



Key Industries, Key Occupations, Key Skills: Targeting Workforce Priorities in the Twin Cities

Where should economic and workforce development organizations devote their resources? Every region, county and city is characterized by a set of industries and occupations that set it apart from all others. In the case of the Twin Cities, that industry base is very diverse consisting of numerous manufacturing and service industries that each have their own specific requirements for skilled workers. With so many options for investment, in what industry sectors and occupations should we focus our finite economic and workforce development resources? In 2005, the Twin Cities Employer Services Partnership reviewed available information to identify some key industries in the Metro and associated occupations and skills.

Metro industries were examined using a variety of quantitative criteria including employment size, recent growth, projected growth, wages and relative competitiveness and scored according to those criteria. Industries were also examined by other qualitative factors such as their tendency to hire growing tiers of the workforce (e.g. immigrants, retirees, etc.) or their tendency to be capital importers. Taken together, these priorities were weighted and those industries with the highest scores were considered targeted industries. Five broad industry sectors were identified by this process:

- Healthcare
- Finance and Insurance
- Professional and Technical Services
- Freight and Air Passenger Transportation
- High Tech Manufacturing

Using Minnesota's labor market information data, a group of 90 occupations were identified that were highly utilized by these industries. Subsequently, the O*NET skills database was used to identify the specific skills most important to the industries and their respective occupations. The following pages summarize this analysis for the 5 targeted industry groups.

Targeted Industry: Healthcare

As a broad industry sector, healthcare and social assistance has added over 12,260 jobs in the Twin Cities between the second quarters of 2004 and 2006. More recently, vacancies for healthcare-related occupations have declined. However, shortage conditions still exist for many occupations and are expected to intensify in coming years.

Top 10 Occupations (by % industry employment) Employed in Twin Cities Healthcare Industries

Occupation	Twin Cities Occupational Employment	Median Wage (4Q 2006)	Occupation in Demand?	Projected Growth 2004-2014*
Registered Nurses	28,220	\$31.30	Yes	27.5%
Nursing Aides, Orderlies, and Attendants	13,670	\$13.44	Yes	12.0%
Home Health Aides	6,260	\$11.78	Yes	47.7%
Licensed Practical and Licensed Vocational Nurses	8,180	\$19.51	Yes	12.1%
Personal and Home Care Aides	7,810	\$10.55	Yes	45.2%
Office Clerks, General	41,750	\$13.69		6.7%
Maids and Housekeeping Cleaners	7,400	\$10.02		12.7%
Receptionists and Information Clerks	14,450	\$12.80		17.4%
Medical Secretaries	4,310	\$15.93		11.3%
Social and Human Service Assistants	5,370	\$13.51	Yes	32.1%

*Source: DEED, Labor Market Information Office, Occupational Employment Statistics (OES) and Minnesota Employment Projections. *Projected growth statistics provided here are preliminary and are subject to revision.*

Top 5 Skills Associated with Twin Cities Healthcare Jobs

Skill	Description
Active Listening	Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.
Speaking	Talking to others to convey information effectively.
Time Management	Managing one's own time and the time of others.
Service Orientation	Actively looking for ways to help people.
Social Perceptiveness	Being aware of others' reactions and understanding why they react as they do.

Targeted Industry: Finance and Insurance

As a broad industry sector, finance and insurance have added 1,270 jobs in the Twin Cities between the second quarters of 2004 and 2006. More recently, vacancies for some finance-related occupations have risen slightly. Increasing interest rates and decreased home buying may curb some of the growth that has taken place in recent years.

Top 10 Occupations (by % industry employment) Employed in Twin Cities Finance and Insurance Industries

Occupation	Twin Cities Occupational Employment	Median Wage (4Q 2006)	Occupation in Demand?	Projected Growth 2004-2014*
Customer Service Representatives	25,220	\$16.32		19.7%
Tellers	6,350	\$11.11		18.0%
Office Clerks, General	41,750	\$13.69		6.7%
Securities, Commodities, and Financial Services Sales Agents	6,200	\$35.07	Yes	11.9%
Loan Officers	5,120	\$27.95	Yes	10.6%
First-Line Supervisors/Managers of Office and Administrative Support Workers	17,310	\$22.86		6.6%
Insurance Sales Agents	2,560	\$29.01		6.1%
Loan Interviewers and Clerks	4,990	\$16.76		1.0%
Executive Secretaries and Administrative Assistants	20,410	\$19.74		11.3%
Claims Adjusters, Examiners, and Investigators	1,690	\$21.17		16.2%

*Source: DEED, Labor Market Information Office, Occupational Employment Statistics (OES) and Minnesota Employment Projections. *Projected growth statistics provided here are preliminary and are subject to revision.*

Top 5 Skills Associated with Twin Cities Finance & Insurance Jobs

Skill	Description
Reading Comprehension	Understanding written sentences and paragraphs in work related documents.
Active Listening	Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.
Speaking	Talking to others to convey information effectively.
Mathematics	Using mathematics to solve problems.
Writing	Communicating effectively in writing as appropriate for the needs of the audience.

Targeted Industry: Professional and Technical Services

As a broad industry sector, professional and technical services have gained 6,240 jobs in the Twin Cities between the second quarters of 2004 and 2006. More recently, vacancies for many professional occupations have increased. Future job growth is expected to be strong for many of these occupations and wages are typically higher than the average.

Top 10 Occupations (by % industry employment) Employed in Twin Cities Professional and Technical Services Industries

Occupation	Twin Cities Occupational Employment	Median Wage (4Q 2006)	Occupation in Demand?	Projected Growth 2004-2014*
Lawyers	9,550	\$54.43	Yes	13.4%
Accountants and Auditors	18,180	\$26.54	Yes	18.8%
Management Analysts	7,920	\$33.41	Yes	19.8%
Office Clerks, General	41,750	\$13.69		6.7%
Computer Software Engineers, Applications	15,120	\$38.48	Yes	45.1%
Legal Secretaries	3,820	\$23.60		10.7%
Paralegals and Legal Assistants	3,860	\$23.69	Yes	25.2%
Bookkeeping, Accounting, and Auditing Clerks	19,510	\$16.70		4.6%
General and Operations Managers	20,490	\$46.21	Yes	15.9%
Computer Software Engineers, Systems Software	6,220	\$39.83	Yes	43.5%

*Source: DEED, Labor Market Information Office, Occupational Employment Statistics (OES) and Minnesota Employment Projections. *Projected growth statistics provided here are preliminary and are subject to revision.*

Top 5 Skills Associated with the Twin Cities Professional and Technical Services Industry

Skill	Description
Active Listening	Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.
Critical Thinking	Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.
Speaking	Talking to others to convey information effectively.
Active Learning	Understanding the implications of new information for both current and future problem-solving and decision-making.
Writing	Communicating effectively in writing as appropriate for the needs of the audience.

Targeted Industry: Freight and Air Passenger Transportation

As a broad industry sector, transportation and warehousing has lost 1,190 jobs in the Twin Cities between the second quarters of 2004 and 2006. More recently, transportation has begun to add back some of the jobs it has lost since 2000. Despite the recent downturn, transportation is considered to be important for the future economic vitality of the region.

Top 10 Occupations (by % industry employment) Employed in Twin Cities Transportation Industries

Occupation	Twin Cities Occupational Employment	Median Wage (4Q 2006)	Occupation in Demand?	Projected Growth 2004-2014*
Truck Drivers, Heavy and Tractor-Trailer	14,790	\$19.93	Yes	14.5%
Bus and Truck Mechanics and Diesel Engine Specialists	5,390	\$20.69	Yes	13.8%
Aircraft Mechanics and Service Technicians	3,050	\$39.40		2.3%
Customer Service Representatives	25,220	\$16.32		19.7%
Railroad Conductors and Yardmasters	740 (statewide)	\$25.77 (statewide)		-4.8%
Laborers and Freight, Stock, and Material Movers, Hand	20,120	\$13.57		7.1%
Cargo and Freight Agents	700	\$19.29		-6.2%
Office Clerks, General	41,750	\$13.69		6.7%
First-Line Supervisors/Managers of Transportation and Material-Moving Machine and Vehicle	3,320	\$24.40		15.9%
Dispatchers, Except Police, Fire, and Ambulance	2,020	\$18.09		6.2%

*Source: DEED, Labor Market Information Office, Occupational Employment Statistics (OES) and Minnesota Employment Projections. *Projected growth statistics provided here are preliminary and are subject to revision.*

Top 5 Skills Associated with Twin Cities Transportation Jobs

Skill	Description
Operation and Control	Controlling operations of equipment or systems.
Speaking	Talking to others to convey information effectively.
Operation Monitoring	Watching gauges, dials, or other indicators to make sure a machine is working properly.
Time Management	Managing one's own time and the time of others.
Equipment Maintenance	Performing routine maintenance on equipment and determining when and what kind of maintenance is needed.

Targeted Industry: High Tech Manufacturing

As a broad industry sector, manufacturing has gained 2,000 jobs between the second quarters of 2004 and 2006. The sector continues to pay higher than average wages and supplies 12 percent of the total employment in the region. The industries included in this analysis are those that fit the Institute of Electrical and Electronics Engineers (IEEE) definition of high technology that have a significant presence in the Twin Cities region. Included in this grouping are industries such as machinery, computer and medical device manufacturing. While current and projected employment conditions are unfavorable for many occupations, individual employers may face specific labor shortages as existing workers retire and skill requirements increase with automation.

Top 10 Occupations (by % industry employment) Employed in Twin Cities High Tech Manufacturing Industries

Occupation	Twin Cities Occupational Employment	Median Wage (4Q 2006)	Occupation in Demand?	Projected Growth 2004-2014*
Team Assemblers	17,780	\$13.91		10.0%
First-Line Supervisors/Managers of Production and Operating Workers	8,330	\$25.29	Yes	3.8%
Welders, Cutters, Solderers, and Brazers	4,010	\$19.40	Yes	0.0%
Electrical and Electronic Equipment Assemblers	2,810	\$14.38		3.4%
Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	3,840	\$15.96	Yes	-16.3%
Machinists	3,800	\$20.65		3.3%
Computer Software Engineers, Systems Software	6,220	\$39.22	Yes	43.5%
Inspectors, Testers, Sorters, Samplers, and Weighers	4,170	\$16.84		-4.1%
Industrial Engineers	3,960	\$35.58	Yes	22.7%
Mechanical Engineers	3,880	\$33.41	Yes	12.7%

*Source: DEED, Labor Market Information Office, Occupational Employment Statistics (OES) and Minnesota Employment Projections. *Projected growth statistics provided here are preliminary and are subject to revision.*

Top 5 Skills Associated with Twin Cities High Tech Manufacturing Jobs

Skill	Description
Equipment Selection	Determining the kind of tools and equipment needed to do a job.
Mathematics	Using mathematics to solve problems.
Quality Control Analysis	Conducting tests and inspections of products, services, or processes to evaluate quality or performance.
Active Listening	Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.
Operation and Control	Controlling operations of equipment or systems.