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# Minnesota Job Vacancy Survey

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**Research and  
Statistics Office**

**Minnesota  
Department of  
Economic Security**

**January 2002**

# Project Purpose and Background

**A** statewide job vacancy survey contributes to our understanding of occupational supply and demand and provides an economic indicator of workforce shortages. This valuable survey information can serve the following needs:

- Hiring managers and human resource professionals use this information to determine hiring competition and to prioritize human resource needs.
- Employment and training service providers utilize this information to plan employment service and workforce development strategies.
- Counselors, instructors and educational planners use this information to identify workforce development priorities and aid students and jobseekers in identifying occupations that are in demand.
- Policymakers are informed of the location and magnitude of labor market imbalances and the quantity and quality of current open-for-hire positions in Minnesota.

Job vacancies— positions open for hire at the time of the survey— were reported by employers who participated in the *Minnesota Job Vacancy Survey*. Exact counts of job vacancies cannot be known with certainty. Rather, this study provides estimates of the demand for workers on a statewide and regional level during fourth quarter (October to December) 2001.

The data were collected from a sample of firms and organizations throughout the state of Minnesota. The sample was randomly drawn to represent the industry and size characteristics of employers in 11 regions. Not all surveyed firms participated. Still, the 67 percent that did participate (5,123 responses from a survey of 7,593) enable us to produce statistically reliable findings.

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# Major Findings

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## Summary

**T**he economic environment in Minnesota is dramatically different than it was just one year ago. Minnesota's economy experienced 18 years of economic expansion, the longest in the state's history, during the late 1980s, 1990s and into 2000. The state weathered the mild 1990-1991 national recession with no overall decrease in jobs; Minnesota then outpaced the nation in job growth during the 1990s. However, signs of a nationwide economic slowdown darkened the horizon by the end of 2000. Annual job growth fell steadily, and rising unemployment rates and layoffs provided more evidence of the downturn.

The most recent data indicate that the U.S. economy fell into recession in March 2001. This time, Minnesota was not spared:

- Layoffs began to spike at the end of 2000.
- The unemployment rate hit 4.0 percent in December 2001.
- For the first time in 18 years, the number of jobs in the state began to slide in 2001.

The *Minnesota Job Vacancy Survey* provides still more information on the impact of this recession in Minnesota: There are 43.0 percent fewer job vacancies than were measured one year ago.<sup>1</sup>

The current round of the *Minnesota Job Vacancy Survey* reveals an estimated 80,000 job vacancies in Minnesota during fourth quarter (October to December) 2001. The 80,000 job vacancies translate into a job vacancy rate of 3.1 percent— or slightly more than three job vacancies for every 100 filled jobs in Minnesota. This is down from a 5.5 percent job vacancy rate during fourth quarter 2000. Statewide, we estimate that there are slightly fewer job vacancies than there are unemployed workers (0.7 job vacancies for every unemployed worker). During fourth quarter 2000, there were about 1.6 job vacancies for every unemployed worker.<sup>2</sup>

<sup>1</sup> Due to changes in survey sampling and estimation methodology, job vacancy totals from 4th quarter 2000 and 2nd quarter 2001 have been re-estimated. Comparisons to previous job vacancy survey rounds are based on the re-estimated job vacancy totals. For more information, see the "About this Study" section at the end of this report. Job vacancy rates and percent changes from previous surveys are presented to the nearest tenth of a percent.

<sup>2</sup> This ratio is based on the revised 4th quarter 2000 job vacancy estimates; see footnote 1.

In keeping with the regional distribution of all jobs in Minnesota, the majority of job vacancies, 47,000, are located in the Twin Cities seven-county area. Greater Minnesota has a job vacancy rate of 3.4 percent while the Twin Cities job vacancy rate is slightly under 3.0 percent. In the Twin Cities, job vacancies are down 52.0 percent from a year ago, while job vacancies in Greater Minnesota are only down 22.1 percent.

Despite the dramatic drop in job vacancies from last year, high job vacancy rates persist. Three occupational groups show evidence of having the greatest need for workers based on a combination of the number of job vacancies, the job vacancy rate and the turnover-adjusted demand (a calculation that controls for turnover in the occupational group). These are:

- healthcare practitioners and technical occupations (including registered and licensed practical nurses),
- healthcare support occupations (including nursing aides, orderlies and attendants), and
- personal care and services occupations (including childcare workers, personal and home care aides).

Moreover, the healthcare sector outstrips all other industry groups in the number of job vacancies and has the highest job vacancy rate.

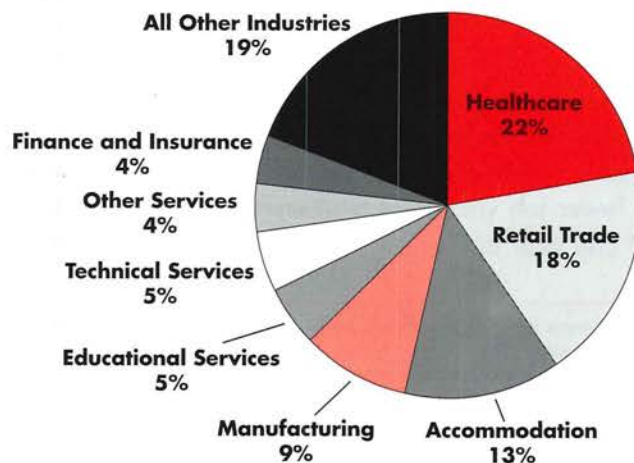
By firm size, firms with less than 50 employees account for 50 percent of total job vacancies. Very small (one to four employ-

ees) and small (five to 50 employees) firms also have higher-than-average job vacancy rates at 4.5 and 4.3 percent, respectively.

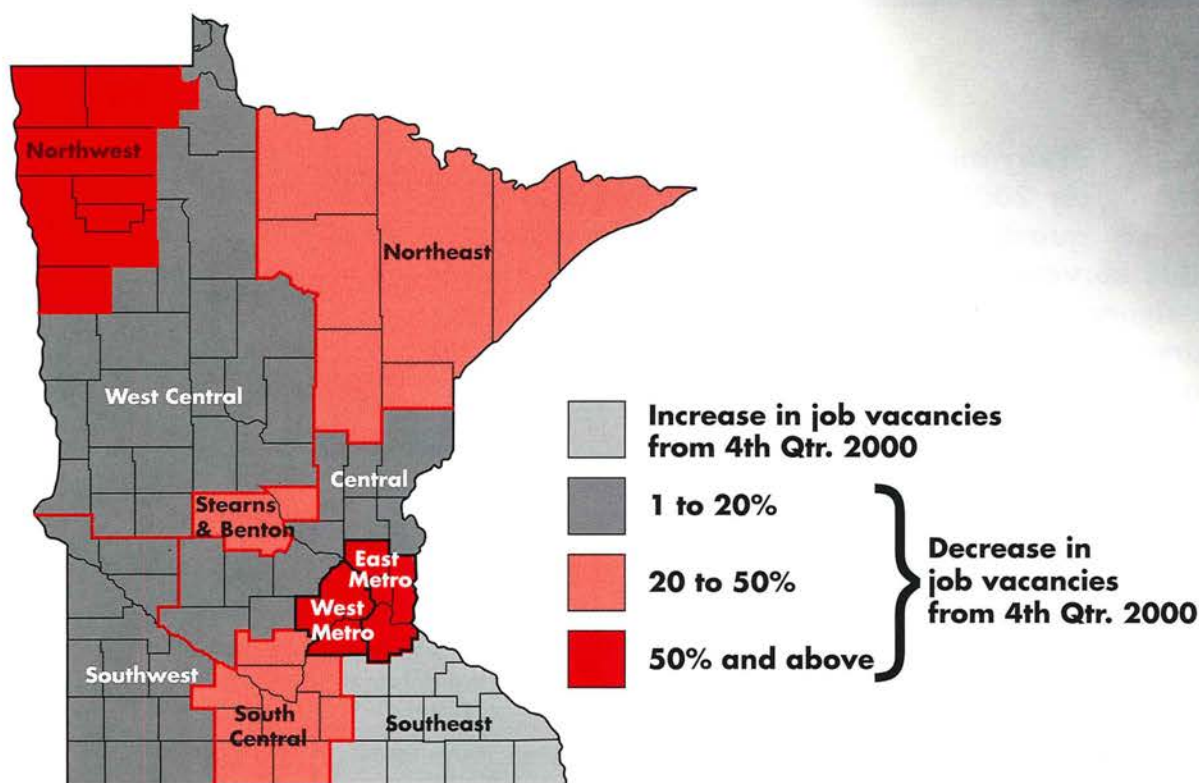
This report also includes analysis of characteristics associated with the job vacancies including: education and experience requirements, starting wage and benefit offers, and whether job vacancies are temporary or seasonal, and part- or full-time. Following are some key characteristics of Minnesota job vacancies during fourth quarter 2001:

- Fifty-eight percent are full-time, and 42 percent are part-time.
- Eighteen percent are temporary or seasonal.
- Thirty-six percent require a high school diploma but no education beyond that. Thirty-three percent require some level of post-secondary education or training.
- Slightly more than one-third call for previous experience in either a specific occupation or a related field.
- The median (50th percentile) wage offer for all job vacancies is \$9.31 per hour. Wage offers are highly correlated with experience and education requirements of job vacancies and other occupational characteristics.
- Most offer paid vacation (66 percent), health benefits (65 percent), retirement plans (59 percent), and sick leave (51 percent). Benefits are less common for part-time job vacancies than for full-time job vacancies.

**Figure 1: Industrial Division of Job Vacancies in Minnesota, Fourth Quarter 2001**



# Where Are the Job Vacancies?



- The Southeast region experienced a 4.0 percent increase in job vacancies between fourth quarter 2000 and fourth quarter 2001. This region was the only region where job vacancies increased from a year ago.
- The economic downturn is hitting job markets in the Twin Cities and northern Minnesota regions harder than job markets in the southern regions of the state. Job vacancies decreased 53.0 percent in the West Metro, 51.4 percent in the Northwest region, and 50.7 percent in the East Metro region.
- Despite the sharp drop in hiring demand, the majority of job vacancies in Minnesota are still in the Twin Cities seven-county area.

## Comparison of Fourth Quarter 2001 to Previous Job Vacancy Surveys

**S**urvey methodology for the fourth quarter 2001 has changed from the fourth quarter 2000 and the second quarter 2001 surveys. In order to make consistent comparisons between this survey and the earlier surveys, we have re-estimated the number of job vacancies for the fourth quarter 2000 and second quarter 2001.

Regional shifts in hiring patterns between the three time periods are apparent. In keeping with the regional distribution of all jobs in Minnesota, the majority of job vacancies, 58.9 percent, are located in the Twin Cities seven-county area. However, the number of job vacancies decreased more sharply in the Twin Cities than in Greater Minnesota— a 52.0 percent decline in job vacancies in the Twin Cities from one year ago compared to a 22.1 percent decline in job vacancies in Greater Minnesota. Moreover, Greater Minnesota has a job vacancy rate of 3.4 percent compared to 4.6 percent one year ago, while the Twin Cities job vacancy rate has dropped to slightly under 3.0 percent compared to 6.0 percent last year.<sup>3</sup>

Shifts in occupational hiring patterns between the three time periods are also apparent. Hiring in computer and mathematical; installation, maintenance and repair; building,

grounds cleaning and maintenance; and construction and extraction occupations dropped most sharply from last year. Most likely, these shifts are due to souring economic conditions and the dot.com bust.

Job vacancies in farming, fishing and forestry; education, training and library; legal; and life, physical and social sciences increased in fourth quarter 2001 compared to a year ago. These fields generally require specialized knowledge and preparation and employment in these fields is smaller.

Industry shifts mirror occupational shifts in hiring. The information, and administrative and support industries experienced the largest drops in job vacancies from fourth quarter 2000 to fourth quarter 2001. Interestingly, the information industry has re-bounded slightly with more job vacancies than in second quarter 2001.

<sup>3</sup> These job vacancy rates are based on the revised job vacancy estimates.

**T**he following table shows the percent change in job vacancies from fourth quarter 2000 and second quarter 2001 by occupational group.

**Table 1: Comparison of Fourth Quarter 2001 Job Vacancies to Previous Job Vacancy Surveys**

Major Occupational Group	Minnesota		Greater Minnesota		Twin Cities	
	Change from Fourth Quarter 2000 (%)	Change from Second Quarter 2001 (%)	Change from Fourth Quarter 2000 (%)	Change from Second Quarter 2001 (%)	Change from Fourth Quarter 2000 (%)	Change from Second Quarter 2001 (%)
Food Preparation and Serving Related	-30.6%	-25.0%	-6.7%	-36.3%	-42.1%	-12.9%
Sales and Related	-55.8	-29.4	3.8	-22.1	-63.9	-32.9
Office and Administrative Support	-54.1	-34.7	-43.3	-4.6	-57.7	-42.7
Healthcare Practitioners and Technical	-3.4	-1.1	32.9	29.0	-22.5	-18.4
Transportation and Material Moving	-19.6	-32.9	-19.8	-28.5	-19.5	-35.7
Production	-56.9	-15.4	-35.9	17.7	-74.6	-47.1
Education, Training and Library	45.1	-11.5	86.4	8.9	30.0	-19.4
Healthcare Support	-28.2	-23.8	-22.5	-25.2	-32.5	-22.6
Personal Care and Services	-37.9	-51.2	-23.8	-50.0	-42.6	-15.7
Business and Financial Operations	-25.1	44.5	-12.3	191.2	-27.9	27.3
Construction and Extraction	-62.6	-62.6	-28.8	-38.3	-84.1	-82.4
Building, Grounds Cleaning and Maintenance	-65.6	-51.1	-55.0	-45.0	-72.4	-56.3
Installation, Maintenance and Repair	-69.5	-26.4	-29.7	-14.0	-79.7	-34.9
Community and Social Services	-36.2	58.5	-27.5	129.3	-41.6	28.6
Management	-55.9	-52.3	-42.7	-31.9	-59.9	-57.7
Architecture and Engineering	-64.8	-29.5	-74.8	-37.4	-58.6	-25.9
Farming, Fishing and Forestry	93.5	14.9	90.9	16.4	112.1	6.0
Protective Services	-34.2	-11.8	-37.6	-59.9	-33.6	8.3
Art, Design, Entertainment and Media	-46.8	-26.8	-20.3	18.6	-56.2	-41.4
Life, Physical and Social Sciences	16.5	0.9	4.4	3.8	20.7	0.0
Computer and Mathematical	-73.0	-43.9	-66.1	-32.5	-74.0	-45.6
Legal	28.1	14.8	-44.1	-48.6	38.9	24.1
<b>Total</b>	<b>-43.0%</b>	<b>-27.7%</b>	<b>-22.1%</b>	<b>-17.6%</b>	<b>-52.0%</b>	<b>-33.4%</b>

**T**he following table shows the percent change in job vacancies from fourth quarter 2000 and second quarter 2001 by industry.

**Table 1: Comparison of Fourth Quarter 2001 Job Vacancies to Previous Job Vacancy Surveys**  
(Continued)

Major Industrial Group	Minnesota		Greater Minnesota		Twin Cities	
	Change from Fourth Quarter 2000 (%)	Change from Second Quarter 2001 (%)	Change from Fourth Quarter 2000 (%)	Change from Second Quarter 2001 (%)	Change from Fourth Quarter 2000 (%)	Change from Second Quarter 2001 (%)
Healthcare	-14.8%	-12.6%	14.1%	9.9%	-30.1%	-25.8%
Retail Trade	-54.4	-23.4	-14.9	-24.2	-65.4	-22.9
Accommodation	-47.2	-36.5	-10.5	-43.7	-60.1	-29.5
Manufacturing	-51.9	-1.0	-31.8	45.0	-68.9	-37.6
Educational Services	-8.2	-29.6	-45.6	-42.5	15.6	-24.5
Technical Services	-35.8	3.8	-33.2	45.0	-36.2	-1.1
Other Services	-38.9	-36.2	-68.0	-37.9	-26.1	-35.8
Finance and Insurance	-43.5	-36.9	-30.5	43.2	-46.0	-44.4
Transportation and Warehousing	-50.0	-56.2	-71.2	-71.5	-30.5	-44.9
Wholesale Trade	-39.8	17.5	0.6	30.6	-53.8	9.2
Administrative and Support	-66.5	-33.1	-64.4	-39.6	-67.1	-30.8
Arts and Entertainment	21.3	-52.6	-2.8	-27.9	50.6	-62.7
Construction	-61.8	-61.9	-19.5	1.8	-86.6	-88.1
Public Administration	-34.0	-39.1	-29.8	-49.6	-37.0	-27.3
Information	-66.5	16.7	-62.9	34.4	-67.7	11.0
Agriculture	5.7	-35.4	11.8	-34.3	-42.3	-48.3
Real Estate	-60.9	-70.1	23.5	-8.0	-76.0	-81.6
Management	-16.8	-8.6	-58.3	-16.7	-13.5	-8.2
Utilities	-61.5	-45.7	-50.9	-16.9	-77.8	-75.0
Mining	-12.8	-59.5	-38.5	-66.2	NA	-23.1
<b>Total</b>	<b>-43.0%</b>	<b>-27.7%</b>	<b>-22.1%</b>	<b>-17.6%</b>	<b>-52.0%</b>	<b>-33.4%</b>

## Workforce Supply and Demand Measures

**J**obseekers and employers want to know “who’s hiring— and for what fields of work?” But they also need to know about the balance (or imbalance) between vacancies and the pool of jobseekers.

Vacancy counts alone are not a complete picture of labor market demand. A large number of job vacancies may indicate a lack of workers qualified for open positions. Or, it may be related to continuous turnover and replacement hiring. This report provides three measures for the comparison of hiring demand across occupational groups and industries: job vacancy rates, the duration of job vacancies, and turnover-adjusted demand.

### Job Vacancy Rate

The demand for workers is not uniform across occupational groups and industries. One measure of workforce demand is a job vacancy rate— the number of job vacancies as a percent of total filled jobs.

- The average job vacancy rate for all occupations in fourth quarter 2001 is 3.1 percent— or slightly more than three job vacancies for every 100 filled jobs in the state.
- The occupational groups with a large number of job vacancies and high job vacancy rates are: healthcare support (6.0 percent), healthcare practitioners and technical (5.9 percent), and food preparation and serving related (5.8 percent).
- The lowest job vacancy rates are found in the following occupational groups: computer and mathematical (1.0 percent); management (1.2 percent); production (1.7 percent); architecture and engineering (1.9 percent); and installation, maintenance and repair (1.9 percent).

### Duration of Job Vacancies

Another important indicator of a workforce shortage is the duration of a job vacancy. Employers were asked how long current job vacancies have been open for hire. Longer hiring cycles— job vacancies open for 60 days or more— generally indicate that a “market-clearing” problem exists. In professional, high-skill or technical fields, this longer duration of job vacancies is often due to the specialized education or training required. On the other hand, there may be a shortage of qualified, willing workers. Shorter hiring cycles— with few job vacancies open more than 30 days— may indicate there is no shortage of workers. Additionally, these may indicate that the positions need to be filled quickly or are seasonal, like lifeguards or snow removal workers.

Employers could also classify positions as being “always open.” A workforce shortage— or lack of workers to fill positions— can prevent employers from achieving full staffing. However, a concentration of “always open” job vacancies often indicates something else: continuous turnover and replacement hiring.

Jobs in high-turnover fields may need to be refilled multiple times in a single year, resulting in the appearance of many vacancies. Employers consider such job vacancies to be “always open” since they are always recruiting and hiring new staff for these positions.

- Forty-three percent of total job vacancies are reported as open for less than 60 days.
- Twenty-two percent of total job vacancies are reported as open for 60 days or more, but are not considered “always open.”
- The remainder, 35 percent, are “always open” for hire— meaning that employers recruit and place workers on a continuous basis.

### Turnover-Adjusted Demand

Job vacancy rates and the duration of job vacancies alone do not provide conclusive proof that a workforce shortage exists. Several market factors drive job vacancy levels: the demand for new entries to the field, the balance (or imbalance) of workforce supply and demand, and turnover— the rate at which workers cycle in and out of jobs.

Turnover-adjusted demand is a tool to compare job vacancy rates while controlling for the regular expected level of hiring due to

turnover. This index measures workforce demand due to factors other than turnover.<sup>4</sup> While job vacancy rates may be used to compare occupational hiring demand over time, the turnover-adjusted demand index compares occupational groups at this point in time.

- Four occupational groups have a large number of job vacancies and a high turnover-adjusted demand possibly indicating workforce shortages: healthcare practitioners and technical; community and social services; healthcare support; and education, training and library.
- Five occupational groups have a large number of job vacancies, but a low turnover-adjusted demand: office and administrative support; production; construction and extraction; building, grounds cleaning and maintenance; and management. Low turnover-adjusted demand index values in these fields suggest a low level of hiring difficulty faced by employers.

### Summary

In summary, these three measures— the job vacancy rate, the turnover-adjusted demand and the duration of job vacancies— must be considered together when comparing hiring demand across occupational groups and industries.

<sup>4</sup> Turnover-adjusted demand is calculated: (job vacancy rate/turnover rate) for the occupational group divided by (job vacancy rate/turnover rate) for all jobs. Job vacancy rates were calculated from this fourth quarter 2001 Minnesota Job Vacancy Survey. Turnover rates were calculated using the Current Population Survey's Job Tenure Supplement microdata, produced by the U.S. Census Bureau.

# Statewide Findings

## Job Vacancies by Occupational Group and Firm Size

- Sixty-two percent of total statewide job vacancies are concentrated in six of 22 occupational groups. (See Appendix on page 33 for occupational group definitions.)
- In Minnesota, firms with less than 50 employees account for 50 percent of total job vacancies.
- The job vacancy rate for small and very small firms (4.3 percent and 4.5 percent) indicates that these firms may be having a more difficult time finding qualified, willing job applicants than larger firms.

\* Employment estimates by occupational group are from the Estimates Delivery System (EDS) 2001, using the 2001 Occupational Employment Statistics (OES) data.

\*\* The index value for all jobs is 1.0, High (High)=TAD above 1.2, Average (Avg)=TAD between 0.8 and 1.2, Low (Low)=TAD below 0.8.

\*\*\* The occupational group wages below are median hourly wage rates calculated from wages reported by employers.

NA=Not Available

**Table 1a: Employment and Job Vacancies by Major Occupational Group in Minnesota**

Major Occupational Group	Number of Job Vacancies	Change from Fourth Quarter 2000 (%)	Job Vacancy Rate* (%)	Turnover Adjusted Demand** (TAD)	Part-Time (%)	Temporary or Seasonal (%)	Requiring Field or Occupational Experience (%)	Requiring Education Beyond a High School Diploma (%)	Offer Health-care Benefits (%)	Median Wage Offer*** (\$)
Food Preparation and Serving Related	11,416	-30.6%	5.8%	Avg	67%	8%	11%	1%	52%	\$ 7.00
Sales and Related	10,862	-55.8	3.6	Avg	63	34	21	10	47	7.00
Office and Administrative Support	8,795	-54.1	2.0	Low	34	28	32	19	67	10.00
Healthcare Practitioners and Technical	7,449	-3.4	5.9	High	38	3	55	93	90	16.50
Transportation and Material Moving	6,050	-19.6	3.5	Avg	54	35	12	6	51	9.50
Production	4,734	-56.9	1.7	Low	5	3	17	12	90	10.00
Education, Training and Library	4,404	45.1	3.0	High	41	27	49	64	68	10.00
Healthcare Support	4,164	-28.2	6.0	High	56	2	28	53	67	9.65
Personal Care and Services	3,376	-37.9	5.2	Avg	53	20	48	33	49	8.00
Business and Financial Operations	3,112	-25.1	2.8	Avg	2	27	83	90	89	16.00
Construction and Extraction	2,396	-62.6	2.2	Low	7	36	36	18	62	11.23
Building, Grounds Cleaning and Maintenance	1,982	-65.6	2.3	Low	53	8	8	2	50	8.25
Installation, Maintenance and Repair	1,976	-69.5	1.9	Avg	16	6	50	38	68	10.00
Community and Social Services	1,856	-36.2	4.9	High	31	24	67	61	51	9.81
Management	1,715	-55.9	1.2	Low	0	3	94	72	87	23.08
Architecture and Engineering	927	-64.8	1.9	Avg	2	2	62	82	98	15.00
Farming, Fishing and Forestry	923	93.5	18.4	High	28	22	35	14	66	10.30
Protective Services	908	-34.2	2.1	Avg	55	5	22	38	50	9.25
Art, Design, Entertainment and Media	891	-46.8	2.4	Low	41	32	61	36	46	11.06
Life, Physical and Social Sciences	814	16.5	3.8	Avg	7	6	52	90	97	16.35
Computer and Mathematical	704	-73.0	1.0	Low	6	1	88	94	98	19.95
Legal	333	28.1	2.0	Low	3	1	91	97	98	18.00
<b>Firm Size</b>										
Small (5 to 49 employees)	34,362	-42.6	4.3	NA	42	15	30	24	62	9.00
Medium (50 to 249 employees)	20,696	-47.7	2.6	NA	48	17	33	34	67	9.20
Large (250 or more employees)	19,385	-34.3	2.4	NA	40	17	37	46	77	10.00
Very Small (Less than 5 employees)	5,344	-51.6	4.5	NA	20	47	51	42	33	9.02
<b>All Job Vacancies</b>	<b>79,787</b>	<b>-43.0%</b>	<b>3.1%</b>		<b>42%</b>	<b>18%</b>	<b>34%</b>	<b>33%</b>	<b>65%</b>	<b>\$9.31</b>

# Job Vacancies by Occupation

- Job vacancies are grouped into 533 unique occupations. The top 25 occupations with the most job vacancies account for 52 percent of total job vacancies.
- In Minnesota, there are 16 occupations with 1,000 or more job vacancies. The

top five occupations with the most job vacancies are cashiers (4,700); retail salespersons (3,900); combined food preparation and serving workers, including fast food (3,500); registered nurses (3,300); and laborers and freight, stock, and material movers (2,700).

**Table 2a: Top 25 Occupations with the Most Job Vacancies in Minnesota**

Job Title	Number of Job Vacancies	Job Vacancy Rate (%)	Median Wage Offer* (\$)
Cashiers	4,654	7.1%	\$ 6.75
Retail Salespersons	3,884	4.4	7.00
Combined Food Preparation and Serving Workers, Including Fast Food	3,531	8.6	7.00
Registered Nurses	3,260	7.0	18.05
Laborers and Freight, Stock, and Material Movers, Hand	2,666	7.0	9.12
Nursing Aides, Orderlies, and Attendants	2,443	8.1	9.48
Teacher Assistants	2,043	7.3	7.82
Waiters and Waitresses	1,976	4.9	5.20
Licensed Practical and Licensed Vocational Nurses	1,581	9.4	13.95
First-Line Supervisors/Managers of Food Preparation and Service Workers	1,343	8.9	9.00
Hairdressers, Hairstylists, and Cosmetologists	1,267	15.1	7.50
Truck Drivers, Heavy and Tractor-Trailer	1,187	4.1	12.50
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	1,117	2.7	9.39
Receptionists and Information Clerks	1,023	4.5	10.75
Office Clerks, General	1,023	1.5	10.00
Food Preparation Workers	1,022	7.2	7.50
Customer Service Representatives	993	2.4	10.00
Packers and Packagers, Hand	980	7.0	9.50
Personal and Home Care Aides	890	7.3	8.25
Stock Clerks and Order Fillers	883	2.5	8.00
Automotive Service Technicians and Mechanics	843	7.3	6.50
Preschool Teachers, Except Special Education**	834	11.8	11.00
Carpenters	817	5.0	18.00
Tax Preparers	797	NA	25.00
First-Line Supervisors/Managers of Retail Sales Workers	780	2.7	13.46

\* The occupation wages above are median hourly wage rates calculated from wages reported by employers.

\*\* Median wage was calculated based on a 9-1/2 month year.

NA=Not Available

# Job Vacancies by Industry

- Twenty-two percent of total job vacancies in Minnesota are in the healthcare industry.<sup>5</sup>
- The healthcare industry has the highest job vacancy rate at 5.5 percent, indicating that this industry may be having a difficult time finding qualified, willing job applicants.
- The highest concentrations of job vacancies that are considered temporary or seasonal are mining (59 percent), technical services (42 percent), retail trade (38 percent), and transportation and warehousing (35 percent).

**Table 3a: Employment and Job Vacancies by Industry in Minnesota**

Industry	Number of Job Vacancies	Change from Fourth Quarter 2000 (%)	Job Vacancy Rate (%)	Temporary or Seasonal (%)	Median Wage Offer* (\$)
Healthcare	17,776	-14.8 %	5.5%	11%	\$ 10.60
Retail Trade	14,192	-54.4	4.2	38	7.25
Accommodation	10,453	-47.2	5.4	5	7.30
Manufacturing	7,502	-51.9	1.8	12	10.35
Educational Services	4,379	-8.2	2.1	11	11.00
Technical Services	3,593	-35.8	3.1	42	14.11
Other Services	3,255	-38.9	3.7	7	9.00
Finance and Insurance	3,205	-43.5	2.5	4	13.00
Transportation and Warehousing	2,568	-50.0	2.5	35	10.75
Wholesale Trade	2,344	-39.8	1.8	6	10.30
Administrative and Support	2,237	-66.5	3.0	25	9.25
Arts and Entertainment	2,116	21.3	5.0	29	6.00
Construction	2,071	-61.8	1.6	32	12.12
Public Administration	1,634	-34.0	1.5	18	12.00
Information	1,252	-66.5	1.7	10	8.50
Agriculture	485	5.7	3.2	25	9.62
Real Estate	482	-60.9	1.3	1	11.00
Management	139	-16.8	3.4	1	9.50
Utilities	70	-61.5	0.5	10	16.00
Mining	34	-12.8	0.5	59	10.50
<b>Total</b>	<b>79,787</b>	<b>-43.0%</b>	<b>3.1%</b>	<b>18%</b>	<b>\$ 9.31</b>

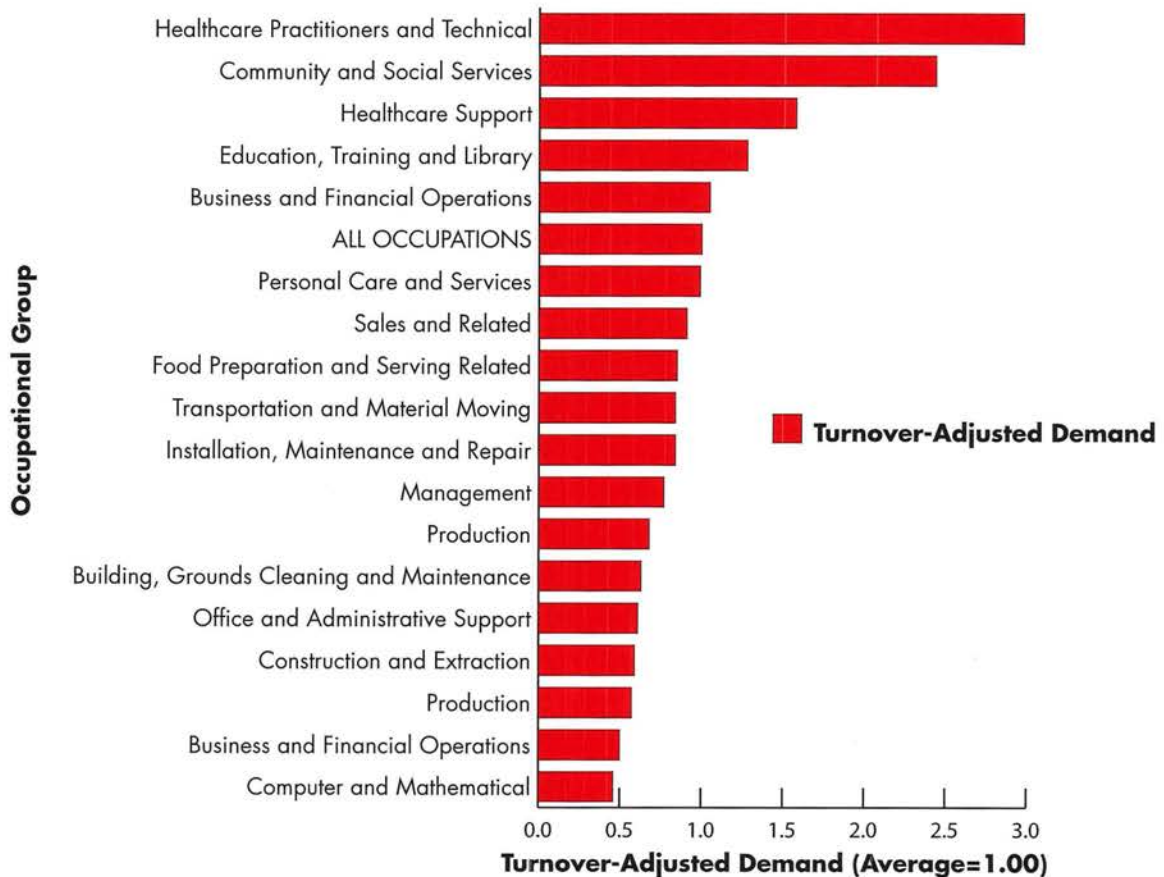
\* The industry wages above are median hourly wage rates calculated from wages reported by employers.

<sup>5</sup> For a definition of industries, please see the Minnesota Job Vacancy Survey Methodological Note available on the Internet at [www.MnWorkForceCenter.org/lmi/public.htm](http://www.MnWorkForceCenter.org/lmi/public.htm)

# Workforce Supply and Demand Indicators

- In Minnesota, among major occupational groups, the highest job vacancy rates are found in: healthcare support (6.0 percent), healthcare practitioners and technical (5.9 percent), and food preparation and serving related (5.8 percent).
- Four occupational groups have a large number of job vacancies and a high turnover-adjusted demand, indicating a higher demand for new entries to the field. These occupational groups are: healthcare practitioners and technical; community and social services; healthcare support; and education, training, and library.

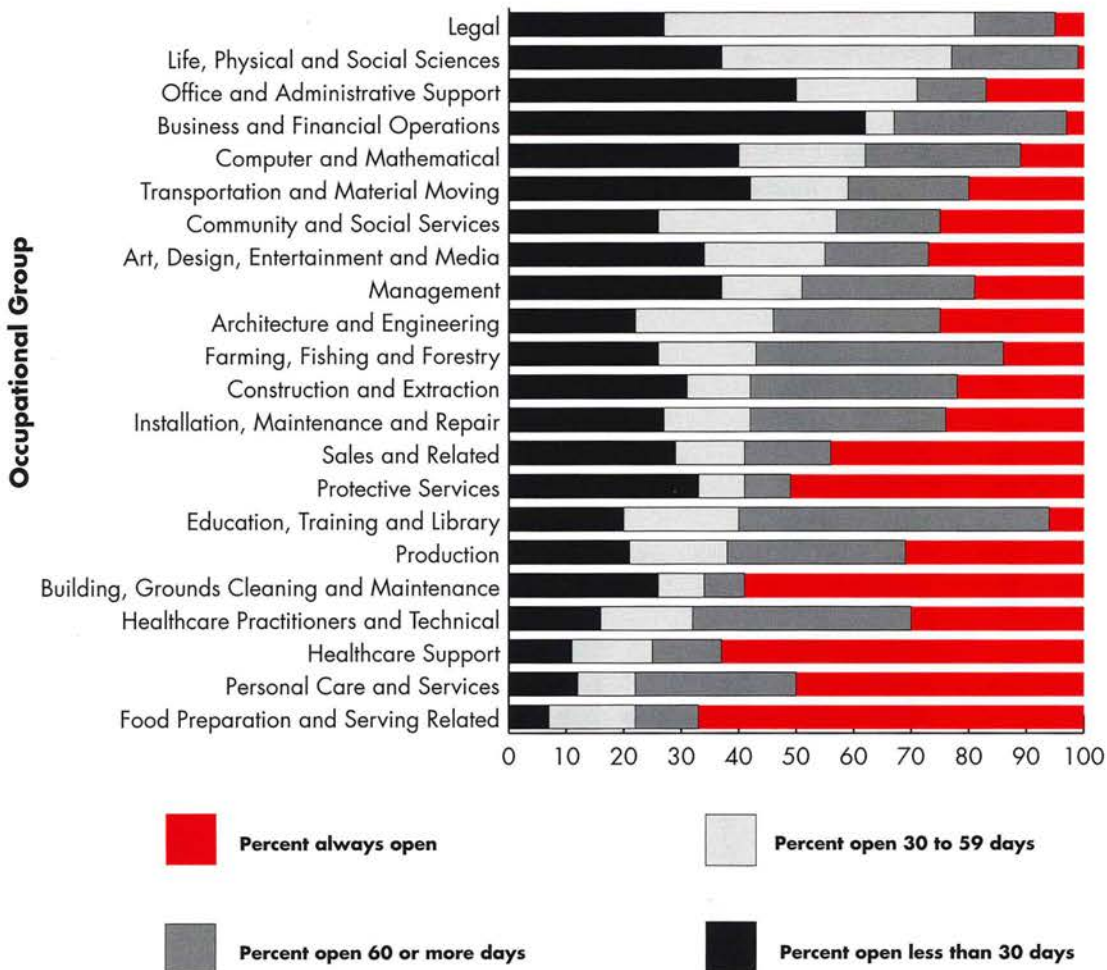
**Figure 1a: Turnover-Adjusted Demand for Occupational Groups with 1,000 or more Job Vacancies in Minnesota**



# Duration of Job Vacancies

- Thirty-five percent of job vacancies in Minnesota are reported as “always open” for hire.
- Twenty-two percent have been vacant 60 days or more.
- Sixteen percent of job vacancies have been vacant between 30 and 59 days, and 27 percent have been vacant less than 30 days.

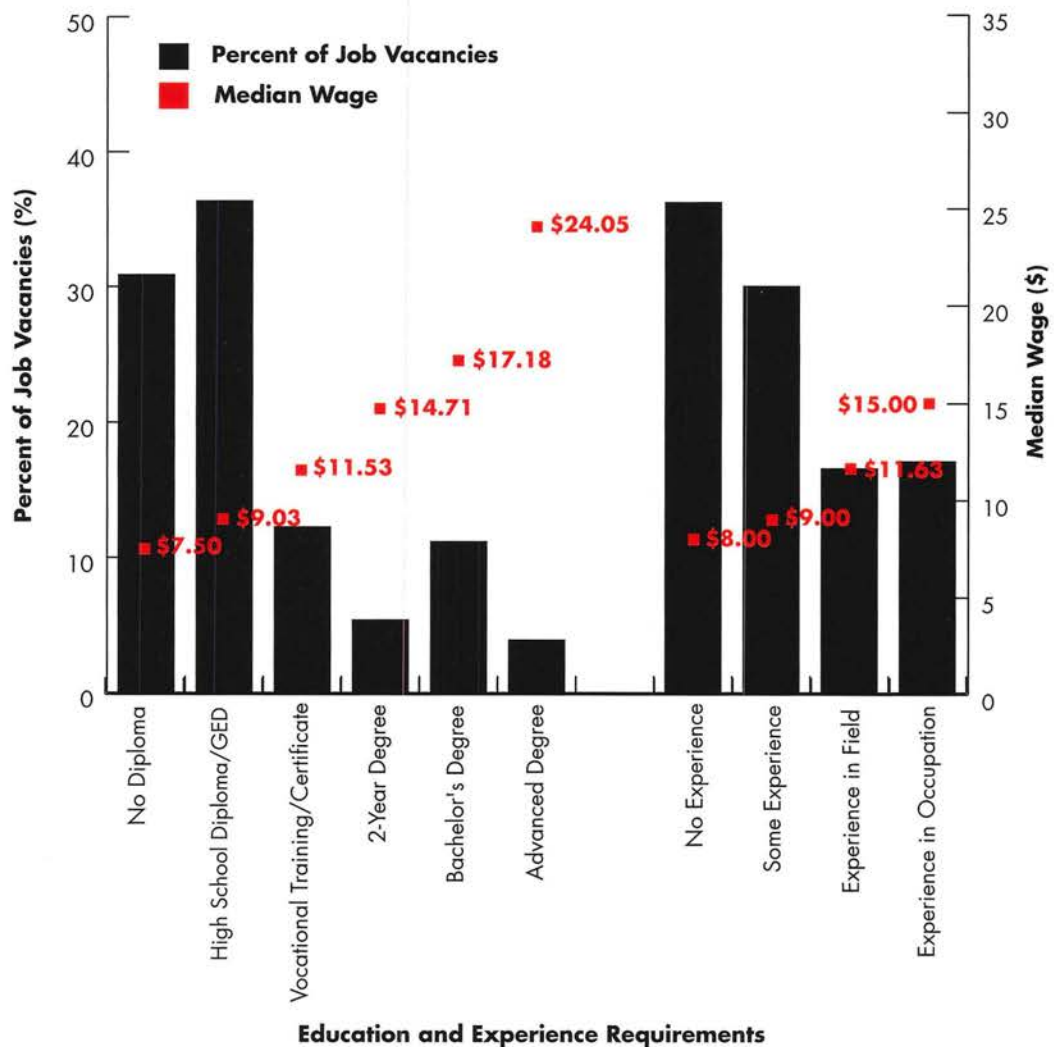
**Figure 2a: Duration of Job Vacancies in Minnesota**



# Education and Experience

- One-third of job vacancies require a vocational degree or certificate, two-year degree, bachelor's degree or advanced degree. Occupations that require a high school diploma or less (67 percent) tend to have higher turnover.
- The demand for experienced workers is strong. Thirty-four percent of total job vacancies require previous experience in either a related field or occupation.
- Nineteen percent of total job vacancies do not require any education or previous experience.

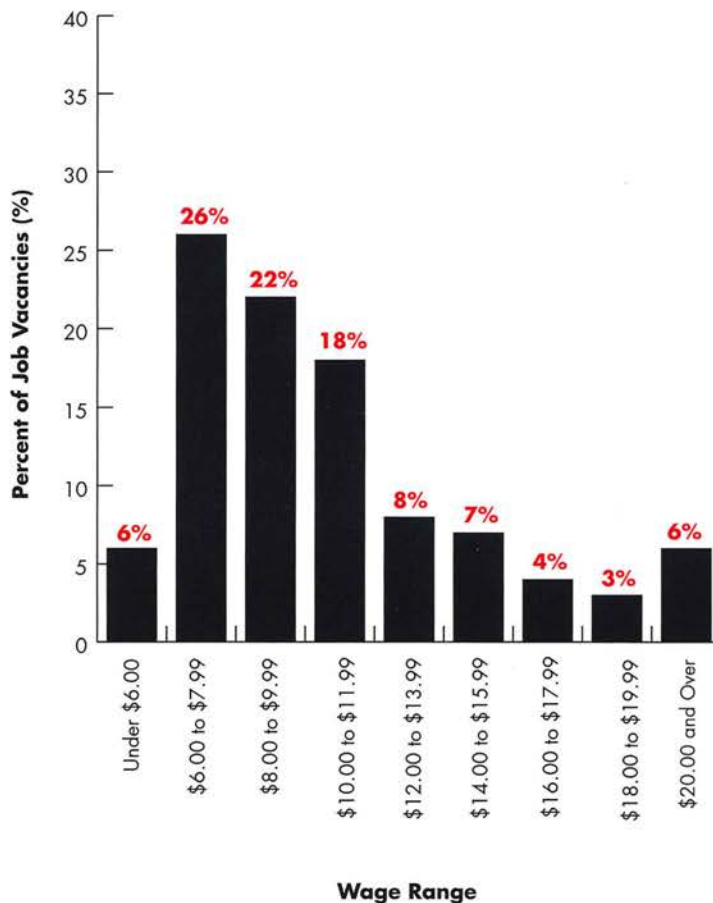
**Figure 3a: Education and Training Requirements of Vacancies with Median Wage Offers in Minnesota**



# Wages

- The median wage offer (50th percentile—half are below, half are above) for all job vacancies is \$9.31 per hour in Minnesota. Full-time job vacancies offer a higher median starting wage (\$10.50 per hour) than part-time job vacancies (\$7.70 per hour).
- Fifty-four percent of total job vacancies offer starting wages below \$10.00 per hour; six percent offer a wage less than \$6.00 per hour.
- As training and experience requirements increase, so do the wage rates offered. (See Figure 3a.)

**Figure 4a: Percent of Job Vacancies by Hourly Wage Range in Minnesota**



# Benefits

- In Minnesota, a majority of full-time job vacancies offer health benefits (84 percent), paid vacation (82 percent), retirement plans (75 percent), and sick leave (66 percent).
- Part-time job vacancies are less likely to offer benefits; only 43 percent offer paid vacation, 37 percent offer health insurance, 36 percent offer retirement plans, and 29 percent offer sick leave.

# Greater Minnesota Findings

## Job Vacancies by Occupational Group and Firm Size

- Sixty-three percent of total job vacancies in Greater Minnesota are concentrated in six of 22 occupational groups. (See Appendix on page 33 for occupational group definitions.)
- In Greater Minnesota, firms with less than 50 employees account for 56 percent of total job vacancies.
- The job vacancy rate for small and very small firms (4.0 percent and 6.4 percent) indicates that these firms may be having a more difficult time finding qualified, willing job applicants than larger firms.

\* Employment estimates by occupational group are from the Estimates Delivery System (EDS) 2001, using the 2001 Occupational Employment Statistics (OES) data.

\*\* The index value for all jobs is 1.0, High (High)=TAD above 1.2, Average (Avg)=TAD between 0.8 and 1.2, Low (Low)=TAD below 0.8.

\*\*\* The occupational group wages below are median hourly wage rates calculated from wages reported by employers.

NA=Not Available

**Table 1b: Employment and Job Vacancies by Major Occupational Group in Greater Minnesota**

Major Occupational Group	Number of Job Vacancies	Change from		Job Vacancy Rate* (%)	Turnover-Adjusted Demand** (TAD)	Part-Time (%)	Temporary or Seasonal (%)	Requiring Field or Occupational Experience (%)	Requiring Education Beyond a High School Diploma (%)	Offer Health-care Benefits (%)	Median Wage Offer*** (\$)
		Fourth Quarter 2000 (%)	Fourth Quarter 2000 (%)								
Food Preparation and Serving Related	4,987	-6.7%	5.7%	Low	68%	13%	10%	2%	33%	\$ 6.25	
Sales and Related	3,825	-24.6	3.8	Avg	70	39	9	2	33	6.75	
Healthcare Practitioners and Technical	3,540	32.9	6.6	High	32	2	62	90	91	15.75	
Production	3,218	-35.9	2.8	Avg	4	3	12	8	95	10.00	
Office and Administrative Support	2,693	-43.3	1.8	Low	48	29	33	17	54	8.50	
Transportation and Material Moving	2,498	-19.8	3.7	Low	27	26	14	13	73	9.00	
Healthcare Support	1,925	-22.5	5.8	High	52	1	13	55	68	9.00	
Construction and Extraction	1,776	-28.8	4.0	Avg	10	42	22	8	57	10.50	
Education, Training and Library	1,519	86.4	2.4	Avg	19	68	58	56	18	7.90	
Personal Care and Services	1,028	-23.8	4.2	Low	66	46	33	23	33	6.14	
Building, Grounds Cleaning and Maintenance	1,017	-55.0	2.9	Low	68	12	8	0	34	7.00	
Installation, Maintenance and Repair	934	-29.7	2.3	Avg	12	11	53	35	32	9.00	
Farming, Fishing and Forestry	800	90.9	22.0	High	29	23	27	4	64	10.30	
Community and Social Services	798	-27.5	4.6	High	54	16	43	34	36	9.00	
Business and Financial Operations	661	-12.3	2.9	Avg	4	27	73	81	69	12.50	
Management	516	-42.7	1.3	Low	0	10	93	48	58	19.23	
Art, Design, Entertainment and Media	350	-20.3	3.8	Avg	67	47	61	37	32	6.50	
Architecture and Engineering	256	-74.8	2.2	Avg	2	0	71	90	98	11.00	
Life, Physical and Social Sciences	191	4.4	3.6	High	9	13	36	69	91	14.85	
Protective Services	121	-37.6	0.8	Low	38	2	50	30	73	10.00	
Computer and Mathematical	108	-66.1	1.0	Low	3	1	81	95	99	16.39	
Legal	19	-44.1	0.5	Low	37	0	61	74	79	16.43	
<b>Firm Size</b>											
Small (5 to 49 employees)	14,642	-9.1	4.0	NA	39	16	22	15	51	8.00	
Medium (50 to 249 employees)	8,113	-37.9	2.7	NA	50	21	28	28	62	8.25	
Large (250 or more employees)	6,375	-18.1	2.5	NA	37	11	36	46	82	9.48	
Very Small (Less than 5 employees)	3,650	-28.6	6.4	NA	27	60	31	41	17	8.77	
<b>All Job Vacancies</b>	<b>32,780</b>	<b>-22.1%</b>	<b>3.4%</b>		<b>40%</b>	<b>21%</b>	<b>27%</b>	<b>27%</b>	<b>56%</b>	<b>\$ 8.50</b>	

# Job Vacancies by Occupation

- The top 25 occupations with the most job vacancies account for 59 percent of all job vacancies.
- In Greater Minnesota, there are six occupations with 1,000 or more job vacancies: cashiers (2,100); combined food preparation and serving workers including fast food (1,500); registered nurses (1,500); nursing aides, orderlies, and attendants (1,400); retail salespersons (1,300); and laborers and freight, stock, and material movers (1,200).

\* The occupation wages below are median hourly wage rates calculated from wages reported by employers.

NA=Not Available

**Table 2b: Top 25 Occupations with the Most Job Vacancies in Greater Minnesota**

Job Title	Number of Job Vacancies	Job Vacancy Rate (%)	Median Wage Offer* (\$)
Cashiers	2,101	6.8%	\$ 6.50
Combined Food Preparation and Serving Workers, Including Fast Food	1,535	9.9	6.25
Registered Nurses	1,514	7.8	18.00
Nursing Aides, Orderlies, and Attendants	1,427	8.6	9.00
Retail Salespersons	1,274	4.5	6.00
Laborers and Freight, Stock, and Material Movers, Hand	1,162	9.1	7.00
Teacher Assistants	933	7.7	7.82
Truck Drivers, Heavy and Tractor-Trailer	903	5.9	12.00
Licensed Practical and Licensed Vocational Nurses	741	7.5	12.38
Grinding and Buffing Machine Tool Setters, Metal and Plastic	714	NA	15.00
Carpenters	707	10.0	18.00
Waiters and Waitresses	677	4.3	5.15
Maids and Housekeeping Cleaners	584	5.8	6.25
Construction Laborers	573	10.8	10.50
Automotive Service Technicians and Mechanics	523	10.7	6.50
Food Preparation Workers	499	7.1	6.00
First-Line Supervisors/Managers of Food Preparation and Service Workers	468	6.9	8.77
Office Clerks, General	394	1.5	9.02
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	393	2.6	8.21
Farmworkers and Laborers, Crop, Nursery, and Greenhouse	391	NA	10.30
Cooks, Restaurant	387	6.5	8.00
Cooks, Short Order	384	21.8	6.00
Dishwashers	370	7.1	5.40
Metal-Refining Furnace Operators and Tenders	357	NA	10.00
Customer Service Representatives	354	3.7	9.02

# Job Vacancies by Industry

- Twenty-five percent of total job vacancies in Greater Minnesota are in the healthcare industry.
- The accommodation industry has the highest job vacancy rate at 5.9 percent, indicating that this industry may be having a difficult time finding qualified, willing job applicants.
- The highest concentrations of temporary or seasonal job vacancies are found in mining (75 percent), arts and entertainment (64 percent), retail trade (37 percent), and administration and support (37 percent).

**Table 3b: Employment and Job Vacancies by Industry in Greater Minnesota**

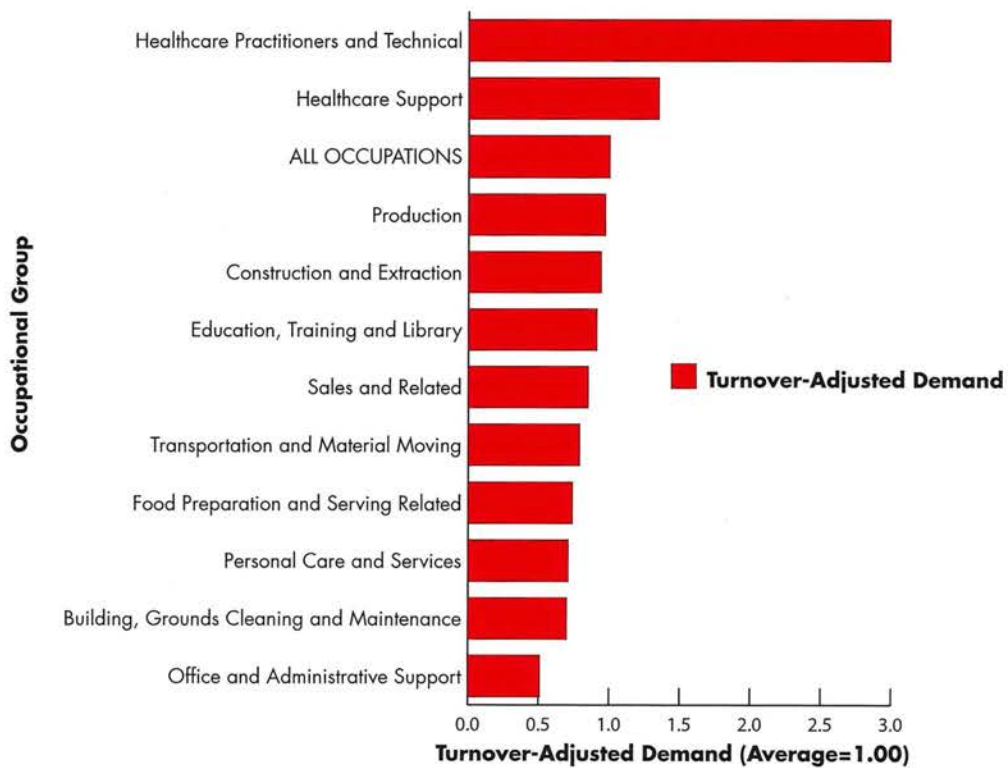
Industry	Number of Job Vacancies	Change from Fourth Quarter 2000 (%)	Job Vacancy Rate (%)	Temporary or Seasonal (%)	Median Wage Offer* (\$)
Healthcare	8,245	14.1 %	5.3%	18%	\$ 9.81
Retail Trade	5,777	-14.9	4.2	37	6.50
Manufacturing	4,868	-31.8	2.7	11	10.00
Accommodation	4,588	-10.5	5.9	8	6.25
Construction	1,614	-19.5	3.2	34	10.50
Educational Services	1,012	-45.6	1.1	16	10.13
Wholesale Trade	1,008	0.6	2.8	11	9.00
Arts and Entertainment	931	-2.8	4.9	64	6.00
Public Administration	716	-29.8	1.4	30	11.31
Transportation and Warehousing	710	-71.2	2.4	20	10.10
Finance and Insurance	623	-30.5	2.3	20	10.15
Technical Services	532	-33.2	2.7	30	12.00
Other Services	522	-68.0	1.7	9	9.00
Administrative and Support	513	-64.4	2.8	37	7.50
Agriculture	455	11.8	3.6	22	9.62
Information	352	-62.9	1.9	11	8.50
Real Estate	231	23.5	2.8	3	8.00
Utilities	54	-50.9	0.7	11	16.00
Mining	24	-38.5	0.4	75	12.00
Management	5	-58.3	1.9	20	10.00
<b>Total</b>	<b>32,780</b>	<b>-22.1 %</b>	<b>3.4%</b>	<b>21%</b>	<b>\$ 8.50</b>

\* The industry wages above are median hourly wage rates calculated from wages reported by employers.

# Workforce Supply and Demand Indicators

- In Greater Minnesota, among major occupational groups, the highest job vacancy rates are found in: healthcare practitioners and technical (6.6 percent), healthcare support (5.8 percent), and food preparation and serving related (5.7 percent).
- Two occupational groups have a large number of job vacancies and a high turnover-adjusted demand, indicating a higher demand for new entries into the field. These occupational groups are: healthcare practitioners and technical and healthcare support.

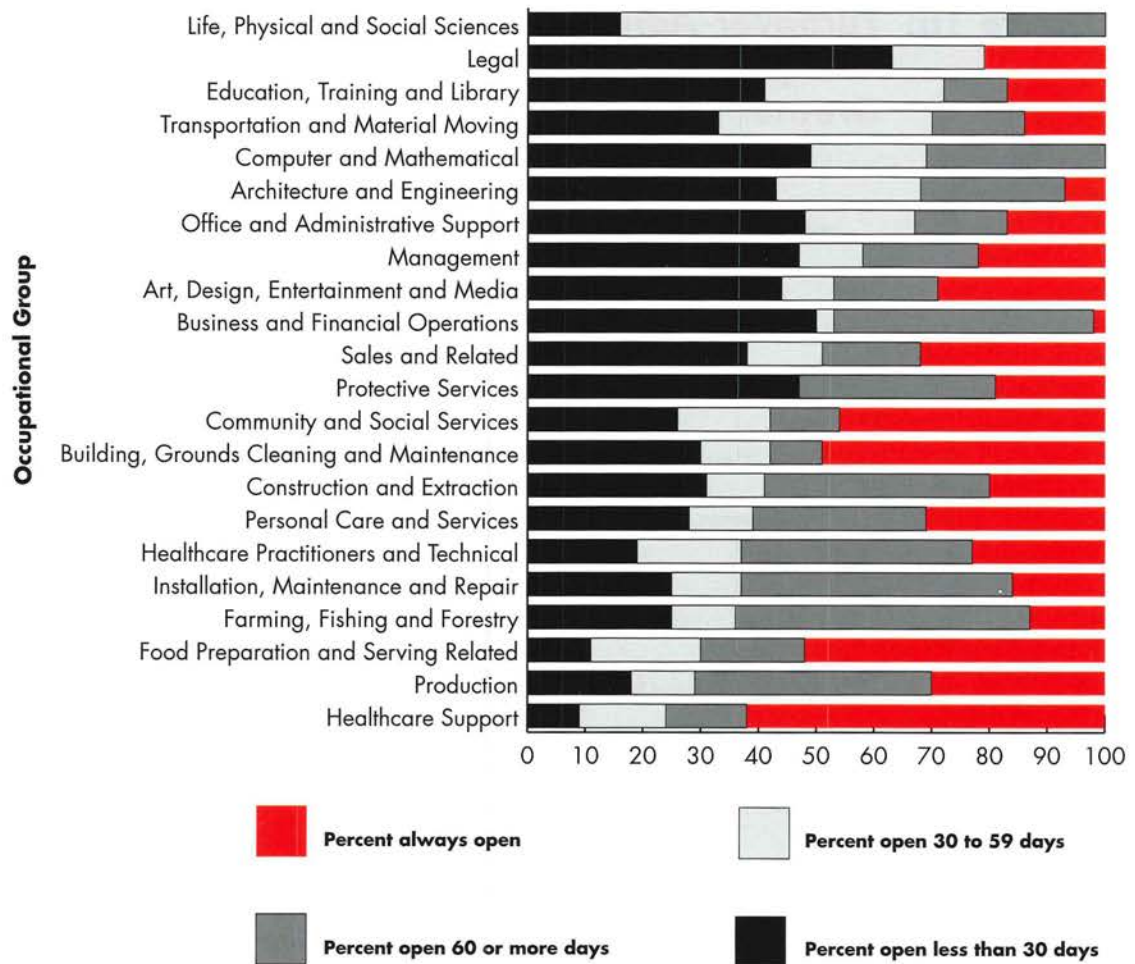
**Figure 1b: Turnover-Adjusted Demand for Occupational Groups with 1,000 or More Job Vacancies in Greater Minnesota**



# Duration of Job Vacancies

- Thirty-one percent of job vacancies in Greater Minnesota are reported as "always open" for hire.
- One in four job vacancies have been vacant 60 days or more.
- Seventeen percent of job vacancies have been vacant between 30 and 59 days, and 27 percent have been vacant less than 30 days.

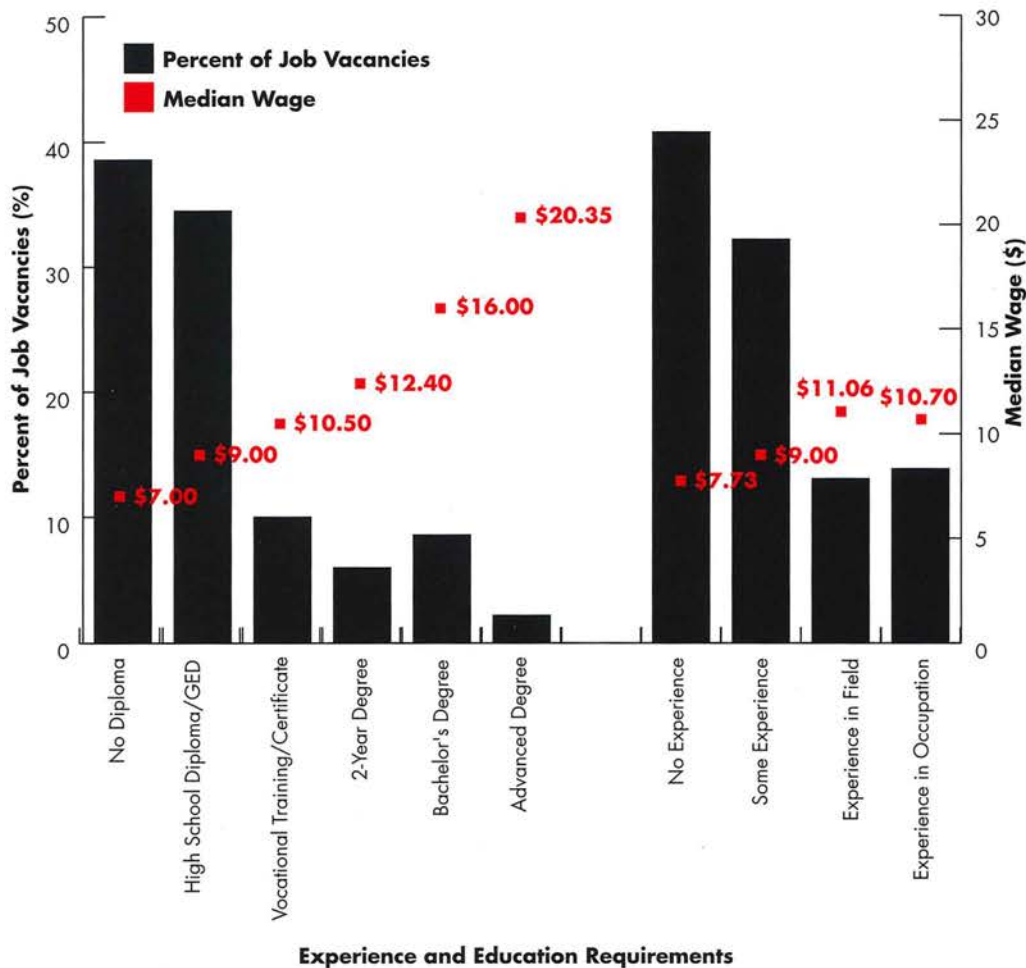
**Figure 2b: Duration of Job Vacancies in Greater Minnesota**



# Education and Experience

- Twenty-seven percent of total job vacancies in Greater Minnesota require a vocational degree or certificate, two-year degree, bachelor's degree or advanced degree. Occupations that require a high school diploma or less (73 percent) tend to have higher turnover.
- In Greater Minnesota, the demand for experienced workers is strong. Twenty-seven percent of total job vacancies require previous experience in either a related field or occupation.
- Twenty-four percent of job vacancies do not require any education or previous experience.

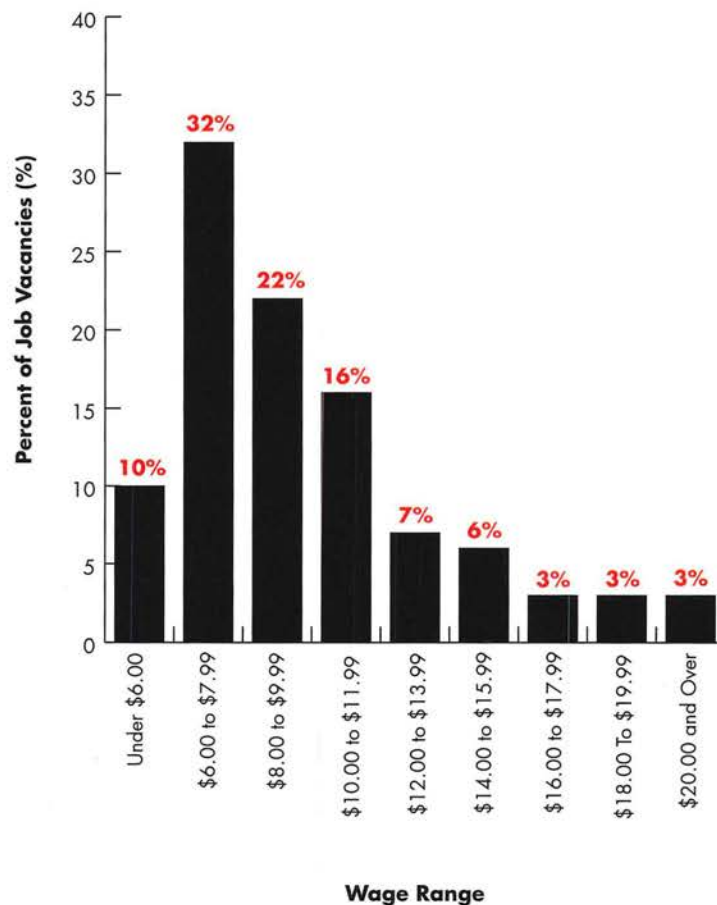
**Figure 3b: Education and Training Requirements of Job Vacancies with Median Wage Offers in Greater Minnesota**



# Wages

- The median wage offer (50th percentile—half are below, half are above) for all job vacancies is \$8.50 per hour in Greater Minnesota. Full-time job vacancies offer a higher median wage (\$10.00 per hour) than part-time job vacancies (\$6.75 per hour).
- Sixty-three percent of total vacancies offer starting wages below \$10.00 per hour; 10 percent offer a wage less than \$6.00 per hour.
- As training and experience requirements increase, so do the wage rates offered. (See Figure 3b.)

**Figure 4b: Percent of Job Vacancies by Hourly Wage Range in Greater Minnesota**



# Benefits

- In Greater Minnesota, a majority of full-time job vacancies offer health benefits (74 percent), paid vacation (74 percent), retirement plans (67 percent), and sick leave (62 percent).
- Part-time job vacancies are less likely to offer benefits; only 41 percent offer paid vacation, 30 percent offer retirement plans, 28 percent offer sick leave and 28 percent offer health insurance.

# Twin Cities Findings

## Job Vacancies by Occupational Group and Firm Size

- Sixty-four percent of job vacancies in the Twin Cities are concentrated in six of 22 occupational groups. (See Appendix on page 33 for occupational group definitions.)
- In the Twin Cities, firms with less than 50 employees account for 46 percent of total job vacancies.
- The job vacancy rate for small firms (4.5 percent) indicates that these firms may be having a more difficult time finding qualified, willing job applicants than larger firms.

\* Employment estimates by occupational group are from the Estimates Delivery System (EDS) 2001, using the 2001 Occupational Employment Statistics (OES) data.

\*\* The index value for all jobs is 1.0, High (High)=TAD above 1.2, Average (Avg)=TAD between 0.8 and 1.2, Low (Low)=TAD below 0.8.

\*\*\* The occupational group wages below are median hourly wage rates calculated from wages reported by employers.

NA=Not Available

**Table 1c: Employment and Job Vacancies by Major Occupational Group in the Twin Cities**

Major Occupational Group	Number of Job Vacancies	Change from Fourth Quarter 2000 (%)	Job Vacancy Rate* (%)	Turnover Adjusted Demand** (TAD)	Part-Time (%)	Temporary or Seasonal (%)	Requiring Field or Occupational Experience (%)	Requiring Education Beyond a High School Diploma (%)	Offer Health-care Benefits (%)	Median Wage Offer*** (\$)
Sales and Related	7,037	-63.9%	3.7%	Avg	59%	31%	27%	14%	55%	\$7.50
Food Preparation and Serving Related	6,429	-42.1	5.9	Avg	66	5	13	1	67	7.50
Office and Administrative Support	6,102	-57.7	2.1	Low	27	28	31	21	74	10.00
Healthcare Practitioners and Technical	3,909	-22.5	5.3	High	44	3	48	96	89	17.54
Transportation and Material Moving	3,552	-19.5	3.6	Avg	74	41	10	1	37	10.71
Education, Training and Library	2,885	30.0	3.4	High	52	5	47	70	95	10.10
Business and Financial Operations	2,451	-27.9	2.9	Avg	1	27	86	93	97	24.04
Personal Care and Services	2,348	-42.6	6.0	High	47	8	53	37	57	8.25
Healthcare Support	2,239	-32.5	6.2	High	60	3	41	51	66	10.00
Production	1,516	-74.6	1.0	Low	9	2	27	20	81	9.00
Management	1,199	-59.9	1.2	Avg	0	0	95	82	100	24.04
Community and Social Services	1,058	-41.6	5.2	High	14	29	84	82	63	11.26
Installation, Maintenance and Repair	1,042	-79.7	1.7	Low	19	0	47	41	95	12.00
Building, Grounds Cleaning and Maintenance	965	-72.4	1.9	Low	38	4	9	3	68	12.00
Protective Services	787	-33.6	2.9	High	57	5	16	39	46	9.25
Architecture and Engineering	671	-58.6	1.8	Avg	1	3	59	79	98	16.00
Life, Physical and Social Sciences	623	20.7	4.0	High	7	4	57	96	99	16.43
Construction and Extraction	620	-84.1	1.0	Low	0	18	68	47	80	15.00
Computer and Mathematical	596	-74.0	1.0	Low	6	1	89	94	98	20.82
Art, Design, Entertainment and Media	541	-56.2	2.1	Low	25	22	61	35	57	11.60
Legal	314	38.9	2.5	Avg	1	1	92	98	99	18.00
Farming, Fishing and Forestry	123	112.1	9.4	High	20	17	80	77	80	12.25
<b>Firm Size</b>										
Small (5 to 49 employees)	19,720	-54.9	4.5	NA	43	15	36	31	71	10.00
Large (250 or more employees)	13,010	-40.2	2.3	NA	41	20	37	46	74	10.00
Medium (50 to 249 employees)	12,583	-52.5	2.5	NA	47	14	37	39	71	10.00
Very Small (Less than five employees)	1,694	-71.5	2.7	NA	6	18	77	43	65	10.50
<b>All Job Vacancies</b>	<b>47,007</b>	<b>-52.0%</b>	<b>2.9%</b>		<b>42%</b>	<b>16%</b>	<b>38%</b>	<b>37%</b>	<b>72%</b>	<b>\$10.00</b>

# Job Vacancies by Occupation

- In the Twin Cities, the top 25 occupations with the most job vacancies account for 55 percent of all job vacancies.
- There are nine occupations with 1,000 or more job vacancies. The top five occupations with the most job vacancies are: retail salespersons (2,600); cashiers (2,600); combined food preparation and serving workers, including fast food workers (2,000); registered nurses (1,700); and laborers and freight, stock, and material movers (1,500).

\* The occupation wages below are median hourly wage rates calculated from wages reported by employers.

\*\* Median wage was calculated based on a 9 1/2 month year.

NA=Not Available

**Table 2c: Top 25 Occupations with the Most Job Vacancies in the Twin Cities**

Job Title	Number of Job Vacancies	Job Vacancy Rate (%)	Median Wage Offer* (\$)
Retail Salespersons	2,610	4.5%	\$ 7.25
Cashiers	2,553	7.5	7.25
Combined Food Preparation and Serving Workers, Including Fast Food	1,996	7.8	7.30
Registered Nurses	1,746	6.4	18.39
Laborers and Freight, Stock, and Material Movers, Hand	1,504	6.4	11.00
Waiters and Waitresses	1,299	5.3	5.25
Teacher Assistants	1,110	7.0	9.40
Hairdressers, Hairstylists, and Cosmetologists	1,101	18.2	7.50
Nursing Aides, Orderlies, and Attendants	1,016	7.4	10.00
Packers and Packagers, Hand	913	11.6	9.50
First-Line Supervisors/Managers of Food Preparation and Service Workers	875	10.5	9.00
Licensed Practical and Licensed Vocational Nurses	840	12.1	14.85
Receptionists and Information Clerks	790	5.1	12.00
First-Line Supervisors/Managers of Retail Sales Workers	727	4.4	13.46
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	724	2.8	12.02
Tax Preparers	687	NA	25.00
Personal and Home Care Aides	682	8.9	8.45
Postal Service Mail Sorters, Processors, and Processing Machine Operators	641	16.1	NA
Customer Service Representatives	639	2.0	10.00
Office Clerks, General	629	1.6	10.00
Stock Clerks and Order Fillers	545	2.5	8.50
Preschool Teachers, Except Special Education**	534	13.1	10.00
Food Preparation Workers	523	7.3	9.00
Data Entry Keyers	519	9.6	10.00
Security Guards	454	3.3	10.00

# Job Vacancies by Industry

- Twenty percent of total job vacancies in the Twin Cities are in the healthcare industry.
- The healthcare industry has the highest job vacancy rate at 5.6 percent, indicating that this industry may be having a difficult time finding qualified, willing job applicants.
- The highest concentrations of temporary or seasonal job vacancies are found in agriculture (70 percent), technical services (44 percent), transportation and warehousing (40 percent), and retail trade (39 percent).

**Table 3c: Employment and Job Vacancies by Industry in the Twin Cities**

Industry	Number of Job Vacancies	Change from Fourth Quarter 2000 (%)	Job Vacancy Rate (%)	Temporary or Seasonal (%)	Median Wage Offer* (\$)
Healthcare	9,531	-30.1 %	5.6%	5%	\$ 11.50
Retail Trade	8,415	-65.4	4.2	39	8.00
Accommodation	5,865	-60.1	5.1	3	7.70
Educational Services	3,367	15.6	2.9	9	11.63
Technical Services	3,061	-36.2	3.2	44	15.00
Other Services	2,733	-26.1	4.9	6	9.00
Manufacturing	2,634	-68.9	1.1	14	11.50
Finance and Insurance	2,582	-46.0	2.6	0	13.00
Transportation and Warehousing	1,858	-30.5	2.6	40	10.75
Administrative and Support	1,724	-67.1	3.1	21	10.00
Wholesale Trade	1,336	-53.8	1.4	2	12.25
Arts and Entertainment	1,185	50.6	5.0	2	6.00
Public Administration	918	-37.0	1.6	9	13.20
Information	900	-67.7	1.6	9	8.25
Construction	457	-86.6	0.6	28	15.00
Real Estate	251	-76.0	0.9	0	12.00
Management	134	-13.5	3.5	0	9.50
Agriculture	30	-42.3	1.3	70	7.00
Utilities	16	-77.8	0.2	6	17.61
Mining	10	NA	2.4	20	10.00
<b>Total</b>	<b>47,007</b>	<b>-52.0%</b>	<b>2.9%</b>	<b>16%</b>	<b>\$ 10.00</b>

\* The industry wages above are median hourly wage rates calculated from wages reported by employers.

# Workforce Supply and Demand Indicators

- In the Twin Cities, among occupational groups, the highest job vacancy rates are found in: healthcare support (6.2 percent), personal care and services (6.0 percent), and food preparation and serving related (5.9 percent).
- Five occupational groups have a large number of job vacancies and a high turnover-adjusted demand, indicating a higher demand for new entries to the field. These occupational groups are: healthcare practitioners and technical; community and social services; healthcare support; education, training and library; and personal care and services.

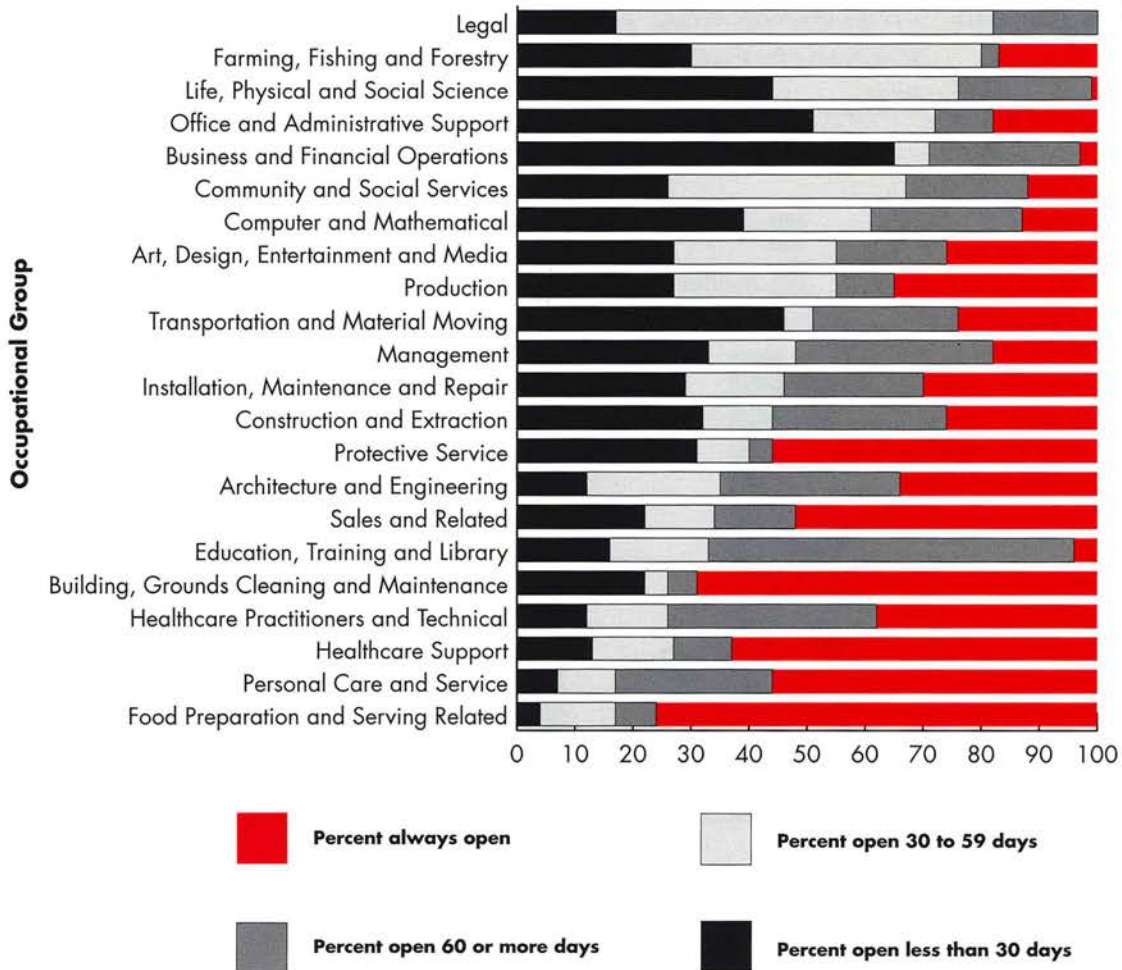
**Figure 1c: Turnover-Adjusted Demand for Occupational Groups with 1,000 or more Job Vacancies in the Twin Cities**



# Duration of Job Vacancies

- Thirty-nine percent of job vacancies in the Twin Cities are reported as “always open” for hire.
- Twenty percent of job vacancies have been vacant 60 days or more.
- Fifteen percent of job vacancies have been vacant between 30 and 59 days, and 27 percent have been vacant less than 30 days.

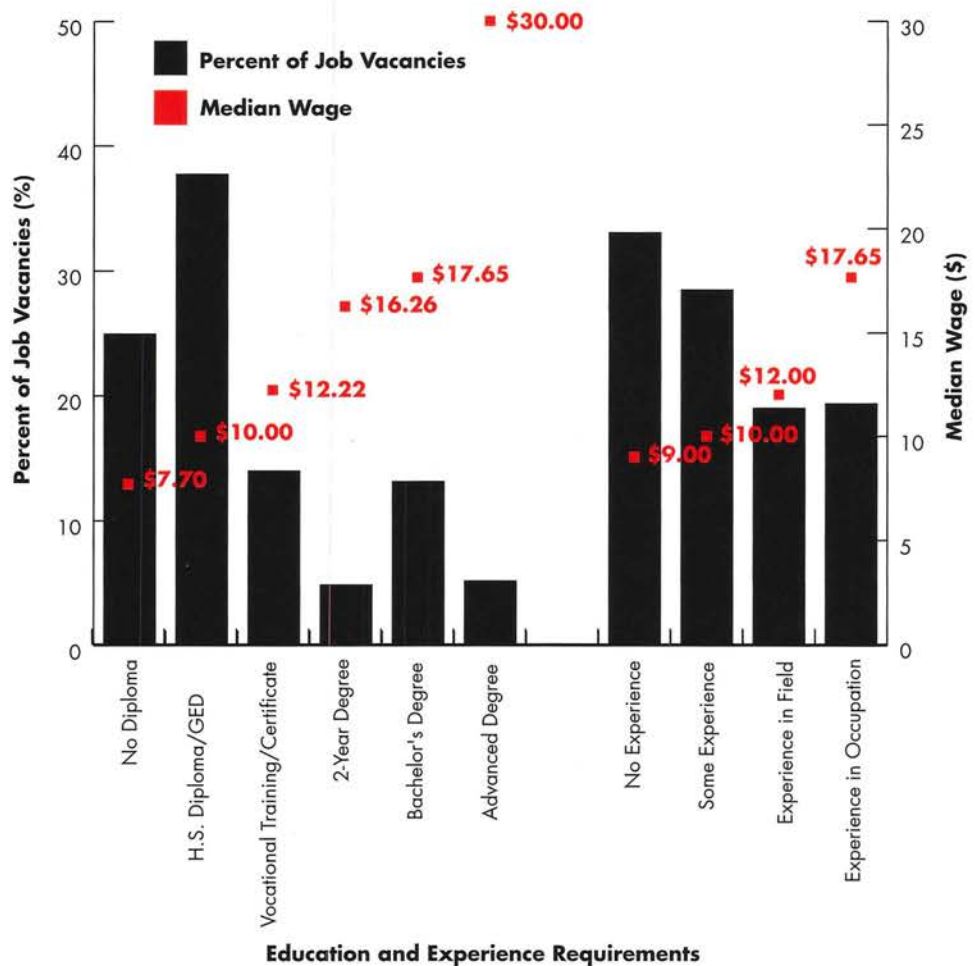
**Figure 2c: Duration of Job Vacancies in the Twin Cities**



# Education and Experience

- Thirty-seven percent of total job vacancies in the Twin Cities require a vocational degree or certificate, two-year degree, bachelor's degree or advanced degree. Occupations that require a high school diploma or less (63 percent) tend to have higher turnover.
- In the Twin Cities, the demand for experienced workers is strong. Thirty-eight percent of job vacancies require previous experience in either a related field or occupation.
- Sixteen percent of total job vacancies do not require any education or previous experience.

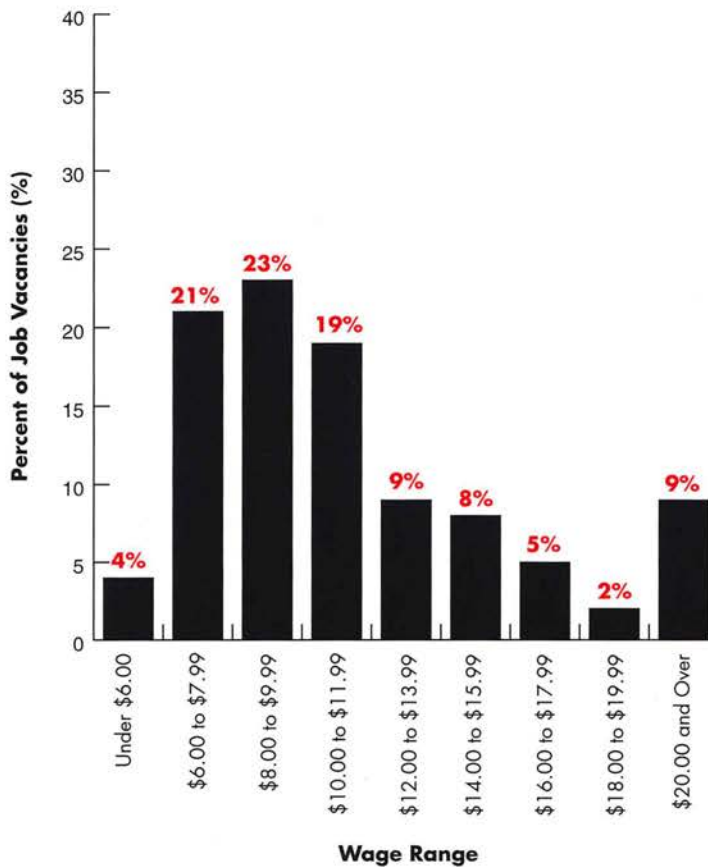
**Figure 3c: Education and Training Requirements of Job Vacancies with Median Wage Offers in the Twin Cities**



# Wages

- The median wage offer (50th percentile—half are below, half are above) for all job vacancies is \$10.00 per hour in the Twin Cities. Full-time job vacancies offer a higher median wage (\$12.00 per hour) than part-time job vacancies (\$8.50 per hour).
- Forty-seven percent of vacancies offer starting wages below \$10.00 per hour; four percent offer a wage less than \$6.00 per hour.
- As training and experience requirements increase, so do the wage rates offered. (See Figure 3c.)

**Figure 4c: Percent of Job Vacancies by Hourly Wage Range in the Twin Cities**

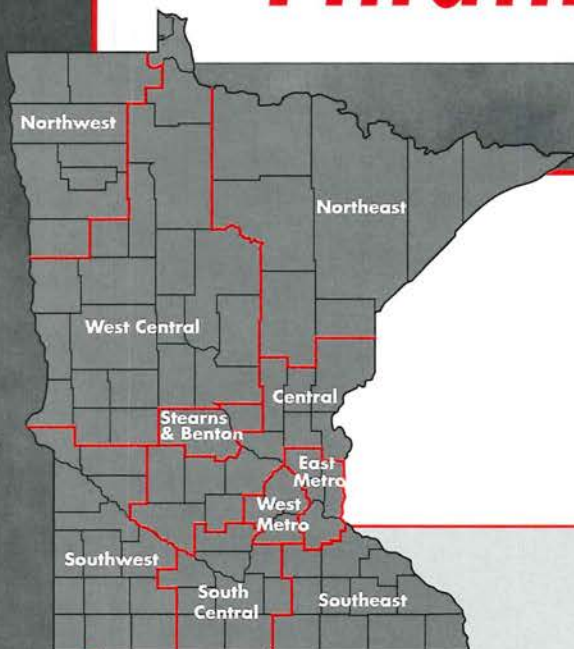


# Benefits

- In the Twin Cities, a majority of full-time job vacancies offer health benefits (91 percent), paid vacation (89 percent), retirement plans (81 percent), and sick leave (70 percent).
- Part-time job vacancies are less likely to offer benefits; only 44 percent offer health insurance, 43 percent offer paid vacation, 40 percent offer retirement plans, and 30 percent offer sick leave.

# Regional Findings

## Summary



Major Occupational Group	Minnesota		Stearns and Benton		Central		East Metro	
	Number of Job Vacancies	Job Vacancy Rate (%)	Number of Job Vacancies	Job Vacancy Rate (%)	Number of Job Vacancies	Job Vacancy Rate (%)	Number of Job Vacancies	Job Vacancy Rate (%)
Food Preparation and Serving Related	11,416	5.8%	91	1.2%	1,504	7.9%	3,319	7.9%
Sales and Related	10,862	3.6	407	3.6	315	2.3	3,694	4.7
Office and Administrative Support	8,795	2.0	341	2.2	304	1.7	2,854	2.7
Healthcare Practitioners and Technical	7,449	5.9	180	4.1	375	6.0	1,384	4.9
Transportation and Material Moving	6,050	3.5	286	4.1	415	4.0	2,476	5.2
Production	4,734	1.7	188	1.6	324	1.6	463	0.6
Education, Training and Library	4,404	3.0	69	1.4	107	0.9	394	0.8
Healthcare Support	4,164	6.0	70	3.4	301	6.1	1,256	8.1
Personal Care and Services	3,376	5.2	135	9.8	90	2.0	1,346	11.4
Business and Financial Operations	3,112	2.8	16	0.6	130	4.4	1,016	3.5
Construction and Extraction	2,396	2.2	286	8.3	510	6.4	121	0.4
Building, Grounds Cleaning and Maintenance	1,982	2.3	110	3.8	171	3.1	360	1.8
Installation, Maintenance and Repair	1,976	1.9	7	0.2	122	2.2	296	1.3
Community and Social Services	1,856	4.9	7	0.5	75	2.5	825	11.1
Management	1,715	1.2	12	0.4	62	1.1	537	1.5
Architecture and Engineering	927	1.9	20	3.0	32	2.4	194	1.2
Farming, Fishing and Forestry	923	18.4	3	2.3	19	2.2	117	17.7
Protective Services	908	2.1	9	1.0	10	0.4	376	3.7
Art, Design, Entertainment and Media	891	2.4	8	1.0	102	12.1	220	2.7
Life, Physical and Social Sciences	814	3.8	19	7.9	14	2.5	129	1.7
Computer and Mathematical	704	1.0	3	0.3	11	1.7	196	1.1
Legal	333	2.0	10	2.8	0	0.0	258	11.0
<b>Total</b>	<b>79,787</b>	<b>3.1%</b>	<b>2,277</b>	<b>2.6%</b>	<b>4,993</b>	<b>3.4%</b>	<b>21,831</b>	<b>3.3%</b>

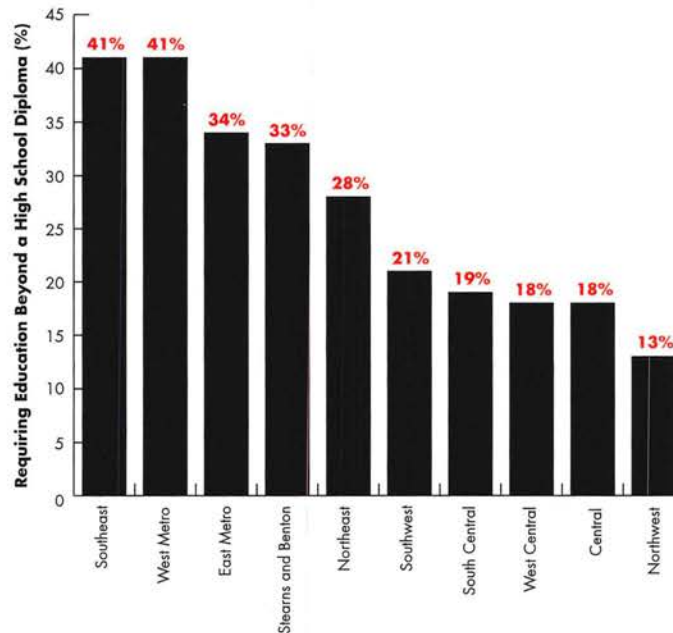
NA=Not Available

- Job vacancy rates vary greatly by occupational group between the regions of Minnesota with many of the highest job vacancy rates probably driven by seasonal hiring.
- High job vacancy rates are found in personal care and services in the Stearns and Benton, and East Metro regions; this is largely driven by winter recreational hiring.
- The job vacancy rate in the healthcare practitioners and technical occupation group is high in the Southeast region.
- Job vacancy rates in construction and extraction occupations are high in the South Central and Southwest regions.

**Table 1d: Job Vacancies by Region**

Northeast		Northwest		South Central		Southeast		Southwest		West Central		West Metro	
Number of Job Vacancies	Job Vacancy Rate (%)	Number of Job Vacancies	Job Vacancy Rate (%)	Number of Job Vacancies	Job Vacancy Rate (%)	Number of Job Vacancies	Job Vacancy Rate (%)	Number of Job Vacancies	Job Vacancy Rate (%)	Number of Job Vacancies	Job Vacancy Rate (%)	Number of Job Vacancies	Job Vacancy Rate (%)
595	2.1%	347	5.7%	177	3.3%	776	5.4%	210	4.9%	1,287	6.5%	3,110	4.6%
980	1.6	4	0.1	409	5.0	958	4.3	194	2.3	558	3.2	3,343	3.0
426	0.9	50	0.7	257	2.0	820	2.2	182	1.5	313	1.5	3,248	1.7
342	1.3	48	2.5	139	3.4	2,030	12.4	85	2.7	341	4.2	2,525	5.6
192	1.4	51	1.3	392	5.5	229	1.5	136	2.1	797	9.4	1,076	2.1
48	0.0	51	1.1	235	1.7	354	1.2	156	1.5	1,862	12.8	1,053	1.2
110	0.8	8	0.2	7	0.1	1,051	9.9	22	0.3	145	1.6	2,491	6.9
355	2.4	35	1.8	198	5.5	621	8.3	149	4.9	196	3.9	983	4.8
223	2.0	17	1.9	31	1.4	361	8.4	78	2.5	93	2.5	1,002	3.7
65	0.3	0	0.0	19	0.8	215	3.8	3	0.1	213	9.1	1,435	2.6
20	0.2	0	0.0	424	11.5	145	1.7	363	12.1	28	0.4	499	1.5
115	1.2	23	1.2	77	2.3	337	6.0	35	1.1	149	2.2	605	2.1
25	0.0	20	1.0	120	3.5	69	0.8	58	2.2	513	7.6	746	1.8
128	0.3	5	0.5	52	4.4	231	7.1	43	3.9	257	8.7	233	1.8
17	0.2	0	0.0	81	2.1	163	1.9	2	0.1	179	3.4	662	1.1
21	0.7	15	1.5	16	1.1	143	3.7	6	1.3	3	0.2	477	2.2
45	8.8	21	13.1	309	71.9	366	76.3	37	5.6	0	0.0	6	0.9
28	0.7	0	0.0	11	0.7	30	1.3	5	0.3	28	1.2	411	2.4
132	1.0	10	2.2	0	0.0	41	2.3	0	0.0	57	3.2	321	1.8
28	1.9	0	0.0	0	0.0	24	1.6	1	0.3	105	15.4	494	6.2
12	0.6	6	1.9	4	0.4	51	NA	1	0.2	20	3.8	400	1.0
5	0.2	0	0.0	0	0.0	3	8.0	0	0.0	1	0.2	56	0.5
<b>3,912</b>	<b>2.8%</b>	<b>711</b>	<b>1.4%</b>	<b>2,958</b>	<b>3.4%</b>	<b>9,018</b>	<b>4.2%</b>	<b>1,766</b>	<b>2.2%</b>	<b>7,145</b>	<b>4.9%</b>	<b>25,176</b>	<b>2.6%</b>

**Figure 1d: Post-Secondary Education Requirements for Job Vacancies by Region**



- Wages of job vacancies vary by region, with the highest median wages in the West Metro and East Metro, and the lowest in the Northwest.
- The regions with the greatest share of job vacancies requiring post-secondary education are the Southeast (41 percent), West Metro (41 percent) and East Metro (34 percent) regions. The Northwest and Central regions have the lowest shares of job vacancies that require post-secondary education, at 13 and 18 percent, respectively.
- The variation in the median wages and educational requirements of job vacancies by region is largely driven by differences in industry and occupation mix by region.

**Table 2d: Median Wage Offers for Job Vacancies by Region**

Regions	Median Wage Offer (\$)*
West Metro	\$ 10.00
East Metro	9.50
Southeast	9.02
Stearns and Benton	9.00
Central	9.00
South Central	9.00
West Central	8.21
Southwest	8.00
Northeast	6.65
Northwest	6.00
<b>State</b>	<b>\$ 9.31</b>

\* The wages to the left are median hourly wage rates calculated from wages reported by employers.

# Appendix

## Occupational Group Definitions

Twenty-two major occupational groupings defined by the Standard Occupational Classification (SOC) System are represented in this survey sample. Examples of occupations for each major occupational group include the following:

<b>Major Occupational Group</b>	<b>Sample Occupations</b>
<b>Management</b>	Educational Administrators, Marketing Managers, and Medical and Health Service Managers
<b>Business and Financial Operations</b>	Accountants, Financial Analysts, and Human Resource Specialists
<b>Computer and Mathematical</b>	Actuaries, Computer Programmers, and Computer Support Specialists
<b>Architecture and Engineering</b>	Architects, Chemical Engineers, and Drafters
<b>Life, Physical and Social Sciences</b>	Anthropologists, Chemists, and Geographers
<b>Community and Social Services</b>	Clergy, Health Educators, and Marriage and Family Therapists
<b>Legal</b>	Court Reporters, Lawyers, and Paralegals
<b>Education, Training and Library</b>	Librarians, Post-secondary Teachers, and Special Education Teachers
<b>Art, Design, Entertainment and Media</b>	Coaches, Producers and Directors, and Radio Operators
<b>Healthcare Practitioners and Technical Healthcare Support</b>	Dentists, Physicians, and Registered Nurses Dental Assistants, Home Health Aides, and Pharmacy Aides
<b>Protective Services</b>	Animal Control Workers, Detectives, and Police Officers
<b>Food Preparation and Serving Related</b>	Cooks, Food Preparation Workers, and Waiters and Waitresses
<b>Building, Grounds Cleaning and Maintenance</b>	Housekeeping Cleaners, Janitors, and Pest Control Workers
<b>Personal Care and Services</b>	Childcare Workers, Hairdressers and Hairstylists, and Personal and Home Care Aides
<b>Sales and Related</b>	Cashiers, Insurance Sales Agents, and Retail Salespersons
<b>Office and Administrative Support</b>	Customer Service Representatives, Tellers, and Secretaries
<b>Farming, Fishing and Forestry</b>	Agricultural Inspectors, Animal Breeders, and Farmers
<b>Construction and Extraction</b>	Construction Laborers, Carpenters, and Electricians
<b>Installation, Maintenance and Repair</b>	Automotive Service Technicians and Mechanics, Motorcycle Mechanics, and Millwrights
<b>Production</b>	Butchers and Meat Cutters, Foundry Mold and Coremakers, and Machinists
<b>Transportation and Material Moving</b>	Airline Pilots, Bus Drivers, and Truck Drivers

Source: Standard Occupational Classification System, U.S. Department of Labor.  
SOC Web page: <http://stats.bls.gov/soc/socguide.htm>

## About this Study

**I**nformation on job vacancies comes from a survey of 7,593 Minnesota employers, conducted over a three-month period from October to December 2001. Surveyed employers were randomly selected from Minnesota's Covered Employment and Wages (ES-202) database. The sample was stratified by major industry and size class to represent the universe of employers in 11 defined regions throughout the state of Minnesota.

The fourth quarter 2001 *Minnesota Job Vacancy Survey* produces point-in-time estimates: employers were asked to provide information on current vacancies at the time of survey, including job titles, number of job vacancies, education and experience requirements, wages and benefits, and the length of time the job vacancy had been open. Responses were received from 5,123 firms (67 percent of total surveyed firms). Job titles were coded into 533 detailed occupations using the Standard Occupational Classification (SOC) System. After survey data collection and editing were completed, data were scaled to produce estimates representative of 11 regions. The scaling process takes into account the distribution of employment, by industry and size class, in the respondent group and in the universe of statewide employers.

For the purpose of this study, a job vacancy is defined as a position that is currently open for hire at the time the employer filled out the survey. This study excludes job vacancies reserved for contract consultants, employees of contractors, and others not considered employees of surveyed firms.

The fourth quarter 2001 *Minnesota Job Vacancy Survey* utilizes a different methodology than previous *Minnesota Job Vacancy Survey* reports. The sample drawn was based on the variances of job vacancies from employers who responded on previous surveys. While comparisons may be made between this survey and previous surveys, caution should be used in comparing job vacancy totals directly.

For more detail on survey methodology, go to:  
**[www.MnWorkForceCenter.org/lmi/public.htm](http://www.MnWorkForceCenter.org/lmi/public.htm)**

**Please tell us what you think!**

## **Minnesota Job Vacancy Survey**

# **Customer Satisfaction Questionnaire**

**1. In what kind of business activity or service are you or your organization engaged?**

- Administrative/Managerial
- Advertising/Communication/Marketing
- Agriculture/Farming
- Computer-related/Technical
- Construction/Trades
- Education/Academic
- Federal government
- Financial Services
- Gaming
- Healthcare
- Local or state government
- Manufacturing/Printing and Publishing
- Media/Entertainment/Design
- Military
- Natural Resources/Mining
- Professional
- Retired/Not in the workforce
- Sales
- Student
- Telecommunications
- Other \_\_\_\_\_

**2. In general, how do you use the information in the Minnesota Job Vacancy Survey report? Check all that apply.**

- Academic research
- Business forecasting
- General information
- Human resource planning
- Media
- Policy and program planning
- Tracking economic trends
- Other \_\_\_\_\_

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**3. Please evaluate the following aspects of the *Minnesota Job Vacancy Survey* report, specifically in terms of useability, on a 1 to 4 scale:**

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Writing style	1	2	3	4
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Figures provided	1	2	3	4
General appearance of publication	1	2	3	4

**4. After I read the *Minnesota Job Vacancy Survey* report, I usually:**

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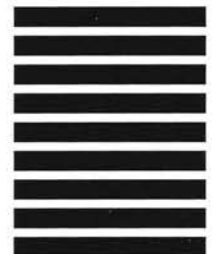
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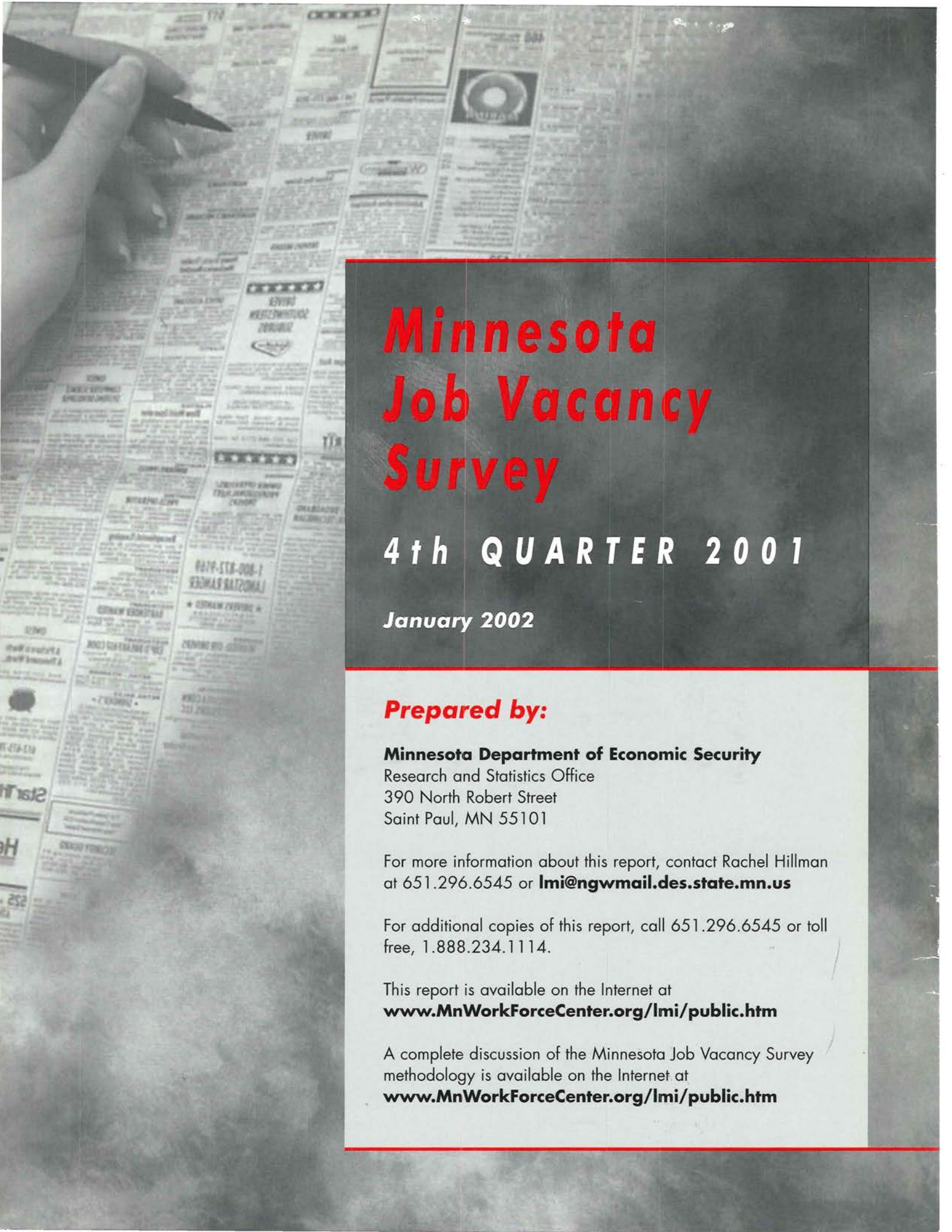
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## **Job Vacancy Statistics Workgroup**

The Workforce Information Council (WIC) has determined that obtaining accurate job vacancy information from within the States and also nationwide is a vital goal. To meet this goal, the Employment and Training Administration (ETA) and the Bureau of Labor Statistics (BLS) has partnered with eight States nationwide to form the Job Vacancy Statistics Workgroup.

Information on the Job Vacancy Statistics Workgroup may be obtained at

**[www.workforceinfocouncil.org](http://www.workforceinfocouncil.org)**



# Minnesota Job Vacancy Survey

4th QUARTER 2001

January 2002

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This report is available on the Internet at  
[www.MnWorkForceCenter.org/lmi/public.htm](http://www.MnWorkForceCenter.org/lmi/public.htm)

A complete discussion of the Minnesota Job Vacancy Survey methodology is available on the Internet at  
[www.MnWorkForceCenter.org/lmi/public.htm](http://www.MnWorkForceCenter.org/lmi/public.htm)