Total	\$14.44	1.8	36.3	\$13.70	2.2	36.2	\$17.24	0.8	36.8
Worker characteristics: ⁴									
White-collar occupations ⁵ Professional specialty and technical Executive, administrative, and	17.28 20.66	1.7	36.9 36.7	16.53 19.77	2.3 1.6	36.8 36.6	19.25 21.96	1.0	37.1 37.0
managerial Sales Administrative support Blue-collar occupations ⁵ Precision production, craft, and repair Machine operators, assemblers, and	24.97 13.15 10.49 12.43 14.52	1.8 8.0 2.3 2.1 5.2	41.0 31.5 37.3 38.3 39.9	25.01 13.16 10.23 12.36 14.43	2.4 8.0 2.7 2.2 5.6	41.3 31.5 37.5 38.5 39.9	24.82 7.31 11.31 13.38 15.38	2.1 14.6 1.6 1.8 2.0	39.5 21.1 36.5 36.5 40.0
inspectors	11.90 13.97	2.4 4.2	39.4 40.4	11.90 14.21	2.4 4.6	39.4 42.0	_ 12.44	- 2.7	- 32.5
helpers, and laborers Service occupations ⁵	9.44 8.67	2.3 1.4	34.0 31.2	9.32 7.40	2.5 1.3	33.9 29.8	11.03 12.07	3.9 1.5	36.5 35.7
Full timePart time	15.19 8.29	2.0 1.3	40.0 20.6	14.47 7.91	2.4 1.1	40.2 20.7	17.77 10.59	.7 3.0	39.5 20.0
Union Nonunion	15.71 14.09	1.1 2.3	37.2 36.1	14.77 13.47	2.0 2.7	37.3 35.9	17.43 17.13	1.3 .9	37.0 36.7
TimeIncentive	14.33 16.81	1.8 8.6	36.2 39.7	13.53 16.81	2.1 8.6	36.0 39.7	17.24 –	.8 -	36.8 -
Establishment characteristics:									
Goods producing Service producing	(6) (6)	(⁶)	(⁶)	14.75 13.16	3.5 2.0	39.6 34.6	(⁶)	(⁶)	(⁶)
50-99 workers ⁷ 100-499 workers 500-999 workers 1000-2499 workers 2500 workers or more	11.73 13.12 16.29 14.73 18.46	1.9 2.3 3.5 5.7 1.4	33.9 35.7 38.3 37.4 38.0	11.50 12.80 16.07 14.03 18.68	2.0 2.6 4.1 7.0 3.8	33.9 35.8 38.5 37.9 37.8	16.06 15.24 17.63 17.24 18.31	11.6 1.6 3.3 2.4 .8	33.9 35.2 36.7 35.8 38.2
Geographic areas:8									
Metropolitan Nonmetropolitan	15.40 11.82	2.2 3.7	36.3 36.2	14.71 11.11	2.6 3.8	36.1 36.5	17.81 15.24	.7 2.9	37.4 34.9
New England Middle Atlantic East North Central West North Central South Atlantic East South Central West South Central West South Central Mountain Pacific	16.96 17.42 15.45 14.44 13.73 11.88 13.82 14.04 16.88	1.8 1.5 .9 1.8 1.4 2.3 1.0 1.9	35.1 35.7 36.2 36.3 37.0 37.8 37.2 36.5 36.2	16.29 16.47 14.85 13.70 13.20 11.34 13.45 12.97 15.89	2.1 1.7 1.0 2.2 1.8 2.5 1.2 2.6 1.8	35.0 35.8 36.3 36.2 36.7 38.0 37.0 36.4 36.4	20.14 21.25 18.51 17.24 15.47 15.22 14.96 17.42 20.23	2.1 1.5 1.3 .8 1.4 1.7 1.3 1.9	35.2 35.5 35.8 36.8 37.9 36.9 37.8 36.5 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

are at least partially based on productivity payments such as piece rates, commissions, and production bonuses.

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

the number of workers, weighted by hours.

In this census division, collection was conducted between October 1996 and

April 1998. The average reference period was July 1997.

3 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.

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

A classification system including about 480 individual occupations is used to cover all workers in the civilian economy. See Technical Note for more information.
 Classification of establishments into goods-producing and service-producing industries applies to private industry only.

 Establishments classified with 50-99 workers may contain establishments with forest the 50 days to the staff and the staff an

with fewer than 50 due to staff reductions between survey sampling and collection.

8 Data are presented for metropolitan and nonmetropolitan area divisions as 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 1997

		Total		Metro	opolitan are	as	Nonme	etropolitan a	reas
Worker and establishment characteristics,	Hourly e	arnings		Hourly ea	arnings		Hourly e	arnings	
and geographic areas	Mean	Relative error ⁴ (percent)	Mean weekly hours	Mean	Relative error ⁴ (percent)	Mean weekly hours	Mean	Relative error ⁴ (percent)	Mean weekly hours
Total	\$14.44	1.8	36.3	\$15.40	2.2	36.3	\$11.82	3.7	36.2
Private Industry	13.70	2.2	36.2	14.71	2.6	36.1	11.11	3.8	36.5
State and local government	17.24	.8	36.8	17.81	.7	37.4	15.24	2.9	34.9
Worker characteristics:5									
White-collar occupations ⁶	17.28	1.7	36.9	18.05	2.2	37.1	14.30	3.8	36.2
Professional specialty and technical	20.66	1.1	36.7	21.19	1.4	36.8	18.71	1.5	36.7
Executive, administrative, and	20.00	'.'	30.7	21.13	1.4	30.0	10.71	1.5	30.7
managerial	24.97	1.8	41.0	25.45	2.2	41.1	22.07	6.2	39.9
Sales	13.15	8.0	31.5	13.93	9.2	31.2	9.73	8.0	32.9
Administrative support	10.49	2.3	37.3	11.17	2.9	37.8	9.73 8.31	4.0	35.7
Blue-collar occupations ⁶	12.43	2.3	38.3	13.30	1.0	38.4	10.87	3.3	38.2
Precision production, craft, and repair	12.43	5.2	38.3	15.82	1.0	39.6	10.87	9.7	38.2 40.5
	14.52	3.2	39.9	13.62	1.4	39.0	12.04	9.7	40.5
Machine operators, assemblers, and	11.90	2.4	39.4	12.10	4.1	39.6	11.62	1.9	39.2
inspectors		1		_	1		-		
Transportation and material moving	13.97	4.2	40.4	14.90	3.6	41.5	10.52	5.1	36.8
Handlers, equipment cleaners,	0.44		240	40.47	4.7	20.5	0.04	0.4	040
helpers, and laborers	9.44	2.3	34.0	10.17	1.7	33.5	8.21	2.4	34.9
Service occupations ⁶	8.67	1.4	31.2	8.83	2.0	30.9	8.31	3.0	32.1
Full time	15.19	2.0	40.0	16.25	2.3	40.2	12.30	4.5	39.7
Part time	8.29	1.3	20.6	8.53	1.6	20.6	7.58	1.4	20.5
Union	15.71	1.1	37.2	16.02	1.3	36.9	14.74	.9	38.1
Nonunion	14.09	2.3	36.1	15.22	2.9	36.2	11.11	4.2	35.8
Time	44.00	1.8	36.2	45.00	1.9	36.2	44.04	3.8	26.4
Incentive	14.33 16.81	8.6	39.7	15.28 17.78	9.7	39.3	11.84 10.55	13.2	36.1 42.6
Establishment characteristics:									
Goods producing ⁷	14.75	3.5	39.6	16.02	4.3	39.5	12.46	5.7	39.8
Service producing ⁷	13.16	2.0	34.6	14.14	2.2	34.7	10.08	4.1	34.3
50-99 workers ⁸	11.73	1.9	33.9	12.15	2.7	33.8	10.80	2.6	34.2
100-499 workers	13.12	2.3	35.7	13.84	3.2	35.3	11.94	4.7	36.3
500-999 workers	16.29	3.5	38.3	17.09	3.8	38.4	14.13	3.7	37.8
1000-2499 workers	14.73	5.7	37.4	16.06	3.6	37.3	9.43	10.0	37.9
2500 workers or more	18.46	1.4	38.0	18.46	1.4	38.0	-	-	-
Geographic areas: ⁹									
New England	16.96	1.8	35.1	17.42	1.8	35.2	13.75	5.3	34.0
Middle Atlantic	17.42	1.5	35.7	17.75	1.3	35.7	12.22	7.4	36.1
East North Central	15.45	.9	36.2	15.90	1.0	36.2	12.98	1.3	36.4
West North Central	14.44	1.8	36.3	15.40	2.2	36.3	11.82	3.7	36.2
South Atlantic	13.73	1.4	37.0	14.17	1.7	36.9	11.56	4.0	37.4
East South Central	11.88	2.3	37.8	13.60	1.6	37.0	10.22	3.7	38.7
West South Central	13.82	1.0	37.2	14.13	1.2	37.2	11.88	4.0	37.3
Mountain	14.04	1.9	36.5	14.17	2.4	36.4	13.51	2.4	36.6
Pacific	16.88	1.5	36.2	17.06	1.5	36.2	13.37	2.9	36.1

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 Metropolitan areas can be a Metropolitan Statistical Area or Consolidated

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.

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

7 Classification of establishments into goods-producing and service-producing industries applies to private industry poly.

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8 Establishments classified with 50-99 workers may contain establishments with fewer than 50 workers due to reduction in staff from the time of sampling to data collection.

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

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

Metropolitan areas can be a Metropolitan Statistical Area or Consolidated 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.

^{1994.} Nonmetropolitan areas are counties that do not lit the definitions above. For more information, see Technical Note.

3 In this census division, collection was conducted between October 1996 and April 1998. The average reference period was July 1997.

4 The relative standard error (RSE) is the standard error expressed as a

⁴ 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.

⁵ 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

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 1997

		Total			Full time		F	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)	Mean weekly hours
AII	\$14.44	1.8	36.3	\$15.19	2.0	40.0	\$8.29	1.3	20.6
All excluding sales	14.51	1.8	36.6	15.14	2.0	40.0	8.56	1.6	20.5
White collar	17.28 17.78	1.7 1.6	36.9 37.7	17.98 18.15	1.6 1.5	39.9 39.9	10.22 12.23	2.5 3.1	20.9 20.7
Professional specialty and technical	20.66	1.1	36.7	21.06	1.1	39.5	15.77	1.9	20.0
Professional specialty	22.57	1.0	36.8	22.88	1.0	39.5	18.05	2.0	18.5
Engineers, architects, and surveyors	26.75	5.6	41.1	26.75	5.6	41.1	_	_	_
Architects	25.40 28.45	7.7 6.2	40.2 40.2	25.40 28.45	7.7 6.2	40.2 40.2	_	-	
Civil engineers Electrical and electronic engineers	24.90	4.0	42.1	24.90	4.0	40.2	_	_	
Industrial engineers	28.70	15.9	40.3	28.70	15.9	40.3	_		
Mechanical engineers	23.09	8.4	41.5	23.09	8.4	41.5	_	_	_
Engineers, n.e.c.	25.06	3.6	42.1	25.06	3.6	42.1	_	_	_
Mathematical and computer scientists	23.48	2.6	40.2	23.48	2.6	40.2	_	_	_
Computer systems analysts and scientists	23.92	2.6	40.3	23.92	2.6	40.3	_	_	_
Operations and systems researchers and									
analysts	20.14	5.2	39.8	20.14	5.2	39.8	_	_	_
Natural scientists Chemists, except biochemists	18.92 21.58	3.5 11.6	40.2	18.90 21.58	3.5	40.2 41.7	_	_	_
Physical scientists, n.e.c.	25.38	6.1	41.7 40.3	25.38	11.6	40.3	_	-	_
Health related	20.37	2.7	34.0	20.58	3.2	39.5	19.39	2.1	20.5
Physicians	37.97	11.1	40.1	37.49	11.6	41.2	61.76	7.4	16.9
Registered nurses	17.78	1.3	33.0	17.61	1.5	39.2	18.40	1.8	20.8
Pharmacists	23.54	3.6	31.7	24.24	3.4	40.2	-	_	
Dietitians	14.76	4.8	30.7	14.70	4.8	39.6	_	_	_
Respiratory therapists	15.82	7.4	38.8	15.82	7.4	39.4	_	_	_
Occupational therapists	20.46	8.0	32.3	18.34	2.9	39.4	25.37	11.3	22.8
Physical therapists	21.02	8.3	35.5	20.84	8.8	39.2	_	_	-
Speech therapists	24.62	2.7	33.9	24.76	2.6	36.5	_	-	-
Therapists, n.e.c.	13.14	2.5	39.5	13.13	2.5	40.0	_	-	-
Physicians' assistants	23.69	8.6	39.7	23.69	8.6	39.7	-		
Teachers, college and university	32.99	4.1	35.5	33.83	3.9	39.3	16.95	8.4	12.5
Social science teachers, n.e.c.	32.01	7.9	39.6 39.4	- 22 F1	12.0	39.9	_	_	_
Mathematical science teachers	22.47 29.67	13.8 15.7	39.4	22.51 29.69	13.9 15.7	40.1	_	_	_
Health specialities teachers	22.75	5.7	36.4	22.89	5.8	40.1	17.74	6.1	8.8
Business, commerce, and marketing teachers	29.01	8.4	30.9	29.89	8.9	37.6	-	0.1	
Art, drama, and music teachers	28.45	6.6	35.4	30.31	3.9	39.8	16.34	7.5	20.4
Education teachers	21.01	3.7	25.5	_	_	-	-	_	
English teachers	26.61	8.0	26.1	_	_	_	_	_	_
Trade and industrial teachers	25.61	.9	36.8	25.63	.9	37.2	_	-	-
Teachers, post secondary, subject not specified	23.07	12.6	30.7	24.59	13.3	38.9	15.36	15.1	14.8
Teachers, post secondary, n.e.c	33.70	6.3	38.6	33.98	5.7	39.6	17.00	20.7	14.9
Teachers, except college and university	23.44	2.3	34.9	23.68	2.4	37.4	16.61	5.9	12.2
Prekindergarten and kindergarten	20.04	10.9	35.2	20.58	11.2	37.3			
Elementary school teachers	24.59	2.4	36.9	24.60	2.5	36.9	19.07	1.3	21.5
Secondary school teachers	24.72	2.8	36.0	24.56	2.8	37.5	29.64	11.5	16.3
Teachers, special education	24.55	3.2 5.4	37.0	24.62	3.3	37.5	13.85	9.5	13.3
Teachers, n.e.c	22.26 8.94	4.0	32.5 8.5	23.08	5.0	37.8	8.94	4.0	8.5
Vocational and educational counselors	16.08	5.7	37.3	16.03	5.9	39.7	-		
Librarians, archivists, and curators	20.26	5.8	37.4	20.34	5.8	38.0	14.38	8.6	18.0
Librarians	22.30	4.6	37.0	22.43	4.6	37.6	14.38	8.6	18.0
Social scientists and urban planners	15.78	5.0	39.9	15.73	5.1	40.2		-	-
Economists	20.68	13.7	40.6	20.68	13.7	40.6	-	-	_
Psychologists	20.28	6.8	39.4	20.49	6.9	40.1	_	-	-
Social, recreation, and religious workers	14.02	2.6	37.5	14.14	2.9	39.9	12.76	7.0	22.9
Social workers	14.00	2.7	37.6	14.11	2.9	39.8	12.71	7.6	22.7
Recreation workers	11.74	11.4	37.3	-	_	-	_	-	-
Lawyers and judges	26.49	4.7	42.6	26.71	4.8	44.2	_	-	-
Lawyers	25.93	5.2	42.7	26.14	5.2	44.4	_	-	-
Writers, authors, entertainers, athletes, and	47.00	4.0	202	10 10	4.0	40.0	12.00	10.0	24.0
professionals, n.e.c.	17.83	4.0	38.2	18.13	4.2	40.2	13.00	10.2	21.2

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 1997–Continued

		Total			Full time		I	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 week hou
White collar –Continued									
Professional specialty and technical –Continued Professional specialty –Continued									
Writers, authors, entertainers, athletes, and professionals, n.e.c. –Continued									
Technical writers	\$18.17	6.2	39.5	\$18.24	6.3	40.0	_	-	-
Designers	16.98	6.3	39.7	17.08	6.2	40.2	_	-	-
Actors and directors	22.43	36.4	38.6	_	-	_	_	_	_
Painters, sculptors, craft artists, and artist printmakers	14.59	8.6	39.5	15.00	8.9	40.4	_	_	١.
Editors and reporters	17.44	8.2	38.3	17.92	9.8	40.1	_	_	_ ا
Public relations specialists	12.26	8.1	39.4	12.13	7.8	40.4	_	_	-
Athletes	18.78	28.1	27.7	20.49	34.0	40.0	\$12.26	26.0	12
Professional, n.e.c.	24.36	7.7	40.0	24.36	7.7	40.0	_	-	-
Technical Clinical laboratory technologists and	14.67	2.5	36.5	15.04	2.8	39.4	11.74	2.8	23
technicians	13.24	2.4	37.6	13.22	2.5	39.9	13.46	6.6	22
Health record technologists and technicians Radiological technicians	9.60 15.66	1.5 1.9	34.3 32.9	9.45 16.08	1.1 2.4	36.0 39.6	- 13.91	2.0	19
Licensed practical nurses	11.13	1.7	34.2	11.09	1.8	39.5	11.26	3.7	23
Health technologists and technicians, n.e.c	11.47	2.2	35.0	11.77	4.6	40.0	10.41	4.8	24
Electrical and electronic technicians	17.63	7.1	40.2	17.63	7.1	40.2	_	-	
Mechanical engineering technicians	16.51	9.0	39.9	_	-	-	_	-	-
Engineering technicians, n.e.c.	15.68	3.5	39.8	15.70	3.5	39.9	_	-	-
Drafters	15.27	4.8	38.6	15.31	5.3	39.9	_	-	-
Chemical technicians	14.89 13.00	6.8 4.6	38.5 39.3	14.99 12.97	7.2 4.6	40.0 40.0	_	_	
Science technicians, n.e.c	47.89	11.4	20.2	47.89	11.4	20.2	_	-	
Computer programmers	19.06	3.4	39.7	19.16	3.4	40.3	_	_	
Legal assistants	17.27	4.5 8.2	38.3	17.42	4.4	39.2	_ 10.15	_	21
Technical and related, n.e.c.	16.01		36.4	16.56	9.1	40.5	12.15	5.2	
Executive, administrative, and managerial	24.97 28.34	1.8 2.3	41.0 41.3	25.01 28.38	1.8 2.4	41.3 41.7	17.24	15.1 29.5	16
Executives, administrators, and managers Legislators	26.3 4 9.11	13.7	16.6	20.30	2.4	41.7	17.33	29.5	14
Administrators and officials, public									
administration	22.44	3.4	40.8	22.40	3.4	41.0	_	-	-
Financial managers	30.59	5.9	41.0	30.52	5.9	41.1	_	_	-
Personnel and labor relations managers Purchasing managers	23.86 26.41	11.1 12.2	42.8 42.8	23.86 26.41	11.1 12.2	42.8 42.8	_	-	[
Managers, marketing, advertising, and public	20.71	12.2	72.0	20.41	12.2	42.0			
relations	31.51	3.9	41.2	31.51	3.9	41.2	_	_	
Administrators, education and related fields	26.01	3.7	40.0	26.12	3.6	40.2	_	-	-
Managers, medicine and health	29.53	14.5	40.8	29.53	14.5	40.8	_	-	-
Managers, food servicing and lodging	44.60	44.4	400	45.04	11.0	44.2			
establishments Managers, properties and real estate	14.63 18.80	9.0	42.2 39.7	15.01 18.80	11.6 9.0	44.3 39.7	_	_	-
Managers, service organizations, n.e.c	21.27	4.6	41.6	21.27	4.6	41.6	_	-]
Managers and administrators, n.e.c.	29.61	3.8	42.5	29.61	3.8	42.5	_	_	١.
Management related	19.19	1.7	40.3	19.20	1.7	40.6	17.13	6.8	19
Accountants and auditors	18.33	4.9	39.6	18.34	5.0	40.3	_	-	-
Underwriters	17.63	8.9	39.9	17.63	8.9	39.9	-	-	-
Other financial officers	21.58	6.0	41.4	21.58	6.0	41.4	_	-	-
Management analysts Personnel, training, and labor relations	20.92	7.0	40.5	20.92	7.0	40.6	_	_	-
specialists	18.91	2.8	39.6	18.94	2.8	39.9	-	-	-
Buyers, wholesale and retail trade, except farm	00.07		,, ,	00.07		44 7			
products Purchasing agents and buyers, n.e.c	20.37 20.35	9.7 8.4	41.7 41.1	20.37 20.35	9.7	41.7 41.1	_	_	-
Construction inspectors	20.35 18.48	11.1	40.0	20.35 18.48	8.4 11.1	40.0	_	I -	
Inspectors and compliance officers, except							_		
Construction	17.12	5.5	40.4	17.12	5.5	40.4	_	-	-
Management related, n.e.c.	18.27	4.2	40.0	18.28	4.2	40.3	_	_	-

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 1997–Continued

		Total			Full time		F	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)	Mea week hou
White collar –Continued									
Sales	\$13.15	8.0	31.5	\$16.09	9.1	40.6	\$6.95	3.9	21.
Supervisors, sales	16.83	5.2	39.8	16.91	5.5	41.0	-	-	
Insurance sales	16.42	19.4	30.5	18.68	15.0	36.7	_	_	-
Advertising and related sales	24.04	6.1	38.8	24.91	4.9	40.3	_	_	-
Sales, other business services	17.68	25.2	31.0	25.24	13.0	41.0	_	_	-
Sales engineers	21.98	8.1	40.3	21.98	8.1	40.3	_	-	_
Sales representatives, mining, manufacturing, and wholesale	22.51	7.9	41.3	22.76	7.8	41.5	_	_	_
Sales workers, motor vehicles and boats	15.15	6.4	44.3	15.32	6.7	44.7	_	_	
Sales workers, apparel	-	_	-	8.43	3.4	36.9	_	_	_
Sales workers, furniture and home furnishings	11.38	32.9	26.5	_	-	-	_	_	-
Sales workers, hardware and building supplies	15.04	26.2	35.1	16.74	22.8	40.1	-	_	-
Sales workers, parts	11.71	7.1	41.2	11.71	7.1	41.2			
Sales workers, other commodities	8.22	3.1	30.0	8.82	3.9	40.8	7.23	1.6	20
Sales counter clerks	7.22	3.2	27.1	8.30	4.6	38.5	6.33	2.8	21
Cashiers Demonstrators, promoters, and models, sales	6.77 9.25	2.0 16.9	26.2 22.4	7.53 11.07	2.3 15.9	39.0 40.0	6.16 6.98	1.0 6.6	14
Sales support, n.e.c.	10.79	5.2	37.3	11.25	6.0	40.2	7.17	11.6	23
Administrative support, including clerical	10.49	2.3	37.3	10.70	2.3	39.7	7.99	2.1	21
Supervisors, general office	14.56	3.9	40.7	14.56	3.9	40.7	7.55		-
Supervisors, financial records processing	14.81	5.4	40.7	14.81	5.4	40.6	_	_	-
Supervisors, distribution, scheduling, and									
adjusting clerks	14.35	4.3	40.0	14.35	4.3	40.0	_	_	-
Computer operators	12.18 9.15	8.4 4.0	40.2 39.7	12.18 9.15	8.4 4.0	40.2 39.7	_	_	-
Peripheral equipment operators Secretaries	12.04	1.8	39.7	12.10	1.8	39.7	10.33	4.3	22
Stenographers	11.06	5.3	37.1	11.53	3.9	39.5	10.55		-
Typists	10.20	3.9	39.6	10.21	4.0	39.8	_	_	-
Interviewers	8.31	5.1	32.8	8.08	5.2	36.9	9.22	15.0	22
Hotel clerks	6.78	1.9	37.6	6.78	1.9	37.6	_	-	-
Receptionists	7.96	3.6	32.9	8.42	3.8	39.7	6.98	2.5	24
Information clerks, n.e.c.	9.83	8.6	35.0	9.65	10.0	40.0	11.09	7.2	18
Classified ad clerks Order clerks	7.53 11.49	6.9 9.5	34.7 38.4	- 11.62	9.8	39.7	- 8.84	7.5	23
Personnel clerks, except payroll and	11.43	9.5	30.4	11.02	9.0	39.1	0.04	7.5	20
timekeeping	10.18	3.3	37.8	10.19	3.3	37.9	_	_	_
Library clerks	9.04	4.0	26.4	9.60	3.1	38.9	8.45	8.4	19
File clerks	8.00	2.6	38.1	7.94	2.2	39.8	_	-	-
Records clerks, n.e.c.	8.81	3.7	38.1	8.92	3.8	39.7	7.32	4.8	23
Bookkeepers, accounting and auditing clerks	10.27	2.4	37.4	10.38	2.4	39.8	9.00	3.8	22
Payroll and timekeeping clerks	11.94 10.55	8.8 5.8	39.8 37.3	11.94 10.70	8.8 6.2	39.8 39.6	_	_	
Billing clerks Cost and rate clerks	12.29	8.9	38.8	12.29	8.9	38.8		-	
Mail preparing and paper handling machine	12.23	0.9	50.0	12.23	0.3	35.0	_		
operators	7.56	3.6	28.2	-	-	-	_	-	-
Office machine operators, n.e.c.	6.42	7.7	34.8	-	-	-	_	-	-
Telephone operators	11.87	9.0	34.6	12.53	8.5	39.7	_	_	-
Mail clerks, except postal service Messengers	7.08 7.62	12.2 4.7	37.3 30.7	6.75 -	12.8	40.0		_	-
Dispatchers	11.86	7.2	39.3	_ 11.91	7.2	40.1	l -	I -	
Production coordinators	14.31	4.0	38.5	14.55	4.2	40.1	_	_	-
Traffic, shipping and receiving clerks	9.60	4.6	38.9	9.63	4.7	39.5	_	_	-
Stock and inventory clerks	9.37	4.4	38.0	9.45	4.6	39.9	7.78	4.3	19
Weighers, measurers, checkers, and samplers	13.75	18.3	24.8	14.56	17.5	40.0	_	_	-
Expeditors Material recording, scheduling, and distribution	14.38	8.5	36.7	14.87	8.5	40.0	_	_	-
clerks, n.e.c	10.67	10.4	36.1	10.93	10.7	40.0	_	_	-
investigators	13.32	5.5	38.0	13.48	5.5	38.9	_	_	-
Investigators and adjusters, except insurance	10.18	4.0	39.0	10.28	3.9	40.0	_	-	-
Eligibility clerks, social welfare	12.10	4.6	39.2	12.15	4.6	39.8	_	-	-

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 1997–Continued

		Total			Full time		I	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 hours
White collar -Continued									
Administrative support, including clerical									
-Continued									
Bill and account collectors	\$9.52	9.0	40.0	\$9.52	9.0	40.0		-	-
General office clerks	10.34	2.5	36.6	10.64	2.5	39.8	\$7.58	3.7	21.2
Bank tellers	8.02	4.4	35.9	8.12	4.7	40.0	7.23	9.6	19.
Proofreaders	9.68	5.8	29.7	-	_	-	_	-	-
Data entry keyers	9.06	2.6	38.2	9.10	2.7	39.9	8.41	8.9	21.0
Statistical clerks	9.39	6.9	37.1	9.46	7.9	39.7	_	-	-
Teachers' aides	8.24	3.5	29.0	8.37	5.0	35.1	8.02	3.9	22.
Administrative support, n.e.c	9.90	2.2	37.2	9.98	2.3	40.0	8.35	8.7	15.8
Blue collar	12.43	2.1	38.3	12.75	2.2	40.4	7.38	2.4	21.1
Desciolar mandration, seeks and seeks	44.50		000	44.00		400	7.05		
Precision production, craft, and repair	14.52	5.2	39.9	14.60	5.3	40.3	7.95	6.4	21.7
Supervisors, mechanics and repairers	18.89	8.3	43.1	18.89	8.3	43.1	-	-	-
Automobile mechanics	14.24	12.5	40.1	14.24	12.5	40.1	_	-	-
Automobile mechanic apprentices	12.26	16.5	39.3	_	_	-	_	-	-
Bus, truck, and stationary engine mechanics	13.66	3.2	40.7	13.59	3.3	40.7	_	-	-
Automobile body and related repairers	13.29	3.9	41.0	13.29	3.9	41.0	_	-	-
Heavy equipment mechanics	16.64	2.7	40.3	16.64	2.7	40.3	_	-	-
Industrial machinery repairers	13.52	6.0	39.7	13.52	6.0	39.7	_	-	-
Electronic repairers, communications and									
industrial equipment	15.65	6.3	40.0	15.65	6.3	40.0	_	_	-
Data processing equipment repairers	12.53	9.3	35.3	13.06	11.7	40.0	_	-	-
Heating, air conditioning, and refrigeration	40.00		000	40.00		000			
mechanics	13.63	7.1	39.8	13.63	7.1	39.8	_	-	-
Millwrights	16.99	11.0	40.0	16.99	11.0	40.0	_	-	_
Mechanics and repairers, n.e.c Supervisors, plumbers, pipefitters, and	14.99	1.8	39.8	15.03	1.8	40.0	-	_	-
steamfitters	25.19	3.1	40.0	25.19	3.1	40.0	_	-	-
Supervisors, construction trades, n.e.c	17.79	3.0	41.0	17.79	3.0	41.0	_	-	-
Carpenters	18.72	5.6	39.8	18.68	5.7	40.0	_	-	-
Electricians	17.55	3.8	40.0	17.55	3.8	40.0	_	-	-
Plumbers, pipefitters and steamfitters	19.08	13.0	40.0	19.08	13.0	40.0	_	-	-
Structural metal workers	15.27	13.0	40.0	15.27	13.0	40.0	_	-	-
Construction trades, n.e.c.	13.43	2.3	39.6	13.45	2.3	40.1	_	-	-
Supervisors, production	16.15	6.7	41.1	16.15	6.7	41.1	_	-	-
Tool and die makers	19.53	3.4	36.7	19.72	3.6	40.4	_	-	-
Precision assemblers, metal	15.82	13.2	40.0	15.82	13.2	40.0	_	-	-
Machinists	17.04	5.3	41.0	17.04	5.3	41.0	_	-	-
Sheet metal workers	18.82	5.2	39.9	18.82	5.2	39.9	_	-	-
Electrical and electronic equipment assemblers	8.02	11.3	36.4	8.28	10.7	40.0	_	_	-
Miscellaneous precision workers, n.e.c	13.09	7.4	40.0	13.09	7.4	40.0	_	_	-
Bakers	7.72	4.0	34.2	7.98	2.9	40.0	_	_	_
Inspectors, testers, and graders	14.71	4.7	40.5	14.71	4.7	40.5	_	_	-
Water and sewer treatment plant operators	17.10	1.1	40.0	17.10	1.1	40.0	_	_	_
Stationary engineers	16.37	4.3	40.1	16.37	4.3	40.1	-	-	-
Machine operators, assemblers, and inspectors	11.90	2.4	39.4	11.96	2.5	39.9	7.67	5.7	22.
Punching and stamping press operators	11.15	4.3	39.2	11.21	4.1	40.0	-	-	-
Drilling and boring machine operators Grinding, abrading, buffing, and polishing	10.92	8.3	40.0	10.92	8.3	40.0	_	-	-
machine operators	10.39	9.6	40.0	10.39	9.6	40.0	_	_	l _
Numerical control machine operators	13.43	8.5	40.0	13.43	8.5	40.0	_	_	_
Fabricating machine operators, n.e.c.	10.73	3.5	40.0	10.73	3.5	40.0	_	_	_
Molding and casting machine operators	11.08	5.3	39.6	11.10	5.3	40.0	_	_	-
Metal plating machine operators	13.87	5.1	40.0	13.87	5.1	40.0	_	_	l _
Sawing machine operators	12.03	11.0	40.0	12.03	11.0	40.0	_	_	-
Printing press operators	16.12	4.6	39.1	16.12	4.6	39.1	_	_	_
Photoengravers and lithographers	14.79	8.3	39.0	14.79	8.3	39.0	_	-	
Laundering and dry cleaning machine operators	6.83	4.2	36.5	6.83	4.7	39.7	6.85	7.5	23.
Cementing and gluing machine operators	11.46	7.7	40.0	11.46	7.7	40.0	- 0.00	- 7.5	23.
Johnshing and graing machine operators	11.40	'.'	70.0	11.40	'.'	70.0	-	I -	-

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 1997–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									
Packaging and filling machine operators Extruding and forming machine operators	\$12.26	4.4	39.6	\$12.29	4.4	40.0	_	_	-
Mixing and blending machine operators	8.37 12.34	8.0 6.7	38.1 40.0	8.37 12.34	8.0 6.7	38.1 40.0	_	-	-
Painting and paint spraying machine operators	13.88	5.0	40.0	13.88	5.0	40.0	_	_	_
Folding machine operators	10.86	5.4	40.0	10.86	5.4	40.0	_	_	-
Slicing and cutting machine operators	11.14	8.0	38.3	11.61	6.9	39.9	_	_	-
Photographic process machine operators	8.84	15.9	38.9	_	-	-	_	_	-
Miscellaneous machine operators, n.e.c	12.83	3.5	39.5	12.90	3.6	39.8	\$8.22	5.3	28
Welders and cutters	12.67	6.6	40.0	12.67	6.6	40.0	-	-	-
Assemblers	11.93	4.7	39.0	12.06	4.8	39.9	_	-	-
Miscellaneous hand working, n.e.c.	10.31 11.68	4.9 4.7	40.0 38.6	10.31 11.80	4.9 4.2	40.0 40.2	_	_	
Production inspectors, checkers and examiners Production testers	13.60	7.0	40.0	13.60	7.0	40.2	_	-	
1 Toddolloff toolofo	10.00	'	10.0	10.00	'	10.0			
Transportation and material moving	13.97	4.2	40.4	14.32	4.1	43.4	9.60	7.5	21
Supervisors, motor vehicle operators	16.05	24.8	41.3	16.05	24.8	41.3	_	-	-
Truck drivers	14.87	3.2	47.3	14.92	3.2	48.6	13.02	11.0	22
Driver-sales workers	10.75	15.2	35.9	11.86	11.5	42.5	_	_	-
Bus drivers	11.74	4.9	26.8	13.18	6.5	34.9	10.05	6.6	21
Taxicab drivers and chauffeurs	8.40 6.44	5.7 4.9	31.6 34.5	- 6.53	6.0	39.2	- 6.04	5.2	22
Motor transportation, n.e.c	18.04	4.9	40.7	6.53 18.04	4.1	40.7	-	5.2	22
Operating engineers	15.24	4.6	40.0	15.24	4.6	40.0	_	_	
Excavating and loading machine operators	18.33	9.2	40.0	18.33	9.2	40.0	_	_	-
Grader, dozer, and scrapper operators	11.07	7.7	40.0	11.07	7.7	40.0	_	_	-
Industrial truck and tractor equipment operators	12.19	1.7	39.4	12.21	1.8	39.9	-	-	-
Miscellaneous material moving equipment operators, n.e.c.	12.71	11.8	39.8	12.73	11.9	40.0	_	_	-
Handlers, equipment cleaners, helpers, and									
laborers	9.44	2.3	34.0	10.04	2.1	39.6	6.70	3.7	20
Groundskeepers and gardeners, except farm Supervisors, handlers, equipment cleaners, and	10.31	4.7	34.3	10.74	5.2	40.0	8.09	16.9	19.
laborers, n.e.c.	12.69	5.8	40.6	12.69	5.8	40.6	_	_	-
Helpers, mechanics and repairers	7.49	11.8	39.5	=		-	-	-	-
Construction laborers	9.57	15.4	39.8	9.54	15.4	39.9	_	-	-
Production helpers Stock handlers and baggers	10.15 8.09	3.2 5.4	39.5 27.5	10.24 10.19	3.2	40.1 40.0	- 5.99	3.5	21
Machine feeders and offbearers	10.08	9.0	36.6	10.19	10.0	39.2	5.99	3.5	21
Freight, stock, and material handlers, n.e.c	11.02	6.1	30.9	12.57	6.2	38.6	7.21	2.9	20
Garage and service station related	8.36	14.1	32.7	_	_	-	_	_	
Vehicle washers and equipment cleaners	8.02	11.0	39.0	8.00	10.5	40.0	_	-	-
Hand packers and packagers	8.57	6.9	36.8	8.73	7.6	39.5	7.30	9.7	24
Laborers, except construction, n.e.c	9.24	4.1	34.9	9.51	4.7	39.2	6.97	5.9	18
Service	8.67	1.4	31.2	9.49	2.0	39.4	6.45	1.6	20
Protective service	13.73	2.3	39.0	14.11	2.4	41.4	7.48	11.3	19
Supervisors, firefighters and fire prevention	15.52	8.3	50.0	15.52	8.3	50.0	-	-	-
Supervisors, police and detectives	21.94	2.9	40.0	21.94	2.9	40.0	-	-	-
Supervisors, guards Firefighting	16.41 12.32	12.6 2.6	38.7 47.1	16.26 12.37	13.0 2.6	40.0 49.6	_	_	
Police and detectives, public service	16.76	3.1	40.0	16.78	3.1	49.6	_	_	
Sheriffs, bailiffs, and other law enforcement	. 3.7 0		.5.5	. 5.7 0	"				
officers	14.89	3.4	37.7	15.12	3.5	40.0	-	-	-
Correctional institution officers	12.91	4.6	39.2	12.96	4.6	39.9	-	-	-
Guards and police, except public service	8.35	10.2	35.2	8.72	8.6	39.9	_	_	-
Protective service, n.e.c.	7.18	12.1	27.7	7.74	15.2	39.2	6.37	6.5	19
Food service	6.77	2.2	27.5	7.66	1.8	38.7	5.55	1.6	19.
Supervisors, food preparation and service	9.95	2.5	37.0	10.36	3.6	40.3	7.59	2.2	25

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 1997-Continued

		Total		F	full time		F	Part time	
0 " 1	Hourly e	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
Service –Continued									
Food service –Continued									
Bartenders	\$6.20	5.0	29.3	\$6.72	3.0	40.0	\$5.46	13.9	21.3
Waiters and waitresses	3.97	9.0	25.2	4.46	13.0	38.5	3.58	6.1	19.7
Cooks	8.22	2.0	33.7	8.51	2.5	38.9	7.21	2.2	23.0
Food counter, fountain, and related	5.89	3.8	23.0	6.64	9.3	37.2	5.66	2.7	20.5
Kitchen workers, food preparation	7.10	2.9	27.5	7.25	2.1	39.6	6.94	5.1	20.8
Waiters'/Waitresses' assistants	5.42	6.1	26.3	6.00	9.1	38.9	4.88	7.2	20.1
Food preparation, n.e.c.	6.50	2.7	23.5	7.11	3.1	36.9	5.85	2.6	17.1
Health service	8.01	1.6	30.9	8.16	2.1	39.1	7.68	1.5	20.7
Health aides, except nursing	8.89	4.7	30.2	9.04	4.8	38.2	8.60	9.5	21.8
Nursing aides, orderlies and attendants	7.87	1.8	31.1	8.03	2.4	39.3	7.48	1.5	20.7
Cleaning and building service	9.07	2.4	34.3	9.47	2.8	39.4	7.00	2.7	20.7
Supervisors, cleaning and building service									
workers	13.56	7.3	38.7	13.75	7.1	40.1	_	_	-
Maids and housemen	6.59	2.0	34.3	6.51	2.2	38.5	7.05	4.5	20.8
Janitors and cleaners	8.80	2.6	33.7	9.22	2.9	39.4	6.95	3.1	20.7
Personal service	8.03	1.9	30.3	8.56	3.1	38.6	6.69	3.1	19.6
Supervisors, personal service	12.25	14.0	34.7	13.49	7.2	40.9	_	_	_
Attendants, amusement, and recreation									
facilities	7.36	4.4	37.3	7.55	3.5	40.0	6.18	4.3	26.4
Ushers	5.68	5.3	10.7	_	-	-	5.68	5.3	10.7
Welfare service aides	7.75	7.8	24.7	7.89	11.4	36.3	7.60	6.9	18.1
Early childhood teachers' assistants	7.30	5.3	26.7	7.63	4.0	38.3	7.10	8.3	22.4
Child care workers, n.e.c	7.84	3.4	26.9	8.26	4.2	39.6	6.91	5.0	15.7
Service, n.e.c.	7.61	3.7	27.3	8.18	3.9	39.4	6.09	3.5	15.0

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 bours.

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 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 October 1996 and April

^{1998.} The average reference period was July 1997.
A classification system including about 480 individual occupations is used to cover all

workers in the civilian economy. For more information, see Technical Note.

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.

		Total			Full time		I	Part time	
	Hourly 6	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
	\$13.70	2.2	36.2	\$14.47	2.4	40.2	\$7.91	1.1	20.7
All excluding sales	13.74	2.2	36.6	14.37	2.4	40.2	8.14	1.5	20.6
White collar	16.53 17.12	2.3 2.1	36.8 37.9	17.32 17.47	2.2 2.1	40.3 40.2	9.78 12.15	2.3 3.3	21.2 21.1
Professional specialty and technical	19.77	1.6	36.6	20.23	1.8	40.0	15.50	1.9	20.4
Professional specialty	22.16	1.5	36.7	22.55	1.5	40.3	18.20	2.0	19.1
Engineers, architects, and surveyors	27.17	5.9	41.2	27.17	5.9	41.2	_	-	-
Civil engineers	28.57	7.4	40.4	28.57	7.4	40.4	_	-	-
Electrical and electronic engineers	24.72	4.3	42.3	24.72	4.3	42.3	_	-	-
Industrial engineers	28.85	16.0	40.3	28.85	16.0	40.3	_	_	-
Mechanical engineers	22.78 26.03	8.5 3.7	41.6 42.5	22.78 26.03	8.5 3.7	41.6 42.5	_	_	-
Engineers, n.e.c Mathematical and computer scientists	24.60	2.8	42.5	24.60	2.8	42.5	_	_	-
Computer systems analysts and scientists	25.27	2.7	40.4	25.27	2.7	40.4	_	_	_
Operations and systems researchers and	20.33	4.7	39.9	20.33	4.7	39.9	_	_	
analysts Natural scientists	20.33	8.1	40.4	20.33	8.2	40.7	_		-
Chemists, except biochemists	21.58	11.6	41.7	21.58	11.6	41.7	_	1 _	_
Physical scientists, n.e.c.	27.42	6.6	40.0	27.42	6.6	40.0	_	l _	l _
Biological and life scientists	22.72	12.0	40.0	22.72	12.0	40.0	_	l _	_
Health related	20.78	3.5	32.8	21.23	4.1	39.5	19.11	2.1	20.
Physicians	59.42	9.9	40.7	59.45	10.1	42.8	_	_	_
Registered nurses	17.43	1.7	32.0	17.17	2.1	39.1	18.25	2.0	20.
Pharmacists	23.79	4.4	30.3	24.86	4.2	40.3	_		_
Dietitians	14.57	5.4	32.2	14.57	5.6	39.5	_	-	-
Respiratory therapists	15.82	7.4	38.8	15.82	7.4	39.4	_	-	-
Occupational therapists	21.43	11.3	29.8	18.07	2.0	39.6	_	-	-
Physical therapists	20.98	8.7	35.7	20.96	9.1	39.2	_	-	-
Therapists, n.e.c.	13.65	4.8	40.0	13.65	4.8	40.0	_	-	-
Physicians' assistants	23.51	12.7	39.5	23.51	12.7	39.5			-
Teachers, college and university	24.61	5.9	28.1	25.81	7.8	38.5	16.70	6.3	10.
Health specialities teachers	20.74	2.7	39.0	_	_	_	_	_	_
Business, commerce, and marketing teachers	25.72	13.2	29.0	_	-	_			
Art, drama, and music teachers	27.06 18.46	5.9 15.6	34.2 18.0	26.17	8.1	39.3	16.37 15.36	17.7 15.1	16. 14.
Teachers, post secondary, subject not specified Teachers, post secondary, n.e.c.	29.24	13.0	34.2	30.01	11.9	39.6	-	- 13.1	'4.
Teachers, except college and university	15.04	5.8	33.4	15.11	6.2	39.5	14.32	14.6	12.
Prekindergarten and kindergarten	8.91	3.9	38.5	9.09	4.4	40.0	-	14.0	'2.
Elementary school teachers	19.27	6.1	38.4	19.27	6.1	39.3	_	_	_
Secondary school teachers	18.90	7.7	32.9	19.39	8.6	38.3	_	_	-
Teachers, n.e.c.	14.95	13.2	29.6	14.70	16.4	39.4	15.81	16.2	15.
Vocational and educational counselors	15.40	4.6	34.1	15.28	4.7	39.6	_	-	-
Librarians, archivists, and curators	20.34	12.2	36.5	20.75	12.1	37.8	_	-	-
Librarians	20.73	12.2	36.8	21.20	12.0	38.3	_	-	-
Social scientists and urban planners	19.37	9.0	39.9	19.47	9.5	40.6	-	-	-
Economists	20.68	13.7	40.6	20.68	13.7	40.6	_	-	-
Psychologists	17.86	8.4	39.1	18.12	9.3	40.8	_	-	-
Social, recreation, and religious workers	12.69	4.0	37.4	12.55	4.4	39.7	_	-	-
Social workers	12.41	3.7	37.6	12.26	4.0	39.7	_		-
Lawyers and judges	30.82 30.82	8.5 8.5	55.2 55.2	30.82 30.82	8.5 8.5	55.2 55.2	_	-	-
Lawyers Writers, authors, entertainers, athletes, and	30.62	0.5	35.2	30.62	0.5	35.2	_	-	-
professionals, n.e.c.	17.43	5.5	38.1	17.73	5.9	40.3	12.72	11.2	20.
Technical writers	18.17	6.2	39.5	18.24	6.3	40.0	-	1 1.2	20.
Designers	17.18	6.3	39.7	17.29	6.2	40.2	_	_	_
Actors and directors	22.43	36.4	38.6	-	_	-	_	_	l –
Painters, sculptors, craft artists, and artist									1
printmakers	14.45	8.8	39.5	14.86	9.0	40.4	_	_	-
Editors and reporters	17.44	8.2	38.3	17.92	9.8	40.1	_	_	-
Public relations specialists	12.13	8.0	39.4	12.00	7.6	40.4	_	_	-
Athletes	17.12	47.4	23.1	_	-	_	12.26	26.0	12.
Professional, n.e.c.	25.28	9.7	40.0	25.28	9.7	40.0	_	-	l –
Technical	14.98	3.2	36.3	15.45	3.5	39.3	11.36	2.5	22

Table 4. Selected occupations, West North Central, private industry: Mean hourly earnings¹ for full-time and part-time workers,² National Compensation Survey,³ 1997–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)	Mean week hour
White collar –Continued									
Professional specialty and technical –Continued									
Technical –Continued Clinical laboratory technologists and									
technicians	\$13.87	4.7	36.0	\$13.94	5.4	39.7	\$13.46	6.6	22.
Health record technologists and technicians Radiological technicians	9.63 15.66	1.6 1.9	34.2 32.9	- 16.10	2.5	39.6	_ 13.88	2.1	19
Licensed practical nurses	11.09	2.1	33.4	11.13	2.4	39.5	10.98	3.3	23
Health technologists and technicians, n.e.c	11.11	2.7	34.6	11.40	5.4	39.8	10.24	5.5	24
Electrical and electronic technicians	17.62	7.2	40.2	17.62	7.2	40.2	_	-	-
Mechanical engineering technicians	16.51	9.0	39.9	. –			-	-	-
Engineering technicians, n.e.c.	15.05	10.9	39.7	15.08	11.1	40.0	_	-	-
Drafters Chemical technicians	15.25 14.91	5.7 7.7	39.3 40.0	15.37 14.91	5.7 7.7	39.9 40.0	_	_	
Science technicians. n.e.c.	12.90	4.5	39.3	12.87	4.5	40.0	_	_	
Airplane pilots and navigators	47.89	11.4	20.2	47.89	11.4	20.2	_	_	-
Computer programmers	19.28	3.7	39.7	19.38	3.6	40.4	_	-	-
Legal assistants	17.77	4.2	39.1	17.77	4.2	39.1		<u> </u>	-
Technical and related, n.e.c.	16.33	9.0	37.6	16.69	9.4	40.5	11.89	8.1	19
Executive, administrative, and managerial	25.01	2.4	41.3	25.04	2.4	41.5	18.59	19.7	21
Executives, administrators, and managers	28.47	3.2	41.9	28.50	3.2	42.0	19.55	46.0	24
Financial managers	26.24	5.1	41.2	26.14	5.0	41.3	_	-	-
Personnel and labor relations managers	21.73	11.7	42.8	21.73	11.7	42.8	_	-	-
Purchasing managers	26.68	12.6	42.8	26.68	12.6	42.8	_	-	-
Managers, marketing, advertising, and public	21 51	3.9	41.2	31.51	3.9	41.2	_	_	
relations Administrators, education and related fields	31.51 21.78	8.6	39.3	22.07	8.5	40.0	_	-	
Managers, medicine and health	30.03	15.1	40.9	30.03	15.1	40.9	_	_	-
Managers, food servicing and lodging									
establishments	14.74	11.4	42.8	15.01	11.6	44.3	-	-	-
Managers, properties and real estate	16.85	7.2	39.6	16.85	7.2	39.6	_	-	-
Managers, service organizations, n.e.c	21.54 30.17	5.0 4.0	42.2 42.6	21.54 30.18	5.0 4.0	42.2 42.6	_	_	-
Management related	19.50	1.9	40.4	19.51	2.0	40.7	_ 17.78	6.9	19
Accountants and auditors	18.67	5.5	39.6	18.69	5.6	40.5	-	-	'-
Underwriters	17.63	8.9	39.9	17.63	8.9	39.9	_	-	-
Other financial officers	21.49	6.4	41.5	21.49	6.4	41.5	_	-	-
Management analysts	21.37	7.2	40.6	21.37	7.2	40.7	_	-	-
Personnel, training, and labor relations specialists	19.15	3.0	39.6	19.17	3.0	40.0			
Buyers, wholesale and retail trade, except farm	19.13	3.0	39.0	19.17	3.0	40.0	_	_	
products	20.37	9.7	41.7	20.37	9.7	41.7	_	_	-
Purchasing agents and buyers, n.e.c	19.78	9.7	41.3	19.78	9.7	41.3	_	-	-
Inspectors and compliance officers, except	40.50		44.0	40.50		44.0			
construction	16.58 18.62	6.2 4.7	41.3 40.2	16.58 18.62	6.2 4.7	41.3 40.4	_	_	
Managorioni rolatoa, moto	10.02	'''	10.2	10.02	'''	10.1			
Sales	13.16	8.0	31.5	16.12	9.1	40.6	6.95	3.9	21
Supervisors, sales	16.83	5.2	39.8	16.91	5.5	41.0	_	-	-
Insurance sales	16.42	19.4	30.5	18.68	15.0	36.7	_	-	-
Advertising and related sales Sales, other business services	24.04 17.68	6.1 25.2	38.8 31.0	24.91 25.24	4.9 13.0	40.3 41.0	_	_	
Sales engineers	21.98	8.1	40.3	21.98	8.1	40.3	_	_	-
Sales representatives, mining, manufacturing,				****					
and wholesale	22.51	7.9	41.3	22.76	7.8	41.5	-	_	-
Sales workers, motor vehicles and boats	15.15	6.4	44.3	15.32	6.7	44.7	-	-	-
Sales workers, apparel	- 11 20	22.0	26.5	8.43	3.4	36.9	_	-	-
Sales workers, furniture and home furnishings Sales workers, hardware and building supplies	11.38 15.04	32.9 26.2	26.5 35.1	- 16.74	22.8	40.1	_	_	-
Sales workers, nardware and building supplies Sales workers, parts	15.04	7.1	41.2	16.74	7.1	40.1	_	_	
Sales workers, other commodities	8.23	3.1	30.1	8.82	3.9	40.8	7.25	1.6	21
Sales counter clerks	7.22	3.2	27.1	8.30	4.6	38.5	6.33	2.8	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 1997–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 week hou
White collar –Continued									
Sales -Continued									
Cashiers	\$6.76	2.0	26.3	\$7.53	2.4	39.0	\$6.14	1.0	20.
Demonstrators, promoters, and models, sales Sales support, n.e.c	9.25 10.79	16.9 5.2	22.4 37.3	11.07 11.25	15.9 6.0	40.0 40.2	6.98 7.17	6.6 11.6	14. 23
Administrative support, including clerical	10.23	2.7	37.5	10.42	2.6	39.7	7.75	2.9	21
Supervisors, general office	14.45	5.2	40.9	14.45	5.2	40.9	_	-	-
Supervisors, financial records processing	14.73	5.9	40.6	14.73	5.9	40.6	_	-	-
Supervisors, distribution, scheduling, and									
adjusting clerks	16.49	7.0	40.0	16.49	7.0	40.0	_	-	-
Computer operators	13.31 9.15	5.6 4.0	40.2 39.7	13.31 9.15	5.6 4.0	40.2 39.7	_	_	
Peripheral equipment operators Secretaries	11.36	2.0	38.4	11.40	2.0	39.7	10.56	6.0	23
Stenographers	11.06	5.3	37.1	11.53	3.9	39.5	-		20
Typists	9.00	3.5	39.0	8.97	3.6	39.8	_	_	-
Interviewers	8.13	5.6	31.9	7.78	5.3	36.4	9.22	15.0	22
Hotel clerks	6.78	1.9	37.6	6.78	1.9	37.6	_	-	-
Receptionists	7.82	3.5	32.9	8.25	3.8	39.7	6.97	2.5	24
Information clerks, n.e.c.	9.96	9.4	36.0	10.19	9.8	40.1	7.39	6.0	16
Classified ad clerks	7.53 11.49	6.9 9.5	34.7 38.4	- 11.62	9.8	39.7	- 8.84	7.5	23
Order clerks Personnel clerks, except payroll and	11.49	9.5	30.4	11.02	9.0	39.7	0.04	7.5	23
timekeeping	10.16	3.4	37.8	10.17	3.4	37.9	_	-	-
File clerks	8.01	2.6	38.1	7.96	2.2	39.8			-
Records clerks, n.e.c.	8.68	4.1	38.1	8.78	4.2	39.7	7.15	5.9	23
Bookkeepers, accounting and auditing clerks Payroll and timekeeping clerks	9.91 11.50	2.6 10.5	37.0 39.7	10.02 11.50	2.6 10.5	39.7 39.7	8.84	3.4	22
Billing clerks	10.11	6.6	36.9	10.27	7.0	39.6	_	-	[
Cost and rate clerks	12.29	8.9	38.8	12.29	8.9	38.8	_	_	-
Mail preparing and paper handling machine									
operators	7.56	3.6	28.2	_	-	-	_	-	-
Office machine operators, n.e.c.	6.42	7.7	34.8				_	-	-
Telephone operators	11.97	8.9	34.8	12.53	8.5	39.7	_	-	-
Mail clerks, except postal service Messengers	7.06 7.58	12.5 5.3	37.2 29.9	6.71	13.0	40.0	_	_	
Dispatchers	13.05	11.2	39.3	13.19	10.8	40.1	_	_	
Production coordinators	14.31	4.0	38.5	14.55	4.2	40.2	_	_	
Traffic, shipping and receiving clerks	9.60	4.6	38.9	9.63	4.7	39.5	_	_	-
Stock and inventory clerks	9.20	4.8	38.0	9.27	5.0	40.0	7.71	4.2	19
Weighers, measurers, checkers, and samplers	14.56	17.5	40.0	14.56	17.5	40.0	_	-	-
Expeditors Material recording, scheduling, and distribution	14.38	8.5	36.7	14.87	8.5	40.0	_	_	-
clerks, n.e.c.	10.60	11.6	35.6	10.89	12.1	40.0	_	_	-
Insurance adjusters, examiners, and	12 20	5.7	38.0	13.44	5.7	38.9			
investigators	13.28 10.17	5.7 4.0	39.0	10.28	4.0	40.0	_	_	
Eligibility clerks, social welfare	10.17	7.8	36.1	10.48	8.3	39.5	_	1 _	-
Bill and account collectors	8.89	8.1	40.0	8.89	8.1	40.0	_	_	-
General office clerks	10.00	3.7	36.2	10.27	3.8	39.7	7.15	5.7	19
Bank tellers	8.02	4.4	35.9	8.12	4.7	40.0	7.23	9.6	19
Proofreaders	9.68	5.8	29.7	-		-	-		-
Data entry keyers	9.17	3.2	37.8	9.22	3.4	39.9	8.41	8.9	21
Statistical clerks Teachers' aides	9.39 7.68	6.9 8.8	37.1 37.1	9.46 -	7.9	39.7	_		[
Administrative support, n.e.c.	9.84	9.6	38.4	9.91	10.1	40.1	8.09	13.0	19
Blue collar	12.36	2.2	38.5	12.68	2.3	40.4	7.14	2.6	21
Precision production, craft, and repair	14.43	5.6	39.9	14.52	5.7	40.3	7.94	6.5	21
Supervisors, mechanics and repairers	18.73	9.0	43.4	18.73	9.0	43.4	-	-	-
Automobile mechanics	14.26	13.2	40.1	14.26	13.2	40.1	-	-	-
Bus, truck, and stationary engine mechanics	13.47	4.2	40.9	13.37	4.2	41.0	_	-	-

Table 4. Selected occupations, West North Central, private industry: Mean hourly earnings¹ for full-time and part-time workers,² National Compensation Survey,³ 1997–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 weel hou
Blue collar –Continued									
Precision production, craft, and repair -Continued									
Automobile body and related repairers	\$13.29	3.9	41.0	\$13.29	3.9	41.0	_	-	-
Heavy equipment mechanics	16.80	6.6	40.5	16.80	6.6	40.5	_	-	-
Industrial machinery repairers Electronic repairers, communications and	13.52	6.0	39.7	13.52	6.0	39.7	_	-	-
industrial equipment	16.15	5.5	40.0	16.15	5.5	40.0	_	_	_
Data processing equipment repairers	12.53	9.3	35.3	13.06	11.7	40.0	_	_	-
Heating, air conditioning, and refrigeration									
mechanics	14.07	8.9	39.7	14.07	8.9	39.7	_	-	-
Millwrights	16.99	11.0	40.0	16.99	11.0	40.0	_	-	-
Mechanics and repairers, n.e.c.	15.10	1.9	39.8	15.15	2.0	40.0	_	_	-
Supervisors, plumbers, pipefitters, and steamfitters	25.19	3.1	40.0	25.19	3.1	40.0	_	_	
Supervisors, construction trades, n.e.c.	19.42	4.4	42.6	19.42	4.4	42.6	_	_	
Carpenters	19.46	6.6	39.7	19.42	6.7	40.0	_	_	
Electricians	18.55	6.0	40.0	18.55	6.0	40.0	_	_	
Plumbers, pipefitters and steamfitters	19.24	13.4	40.0	19.24	13.4	40.0	_	_	
Structural metal workers	15.27	13.0	40.0	15.27	13.0	40.0	_	-	
Supervisors, production	16.31	7.2	41.2	16.31	7.2	41.2	_	-	
Tool and die makers	19.53	3.4	36.7	19.72	3.6	40.4	_	-	
Precision assemblers, metal Machinists	15.82 17.02	13.2 5.3	40.0 41.0	15.82 17.02	13.2 5.3	40.0 41.0	_	_	
Sheet metal workers	18.82	5.2	39.9	18.82	5.2	39.9	_	-	
Electrical and electronic equipment assemblers	8.02	11.3	36.4	8.28	10.7	40.0	_	_	
Miscellaneous precision workers, n.e.c	13.09	7.4	40.0	13.09	7.4	40.0	_	-	
Bakers	7.72	4.0	34.2	7.98	2.9	40.0	-	-	
Inspectors, testers, and graders Stationary engineers	14.71 16.69	4.7 6.8	40.5 40.3	14.71 16.69	4.7 6.8	40.5 40.3	_ _	_	:
Machine operators, assemblers, and inspectors	11.90	2.4	39.4	11.96	2.5	39.9	\$7.66	5.6	22
Punching and stamping press operators	11.15	4.3	39.4	11.21	4.1	40.0	φ7.00 —		~
Drilling and boring machine operators	10.92	8.3	40.0	10.92	8.3	40.0	_	_	
Grinding, abrading, buffing, and polishing									
machine operators	10.39	9.6	40.0	10.39	9.6	40.0	_	-	
Numerical control machine operators	13.43	8.5	40.0	13.43	8.5	40.0	_	-	
Fabricating machine operators, n.e.c.	10.73	3.5	40.0	10.73	3.5	40.0	_	-	
Molding and casting machine operators	11.08	5.3	39.6	11.10	5.3	40.0	_	_	
Metal plating machine operators Sawing machine operators	13.87 12.03	5.1 11.0	40.0 40.0	13.87 12.03	5.1 11.0	40.0 40.0	_	-	
Printing press operators	16.12	4.6	39.1	16.12	4.6	39.1	_	_	
Photoengravers and lithographers	14.79	8.3	39.0	14.79	8.3	39.0	_	_	
Laundering and dry cleaning machine operators	6.83	4.2	36.5	6.83	4.7	39.7	6.85	7.5	23
Cementing and gluing machine operators	11.46	7.7	40.0	11.46	7.7	40.0	_	-	
Packaging and filling machine operators	12.26	4.4	39.6	12.29	4.4	40.0	_	-	
Extruding and forming machine operators	8.37	8.0	38.1	8.37	8.0	38.1	_	-	
Mixing and blending machine operators Painting and paint spraying machine operators	12.34 13.88	6.7 5.0	40.0 40.0	12.34 13.88	6.7 5.0	40.0 40.0	_	_	
Folding machine operators	10.86	5.4	40.0	10.86	5.4	40.0	_	_	:
Slicing and cutting machine operators	11.14	8.0	38.3	11.61	6.9	39.9	_	_	.
Photographic process machine operators	8.84	15.9	38.9	-	-	-	-	_	
Miscellaneous machine operators, n.e.c	12.83	3.5	39.5	12.90	3.6	39.8	8.18	5.3	28
Welders and cutters	12.67	6.6	40.0	12.67	6.6	40.0	_	-	-
Assemblers	11.93	4.7	39.0	12.06	4.8	39.9	-	-	-
Miscellaneous hand working, n.e.c Production inspectors, checkers and examiners	10.31 11.68	4.9 4.7	40.0 38.6	10.31 11.80	4.9 4.2	40.0 40.2	_	_	'
Production testers	13.60	7.0	40.0	13.60	7.0	40.2	_	_	:
Transportation and material moving	14.21	4.6	42.0	14.54	4.4	44.0	8.88	10.7	24
Supervisors, motor vehicle operators	16.24	28.0	41.5	16.24	28.0	41.5	-	l	-
Truck drivers	14.95	3.2	47.6	14.99	3.2	48.9	13.02	11.0	22
Driver-sales workers	10.75	15.2	35.9	11.86	11.5	42.5	-		
Bus drivers	9.93	11.9	29.4	11.21	17.1	31.1	8.39	3.2	27

Table 4. Selected occupations, West North Central, private industry: Mean hourly earnings1 for full-time and part-time workers,2 National Compensation Survey, 3 1997-Continued

		Total		F	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)	Mean weekly hours
Blue collar -Continued									
Transportation and material moving -Continued									
Taxicab drivers and chauffeurs	\$8.42	5.6	34.4						
Motor transportation, n.e.c.	6.28	3.7	34.5	\$6.33	4.3	39.2	\$6.04	5.2	22.1
Supervisors, material moving equipment	18.04	4.1	40.7	18.04	4.1	40.7	_	-	-
Excavating and loading machine operators	16.19	16.1	40.0	16.19	16.1	40.0	-	-	_
Industrial truck and tractor equipment operators	12.19	1.7	39.4	12.21	1.8	39.9	_	_	_
Miscellaneous material moving equipment	13.39	14.9	39.8	13.42	15.0	40.1		_	
operators, n.e.c.	13.39	14.9	39.0	13.42	15.0	40.1	_	_	_
Handlers, equipment cleaners, helpers, and									
laborers	9.32	2.5	33.9	9.92	2.2	39.5	6.67	3.9	20.8
Groundskeepers and gardeners, except farm	9.39	8.2	28.3	10.92	6.5	40.0	6.25	1.2	17.6
Supervisors, handlers, equipment cleaners, and									
laborers, n.e.c.	12.51	5.9	40.7	12.51	5.9	40.7	_	-	_
Production helpers	10.15	3.3	39.5	10.24	3.3	40.1	_		_
Stock handlers and baggers	8.10	5.5	27.6	10.20	3.3	40.0	6.00	3.5	21.0
Machine feeders and offbearers	10.08	9.0	36.6	10.14	10.0	39.2			
Freight, stock, and material handlers, n.e.c	11.02	6.1	30.9	12.57	6.2	38.6	7.21	2.9	20.6
Garage and service station related	8.36	14.1	32.7	-	10.5	-	-	-	_
Vehicle washers and equipment cleaners	8.02	11.0	39.0	8.00	10.5	40.0	- 7.20	- 0.7	-
Hand packers and packagersLaborers, except construction, n.e.c.	8.57 9.19	6.9 4.3	36.8 35.0	8.73 9.42	7.6 5.1	39.5 39.1	7.30 7.15	9.7 6.1	24.3 18.3
•									
Service	7.40	1.3	29.8	7.99	1.2	39.0	6.16	1.8	19.9
Protective service	8.22	10.0	34.9	8.74	8.8	39.8	6.08	4.7	23.0
Guards and police, except public service	8.00	10.1	35.2	8.43	8.6	39.9	-	_	-
Food service	6.67	2.6	27.6	7.64	1.9	38.8	5.33	1.6	19.8
Supervisors, food preparation and service	9.87	2.5	37.6	10.28	3.4	40.5	- 5.46	12.0	-
Bartenders	6.20 3.96	5.0 9.1	29.3 25.1	6.72 4.45	3.0 13.2	40.0 38.5	5.46 3.58	13.9 6.1	21.3 19.7
Cooks	8.26	2.1	34.0	8.59	2.5	39.2	7.19	2.4	23.5
Food counter, fountain, and related	5.84	3.8	23.2	6.65	9.4	37.2	5.58	2.4	20.7
Kitchen workers, food preparation	6.77	3.4	28.0	7.05	3.0	39.5	6.46	5.8	21.2
Waiters'/Waitresses' assistants	5.43	6.2	26.5	6.00	9.1	38.9	4.88	7.4	20.3
Food preparation, n.e.c.	6.40	3.0	23.5	7.11	3.5	36.9	5.64	2.4	16.9
Health service	7.66	1.0	30.0	7.76	2.3	39.0	7.44	1.8	20.1
Health aides, except nursing	8.51	5.0	29.9	8.76	4.0	38.1	7.91	12.7	19.7
Nursing aides, orderlies and attendants	7.51	1.0	30.2	7.59	2.2	39.2	7.35	1.7	20.3
Cleaning and building service	7.92	2.2	32.4	8.23	2.8	39.2	6.92	2.8	20.6
workers	10.88	3.5	38.6	10.98	3.6	40.2	_	_	_
Maids and housemen	6.60	2.1	34.2	6.53	2.3	38.5	7.05	4.5	20.8
Janitors and cleaners	7.84	3.3	31.1	8.24	4.2	39.3	6.86	3.2	20.6
Personal service	7.95	2.2	31.3	8.45	3.4	38.6	6.20	2.3	18.9
Supervisors, personal service	12.25	14.0	34.7	13.49	7.2	40.9	-	-	-
Attendants, amusement, and recreation									
facilities	7.36	4.4	37.3	7.55	3.5	40.0	6.18	4.3	26.4
Ushers	5.68	5.3	10.7	_	-	-	5.68	5.3	10.7
Welfare service aides	6.80	6.6	24.2	6.68	6.6	35.2	6.96	6.7	17.2
Early childhood teachers' assistants	6.21	4.4	29.6	6.61	3.4	39.5	5.81	4.5	23.6
Child care workers, n.e.c.	7.79	4.4	28.1	8.18	4.4	39.7	6.57	3.8	14.7
Service, n.e.c.	7.27	4.1	26.7	7.75	4.2	39.4	6.12	3.6	15.0

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.

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.

In this census division, collection was conducted between October 1996 and April

^{1998.} The average reference period was July 1997.

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.

 $\label{thm:control} \begin{tabular}{ll} Table 5. Selected occupations, West North Central, State and local government: Mean hourly earnings 1 and weekly hours for full-time and part-time workers, 2 National Compensation Survey, 3 1997 $$$

		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)	Mean weekly hours
All	\$17.24	0.8	36.8	\$17.77	0.7	39.5	\$10.59	3.0	20.0
All excluding sales	17.25	.8	36.8	17.78	.7	39.5	10.61	3.1	20.0
White collar	19.25	1.0	37.1	19.64	.9	39.2	12.40	4.5	19.6
White collar excluding sales	19.26	1.0	37.2	19.65	.9	39.2	12.45	4.6	19.7
Professional specialty and technical	21.96	1.1 1.2	37.0 36.9	22.20	1.0	38.8 38.7	16.64 17.65	3.6 4.4	18.6 17.1
Professional specialty Engineers, architects, and surveyors	23.01 23.12	4.6	39.9	23.22 23.12	1.2 4.6	39.9	-	- 4.4	'/.'
Civil engineers	28.00	8.9	39.2	28.00	8.9	39.2	_	_	_
Mathematical and computer scientists	19.46	1.7	40.0	19.46	1.7	40.0	_	_	_
Computer systems analysts and scientists	19.51	1.1	40.0	19.51	1.1	40.0	_	_	_
Natural scientists	_	-	-	_	_	_	_	_	_
Physical scientists, n.e.c.	21.96	7.8	40.8	21.96	7.8	40.8	_	_	-
Health related	19.35	2.2	37.6	19.18	2.4	39.5	21.12	6.6	24.5
Registered nurses	18.95	1.7	36.9	18.90	1.9	39.6	19.27	3.7	25.6
Occupational therapists	18.71	5.6	38.0	_	-	_	_	-	-
Teachers, college and university	35.01	4.7	37.9	35.57	4.5	39.5	17.23	16.4	16.6
Medical science teachers	30.51	17.1	40.0	30.51	17.1	40.0	_	-	-
Health specialities teachers	23.62	7.8	35.4	23.82	8.0	40.0	_	_	_
Trade and industrial teachers	25.64	.9	37.2	25.64	.9	37.2	_	-	_
Teachers, post secondary, n.e.c.	34.15	6.0	39.1	34.37	5.5	39.6	- 17.00		12.0
Teachers, except college and university	23.98	2.2	35.0	24.20 24.08	2.2	37.3 36.5	17.02	6.8	12.0
Prekindergarten and kindergarten	23.83 24.68	6.6 2.5	34.2 36.8	24.08 24.69	6.9 2.5	36.9	_	-	_
Elementary school teachers Secondary school teachers	24.86	2.9	36.1	24.67	2.9	37.5	_	_	[
Teachers, special education	24.58	3.2	37.0	24.66	3.3	37.5	_	1 =	_
Teachers, n.e.c.	22.92	5.2	32.8	23.71	4.6	37.6	13.35	10.7	12.8
Substitute teachers	8.94	4.0	8.8	-	_	-	8.94	4.0	8.8
Vocational and educational counselors	16.53	7.4	39.8	16.53	7.4	39.8	_	_	_
Librarians, archivists, and curators	20.25	6.4	37.6	20.29	6.4	38.0	_	_	_
Librarians	22.52	4.9	37.0	22.59	4.9	37.5	_	-	_
Social scientists and urban planners	_	_	-	_	_	_	_	_	-
Psychologists	22.17	7.3	39.7	22.17	7.3	39.7	_	_	-
Social, recreation, and religious workers	14.79	3.1	37.6	15.06	3.5	39.9	_	-	-
Social workers	14.84	3.2	37.7	15.10	3.5	39.9	_	-	-
Lawyers and judges	24.28	5.8	38.1	24.55	5.6	40.0	_	-	-
Lawyers	23.28	6.5	38.0	23.53	6.3	40.0	_	-	-
Writers, authors, entertainers, athletes, and	00.04	7.0	000	04.44		40.0			
professionals, n.e.c.	20.84	7.9	39.3	21.11	8.1	40.0	_	-	_
Professional, n.e.c.	22.72	10.7	40.0	22.72	10.7	40.0	12.65	- E 0	24.0
Technical	13.27 15.75	2.1 8.0	37.6 32.9	13.22	2.3	39.9	13.65	5.8	24.9
Radiological technicians Licensed practical nurses	11.25	3.6	37.5	10.97	3.2	39.4	- 14.13	11.3	25.1
Health technologists and technicians, n.e.c	12.94	2.6	36.9	13.09	2.7	40.8	11.85	3.8	21.9
Engineering technicians, n.e.c.	16.34	5.3	39.9	16.34	5.3	39.9	-		
Computer programmers	16.36	6.7	40.0	16.36	6.7	40.0	_	_	_
Technical and related, n.e.c.	12.78	3.0	27.7	13.37	6.4	40.0	-	-	-
Executive, administrative, and managerial	24.82	2.1	39.5	24.90	2.1	40.4	14.35	10.7	10.4
Executives, administrators, and managers	27.89	2.3	39.5	27.99	2.3	40.6	14.33	14.8	8.8
Legislators	9.11	13.7	16.6	_	-	_	_	-	-
Administrators and officials, public administration	22.53	3.5	40.9	22.50	3.6	41.1	_	_	_
Administrators, education and related fields	27.27	3.4	40.2	27.30	3.4	40.2	_	_	-
Managers, service organizations, n.e.c	20.48	11.0	40.0	20.48	11.0	40.0	_	-	-
Managers and administrators, n.e.c	22.78	8.8	41.4	22.78	8.8	41.4	_	-	-
Management related	17.67	4.7	39.6	17.69	4.7	39.9	-	-	-
Accountants and auditors	16.35	6.1	39.7	16.35	6.1	39.7	_	-	-
Management analysts	18.07	17.2	40.0	18.07	17.2	40.0	-	-	-
Personnel, training, and labor relations									
specialists	17.52	7.6	39.8	17.53	7.7	39.9	-	-	-
Construction inspectors	16.74	9.5	40.0	16.74	9.5	40.0	_	-	-
Inspectors and compliance officers, except	47 44		20 0	47 44		20.0			
construction	17.44	7.7	39.9	17.44	7.7	39.9	_	_	-

 $\label{thm:control} \begin{tabular}{ll} Table 5. Selected occupations, West North Central, State and local government: Mean hourly earnings 1 and weekly hours for full-time and part-time workers, 2 National Compensation Survey, 3 1997-Continued 3 and 4 and$

		Total			Full time		I	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
White collar -Continued									
Executive, administrative, and managerial									
-Continued									
Management related –Continued Management related, n.e.c	\$16.71	9.4	39.0	\$16.76	9.5	39.9	_	_	_
Color	7.04	44.0	04.4						
Sales Cashiers	7.31 7.56	14.6 16.2	21.1 22.2	_	_	_	_	_	_
Administrative support including clarical	11.31	1.6	36.5	11 61	1.5	30.5	\$8.56	2.2	21.5
Administrative support, including clerical	14.86	1.6 4.7	40.0	11.61 14.86	1.5 4.7	39.5 40.0	фо.50 —	2.2	21.5
Secretaries	12.73	1.9	39.1	12.80	1.8	39.9	9.90	4.9	22.1
Typists	10.70	3.8	39.9	10.70	3.8	39.9	-	_	
Receptionists	9.85	6.9	33.4	10.05	6.9	40.0	_	_	_
Information clerks, n.e.c.	9.47	16.1	32.5	_	_	_	-	_	_
Library clerks	9.03	4.3	25.7	9.67	3.6	38.7	8.45	8.4	19.7
Records clerks, n.e.c.	10.46	5.6	38.0	10.66	5.5	40.0	_	_	-
Bookkeepers, accounting and auditing clerks	12.04	6.3	39.3	12.07	6.6	39.9	_	-	-
Dispatchers	10.84	4.7	39.3	10.83	4.8	40.1	_	-	-
Stock and inventory clerks	13.56	9.1	37.8				-	_	-
Eligibility clerks, social welfare	12.47	5.0	39.8	12.47	5.0	39.8			
General office clerks	10.91	2.0	37.3	11.28	2.2	39.9	8.13	5.8	24.8
Teachers' aides	8.24	3.6	28.9	8.40	5.1	35.0	8.01	3.9	22.8
Administrative support, n.e.c	10.39	5.8	29.8	10.60	6.5	39.7	_	_	_
Blue collar	13.38	1.8	36.5	13.69	1.9	39.8	9.94	6.1	18.8
Precision production, craft, and repair	15.38	2.0	40.0	15.38	2.0	40.0	_	_	_
Bus, truck, and stationary engine mechanics	14.12	3.4	40.0	14.12	3.4	40.0	_	_	_
Heavy equipment mechanics	16.41	5.5	40.0	16.41	5.5	40.0	_	_	_
Mechanics and repairers, n.e.c.	13.68	8.0	39.8	13.70	8.1	40.0	-	_	_
Supervisors, construction trades, n.e.c	16.60	2.9	40.0	16.60	2.9	40.0	-	_	-
Construction trades, n.e.c.	12.72	2.9	40.0	12.72	2.9	40.0	-	-	-
Water and sewer treatment plant operators	17.10	1.1	40.0	17.10	1.1	40.0	_	_	_
Machine operators, assemblers, and inspectors	-	-	-	-	_	-	-	_	-
Transportation and material moving	12.44	2.7	32.5	12.77	3.9	39.3	10.99	8.2	18.4
Truck drivers	12.46	5.4	40.0	12.46	5.4	40.0	_	_	_
Bus drivers	12.80	4.1	25.5	14.37	2.0	37.6	11.00	8.2	18.5
Operating engineers	14.95	4.5	40.0	14.95	4.5	40.0	-	-	-
Grader, dozer, and scrapper operators	10.91	8.0	40.0	10.91	8.0	40.0	_	-	-
Miscellaneous material moving equipment operators, n.e.c.	10.15	6.2	40.0	10.15	6.2	40.0	_	_	_
Handlers, equipment cleaners, helpers, and									
laborers	11.03	3.9	36.5	11.41	3.7	40.0	7.46	11.6	20.0
Groundskeepers and gardeners, except farm	10.81	6.2	39.0	10.67	6.9	40.0	-	_	
Construction laborers	11.61	9.7	40.0	11.61	9.7	40.0	_	_	_
Laborers, except construction, n.e.c	9.70	6.4	34.1	10.40	4.4	40.0	_	-	-
Service	12.07	1.5	35.7	12.68	1.8	40.4	8.27	2.5	20.8
Protective service	15.14	2.0	40.3	15.23	2.0	41.8	10.75	10.2	15.1
Supervisors, firefighters and fire prevention	15.59	9.2	51.3	15.59	9.2	51.3	_	_	-
Supervisors, police and detectives	21.94	2.9	40.0	21.94	2.9	40.0	-	-	-
Supervisors, guards	16.18	13.9	38.6	-	_	-	-	-	-
Firefighting	12.32	2.6	47.1	12.37	2.6	49.6	-	-	-
Police and detectives, public service	16.74	3.1	40.0	16.76	3.1	40.1	_	_	-
officers	14.89	3.4	37.7	15.12	3.5	40.0	-	-	-
Correctional institution officers	12.91	4.6	39.2	12.96	4.6	39.9	-	-	-
Guards and police, except public service	13.26	9.9	35.3	12.54	11.0	39.4	-	-	-
Protective service, n.e.c.	7.82	14.4	29.2	_	_	-	-	_	-

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 1997-Continued

		Total		I	Full time		Part time		
2 4	Hourly e	arnings		Hourly e	arnings		Hourly earnings		Mean
Occupation ⁴	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	weekly
Service –Continued Food service Supervisors, food preparation and service Cooks Kitchen workers, food preparation	\$7.89 11.37 7.74 8.26	2.1 11.2 5.9 3.2	25.7 29.3 30.6 25.6	\$8.00 12.89 7.78	4.8 9.2 6.6	37.1 35.9 36.3	\$7.77 - 7.48	2.9 - 8.9	19.0 - 16.4
Food preparation, n.e.c. Health service Health aides, except nursing Nursing aides, orderlies and attendants Cleaning and building service	7.09 9.60 10.43 9.47 11.22	4.0 4.9 5.1 6.0	23.9 35.4 31.5 36.2 38.6	7.16 9.72 - 9.63 11.32	5.8 6.1 - 6.8 1.7	36.4 39.5 - 39.5 39.6	7.03 9.18 - 8.62 8.15	5.5 1.1 - 2.0 6.4	18.3 25.9 - 24.8 22.1
Janitors and cleaners	10.24 8.44 10.11 7.85 8.11 10.08	2.0 3.6 7.5 7.5 8.2 3.5	38.6 26.1 26.1 25.4 21.4 33.6	10.31 9.50 - 8.42	2.0 6.9 - 8.2	39.5 38.5 - 37.5	8.13 7.66 - 7.58 7.59	10.9 5.9 - 9.6 10.4	22.4 21.1 - 22.0 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,

1998. The average reference period was July 1997.

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.

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.

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

3 In this census division, collection was conducted between October 1996 and April

Table 6. Occupational groups¹ and levels,² West North Central: Mean hourly earnings³ and weekly hours, private industry and State and local government, National Compensation Survey,⁴ 1997

		Total		Priv	ate industry		State and local government		
	Hourly	earnings		Hourly e	arnings		Hourly e	arnings	
Occupational group and level	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours
All	\$14.44	1.8	36.3	\$13.70	2.2	36.2	\$17.24	0.8	36.8
All excluding sales	14.51	1.8	36.6	13.74	2.2	36.6	17.25	.8	36.8
White collar	17.28	1.7	36.9	16.53	2.3	36.8	19.25	1.0	37.1
1	6.49	4.6	27.5	6.45	4.8	27.6	6.91	5.4	26.4
2		2.2	31.2	7.02	1.8	31.0	8.89	5.7	32.2
3		2.6	33.5	8.16	2.7	33.7	9.17	3.5	32.3
4	-	1.1	37.1	10.07	1.2	37.1	10.38	1.6	37.1
5	-	1.2	37.9	11.79	1.4	38.0	12.59	1.2	37.8
6		1.4	38.6	13.60	1.7	38.9	12.70	2.0	37.6
7		1.7	36.5	16.04	1.7	36.5	18.45	3.1	36.5
8		1.4	37.5	17.65	2.5	37.9	21.60	1.8	37.1
9		1.1	39.0	20.67	1.2	39.3	22.55	1.6	38.5
10		1.9	40.1	23.98	2.1	39.9	22.97	4.8	41.2
11		5.2	40.7	28.05	6.3	40.7	27.00	1.9	40.5
12		1.6	41.2	33.05	2.7	41.5	28.45	4.6	39.4
13		2.8	40.4	44.40	4.3	40.7	-		
14		2.6	42.1	49.13	3.6	42.6	36.50	2.5	40.1
15		<u>-</u> _	<u></u> _	79.70	29.8	40.1	. –	I	l
Not able to be leveled		6.5	36.5	20.36	9.3	36.5	18.11	4.5	36.3
White collar excluding sales		1.6	37.7	17.12	2.1	37.9	19.26	1.0	37.2
1		6.5	31.9	6.04	6.5	33.8	6.99	5.6	26.0
2		2.8	34.2	7.29	2.6	34.5	8.90	6.0	32.9
3		3.3	35.4	8.27	3.7	36.0	9.19	3.5	32.5
4	10.19	1.4	37.9	10.13	1.5	38.1	10.38	1.6	37.1
5		1.3	37.7	11.83	1.5	37.7	12.58	1.2	37.8
6		1.5	38.4	13.44	1.9	38.7	12.70	2.0	37.6
7		1.9	36.1	15.72	1.3	35.9	18.45	3.1	36.5
8		1.2	37.3	17.17	1.8	37.6	21.60	1.8	37.1
9		1.1	38.9	20.43	1.0	39.1	22.55	1.6	38.5
10	23.52	1.9	40.1	23.64	2.1	39.8	22.97	4.8	41.2
11	26.31	1.3	40.4	26.12	1.5	40.4	27.00	1.9	40.5
12	32.14	1.6	41.2	32.86	2.8	41.5	28.45	4.6	39.4
13	41.75	2.8	40.4	44.40	4.3	40.7	_	-	-
14	46.72	2.6	42.1	49.13	3.6	42.6	36.50	2.5	40.1
15	–	_	-	79.70	29.8	40.1	_	-	-
Not able to be leveled	19.31	6.6	36.5	20.07	9.7	36.7	18.11	4.5	36.3
Professional specialty and technical	20.66	1.1	36.7	19.77	1.6	36.6	21.96	1.1	37.0
Professional specialty	22.57	1.0	36.8	22.16	1.5	36.7	23.01	1.2	36.9
4	9.00	5.3	19.7	8.74	8.2	29.3	9.45	3.8	12.6
5	12.59	2.2	35.8	12.21	3.1	37.7	13.11	1.7	33.5
6	12.32	3.2	35.7	12.56	4.6	38.4	11.70	2.3	30.1
7	18.31	2.7	33.8	16.56	2.3	31.7	19.77	3.5	35.8
8		1.5	36.1	17.33	3.5	35.0	22.47	2.1	36.7
9		1.3	37.8	20.71	1.0	37.7	23.58	2.3	38.0
10		3.0	38.2	22.85	3.5	37.9	20.95	5.3	39.8
11	26.06	1.6	40.2	26.17	1.8	40.3	25.73	3.1	39.6
12	30.25	5.6	40.3	31.79	6.1	40.8	25.18	8.6	38.6
13	40.70	5.1	40.2	48.75	7.4	40.4	32.13	2.9	39.9
14	41.60	6.0	41.5	46.70	10.0	43.3	37.07	3.1	40.0
Not able to be leveled		5.3	36.4	18.46	8.8	34.9	16.75	6.6	38.5
Engineers, architects, and surveyors	26.75	5.6	41.1	27.17	5.9	41.2	23.12	4.6	39.9
7		3.6	40.5	19.82	5.6	40.8	_	-	-
8		2.5	40.2	19.34	2.3	40.2	_		-
9		2.1	40.7	21.06	2.2	40.9	20.24	3.1	39.9
10		4.7	41.5	25.05	4.7	41.5	_	-	-
11		1.9	43.1	26.70	2.0	43.2	_	-	-
12		7.2	40.4	35.87	7.0	40.5	_	-	-
13		5.3	40.0	39.05	5.5	40.1	- -	<u> </u>	-
Mathematical and computer scientists		2.6	40.2	24.60	2.8	40.3	19.46	1.7	40.0
7		2.5	40.0	16.54	5.2	40.0	17.11	3.0	40.0
8		5.3	40.6	20.02	5.3	40.6	_	-	-
9		1.3	40.3	21.76	1.7	40.4	_	-	-
10	24.56	4.5	41.3	25.09	4.4	41.4	_	_	-

Table 6. Occupational groups¹ and levels,² West North Central: Mean hourly earnings³ and weekly hours, private industry and State and local government, National Compensation Survey,⁴ 1997—Continued

		Total		Priv	ate industry		State and local govern		
	Hourly e	arnings		Hourly e	arnings		Hourly e	arnings	
Occupational group and level	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									
into contain containada									
Professional specialty and technical -Continued									
Professional specialty –Continued									
Mathematical and computer scientists –Continued 11	\$26.30	2.8	40.3	\$26.57	3.0	40.3	_	_	_ ا
12	28.48	3.9	39.6	28.48	3.9	39.6	_	_	-
Natural scientists	18.92	3.5	40.2	22.40	8.1	40.4	_	l _	١.
9	20.88	3.8	39.8	21.89	5.5	40.0	_	_	
11	22.57	14.8	40.9	26.54	5.7	41.3	_	_	
12	27.49	9.5	41.7	30.33	5.3	41.6	_	_	
Health related	20.37	2.7	34.0	20.78	3.5	32.8	\$19.35	2.2	37
5	12.68	1.6	35.4	12.79	2.5	33.2	_	_	-
6	14.24	4.9	34.9	14.24	4.9	34.9	_	_	-
7	17.43	3.0	31.6	17.10	3.6	30.4	18.28	2.3	35
8	17.34	4.3	34.4	16.90	5.2	33.2	18.75	1.0	38
9	20.49	1.2	34.5	20.30	1.2	33.8	21.25	3.1	37
10	20.43	7.0	33.9	18.98	9.5	31.4	22.98	7.3	39
11	28.02	8.5	34.4	28.13	10.9	33.7	27.65	6.7	36
12	20.92	19.1	39.6	_	_	_	_	_	
13	45.22	10.5	40.6	72.17	3.6	41.4	_	_	
Teachers, college and university	32.99	4.1	35.5	24.61	5.9	28.1	35.01	4.7	37
7	20.58	13.7	23.6	13.82	5.7	14.7	_	-	
8	21.09	10.9	32.9	19.45	3.9	33.3	21.70	14.5	32
9	24.90	3.9	36.5	24.26	6.8	31.4	24.95	4.2	37
10	25.33	8.2	28.3	_	-	-	_	-	
11	27.25	3.4	39.2	25.41	5.6	37.3	27.94	4.0	40
12	31.90	3.2	39.0	29.50	3.7	38.8	33.81	1.4	39
13	39.49	2.7	39.7	37.48	10.4	35.9	39.65	2.8	40
Not able to be leveled	26.50	21.0	33.6		–		_		
Teachers, except college and university	23.44	2.3	34.9	15.04	5.8	33.4	23.98	2.2	35
4	9.08	5.8	15.7	-	–		9.45	3.8	12
5	10.19	5.4	23.0	10.26	7.6	39.5	10.11	5.6	15
6	10.59	5.8	23.8	10.43	6.4	35.6	11.38	7.7	8
7	21.79	3.9	34.3	14.25	2.5	32.9	22.05	4.0	34
8	24.09	3.3	35.9	15.99	9.2	32.1	24.32	3.4	36
9	25.43	4.0	37.3	20.25	3.5	39.3	25.72	4.4	3
Librarians, archivists, and curators	20.26	5.8	37.4	20.34	12.2	36.5	20.25	6.4	37
7	19.84	12.4	36.4	-	_	-	20.27	12.4	36
8	23.96	4.1	35.9	_ 10.17	7.4	-	24.02	4.0	36
9	23.46	13.0	38.9	18.17	7.4	38.3	_	_	
Social scientists and urban planners	15.78 18.09	5.0 15.6	39.9 39.0	19.37	9.0	39.9	_		
9	18.24	4.4	40.0	18.98	4.4	40.0	_	_	
11	26.95	7.0	41.4	31.77	8.2	44.3	_		
Social, religious, and recreation workers	14.02	2.6	37.5	12.69	4.0	37.4	14.79	3.1	37
5	9.23	3.3	39.6	9.27	3.2	39.6	-	J -	".
6	11.49	2.4	36.0	10.88	5.7	38.4	11.70	2.2	35
7	12.91	2.3	35.3	12.20	3.4	39.1	13.46	3.8	32
8	13.29	3.3	38.6	12.81	8.7	33.4	13.37	3.6	39
9	17.42	4.8	39.5	15.39	6.4	37.7	17.95	5.9	39
10	17.80	5.4	40.0	_	-	_	_	-	
Lawyers and judges	26.49	4.7	42.6	30.82	8.5	55.2	24.28	5.8	38
11	23.76	6.6	39.5	_	-	-	_	-	-
12	22.50	11.2	46.5	-	_	-	_	-	-
Writers, authors, entertainers, athletes, and									1
professionals, n.e.c	17.83	4.0	38.2	17.43	5.5	38.1	20.84	7.9	39
5	11.47	9.4	39.9	11.47	9.4	39.9	_	-	-
6	11.28	5.7	39.1	11.33	5.9	39.1	_	-	-
7	15.65	7.4	40.3	15.54	8.1	40.4	_	-	-
8	16.40	8.0	38.8	14.91	2.3	38.3	_	-	-
9	18.52	7.2	40.6	18.59	7.6	40.7	_	_	-
11	22.16	2.4	39.9	22.28	2.4	39.9	_	-	-
12	34.46	3.9	39.9	34.46	3.9	39.9	_	-	-

Table 6. Occupational groups¹ and levels,² West North Central: Mean hourly earnings³ and weekly hours, private industry and State and local government, National Compensation Survey,⁴ 1997—Continued

		Total		Priv	ate industry		State and	local gover	nment
	Hourly	earnings		Hourly e	arnings		Hourly e	arnings	
Occupational group and level	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 Writers, authors, entertainers, athletes, and									
professionals, n.e.c. –Continued	\$17.80	9.6	35.6	\$17.04	10.9	35.0	\$21.61	12.5	38
Not able to be leveled Technical	·	2.5	36.5	14.98	3.2	36.3	13.27	2.1	37
3		3.6	29.4	8.96	3.6	29.4	-		"-
4		2.9	36.5	10.33	3.7	36.0	_	_	-
5	. 11.81	2.1	35.2	11.57	2.0	34.8	13.14	4.0	37
6		3.1	36.5	14.12	3.3	36.6	12.92	5.1	36
7		4.2	36.8	15.52	4.9	36.7	14.86	5.5	36
8 9		2.3 2.0	39.5 37.8	17.38 20.14	2.3 2.1	39.5 37.8	15.48 19.28	1.9 3.1	39
10		5.9	42.6	20.14	5.9	42.6	13.20	3.1	31
11		5.9	34.0	28.79	5.9	34.0	-	_	-
Executive, administrative, and managerial		1.8	41.0	25.01	2.4	41.3	24.82	2.1	39
5		3.4	40.4	11.56	4.4	41.6	12.10	3.5	37
6 7		3.7 1.7	40.1 40.4	13.90 14.90	4.4 1.9	40.2 40.6	14.31 15.92	2.8 4.0	39
8		1.8	40.4	16.90	1.8	40.0	17.51	4.5	39
9		1.4	40.8	20.29	2.0	41.1	19.90	2.1	40
10	. 24.65	2.8	41.7	24.63	3.1	41.6	24.73	6.7	42
11		2.2	41.4	25.84	2.4	41.3	28.74	2.6	4
12		2.1	42.4	33.23	2.2	42.6	35.46	5.6	40
13		2.4 3.8	40.9	39.33	2.9	41.4 42.5	_ 25.00	2.5	1
14 15		34.2	42.3 40.8	49.57 90.16	3.7 34.2	40.8	35.00	2.5	40
Not able to be leveled		13.4	36.4	27.91	20.6	40.1	21.84	12.0	32
Executives, administrators, and managers		2.3	41.3	28.47	3.2	41.9	27.89	2.3	39
5		6.5	45.6	11.19	7.0	47.5	_	-	-
<u>6</u>		10.8	41.9	12.76	14.6	42.7	_		٠. ا
7 8		2.7 2.1	40.5 40.3	13.35 17.03	3.1 2.3	40.6 40.4	15.89 17.27	5.5 6.2	39
9		2.1	41.5	20.47	4.2	42.1	19.60	1.4	4(
10		3.2	42.1	24.81	3.6	41.9	25.50	6.3	42
11	. 27.05	2.3	41.8	26.37	2.8	41.8	29.20	3.0	42
12		1.9	42.7	33.85	2.0	42.9	35.84	5.6	40
13		2.4	40.9	39.36	2.9	41.4	-	-	1
14 15		3.7 34.2	42.5 40.8	50.30 90.16	3.7 34.2	42.6 40.8	35.79	3.1	40
Not able to be leveled		14.2	36.2	28.45	22.4	40.2	21.84	12.0	32
Management related	19.19	1.7	40.3	19.50	1.9	40.4	17.67	4.7	39
5	. 11.82	3.1	39.4	11.68	4.4	40.0	12.15	3.9	37
6		4.1	39.8	14.07	4.7	39.9	14.02	3.1	39
7		2.1	40.4	15.75	2.4	40.6	15.93	5.0	39
8 9		2.8 1.6	41.0 40.1	16.75 20.11	2.7	41.4 40.1	17.66 20.57	6.0 5.0	40
10		5.7	39.9	23.68	5.8	39.9	-	- 5.0	40
11		3.7	40.5	24.80	3.9	40.5	-	-	-
12		4.9	41.4	30.68	5.0	41.5	-	-	-
14 Not able to be leveled		3.6 6.7	40.5 40.0	- 23.45	6.7	- 40.0	_	_	:
Sales		8.0	31.5	13.16	8.0	31.5	7.31	14.6	21
1		3.8	24.8	6.71	3.8	24.7	- 1.31	14.6	
2		2.0	23.6	6.24	2.0	23.8	_	-	-
3		1.8	28.8	7.87	1.8	28.9	-	-	-
4		6.2	32.0	9.72	6.2	32.0	-	-	-
5		3.5	39.8	11.55	3.5	39.8	-	-	-
6		4.5	41.1	14.99	4.5	41.1	-	_	-
7	. 18.63	9.5	41.2	18.63	9.5	41.2	_	_	-

Table 6. Occupational groups¹ and levels,² West North Central: Mean hourly earnings³ and weekly hours, private industry and State and local government, National Compensation Survey,⁴ 1997—Continued

		Total		Priv	ate industry		State and	local gover	nment
	Hourly 6	earnings		Hourly e	arnings		Hourly e	arnings	
Occupational group and level	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									
8		12.0	41.0	\$21.62	12.0	41.0	-	-	-
9 10		8.0 7.9	42.7 40.6	25.17 26.45	8.0 7.9	42.7 40.6	_	_	-
11		25.1	43.7	47.69	25.1	43.7	_	_	
12		4.7	42.0	38.29	4.7	42.0	-	_	-
Not able to be leveled	25.28	20.4	34.5	25.28	20.4	34.5	-	_	-
Administrative support, including clerical	10.49	2.3	37.3	10.23	2.7	37.5	\$11.31	1.6	36
1		6.5	31.9	6.04	6.5	33.8	6.99	5.6	26
2		2.9	34.4	7.29	2.6	34.8	8.90	6.0	32
3 4		3.3 1.3	35.4 38.3	8.26 10.11	3.7 1.5	36.1 38.4	9.19 10.59	3.5 1.9	32
5		1.6	39.4	11.92	2.0	39.2	12.34	1.5	39
6		1.8	39.5	13.06	3.0	39.7	12.60	2.5	39
7	15.21	1.9	39.6	15.19	2.1	40.3	15.25	3.2	38
8		2.9	40.2	16.24	2.8	40.2	_	_	-
9		5.5	39.9	19.51	4.2	39.9	_	_	-
10 Not able to be leveled		5.5 11.9	39.2 37.7	21.84 11.30	5.5 13.3	39.2 37.6	_	_	
ue collar1		2.1	38.3	12.36 7.37	2.2	38.5	13.38	1.8 7.8	36
2		1.2 3.3	32.2 36.1	9.10	1.3 3.3	32.3 36.7	6.78 9.69	8.3	23
3		2.6	38.9	10.95	2.8	39.0	11.48	4.6	38
4		2.3	38.8	11.54	2.5	39.1	11.20	3.5	34
5		1.8	42.1	13.52	1.9	42.5	13.55	1.9	38
6		1.8	40.7	14.74	3.4	40.8	12.47	3.0	39
7		2.4 2.6	39.9 40.2	16.59	2.5 2.7	39.9 40.2	14.63	5.1 3.5	39
8 9		2.8	41.7	18.80 20.01	3.2	41.8	19.73 18.89	2.1	40
10		8.5	40.0	30.39	7.8	40.0	-		'`-
Not able to be leveled		16.5	40.0	13.74	16.5	40.0	-	_	-
Precision production, craft, and repair	14.52	5.2	39.9	14.43	5.6	39.9	15.38	2.0	40
3		3.1	37.4	8.19	3.0	37.3	_	-	-
4		4.5	39.7	10.11	4.4	39.7	-	_	- ا
5 6		3.7 6.3	40.2 40.9	12.63 14.47	4.1 6.8	40.2 40.9	14.49 14.22	3.6 4.7	40
7		1.3	39.9	16.62	2.0	39.8	15.31	2.2	40
8		1.7	40.0	19.08	1.7	40.0	19.92	3.8	40
9		1.5	41.9	19.41	1.5	42.0	18.71	2.8	40
10	29.27	8.8	40.0	-	-	-	_	_	-
Machine operators, assemblers, and inspectors	11.90	2.4	39.4	11.90	2.4	39.4	_	_	-
1		5.2	37.8	8.16	5.2	37.8	_	_	-
2		1.9	39.1	9.35	1.9	39.1	_	_	-
3		4.2 2.1	39.5 39.8	11.47 11.61	4.2 2.1	39.5 39.8	_	_	-
4 5		3.2	39.8	12.95	3.2	39.8	_	_]
6		4.3	39.9	14.48	4.3	39.9	_	_	
7		3.3	39.9	16.19	3.3	39.9	_	-	-
9	19.34	4.2	37.7	19.34	4.2	37.7	-	_	-
Transportation and material moving		4.2	40.4	14.21	4.6	42.0	12.44	2.7	32
1		6.3	31.2	6.76	6.5	31.9			
2		5.5	32.1	10.52	6.0	35.7	12.46	9.0	17
3		3.9	38.1 38.0	12.51 12.00	4.6 6.0	38.6 39.1	13.56	5.0 6.7	35
4 5		5.3	48.6	15.29	3.4	50.4	11.39 13.32	1.2	34
6		10.8	43.3	18.80	5.3	47.2	11.27	11.8	37
7		18.1	40.2	-	_		10.96	10.8	38

Table 6. Occupational groups¹ and levels,² West North Central: Mean hourly earnings³ and weekly hours, private industry and State and local government, National Compensation Survey,⁴ 1997—Continued

		Total		Priv	ate industry		State and	local govern	nmen
Occuration 1	Hourly e	earnings] ,	Hourly e	arnings] ,	Hourly e	arnings	
Occupational group and level	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mea wee hou
lue collar -Continued									
Transportation and material moving -Continued									
8 9	\$23.35 26.16	11.6 18.3	43.4 41.1	\$23.35 28.06	11.6 21.0	43.4 41.5	_ _	_	-
Handlers, equipment cleaners, helpers, and									
laborers	9.44 7.04	2.3 2.2	34.0 29.3	9.32 7.06	2.5 2.2	33.9 29.4	\$11.03 5.92	3.9 4.5	36 26
2	8.72	6.9	33.8	8.77	7.1	33.9	7.63	3.9	30
3		3.9	38.8	10.12	4.1	38.7	10.13	5.0	40
4		3.2	36.8	12.00	3.8	37.1	10.79	4.5	33
5	12.49	2.9	39.3	12.30	3.1	39.0	12.99	4.8	40
6 7	13.40 12.77	4.7 8.2	39.6 39.5	13.60 12.46	5.4 8.0	39.5 39.4	12.23 –	5.4	40
ervice	8.67	1.4	31.2	7.40	1.3	29.8	12.07	1.5	35
1	6.30	1.7	24.9	6.20	2.0	24.8	7.17	3.9	25
2	7.13	1.7	30.7	6.60	2.0	30.2	8.68	2.3	32
3	7.67	1.5	31.7	7.36	2.0	31.4	9.68	2.7	33
4	9.11	1.8	35.6	8.51	2.7	34.9	10.92	2.5	38
5 6	10.81 11.06	4.4 4.4	36.7	10.19	5.9 7.8	35.4 39.1	11.48 11.91	2.7 2.5	38
7	15.67	1.9	39.5 40.8	10.34 12.11	3.6	32.6	16.13	1.8	42
8	16.40	4.7	40.4	15.87	5.3	39.7	16.80	6.7	40
9	17.64	2.5	40.2	_	_	-	17.62	2.5	40
10		7.5	43.5	_	-	-	20.03	8.1	42
11	25.14	6.3	40.0	-	-	-	-	_	
Protective service	13.73 6.89	2.3 13.3	39.0 33.0	8.22	10.0	34.9	15.14 10.42	2.0 8.4	36
3	8.23	3.9	27.3	8.10	4.1	31.1	-	-	".
4	10.86	7.3	38.3	9.38	5.4	39.8	12.44	7.4	36
5		2.1	40.8	_	_	-	10.96	2.0	4
6	11.82	2.5	40.3	_	-	-	11.92	2.5	40
7 8	15.68 16.83	2.5 6.8	42.9 40.4	_	_	_	15.72 16.90	2.5 7.0	42
9		2.5	40.4	_	_	_	17.62	2.5	40
10	19.98	8.3	42.7	_	_	_	19.98	8.3	42
11	-	6.3	40.0	_	-	-	_	-	
Food service		2.2	27.5	6.67	2.6	27.6	7.89	2.1	2
1 2	5.72 6.10	2.3 2.9	22.6 27.5	5.61 5.86	2.6 3.7	22.5 28.1	6.78 7.85	3.7 4.2	23
3		4.8	30.7	6.36	5.3	30.3	8.49	2.0	38
4	8.14	6.3	34.6	8.14	6.4	34.7	_	_	.
5	9.35	6.2	37.5	9.19	6.8	39.4	10.41	5.8	28
6	12.03	4.7	39.6	12.00	4.9	39.7	_	-	
7 Health service	13.21 8.01	3.3	41.8 30.9	12.99 7.66	2.9 1.0	42.1 30.0	9.60	4.9	35
1		1.7	26.0	6.28	1.8	25.7	9.00	-	".
2		3.1	30.7	7.38	3.6	29.2	8.28	4.5	35
3	7.66	2.9	30.7	7.61	2.9	30.8	8.82	7.8	29
4		3.0	33.3	8.34	3.6	31.4	9.63	1.4	39
5 7	11.12 14.11	7.4 6.6	36.7 20.1	9.68	7.8	32.6	_	_	'
Cleaning and building service		2.4	34.3	7.92	2.2	32.4	- 11.22	1.7	38
1		2.3	29.9	6.93	2.9	29.4	7.80	6.3	36
2	8.47	3.1	37.4	7.87	2.8	37.1	9.31	2.5	37
3	9.52	3.0	37.2	8.12	3.6	34.2	10.42	2.9	39
4	10.94	4.4	38.1	10.15	6.0	36.3	11.70	4.1	40
5	11.24	3.9	38.6	10.48	2.1	40.0	11.98	6.2	37
Personal service	8.03 6.41	1.9 4.3	30.3 20.5	7.95 6.39	2.2 4.3	31.3 21.1	8.44 6.51	3.6 13.3	18
2	6.60	4.7	29.2	5.93	3.2	29.3	8.14	9.8	29
3	7.75	3.8	31.9	7.73	4.1	33.6	7.98	4.1	20

Table 6. Occupational groups¹ and levels,² West North Central: Mean hourly earnings³ and weekly hours, private industry and State and local government, National Compensation Survey, 4 1997-Continued

		Total		Priva	ate industry		State and local government		
	Hourly earnings			Hourly earnings		.,	Hourly earnings		
Occupational group and level	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 Personal service –Continued 4	\$8.50 12.93 8.67 15.65	5.2 10.5 20.4 6.6	37.0 27.2 37.6 40.2	\$8.28 13.91 8.64 15.65	6.6 15.8 21.1 6.6	37.9 23.9 38.2 40.2	\$9.17 - - -	9.8 - - -	34.5 - - -

¹ A classification system including about 480 individual occupations is used to cover all workers in the civilian economy. For more information, see Technical Note.

² Each occupation for which data are collected in an establishment is evaluated based

weighted by hours.

4 In this census division, collection was conducted between October 1996 and April 1998. The average reference period was July 1997.

5 The relative standard event (COC): 1

NOTE: Dashes indicate that no data were reported or that data did not meet publication criteria. Occupational groups may include data for levels 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,

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.

Technical Note

The data in this report 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 government. 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 1,324 establishments with 50 or more workers, representing about 26,700 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. The sampling frame was reviewed prior to the survey and, when necessary, missing establishments were added, out-of-business and out-of-scope establishments were removed, and addresses, employment levels, industry classification, and other information were updated.

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 includes 149 metropolitan and nonmetropolitan areas that represent the Nation's 326 metropolitan statistical areas (as defined by the Office of Management and Budget) and the remaining portions of the 48 contiguous 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 is drawn by first stratifying the sampling frame by industry and ownership. 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 are applied to each establishment when the data are tabulated so the establishment represents similar units (by industry and employment size) in the economy that are not selected for collection.

The third stage of sample selection is a probability sample of occupations within a sampled establishment. In the West North Central region, collection was conducted between October 1996 and April 1998 with an average reference period of July 1997. The combined average payroll reference month for all surveys that contributed to the national estimates is August 1997. Additional information about the area sample and method of estimation is available in the BLS publication, *National Compensation Survey: Occupational Wages in the United States*, 1997, Bulletin 2519.

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

Probability-proportional-to-size selection of establishment jobs

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.

- 2. Classification of jobs into occupations based on the Census of Population system
- 3. Characterization of jobs as full time v. part time, union v. nonunion, and time v. incentive
- 4. Determination of the level of work of each job

For each occupation, wage data are collected for those workers who meet all the criteria identified in the last three steps. Special procedures are developed for jobs for which a correct classification or level can not be determined.

In step one, the jobs to be sampled are selected at each establishment by the BLS field economist during a personal visit. A complete list of employees is used for sampling, with each selected worker representing a job within the establishment. As with the selection of establishments, the selection of a job is 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 entails 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 overlap two or more census classification codes, the duties used to set the wage level are used to classify the job. Classification by primary duties is the fallback.

In step three, certain other job characteristics of the chosen workers are identified. First, the worker is identified as holding either a full- or part-time job, based on the establishment's definition of those terms. Then the worker is classified as having a time versus incentive job, depending on whether any part of pay is directly based on the actual production of the workers, rather than solely on hours worked. Finally, the worker is identified as being in a union job or a nonunion job.

The fourth step in the job classification procedure is 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 using the criteria for leveling a job, see appendixes C and D at www.bls.gov/compub.htm or any of our published NCS bulletins. This web site also has a link to the NCS job descriptions.

Data reliability. The data in this summary 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 report provide RSE data for indicated series.

The 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 is \$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 \times 1.645 \times 0.006 = 0.149 , round 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 conducted in all survey areas will be used to develop a formal quality assessment process to help compute nonsampling error. Although they also are not specifically measured, efforts are made to minimize nonsampling errors by the extensive training of field economists who gather survey data, edit the data by computer, and provide a detailed review of the data.

Census area divisions. Census divisions are 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.² Some census divisions include Consolidated Metropolitan Statistical Areas (CMSAs) and Metropolitan Statistical Areas (MSAs) that cross State lines.

Additional information about the National Compensation Survey, including a list of occupational classifications, is available by calling (202) 691-6199. You may also write to the

² Although Alaska and Hawaii are included in the Pacific Census Division, the 1997 NCS excluded these States.

Bureau of Labor Statistics at: Division of Compensation Data Analysis and Planning, 2 Massachusetts Ave., NE, Room 4175, Washington, DC 20212-0001, or send e-mail to **OCLTINFO@bls.gov**.

The data contained in this summary are also available on the Internet through the BLS site http://stats.bls.gov/ comhome.htm. Data are in three formats: An ASCII file containing the published table formats; an ASCII file containing positional columns of data for manipulation as a data base or spreadsheet; and a Portable Document Format (PDF) containing the entire summary.

Material in this summary is in the public domain and, with appropriate credit, may be reproduced without permission. This information is available to sensory impaired individuals upon request. Voice phone: (202) 691-5200; Federal Information Relay Service: 1-800-877-8339.

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, 1997

	Number of		N	lumber of e	stablishmer	nts studied		
Industry division	establish- ments rep- resented ¹	Total	50 - 99 workers	100 - 499 workers	500 - 999 workers	1000 - 2,499 workers	2,500 - 4,999 workers	5,000 or more workers
AII	26.700	1,324	374	604	153	116	53	24
	23,500	1,324	350	516	128	83	35	10
Private Industry	5.800	321	80	160	46	17	12	6
· · · · · · · · · · · · · · · · · ·	(²)	9	8	1	40	''	12	0
Mining	800	38	19	1 17	_ 2	_	_	_
Construction	5.000	274	53	142	44	17	- 10	
Manufacturing					30	l	12 9	6
Durable goods	3,200	162	29	77	30	13	9	4
Fabricated metal products, except machinery and	700		40	44		١ ,		
transportation equipment	700	29	10	14	3	1	1	_
Industrial and commercial machinery and computer	000			47		١ ,		
equipment	800	33	6	17	8	1	1	_
Electronic and electrical equipment	500	22	4	9	7	2		
Transportation equipment	300	25	3	8	2	4	5	3
Measuring, analyzing, and controlling instruments	200	19	2	9	4	2	1	1
Nondurable goods	1,800	112	24	65	14	4	3	2
Food and kindred products	700	29	7	15	4	2	1	– .
Printing, publishing, and allied industries	500	37	7	25	3		1	1
Chemicals and allied products	200	17	3	9	3	2		– .
Service-producing industries	17,600	801	270	356	82	66	23	4
Transportation and utilities	1,600	80	22	34	10	10	2	2
Wholesale trade	1,600	53	21	22	8	2	–	_
Retail trade	5,900	186	91	79	12	3	1	
Finance, insurance and real estate	1,200	72	24	20	9	11	7	1
Depository institutions	400	20	11	3	3		2	1
Insurance carriers	400	29	4	11	5	5	4	
Services	7,400	410	112	201	43	40	13	1
Business services	1,800	72	20	39	7	6	_	_
Educational services	400	71	29	36	4	2		-
Health services	2,800	161	29	72	23	24	12	1
Hospitals	400	68	2	16	15	22	12	1
Engineering, accounting, research, management, and			1					
related services	300	18	4	9	3	2	-	_
State and local government	3,200	202	24	88	25	33	18	14
Health services	300	25	4	9	3	5	3	1
Hospitals	100	15	1	3	3	4	3	1

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.

 $\label{thm:control} \mbox{Table B. Number of workers1 represented by the survey, by occupational group,2 West North Central, National Compensation Survey,3 1997}$

Occupational group	All industries	Private industry	State and local government
All	5,118,000 4,787,700	3,965,300 3,637,600	1,152,700 1,150,000
White collar	2,716,200	1,904,500	811,700
White collar excluding sales	2,385,800	1,576,800	809,000
Professional specialty and technical	1,115,800 865,900 250,000 408,200 330,300 861,800	619,600 414,100 205,500 319,900 327,700 637,300	496,200 451,800 44,400 88,400 2,700 224,400
Blue collar	1,484,200	1,376,200	108,000
Precision production, craft, and repair	423,800	383,800	39,900
Machine operators, assemblers, and inspectors	480,100	480,000	_
Transportation and material moving	206,200	167,100	39,100
Handlers, equipment cleaners, helpers, and laborers	374,200	345,300	28,900
Service	917,600	684,600	233,000

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 October 1996 and April 1998. The average reference period was