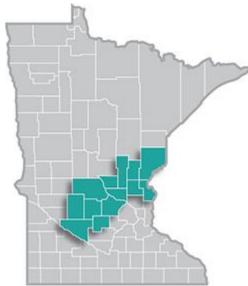
Central Minnesota – Manufacturing Overview



According to DEED's Quarterly Census of Employment and Wages (QCEW) data, the 13-county Central Minnesota region was home to 1,185 manufacturing establishments providing 42,346 jobs through the third quarter of 2019. Manufacturing accounted for 15.1 percent of total employment in the region, making it the second largest industry behind health care and social assistance (49,935 jobs) and having slightly more jobs than retail trade (36,754 jobs).

These manufacturers provided about \$565 million in total payroll in the third quarter of 2019, making it the second largest industry in terms of payroll as well. Average annual wages in manufacturing were \$53,352 in 2019, which was over \$8,000 and 18.5 percent higher than the total of all industries (see Table 1).

| Table 1 | . Central Minnesota Manufacturing Industry | Employmen | t Statistics | , Quarter 3 2019 | |
|---------|---|----------------|--------------|--------------------|-------------|
| NAICS | NAICS Industry Title | Number | Number | Quarterly Payroll, | Avg. Annual |
| Code | | of Firms, | of Jobs, | Q3 2019 | Wages, |
| | | Q3 2019 | Q3 2019 | | Q3 2019 |
| 0 | Total, All Industries | 18,351 | 280,105 | \$3,155,584,289 | \$45,032 |
| 31 | Manufacturing | 1,185 | 42,346 | \$564,893,620 | \$53,352 |
| 332 | Fabricated Metal Product Manufacturing | 313 | 8,013 | \$117,186,006 | \$58,448 |
| 311 | Food Manufacturing | 102 | 7,973 | \$98,480,928 | \$49,400 |
| 333 | Machinery Manufacturing | 128 | 3,937 | \$57,097,859 | \$57,980 |
| 326 | Plastics and Rubber Products Manufacturing | 65 | 3,072 | \$38,350,949 | \$49,920 |
| 337 | Furniture and Related Product Manufacturing | 103 | 2,794 | \$34,385,369 | \$49,192 |
| 336 | Transportation Equipment Manufacturing | 39 | 2,662 | \$34,036,377 | \$51,116 |
| 327 | Nonmetallic Mineral Product Manufacturing | 83 | 2,337 | \$33,207,356 | \$56,836 |
| 322 | Paper Manufacturing | 11 | 2,087 | \$33,323,982 | \$63,856 |
| 339 | Miscellaneous Manufacturing | 96 | 2,084 | \$25,508,861 | \$48,932 |
| 323 | Printing and Related Support Activities | 66 | 1,451 | \$16,710,747 | \$46,020 |
| 334 | Computer and Electronic Prod. Manufacturing | 28 | 1,401 | \$20,841,933 | \$59,488 |
| 321 | Wood Product Manufacturing | 56 | 959 | \$11,271,973 | \$47,008 |
| 331 | Primary Metal Manufacturing | 8 | 843 | \$11,727,593 | \$55,640 |
| 312 | Beverage and Tobacco Product Manufacturing | 22 | 842 | \$10,346,502 | \$49,140 |
| 335 | Electrical Equipment Manufacturing | 12 | 809 | \$9,597,044 | \$47,424 |
| 325 | Chemical Manufacturing | 21 | 649 | \$9,347,967 | \$57,564 |
| 314 | Textile Product Mills | 23 | 355 | \$2,998,008 | \$33,748 |
| | Source: DEED Que | arterly Census | s of Employr | nent & Wages (QCE | W) program |

Fabricated Metal Product Manufacturing was the largest sector in Central Minnesota, with 8,013 jobs at 313 establishments, and just over \$117 million in quarterly payroll. The largest subsectors in Fabricated Metal Product Manufacturing include Machine Shops (2,987 jobs), Architectural and Structural Metals Manufacturing (1,959 jobs), and Other Fabricated Metal Product Manufacturing (1,180 jobs). The Central region also had notable employment in Forging and Stamping, Boiler Tank and Shipping Container Manufacturing, and Coating, Engraving, Heat Treating, and Allied Activities.



The second largest manufacturing sector in the region is Food Manufacturing with 7,973 jobs at 102 firms. The largest subsectors in Food Manufacturing include Animal Slaughtering and Processing (3,683 jobs), Other Food Manufacturing (1,253 jobs), and Animal Food Manufacturing (710 jobs).

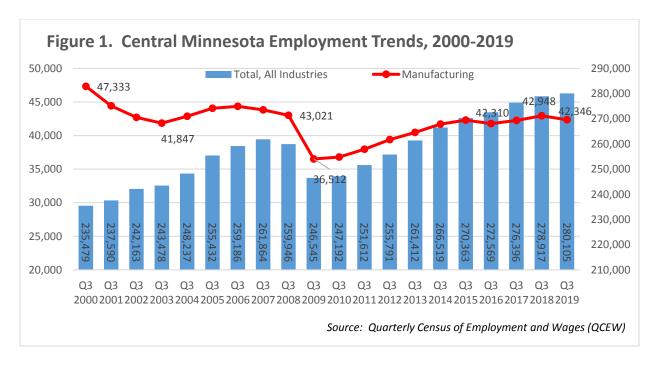
Combined, those two sectors accounted for over one-third (37.7%) of the region's manufacturing jobs. Central Minnesota also had notable numbers of jobs in Machinery Manufacturing (3,937 jobs), Plastics and Rubber Products Manufacturing (3,072 jobs), and Furniture and Related Product Manufacturing (2,794 jobs). Those three sectors combined for almost one-quarter (23.1%) of total manufacturing employment in the region.

Central Minnesota also has considerable employment numbers in the Transportation Equipment Manufacturing (2,662 jobs), Nonmetallic Mineral Product Manufacturing (2,337 jobs), Paper Manufacturing (2,087 jobs), Miscellaneous Manufacturing (2,084 jobs), Printing and Related Support Activities (1,451 jobs), Computer and Electronic Product Manufacturing (1,401 jobs), and Wood Product Manufacturing (959 jobs) sectors.

Average annual wages in manufacturing (\$53,352) were 18.5 percent higher than the total of all industries (\$45,032), led by high average annual wages in Paper Manufacturing (\$63,856), Computer and Electronic Product Manufacturing (\$59,488), Fabricated Metal Product Manufacturing (\$58,448) Machinery Manufacturing (\$57,980), and Chemical Manufacturing (\$57,564).

Industry Trends

Manufacturers in Central Minnesota cut about 5,500 jobs during the 2001 recession, then enjoyed a slight recovery and mostly held steady from 2003 to 2008. The region's manufacturers suffered even more significant job losses during the recession from 2008 to 2010, dropping 6,509 jobs in one year, to a low of 36,512 jobs through the third quarter of 2009. However, manufacturers in the region have again enjoyed a slow but steady recovery, regaining about 5,800 net new jobs over that time period, nearly recovering all jobs that were lost (see Figure 1).





Since the end of the recession, manufacturers in Central Minnesota now have 5,834 more jobs than ten years ago, in 2009. Manufacturing employment was up 16.0 percent from 2009 to 2019, while the total of all industries surpassed its pre-recession peak in 2013 and is now up about 33,500 jobs since 2009, a 13.6 percent increase in jobs.

In sum, 13 of the 16 manufacturing sectors had more jobs in 2019 than in 2009, including ten that increased more than 20 percent of their employment. The largest job gains occurred in Machinery Manufacturing, which added 1,249 jobs, based on expansions in Material Handling Equipment Manufacturing and Packaging Machinery Manufacturing. The other large growth was in Fabricated Metal Product Manufacturing, which expanded by 947 jobs. Northwest Minnesota also saw important job gains in Food Manufacturing, Transportation Equipment Manufacturing, Nonmetallic Mineral Product Manufacturing, Plastics and Rubber Products Manufacturing, and Computer and Electronic Product Manufacturing.

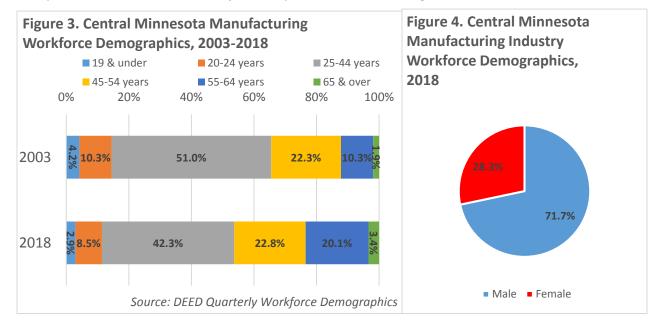
The biggest job declines in the past decade occurred in Wood Product Manufacturing, which sliced 475 jobs from 2009 to 2019, 12 percent of its previous employment level. The losses were heaviest in Other Wood Product Manufacturing, which cut over 450 jobs from 2009 to 2019. The other large decline in the region occurred in the Furniture and Related Product Manufacturing sector, which eliminated 287 jobs over the last 10 years.

Encouragingly, 10 of the 17 sectors added jobs since the third quarter of 2014, while only 8 of the 17 sectors gained jobs in the past year. Similar to the ten-year trends, the most notable recoveries in the past five years occurred in Machinery Manufacturing, Plastics and Rubber Products Manufacturing and Nonmetallic Mineral Product Manufacturing (see Table 2).

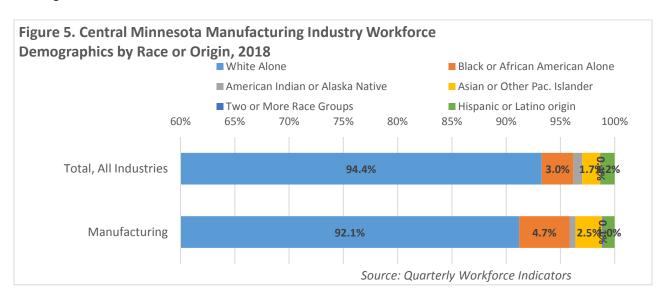
| Table 2. Central Minnesota Manufacturing Industry Trends, 2009-2019 | | | | | | | | |
|---|----------|--------------------------|---------------|-------------|---------------|------------|----------|--|
| | | 1-Year | ar Trend, 5-Y | | 5-Year Trend, | | r Trend, | |
| NAICS Industry Title | Number | Q3 2018- | Q3 2019 | Q3 2014 | -Q3 2019 | Q3 2009 | -Q3 2019 | |
| | of Jobs, | Numeric | Percent | Numeric | Percent | Numeric | Percent | |
| | Q3 2019 | Change | Change | Change | Change | Change | Change | |
| Total, All Industries | 280,105 | +1,188 | +0.4% | +13,586 | +5.1% | +33,560 | +13.6% | |
| Manufacturing | 42,346 | -60 2 | -1.4% | +635 | +1.5% | +5,834 | +16.0% | |
| Fabricated Metal Product Mfg. | 8,013 | +289 | +3.7% | +633 | +8.6% | +2,423 | +43.3% | |
| Food Mfg. | 7,973 | <i>-736</i> | -8.5% | -73 | -0.9% | +444 | +5.9% | |
| Machinery Mfg. | 3,937 | -14 | -0.4% | +579 | +17.2% | +1,273 | +47.8% | |
| Plastics & Rubber Products Mfg. | 3,072 | +105 | +3.5% | +388 | +14.5% | +1,044 | +51.5% | |
| Furniture & Related Product Mfg. | 2,794 | +4 | +0.1% | +170 | +6.5% | +801 | +40.2% | |
| Transportation Equipment Mfg. | 2,662 | +76 | +2.9% | -250 | -8.6% | +797 | +42.7% | |
| Nonmetallic Mineral Product Mfg. | 2,337 | <i>-35</i> | -1.5% | +293 | +14.3% | +195 | +9.1% | |
| Paper Mfg. | 2,087 | -131 | -5.9% | +8 | +0.4% | -199 | -8.7% | |
| Miscellaneous Mfg. | 2,084 | +129 | +6.6% | +157 | +8.1% | +811 | +63.7% | |
| Printing & Related Support Act. | 1,451 | -37 | -2.5% | -849 | -36.9% | -1,279 | -46.8% | |
| Computer & Electronic Prod Mfg. | 1,401 | -52 | -3.6% | -279 | -16.6% | -605 | -30.2% | |
| Wood Product Mfg. | 959 | -13 | -1.3% | -176 | -15.5% | -27 | -2.7% | |
| Primary Metal Mfg. | 843 | +34 | +4.2% | +452 | +115.6% | #N/A | #N/A | |
| Beverage & Tobacco Product Mfg. | 842 | +79 | +10.4% | +235 | +38.7% | +405 | +92.7% | |
| Electrical Equipment, Applia. Mfg. | 809 | -247 | -23.4% | -721 | -47.1% | -993 | -55.1% | |
| Chemical Mfg. | 649 | -89 | -12.1% | +185 | +39.9% | +415 | +177.4% | |
| Textile Product Mills | 355 | +40 | +12.7% | -105 | -22.8% | -94 | -20.9% | |
| | Source | : DEED <mark>Ouar</mark> | terly Censu | s of Employ | ment & Wo | iges (OCFW | nrogram | |



New graduates and other jobseekers will be important in filling the workforce pipeline in the manufacturing industry, which relies on a relatively old workforce. In 2018, nearly one-fourth (23.5%) of workers in the industry were 55 years or older, up from just 12.2 percent of the workforce back in 2003. In contrast, less than 11.4 percent of workers in the industry were under 25 years of age, down from almost 14.5 percent in 2003. Likewise, the percent of workers from 25 to 44 years of age dropped from 51.0 percent of the total in 2003 to just 42.3 percent in 2018 (see Figure 3).



Further demographic data from DEED's Quarterly Employment Demographics program shows that the manufacturing industry is relatively non-diverse, with males accounting for 72 percent of workers (see Figure 4), and about 92 percent reporting white as their race (see Figure 5). It should be noted that the Manufacturing industry has a greater concentration of non-white workers than do the total of all industries in the region with Black or African Americans making up 4.7 percent of the workforce and Asian or Other Pacific Islander making up 2.5 percent. In the face of tight labor markets, manufacturers may need to tap into new labor pools in order to attract the talent they need to grow and replace existing workers.





Industry Demand

The steady recovery in manufacturing employment in recent years has led to a steadily increasing number of <u>job vacancies</u> across the Central Minnesota region as well, with demand reaching levels never before seen. The 2,092 job vacancies reported by manufacturing employers in the second quarter of 2019 was the highest number ever posted, and was nearly seven times more openings than the 302 vacancies posted in 2009, in the midst of the recession (see Figure 2).



The median wage offer for these vacancies held steady at about \$15.33 per hour in the second quarter of 2019 and 41 percent of the manufacturing vacancies required at least 1 year of experience and 28 percent requiring postsecondary education, which was similar to past years. Only 3 percent of posted manufacturing openings were part-time, as compared to 38 percent of vacancies across all industries (see Table 3).

| Table 3. Central Minnesota Manufacturing Job Vacancy Survey, 2 nd Quarter 2019 | | | | | | | | |
|---|-----------|---------|-----------|-------------------|-----------------------------|--|--|--|
| NAICS Industry Title | Number of | Median | Percent | Percent Requiring | Percent Requiring | | | |
| | Job | Wage | Part-time | Postsecondary | 1+ Years Work | | | |
| | Vacancies | Offer | | Education | Experience | | | |
| Total, All Industries | 13,434 | \$14.55 | 38% | 28% | 41% | | | |
| Manufacturing | 2,092 | \$15.33 | 3% | 30% | 41% | | | |
| | | | | Source: DEE | D <u>Job Vacancy Survey</u> | | | |

The largest number of manufacturing vacancies were for transportation and material moving occupations with 1,526 vacancies with a median wage offer of \$18.83. Next was production occupations, including metal and plastic workers, food processing workers, assemblers and fabricators, supervisors of production workers, textile and furnishing workers, and other production occupations. The median wage offer for these positions was \$14.98, but ranged between \$11 and \$32 per hour. Manufacturers in Central Minnesota were also looking to hire sales and office, installation, maintenance, and repair workers, management, and engineering occupations (see Table 4).



| Table 4. Central Minnesota Production Occupations Job Vacancy Survey, 2 nd Quarter 2019 | | | | | | | |
|--|-----------|---------|-----------|--------------------------|---------------------------------|--|--|
| | Number of | Median | Percent | Percent Requiring | Percent Requiring | | |
| | Job | Wage | Part-time | Postsecondary | 1+ Years Work | | |
| SOC Occupational Title | Vacancies | Offer | | Education | Experience | | |
| Total, All Occupations | 13,434 | \$14.55 | 38% | 28% | 41% | | |
| Production Occupations | 1,432 | \$14.98 | 6% | 16% | 29% | | |
| Supervisors of Production Workers | 107 | \$32.13 | 0% | 78% | 96% | | |
| Assemblers & Fabricators | 260 | \$13.77 | 0% | 6% | 22% | | |
| Food Processing Workers | 140 | \$12.26 | 40% | 0% | 14% | | |
| Metal Workers & Plastics Workers | 324 | \$17.81 | 0% | 38% | 53% | | |
| Textile, Apparel, & Furnishing Workers | 16 | \$13.41 | 58% | 0% | 0% | | |
| Other Production Occupations | 515 | \$14.83 | 5% | 0% | 7% | | |
| Woodworkers | 50 | \$14.72 | 0% | 0% | 33% | | |
| Plant and System Operators | 5 | \$19.04 | 0% | 0% | 40% | | |
| Office & Administrative Support | 756 | \$14.04 | 41% | 10% | 52% | | |
| Transportation & Material Moving | 1,526 | \$18.83 | 33% | 6% | 55% | | |
| Architecture & Engineering | 235 | \$32.58 | 0% | 97% | 94% | | |
| Management | 258 | \$38.08 | 3% | 88% | 97% | | |
| Installation, Maintenance, & Repair | 423 | \$18.63 | 6% | 54% | 58% | | |
| Sales & Related | 1,879 | \$11.73 | 55% | 2% | 22% | | |
| | | | | Source: DEEL | Source: DEED Job Vacancy Survey | | |

Industry Occupational Employment

DEED's Occupational Employment Statistics (OES) program provides detailed employment and wage data for a wide range of occupations involved in manufacturing. In sum, there were an estimated 33,920 people working in production occupations in Central Minnesota, accounting for about 11.8 percent of total employment in the region. Median hourly wages for production occupations were \$18.88 in 2019, but ranged from \$12.28 at the low end to \$46.24 at the high end.

As noted above, in addition to production occupations, manufacturers also require the services of workers in several other occupational groups, such as office and administrative support, transportation and material moving, architecture and engineering, management, and installation, maintenance and repair. Not surprisingly, wages were higher for the higher level positions (see Table 5).

| Table 5. Central Minnesota Occupational Employment & Wage Statistics, 2019 | | | | | | | |
|--|----------------|--------------------|--------------------|--------------------|--|--|--|
| | Estimated | Regional | Estimated | Statewide | | | |
| | Regional | Median | Statewide | Median | | | |
| SOC Occupational Title | Employment | Hourly Wage | Employment | Hourly Wage | | | |
| Total, All Occupations | 286,270 | \$18.94 | 2,867,700 | \$20.95 | | | |
| Production Occupations | 33,920 | \$18.88 | 214,230 | \$18.68 | | | |
| Office & Administrative Support | 39,130 | \$18.22 | 405,970 | \$19.10 | | | |
| Transportation & Material Moving | 20,530 | \$18.65 | 177,580 | \$18.48 | | | |
| Architecture & Engineering | 4,680 | \$32.85 | 56,070 | \$37.53 | | | |
| Management | 13,540 | \$42.76 | 171,250 | \$51.26 | | | |
| Installation, Maintenance, & Repair | 12,010 | \$22.08 | 100,030 | \$23.13 | | | |
| Sales & Related | 29,050 | \$13.96 | 277,070 | \$14.97 | | | |
| Business & Financial Operations | 9,830 | \$29.04 | 164,510 | \$33.03 | | | |
| Computer & Mathematical | 4,470 | \$32.26 | 96,020 | \$40.96 | | | |
| | Source: DEED O | ccupational Emp | loyment Statistics | s (OES) program | | | |



Team assemblers, machinists, first-line supervisors, and more are the most common jobs found at manufacturing firms in Minnesota, according to DEED's Occupational Staffing Matrix data. Median hourly wages for these manufacturing positions ranged from a low of less than \$12 per hour for packers and packagers to a high of \$30 per hour for first-line supervisors of production and operating workers. Almost all of the production-related manufacturing occupations can be gained with a high school diploma and learned through on-the-job training, though some also benefit from vocational training or associate degrees (see Table 6).

| Table 6 | . Central Minnesota Top 30 Production-related Manufac | turing Occup | ations, 2 | 019 Wage Data |
|---------|--|---------------|-------------|---------------------------------|
| | | Estimated | Median | Minnesota |
| SOC | | Regional | Hourly | Educational Requirements |
| Code | SOC Occupational Title | Employment | Wage | for Occupations |
| 512092 | Team & All Other Assemblers | 4,460 | \$17.32 | High School or equiv. |
| 511011 | First-Line Supervisors of Production & Operating Workers | 1,700 | \$30.04 | High School or equiv. |
| 514041 | Machinists | 2,170 | \$23.96 | Vocational training |
| 513023 | Slaughterers & Meat Packers | 1,290 | \$15.51 | High School or equiv. |
| 519111 | Packaging & Filling Machine Operators & Tenders | 1,390 | \$16.44 | High School or equiv. |
| 514121 | Welders, Cutters, Solderers, & Brazers | 2,100 | \$22.44 | High School or equiv. |
| 519061 | Inspectors, Testers, Sorters, Samplers, & Weighers | 1,350 | \$19.48 | High School or equiv. |
| 537062 | Laborers & Freight, Stock, & Material Movers, Hand | 4,290 | \$16.75 | High School or equiv. |
| 514031 | Cutting, Punching, & Press Machine Setters, Metal/Plastic | 790 | \$19.05 | High School or equiv. |
| 515112 | Printing Press Operators | 460 | \$20.27 | High School or equiv. |
| 499041 | Industrial Machinery Mechanics | 890 | \$26.45 | Vocational training |
| 512028 | Electrical & Electronic Equipment Assemblers | 490 | \$18.31 | High School or equiv. |
| 519198 | HelpersProduction Workers | 1,540 | \$14.63 | High School or equiv. |
| 514011 | Computer-Controlled Machine Tool Operators, Metal/Plastic | 610 | \$22.30 | High School or equiv. |
| 537051 | Industrial Truck & Tractor Operators | 910 | \$20.83 | High School or equiv. |
| 519199 | Production Workers, All Other | 430 | \$19.51 | High School or equiv. |
| 499071 | Maintenance & Repair Workers, General | 2,690 | \$21.02 | High School or equiv. |
| 537064 | Packers & Packagers, Hand | 1,560 | \$12.05 | High School or equiv. |
| 513099 | All other food processing workers | 140 | \$15.14 | High School or equiv. |
| 514072 | Molding, Coremaking & Casting Machine Setters & Operators | 740 | \$18.34 | High School or equiv. |
| 533032 | Truck Drivers, Heavy & Tractor-Trailer | 5,250 | \$23.28 | High School or equiv. |
| 512028 | Electromechanical Equipment Assemblers | 490 | \$18.31 | High School or equiv. |
| 519121 | Coating, Painting, & Spraying Machine Setters & Operators | 560 | \$21.68 | High School or equiv. |
| 513092 | Food Batchmakers | 600 | \$15.79 | High School or equiv. |
| 519196 | Paper Goods Machine Setters, Operators, & Tenders | 0 | \$20.18 | High School or equiv. |
| 515113 | Print Binding & Finishing Workers | 210 | \$14.91 | High School or equiv. |
| 517011 | Cabinetmakers & Bench Carpenters | 880 | \$19.80 | High School or equiv. |
| 519032 | Cutting & Slicing Machine Setters, Operators, & Tenders | 470 | \$21.52 | High School or equiv. |
| 514111 | Tool & Die Makers | 250 | \$28.50 | Vocational training |
| | Source: DEED Occupational Employment Statistics (OES) program, | Minnesota Edu | cational Re | quirements for Occupations |

In addition to the production-related occupations, manufacturers also rely heavily on sales and office workers including manufacturing sales representatives, customer service representatives, and production, planning, shipping, and traffic clerks; transportation and material moving workers such as truck drivers and packers and packagers; engineering occupations like industrial, mechanical, and electrical engineers; management positions such as industrial production and general managers; and business and financial operations occupations like accountants and auditors.



Many of these occupations require higher education, but also offer higher wages. For example, all of the engineering positions have median wages above \$35 per hour in Central Minnesota, with median wages topping \$56 per hour for engineering managers, but also require bachelor's degrees at the minimum. Likewise, software developers, industrial production managers, and general and operations managers all earn well over \$30 per hour, and all require bachelor's degrees. In contrast, sales representatives required just a high school diploma, but also offered relatively high wages (see Table 7).

| | | Estimated | Median | Minnesota |
|--------|---|------------|---------|---------------------------------|
| SOC | | Regional | Hourly | Educational Requirements |
| Code | SOC Occupational Title | Employment | Wage | for Occupations |
| 414012 | Sales Representatives, Manufacturing, exc. Technical Products | 3,200 | \$28.42 | High School or equiv. |
| 434051 | Customer Service Representatives | 5,460 | \$16.37 | High School or equiv. |
| 172112 | Industrial Engineers | 900 | \$39.62 | Bachelor's degree |
| 111021 | General & Operations Managers | 3,860 | \$40.20 | Bachelor's degree |
| 435071 | Shipping, Receiving, & Traffic Clerks | 1,590 | \$17.36 | High School or equiv. |
| 113051 | Industrial Production Managers | 660 | \$42.97 | Bachelor's degree |
| 172141 | Mechanical Engineers | 760 | \$35.58 | Bachelor's degree |
| 433031 | Bookkeeping, Accounting, & Auditing Clerks | 2,850 | \$19.90 | High School or equiv. |
| 173026 | Industrial Engineering Technicians | 300 | \$25.30 | Associate degree |
| 131023 | Purchasing Agents, exc. Wholesale, Retail & Farm Products | #N/A | #N/A | Bachelor's degree |
| 439061 | Office Clerks, General | 4,870 | \$17.60 | High School or equiv. |
| 414011 | Sales Representatives, Manufacturing, Technical Products | 150 | \$29.86 | Bachelor's degree |
| 435061 | Production, Planning, & Expediting Clerks | 660 | \$23.62 | High School or equiv. |
| 132011 | Accountants & Auditors | 1,560 | \$30.86 | Bachelor's degree |
| 435081 | Stock Clerks & Order Fillers | 4,760 | \$12.35 | High School or equiv. |
| 119041 | Engineering Managers | 300 | \$56.75 | Bachelor's degree |
| 172071 | Electrical Engineers | 410 | \$47.91 | Bachelor's degree |
| 151133 | Software Developers, Systems Software | 150 | \$42.94 | Bachelor's degree |
| 151132 | Software Developers, Applications | 800 | \$41.10 | Bachelor's degree |
| 173023 | Electrical & Electronic Engineering Technicians | 230 | \$26.01 | Associate degree |

Industry Outlook

According to DEED's 2016 to 2026 Employment Outlook data, the Central Minnesota manufacturing industry is projected to gain 2,316 jobs over the next decade, a 5.6 percent increase. This is less than the overall growth of 8.6 percent across the total of all industries in Central Minnesota, and contrasts with the state of Minnesota as a whole, which is projected to lose about 5,400 manufacturing jobs from 2016 to 2026, a 1.7 percent decline.

Thirteen of the 17 manufacturing sectors are expected to add jobs, led by continued strong growth in Fabricated Metal Product Manufacturing, which is projected to gain 1,130 net new jobs, a 16.2 percent expansion. The region may also see job growth in Machinery Manufacturing, Plastics and Rubber Products Manufacturing, Chemical Manufacturing, Miscellaneous Manufacturing, Transportation Equipment Manufacturing, and Food Manufacturing.

In contrast, four of the 17 sectors are expected to see job declines in the next decade, with the most severe losses projected in Computer and Electronic Product Manufacturing, Printing and Related Support Activities, and Textile Product Mills. Those three sectors are expected to lose almost 900 jobs combined (see Table 8).



| | 8. Central Minnesota Manufacturing | | | | |
|-------|---------------------------------------|-----------|------------|--------------------|-------------|
| NAICS | Industry | Estimated | Projected | Percent | Numeric |
| Code | | | Employment | Change | Change |
| | | 2016 | 2026 | 2016-2026 | 2016-2026 |
| 0 | Total, All Industries | 310,433 | 337,062 | +8.6% | +26,629 |
| 31 | Manufacturing | 41,361 | 43,677 | +5.6% | +2,316 |
| 311 | Food Manufacturing | 7,764 | 7,997 | +3.0% | +233 |
| 332 | Fabricated Metal Product Mfg. | 6,956 | 8,086 | +16.2% | +1,130 |
| 333 | Machinery Manufacturing | 3,719 | 4,225 | +13.6% | +506 |
| 326 | Plastics & Rubber Products Mfg. | 2843 | 3,458 | +21.6% | +615 |
| 336 | Transportation Equipment Mfg. | 2,797 | 3,038 | +8.6% | +241 |
| 337 | Furniture & Related Product Mfg. | 2705 | 2900 | +7.2% | +195 |
| 322 | Paper Manufacturing | 2166 | 2367 | +9.3% | +201 |
| 327 | Nonmetallic Mineral Product Mfg. | 2156 | 2253 | +4.5% | +97 |
| 339 | Miscellaneous Manufacturing | 2060 | 2,346 | +13.9% | +286 |
| 323 | Printing & Related Support Activities | 1,884 | 1,596 | -15.3% | -288 |
| 334 | Computer & Electronic Product Mfg. | 1574 | 1025 | -34.9% | -549 |
| 321 | Wood Product Manufacturing | 900 | 945 | +5.0% | +45 |
| 331 | Primary Metal Manufacturing | 703 | 860 | +22.3% | +157 |
| 312 | Beverage & Tobacco Product Mfg. | 651 | 864 | +32.7% | +213 |
| 325 | Chemical Manufacturing | 631 | 925 | +46.6% | +294 |
| 314 | Textile Product Mills | 497 | 456 | -8.2% | -41 |
| 315 | Apparel Manufacturing | 31 | 14 | -54.8% | -17 |
| | | | Source: D | EED <u>Employm</u> | ent Outlook |

Occupational Outlook

The projected job gains in the manufacturing industry are expected to carry over into production occupations as well, leading to a projected 4.7 percent increase from 2016 to 2026 in Central Minnesota. Also, the region is expected to have significant demand for production workers over the next ten years due to a large number of labor force exit openings – jobs that become available because the existing worker retires out of the labor force. There may be as many as 12,500 total openings for production occupations in the region due to these retirements and exit openings.

Overall, 47 of the 62 production occupations are expected to see new job growth from 2016 to 2026, led by metal workers and plastic workers, welders, cutters, solderers, and brazers, and machinists which are all expected to grow by about 15 percent. In addition to those occupations, food processing workers, supervisors of production workers, and woodworkers are expected to gain more than 180 workers in the next 10 years.

In contrast, the biggest declines are projected for team assemblers, production workers, all others, inspectors, testers, sorters, samplers, and Weighers, printing press operators and printing press operators. Fifteen of the 62 production occupations are expected to lose jobs.

Regardless of growth or decline, every occupation is expected to at least have some openings from 2016 to 2026. The largest number of total openings are projected for welders, machinists, first-line supervisors of production, helpers-production workers, team assemblers, cutting punching an press machine setters, packaging and filling machine operators, inspectors, testers, sorters, samplers, and weighers, ophthalmic laboratory technicians, and cabinetmakers and bench carpenters (see Table 9).



| SOC Code | SOC Occupational Title | Estimated Employment 2016 | Projected Employment 2026 | Percent Change 2016-2026 | Numeric Change 2016-2026 | * Labor Force Exit Openings 2016-2026 |
|-------------|---|---------------------------------|---------------------------------|--------------------------------|--------------------------------|---|
| 0 | Total, All Occupations | 310,433 | 337,062 | +8.6% | +26,629 | +157,485 |
| 510000 | Production Occupations | 30,697 | 32,129 | +4.7% | +1,432 | +12,556 |
| 512092 | Team Assemblers | 2,204 | 1,693 | -23.2% | -511 | +832 |
| 514041 | Machinists | 1,708 | 2,029 | +18.8% | +321 | +649 |
| 514121 | Welders, Cutters, Solderers, & Brazers | 2,159 | 2,531 | +17.2% | +372 | +624 |
| 512099 | Assemblers & Fabricators, All Other | 1212 | 1095 | -9.7% | <i>-117</i> | +493 |
| 511011 | First-Line Supervisors of Production Workers | 1,778 | 1,973 | +11.0% | +195 | +598 |
| 514031 | Cutting, Punching, & Press Machine Setters | 1390 | 1480 | +6.5% | +90 | +519 |
| 519111 | Packaging & Filling Machine Operators | 1,253 | 1,366 | +9.0% | +113 | +619 |
| 514011 | Computer-Controlled Machine Tool Operators | 546 | 640 | +17.2% | +94 | +164 |
| 519198 | HelpersProduction Workers | 1073 | 1203 | +12.1% | +130 | +610 |
| 518031 | Water/Wastewater Treatment Plant & System | 326 | 333 | +2.1% | +7 | +94 |
| 519061 | Inspectors, Testers, Sorters & Weighers | 1048 | 994 | -5.2% | -54 | +424 |
| 519199 | Production Workers, All Other | 570 | 453 | -20.5% | -117 | +201 |
| 512022 | Electrical & Electronic Equipment Assemblers | 198 | 160 | -19.2% | -38 | +91 |
| 516011 | Laundry & Dry-Cleaning Workers | 399 | 409 | +2.5% | +10 | +271 |
| 513099 | Food Processing Workers, All Other | 321 | 327 | +1.9% | +6 | +139 |
| 513021 | Butchers & Meat Cutters | 317 | 332 | +4.7% | +15 | +146 |
| 513011 | Bakers | 222 | 233 | +5.0% | +11 | +146 |
| 517011 | Cabinetmakers & Bench Carpenters | 894 | 977 | +9.3% | +83 | +437 |
| 515112 | Printing Press Operators | 410 | 365 | -11.0% | -45 | +151 |
| 519121 | Coating, Painting, & Spraying Machine Setters | 610 | 726 | +19.0% | +116 | +191 |
| 516031 | Sewing Machine Operators | 229 | 227 | -0.9% | -2 | +130 |
| 514072 | Molding, Coremaking & Casting Machine Setters | 661 | 708 | +7.1% | +47 | +251 |
| 519023 | Mixing & Blending Machine Setters & Operators | 341 | 394 | +15.5% | +53 | +132 |
| 517041 | Sawing Machine Setters & Operators | 285 | 322 | +13.0% | +37 | +123 |
| 514111 | Tool and Die Makers | 194 | 197 | +1.5% | +3 | +77 |

^{*} Labor Force Exit Openings are the projected number of workers leaving an occupation and exiting the labor market entirely (most labor force exits are related to workers retiring)

Source: DEED Employment Outlook



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http://www.mn.gov/deed/data/regional-lmi/central-lmi.jsp

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