

# Distinguishing Features

*From health care in Southeast Minnesota to manufacturing in Central Minnesota, each region of the state has a concentration of occupations that distinguishes it from other parts of the state.*

Minnesota has a diverse and thriving economy, with employment spread across different industries, occupations and geographies. For planning purposes, the state is divided into six distinct regions, ranging from seven counties in both the Twin Cities and Northeast Minnesota to more than 20 counties in both Northwest and Southwest Minnesota (see Map 1 on page 8).

About 62 percent of the jobs in the state, however, are located in

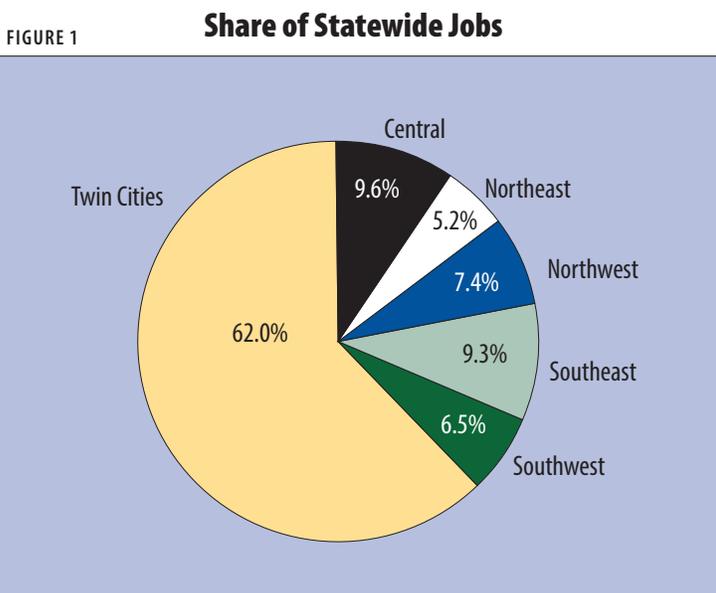
the Twin Cities metro, meaning that many of the unique aspects of the state’s economy outside the Interstate 494-694 loop get overshadowed by the outsized influence of the Twin Cities on Minnesota’s overall employment statistics (see Figure 1).

Each region has a set of occupations that distinguish it from other parts of the state – occupations that are highly concentrated due to the unique structure of the regional economy. As the primary

employment center, the Twin Cities has about 80 percent of the state’s computer and mathematical, legal, and business and financial occupations.

Many of the distinguishing occupations in Greater Minnesota are well known. Southeast Minnesota is world renowned for its concentration of health care practitioners and support occupations, as well as life, physical and social sciences professionals. Central Minnesota has strengths in blue collar areas like production; transportation and material moving; installation, maintenance and repair; construction and extraction; and education, training and library jobs.

Southwest and Northwest Minnesota both stand out in the field of farming, along with production and education. Northeast, meanwhile, is notable for community and social services; natural resources-related occupations like forestry; construction and extraction; and installation, maintenance and repair (see Table 1).



Source: DEED, Occupational Employment Statistics

The unique aspects of each region's economy become clearer at the occupation level using location quotients. Location quotients (LQs) are ratios that allow the region's distribution

of employment to be compared with the state's distribution. If an LQ is equal to 1, then the occupation has the same share of total employment in the region as it does in the state. An

LQ greater than 1 indicates an occupation with a greater share of the region's total employment than is the case in the state.

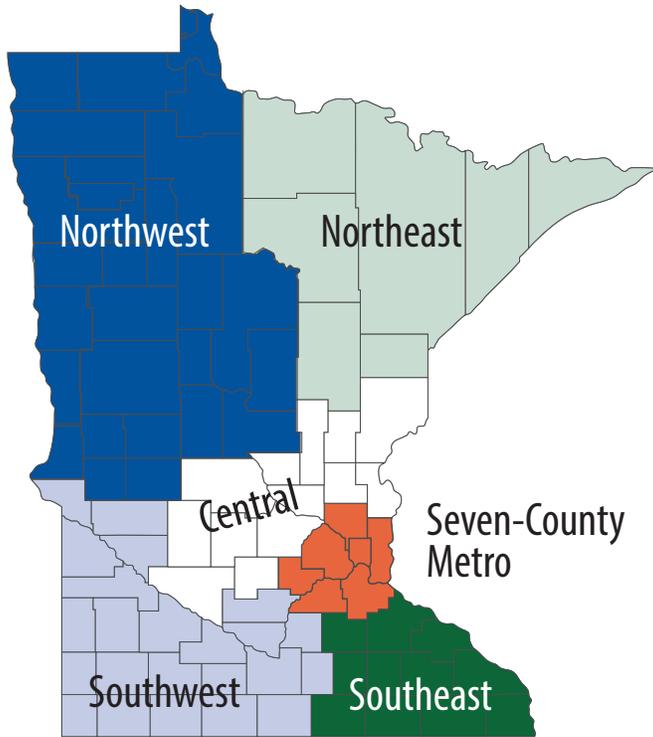
TABLE 1 **Top 5 Occupation Groups by Share of Statewide Employment by Region, 2015**

Central Minnesota Planning Region			Twin Cities Planning Region		
SOC Occupational Group Title	Estimated Regional Employment	Share of Statewide Jobs	SOC Occupational Group Title	Estimated Regional Employment	Share of Statewide Jobs
<b>Total, All Occupations</b>	<b>263,270</b>	<b>9.6%</b>	<b>Total, All Occupations</b>	<b>1,691,650</b>	<b>62.0%</b>
Production	31,390	14.4%	Computer and Mathematical	75,220	82.2%
Education, Training and Library	21,450	13.7%	Legal	14,710	80.3%
Transportation and Material Moving	20,940	12.5%	Business and Financial Operations	124,780	78.0%
Installation, Maintenance and Repair	11,520	12.2%	Arts, Design, Entertainment and Media	27,000	74.1%
Construction and Extraction	10,980	12.0%	Architecture and Engineering	37,380	73.3%
Northeast Minnesota Planning Region			Northwest Minnesota Planning Region		
SOC Occupational Group Title	Estimated Regional Employment	Share of Statewide Jobs	SOC Occupational Group Title	Estimated Regional Employment	Share of Statewide Jobs
<b>Total, All Occupations</b>	<b>141,800</b>	<b>5.2%</b>	<b>Total, All Occupations</b>	<b>203,060</b>	<b>7.4%</b>
Community and Social Services	4,440	9.0%	Farming, Fishing and Forestry	860	24.1%
Farming, Fishing and Forestry	290	8.1%	Protective Service	5,260	12.0%
Life, Physical and Social Science	1,870	7.7%	Production	24,650	11.3%
Installation, Maintenance and Repair	7,060	7.5%	Education, Training and Library	17,270	11.1%
Construction and Extraction	6,360	7.0%	Community and Social Services	5,010	10.2%
Southeast Minnesota Planning Region			Southwest Minnesota Planning Region		
SOC Occupational Group Title	Estimated Regional Employment	Share of Statewide Jobs	SOC Occupational Group Title	Estimated Regional Employment	Share of Statewide Jobs
<b>Total, All Occupations</b>	<b>253,990</b>	<b>9.3%</b>	<b>Total, All Occupations</b>	<b>177,030</b>	<b>6.5%</b>
Health Care Practitioners and Technical	30,490	19.0%	Farming, Fishing and Forestry	700	19.6%
Health Care Support	13,660	15.3%	Production	27,100	12.4%
Life, Physical and Social Science	3,590	14.7%	Education, Training and Library	17,280	11.1%
Production	27,210	12.5%	Health Care Support	8,010	9.0%
Computer and Mathematical	9,220	10.1%	Transportation and Material Moving	12,930	7.7%

Source: DEED Occupational Employment Statistics

MAP 1

**Minnesota's Planning Regions**



**Central Minnesota**

As noted above, production occupations are the most strongly concentrated in Central Minnesota, and that is reflected in the more detailed six-digit SOC (Standard Occupational Classification) codes as well. Eight of the region's top 10 LQs are concentrated in production occupations, including ophthalmic lab technicians working in the region's small optical lens manufacturing cluster; lathe and turning machine setters and painting and coating workers who serve the region's huge fabricated metal product, machinery and transportation equipment manufacturing industries; slaughterers and meat packers; and woodworking and sawing machine setters in the region's

TABLE 2 **Top 10 Highly Concentrated Occupations in Central Minnesota**

SOC Occupational Title	Estimated Regional Employment	Median Hourly Wage	Location Quotient
<b>Total, All Occupations</b>	<b>263,270</b>	<b>\$16.66</b>	<b>1.0</b>
Floor Layers, Except Carpet, Wood and Hard Tiles	30	\$17.58	5.2
Ophthalmic Laboratory Technicians	580	\$13.00	4.7
Lathe and Turning Machine Tool Setters, Metal and Plastic	220	\$20.28	4.1
Slaughterers and Meat Packers	2,620	\$13.05	3.5
Woodworking Machine Setters, Except Sawing	510	\$14.07	3.3
Sawing Machine Setters, Operators and Tenders, Wood	320	\$16.41	3.1
Painting, Coating and Decorating Workers	150	\$14.61	3.0
Etchers and Engravers	40	\$18.41	3.0
Electrical Power-Line Installers and Repairers	820	\$35.96	2.9
Coating, Painting and Spraying Machine Setters	700	\$19.52	2.7

Source: DEED Occupational Employment Statistics

highly concentrated kitchen cabinet manufacturing sector. The highest LQ was for floor layers, serving the region's booming construction industry (see Table 2).

### Northeast Minnesota

Northeast Minnesota's natural resources and amenities provide the backdrop for the region's distinguishing occupations, covering timber industry-related positions like logging equipment operators, foresters and furnace, kiln, oven, drier and kettle operators. Other distinguishing occupations include mining-related trades like explosives workers, mobile heavy equipment mechanics and tower equipment installers; as well as tourism-related positions like tour guides and escorts (see Table 3).



TABLE 3 **Top 10 Highly Concentrated Occupations in Northeast Minnesota**

SOC Occupational Title	Estimated Regional Employment	Median Hourly Wage	Location Quotient
<b>Total, All Occupations</b>	<b>141,800</b>	<b>\$16.58</b>	<b>1.0</b>
Logging Equipment Operators	190	\$17.11	19.3
Furnace, Kiln, Oven, Drier and Kettle Operators	330	\$21.81	11.2
Tour Guides and Escorts	110	\$13.48	6.8
Stonemasons	20	\$24.31	6.4
Foresters	150	\$28.77	5.9
Explosives Workers and Ordnance Handling Experts	20	\$30.76	5.5
Mobile Heavy Equipment Mechanics, Except Engines	1,020	\$26.11	4.8
Radio, Cellular and Tower Equipment Installers	40	\$32.54	4.5
Power Plant Operators	180	\$31.05	4.2
Mental Health and Substance Abuse Social Workers	420	\$21.81	3.9

Source: DEED Occupational Employment Statistics

### Northwest Minnesota

Growing off the region’s strong agriculture and related food manufacturing industry, four of the top 10 occupations with the highest location quotients in Northwest Minnesota are food roasting, baking and drying operators; livestock farm workers; agricultural product graders and sorters; and food cooking machine operators. The rest of the region’s distinguishing occupations are mental health counselors, gaming workers, cementing and gluing machine operators, bailiffs, upholsterers and high school vocational education teachers (see Table 4).

### Southeast Minnesota

Led by the Mayo Clinic in the Rochester metropolitan area, Southeast Minnesota is the

only region with a health care-related occupation in its top 10. In fact, eight of its top 10 occupations are in that field, ranging from health care support workers to anesthesiologists. Many of these health care and life science occupations require postsecondary education and, in turn, earn healthy wages. The other two occupations were in production: food cooking machine operators and model makers (see Table 5).

### Southwest Minnesota

Six of the top 10 occupations in Southwest Minnesota are related to agriculture in some way. They include agricultural equipment operators who plant and harvest crops, meat cutters and packers who process the region’s livestock, agricultural inspectors who ensure quality food is being

produced, purchasing agents who get products to and from markets, and wind turbine service technicians who help harvest the region’s newest crop: wind power. The region’s strong manufacturing sector also relies on the high concentration of coil winders, conveyor operators, and structural iron and steel workers. Interestingly, Southwest is the only region where the occupation with the highest location quotient is also the largest occupation in the region (see Table 6).

While some of these occupations provide a relatively small number of jobs, they still can have a large impact on the region’s economy. These distinguishing occupations have grown and flourished to serve each region’s unique industry mix, while also setting each region apart. **T**

TABLE 4 **Top 10 Highly Concentrated Occupations in Northwest Minnesota**

SOC Occupational Title	Estimated Regional Employment	Median Hourly Wage	Location Quotient
<b>Total, All Occupations</b>	<b>203,060</b>	<b>\$15.42</b>	<b>1.0</b>
Food Roasting, Baking and Drying Machine Operators	170	\$18.92	7.9
Farmworkers, Farm and Ranch Animals	250	\$9.49	5.9
Graders and Sorters, Agricultural Products	60	\$18.86	5.8
Mental Health Counselors	290	\$19.65	5.7
Gaming and Sports Book Writers and Runners	320	\$10.65	5.2
Cementing and Gluing Machine Operators and Tenders	180	\$14.36	4.9
Bailiffs	70	\$18.88	4.7
Food Cooking Machine Operators and Tenders	420	\$19.54	4.7
Upholsterers	110	\$15.24	4.5
Vocational Education Teachers, Secondary School	120	\$49,401 *	4.0

\*OES only publishes annual wage data for teachers.

Source: DEED Occupational Employment Statistics

TABLE 5

**Top 10 Highly Concentrated Occupations in Southeast Minnesota**

SOC Occupational Title	Estimated Regional Employment	Median Hourly Wage	Location Quotient
<b>Total, All Occupations</b>	<b>253,990</b>	<b>\$17.74</b>	<b>1.0</b>
Food Cooking Machine Operators and Tenders	880	\$16.86	7.8
Health Care Support Workers, All Other	2,180	\$18.89	7.1
Medical and Clinical Laboratory Technologists	2,150	\$30.98	6.6
Life Scientists, All Other	440	\$29.44	6.4
Biological Technicians	600	\$35.15	6.1
Medical Equipment Preparers	710	\$17.62	6.1
Nuclear Medicine Technologists	150	\$41.68	6.0
Model Makers, Metal and Plastic	130	\$16.13	5.6
Anesthesiologists	530	\$85.23	5.5
Health Technologists and Technicians, All Other	900	\$31.00	5.5

Source: DEED Occupational Employment Statistics

TABLE 6

**Top 10 Highly Concentrated Occupations in Southwest Minnesota**

SOC Occupational Title	Estimated Regional Employment	Median Hourly Wage	Location Quotient
<b>Total, All Occupations</b>	<b>177,030</b>	<b>\$15.48</b>	<b>1.0</b>
Slaughterers and Meat Packers	6,010	\$13.66	11.9
Coil Winders, Tapers and Finishers	160	\$17.28	5.6
Agricultural Equipment Operators	240	\$14.36	5.5
Meat, Poultry, and Fish Cutters and Trimmers	720	\$11.44	5.3
Purchasing Agents and Buyers, Farm Products	100	\$30.64	5.1
Agricultural Inspectors	90	\$21.05	4.8
Physics Teachers, Postsecondary	50	\$54,813*	4.5
Conveyor Operators and Tenders	260	\$14.79	4.4
Structural Iron and Steel Workers	200	\$18.61	4.3
Wind Turbine Service Technicians	60	\$23.28	4.2

\*OES only publishes annual wage data for teachers.

Source: DEED Occupational Employment Statistics