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# Survey of Job Openings in the Milwaukee Metropolitan Area: Week of May 24, 1993

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# Employment & Training Institute

**Survey of Job Openings in the Milwaukee Metropolitan Area**

**Week of May 24, 1993**

UNIVERSITY OF WISCONSIN • MILWAUKEE  
**UNIVERSITY  OUTREACH**

**Survey of Job Openings in the Milwaukee Metropolitan Area**

**Week of May 24, 1993**

**Survey conducted by**

**Employment and Training Institute and  
Social Science Research Facility  
University of Wisconsin-Milwaukee**

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## **Executive Summary**

The week of May 24, 1993, an estimated 11,870 full-time and 9,277 part-time jobs were open for immediate hire in the four-county Milwaukee metropolitan area. These 21,147 job openings are the result of a number of factors including seasonal fluctuations, company expansions, labor shortages in difficult to fill positions, as well as normal turnover among the 741,100 workers in the metro area due to retirements, resignations and firings. The job openings estimates are based on a survey of Milwaukee area employers conducted by the University of Wisconsin-Milwaukee Employment and Training Institute and Social Science Research Facility.

\* For the metropolitan area, about half (54 percent) of the full-time job openings paid health insurance and were adequate to support a family of four above poverty, two-thirds of the job openings (65 percent) paid health insurance and were adequate to support a family of three, and 75 percent paid health insurance and were adequate to support a family of two.

\* Nearly half of job openings were in small companies. 48 percent of full-time job openings and 45 percent of part-time openings were in companies which had employed fewer than 20 workers.

\* The largest numbers of full-time job openings were split among service companies (28 percent of total full-time job openings), retail and wholesale trade (24 percent) and manufacturing (18 percent). Part-time job openings were concentrated in retail and wholesale trade (49 percent of part-time job openings) and in services (36 percent).

\* Over two-thirds of the full-time openings required education, training or occupation-specific experience beyond high school, while two-thirds of part-time job openings did not. Openings for persons with no post-secondary education or experience were twice as likely to be part-time as openings for persons with advanced education or experience.

\* Full-time jobs in service occupations accounted for almost half of openings available to individuals with less than high school completion. Most factory, crafts and transportation jobs required experience, license or occupation-specific training.

\* Two-thirds of full-time jobs identified by employers as difficult to fill required a license, certification, associate degree or occupation-specific training. Eighty percent of the part-time jobs identified as difficult to fill paid less than \$6.00 per hour.

\* Eighty percent of full-time job openings and 29 percent of part-time positions offered health insurance.

\* The 11,870 full-time job openings available the week of May 24, 1993, represented about 20 percent of jobs needed for the estimated 61,000 - 63,000 persons seeking or expected to work that month. If part-time and full-time job openings are combined, the total of 21,147 jobs represented about 35 percent of jobs needed for the Milwaukee metro population.

\* While family poverty is concentrated in Milwaukee, only 1,289 of the May 1993 full-time job openings were located in central city neighborhoods. About half of these jobs (48 percent) offered health insurance and wages above poverty for a family of four.

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## **Introduction**

Statistics on employment and unemployment have been collected for over forty years to measure labor supply, yet little if any attention has been placed on an analysis of the types of jobs available for those seeking work or the likelihood that individuals will find full-time year-round employment. At the same time, discussions of unemployment and underemployment have focused on characteristics of the job-seeking population and their inability to obtain adequate employment. Unemployment programs which offer job placement assistance, job training or remediation assume intervention and education as the solutions to underemployment. Similarly, measurements of economic well-being in the local, state and national labor markets have relied almost solely upon the status of the civilian labor force to gauge progress, with employment and labor force participation rates in the local labor market as the most familiar measures.

Questions about the ability of the labor market to provide adequate employment at a living or family wage have generated a number of measures which attempt to gauge the inadequacy of income due to underemployment or unemployment. Using either the Current Population Survey or the Panel Study of Income Dynamics, social scientists have attempted to derive measures of adequate employment, underemployment and a more realistic estimate of unemployment. However, few of these methods attempt to document the mismatch between those seeking employment and the number and quality of jobs available, particularly since the dramatic restructuring of the labor market during the 1980s.

To address the need for information on local labor market needs, the City of Milwaukee, Milwaukee Area Technical College, Milwaukee Metropolitan Sewerage Commission, Private Industry Council of Milwaukee County and the University of Wisconsin-Milwaukee have joined together in a unique partnership effort to survey businesses in the metropolitan area and to improve planning for employment of Milwaukee residents. This study summarizes the project's Establishment Survey of Job Openings detailing the types of jobs available at a point-in-time in the metropolitan area by industry, location, full or part-time status and level of fringe benefits. Additional project data will be collected to assist local governments in planning education and training programs and establishing policies to insure greater employment opportunities for local residents.



## I. Profile of Job Openings for Companies in the Metro Milwaukee Area

A total of 34,375 companies were listed by the Wisconsin Department of Industry, Labor and Human Relations (DILHR) as doing business in the four-county metro area of Milwaukee, Washington, Ozaukee and Waukesha counties. When categorized by type of business and number of employees, the majority of businesses were smaller establishments with fewer than ten employees. Retail and wholesale trade made up one-third of the total establishments, and services another one-third.

In May of 1993, the University of Wisconsin-Milwaukee Employment and Training Institute conducted a stratified survey of these Milwaukee area companies to determine the number of jobs open for immediate hire. Data was also collected on the expected rates of pay, education and training required for each position and benefits offered. Results of the survey were tabulated and weighted by size and type of industry and by response rate to project the total number and types of jobs available in the metropolitan area. (See Appendix for discussion of survey design and technical approach.) The findings are summarized below.

The week of May 24, 1993, an estimated 11,870 full and 9,277 part-time jobs were open for immediate hire in the four-county Milwaukee metro area of Milwaukee, Washington, Waukesha and Ozaukee Counties. These 21,147 job openings were the result of a number of factors including: seasonal fluctuations, company expansions, labor shortages in difficult to fill positions, as well as normal job turnover among the 741,100 workers in the metro area due to separations (retirements, resignations, and firings).

**Estimated Job Openings By Type of Company as of May 24, 1993**

<u>Type of Company</u>	<u>Percent of Companies</u>	<u>Full-Time Openings</u>		<u>Part-Time Openings</u>	
		<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
Services	33%	3,374	28%	3,356	36%
Retail and Wholesale Trade	32	2,821	24	4,573	49
Manufacturing	10	2,123	18	521	6
Finance, Insurance, Real Estate	9	1,198	10	173	2
Construction	10	1,054	9	144	2
Transportation, Communications, Utilities	3	674	6	305	3
Government	1	440	4	85	1
Agriculture, Forestry, Fishing	<u>1</u>	<u>186</u>	<u>1</u>	<u>120</u>	<u>1</u>
TOTAL	100%	11,870	100%	9,277	100%

An estimated one out of five employers (20.7 percent) had job openings listed the week of May 24th. At least one full-time position was listed for 13.9 percent of the companies, while 6.8 percent had only part-time openings. Hiring patterns for full and part-time openings were strongly influenced both by the type of business in which a company was engaged and the size of the corporation. Normal job turnover was evident -- with hiring rates and average number

of openings increasing with the size of the company. Company expansions and seasonal fluctuations were most obvious in the smallest category of companies where 17 percent of companies with no employees listed in March 1992 had job openings as of May 24, 1993.

Nearly half (48 percent) of full-time job openings were in companies employing fewer than 20 workers, and nearly two-thirds (64 percent) of full-time jobs were for companies with less than 50 employees. For part-time employment, 75 percent of the job openings were for companies with less than 50 workers.

#### Estimated Job Openings By Size of Company

Size of Company as of March 1992	Percent of Companies	FULL-TIME OPENINGS		PART-TIME OPENINGS	
		Number	Percent	Number	Percent
No Employees	14%	771	6%	1,199	13%
1 - 4 employees	19	1,115	9	995	11
5 - 9 employees	21	1,644	14	1,068	12
10 - 19 employees	15	2,196	19	917	10
20 - 49 employees	19	1,871	16	2,687	29
50 - 99 employees	3	913	8	298	3
100 - 249 employees	5	1,123	9	940	10
250 - 499 employees	3	767	6	411	4
500 - 999 employees	1	227	2	203	2
More than 999 employees	<u>1</u>	<u>1,243</u>	<u>11</u>	<u>559</u>	<u>6</u>
TOTAL	100%	11,870	100%	9,277	100%

The largest numbers of full-time job openings were in service companies, followed by retail and wholesale trade, and manufacturing. Retail and wholesale trade and service businesses combined comprised two-thirds of all companies, 52 percent of full-time openings, and 85 percent of all part-time openings. Construction firms; finance, insurance and real estate businesses; governmental units and manufacturing firms were more likely to have full-time than part-time openings. Retail and wholesale trade and services companies showed large numbers of openings for part-time work.

#### Percent of Full- and Part-Time Job Openings by Type of Company

Type of Company	Total Openings	Percent Full-Time	Percent Part-Time
Services	6,730	50.1	49.9
Retail and Wholesale Trade	7,394	38.2	61.8
Manufacturing	2,644	80.3	19.7
Finance, Insurance, Real Estate	1,371	87.4	12.6
Construction	1,198	88.0	12.0
Transportation, Communications	979	68.9	31.1
Government	525	83.8	16.2
Agriculture, Forestry, Fishing	306	60.8	39.2
TOTAL	21,147	56.1	43.9

## II. Skill Level Requirements for Job Openings

Those employers having immediate job openings were asked to detail the skill level requirements for each job and to indicate whether prior experience was a necessary prerequisite for employment. Narrative responses were categorized by level of education and experience as follows:

1. Minimum, four-year college (Bachelor's) degree with experience.
2. Minimum, Bachelor's degree, no experience.
3. Certification, Associate Degree, license or occupation specific experience required.
4. High school diploma, no experience required.
5. No requirements.

While most employers completed the survey questions as requested, not all reported skill level requirements or starting wage rates, requiring additional weighting of the survey sample to adjust for missing data. The resulting totals differ somewhat from the full count totals on full- and part-time openings due to the effect of missing data on weights used in the stratified sample. (Totals may vary by subanalysis due to weighting procedures used and the extent of missing data for the category. See discussion in Appendix.)

Over two-thirds of the full-time positions open required education, training or occupation-specific experience beyond high school. Those jobs requiring at least a B.A. degree or more but with no experience were concentrated in teaching, health and managerial positions. Positions requiring a B.A. degree or more and experience were concentrated in health, sales and managerial occupations. In the metro area full-time occupations requiring at least four years of college accounted for 15 percent of full-time openings.

**Education and Training Required for Job Openings**

<u>Qualifications Listed</u>	<u>FULL-TIME JOB OPENINGS</u>		<u>PART-TIME JOB OPENINGS</u>		<u>TOTAL Number</u>
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	
B.A. Degree and Experience	1,197	10.5%	179	2.2%	1,376
B.A. Degree only	435	3.8	122	1.5	557
Certificate, License, Associate Degree or Occupation-Specific Training Required	6,195	54.0	2,401	29.9	8,596
High School Diploma only	1,541	13.4	1,941	24.2	3,482
No Requirements	<u>2,097</u>	<u>18.3</u>	<u>3,374</u>	<u>42.1</u>	<u>5,471</u>
TOTAL	11,465	100.0%	8,017	100.0%	19,482

The largest category (54 percent) of jobs offering full-time employment were those requiring a license, certification, associate degree or occupation-specific training. Full-time positions requiring high school completion but no experience accounted for 13 percent of openings and those jobs with no requirements made up 18 percent of openings.

In contrast, part-time positions were available in much greater numbers for applicants with limited education or experience. Jobs requiring no experience and a high school education or less made up 68.3 percent of part-time job openings. Those jobs requiring occupation-specific training, licensing or certification accounted for 29.9 percent of part-time jobs, while jobs available for part-time hire requiring a B.A. or B.A. plus experience accounted for only 3.7 percent of openings.

### **III. Wages and Skill Levels Required for Job Openings**

Hourly wages for job openings were directly related to prior education, training and experience. Wage rates were highest for job openings requiring experience plus a minimum of a bachelor's degree, with 70 percent of these full-time job openings offering wages of \$14.00 or more per hour. For positions requiring a bachelor's degree and no experience, the wages dropped significantly with only 22 percent at or above the \$14.00 per hour level, but with 88 percent at \$9.00 per hour or more. Jobs requiring prior occupational experience, certification, licensing or an associate degree showed a much wider range of wage rates with 17.4 percent of job openings at the \$14.00 or more per hour, and 54 percent offering \$9.00 an hour or more.

For full-time jobs requiring high school completion but no occupationally specific experience, 47.2 percent of the job openings fell within the \$5.00 - \$5.99 range, with less than 8 percent of jobs listed in this category offering \$9.00 or more per hour. Most jobs requiring no previous experience or a minimum level of education fell into the lowest wage occupations, with 43.7 percent below \$5.00 per hour and 59.5 percent below \$6.00 per hour. However, 9.8 percent of jobs in this category offered over \$9.00 per hour.

Part-time job openings were mostly low wage lesser-skilled jobs with 73 percent of openings paying less than \$6.00 per hour, and 41.7 percent below the \$5.00 per hour level. Forty-four percent of part-time jobs required no previous experience or education. An additional 22 percent of part-time job openings required high school completion but no previous experience. Part-time jobs paying \$8.00 or more were limited and in almost all cases required advanced education, experience or certification.

### Wage Rates by Job Qualifications for Full-Time Job Openings

<u>Hourly Wage</u>	<u>Annualized Salary</u>	<u>B.A. Only</u>	<u>B.A. &amp; Experience</u>	<u>License, Certificate, A.A. or Experience</u>	<u>High School Only</u>	<u>No Experience</u>
Less than \$4.00				0.1%	3.6%	8.5%
\$4.00 - 4.99	\$ 8,352 - 10,419			1.4 %	8.0%	35.2%
\$5.00 - 5.99	\$10,440 - 12,507			14.4 %	47.2%	15.8%
\$6.00 - 6.99	\$12,528 - 14,595			9.6 %	19.4%	17.1%
\$7.00 - 7.99	\$14,616 - 16,683	9.7%	0.6%	10.2 %	9.8%	6.7%
\$8.00 - 8.99	\$16,704 - 18,771	2.1%	4.4%	9.4 %	4.1%	7.1%
\$9.00 - 9.99	\$18,792 - 20,859	21.5%	3.0%	9.2 %	3.2%	
\$10.00 - 10.99	\$20,880 - 22,947	10.8%	3.7%	8.4 %	4.5%	1.7%
\$11.00- 11.99	\$22,968 - 25,035	21.0%	4.8%	6.3 %		7.4%
\$12.00 -12.99	\$25,056 - 27,123	3.6%	3.9%	5.2 %		0.3%
\$13.00 - 13.99	\$27,144 - 29,211	9.2%	9.5%	8.0 %		
\$14.00 or more	\$29,232 +	22.1%	70.1%	17.4 %	0.2%	0.4%
<hr/>						
N=		195	777	4,688	1,306	1,974
Hourly Rate Not Specified		240	420	1,507	235	123
Total		435	1,197	6,195	1,541	2,097

Three-fourths of the part-time job openings available paid less than \$6.00 per hour, compared to one-third of full-time job openings. While 93 percent of part-time job openings paid wages of less than \$8.00 per hour, only about half of the full-time jobs started at this rate.

### Starting Wage Rates of Full- and Part-Time Positions Open

<u>Starting Wage Rate</u>	<u>FULL-TIME JOB OPENINGS</u>		<u>PART-TIME JOB OPENINGS</u>	
	<u>Percent of Total</u>	<u>Cumulative Percent</u>	<u>Percent of Total</u>	<u>Cumulative Percent</u>
Under \$4.00	3.4%	3.4%	8.5%	8.5%
\$4.00 - 4.99	10.9	14.3	36.0	44.5
\$5.00 - 5.99	18.7	33.0	30.4	74.9
\$6.00 - 6.99	11.9	44.9	10.4	85.3
\$7.00 - 7.99	8.0	52.9	7.9	93.2
\$8.00 - 8.99	7.0	59.9	1.4	94.6
\$9.00 - 9.99	6.5	66.4	0.7	95.3
\$10.00 - 10.99	5.9	72.3	1.7	97.0
\$11.00 - 11.99	5.4	77.7	0.3	97.3
\$12.00 - 12.99	2.7	80.4	0.4	97.7
\$13.00 - 13.99	4.7	85.1	0.2	97.9
\$14.00 or more	14.9	100.0	2.1	100.0
Total	100.0		100.0	

#### IV. Occupational Demand by Skill Level Required

Two-thirds of full-time job openings required experience or post-secondary education, while two-thirds of part-time jobs did not. Full-time executive, administrative and managerial positions available required a B.A. and experience (30.3 percent); a minimum of a B.A. (10.6 percent); or occupation-specific training, license, certification or associate degree (49.5 percent). Professional specialty occupations most often required a B.A. plus experience (57.7 percent), a B.A. (22.2 percent), or occupation-specific experience or training (19.9 percent). Most technical, sales and administrative support openings required occupation-specific experience (58.3 percent), but 18.6 percent of these jobs were open for persons with high school completion and no experience and for 10.4 percent no prior experience or education requirements were specified.

About forty-five percent of full-time service job openings were available to individuals with less than high school completion. Experience or training was required for 37 percent of service jobs, and 18 percent were open to persons with high school but no experience. Most factory, crafts and transportation jobs required experience, license, certification or occupation-specific training.

### Qualifications Required for Full-Time Job Openings

<u>Type of Position</u>	<u>B.A. &amp; Experience</u>	<u>B.A. Only</u>	<u>License, Certificate, A.A. or Experience</u>	<u>High School Only</u>	<u>No Experience</u>	<u>All Openings</u>
Executive, Admin., Managerial	197	69	322	48	15	651
Professional Specialty	572	220	197	2	0	991
Technical Sales & Administrative Support	382	107	2,237	713	401	3,840
Service	7	0	847	410	1,013	2,277
Factory, Craft, Transportation	35	22	2,571	353	658	3,639
Farming, Forestry, Fishing	<u>3</u>	<u>17</u>	<u>23</u>	<u>16</u>	<u>10</u>	<u>69</u>
<b>Total</b>	<b>1,196</b>	<b>435</b>	<b>6,197</b>	<b>1,542</b>	<b>2,097</b>	<b>11,467</b>
Executive, Admin., Managerial	30.3%	10.6%	49.5%	7.4%	2.3%	100.0%
Professional Specialty	57.7%	22.2%	19.9%	0.2%	0.0%	100.0%
Technical Sales & Administrative Support	9.9%	2.8%	58.3%	18.6%	10.4%	100.0%
Service	0.3%	0.0%	37.2%	18.0%	44.5%	100.0%
Factory, Craft, Transportation	1.0%	0.6%	70.7%	9.7%	18.1%	100.0%
Farming, Forestry, Fishing	4.3%	24.6%	33.3%	23.2%	14.5%	100.0%
<b>Total</b>	<b>10.4%</b>	<b>3.8%</b>	<b>54.0%</b>	<b>13.4%</b>	<b>18.3%</b>	<b>100.0%</b>

### Qualifications Required for Part-Time Job Openings

<u>Type of Position</u>	<u>B.A. &amp; Experience</u>	<u>B.A. Only</u>	<u>License, Certificate, A.A. or Experience</u>	<u>High School Only</u>	<u>No Experience</u>	<u>All Openings</u>
Executive, Admin., Managerial	0	0	41	1	1	43
Professional Specialty	108	19	220	0	94	441
Technical Sales & Administrative Support	30	101	947	1,085	1,194	3,357
Service	39	2	903	624	1,376	2,944
Factory, Craft, Transportation	0	0	267	194	683	1,144
Farming, Forestry, Fishing	<u>0</u>	<u>0</u>	<u>23</u>	<u>37</u>	<u>26</u>	<u>86</u>
<b>Total</b>	<b>177</b>	<b>122</b>	<b>2,401</b>	<b>1,941</b>	<b>3,374</b>	<b>8,015</b>
Executive, Admin., Managerial	0.0%	0.0%	95.3%	2.3%	2.3%	100.0%
Professional Specialty	24.5%	4.3%	49.9%	0.0%	21.3%	100.0%
Technical Sales & Administrative Support	0.9%	3.0%	28.2%	32.3%	35.6%	100.0%
Service	1.3%	0.1%	30.7%	21.2%	46.7%	100.0%
Factory, Craft, Transportation	0.0%	0.0%	23.3%	17.0%	59.7%	100.0%
Farming, Forestry, Fishing	0.0%	0.0%	26.7%	43.0%	30.2%	100.0%
<b>Total</b>	<b>2.2%</b>	<b>1.5%</b>	<b>30.0%</b>	<b>24.2%</b>	<b>42.1%</b>	<b>100.0%</b>

## V. Difficult to Fill Positions

In an attempt to identify high demand occupations, employers were asked to indicate which jobs were "difficult to fill" positions. The results of these responses were used to project an overall picture of high demand jobs in the metropolitan area. The results indicated that about half (49 percent) of all full-time and a third (37 percent) of part-time jobs were seen by employers as difficult to fill. Low wages appeared to be a factor in filling jobs, with 80 percent of part-time and 34 percent of full-time jobs identified as difficult to fill paying less than \$6.00 per hour.

**Qualifications Required for Difficult to Fill Job Openings**

<u>Type of Position</u>	<u>B.A. &amp; Experience</u>	<u>B.A. Only</u>	<u>License, Certificate A.A or Experience</u>	<u>High School Only</u>	<u>No Experience</u>	<u>Sum</u>
Total Full-Time Positions	1,196	435	6,197	1,542	2,097	11,467
Difficult to Fill Positions	511	172	3,690	409	813	5,595
% of Total	43%	40%	60%	27%	39%	49%
Total Part-Time Positions	177	122	2,401	1,941	3,374	8,015
Difficult to Fill Positions	54	57	1,206	358	1,314	2,989
% of Total	30%	47%	50%	18%	39%	37%

Difficulty in filling positions cut across all skill levels in both full and part-time openings. The highest number of full-time openings in the category of hard-to-fill positions was in occupations demanding experience, license, certificate or an associate degree (N = 3,690). 2,500 difficult-to-fill positions were identified in the following occupational clusters: administrative support occupations, including clerical (663 openings); transportation and material moving occupations (586 openings); machine operators, assemblers and inspectors (458 openings); construction (401 openings); and sales (392 openings).

Seventy-eight percent of full-time difficult to fill jobs required advanced training or degrees. Only 14 percent of full-time difficult to fill jobs were seeking high school non-graduates and 7 percent high school graduates without specific experience or advanced training. For the part-time jobs identified as difficult to fill, 43 percent required no experience or education.

Difficult-to-fill higher skilled full-time jobs were identified in health occupations (nurses and specialty occupations) and sales. In the category of jobs requiring high school completion or less, difficult-to-fill positions were identified particularly in service occupations and machine operators, fabricators and laborers. Part-time jobs listed as difficult to fill were primarily in the service and administrative support occupations for experienced as well as non-experienced positions.



## VI. Availability of Fringe Benefits

The availability of fringe benefits varied by the skill level required for jobs and for full and part-time openings, with full-time and higher-skilled jobs more likely to provide fringe benefits.

**Percent of Job Openings Offering Fringe Benefits**

<u>Qualifications Required</u>	<u>FULL-TIME OPENINGS</u>		<u>PART-TIME OPENINGS</u>	
	<u>Health Insurance</u>	<u>Pension</u>	<u>Health Insurance</u>	<u>Pension</u>
B.A. & Experience Required	98%	75%	47%	38%
B.A. & No Experience	99%	62%	38%	16%
License, Certificate, A.A., or Experience	82%	55%	27%	17%
High School, No Experience	82%	46%	30%	20%
No Requirements	58%	37%	30%	15%
All Job Openings	80%	53%	29%	17%

Eligibility for health insurance and pension options varied by employer and by length of the waiting period before coverage, level of employee co-payment and the type of coverage. Eighty percent of jobs open for full-time employment offered health insurance and 53 percent had a pension plan. For part-time employment, only 29 percent of positions had health insurance and only 17 percent had pension options. Part-time jobs for some lesser-skilled occupations offered single-person coverage after five or six months of employment with employee co-payment. Availability of fringe benefits also appeared to vary by type of business for both full and part-time openings. Full-time openings offering health insurance and pension options were highest in government and education sectors and lowest for retail and wholesale trade and service jobs excluding health and education fields.

**Percent of Full-Time Job Openings Offering Fringe Benefits**

<u>Type of Company</u>	<u>Health Insurance</u>	<u>Pension</u>	<u>N =</u>
Retail and Wholesale Trade	57%	25%	2,878
Manufacturing	91%	71%	2,059
Services, excluding Health and Education	77%	40%	1,896
Health	92%	66%	1,134
Construction	91%	65%	1,088
Finance, Insurance, Real Estate	86%	61%	1,016
Transportation, Communications, Utilities	92%	77%	674
Government	95%	93%	336
Education	100%	95%	199
Agriculture, Forestry, Fishing	100%	25%	186
All Full-Time Openings	80%	53%	11,466

Part-time job openings with fringe benefits were more likely to be located in manufacturing. In the service sector (excluding health and education) 6 percent of an estimated 1,712 openings offered fringe benefits. In transportation, communications and utilities less than 1 percent of part-time openings offered health coverage. Retail and wholesale trade, which had by far the largest share of part-time openings, offered health insurance for 29 percent of openings and pensions for 10 percent.

#### Percent of Part-Time Job Openings Offering Fringe Benefits

<u>Type of Company</u>	<u>Health Insurance</u>	<u>Pension</u>	<u>N =</u>
Retail and Wholesale Trade	29%	10%	4,220
Services, excluding Health, Education	6%	6%	1,712
Health	58%	47%	867
Manufacturing	71%	65%	468
Transportation, Communications, Utilities	0%	4%	305
Finance, Insurance, Real Estate	24%	24%	127
Construction	53%	0%	92
Agriculture, Forestry, Fishing	19%	19%	81
Government	49%	55%	74
Education	83%	83%	70
All Part-Time Openings	29%	17%	8,016

#### VII. Location of Job Openings

Employers were asked to specify the location of all job openings within the metropolitan area by zip code. While zip code boundaries permit a straight forward way of separating Milwaukee County from the balance of the four county metro area, City of Milwaukee boundaries were not conterminous with zip codes within the county. To obtain some idea of which jobs were located within the City of Milwaukee, those sixteen zip codes which were predominantly city (80 percent or more of the population) were designated "predominantly City of Milwaukee" while those zip codes which were mixed suburban/city or suburban were termed "balance of county." City zip codes included downtown, the central city and much of the northwest and south side of the city. City of Milwaukee zip codes were further analyzed for the Community Development Block Grant target areas for Department of City Development planning purposes. Ten selected zip code areas were matched with CDBG boundaries to determine the number of job openings for the area.<sup>1</sup>

<sup>1</sup> Predominantly City of Milwaukee zip codes include 53202, 53203, 53204, 53205, 53206, 53207, 53208, 53210, 53212, 53215, 53216, 53218, 53222, 53224, 53225 and 53233. Zip codes used to approximate the Community Development Block Grant target area boundaries included 53203, 253205, 53205, 53206, 53208, 53210, 53212, 53216, 53218 and 53233.

Of all the job openings in the four county metro area the week of May 24, 1993, 67 percent were within Milwaukee County, 27 percent within predominantly City of Milwaukee zip codes, and 12 percent for the CDBG area. When disaggregated by full and part-time jobs, 63 percent of full-time and 73 percent of part-time jobs were located within the county. Twenty-four percent of full-time and 30.5 percent of part-time jobs were within the predominantly city zip codes.

#### Location of Full- and Part-Time Job Openings

	FULL-TIME OPENINGS		PART-TIME OPENINGS		TOTAL OPENINGS	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
Four-County Total	11,867	100.0	9,278	100.0	21,145	100.0
Ozaukee, Washington & Waukesha Counties	4,395	37.0	2,512	27.1	6,907	32.7
Milwaukee County	7,472	63.0	6,766	72.9	14,238	67.3
Predominantly City Zip Codes	2,876	24.2	2,831	30.5	5,707	27.0
CDBG Zip Codes	1,289	10.9	1,307	14.1	2,596	12.3

When analyzed by occupational clusters, the types of jobs within the county and city varied for full and part-time jobs. Over two-thirds of full-time openings in the metro area were concentrated in office occupations including managerial, professional specialties and administrative support (50 percent) and service occupations (19 percent) with the balance (31 percent) in factory, crafts and transportation occupations. For Ozaukee, Waukesha and Washington Counties, almost one-half (48 percent) of the full-time jobs were in factory, crafts and transportation, while in the County of Milwaukee these jobs accounted for 22 percent of full-time openings and in the City of Milwaukee, 21 percent of openings.

Executive, administrative and managerial openings made up nearly 12 percent of full-time job openings in the city and 6 percent of job openings in the metro area. Technical, sales and administrative support accounted for 38 percent of the CDBG area, 40 percent of city, 37 percent of county and 31 percent of Waukesha, Washington and Ozaukee County openings. The service sector made up 24 percent of county jobs, 19 percent of city jobs, 17 percent of CDBG area jobs, and only 11 percent of the balance of the SMSA outside of Milwaukee County.

### Full-Time Job Openings by Location as of May 24, 1993

<u>Type of Job</u>	<u>Four-County TOTAL</u>		<u>Ozaukee, Washington, Waukesha Counties</u>		<u>Milwaukee County</u>		<u>Predominantly City of Milwaukee</u>		<u>CDBG Zip codes</u>	
	Number	%	Number	%	Number	%	Number	%	Number	%
Executive, Administrative, Managerial	750	6.3	75	1.7	675	9.0	341	11.8	168	13.0
Professional Specialties	1,006	8.5	375	8.5	631	8.5	238	8.3	131	10.2
Technical Sales & Admin. Support	4,134	34.8	1,362	31.0	2,772	37.1	1,160	40.3	493	38.2
Service	2,246	18.9	482	11.0	1,764	23.6	534	18.6	219	17.0
Factory, Construction, Transportation, Farming	<u>3,731</u>	<u>31.5</u>	<u>2,101</u>	<u>47.8</u>	<u>1,630</u>	<u>21.8</u>	<u>603</u>	<u>21.0</u>	<u>278</u>	<u>21.6</u>
Total, Full-Time	11,867	100.0	4,395	100.0	7,472	100.0	2,876	100.0	1,289	100.0

Part-time openings comprised one-half of the total openings in the city, 48 percent in the county and 36 percent in Ozaukee, Washington and Waukesha counties.

### Part-Time Job Openings by Location as of May 24, 1993

<u>Type of Job</u>	<u>Four-County TOTAL</u>		<u>Ozaukee, Washington, Waukesha Counties</u>		<u>Milwaukee County</u>		<u>Predominantly City of Milwaukee</u>		<u>CDBG Zip codes</u>	
	Number	%	Number	%	Number	%	Number	%	Number	%
Executive, Administrative, Managerial	49	0.5	3	0.1	46	0.7	12	0.4	11	0.9
Professional Specialties	611	6.6	112	4.5	499	7.4	302	10.7	229	17.5
Technical Sales & Admin. Support	3,666	39.5	1,184	47.1	2,482	36.7	1,012	35.8	477	36.5
Service	3,660	39.5	832	33.1	2,828	41.8	1,099	38.8	340	26.0
Factory, Construction, Transportation, Farming	<u>1,292</u>	<u>13.9</u>	<u>381</u>	<u>15.1</u>	<u>911</u>	<u>13.4</u>	<u>406</u>	<u>14.3</u>	<u>250</u>	<u>19.1</u>
Total, Part-Time	9,278	100.0	2,512	100.0	6,766	100.0	2,831	100.0	1,307	100.0

Part-time job openings were most heavily concentrated in the service, administrative support and sales occupations within Milwaukee County. Service sector occupations made up 39 percent of all part-time openings in the metro area. Forty-two percent of Milwaukee County part-time job openings, 39 percent of City of Milwaukee openings and 33 percent of Ozaukee, Washington and Waukesha counties openings were in the service sector. Administrative support jobs comprised 39 percent of all part-time openings, 37 percent in Milwaukee County, 36 percent in the city and 47 percent in Ozaukee, Washington and Waukesha counties.

Factory, transportation and crafts occupations made up 14 percent of overall Milwaukee County part-time openings, 14 percent of city and 15 percent of Ozaukee, Washington and Waukesha counties' openings. Professional specialty occupations, primarily health and teaching occupations, accounted for 7 percent of metro area part-time openings. Seven percent of Milwaukee County part-time job openings, 17 percent of CDBG, 11 percent of city and 5 percent of Ozaukee, Washington and Waukesha counties openings were in professional specialty occupations, including health and teaching. Few openings were listed for part-time managerial and administrative positions.

### **VIII. Concentration of Poverty in the CDBG Target Area**

To assess the availability of jobs in Milwaukee's central city neighborhoods, a separate analysis of job openings in the City of Milwaukee Community Development Block Grant (CDBG) target areas was conducted. Information on poverty and employment was also extracted from the 1990 U.S. Census (STF-3B Zip Code Files) for these selected zip codes to gauge the concentration of the unemployed population and families living below the poverty level within the metropolitan area living in the CDBG area and compared to the location of job openings.

#### **Full-Time and Part-Time Job Openings in the Milwaukee CDBG Target Area**

<u>May 1993 Survey</u>	<u>CDBG Zip codes</u>	<u>CDBG as % of Metro Area</u>	<u>Balance of Milwaukee County</u>	<u>Ozaukee, Wash., Wauk. Counties</u>	<u>Total SMSA</u>
Full-time Openings	1,289	10.9%	6,183	4,395	11,867
Part-time Openings	1,307	14.1%	5,459	2,512	9,278

While the unemployed population and number of families living below poverty are highly concentrated within the CDBG zip codes, full-time job openings available within the area are limited. The number of full-time jobs available within the CDBG area (1,289) fall far short of the number of unemployed persons and number of families below the poverty level, based on 1990 data. In contrast, counties in the balance of the SMSA (Washington, Waukesha and Ozaukee) show full-time job openings much closer to the number of unemployed and the number of families below poverty.

### Families Living Below Poverty by Location: 1990 Census

	<u>CDBG Zip codes</u>	<u>CDBG as % of Metro Area</u>	<u>Balance of Milwaukee County</u>	<u>Ozaukee Wash., Wauk. Counties</u>	<u>Total MSA</u>
Total Families in Area	97,809	26.5%	143,353	128,270	369,432
One-Parent Families Living Below Poverty	43,052	75.3%	11,291	2,828	57,171
Two-Parent Families Living Below Poverty	7,041	51.7%	5,000	1,579	13,620

### Civilian Labor Force by Location: 1990 Census

<u>Civilian Labor Force</u>	<u>CDBG Zip codes</u>	<u>CDBG as % of Metro Area</u>	<u>Balance of Milwaukee County</u>	<u>Ozaukee Wash., Wauk. Counties</u>	<u>Total MSA</u>
Total Persons	124,791	16.8%	354,583	261,589	740,963
Unemployed Persons	17,111	42.5%	15,633	7,482	40,226

The proportion of full-time job openings offering health insurance is also higher in these three counties than in Milwaukee County or in the CDBG area. For the four-county metropolitan area, the proportion of full-time job openings offering health insurance was calculated for a family of 2, 3 and 4 persons based on 1993 poverty levels. About half (54 percent) of the May 1993 full-time job openings paid health insurance and were adequate to support a family of four above poverty. Two-thirds of the job openings (65 percent) paid health insurance and were adequate to support a family of three above poverty, and 76 percent paid health insurance and were adequate to support a family of 2 above the poverty level. An estimated 63 percent of full-time job openings pay above the poverty level for a family of four in Ozaukee, Washington and Waukesha counties, compared with 46 percent of job openings in the CDBG area.

### Percent of Full-Time Job Openings With Health Insurance and Family Wages Above Poverty

<u>Percent of Jobs With Health Insurance and Wages Above Poverty for a Family of</u>	<u>CDBG Zip codes</u>	<u>Balance of Milwaukee County</u>	<u>Ozaukee, Wash., Wauk. Counties</u>	<u>Total MSA</u>
Two (wage > \$4.52/hr.)	67%	67%	88%	76%
Three (wage > \$5.70/hr.)	64%	60%	72%	65%
Four (wage > \$6.89/hr.)	48%	48%	62%	54%

## IX. Analysis of the Population Unemployed and Seeking Work

### Official BLS Employment Statistics

The official federal Bureau of Labor Statistics May 1993 unemployment rate for the Milwaukee metropolitan area was 5.0 percent, with 741,100 persons employed and 38,820 unemployed. Within the metropolitan area, unemployment rates were highest in the City of Milwaukee which had a 7.1 percent rate with 21,800 persons listed as unemployed, compared with unemployment rates of 3.2 percent in Milwaukee County suburbs, 3.3 percent in Ozaukee County, and 4.0 percent in Washington and Waukesha Counties.

**Bureau of Labor Statistics May 1993 Civilian Labor Force Estimates**

<u>Residence</u>	<u>Civilian Labor Force</u>	<u>Employed</u>	<u>Unemployed</u>	<u>Percent Unemployed</u>
City of Milwaukee	308,800	287,000	21,800	7.1
Milwaukee County Suburbs	186,300	180,400	5,900	3.2
Ozaukee County	43,300	41,800	1,420	3.3
Washington County	57,100	54,700	2,300	4.0
Waukesha County	<u>184,600</u>	<u>177,200</u>	<u>7,400</u>	4.0
Total	780,100	741,100	38,820	5.0

Totals may not add due to rounding.

### Job Service Applicants File

The most detailed information available on individuals seeking employment in the metropolitan area is the file of "Active Job Applicants" listed with Job Service offices in the metro area. As of May 31, 1993, 47,000 people were listed as actively seeking employment. The characteristics of these applicants provide the most useful information on the population seeking work and detail age, race, sex, level of education and economic status of job seekers. The active applicant file includes unemployment compensation claimants who made up an estimated one-third to one-half of the file according to Job Service staff, plus those Aid to Families with Dependent Children (AFDC) and General Assistance recipients required or volunteering to seek employment. Not all unemployed persons are listed with the Job Service system, however.

The difference between the official BLS unemployment count of 38,820 and the Job Service applicant file population of 47,000 may likely be attributable to three factors:

1. Those persons required to participate with Job Service due to General Assistance or AFDC status may not be counted in the official unemployment statistics if they

are not in the labor force (i.e., not employed and not actively seeking employment).

2. Because the Job Service applicant file holds open individual status until verification of employment on 30-day follow-up, some individuals seeking employment may have found jobs and not reported their status to Job Service.
3. The Bureau of Labor Statistics may undercount the unemployed, particularly in poor and minority communities.

For the total pool of active job seekers listed with Job Service, the majority were male (53 percent), white (52 percent), 22-39 years of age (62 percent) and had a 12th grade education or better (73 percent). As many as one-half may be recently unemployed.

The pool of active Job Service applicants appeared to be divided into three distinctly different groups -- AFDC clients, persons receiving general assistance and job seekers not receiving public assistance. Two-thirds of the applicants were not on public assistance while 11 percent received General Assistance and 24 percent received AFDC (Aid to Families with Dependent Children). The AFDC population included substantial numbers of minority females having limited education. The file showed 85 percent of the AFDC population as females, 75 percent minority and 53 percent with less than a 12th grade education. The General Assistance population included many minority males (72 percent were males, 87 percent minority, 48 percent have less than a 12th grade education). In contrast, two-thirds of those applicants not on public assistance were male, with many having higher levels of educational attainment. Of these job seekers, 13.9 percent had less than a 12th grade education, 47.8 percent were 12th grade completers, 23.8 percent had completed 13-15 years of education, and 14.5 percent had completed 16 or more years of schooling.



CHARACTERISTICS OF ACTIVE JOB SERVICE APPLICANTS  
MAY 31, 1993

TOTALS FOR MILWAUKEE, OZAUKEE,  
WASHINGTON AND WAUKESHA COUNTIES

	TOTAL		NOT ON		GENERAL			
	ACTIVE		PUBLIC ASSISTANCE		ASSISTANCE		AFDC	
TOTAL	47,000		30,745		5,108		11,147	
SEX								
MALE	25,110	53.4%	19,753	64.2%	3,679	72.0%	1,678	15.1%
FEMALE	21,890	46.6%	10,992	35.8%	1,429	28.0%	9,469	84.9%
RACE/ETHNIC								
WHITE	24,549	52.2%	21,127	68.7%	648	12.7%	2,774	24.9%
BLACK	18,450	39.3%	7,641	24.9%	4,120	80.7%	6,689	60.0%
HISPANIC	2,470	5.3%	1,307	4.3%	224	4.4%	939	8.4%
NATIVE AMERICAN	480	1.0%	256	0.8%	43	0.8%	181	1.6%
ASIAN & PACIFIC ISL	819	1.7%	262	0.9%	33	0.6%	524	4.7%
UNKN	232	0.5%	152	0.5%	39	0.8%	41	0.4%
AGE GROUP								
UNDER 16	63	0.1%	47	0.2%	11	0.2%	5	0.0%
16-21	2,961	6.3%	2,050	6.7%	511	10.0%	400	3.6%
22-39	28,905	61.5%	17,030	55.4%	2,999	58.7%	8,876	79.6%
40-54	11,712	24.9%	8,701	28.3%	1,313	25.7%	1,698	15.2%
55-64	2,971	6.3%	2,564	8.3%	260	5.1%	147	1.3%
65 & OVER	388	0.8%	353	1.1%	14	0.3%	21	0.2%
HIGHEST GRADE COMPLETED								
LESS THAN 9	2,061	4.4%	654	2.1%	380	7.4%	1,027	9.2%
9-11	10,559	22.5%	3,633	11.8%	2,068	40.5%	4,858	43.6%
12	20,635	43.9%	14,683	47.8%	1,993	39.0%	3,959	35.5%
13-15	9,109	19.4%	7,315	23.8%	582	11.4%	1,212	10.9%
16 OR MORE	4,636	9.9%	4,460	14.5%	85	1.7%	91	0.8%

### **Total Estimated Population "Expected to Work" But Not Employed as of May 1993**

The official unemployment population of 38,820 persons for May 1993 does not include that portion of the welfare population "not in the labor force" but "able to work." Because current labor force statistics were not available on the May 1993 population of adults receiving AFDC or Food Stamps, 1990 census data on the adult population (ages 18 - 65) receiving public assistance for the four-county metro area was used along with May 1993 actual counts of adults receiving AFDC or Food Stamps in order to estimate the number of adults not counted in the labor force but considered able to work. Accounting for the number of individuals estimated to be employed or unemployed who were counted in the official May 1993 employment calculations, the residual population on AFDC/Food Stamps not in the labor force and not disabled/unable to work was estimated to be from 22,413 to 24,371. (See Appendix A for a discussion of the methodology used.) When this population of individuals "expected to work" yet not in the labor force was added to the official May 1993 unemployment count of 38,820 for the metro area, the total number seeking or expected to seek employment reaches 61,233 to 63,191 persons.

The 11,870 full-time job openings available the week of May 24, 1993, represented about 20 percent of jobs required for persons seeking or expected to work. If part-time and full-time job openings were combined, the total of 21,147 jobs represented about 35 percent of jobs needed for the Milwaukee metro population.

FULL TIME JOBS OPENINGS BY TYPE OF BUSINESS AND SIZE OF COMPANY  
FOR THE METROPOLITAN MILWAUKEE LABOR MARKET

INDUSTRY	ESTABLISHMENT SIZE AS OF MARCH 1992										SUM ROW	% COLUMN
	NONE	1 TO 4	5 TO 9	10 TO 19	20 TO 49	50 TO 99	100 TO 249	250 TO 499	500 TO 999	1000 OR MORE		
AGRICULTURE, FORESTRY, FISHING	75	20	0	61	30	0	0	0	0	0	186	2%
CONSTRUCTION	138	116	234	378	116	33	39	0	0	0	1054	9%
MANUFACTURING	20	27	143	344	207	236	537	177	76	356	2123	18%
TRANSPORTATION, COMMUNICATIONS, UTILITIES	56	44	0	413	137	0	10	3	0	11	674	6%
RETAIL, WHOLESALE	180	225	444	656	862	0	295	91	0	68	2821	24%
FINANCE, INSURANCE, REAL ESTATE	124	185	260	0	74	371	8	77	15	84	1198	10%
SERVICES	175	498	549	336	430	267	216	408	95	400	3374	28%
GOVERNMENT	3	0	14	8	15	6	18	11	41	324	440	4%
SUM COLUMN	771	1115	1644	2196	1871	913	1123	767	227	1243	11870	100%
%ROW	6%	9%	14%	19%	16%	8%	9%	6%	2%	10%	100%	

PART TIME JOBS OPENINGS BY TYPE OF BUSINESS AND SIZE OF COMPANY  
FOR THE METROPOLITAN MILWAUKEE LABOR MARKET

INDUSTRY	ESTABLISHMENT SIZE AS OF MARCH 1992										SUM ROW	% COLUMN
	NONE	1 TO 4	5 TO 9	10 TO 19	20 TO 49	50 TO 99	100 TO 249	250 TO 499	500 TO 999	1000 OR MORE		
AGRICULTURE, FORESTRY, FISHING	30	60	0	30	0	0	0	0	0	0	120	1%
CONSTRUCTION	40	29	47	22	0	6	0	0	0	0	144	2%
MANUFACTURING	67	53	0	18	59	16	274	3	0	31	521	6%
TRANSPORTATION, COMMUNICATIONS, UTILITIES	0	0	0	77	164	47	10	6	0	1	305	3%
RETAIL, WHOLESALE	882	253	491	456	1837	0	403	39	0	212	4573	49%
FINANCE, INSURANCE, REAL ESTATE	27	26	58	0	0	11	27	14	0	10	173	2%
SERVICES	153	570	446	309	622	216	222	344	201	273	3356	36%
GOVERNMENT	0	4	26	5	5	2	4	5	2	32	85	1%
SUM COLUMN	1199	995	1068	917	2687	298	940	411	203	559	9277	100%
%ROW	13%	11%	12%	10%	29%	3%	10%	4%	2%	6%	100%	

SOURCE: EMPLOYMENT AND TRAINING INSTITUTE/SOCIAL SCIENCE RESEARCH FACILITY

**SKILL REQUIREMENTS FOR FULL TIME JOB OPENINGS  
IN METROPOLITAN MILWAUKEE**

OCCUPATION	B.A. DEGREE OR MORE REQUIRED		TRAINING, A.A. DEGREE, LICENSE OR	H.S.DIPLOMA NO EXPERIENCE	NO REQUIREMENTS	ALL
	DEGREE WITH NO EXPERIENCE	DEGREE PLUS EXPERIENCE	EXPERIENCE			
EXECUTIVE, ADMINISTRATIVE, AND MANAGERIAL OCCUPATIONS	69	197	322	48	15	651
PROFESSIONAL SPECIALTY OCCUPATIONS	220	572	197	2		991
HEALTH ASSESSMENT, DIAGNOSING AND TREATMENT	45	245	125			415
TEACHERS	128	21				149
OTHER SPECIALTY OCCUPATIONS	47	306	72	2		427
TECHNICAL, SALES, AND ADMINISTRATIVE SUPPORT	107	382	2237	713	401	3840
TECHNICIANS AND RELATED SUPPORT OCCUPATIONS	24	30	341		2	397
SALES REPRESENTATIVES	75	221	421	36	83	836
SALES WORKERS		4	184	129	120	437
ADMINISTRATIVE SUPPORT OCCUPATIONS	8	127	1291	548	195	2169
SECRETARIES, STENOGRAPHERS, AND TYPISTS		3	278	70	2	353
INFORMATION CLERKS			121	36		157
FINANCIAL RECORDS PROCESSING OCCUPATIONS	1	28	93	7	13	142
ADJUSTERS AND INVESTIGATORS		27	414	48	52	541
OTHER SUPPORT OCCUPATIONS	7	69	385	387	128	976
SERVICE OCCUPATIONS		7	847	410	1013	2277
FOOD PREPARATION AND SERVICE OCCUPATIONS			290	132	867	1289
HEALTH SERVICE OCCUPATIONS		4	307	89	1	401
CLEANING AND BUILDING SERVICES,NOT HOUSEHOLD		1	68	137	119	325
OTHER SERVICE OCCUPATIONS		2	182	52	26	262
FARMING, FORESTRY, AND FISHING OCCUPATIONS	17	3	23	16	10	69
PRECISION PRODUCTION, CRAFT, AND REPAIR OCCUPATIONS		3	1209	171	90	1473
MECHANICS AND REPAIRERS		3	243	77		323
CONSTRUCTION TRADES			632	67		699
PRECISION PRODUCTION, PLANT AND SYSTEM OCCUPATIONS			333	27	90	450
OPERATORS, FABRICATORS, AND LABORERS	22	32	1362	182	568	2166
MACHINE OPERATORS,INSPECTORS	17	22	362	65	76	542
FABRICATORS, ASSEMBLERS, AND HAND WORK		10	236	19	73	338
TRANSPORTATION AND MATERIAL MOVING OCCUPATIONS			651		107	758
LABORERS	4		81	66	129	280
HANDLERS,HELPERS,CLEANERS			31	32	183	246
TOTAL	435	1197	6195	1541	2097	11465

SOURCE:EMPLOYMENT AND TRAINING INSTITUTE/SOCIAL SCIENCE RESEARCH FACILITY

**SKILL REQUIREMENTS FOR PART TIME JOB OPENINGS  
IN METROPOLITAN MILWAUKEE**

OCCUPATION	B.A. DEGREE OR MORE REQUIRED		TRAINING, A.A. DEGREE, LICENSE OR EXPERIENCE	H.S.DIPLOMA NO EXPERIENCE	NO REQUIREMENTS	ALL
	DEGREE WITH NO EXPERIENCE	DEGREE PLUS EXPERIENCE				
EXECUTIVE, ADMINISTRATIVE, AND MANAGERIAL OCCUPATIONS			41	1	1	43
PROFESSIONAL SPECIALTY OCCUPATIONS	19	108	220		94	441
HEALTH ASSESSMENT, DIAGNOSING AND TREATMENT	9	55	101			165
TEACHERS	10	47	59			116
OTHER SPECIALTY OCCUPATIONS		6	60		94	160
TECHNICAL, SALES, AND ADMINISTRATIVE SUPPORT	101	30	947	1085	1194	3357
TECHNICIANS AND RELATED SUPPORT OCCUPATIONS	97	15	165		2	279
SALES REPRESENTATIVES		10	73	98	521	702
SALES WORKERS			208	306	458	972
ADMINISTRATIVE SUPPORT OCCUPATIONS	4	5	501	682	212	1404
SECRETARIES, STENOGRAPHERS, AND TYPISTS			74	19	21	114
INFORMATION CLERKS			80	15		95
FINANCIAL RECORDS PROCESSING OCCUPATIONS			23	38		61
ADJUSTERS AND INVESTIGATORS		3	19	56		78
OTHER SUPPORT OCCUPATIONS	4	2	305	554	191	1056
SERVICE OCCUPATIONS	2	39	903	624	1376	2944
FOOD PREPARATION AND SERVICE OCCUPATIONS			574	374	1148	2094
HEALTH SERVICE OCCUPATIONS	2		121	91	51	265
CLEANING AND BUILDING SERVICES,NOT HOUSEHOLD			8	157	141	306
OTHER SERVICE OCCUPATIONS		39	200	2	38	279
FARMING, FORESTRY, AND FISHING OCCUPATIONS			23	37	26	86
PRECISION PRODUCTION, CRAFT, AND REPAIR OCCUPATIONS		1	42		187	210
MECHANICS AND REPAIRERS					23	23
CONSTRUCTION TRADES			23			23
PRECISION PRODUCTION, PLANT AND SYSTEM OCCUPATIONS		1	18		144	163
OPERATORS, FABRICATORS, AND LABORERS			225	194	516	935
MACHINE OPERATORS,INSPECTORS			27	22	57	106
FABRICATORS, ASSEMBLERS, AND HAND WORK			28	107		135
TRANSPORTATION AND MATERIAL MOVING OCCUPATIONS			96		412	508
LABORERS			47	40	25	112
HANDLERS,HELPERS,CLEANERS			28	25	23	76
TOTAL	122	179	2401	1941	3374	8017

SOURCE:EMPLOYMENT AND TRAINING INSTITUTE/SOCIAL SCIENCE RESEARCH FACILITY

HOURLY WAGE RATES FOR FULL TIME JOB OPENINGS  
IN METROPOLITAN MILWAUKEE

	LESS THAN												MORE THAN									
OCCUPATION	\$4.00	\$4.99	\$5.00	\$5.99	\$6.00	\$6.99	\$7.00	\$7.99	\$8.00	\$8.99	\$9.00	\$9.99	\$10.00	\$10.99	\$11.00	\$11.99	\$12.00	\$12.99	\$13.00	\$13.99	\$13.99	ALL
EXECUTIVE, ADMINISTRATIVE, AND MANAGERIAL OCCUPATIONS		1	46	27	8	60	49	3	81	26	46	109	456									
PROFESSIONAL SPECIALTY OCCUPATIONS					24	16	37	41	35	81	8	79	393	714								
HEALTH ASSESSMENT, DIAGNOSING AND TREATMENT					6		7	3	1	4	79	222	322									
TEACHERS					4			24	20			6	54									
OTHER SPECIALTY OCCUPATIONS				24	6	37	34	8	60	4		165	338									
TECHNICAL, SALES, AND ADMINISTRATIVE SUPPORT	56	197	916	489	302	344	237	159	76	118	11	464	3369									
TECHNICIANS AND RELATED SUPPORT OCCUPATIONS				33	14	34	16	26	46	36	6	217	426									
SALES REPRESENTATIVES		3	128	76	32	1	18	4	22	52		166	502									
SALES WORKERS	66	140	204	11			60	37				3	511									
ADMINISTRATIVE SUPPORT OCCUPATIONS		54	584	369	256	309	143	92	10	30	5	79	1931									
SECRETARIES, STENOGRAPHERS, AND TYPISTS			2	147	92	97	25	57				1	421									
INFORMATION CLERKS			33	68	8	28	23			20			180									
FINANCIAL RECORDS PROCESSING OCCUPATIONS				13	15	24	35	6		1	3	29	126									
ADJUSTERS AND INVESTIGATORS			48	43	20	9			1			121										
OTHER SUPPORT OCCUPATIONS		54	501	98	121	151	60	29	9	9	2	49	1083									
SERVICE OCCUPATIONS	316	903	652	264	174	85	83	65	24	25	13	14	2618									
FOOD PREPARATION AND SERVICE OCCUPATIONS	316	749	435	59		31	1						1591									
HEALTH SERVICE OCCUPATIONS			99	131	120	9	16	60	12	20		6	473									
CLEANING AND BUILDING SERVICES,NOT HOUSEHOLD		149	67	62	25	43	42		12	5	7	3	415									
OTHER SERVICE OCCUPATIONS		5	51	12	29	2	24	5			6	5	139									
FARMING, FORESTRY, AND FISHING OCCUPATIONS				6	16		15	2	10		1	19	69									
PRECISION PRODUCTION, CRAFT, AND REPAIR OCCUPATIONS			61	185	103	93	64	183	131	55	2	590	1467									
MECHANICS AND REPAIRERS				19	63		1	72	8	30	2	96	291									
CONSTRUCTION TRADES			20	19	40	93	12	79	78			438	779									
PRECISION PRODUCTION, PLANT AND SYSTEM OCCUPATIONS			41	147			51	32	45	25		56	397									
OPERATORS, FABRICATORS, AND LABORERS	89	375	311	254	148	227	194	192	68	359	35	2252										
MACHINE OPERATORS,INSPECTORS		42	44	130	63	72	74	21			28	474										
FABRICATORS, ASSEMBLERS, AND HAND WORK			162	96		73			3	3		337										
TRANSPORTATION AND MATERIAL MOVING OCCUPATIONS	89	34	1		32	27	118	78	61	348		788										
LABORERS			17	100	70	22	55	2	69		8	3	346									
HANDLERS,HELPERS,CLEANERS			120	70	54	31			24	4		4	307									
TOTAL	372	1190	2050	1306	872	766	716	640	596	300	510	1625	10943									

SOURCE: EMPLOYMENT AND TRAINING INSTITUTE/SOCIAL SCIENCE RESEARCH FACILITY

HOURLY WAGE RATES FOR PART TIME JOB OPENINGS  
IN METROPOLITAN MILWAUKEE

	LESS											MORE	
	THAN	\$4.00	\$5.00	\$6.00	\$7.00	\$8.00	\$9.00	\$10.00	\$11.00	\$12.00	\$13.00	THAN	
OCCUPATION	\$4.00	-\$4.99	-\$5.99	-\$6.99	-\$7.99	-\$8.99	-\$9.99	-\$10.99	-\$11.99	-\$12.99	-\$13.99	\$13.99	ALL
EXECUTIVE, ADMINISTRATIVE, AND MANAGERIAL OCCUPATIONS			11	2	1		1	1				1	17
PROFESSIONAL SPECIALTY OCCUPATIONS		59	31	51	8			19		7	20	90	285
HEALTH ASSESSMENT, DIAGNOSING AND TREATMENT								19		7	20	90	136
TEACHERS		59	31		4								94
OTHER SPECIALTY OCCUPATIONS				51	4								55
TECHNICAL, SALES, AND ADMINISTRATIVE SUPPORT	84	1325	1154	525	245	97	51	76	27	29		102	3715
TECHNICIANS AND RELATED SUPPORT OCCUPATIONS				71	22	18	15	20	1	26		102	275
SALES REPRESENTATIVES		405	167	54	37								663
SALES WORKERS	84	519	335	35									973
ADMINISTRATIVE SUPPORT OCCUPATIONS		401	652	365	186	79	36	56	26	3			1804
SECRETARIES, STENOGRAPHERS, AND TYPISTS			20	28	14	44	36	6					148
INFORMATION CLERKS		28	57	50	20	6		22					183
FINANCIAL RECORDS PROCESSING OCCUPATIONS			27	16		22							65
ADJUSTERS AND INVESTIGATORS				53	23								76
OTHER SUPPORT OCCUPATIONS		373	548	218	129	7		28	26	3			1332
SERVICE OCCUPATIONS	709	1690	1253	212	162		11	23					4060
FOOD PREPARATION AND SERVICE OCCUPATIONS	709	1145	790	56	89								2789
HEALTH SERVICE OCCUPATIONS		6	19	120	43		6						194
CLEANING AND BUILDING SERVICES,NOT HOUSEHOLD		436	272	20				23					751
OTHER SERVICE OCCUPATIONS		103	172	16	30		5						326
FARMING, FORESTRY, AND FISHING OCCUPATIONS		32	33	22									87
PRECISION PRODUCTION, CRAFT, AND REPAIR OCCUPATIONS		74	112				1	39					226
MECHANICS AND REPAIRERS													
CONSTRUCTION TRADES								39					39
PRECISION PRODUCTION, PLANT AND SYSTEM OCCUPATIONS		74	112				1						187
OPERATORS, FABRICATORS, AND LABORERS		179	241	158	322	39							939
MACHINE OPERATORS,INSPECTORS			85		22								107
FABRICATORS, ASSEMBLERS, AND HAND WORK		64	32	60		16							172
TRANSPORTATION AND MATERIAL MOVING OCCUPATIONS		115	35	49	242	3							444
LABORERS			58	18	32	20							128
HANDLERS,HELPERS,CLEANERS			31	30	26								87
TOTAL	794	3360	2835	969	738	135	64	158	27	36	20	193	9329

**LOCATION OF FULL TIME JOB OPENINGS  
WITHIN METROPOLITAN MILWAUKEE**

OCCUPATION	TOTAL METRO FOUR COUNTY AREA	OZAUKEE WAUKESHA WASHINGTON COUNTIES	MILWAUKEE COUNTY	SELECTED CITY OF MILWAUKEE ZIPCODES	BALANCE OF MILWAUKEE COUNTY
EXECUTIVE, ADMINISTRATIVE, AND MANAGERIAL OCCUPATIONS	750	75	675	341	334
PROFESSIONAL SPECIALTY OCCUPATIONS	1006	375	631	238	393
HEALTH ASSESSMENT, DIAGNOSING AND TREATMENT	472	112	360	128	233
TEACHERS	121	85	35	4	31
OTHER SPECIALTY OCCUPATIONS	413	178	236	106	129
TECHNICAL, SALES, AND ADMINISTRATIVE SUPPORT	4134	1362	2772	1160	1611
TECHNICIANS AND RELATED SUPPORT OCCUPATIONS	432	98	335	221	113
SALES REPRESENTATIVES	807	414	393	126	267
SALES WORKERS	525	160	365	132	233
ADMINISTRATIVE SUPPORT OCCUPATIONS	2370	691	1679	681	998
SECRETARIES, STENOGRAPHERS, AND TYPISTS	471	54	417	279	138
INFORMATION CLERKS	146	73	73	23	49
FINANCIAL RECORDS PROCESSING OCCUPATIONS	139	65	74	26	49
ADJUSTERS AND INVESTIGATORS	527	77	450	18	432
OTHER SUPPORT OCCUPATIONS	1087	422	665	335	330
SERVICE OCCUPATIONS	2246	482	1764	534	1229
FOOD PREPARATION AND SERVICE OCCUPATIONS	1218	257	961	152	809
HEALTH SERVICE OCCUPATIONS	442	106	336	103	233
CLEANING AND BUILDING SERVICES,NOT HOUSEHOLD	347	49	298	209	89
OTHER SERVICE OCCUPATIONS	239	70	169	70	98
FARMING, FORESTRY, AND FISHING OCCUPATIONS	68	9	59	24	35
PRECISION PRODUCTION, CRAFT, AND REPAIR OCCUPATIONS	1367	704	663	166	497
MECHANICS AND REPAIRERS	283	63	221	13	208
CONSTRUCTION TRADES	634	511	123	53	70
PRECISION PRODUCTION, PLANT AND SYSTEM OCCUPATIONS	449	130	320	100	219
OPERATORS, FABRICATORS, AND LABORERS	2296	1388	908	412	496
MACHINE OPERATORS,INSPECTORS	538	400	137	73	64
FABRICATORS, ASSEMBLERS, AND HAND WORK	311	192	119	40	79
TRANSPORTATION AND MATERIAL MOVING OCCUPATIONS	777	484	293	162	131
LABORERS	395	165	229	104	125
HANDLERS,HELPERS,CLEANERS	275	146	130	32	97
TOTAL	11867	4395	7472	2876	4596

SOURCE: EMPLOYMENT AND TRAINING INSTITUTE/SOCIAL SCIENCE RESEARCH FACILITY



**LOCATION OF PART TIME JOB OPENINGS  
WITHIN METROPOLITAN MILWAUKEE**

OCCUPATION	TOTAL METRO FOUR COUNTY AREA	OZAUKEE WAUKESHA WASHINGTON COUNTIES	MILWAUKEE COUNTY	SELECTED CITY OF MILWAUKEE ZIPCODES	BALANCE OF MILWAUKEE COUNTY
EXECUTIVE, ADMINISTRATIVE, AND MANAGERIAL OCCUPATIONS	49	3	46	12	34
PROFESSIONAL SPECIALTY OCCUPATIONS	611	112	499	302	196
HEALTH ASSESSMENT, DIAGNOSING AND TREATMENT	225	49	176	90	86
TEACHERS	222	55	167	59	108
OTHER SPECIALTY OCCUPATIONS	164	8	156	153	2
TECHNICAL, SALES, AND ADMINISTRATIVE SUPPORT	3666	1184	2481	1012	1469
TECHNICIANS AND RELATED SUPPORT OCCUPATIONS	294	79	215	135	80
SALES REPRESENTATIVES	750	198	552	57	495
SALES WORKERS	1029	473	556	176	381
ADMINISTRATIVE SUPPORT OCCUPATIONS	1593	435	1158	644	514
SECRETARIES, STENOGRAPHERS, AND TYPISTS	140	12	128	71	57
INFORMATION CLERKS	137	61	76	36	40
FINANCIAL RECORDS PROCESSING OCCUPATIONS	58	34	24		24
ADJUSTERS AND INVESTIGATORS	71	45	26	26	
OTHER SUPPORT OCCUPATIONS	1187	283	904	511	393
SERVICE OCCUPATIONS	3660	832	2828	1099	1728
FOOD PREPARATION AND SERVICE OCCUPATIONS	2460	455	2004	668	1337
HEALTH SERVICE OCCUPATIONS	287	25	262	126	136
CLEANING AND BUILDING SERVICES, NOT HOUSEHOLD	607	213	393	224	169
OTHER SERVICE OCCUPATIONS	306	139	169	81	86
FARMING, FORESTRY, AND FISHING OCCUPATIONS	109	20	88	66	22
PRECISION PRODUCTION, CRAFT, AND REPAIR OCCUPATIONS	179	43	136		136
MECHANICS AND REPAIRERS	23		23		23
CONSTRUCTION TRADES	23	23			
PRECISION PRODUCTION, PLANT AND SYSTEM OCCUPATIONS	133	19	113		113
OPERATORS, FABRICATORS, AND LABORERS	1006	318	688	338	350
MACHINE OPERATORS, INSPECTORS	99	22	78	26	51
FABRICATORS, ASSEMBLERS, AND HAND WORK	143	96	47	47	
TRANSPORTATION AND MATERIAL MOVING OCCUPATIONS	527	87	440	245	195
LABORERS	146	68	77		77
HANDLERS, HELPERS, CLEANERS	90	45	45	20	26
TOTAL	9278	2512	6766	2831	3936

SOURCE: EMPLOYMENT AND TRAINING INSTITUTE/SOCIAL SCIENCE RESEARCH FACILITY

## APPENDIX

### Background on Job Openings Surveys

For the past thirty years the federal government has conducted three different experimental survey programs designed to measure job openings in the labor market. In the period 1969-1973 the Bureau of Labor Statistics (BLS) began the JOLTS (Job Openings and Labor Turnover Survey) program which collected data primarily in the manufacturing sector. Then in 1979-80 the BLS Job Openings Pilot Program conducted a series of pilot programs to assess the feasibility of collecting data nationally. Finally, in 1990 and 1991 the BLS once again embarked on another similar pilot project which concluded that such data could be collected but was expensive to obtain. BLS officials are doubtful that any national effort to collect job vacancy data will occur in the near future. Throughout the 1970s, Wisconsin policy makers continued to collect job vacancy data despite federal lapses in support of the program. From 1975 through 1981 the Department of Industry, Labor and Human Relations (DILHR) expanded coverage to all industries from the initial manufacturing emphasis, but eventually shut down the program in December 1981 when federal funds were withdrawn.

In the mid-1960s, when unemployment rates were very low and job vacancies may have equaled the number of unemployed, the common view among academics and policy makers was that vacancies beyond normal turnover were the result of the unemployed not knowing how to find available jobs and that job seekers mainly needed mechanisms to link up with the companies looking to fill vacancies (Abraham, 1983). More recently, the Employee Turnover Job Openings (ETJO) experiment reflected an interest in identifying occupational labor shortages to determine where hard to fill openings were occurring (BLS, 1991). Others have stressed the importance of collecting vacancy data and analyzing it in comparison to the unemployed and underemployed, noting that the supply of workers dramatically exceeds demand (Riemer, 1988; Abraham, 1983; Levitan and Gallo, 1989). The combination of demand information available through establishment vacancy surveys combined with supply data from a CPS type of household survey can provide policy makers, employers and educators with an analysis more suited to solving the employment needs of those seeking work and of the non-working population which policy makers argue should be seeking employment.

During the 1970s and up until December 1981, the Bureau of Labor Statistics and the Wisconsin Department of Industry, Labor and Human Relations regularly surveyed manufacturing establishments to obtain data on long- and short-term job openings, new hires and separation rates. The Job Openings and Labor Turnover Survey (JOLTS) was established by the Bureau of Labor Statistics and administered locally. It was sent out monthly to a statewide sample of 7,200 businesses in covered establishments, mostly in the manufacturing sector. The survey did not collect data on full-time/part-time status, wages or benefits, but provided valuable economic indicators to gauge local labor market trends. However, funding for this joint federal

and state effort was discontinued by the federal government. Since the JOLTS survey was last administered in December 1981, no other establishment data has been collected on either openings or separations. More recently the U.S. Department of Labor has piloted a survey which examines job vacancies and which was considered for introduction at the federal and state level. This survey requests occupational and industry data and wage data, but not part-time/full-time work status or fringe benefits.

### **Survey Instrument and Technical Approach**

The design of the University of Wisconsin-Milwaukee draws upon the experience of JOLTS and the more recent Department of Labor Survey of Employee Turnover Job Openings (ETJO). This survey expands the information gathered to include full and part-time employment, the location of employment, availability of fringe benefits, and employer-identified hard-to-fill openings.

Information on new hires is particularly important because many firms use entry-level positions as steps for promotions within companies. Location of employment is essential not only for the value it may have for descriptive purposes but because companies often have sub-units throughout the state or region for which hiring and wage reporting is included, and metropolitan employment trends based on administrative office locations may be skewed to overestimate openings. Minimum level of education and special training data provide a benchmark from which to gauge possible training and placement efforts. Fringe benefit availability is examined as an important determinant of adequate employment.

For this survey a representative sample of employers was to be drawn from the covered employment file for the Milwaukee metropolitan area. The methodology incorporated a stratified sample by size of company and Standard Industrial Classification (SIC). Respondents were asked to complete the information on job openings based on actual openings in the week of May 24, 1993.

In order to improve initial response rates and to minimize employer effort required, the University of Wisconsin-Milwaukee survey was reduced to a one-page form limited to vacancy data and new hires only. Reduction of the form to one page has been achieved by requesting the company to simply list job titles for which there are current openings and having University staff code and categorize occupational listings.

Number of People Employed by Your Firm as of May 24, 1993

Full-Time \_\_\_\_\_

Part-Time \_\_\_\_\_

New Hires in the Last 30 Days

Full-Time \_\_\_\_\_

Part-Time \_\_\_\_\_

LIST ALL JOBS OPEN FOR IMMEDIATE HIRE AS OF MAY 24, 1993

Include job openings for full- and part-time employees;  
and temporary employees including temp services.

Exclude job openings for summer youth employment,  
consultants, outside contractors and their employees.

If you have jobs open for immediate hire, please indicate the  
total here \_\_\_\_\_ and list in the table below.

JOB TITLE	Number of Job Openings		Hourly Rate or Monthly Pay	Zip Code of Place of Work	CHECK (✓) IF JOB:				Does Your Company Provide Over 25 Hours of Formal Training?	SPECIFY:  Prior Level of Education or Training Required
	Full Time	Part Time			Is Difficult To Fill	Requires Prior Experience	INCLUDES:			
							Health Insurance	Pension		

UWM, SSRF No.

If you have no current vacancies, please check here and return survey. \_\_\_\_\_

## **Sampling Procedures**

A sample of 4,742 employers in the metropolitan Milwaukee Area was drawn using the Department of Industry, Labor and Human Relations (DILHR) ES-202 employer file for March 1992 and includes all employers covered by Wisconsin unemployment compensation law. This includes:

1. Employers who employed one individual (full or part-time and not necessarily the same person) on at least one day in each of 20 or more calendar weeks in either that year and the preceding calendar year.
2. Employers who paid wages for employment which totaled \$1,500 or more during any calendar quarter in either that year and the preceding calendar year.
3. Any employer who is subject to the Federal Unemployment Tax Act on its total payroll in all states will be subject retroactive to its first Wisconsin payroll of a calendar year.
4. A non-profit organization (only those described in Sec. 501(c)(3) IRS Code) with at least 4 employees on at least one day in each of 20 or more calendar weeks in either that year and the preceding calendar year.
5. Agricultural employers who (a) paid cash wages for agricultural labor which totaled \$20,000 or more during any calendar quarter in either that year and the preceding calendar year, or (b) employed as many as 10 individuals in some agricultural labor for some portion of a day in each of 20 or more calendar weeks in either that year and the preceding calendar year.
6. Any employers of any individual(s) in domestic service who paid cash wages of \$1,000 or more during any calendar quarter in either that year and the preceding calendar year.
7. All government units.
8. Any other employer who has elected coverage on otherwise excluded employment.

Employers not covered by the U.C. law include railroads, entrepreneurs who have no covered employees, farmers and agricultural enterprises with less than 10 employees, domestics, church workers and those working for family corporations with pay.

The sample population was stratified by size and type of company using the following criteria to insure adequate response rate and over-sampling of large employers, construction, finance, hospitals and government:

1. 100 percent sample of employers with 250 or more employees.
2. 100 percent sample of construction, finance and health employers with 50 or more employees.
3. 100 percent sample of local government and education institutions.
4. 12 percent sample of the balance of corporations.
5. Temporary help agencies and estates were excluded.

Surveys were mailed to 4,742 employers asking respondents to detail the number and types of job openings as of May 24, 1993. After three weeks the response rate for the survey was 25 percent, with very low response rates for large companies. In order to increase the response rate for larger companies and to test whether non-respondents differed in any way from respondents, staff attempted to contact approximately 2,000 of the 4,942 sample by phone to solicit their response to the survey. One hundred percent of companies with over 250 employees not responding to the survey mailing were contacted by phone as well as approximately 10 percent of the balance of companies. Follow-up calls resulted in an additional 667 completed surveys, and an overall response rate of 39.2 percent.

Initial mail respondents were compared to a randomly selected population of non-respondents who were solicited by phone. The two groups of respondents were analyzed to test for differences in reported job openings. Only a few of the stratified cells showed any difference while analysis of the overall sample showed no statistical difference in the two populations. A test for differences in means was conducted for number of job openings with no significant difference evident between groups. The lower response rates for large companies was consistent with previous job opening surveys which found the same pattern of non-response.

Results for the sample population were weighted by size and type of industry and by response rate to project the total number and type of jobs available in the metro area. Response rates for questions concerning hourly wages and qualifications were lower than the data completed on type of job openings available, due to missing data (mostly attributable to jobs where salary was based on commission). As a result, two additional weighting formulas were applied to adjust for missing data. The three weights used to project full and part-time openings were: 1) the total population responding to the survey, 2) those detailing wage rates, and 3) those completing questions on fringe benefits and job requirements. The use of these different weighting formulas permitted more reliable estimates but results in slightly different totals across tables for both full and part-time openings.

A combination of non-response rate and low job opening rates for some cells resulted in extremely high weights for a small number of cells which could have distort findings on the number and types of jobs open. A Chi square test was conducted on each weighting cell by both type of company and size, and those responses more than one standard deviation above expected were excluded from the analysis.

The resulting weighting methodology was tested by using the sample data to project overall employment for the SMSA and comparing these projections with published May 1992 ES-202 employment. Estimates of employment based on weighting of survey respondents' reported current employment levels fell within 10 percent of the actual reported levels for the metropolitan area, lending confidence to the weighting procedure used.

### Calculation of Employment Status of the Welfare Population

Excluding persons listed as aged, the Department of Health and Social Services reported 62,684 adults receiving AFDC or Food Stamps in the four county metropolitan area in May of 1993. A portion of this population was employed, another portion was included in the unemployed population, and the balance was not in the labor force and consequently not included in the official calculations on employment and unemployment issued for the Bureau of Labor Statistics. Identifying that portion of the welfare population not in the labor force and not disabled/unable to work is problematic. In an attempt to address this issue for the City of Milwaukee officials, two methods were developed.

The five percent sample of the 1990 U.S. Census provided data on adults aged 18-65 and on public assistance (AFDC, SSI, or other public welfare). This data was used to establish the percent employed, unemployed, disabled and unable to work, and the balance not in the labor force. The 1990 census identified 42,172 individuals, aged 18-65, receiving public assistance anytime during 1989, in the metropolitan four county area. Of this population, 12,929 were identified as disabled and unable to work and 197 as institutionalized and unable to work. Employment status as of April 1, 1990 was then calculated for the balance of the population, and 51.91 percent were found to be "not in the labor force," but "able to work."

### U.S. Census Rates on Employment Status of Milwaukee Area Welfare Population

		Percent of "Able to Work"
Total on Public Assistance	42,172	
Disabled/Unable to Work (30.66% of Total)	- 12,929	
Institutionalized/Unable to Work (0.467% of Total)	- 197	
Total "Able to Work"	29,046	100.00
Employed	8,124	27.97
Employed not currently at work	358	1.23
Unemployed	5,485	18.88
Not in labor force	15,079	51.91
TOTAL	29,046	100.00

The first method applied these proportions to the May 1993 AFDC/Food Stamp population excluding the aged population on Food Stamps in order to provide a rough estimate of the number not in the labor force and able to work. Using this method, an estimated 22,413 adults were on AFDC or Food Stamps who were not in the labor force but "able to work."

Total number of adults (non-aged) on AFDC/Food Stamps, May 1993	62,684
X .3112 = Estimated Unable to work	<u>-19,507</u>
Estimated Total "Able to Work"	43,177
 X .2797 = Estimated Employed	 12,076
X .0123 = Est. Employed, not currently at work	531
X .1888 = Estimated Unemployed	8,152
X .5191 = Estimated Not in labor force but "able to work"	22,413

In the second method, the metropolitan area disabled population on AFDC/Food Stamps as detailed by the state Department of Health and Social Services (N=15,735) was subtracted from the total on AFDC or Food Stamps in May 1993 (N=62,684). The balance of the AFDC/Food Stamps population (N=46,949) was considered "able to work." Again, the proportions from the 1990 U.S. Census calculations were applied to the population as shown below. Under this second method, the number of persons not in the labor force and "able to work" totaled 24,371.

Total number of adults (non-aged) on AFDC/Food Stamps, May 1993	62,684
(minus) disabled AFDC/Food Stamp population	<u>- 15,735</u>
Estimated Total "Able to Work"	46,949
 X .2797 = Estimated Employed	 13,132
X .0123 = Est. Employed, not currently at work	577
X .1888 = Estimated Unemployed	8,864
X .5191 = Estimated Not in labor force but "able to work"	24,371



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## STANDARD INDUSTRIAL CLASSIFICATIONS

### CONSTRUCTION

General Building Contractors  
Heavy Construction Except  
Building  
Special Trade Contractors

### MANUFACTURING

Food and Kindred Products  
Tobacco Products  
Textile Mill Products  
Apparel & Other Textile Products  
Lumber and Wood Products  
Furniture and Fixtures  
Paper and Allied Products  
Printing and Publishing  
Chemicals and Allied Products  
Petroleum and Coal Products  
Rubber and Miscellaneous  
Plastics Products  
Leather and Leather Products  
Stone, Clay, and Glass Products  
Primary Metal Industries  
Fabricated Metal Products  
Industrial, Commercial and  
Computer Equipment  
Electronic and Other Electric  
Equipment  
Transportation Equipment  
Instruments and Related Products  
Miscellaneous Manufacturing  
Industries

### MINING

Metal Mining  
Coal Mining  
Oil and Gas Extraction  
Nonmetallic Minerals, Except Fuels

### TRANSPORTATION, COMMUNICATIONS,

ELECTRIC, GAS & SANITARY SVCS  
Railroad Transportation  
Local and Interurban Passenger  
Transit  
Trucking and Warehousing  
U.S. Postal Service  
Water Transportation  
Transportation by Air  
Pipelines, Except Natural Gas  
Transportation Services  
Communications  
Electric, Gas & Sanitary Services

### WHOLESALE TRADE

Wholesale Trade - Durable Goods  
Wholesale Trade - Nondurable Goods

### RETAIL TRADE

Bldg Materials & Garden Supplies  
General Merchandise Stores  
Food Stores  
Automotive Dealers & Svc Stations  
Apparel and Accessory Stores  
Furniture, Home Furnishings Stores  
Eating and Drinking Places  
Miscellaneous Retail

### FINANCE, INSURANCE, & REAL ESTATE

Depository Institutions  
Nondepository Institutions  
Security and Commodity Brokers  
Insurance Carriers  
Insurance Agents, Brokers, and  
Service  
Real Estate  
Holding & Other Investment Offices

### SERVICES

Hotels and Other Lodging Places  
Personal Services  
Business Services  
Auto Repair, Services, and Parking  
Miscellaneous Repair Services  
Motion Picture  
Amusement and Recreation Services  
Health Services  
Legal Services  
Educational Services  
Social Services  
Museums, Botanical, Zoological  
Gardens  
Membership Organizations  
Engineering and Management Services  
Private Households  
Services, NEC.

### PUBLIC ADMINISTRATION

Executive, Legislative, & General  
Justice, Public Order, and Safety  
Finance, Taxation & Monetary Policy  
Administration of Human Resources  
Environmental Quality and Housing  
Administration of Economic Programs  
National Security and International  
Affairs

### AGRICULTURE, FORESTRY, AND FISHING

Agricultural Production - Crops  
Agricultural Production - Livestock  
Agricultural Services  
Forestry  
Fishing, Hunting and Trapping