Minnesota Minimum-wage Report, 2005

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Research and Statistics

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Executive summary

This report, part of an annual series, describes trends in Minnesota's population of minimumwage workers since 1998 and presents characteristics of these workers for 2005. **Minimum-wage workers are defined in this report as workers earning the full minimum wage (see below)** or less at their main job, **excluding overtime pay, tips and commissions.**¹ The report also considers why some workers have reported earnings less than the full minimum, and how this affects the estimated number of workers whose wages are actually lifted by the minimum.

This report deals with Minnesota minimumwage workers within the population of all employed wage-and-salary workers age 15 years and older. The statistics are estimates computed from the Current Population Survey (CPS), conducted monthly by the U.S. Census for the U.S. Bureau of Labor Statistics.²

From September 1997 through July 2005, Minnesota's full minimum wage was \$5.15 an hour; it rose to \$6.15 on Aug. 1, 2005. The full federal minimum has been at \$5.15 an hour since September 1997. Minnesota provides a lower minimum for small employers. Prior to August 2005, this minimum was \$4.90 for employers with annual revenues below \$500,000; as of August 2005, it is \$5.25 for employers with revenues less than \$625,000.³ For workers younger than age 20, both federal and state law provide a lower minimum during the first 90 consecutive days of employment. The Minnesota "youth minimum" was \$4.25 until August 2005, when it was raised to \$4.90.⁴ The following are the report's major findings.

Trends in minimum-wage population

- From January through July 2005 (before the increase in Minnesota's minimum wage), an estimated 53,000 of the state's wage-and-salary workers, or 2.1 percent, earned \$5.15 an hour or less. The comparable U.S. figure was 2.5 percent.
- Because of overall wage growth, the percentage of the state's wage-and-salary workers at or below \$5.15 an hour fell from 5.0 percent in 1998 to 2.1 percent in the first seven months of 2005.
- With the increase in the state's minimum wage in August 2005, the percentage of minimum-wage workers rose from 2.1 to 3.3 percent of the wage-and-salary workforce.
- The percentage of Minnesota's minimumwage workers who also received overtime pay, tips or commissions rose from an estimated 24 percent in 1998 to 33 percent in the first portion of 2005. This occurred because wages rose more for minimum-wage workers who did *not* receive these other types of pay than for those who did.

Characteristics of minimum-wage workers in 2005

The following estimates pertain to August through December 2005, the portion of the year after Minnesota's full minimum wage increased to \$6.15.

Industry

- Among major industries, eating and drinking places had the highest rate of minimum-wage workers, 18 percent. About 29 percent of all minimum-wage workers were employed in eating and drinking places.
- The second-highest percentage of minimumwage workers was in private household services, 13 percent.

¹ Overtime pay, tips and commissions are excluded from earnings in the data used. Also, tips are excluded from wages for purposes of Minnesota's minimum-wage law (see Appendix A). The term "minimum-wage worker" as used in this report has no implications regarding the degree of compliance with the minimum-wage law.

² The CPS excludes workers younger than 15.

³ Employers with annual revenues less than \$500,000 are exempt under the federal law.

⁴ The federal youth minimum has been \$4.25 since September 1997.

• Among industries, the percentage of minimum-wage workers with additional earnings from overtime, tips or commissions was highest in eating and drinking places (57 percent) and hotels, motels and other accommodation (41 percent).

Occupation

- Among major occupation groups, food preparation and serving occupations had the highest rate of minimum-wage workers at 17 percent. About 31 percent of all minimumwage workers were in these occupations.
- The next highest percentages of minimumwage workers were in personal care and service occupations (10 percent) and farming, fishing and forestry occupations (8 percent).
- Among occupations, the percentage of minimum-wage workers with additional earnings from overtime, tips or commissions was highest in food preparation and serving (57 percent), protective service (27 percent), and personal care and service (24 percent).

Age and gender

- Among 15- to 19-year-olds in Minnesota, 17 percent earned \$6.15 an hour or less, compared with 1.6 percent of 25- to 54-year-olds and 2.7 percent of those 55 and older.
- Fifty-eight percent of all minimum-wage workers were 15 to 24.
- Among employed women, 4.1 percent were minimum-wage workers, compared with 2.6 percent of men.

Work status

- Among part-time workers, 9.5 percent earned \$6.15 an hour or less, compared with 1.5 percent of full-time workers.
- Part-time workers made up 64 percent of all minimum-wage workers, but only 23 percent of the workforce.

Education

- Among workers with less than a high-school education, 14 percent were minimum-wage workers, compared with 3.3 percent for those with a high-school degree and 1.9 for those with at least some college.
- Those without a high-school degree made up 35 percent of all minimum-wage workers, even though they comprised only 9 percent of the workforce.

Marital status

- Among unmarried workers, 5.6 percent earned \$6.15 an hour or less, as opposed to 1.5 percent of married workers.
- Unmarried workers accounted for 74 percent of all minimum-wage workers as compared with 44 percent of the workforce.

Poverty status

- Minimum-wage workers accounted for 8.9 percent of workers living below the poverty line, as opposed to 3.0 percent of workers above the poverty line.
- Workers below the poverty line made up 15 percent of all minimum-wage workers, as opposed to 6 percent of the overall workforce.

Metropolitan residence

• In metropolitan Minnesota, minimum-wage workers made up 2.9 percent of the workforce; for the rest of the state, minimum-wage workers were 4.8 percent of the total.

Workers earning less than the full minimum

- Among Minnesota workers earning \$5.15 an hour or less from 2001 through July 2005:
 - 22 percent earned exactly \$5.15, while 78 earned less.
 - ➤ 43 percent earned less than \$4.25.

26 percent of hourly workers, and 66 percent of salaried workers,⁵ earned less than \$4.25.

- Perhaps 10 to 15 percent of workers earning less than the applicable minimum seem to be in exempt categories.
- Data errors seem to account for a small portion of the cases with reported earnings less than the applicable minimum wage.
- Among workers earning \$5.14 an hour or less from 2001 to July 2005, an estimated 54 percent were salaried, as opposed to 10 percent for those earning \$5.15 to \$10.00 and 22 percent for those earning \$10.00 to \$15.00. This indicates that noncompliance with the minimum wage is more prevalent for salaried workers.⁶
- Depending on employer behavior, the minimum wage may directly lift the wages of anywhere from 22 to 64 percent of workers earning the full minimum or less. It may indirectly affect the earnings of other workers through positive or negative "spillover effects."

⁵ "Salaried workers," as used in this report, refers to all workers paid on a basis other than hours worked. This includes salaried and commissioned workers and those paid according to work completed. Hourly earnings for salaried workers are estimated as weekly earnings divided by usual weekly hours worked.

⁶ Enforcement of the minimum wage is more difficult for salaried workers than for hourly workers because of greater difficulty in monitoring their hours worked.

Introduction

The federal minimum wage was enacted in 1938 as a means of raising the earnings of low-wage workers. From its initial level of 25 cents, it has been raised several times and now stands at \$5.15. Initially, coverage was limited to employees engaged in interstate commerce or in the production of goods for interstate commerce. Coverage has since been expanded to include most of the labor force. With some exceptions, Minnesota's minimum wage has risen over the years along with the federal minimum. The state's "full minimum" was equal to its federal counterpart from September 1997 until Aug. 1, 2005, when it was raised to \$6.15 (as described below, lower minimums apply in some situations).

As policy-makers consider the minimum wage, a number of questions arise. How many workers are paid the minimum wage or less? What are the characteristics and circumstances of these workers? Are they relatively young or old? What are their family status and family income? In what occupations and industries are they most likely to be found? How complete is coverage of and compliance with the minimum-wage law? How many workers actually have their wages lifted by the minimum wage?

This report, part of an annual series, statistically describes Minnesota's population of minimumwage workers. It first presents trends in the state's population of minimum-wage workers since 1998. It then presents characteristics of minimum-wage workers' are defined for this purpose as workers earning the full minimum *or less* at their main job, excluding overtime pay, tips and commissions.⁷ Because of the increase in the state minimum in 2005, the characteristics estimates pertain to workers earning \$6.15 or less in that year. The report then considers why some workers have reported earnings less than the full minimum, and how this affects the estimated number of workers whose wages are actually lifted by the minimum. Appendix A contains Minnesota's minimum-wage law. Appendix B describes data and estimation procedures. Appendix C presents a detailed analysis of workers with reported earnings less than the full minimum wage.

Exemptions and lower minimums

Both federal and state law provide several exemptions from minimum-wage coverage.⁸ For example, Minnesota exempts some salaried and minor employees in agriculture, seasonal camp staff, elected government officials, traveling salespersons, and several other groups. To be exempt from coverage, a worker must meet both the federal and state exemption conditions.

Lower minimum-wage levels apply to some workers. Employers with annual revenues less than \$500,000 are exempt under federal law; however, small employers in Minnesota are subject to a lower minimum. From January 1998 through August 2005, this "small employer" minimum was \$4.90 for employers with annual revenues below \$500,000; as of August 2005, it is \$5.25 for employers with revenues less than \$625,000. For workers younger than age 20, both federal and state law provide a lower minimum during the first 90 consecutive days of employment. The federal "youth minimum" has been \$4.25 an hour since September 1997. The Minnesota youth minimum was equal to its federal counterpart before August 2005, when it was raised to \$4.90. Special federal and state rules also apply to handicapped workers.

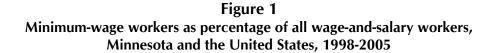
⁷ Overtime pay, tips and commissions are excluded from earnings in the data used. Also, tips are excluded from wages for purposes of Minnesota's minimum-wage law (see Appendix A). The term "minimum-wage worker" as used in this report has no implications regarding the degree of compliance with the minimum-wage law.

⁸The Minnesota exemption categories are in Appendix A. The federal exemption categories are at www.dol.gov/esa/minwage/q-a.htm.

Data and estimation technique

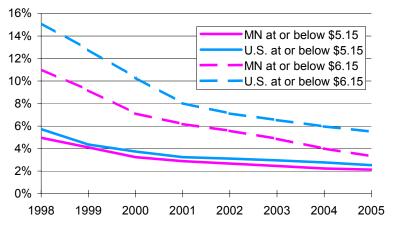
The statistics in this report are estimates derived from the Current Population Survey (CPS). The CPS, conducted monthly by the U.S. Census for the U.S. Bureau of Labor Statistics, provides data about the labor market experience of U.S. households. This report combines the monthly data for each year. Because of sample size issues, most statistics in the report are derived with methods that reduce sampling variation by using multiple years of data or a combination of Minnesota and U.S. data. *Because of a revision in estimation methods, trend statistics are changed somewhat from prior reports.*⁹

⁹ See Appendix B for details.



Prior to Minnesota's minimumwage increase in August 2005, the percentage of minimum-wage workers fell during the past seven years in Minnesota and the United States. The same was true for workers earning \$6.15 an hour or less. Minnesota's minimum-wage increase in August 2005 raised the number of minimum-wage workers in the state by somewhat more than half.

- Before the recent increase in Minnesota's minimum wage, the percentage of minimumwage workers in the state fell from 5.0 percent of all wageand-salary workers in 1998 to 2.1 percent in 2005, because of generally rising wage levels.
- When Minnesota's full minimum wage increased from \$5.15 to \$6.15 in August 2005, the percentage of minimumwage workers rose from an estimated 2.1 percent of all wage-and-salary workers to 3.3 percent, and the estimated number of minimum-wage workers rose from 53,000 to 83,000.
 - At both the \$5.15 and \$6.15 levels, Minnesota had relatively fewer low-wage workers than the United States for the period shown. This resulted from higher overall wages in Minnesota.¹⁰



	Minnesota				United	States
	At or belo	ow \$5.15/hr.	At or belo	ow \$6.15/hr.	Pctg. of all wage-	
		Pctg. of all		Pctg. of all	and-salar	y workers
		wage-and-		wage-and-	At or	At or
	Number	salary	Number	salary	below	below
	(1,000s)	workers	(1,000s)	workers	\$5.15/hr.	\$6.15/hr.
1998	113	5.0%	252	11.0%	5.7%	15.1%
1999	96	4.1	214	9.2	4.4	12.8
2000	76	3.2	168	7.1	3.7	10.3
2001	68	2.9	145	6.2	3.2	8.0
2002	63	2.7	132	5.6	3.1	7.1
2003	60	2.5	119	4.9	3.0	6.5
2004	55	2.2	98	4.0	2.8	6.0
2005	53	2.1	83	3.3	2.5	5.5

 Estimated by DLI Research and Statistics with data from the Current Population Survey, conducted by the U.S. Census Bureau for the U.S. Bureau of Labor Statistics. Estimates of the number and percentage of Minnesota workers at or below \$6.15 an hour are shown, along with a comparable United States estimate, because Minnesota's minimum wage increased from \$5.15 to \$6.15 an hour in August 2005. Because of a revision in estimation method, the estimates for the entire period are changed from previous reports. Estimates, especially for recent years, may be revised in future reports because they take into account multiple years of data. Details in Appendix B.

¹⁰ From 1998 to 2005, the average hourly wage of all wage-and-salary workers averaged 7.7 percent higher in Minnesota than in the United States, according to the CPS data.

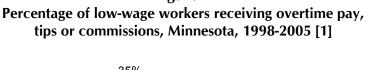
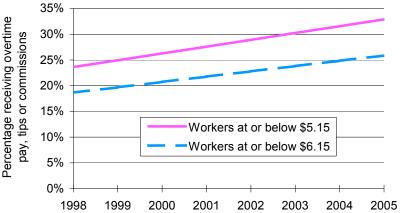


Figure 2

The percentage of Minnesota's low-wage workers who received overtime pay, tips or commissions (OTC) increased during the past seven years.

- From 1998 to 2005, before the increase in the Minnesota's minimum to \$6.15, the percentage of the state's minimumwage workers receiving OTC increased from 24 to 33 percent. Among workers earning \$6.15 or less, the percentage increased from 19 to 26 percent.
- These increases occurred because the decline in the number of minimumwage workers took place primarily among people who did *not* receive OTC. Among workers earning \$5.15 or less, for example, the number receiving OTC fell from about 27,000 to 18,000, while the number *not* receiving OTC fell from 27,000 to 26,000. One received

87,000 to 36,000. One reason for this may relate to the fact that the minimum wage accounts for only part of total earnings for tipped employees. As wages rise generally, employers must follow suit to retain employees, so that increasingly few employers pay the minimum. But where



	Workers at or below \$5.15 an hour				Workers	at or bel	ow \$6.15	an hour
	Usuall	y receive	e overtime	pay,	Usually	y receive	e overtime	pay,
	tip	s or con	missions?	?	tip	s or con	nmissions?	?
	Ye	s	No)	Ye	S	No)
	Number		Number		Number		Number	
	(1,000s)	Pctg.	(1,000s)	Pctg.	(1,000s)	Pctg.	(1,000s)	Pctg.
1998	27	23.6%	87	76.4%	47	18.7%	205	81.3%
1999	24	24.9	72	75.1	42	19.7	172	80.3
2000	20	26.3	56	73.7	35	20.7	133	79.3
2001	19	27.6	49	72.4	32	21.7	114	78.3
2002	18	28.9	45	71.1	30	22.8	102	77.2
2003	18	30.2	42	69.8	28	23.8	91	76.2
2004	17	31.6	38	68.4	24	24.8	74	75.2
2005	18	32.9	36	67.1	21	25.9	61	74.1

 Estimated by DLI Research and Statistics with data from the Current Population Survey, conducted by the U.S. Census Bureau for the U.S. Bureau of Labor Statistics. Estimates are shown for workers at or below \$5.15 and \$6.15 an hour because the Minnesota minimum wage increased from \$5.15 to \$6.15 an hour in August 2005. Because of a revision in estimation method, the estimates for the entire period are changed from previous reports. Estimates, especially for recent years, may be revised in future reports because they take into account multiple years of data. Details in Appendix B.

> employees are tipped, assuming that tips follow market forces, employers paying the minimum wage have less need to raise their direct pay to ensure that their employees' total pay keeps up with the market.

		Workers at or below \$6.15 an hour			
					Pctg. of
				Percentage	these workers
				among	who receive
	Total			all workers	overtime pay,
	workers	Number		at or below	tips or
Industry group [2]	(1,000s)	(1,000s)	Percentage	\$6.15/hour	commissions
Total, 15 years and older	2,494	83	3.3%	100.0%	25.9%
Agriculture, forestry, fishing and hunting	19	1	7.5	1.7	1.7
Mining	6	[4]	.5	.0	[5]
Utilities	20	[4]	.7	.2	[5]
Construction	139	2	1.2	2.0	6.9
Manufacturing	378	4	1.2	5.3	10.3
Wholesale trade	86	1	1.5	1.5	17.2
Retail trade	307	14	4.7	17.3	11.3
Transportation and warehousing	94	2	1.6	1.8	18.6
Information	58	1	2.1	1.5	12.4
Finance and insurance	164	2	.9	1.9	20.7
Real estate, rental, and leasing	42	1	3.2	1.6	24.9
Professional, scientific, and technical servs.	130	1	1.0	1.6	9.1
Mgmt., adm. and support, and waste mgmt. servs.	80	3	3.3	3.2	9.9
Educational services	229	6	2.5	6.9	4.4
Health care excl. hospital and residential servs.	111	2	1.9	2.6	5.7
Hospitals	116	1	.9	1.3	14.0
Residential facilities	60	2	3.5	2.6	12.0
Social assistance	52	3	6.3	4.0	4.0
Arts, entertainment and recreation	45	3	6.3	3.4	30.9
Hotels, motels and other accommodation	21	1	6.6	1.7	40.8
Eating and drinking places	137	24	17.6	29.0	56.5
Private household services	14	2	12.8	2.2	7.5
Other services	96	5	4.8	5.6	26.5
Public administration [3]	91	1	1.1	1.2	20.2

Figure 3 Minimum-wage workers and percentage receiving other types of pay by industry, Minnesota, 2005 [1]

2. Except for the public administration division (see note 3), industries include the private and public sectors.

3. The public administration division is limited to those government employees not classifiable under other industries, such as construction or educational services.

4. Fewer than 500 workers.

5. Percentages are not given for these industries because of small sample size.

Among industry groups, minimum-wage workers are most prevalent in eating and drinking places, as is the percentage of minimum-wage workers receiving OTC.

- Among industry groups, eating and drinking places had the highest rate of minimum-wage workers during 2005, 18 percent. About 29 percent of all minimum-wage workers were employed in eating and drinking places.
- Relatively high concentrations of minimumwage workers were also found in private

household services; agriculture, forestry, fishing and hunting; social assistance; arts, entertainment and recreation; and hotels, motels and other accommodation.

• About 57 percent of minimum-wage workers in eating and drinking places received OTC, followed by 41 percent in hotels, motels and other accommodation and 31 percent in arts, entertainment and recreation.

		W	orkers at or l	pelow \$6,15	an hour
				<u> </u>	Pctg. of
				Percentage	these workers
				among	who receive
	Total			all workers	overtime pay,
	workers	Number		at or below	tips or
Occupation group	(1,000s)	(1,000s)	Percentage	\$6.15/hour	commissions
Total, 15 years and older	2,494	83	3.3%	100.0%	25.9%
Management, professional and technical [2]	687	5	.7	5.9	12.3
Community and social service	52	1	2.0	1.2	2.1
Education, training and library	149	3	2.0	3.5	1.9
Arts, design, entertainment, sports and media	44	1	2.4	1.3	8.9
Health care support	57	2	4.1	2.8	11.5
Protective service	30	1	2.2	.8	27.4
Food preparation and serving	147	25	17.2	30.5	56.6
Building and grounds cleaning and maintenance	76	5	6.2	5.7	6.1
Personal care and service	72	7	9.8	8.5	23.9
Sales and related services	272	14	5.0	16.3	15.5
Office and administrative support	369	7	2.0	8.9	5.5
Farming, fishing and forestry	16	1	8.4	1.6	1.3
Construction and extraction	117	1	1.2	1.7	4.3
Installation, maintenance and repair	80	1	1.0	1.0	16.8
Production	191	4	1.9	4.4	6.6
Transportation and material moving	137	5	3.6	5.9	19.6

Figure 4 Minimum-wage workers and percentage receiving other types of pay by occupation, Minnesota, 2005 [1]

 Includes management occupations; business and financial occupations; computer and mathematical science occupations; architectural and engineering occupations; life, physical and social science occupations; legal occupations; and health care practitioner and technical occupations. The percentages of workers at or below \$6.15 an hour in these groups range from 0.4 to 0.9 percent.

Minimum-wage workers are most prevalent in food preparation and serving occupations, as is the percentage of minimum-wage workers receiving OTC.

- Food preparation and serving occupations had about a 17 percent rate of minimum-wage workers. About 31 percent of minimum-wage workers were in these occupations.
- Relatively high concentrations of minimumwage workers were also found in personal

care and service occupations; farming, forestry and fishing occupations; and building and grounds cleaning and maintenance occupations.

• About 57 percent of minimum-wage workers in food preparation and serving occupations received OTC, followed by 27 percent in protective service, 24 percent in personal care and service, and 20 percent in transportation and material-moving occupations.

		Workers	at or below \$6.7	15 an hour
				Percentage
				among
	Total			all workers
	workers	Number		at or below
Gender and age	(1,000s)	(1,000s)	Percentage	\$6.15/hour
Total, 15 years and older	2,494	83	3.3%	100.0%
15-19 years	182	31	16.9	37.2
20-24 years	285	17	5.9	20.3
25-54 years	1,706	27	1.6	32.2
55 years and older	321	9	2.7	10.3
Men	1,258	32	2.6	39.2
15-19 years	87	13	15.3	16.0
20-24 years	150	7	4.8	8.6
25-54 years	871	9	1.0	11.0
55 years and older	151	3	2.0	3.6
Women	1,236	50	4.1	60.8
15-19 years	95	18	18.3	21.1
20-24 years	135	10	7.2	11.7
25-54 years	835	18	2.1	21.2
55 years and older	170	6	3.3	6.7

Figure 5 Minimum-wage workers by gender and age, Minnesota, 2005 [1]

Young workers and women are more likely than others to be minimum-wage workers. Older workers are more likely than those in their middle years to be minimum-wage workers.

- Among 15- to 19-year-olds, 16.9 percent earned \$6.15 an hour or less, compared with 1.6 percent of 25- to 54-year-olds and 2.7 percent of those 55 and older.
- As a result, 15- to 19-year-olds comprised roughly 37 percent of all minimum-wage workers even though they made up only 7 percent of the workforce. Combining the two

youngest groups, 15- to 24-year-olds made up 58 percent of all minimum-wage workers.

- Although 25- to 54-year-olds were least likely to be minimum-wage workers, they made up 32 percent of all minimum-wage workers because they accounted for 68 percent of the workforce.
- Women were more likely than men to be minimum-wage workers (4.1 vs. 2.6 percent), and therefore accounted for 61 percent of all minimum-wage workers.

Minimum-wage workers by wor	k status, gen	der and age, Min	nesota, 2005 [1]
		Workers at or b	elow \$6.15 an hour
			Percentage
			among
	Total		all workers
	workers	Number	at or below

Figure 6 Minimum-wage workers by work status, gender and age, Minnesota, 2005 [1]

(1,000s)(1,000s) Work status, gender and age Percentage \$6.15/hour Total, 15 years and older 2,494 83 3.3% 100.0% Full time [2] 1,933 30 1.5 35.7 Men 1,081 13 1.2 15.6 Women 851 17 2.0 20.1 39 4 9.1 4.2 15-19 years 20-24 years 194 7 3.7 8.8 25-54 years 1.476 16 1.1 18.9 55 years and older 224 3 1.4 3.8 562 53 9.5 64.3 Part time [2] 19 11.0 23.5 Men 177 Women 385 34 8.8 40.8 15-19 years 144 27 19.0 32.9 20-24 years 91 10 10.6 11.6 25-54 years 230 4.8 13.3 11 55 years and older 97 5 5.5 6.5

1. Estimated by DLI Research and Statistics with data from the Current Population Survey, conducted by the U.S. Census Bureau for the U.S. Bureau of Labor Statistics. Details in Appendix B. The \$6.15 minimum-wage level is used because it took effect in Minnesota in August 2005.

2. Full-time workers are defined as those usually working 35 or more hours a week.

Part-time workers are much more likely than full-time workers to be minimum-wage workers.

- Of part-time workers, 9.5 percent earned \$6.15 an hour or less, compared with 1.5 percent of full-time workers.
- Part-time workers made up 64 percent of all minimum-wage workers, even though they accounted for only 23 percent of the workforce.
- Among full-time workers, women were more likely to be minimum-wage workers (2.0 percent vs. 1.2 percent for men). Among part-time workers, however, men were more likely than women to be minimum-wage workers (11.0 vs. 8.8 percent). A possible explanation is that part-time employment is more commonly a long-term situation for women, as they balance work inside and outside of the home, than for men, and a longer-term job is likely to be higher-paid.

		Workers	at or below \$6.1	5 an hour
				Percentage
	Tatal			among
	Total	Nissente e a		all workers
Education conder and acc	workers	Number	Doroontogo	at or below
Education, gender and age Total, 15 years and older	(1,000s) 2,494	(1,000s) 83	Percentage 3.3%	\$6.15/hour 100.0%
-				
Less than high school	215	29	13.7	35.4
Men	115	13	11.1	15.5
Women	100	17	16.6	19.9
15-19 years	116	23	20.1	28.2
20-24 years	18	1	8.2	1.8
25-54 years	59	3	5.1	3.6
55 years and older	22	1	6.9	1.8
High school only	650	22	3.3	26.3
Men	338	8	2.3	9.2
Women	313	14	4.5	17.1
15-19 years	39	4	11.2	5.2
20-24 years	78	4	5.5	5.1
25-54 years	425	10	2.3	11.6
55 years and older	110	4	3.3	4.3
At least some college	1,629	32	1.9	38.3
Men	805	12	1.5	14.5
Women	824	20	2.4	23.8
15-19 years	28	3	11.1	3.7
20-24 years	189	11	5.9	13.4
25-54 years	1,222	14	1.2	17.0
55 years and older	190	3	1.8	4.2

Figure 7 Minimum-wage workers by education, gender and age, Minnesota, 2005 [1]

Minimum-wage workers are most prevalent among the least educated.

- Minimum-wage workers comprised 13.7 percent of workers with less than a high-school education, compared with 3.3 percent for those with a high-school degree and 1.9 for those with at least some college.
- Because a majority of workers have at least some college education, these people accounted for 38 percent of all minimum-wage workers.
- Those without a high-school degree made up 35 percent of all minimum-wage workers, even though they comprised only 9 percent of the workforce.

Figure 8
Minimum-wage workers by marital status, gender and age, Minnesota, 2005 [1]

		Workers	at or below \$6.1	5 an hour
				Percentage
				among
	Total			all workers
	workers	Number		at or below
Marital status, gender and age	(1,000s)	(1,000s)	Percentage	\$6.15/hour
Total, 15 years and older	2,494	83	3.3%	100.0%
Married, spouse present	1,405	22	1.5	26.2
Men	722	7	.9	8.0
Women	684	15	2.2	18.2
15-19 years	1	[2]	12.1	.1
20-24 years	38	2	4.3	2.0
25-54 years	1,142	15	1.3	17.9
55 years and older	224	5	2.3	6.2
Other marital status	1,089	61	5.6	73.8
Men	536	26	4.8	31.2
Women	553	35	6.4	42.6
15-19 years	182	31	16.9	37.1
20-24 years	247	15	6.2	18.3
25-54 years	564	12	2.1	14.2
55 years and older	97	3	3.5	4.1

2. Fewer than 500 workers.

Unmarried workers are more likely to be paid the minimum wage than are married workers.

- Minimum-wage workers comprised 5.6 percent of unmarried workers, as opposed to 1.5 for those who were married.
- Unmarried workers accounted for 74 percent of all minimum-wage workers even though

they made up only 44 percent of the workforce.

• Unmarried women made up 43 percent of all minimum-wage workers even though they accounted for only 22 percent of the workforce.

Figure 9
Minimum-wage workers by poverty status, gender and age, Minnesota, 2005 [1]

		Workers	at or below \$6.1	15 an hour
				Percentage
				among
	Total			all workers
	workers	Number		at or below
Poverty, status, gender and age	(1,000s)	(1,000s)	Percentage	\$6.15/hour
Total, 15 years and older	2,494	83	3.3%	100.0%
At or below poverty line [2]	139	12	8.9	14.9
Men	68	5	7.2	5.9
Women	71	7	10.5	9.0
15-19 years	17	3	18.6	3.7
20-24 years	42	4	9.0	4.5
25-54 years	71	5	6.4	5.5
55 years and older	9	1	9.9	1.1
Above poverty line [2]	2,356	71	3.0	85.1
Men	1,190	28	2.3	33.3
Women	1,165	43	3.7	51.9
15-19 years	166	28	16.7	33.4
20-24 years	243	13	5.4	15.8
25-54 years	1,635	22	1.4	26.7
55 years and older	312	8	2.4	9.2

2. The poverty line depends on household size and is applied to total household income. The poverty status of each household member is the same as the poverty status of the household.

Minimum-wage workers are more prevalent among those in poverty than among other workers.

• Minimum-wage workers accounted for 8.9 percent of workers living below the poverty

line, as opposed to 3.0 percent of workers above the poverty line.

• Workers below the poverty line made up 15 percent of all minimum-wage workers, compared with 6 percent of the overall workforce.

Figure 10
Minimum-wage workers by metropolitan residence, gender and age, Minnesota, 2005 [1]

		Workers at or below \$6.15 an hour				
				Percentage		
				among		
	Total			all workers		
Metropolitan residence,	workers	Number		at or below		
gender and age	(1,000s)	(1,000s)	Percentage	\$6.15/hour		
Total, 15 years and older	2,494	83	3.3%	100.0%		
Metropolitan [2]	1,888	54	2.9	65.2		
Men	960	22	2.3	26.3		
Women	927	32	3.5	38.9		
15-19 years	128	19	14.9	23.1		
20-24 years	220	12	5.3	14.2		
25-54 years	1,314	18	1.4	21.9		
55 years and older	225	5	2.2	6.1		
Nonmetropolitan [2]	607	29	4.8	34.8		
Men	298	11	3.6	12.9		
Women	309	18	5.9	21.9		
15-19 years	54	12	21.7	14.1		
20-24 years	65	5	7.9	6.2		
25-54 years	392	9	2.2	10.3		
55 years and older	96	4	3.7	4.2		

2. Metropolitan areas include the following metropolitan statistical areas (MSAs) defined by the Census Bureau: the Minneapolis-St. Paul-Bloomington MSA (Minnesota portion: Anoka, Carver, Chisago, Dakota, Hennepin, Isanti, Ramsey, Scott, Sherburne, Washington and Wright Counties), the Duluth MSA (Minnesota portion: St. Louis County only; Carlton County not in sample), the Fargo MSA (Minnesota portion: Clay County) and the St. Cloud MSA (Stearns and Benton Counties). The Rochester and Grand Forks MSAs are not in the sample, nor is the Houston County portion of the La Crosse MSA.

Minimum-wage workers are more prevalent in nonmetropolitan Minnesota than in the state's metropolitan areas (see note 2 in figure).

• In metropolitan Minnesota, minimum-wage workers constituted 2.9 percent of the workforce; for the rest of the state,

minimum-wage workers were 4.8 percent of the total.

• Nonmetro Minnesota accounted for 35 percent of all minimum-wage workers even though it had only 24 percent of the workforce.

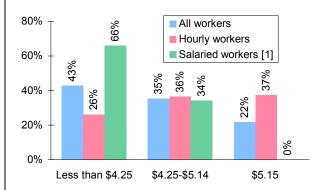
Among Minnesota workers earning the full minimum wage or less, most have reported hourly earnings rates less than the full minimum. The pattern is markedly different for hourly and salaried workers.¹¹

- Among workers earning \$5.15 an hour or less from 2001 to July 2005:
 - 22 percent earned exactly \$5.15, while 78 earned less; 43 percent earned less than \$4.25 (the youth minimum during the period).
 - 37 percent of hourly workers, and zero percent of salaried workers, earned exactly \$5.15.
 - 26 percent of hourly workers, and 66 percent of salaried workers, earned less than \$4.25.
- Workers may be paid less than the full minimum wage for three possible reasons:
 - ➤ they may subject to a lower minimum;
 - \succ they may be exempt; or
 - they may be paid less than the minimum wage illegally.

Also, some workers may appear to be paid less than the full minimum because of data errors.

- About 51 percent of workers earning \$5.15 or less from 2001 to July 2005 were paid less than \$4.90 (the small-employer minimum during the period), or less than \$4.25 if they were younger than age 20.¹²
- An analysis of the industry and occupation of these workers indicates that perhaps 10 to 15 percent were in exempt categories.¹³
- Further analysis, along with the fact that the CPS has an extensive quality assurance program, suggests data errors probably account for a small portion of the cases with reported earnings less than the applicable minimum wage.¹⁴

Figure 11 Hourly earnings of hourly and salaried workers [1] earning \$5.15 an hour or less, Minnesota, January 2001 - July 2005 [2]



- "Salaried workers," as used here, refers to all workers paid on a basis other than hours worked. This includes salaried and commissioned workers and those paid according to work completed.
- Estimated by DLI Research and Statistics with data from the Current Population Survey, conducted by the U.S. Census Bureau for the U.S. Bureau of Labor Statistics. Details in Appendix B.
- This information suggests noncompliance with the minimum wage accounts for a significant proportion of the instances of reported hourly earnings less than the full minimum.

¹¹ See note 1 in figure.

¹² Percentage not shown in figure. Data does not indicate employer size or length of employment.

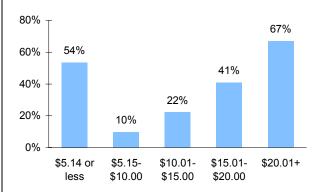
¹³ See Appendix C.

¹⁴ See Appendix C.

Although the prevalence of salaried workers¹⁵ increases with earnings above the minimum wage, this pattern is sharply reversed below the minimum wage.

- An estimated 54 percent of workers earning \$5.14 an hour or less from January 2001 to July 2005 were salaried, as compared with just 10 percent of workers earning \$5.15 to \$10.00 an hour. This indicates noncompliance with the minimum wage is more prevalent for salaried workers. Enforcement is more difficult for salaried workers because of greater difficulty in monitoring their hours worked.¹⁶
- Eighty-six percent of salaried workers earning less than the full minimum wage earned less than \$206 a week, the amount that would give an hourly rate of \$5.15 with 40 hours worked.¹⁷ This suggests most salaried workers earning less than the minimum are part-timers who actually work more than the officially expected number of hours in their employment agreement.

Figure 12 Percentage of workers who were salaried [1] by hourly earnings, Minnesota, January 2001 - July 2005 [2]



- "Salaried workers," as used here, refers to all workers paid on a basis other than hours worked. This includes salaried and commissioned workers and those paid according to work completed.
- Estimated by DLI Research and Statistics with data from the Current Population Survey, conducted by the U.S. Census Bureau for the U.S. Bureau of Labor Statistics. Details in Appendix B.

¹⁵ See note 1 in figure.

¹⁶ See Appendix C for further analysis.

¹⁷ Tabulated from Minnesota CPS data for 2001 to July 2005.

Category of worker	Pctg. among workers earning \$5.15 or less, January 2001 - July 2005 [1]	Effect of minimum wage
Workers paid exactly the applicable minimum wage [2] Other workers (exempt or receiving more or less than applicable minimum wage): [3]	22%	Wages directly lifted by minimum
• Salaried workers [4]	42%	 Possible direct effect: Employer may peg weekly pay to minimum wage using an official number of hours per week, even if actual hours are different. Possible indirect effects: [5] <i>Positive spillover</i> — Employer may need to pay higher wages than otherwise to attract workers because other employers are paying minimum. <i>Negative spillover</i> — Employer may be able to pay lower wages because of greater supply of labor due to possible disemployment effect of minimum.
Hourly workers	36%	No direct effect; possible indirect effects same as for salaried workers.

Figure 13 Possible effects of minimum wage on earnings of workers earning the full minimum wage or less

1. Estimated by DLI Research and Statistics with data from the Current Population Survey, conducted by the U.S. Census Bureau for the U.S. Bureau of Labor Statistics.

2. An estimated 21.7 percent of workers, all hourly, were paid \$5.15 an hour. \$5.15 is assumed to be the applicable minimum for these workers. An additional 0.8 percent were paid \$4.90; the fraction of these that were with small employers is unknown. No sample workers younger than age 20 were paid exactly \$4.25.

3. Applicable minimum in some cases may be \$4.90 or \$4.25, but these cases cannot be identified.

4. "Salaried workers," as used here, refers to all workers paid on a basis other than hours worked. This includes salaried and commissioned workers and those paid according to work completed.

5. Indirect effects for salaried workers would occur only for those not experiencing a direct effect.

Depending on employer behavior, the minimum wage may directly lift the wages of anywhere from 22 to 64 percent of workers earning the full minimum or less. It may indirectly affect the earnings of other workers.

- From 2001 through July 2005, 22 percent of workers paid \$5.15 an hour or less were paid exactly the applicable minimum wage (see note 2 in figure). The minimum directly lifts the wages of these workers.
- About 42 percent of those paid less than the applicable minimum were salaried workers.¹⁸

For an unknown number of these workers, employers may determine weekly pay using the minimum wage along with an official number of hours worked, even if actual hours are different. Where this occurs, the minimum directly lifts the earnings of the workers concerned.

• Workers not experiencing these direct effects may have their wages affected *indirectly* by positive or negative "spillover" effects (see figure).

¹⁸ See note 4 in figure.

Appendix A

Minnesota minimum-wage statute

The following is Minnesota Statutes §177.23, 177.24 and 177.28 as of April 2006.¹⁹

177.23 Definitions.

Subdivision 1. Scope. Unless the language or context clearly indicates that a different meaning is intended, the following terms, for the purposes of sections 177.21 to 177.35, have the meanings given to them in this section.

Subd. 2. **Department.** "Department" means the Department of Labor and Industry.

Subd. 3. **Commissioner.** "Commissioner" means the commissioner of labor and industry or authorized designee or representative.

Subd. 4. **Wage.** "Wage" means compensation due to an employee by reason of employment, payable in:

(1) legal tender of the United States;

(2) check on banks convertible into cash on demand at full face value;

(3) except for instances of written objection to the employer by the employee, direct deposit to the employee's choice of demand deposit account; or

(4) an electronic fund transfer to a payroll card account that meets all of the requirements of section 177.255, subject to allowances permitted by rules of the department under section 177.28.

Subd. 5. **Employ.** "Employ" means to permit to work.

www.revisor.leg.state.mn.us/stats/177 on April 14, 2006.

Subd. 6. **Employer.** "Employer" means any individual, partnership, association, corporation, business trust, or any person or group of persons acting directly or indirectly in the interest of an employer in relation to an employee.

Subd. 7. **Employee.** "Employee" means any individual employed by an employer but does not include:

(1) two or fewer specified individuals employed at any given time in agriculture on a farming unit or operation who are paid a salary;

(2) any individual employed in agriculture on a farming unit or operation who is paid a salary greater than the individual would be paid if the individual worked 48 hours at the state minimum wage plus 17 hours at 1-1/2 times the state minimum wage per week;

(3) an individual under 18 who is employed in agriculture on a farm to perform services other than corn detasseling or hand field work when one or both of that minor hand field worker's parents or physical custodians are also hand field workers;

(4) for purposes of section 177.24, an individual under 18 who is employed as a corn detasseler;

(5) any staff member employed on a seasonal basis by an organization for work in an organized resident or day camp operating under a permit issued under section <u>144.72</u>;

(6) any individual employed in a bona fide executive, administrative, or professional capacity, or a salesperson who conducts no more than 20 percent of sales on the premises of the employer;

(7) any individual who renders service gratuitously for a nonprofit organization;

¹⁹ Taken from the Web site of the Minnesota Office of the Revisor of Statutes,

(8) any individual who serves as an elected official for a political subdivision or who serves on any governmental board, commission, committee or other similar body, or who renders service gratuitously for a political subdivision;

(9) any individual employed by a political subdivision to provide police or fire protection services or employed by an entity whose principal purpose is to provide police or fire protection services to a political subdivision;

(10) any individual employed by a political subdivision who is ineligible for membership in the Public Employees Retirement Association under section <u>353.01</u>, subdivision 2b, clause (1), (2), (4), or (9);

(11) any driver employed by an employer engaged in the business of operating taxicabs;

(12) any individual engaged in babysitting as a sole practitioner;

(13) for the purpose of section 177.25, any individual employed on a seasonal basis in a carnival, circus, fair, or ski facility;

(14) any individual under 18 working less than 20 hours per workweek for a municipality as part of a recreational program;

(15) any individual employed by the state as a natural resource manager 1, 2, or 3 (conservation officer);

(16) any individual in a position for which the United States Department of Transportation has power to establish qualifications and maximum hours of service under United States Code, title 49, section 31502;

(17) any individual employed as a seafarer. The term "seafarer" means a master of a vessel or any person subject to the authority, direction, and control of the master who is exempt from federal overtime standards under United States Code, title 29, section 213(b)(6), including but not limited to pilots, sailors, engineers, radio operators, firefighters, security guards, pursers, surgeons, cooks, and stewards; (18) any individual employed by a county in a single-family residence owned by a county home school as authorized under section 260B.060 if the residence is an extension facility of that county home school, and if the individual as part of the employment duties resides at the residence for the purpose of supervising children as defined by section 260C.007, subdivision 4; or

(19) nuns, monks, priests, lay brothers, lay sisters, ministers, deacons, and other members of religious orders who serve pursuant to their religious obligations in schools, hospitals, and other nonprofit institutions operated by the church or religious order.

Subd. 8. **Occupation.** "Occupation" means any occupation, service, trade, business, industry, or branch or group of industries or employment or class of employment in which employees are gainfully employed.

Subd. 9. **Gratuities.** "Gratuities" means monetary contributions received directly or indirectly by an employee from a guest, patron, or customer for services rendered and includes an obligatory charge assessed to customers, guests or patrons which might reasonably be construed by the guest, customer, or patron as being a payment for personal services rendered by an employee and for which no clear and conspicuous notice is given by the employer to the customer, guest, or patron that the charge is not the property of the employee.

Subd. 10. On-site employee; hours worked. With respect to any caretaker, manager, or other on-site employee of a residential building or buildings whose principal place of residence is in the residential building, including a caretaker, manager, or other on-site employee who receives a principal place of residence as full or partial compensation for duties performed for an employer, the term "hours worked" includes time when the caretaker, manager, or other onsite employee is performing any duties of employment, but does not mean time when the caretaker, manager, or other on-site employee is on the premises and available to perform duties of employment and is not performing duties of employment.

Subd. 11. Companionship services; hours.

With respect to an individual who is: (1) employed to provide companionship services to individuals who, because of age or infirmity, are unable to care for their own needs; (2) employed to stay overnight in the home of such an aged or infirm individual; and (3) paid the minimum wage or more for at least four hours associated with the overnight stay, the term "hours" for the purposes of requiring the payment of minimum wages and overtime premiums under sections 177.24 and 177.25, shall not include nighttime hours, from 10:00 p.m. to 9:00 a.m., up to a total of eight hours per night, during which the employee is available to perform duties for the aged or infirm individual, but is not in fact performing such duties and is free to sleep and otherwise engage in normal private pursuits in the aged or infirm individual's home. For the purposes of this subdivision, the term "companionship services" is defined in Code of Federal Regulations, title 29, sections 552.6 and 552.106 as of March 1, 1984.

HIST: 1973 c 721 s 3; 1974 c 406 s 88; 1975 c 399 s 1; 1977 c 369 s 1; 1978 c 586 s 1; 1978 c 731 s 1; 1979 c 281 s 1; 1980 c 415 s 1; 1982 c 424 s 46-48; 1982 c 625 s 14; 1983 c 60 s 1; 1983 c 122 s 1; 1984 c 614 s 1; 1984 c 628 art 4 s 1; 1Sp1985 c 13 s 274,275; 1986 c 390 s 2; 1986 c 444; 1990 c 418 s 1; 1992 c 464 art 1 s 24; 1999 c 139 art 4 s 2; 2001 c 178 art 1 s 44; 2005 c 10 art 1 s 33; 2005 c 158 s 1 * NOTE: The amendment to subdivision 4 by Laws 2005, chapter *158, section 1, expires May 31, 2007. Laws 2005, chapter 158, *section 4.

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177.24 Payment of minimum wages.

Subdivision 1. **Amount.** (a) For purposes of this subdivision, the terms defined in this paragraph have the meanings given them.

(1) "Large employer" means an enterprise whose annual gross volume of sales made or business done is not less than \$625,000 (exclusive of excise taxes at the retail level that are separately stated) and covered by the Minnesota Fair Labor Standards Act, sections 177.21 to 177.35.

(2) "Small employer" means an enterprise whose annual gross volume of sales made or business done is less than \$625,000 (exclusive of excise taxes at the retail level that are separately stated) and covered by the Minnesota Fair Labor Standards Act, sections <u>177.21</u> to <u>177.35</u>.

(b) Except as otherwise provided in sections <u>177.21</u> to <u>177.35</u>, every large employer must pay each employee wages at a rate of at least \$5.15 an hour beginning September 1, 1997, and at a rate of at least \$6.15 an hour beginning August 1, 2005. Every small employer must pay each employee at a rate of at least \$4.90 an hour beginning January 1, 1998, and at a rate of at least \$5.25 an hour beginning August 1, 2005.

(c) Notwithstanding paragraph (b), during the first 90 consecutive days of employment, an employer may pay an employee under the age of 20 years a wage of \$4.90 an hour. No employer may take any action to displace any employee, including a partial displacement through a reduction in hours, wages, or employment benefits, in order to hire an employee at the wage authorized in this paragraph.

Subd. 1a. Expired

Subd. 2. **Gratuities not applied.** No employer may directly or indirectly credit, apply, or utilize gratuities towards payment of the minimum wage set by this section or federal law.

Subd. 3. **Sharing of gratuities.** For purposes of this chapter, any gratuity received by an employee or deposited in or about a place of business for personal services rendered by an employee is the sole property of the employee. No employer may require an employee to contribute or share a gratuity received by the employee with the employer or other employees or to contribute any or all of the gratuity to a fund or pool operated for the benefit of the employer or employees. This section does not prevent an employee from voluntarily and individually sharing gratuities with other employees. The agreement to share gratuities must be made by the employees free of any

employer participation. The commissioner may require the employer to pay restitution in the amount of the gratuities diverted. If the records maintained by the employer do not provide sufficient information to determine the exact amount of gratuities diverted, the commissioner may make a determination of gratuities diverted based on available evidence and mediate a settlement with the employer.

Subd. 4. Unreimbursed expenses deducted.

Deductions, direct or indirect, from wages or gratuities not authorized by this subdivision may only be taken as authorized by sections <u>177.28</u>, subdivision 3, <u>181.06</u>, and <u>181.79</u>. Deductions, direct or indirect, for up to the full cost of the uniform or equipment as listed below, may not exceed \$50. No deductions, direct or indirect, may be made for the items listed below which when subtracted from wages would reduce the wages below the minimum wage:

(a) purchased or rented uniforms or specially designed clothing required by the employer, by the nature of the employment, or by statute as a condition of employment, which is not generally appropriate for use except in that employment;

(b) purchased or rented equipment used in employment, except tools of a trade, a motor vehicle, or any other equipment which may be used outside the employment;

(c) consumable supplies required in the course of that employment;

(d) travel expenses in the course of employment except those incurred in traveling to and from the employee's residence and place of employment.

Subd. 5. **Expense reimbursement.** An employer, at the termination of an employee's employment, must reimburse the full amount deducted, directly or indirectly, for any of the items listed in subdivision 4. When reimbursement is made, the employer may require the employee to surrender any existing items for which the employer provided reimbursement.

HIST: 1973 c 721 s 4; 1976 c 165 s 1; 1977 c 183 s 1; 1977 c 369 s 2; 1979 c 281 s 2; 1981 c 87 s 1,2; 1984 c 628 art 4 s 1; 1Sp1985 c 13 s 276-278; 1986 c 444; 1987 c 324 s 1; 1987 c 384 art 2 s 45; 1990 c 418 s 2-4; 1996 c 305 art 1 s 49,50; 2Sp1997 c 1 s 1; 2005 c 44 s 1

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177.28 Power to make rules.

Subdivision 1. General authority. The commissioner may adopt rules, including definitions of terms, to carry out the purposes of sections 177.21 to 177.35, to prevent the circumvention or evasion of those sections, and to safeguard the minimum wage and overtime rates established by sections 177.24 and 177.25.

Subd. 2. Repealed, 1988 c 629 s 64

Subd. 3. **Rules required.** The commissioner shall adopt rules under sections 177.21 to 177.35 defining and governing:

(1) salespeople who conduct no more than 20 percent of their sales on the premises of the employer;

(2) allowances as part of the wage rates for board, lodging, and other facilities or services furnished by the employer and used by the employees;

- (3) bonuses;
- (4) part-time rates;
- (5) special pay for special or extra work;
- (6) procedures in contested cases;

(7) other facilities or services furnished by employers and used by employees; and

(8) other special items usual in a particular employer-employee relationship.

Subd. 4. Repealed, 1996 c 305 art 1 s 52

Subd. 5. Rules regarding handicapped. In order to prevent curtailment of opportunities for employment, avoid undue hardship, and safeguard the minimum wage rates under sections 177.24 and 177.25, the department shall also issue rules providing for the employment of handicapped workers at wages lower than the wage rates applicable under sections 177.24 and 177.25, under permits and for periods of time as specified therein. The rules must provide for the employment of learners and apprentices at wages lower than the wage rates applicable under sections 177.24 and 177.25, under permits and subject to limitations on number, proportion, length of learning period, occupations, and other conditions as the department may prescribe. The rules must provide that where a handicapped person is performing or is being considered for

employment where work must be performed which is equal to work performed by a nonhandicapped person, the handicapped person must be paid the same wage as a nonhandicapped person with similar experience and skill.

Subd. 6. Administrative Procedure Act to apply. The rules are subject to the provisions of chapter 14.

HIST: 1973 c 721 s 8; 1976 c 165 s 2; 1977 c 369 s 3; 1982 c 424 s 50; 1984 c 628 art 4 s 1; 1984 c 636 s 1; 1Sp1985 c 13 s 280; 1986 c 444

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Appendix B

Data and estimation technique

Figure 1 — The U.S. estimates were calculated directly from the Current Population Survey (CPS). The Minnesota estimates were calculated in a multi-stage process.

The percentages of Minnesota workers at or below \$5.15 and \$6.15 an hour were estimated using Minnesota data for 1994 to 2005. For those years, a statistical relationship was estimated between the hourly wage level at different points in the lower end of the wage distribution and the percentage of workers at or below that wage level. Data points were created by using hourly wage levels at even multiples of \$.25, going no lower than the full minimum wage for the year in question.²⁰ Because of wage growth over time, the wage level was transformed into an index, equal to the wage level divided by the average wage of the 5th to the 30th percentile of the distribution for the given year. This average was used because of the focus on the lower end of the distribution. For illustration, some of the data points are shown in Figure B-1. To best estimate the statistical relationship for the lower end of the wage distribution, only those data points with an indexed wage below .85 were used.

The statistical relationship between the indexed wage and the percentage of workers at or below that wage was estimated by regression, using a quadratic functional form.²¹ Figure B-2 shows the actual data points and a second set of data points where the percentage of workers at or below the given indexed wage is not the actual percentage but a "fitted" percentage. The fitted percentage is the expected value for the given indexed wage. It is statistically estimated taking into account the relationship between all the indexed wage levels and the corresponding proportions of workers at or below those levels.

Figure B-1 Examples of data points used in estimating relationship between indexed wage and percentage of workers at or below wage level

					Pctg. of
			Average		workers at
			wage for		or below
		Wage	5th-30th	Indexed	wage
	Year	level	percentile	wage [1]	level
-	2004	\$5.15	\$9.03	.571	2.3%
	2003	5.15	8.98	.574	2.1
	2005	5.15	8.87	.581	2.5
	2004	5.25	9.03	.582	2.5
_	2003	5.25	8.98	.585	2.3
-	2005	5.25	8.87	.592	2.5
	1995	4.25	6.41	.663	3.4
	2004	6.00	9.03	.665	4.3
	2003	7.00	8.98	.780	7.6
	1999	6.00	7.67	.782	7.9
	1995	5.15	6.41	.803	8.1
	1994	4.75	5.86	.810	7.6
	2005	7.50	8.87	.846	11.0
-	1999	6.50	7.67	.847	10.1

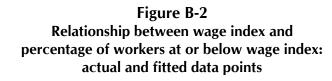
1. Equal to col. 1 divided by col. 2.

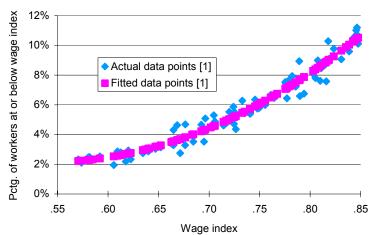
This fitted percentage was used to estimate the proportion of Minnesota workers at or below \$5.15 and \$6.15 an hour each year in Figure 1. This was done by first calculating the wage index for each year for each of these wage levels, by dividing each of these wage levels by the average wage for the 5th to the 30th percentile ("WAGE530") for the given year. The estimated percentage of Minnesota workers at or below \$5.15 and \$6.15 for each year was then determined as the fitted percentage from Figure B-2.

However, because of sampling variation in WAGE530, a preliminary step was performed. A linear statistical relationship between WAGE530 and the statewide average weekly

²⁰ The \$5.15 level was also used for years during which the full minimum was \$5.15.

²¹ This allows the estimated relationship to curve in one direction.





 In the actual data points, the percentage of workers at or below the wage index (vertical axis) is the actual value. In the fitted data points, the percentage of workers at or below the wage index is the expected value computed from the statistically estimated relationship between all values of the wage index and the corresponding percentages of workers at or below the wage index.

wage $(SAWW)^{22}$ for the given year was estimated, and the fitted values of WAGE530 from this statistical relationship (similar to the fitted values in Figure B-2) were used in place of the actual values. That is, for estimating the percentage of workers at or below \$5.15 and \$6.15 for each year, the wage index was computed as the ratio of \$5.15 or \$6.15 to the fitted value of WAGE530, and the percentage of workers at or below the indexed wage was then determined according the fitted values in Figure B-2.

Minnesota's total number of minimum-wage workers for each year was estimated by applying the estimated percentage of minimum-wage workers to the state's total number of workers computed directly from the CPS. *Figure 2* — The percentage of Minnesota "low-wage workers" (those paid \$5.15 or \$6.15 an hour or less, respectively) who received overtime pay, tips or commissions (OTC) each year was estimated with a similar statistical technique to that used in Figure 1. A set of fitted values of the percentage receiving OTC was estimated, where the fitted values followed *a straight line* over time. Figure B-3 shows the actual and fitted values; the fitted values were used in Figure 2.

The number of low-wage workers receiving OTC for each year was estimated by applying the fitted percentage receiving OTC to the estimated number of low-wage workers (those at \$5.15 or \$6.15 or less, respectively) from Figure 1.

Figures 3 and 4 — Minnesota's total number of workers was calculated directly from the CPS data. For the

total number of workers by industry or occupation, the first step was to compute, for each industry or occupation, the percentage of total state workers in that industry or occupation for 2003 through 2005. The three-year average was used to reduce sampling variation. This percentage was then applied to Minnesota's total number of workers for 2005 to estimate the number of workers in the industry or occupation for 2005.

The total number of minimum-wage workers (\$6.15 an hour or less) for 2005 is the number estimated for Figure 1.

The number of minimum-wage workers in each industry or occupation was estimated using, as the starting point, the U.S. ratio of workers at or below \$6.15 to total workers by industry or occupation, averaged over 2003 to 2005. Because workers at or below \$6.15 make up a larger proportion of the U.S. workforce than of the Minnesota workforce (5.5 percent vs. 3.3 percent for 2005), the Minnesota estimates were scaled proportionately downward so that the sum of the estimated numbers for the different

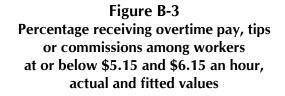
²² The SAWW, from the Department of Employment and Economic Development, is the average weekly wage of nonfederal workers covered under unemployment insurance. It is used by insurers and the Department of Labor and Industry (DLI) to adjust certain workers' compensation benefits and by DLI to adjust provider fee limits.

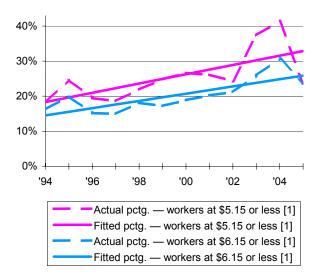
industries and occupations was equal to Minnesota's estimated total number of minimum-wage workers.

Figures 5 to 10 — The total number of workers and the total number of minimum-wage workers for 2005 were computed as in the other tables. The total number of workers by group (e.g., 16to 19-year-old males) was estimated with the same technique as for industries and occupations in Figures 3 and 4, except that the percentage of total workers in each group was calculated over 2001 through 2005 instead of 2003 through 2005 to reduce sampling variation.

As in Figures 3 and 4, the number of minimumwage workers in each group was estimated using the U.S. ratio of workers at or below \$6.15 an hour to total workers by group as the starting point, using the 2001 through 2005 average in this case. Again, the Minnesota estimates were scaled proportionately downward so that the sum of the estimated numbers for the different groups was equal to Minnesota's total number of minimum-wage workers for 2005. To maintain consistency across tables (given the use of the same age and gender categories in different tables), the procedure was actually more detailed than described here.²³

Figures 10 to 12 and C-1 to C-4 — The numbers in these figures were computed directly from the Minnesota CPS. To reduce sampling variation the period January 2001 through July 2005 was used. (Only the first portion of 2005 was used because Minnesota's minimum wage rose in August of that year.)





 The actual percentage was computed directly from the data. The fitted percentage was derived by statistically estimating a linear relationship between the actual percentage and time.

²³ Further explanation is available from DLI Research and Statistics, (651) 284-5025.



Workers with reported earnings less than the full minimum wage

This appendix provides further analysis of the data behind Figures 11 and 12.

Among Minnesota workers earning \$5.15 an hour or less from 2001 through July 2005 in the Current Population Survey (CPS), an estimated 78 percent earned less than \$5.15, with 43 percent earning less than \$4.25. Why does this occur?

Workers may earn less than the full minimum wage for three possible reasons:

First, both Minnesota and federal law exempt some classes of workers from the minimum wage. Depending on the particular circumstances, exempt workers under Minnesota law include some salaried and minor employees in agriculture; seasonal camp staff; elected government officials; traveling salespeople; people providing police or fire protection; taxi drivers; babysitters; seasonal staff at a carnival, circus, fair or ski facility; minors working halftime or less in a municipal recreation program; and others.²⁴ The federal exemption categories cover some of the same groups as the state exemptions, though with different specific conditions.²⁵ To be exempt from coverage, a worker must be exempt under both state and federal law.

Second, a lower minimum than the full minimum applies to some workers. Both federal and state law specify a lower minimum for workers younger than age 20 during their first 90 consecutive days of employment. At the federal level, this lower minimum has been \$4.25 an hour since September 1997; in Minnesota it was \$4.25 from September 1997 until August 2005, when it rose to \$4.90.

Federal law exempts employers doing less than \$500,000 a year in business as long as they are not engaged in interstate commerce. Minnesota law, however, provides a lower minimum for these smaller employers, which was \$4.90 from January 1998 until August 2005, when it rose to \$5.25. Both federal and state law have special provisions for handicapped workers.

Third, some workers may be paid less than the minimum wage illegally. This seems more likely with salaried workers than with hourly workers because of the greater enforcement challenge in monitoring hours worked for salaried workers.²⁶

Also, reporting errors may occur. Hourly workers report their hourly wage rate directly. For salaried workers, DLI Research and Statistics estimates hourly earnings from the CPS data by dividing weekly earnings by weekly hours worked. The earnings figure in this calculation is reported earnings at the worker's main job during the survey week. The hours figure is usual hours worked at the worker's main job, if reported, or if not, actual hours at the main job during the survey week. Usual hours is preferred because this gives an average reflecting what the worker generally earns per hour. Clearly, there are more opportunities for error with salaried workers than for hourly workers. For salaried workers, estimated hourly earnings will be incorrect if weekly pay or usual hours is reported incorrectly or if usual hours is not reported and actual hours is different from usual hours.

Note that reporting error may cause reported or calculated hourly earnings to be either too low or too high. Thus, it is unknown whether

²⁴ The Minnesota exemption conditions are shown in Appendix A. ²⁵ See <u>www.dol.gov/esa/minwage/q-a.htm</u>.

²⁶ "Salaried workers," as used here, refers to all workers paid on a basis other than hours worked. This includes salaried and commissioned workers and those paid according to work completed.

	Your	iger than ag	e 20	Age	Age 20 and older		Total		
	Hourly	Salaried		Hourly	Salaried		Hourly	Salaried	
Hourly wage	workers	wrkrs [2]	Total	workers	wrkrs [2]	Total	workers	wrkrs [2]	Total
	Number of sample workers								
Less than \$1.00	0	1	1	1	17	18	1	18	19
\$1.00-\$1.99	1	4	5	7	14	21	8	18	26
\$2.00-\$2.99	7	6	13	20	18	38	27	24	51
\$3.00-\$4.24	7	10	17	15	46	61	22	56	78
\$4.25-\$4.99 [3]	2	1	3	7	30	37	9	31	40
\$5.00-\$5.14	38	5	43	39	18	57	77	23	100
\$5.15	29	0	29	57	0	57	86	0	86
Total	84	27	111	146	143	289	230	170	400
				Percentag	e of sample	workers			
Less than \$1.00	0%	4%	1%	1%	12%	6%	0%	11%	5%
\$1.00-\$1.99	1	15	5	5	10	7	3	11	7
\$2.00-\$2.99	8	22	12	14	13	13	12	14	13
\$3.00-\$4.24	8	37	15	10	32	21	10	33	20
\$4.25-\$4.99	2	4	3	5	21	13	4	18	10
\$5.00-\$5.14	45	19	39	27	13	20	33	14	25
\$5.15	35	0	26	39	0	20	37	0	22
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%
	Cumulative percentage								
Less than \$1.00	0%	4%	1%	1%	12%	6%	0%	11%	5%
\$1.00-\$1.99	1	19	5	5	22	13	4	21	11
\$2.00-\$2.99	10	41	17	19	34	27	16	35	24
\$3.00-\$4.24	18	78	32	29	66	48	25	68	44
\$4.25-\$4.99	20	81	35	34	87	61	29	86	54
\$5.00-\$5.14	65	100	74	61	100	80	63	100	79
\$5.15	100%	100%	100%	100%	100%	100%	100%	100%	100%

Figure C-1 Minnesota CPS sample workers earning \$5.15 an hour or less, January 2001 - July 2005 [1]

1. Tabulated by DLI Research and Statistics with data from the Current Population Survey, conducted by the U.S. Census Bureau for the U.S. Bureau of Labor Statistics. This figure shows sample cases rather than population estimates from the sample.

2. "Salaried workers," as used here, refers to all workers paid on a basis other than hours worked. This includes salaried and commissioned workers and those paid according to work completed.

3. The 40 sample workers in this category include two who were earning exactly \$4.25 (both 20 or older) and three earning exactly \$4.90 (all hourly workers).

reporting error causes an increase or decrease in the estimated number of minimum-wage workers.

The CPS data does not provide enough detail to indicate what percentages of workers earning less than the full minimum wage fall into each of these categories. However, it does provide a few suggestions. In the following analysis, only the period through July 2005 is considered because the Minnesota minimum wage rose in August 2005.

Figure C-1 shows data about Minnesota CPS sample workers with reported or estimated hourly wages of \$5.15 or less for 2001 through

July 2005. Figure C-1 is a more detailed version of Figure 11. In contrast with Figure 11, Figure C-1 shows sample workers rather than estimates of the number of workers in the population.²⁷ This is because with the more detailed categories in Figure C-1, it is important to recognize the small number of sample cases involved in some instances. Because of this, the percentages in Figure C-1 may differ slightly from those in Figure 11.

²⁷ Each person in the CPS sample has a weight indicating how many people in the population the sample person represents. Population estimates are computed from the CPS by using sample weights rather than the number of sample cases.

Of the 400 sample workers, only 86, or 22 percent, earned \$5.15; the remaining 78 percent earned less.

Hourly and salaried workers show different patterns. Whereas 63 percent of hourly workers earned less than \$5.15 an hour, *all* salaried workers earned less than that rate. Also, relatively high proportions of salaried workers earned the lowest hourly rates: 68 and 25 percent of salaried and hourly workers, respectively, earned less than \$4.25.

About the same percentages of workers age 15 to 19 and those 20 and older earned less than \$5.15 — 74 percent and 80 percent, respectively. However, the 15- to 19-year-olds were more concentrated in the \$4.25 to \$5.14 range, which is expected because of the \$4.25 minimum for this group during the first 90 consecutive days of employment. Among 15- to 19-year-olds, 42 percent were in the \$4.25 to \$5.14 range, as opposed to 33 percent of those 20 and older.

Closer examination indicates this difference occurs primarily, if not exclusively, among hourly workers. Among hourly workers earning \$5.15 or less, 47 percent of the 15- to 19-yearolds earned between \$4.25 and \$5.14, as compared with 32 percent of those 20 and older. Among hourly workers earning *less than* \$5.15, the corresponding percentages were 73 and 52 percent.²⁸ There was only a slight difference between the two age groups for salaried workers (tending in the opposite direction). A greater difference between the two age groups is expected among hourly workers because of the difficulty of monitoring hours worked for salaried workers.

Among workers with reported earnings less than the applicable minimum wage, what proportion are exempt from coverage, what proportion reflect data errors, and what proportion are illegally paid less than the minimum wage? Figures C-2 and C-3 provide some insight into this question by showing the industry and occupation of workers paid less than the minimum. To narrow the focus, these figures exclude workers who might qualify for a lower minimum than the full minimum. Specifically, they exclude all workers earning at least \$4.90 an hour and workers younger than age 20 earning at least \$4.25.²⁹ To reduce the likelihood of data errors, the figures also exclude salaried workers whose hourly earnings were estimated using actual hours worked during the survey week rather than usual hours worked.³⁰ These two figures begin with 2003 because CPS industry and occupation coding changed in that year.

Figures C-2 and C-3 differ from Figure C-1 in the relative numbers of hourly and salaried workers. In Figure C-1, salaried workers comprise 43 percent of the 400 sample workers shown. In Figures C-2 and C-3, salaried workers account for 66 percent of the 103 total workers. The difference occurs because hourly workers predominate among those excluded from Figures C-2 and C-3 — i.e., the higher-wage workers among those earning \$5.15 or less.³¹

Unfortunately, the industry and occupation classifications in Figures C-2 and C-3 do not correspond closely to the exemption categories in Minnesota's minimum-wage law. The last column in each figure indicates categories that may include some exempt workers. Some categories besides the ones checked may also include some exempt workers.

In both figures, there are 18 workers in all of the categories checked as possibly including exempt workers. In all likelihood, not all of these workers are exempt. This suggests that perhaps 10 to 15 percent of workers with reported

²⁸ Both these differences were statistically significant at the 5-percent level in a two-tailed t-test.

²⁹ Unfortunately, this also excludes some workers who do not qualify for a lower minimum, since the \$4.90 minimum applies only to small employers and the \$4.25 youth minimum applies only during the first 90 consecutive days of employment.

³⁰ As indicated above, it is preferable to estimate average hourly earnings for salaried workers by dividing weekly earnings by usual hours worked, rather than by actual hours worked during the survey week. Since a discrepancy between usual and actual hours is a source of error, eliminating the cases where actual hours was used reduces the prevalence of error in the remaining cases.

³¹ If 2001 and 2002 are excluded from Figure C-1, salaried workers comprise 43 percent of all sample workers included. So the exclusion of those years from Figures C-2 and C-3 has little effect on the relative number of salaried workers.

Figure C-2 Minnesota CPS sample workers earning less than \$4.90 an hour by industry, January 2003 - July 2005, excluding workers younger than age 20 earning at least \$4.25 and salaried workers [1] whose average pay was estimated using hours worked during the survey week [2]

	Hourly	Salaried		Possibly
Industry group	workers	workers [1]	Total	exempt [3]
Restaurants and other food services	13	4	17	
Elementary and secondary schools	2	5	7	
Private households	5	2	7	? [4]
Colleges and universities, including junior colleges	1	5	6	
Beauty salons	2	3	5	
Construction		3	3	
Executive offices and legislative bodies		3	3	?
Animal production	1	1	2	?
Support activities for agriculture and forestry		2	2	
Farm supplies, merchant wholesalers		2	2	
Securities, commodities, funds, trusts and other financial investments		2	2	
Other health care services	1	1	2	
Hospitals	1	1	2	
Vocational rehabilitation services	1	1	2	? [5]
Traveler accommodation		2	2	[-]
Drinking places, alcoholic beverages		2	2	
Automotive repair and maintenance		2	2	
Civic, social, advocacy organizations and grantmaking and giving services		2	2	
Electric power generation, transmission and distribution	1		1	
Animal slaughtering and processing	1		1	
Bakeries, except retail	_	1	1	
Printing and related support activities	1	-	1	
Petroleum refining	1		1	
Machinery manufacturing, not elsewhere classified		1	1	
Electronic component and product manufacturing, not elsewhere classified	1		1	
Sawmills and wood preservation		1	1	
Medical equipment and supplies manufacturing		1	1	
Miscellaneous nondurable goods, merchant wholesalers		1	1	
Furniture and home furnishings stores		1	1	
Grocery stores		1	1	
Clothing and accessories, except shoe, stores		1	1	
Jewelry, luggage and leather goods stores		1	1	
Music stores		1	1	
Department stores and discount stores	1		1	
Retail florists		1	1	
Other direct selling establishments		1	1	
Truck transportation		1	1	?
Taxi and limousine service		1	1	?
Services incidental to transportation		1	1	
Radio and television broadcasting and cable		1	1	
Banking and related activities		1	1	
Accounting, tax preparation, bookkeeping and payroll services		1	1	
Other professional, scientific and technical services		1	1	?
Employment services		1	1	
Travel arrangements and reservation services	1		1	
Investigation and security services	1		1	
Waste management and remediation services		1	1	
Outpatient care centers		1	1	
Individual and family services		1	1	
Child day care services		1	1	? [6]
Independent artists, performing arts, spectator sports and related industries		1	1	. [*]
Total	35	68	103	18

1. "Salaried workers," as used here, refers to all workers paid on a basis other than hours worked. This includes salaried and commissioned workers and those paid according to work completed.

2. Tabulated by DLI Research and Statistics with data from the Current Population Survey, conducted by the U.S. Census Bureau for the U.S. Bureau of Labor Statistics. This figure shows sample cases rather than population estimates from the sample.

A check-mark indicates that some workers in the category may fit one of the exemption conditions in Minnesota's minimum-wage law.
 The workers possibly exempt in this category are babysitters working in others' homes.

5. This category includes handicapped employees in sheltered workshop, who are subject to special minimum-wage rules though not actually exempt.

6. The workers possibly exempt in this category are babysitters working in their own homes.

Figure C-3 Minnesota CPS sample workers earning less than \$4.90 an hour by occupation, January 2003 - July 2005, excluding workers younger than age 20 earning at least \$4.25 and salaried workers [1] whose average pay was estimated using hours worked during the survey week [2]

	Hourly	Salaried		Possibly
Occupation group	workers	workers [1]	Total	exempt [3]
Child care workers	4	3	7	? [4]
Cooks	2	4	6	
Waiters and waitresses	5	1	6	
Janitors and building cleaners	2	3	5	
Hairdressers, hairstylists and cosmetologists	2	3	5	
Miscellaneous agricultural workers	1	3	4	?
Laborers and freight, stock and material movers, hand	1	3	4	
Postsecondary teachers		3	3	
Bartenders	2	1	3	
Maids and housekeeping cleaners		3	3	
Cashiers		3	3	
Secretaries and administrative assistants	1	2	3	
Chief executives		2	2	?
Managers, all other		2	2	
Accountants and auditors		2	2	
Athletes, coaches, umpires and related workers		2	2	
Medical assistants and other healthcare support occupations	1	1	2	
Food preparation workers		2	2	
Combined food preparation and serving workers, including fast food	2		2	
Retail salespersons	1	1	2	
Delivery, sales and truck drivers		2	2	?
Marketing and sales managers		1	1	
Education administrators		1	1	?
Medical and health services managers		1	1	
Social and community service managers		1	1	
Personal financial advisors		1	1	
Computer scientists and systems analysts		1	1	
Computer programmers		1	1	
Electrical and electronic engineers	1	•	1	
Artists and related workers		1	1	
Designers		1	1	
Announcers		1	1	
Broadcast and sound engineering technicians and radio operators	1	•	1	
Supervisors, protective service workers, all other	1		1	
First-line supervisors/managers of food preparation and serving workers	1		1	
Counter attendants, cafeteria, food concession and coffee shop	1		1	
Dining room and cafeteria attendants and bartender helpers	1		1	
Dishwashers	1		1	
Grounds maintenance workers		1	1	
First-line supervisors/managers of non-retail sales workers		1	1	
Securities, commodities and financial services sales agents		1	1	
Sales representatives, wholesale and manufacturing		1	1	?
Door-to-door sales workers, news and street vendors and related workers		1	1	<u>:</u>
		1	1	
Bookkeeping, accounting and auditing clerks		1	1	
Customer service representatives	4		1	
Information and record clerks, all other	1	4	1	
Word processors and typists		1	1	
Construction laborers		1	1	
Drywall installers, ceiling tile installers and tapers		1	1	
Electricians	1		1	
Sewing machine operators	1		1	
Packaging and filling machine operators and tenders	1		1	
Taxi drivers and chauffeurs		1	1	?
Packers and packagers, hand	1	1	1	
	35	68	103	18

1. "Salaried workers," as used here, refers to all workers paid on a basis other than hours worked. This includes salaried and

commissioned workers and those paid according to work completed.

2. Tabulated by DLI Research and Statistics with data from the Current Population Survey, conducted by the U.S. Census Bureau for the U.S. Bureau of Labor Statistics. This figure shows sample cases rather than population estimates from the sample.

3. A check-mark indicates that some workers in the category may fit one of the exemption conditions in Minnesota's minimum-wage law.

4. The workers possibly exempt in this category are babysitters.

earnings less than the applicable minimum are exempt.

For the remainder, either their reported earnings rates reflect data errors or they are being paid less than the minimum wage illegally.

How likely are these two possibilities? CPS staff indicate the survey has a highly developed quality assurance program. Every month, a sample of the interviewed households are reinterviewed and the responses are compared with the original answers. Discrepancies are investigated and corrected and procedural changes are made where warranted.³²

On the other hand, some of the reported hourly earnings amounts are small enough to strongly suggest that data errors may be involved in some cases. As shown in Figure C-1, of the 400 cases with reported hourly earnings of \$5.15 or less for 2001 through July 2005, 19 (five percent) were less than \$1.00 an hour and another 26 (seven percent) were at least \$1.00 but less than \$2.00. Most of these were salaried workers, for whom hourly earnings were calculated from weekly earnings and weekly hours worked.

The possibility of data errors can also be examined by considering the data itself. If data errors were the sole explanation for reported sub-minimum earnings, one would expect the workers concerned to be randomly distributed across industries and occupations. However, this is not the case. In Figure C-2, 13 of the 35 hourly workers are in restaurants and other food services. In Figure C-3, five of the 35 hourly workers are waiters and waitresses; two are hairdressers, hairstylists and cosmetologists; two where one would expect to see higher noncompliance with the minimum wage than in other occupations, to the degree that employers can rely on tips to attract the number of workers they need.

The high representation of salaried workers among sub-minimum-wage workers warrants further analysis. Figure C-4 shows the relative numbers of hourly and salaried workers by wage level in the Minnesota sample (returning to the

original analysis period of January 2001 through July 2005 because industry and occupation categories are not used). As expected, except at the lowest earnings rates, the relative number of salaried workers increases with hourly earnings. Strikingly, the opposite occurs at the lowest earnings rates. At hourly earnings of \$5.01 to \$9.00, the proportion of salaried workers ranges from 6 to 10 percent. At \$5.00 an hour and below, the proportion jumps to 41 percent and higher, averaging 54 percent. The absolute number of salaried workers also turns upward at sub-minimum-wage levels. The number of these workers falls with hourly earnings in the range just above \$5.00, but sharply reverses direction, from 37 to 61, as hourly earnings falls from \$5.01-\$6.00 to \$4.01-\$5.00. The contrast would be even sharper were it not for the lower minimum wages of \$4.25 and \$4.90 for youth (first 90 days) and small employers.

If the relatively large proportion of salaried workers at sub-minimum-wage levels resulted from data errors, one would expect the proportion to change gradually as hourly earnings falls. Instead, the proportion jumps sharply upward at just the point where hourly earnings fall below the minimum wage. The data strongly suggests that data errors are at most a minor factor in explaining the number of salaried workers below the minimum wage, and that several employers pay lower-wage employees on a salaried basis to escape from compliance with the minimum-wage law.

³² Dennis Clark, Washington CPS office, May 4, 2006.

Hourly workers Salaried workers [1]							
	Hourly	workers	Salaried v				
		Pctg.	Pctg.				
		within		within			
		earnings		earnings	Total		
Hourly earnings	Number	group	Number	group	workers		
\$0.01-\$1.00	6	23%	20	77%	26		
\$1.01-\$2.00	8	33	16	67	24		
\$2.01-\$3.00	26	49	27	51	53		
\$3.01-\$4.00	17	28	43	72	60		
\$4.01-\$5.00	87	59	61	41	148		
\$5.01-\$6.00	548	94	37	6	585		
\$6.01-\$7.00	662	91	63	9	725		
\$7.01-\$8.00	937	92	76	8	1,013		
\$8.01-\$9.00	843	90	90	10	933		
\$9.01-\$10.00	983	85	174	15	1,157		
\$10.01-\$11.00	747	86	123	14	870		
\$11.01-\$12.00	803	82	179	18	982		
\$12.01-\$13.00	644	76	204	24	848		
\$13.01-\$14.00	623	76	196	24	819		
\$14.01-\$15.00	650	71	270	29	920		
\$15.01-\$16.00	479	71	195	29	674		
\$16.01-\$17.00	390	60	256	40	646		
\$17.01-\$18.00	400	63	239	37	639		
\$18.01-\$19.00	250	56	198	44	448		
\$19.01-\$20.00	339	48	372	52	711		
\$20.01-\$21.00	198	48	218	52	416		
\$21.01-\$22.00	200	45	244	55	444		
\$22.01-\$23.00	174	55	140	45	314		
\$23.01-\$24.00	137	43	181	57	318		
\$24.01-\$25.00	185	40	280	60	465		
\$25.01-\$26.00	114	47	131	53	245		
\$26.01-\$27.00	107	44	136	56	243		
\$27.01-\$28.00	84	40	124	60	208		
\$28.01-\$29.00	71	28	181	72	252		
\$29.01-\$30.00	103	47	115	53	218		
\$30.01-\$35.00	186	27	512	73	698		
\$35.01-\$40.00	48	12	367	88	415		
\$40.01-\$45.00	27	11	223	89	250		
\$45.01-\$50.00	17	8	203	92	220		
\$50.01+	43	11	345	89	388		
Total	11,136	64%	6,239	36%	17,375		

Figure C-4 Minnesota CPS sample workers by hourly earnings and hourly-vs.-salaried [1] status, January 2001 - July 2005 [2]

1. "Salaried workers," as used here, refers to all workers paid on a basis other than hours worked. This includes salaried and commissioned workers and those paid according to work completed.

2. Tabulated by DLI Research and Statistics with data from the Current Population Survey, conducted by the U.S. Census Bureau for the U.S. Bureau of Labor Statistics. This figure shows sample cases rather than population estimates from the sample.