

## 7-County Twin Cities Metro Area Minnesota – Manufacturing Overview



According to DEED’s [Quarterly Census of Employment and Wages](#) (QCEW) data, the 7-county Twin Cities metro area was home to 4,031 manufacturing establishments providing 175,817 jobs in 2023. That was just over half (54%) of total manufacturing employment in the state. Manufacturing accounted for 10% of total employment in the region, making it the second largest industry behind health care and social assistance (291,689 jobs), and just ahead of retail trade (154,854 jobs).

These manufacturers provided over \$15.59 billion in total payroll in 2023, again making it the second largest industry behind only health care and social assistance. Average annual wages in manufacturing were \$88,660 in 2023, which was nearly 13.1% higher than the total of all industries.

**Table 1. Twin Cities Metro Minnesota Manufacturing Industry Employment Statistics, 2023**

NAICS Code	NAICS Industry Title	Number of Jobs	Number of Firms	Total Payroll	Avg. Annual Wages
0	<b>Total, All Industries</b>	<b>1,754,325</b>	<b>93,760</b>	<b>\$137,438,189,603</b>	<b>\$78,364</b>
31	<b>Manufacturing</b>	<b>175,817</b>	<b>4,031</b>	<b>\$15,587,649,810</b>	<b>\$88,660</b>
334	Computer & Electronic Product Manufacturing	36,050	330	\$4,057,183,932	\$112,476
332	Fabricated Metal Product Manufacturing	25,848	768	\$2,094,434,436	\$81,016
339	Miscellaneous Manufacturing	22,389	627	\$1,928,790,915	\$86,164
333	Machinery Manufacturing	17,836	355	\$1,602,586,525	\$89,856
323	Printing & Related Support Activities	11,375	403	\$857,888,727	\$75,400
311	Food Manufacturing	11,002	276	\$718,961,353	\$65,364
326	Plastics & Rubber Products Manufacturing	10,483	177	\$778,686,227	\$74,204
325	Chemical Manufacturing	9,600	153	\$1,052,009,431	\$109,564
321	Wood Product Manufacturing	6,416	106	\$472,512,365	\$73,580
322	Paper Manufacturing	4,108	66	\$337,978,858	\$82,264
335	Electrical Equipment, Appliance, & Component Manufacturing	3,915	99	\$361,208,196	\$92,300
337	Furniture and Related Product Manufacturing	3,334	212	\$223,672,411	\$67,080
312	Beverage & Tobacco Product Manufacturing	3,006	113	\$153,705,161	\$51,116
331	Primary Metal Manufacturing	2,503	41	\$203,310,132	\$81,224
327	Nonmetallic Mineral Product Manufacturing	2,501	101	\$210,781,685	\$84,188
324	Petroleum & Coal Products Manufacturing	2,010	17	\$308,530,097	\$153,712
336	Transportation Equipment Manufacturing	1,949	74	\$152,315,127	\$78,208
314	Textile Product Mills	728	53	\$31,840,147	\$43,732
315	Apparel Manufacturing	361	45	\$16,467,718	\$45,552
314	Textile Mills	218	8	\$12,324,844	\$56,628
316	Leather & Allied Product Manufacturing	180	9	\$12,461,523	\$69,472

Source: Quarterly Census of Employment & Wages

Computer and Electronic Product Manufacturing was easily the largest sector in the Twin Cities, with 36,050 jobs, followed by Fabricated Metal Product Manufacturing, which had 25,848 jobs in 2023. Combined, those two sectors accounted for over one-third (35.2%) of the region’s manufacturing employment.

The region also had large numbers of jobs in Miscellaneous Manufacturing (22,389 jobs), which includes medical devices and equipment; Machinery Manufacturing (17,836 jobs), Printing and Related Support Activities (11,375 jobs), and Food Manufacturing (11,002 jobs). Those four sectors combined for another 35.6% of total manufacturing employment in the region.

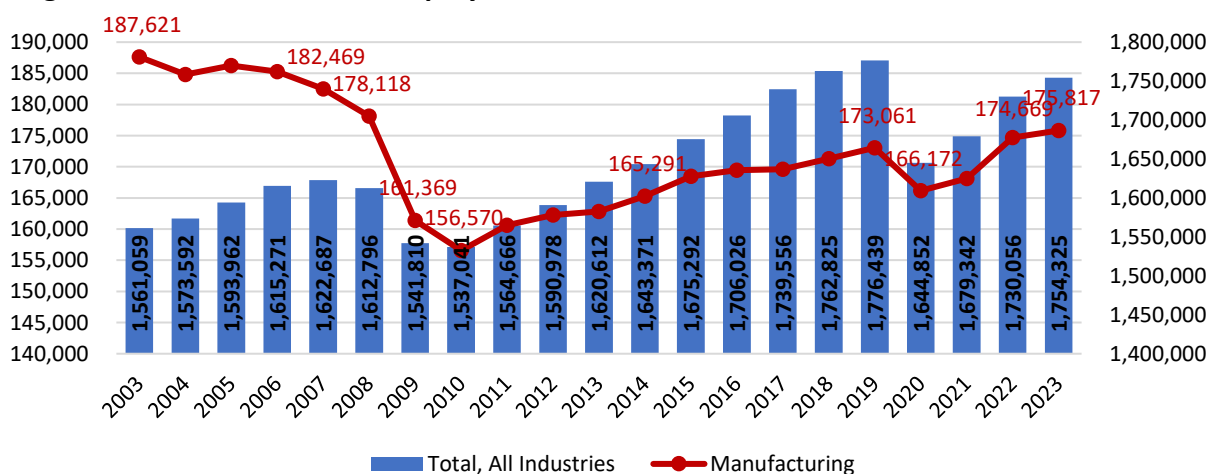
The Twin Cities also has notable employment in the Plastics and Rubber Product Manufacturing (10,483 jobs), Chemical Manufacturing (9,600 jobs), Wood Product Manufacturing (6,416 jobs), Electrical Equipment and Appliance Manufacturing (3,915 jobs), Furniture and Related Product Manufacturing (3,334 jobs), Beverage and Tobacco Product Manufacturing (3,006 jobs), and Primary Metal Manufacturing (2,503 jobs).

Average annual wages in manufacturing (\$88,660) were about 13.1% higher than the total of all industries (\$78,364), led by extremely high average weekly wages in Petroleum and Coal Products Manufacturing (\$153,712), Computer and Electronic Product Manufacturing (\$112,476), Chemical Manufacturing (\$109,564), Electrical Equipment and Appliance Manufacturing (\$92,300), Machinery Manufacturing (\$89,856), and Miscellaneous Manufacturing (\$86,164).

### Industry Trends

In the early 2000s, the manufacturing industry in the Twin Cities saw significant employment declines. During the Great Recession from 2008 to 2010, manufacturers cut 21,548 jobs, hitting a low of 156,570 jobs in 2010. However, since then, employment in the manufacturing sector has been on the rise. From 2010 to 2019, the Twin Cities Metro area added 16,491 jobs. The pandemic caused another setback, with a loss of 6,889 jobs from 2019 to 2020. Despite this, the industry has been recovering steadily, reaching 175,817 jobs in 2023.

**Figure 1. Twin Cities Metro Employment Trends, 2003-2023**



Source: Quarterly Census of Employment & Wages

Thanks to a slow ongoing recovery, manufacturers in Twin Cities Metro Area now have about 13,003 more jobs now than ten years ago, in 2013. Manufacturing employment was up 8% from 2013 to 2023, while the total of all industries increased 8.3% over the past 10 years, a gain of 133,713 jobs.

The biggest job declines in the past decade occurred in Printing and Related Support Activities, which sliced 3,092 jobs and Primary Metal Manufacturing decreased by 1,031 jobs, an 18.9% decrease. In sum, 12 of the 21 manufacturing sectors had more jobs in 2023 than in 2013, including eight that added more than 20% of their employment with the largest job gains occurring in Miscellaneous Manufacturing which gained 5,168 jobs since 2013. In addition there were large gains in Chemical Manufacturing which gained 2,797 jobs and Wood Product Manufacturing which gained 2,755 jobs since 2013.

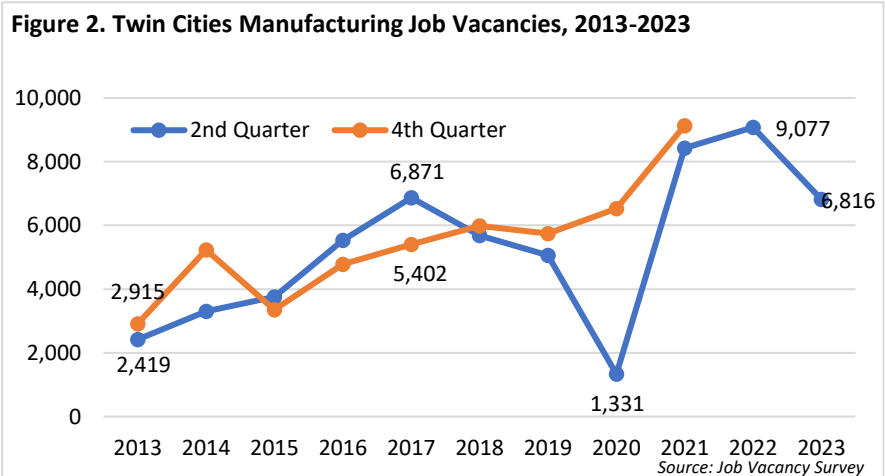
Fourteen of the 21 sectors added jobs in the past year, indicating a widespread and relatively strong recovery from the Great Recession (see Table 2). The sectors with the largest job gains include Computer and Electronic Product Manufacturing, which added 1,190 jobs, followed by Miscellaneous Manufacturing (+659 jobs) and Machinery Manufacturing (+475 jobs). The largest job declines were seen in Electrical Equipment, Appliance, and Component Manufacturing, which lost 846 jobs, followed by Furniture and Related Product Manufacturing (-778 jobs) and Plastics and Rubber Product Manufacturing, which cut 594 jobs.

Table 2. Twin Cities Metro Area Minnesota Manufacturing Industry Employment Statistics, 2023			1-Year Trend 2022-2023		5-Year Trend 2018-2022		10-Year Trend 2013-2023	
NAICS Code	NAICS Industry Title	Number of Jobs	Numeric Change	Percent Change	Numeric Change	Percent Change	Numeric Change	Percent Change
0	<b>Total, All Industries</b>	<b>1,754,325</b>	<b>24,269</b>	<b>1.4%</b>	<b>-8,500</b>	<b>-0.5%</b>	<b>133,713</b>	<b>8.3%</b>
31	<b>Manufacturing</b>	<b>175,817</b>	<b>1,148</b>	<b>0.7%</b>	<b>4,500</b>	<b>2.6%</b>	<b>13,003</b>	<b>8.0%</b>
334	Computer & Electronic Product Manufacturing	36,050	1,190	3.4%	151	0.4%	1,323	3.8%
332	Fabricated Metal Product Manufacturing	25,848	154	0.6%	927	3.7%	2,181	9.2%
339	Miscellaneous Manufacturing	22,389	659	3.0%	3,376	17.8%	5,168	30.0%
333	Machinery Manufacturing	17,836	475	2.7%	640	3.7%	815	4.8%
323	Printing & Related Support Activities	11,375	76	0.7%	-2,112	-15.7%	-3,092	-21.4%
311	Food Manufacturing	11,002	-302	-2.7%	5	0.0%	-550	-4.8%
326	Plastics & Rubber Products Manufacturing	10,483	-594	-5.4%	252	2.5%	1,999	23.6%
325	Chemical Manufacturing	9,600	286	3.1%	1,027	12.0%	2,797	41.1%
321	Wood Product Manufacturing	6,416	414	6.9%	1,533	31.4%	2,755	75.3%
322	Paper Manufacturing	4,108	244	6.3%	-65	-1.6%	-748	-15.4%
335	Electrical Equipment, Appliance, & Component Mfg.	3,915	-846	-17.8%	-438	-10.1%	-652	-14.3%
337	Furniture & Related Product Manufacturing	3,334	-778	-18.9%	-792	-19.2%	-741	-18.2%
312	Beverage & Tobacco Product Manufacturing	3,006	184	6.5%	750	33.2%	1,550	106.5%
331	Primary Metal Manufacturing	2,503	10	0.4%	-786	-23.9%	-1,031	-29.2%
327	Nonmetallic Mineral Product Manufacturing	2,501	-48	-1.9%	211	9.2%	613	32.5%
324	Petroleum a& Coal Products Manufacturing	2,010	70	3.6%	N/A	N/A	-122	-5.7%
336	Transportation Equipment Manufacturing	1,949	28	1.5%	366	23.1%	600	44.5%
314	Textile Product Mills	728	-83	-10.2%	-536	-42.4%	164	29.1%
315	Apparel Manufacturing	361	20	5.9%	-1	-0.3%	33	10.1%
314	Textile Mills	218	-15	-6.4%	13	6.3%	-30	-12.1%
316	Leather & Allied Product Manufacturing	180	2	1.1%	-10	-5.3%	-29	-13.9%

Source: Quarterly Census of Employment & Wages

### Industry Demand

The recent growth in manufacturing employment has led to an increased number of job vacancies across the Twin Cities metro area. The 9,133 job vacancies reported by manufacturing employers in the fourth quarter of 2021 was the highest number of job vacancies ever recorded. This trend continued into 2022 with 9,077 vacancies in the second quarter. More recent data shows that job vacancies dropped to 6,816, indicating levels observed before the pandemic (Figure 2).



The median wage offer for these vacancies decreased to \$23.29 per hour in the second quarter of 2023, down about \$1.30 compared to the same survey in the second quarter of 2022. Nearly 60% of the manufacturing vacancies required at least 1 year of experience, and 43% required postsecondary education. Just 3% of the openings were part-time, as compared to 27% of vacancies across all industries (see Table 3).

NAICS Industry Title	Number of Job Vacancies	Median Wage Offer	Percent Part-time	Percent Requiring Postsecondary Education	Percent Requiring 1+ Years Work Experience
Total, All Industries	78,325	\$20.47	27%	39%	50%
Manufacturing	6,816	\$23.29	3%	43%	58%

*Source: DEED Job Vacancy Survey*

The largest number of manufacturing vacancies were production occupations, including metal and plastic workers, textile and furnishing workers, food processing workers, assemblers and fabricators, printing workers, supervisors of production workers, and other production occupations. The median wage offer for these positions was \$19.51, but ranged between \$10 and \$30 per hour. Manufacturers in the Twin Cities were also looking to hire sales and office, transportation and material moving, engineering, management, and installation, maintenance, and repair workers (see Table 4).

SOC Occupational Title	Number of Job Vacancies	Median Wage Offer	Percent Part-time	Percent Requiring Postsecondary Education	Percent Requiring 1+ Years Work Experience
<b>Total, All Occupations</b>	<b>78,325</b>	<b>\$20.47</b>	<b>27.0%</b>	<b>39.0%</b>	<b>50.0%</b>
<b>Production Occupations</b>	<b>3,134</b>	<b>\$19.51</b>	<b>4.0%</b>	<b>20.0%</b>	<b>40.0%</b>
Supervisors of Production Workers	118	\$30.98	0.0%	22.0%	95.0%
Assemblers and Fabricators	845	\$16.96	1.0%	43.0%	24.0%
Food Processing Workers	314	\$12.87	31.0%	0.0%	7.0%
Metal Workers and Plastic Workers	752	\$21.68	1.0%	8.0%	55.0%
Textile, Apparel, and Furnishings Workers	26	\$17.42	19.0%	0.0%	4.0%
Woodworkers	15	\$21.77	0.0%	0.0%	20.0%
Plant and System Operators	84	\$25.26	2.0%	9.0%	66.0%
Other Production Occupations	704	\$20.33	1.0%	24.0%	44.0%
Office and Administrative Support Occupations	5,147	\$19.56	26.0%	17.0%	60.0%
Transportation and Material Moving Occupations	4,595	\$19.23	30.0%	9.0%	29.0%
Architecture and Engineering Occupations	1,868	\$35.64	0.0%	84.0%	82.0%
Management Occupations	2,679	\$45.27	2.0%	80.0%	92.0%
Installation, Maintenance, and Repair Occupations	2,642	\$23.56	4.0%	23.0%	55.0%
Sales and Related Occupations	10,128	\$16.42	37.0%	9.0%	36.0%

*Source: DEED Job Vacancy Survey*

### Industry Occupational Employment

DEED’s Occupational Employment and Wage Statistics (OEWS) program provides detailed employment and wage data for a wide range of occupations involved in manufacturing. In sum, there were an estimated 104,740 people working in production occupations in the Twin Cities, accounting for about 6% of total employment in the region. Median hourly wages for production occupations were \$27.78 in 2024, but ranged from \$17.84 at the low end to \$36 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. Twin Cities Occupational Employment & Wage Statistics, 2024**

SOC Occupational Title	Estimated Regional Employment	Regional Median Hourly Wage	Estimated Statewide Employment	Statewide Median Hourly Wage
<b>Total, All Occupations</b>	<b>1,743,500</b>	<b>\$27.78</b>	<b>2,881,100</b>	<b>\$25.22</b>
<b>Production Occupations</b>	<b>104,740</b>	<b>\$23.44</b>	<b>203,810</b>	<b>\$23.05</b>
Office & Administrative Support	215,890	\$24.47	352,250	\$23.86
Transportation & Material Moving	129,950	\$23.46	225,820	\$22.86
Architecture & Engineering	41,270	\$46.98	58,320	\$42.97
Management	132,050	\$63.50	201,710	\$57.75
Installation, Maintenance, & Repair	55,220	\$30.28	104,530	\$29.54
Sales & Related	141,920	\$21.35	242,440	\$18.82
Business & Financial Operations	148,630	\$40.39	202,700	\$39.26
Computer & Mathematical	76,680	\$52.09	98,240	\$50.83

*Source: DEED Occupational Employment & Wage Statistics*

Team assemblers, first-line supervisors, machinists, 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 about \$14 for production helpers and packers and packagers to a high of about \$30 per hour for first-line supervisors and tool and die makers. 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. Twin Cities Top 30 Production-related Manufacturing Occupations, 2024 Wage Data**

SOC Code	SOC Occupational Title	Estimated Regional Employment	Median Hourly Wage	MN Educational Requirements for Occupations
512090	Miscellaneous Assemblers and Fabricators	27,980	\$21.85	High School or equiv.
511011	First-Line Supervisors of Production & Operating Workers	6,780	\$38.00	High School or equiv.
514041	Machinists	6,520	\$30.35	Vocational training
519111	Packaging & Filling Machine Operators & Tenders	3,230	\$20.77	High School or equiv.
514121	Welders, Cutters, Solderers, & Brazers	3,770	\$28.85	High School or equiv.
519061	Inspectors, Testers, Sorters, Samplers, & Weighers	6,140	\$25.00	High School or equiv.
537062	Laborers & Freight, Stock, & Material Movers, Hand	33,730	\$22.88	High School or equiv.
514031	Cutting, Punching, & Press Machine Setters, Metal/Plastic	2,930	\$23.79	High School or equiv.
515112	Printing Press Operators	3,920	\$23.04	High School or equiv.
499041	Industrial Machinery Mechanics	3,420	\$33.23	Vocational training
519198	Helpers--Production Workers	1,440	\$19.26	High School or equiv.
519161	Computer Numerically Controlled Tool Operators	2,020	\$24.89	High School or equiv.
537051	Industrial Truck & Tractor Operators	4,630	\$24.65	High School or equiv.
519199	Production Workers, All Other	1,520	\$21.58	High School or equiv.
499071	Maintenance & Repair Workers, General	15,810	\$28.27	High School or equiv.
537064	Packers & Packagers, Hand	3,640	\$18.85	High School or equiv.

513099	All other food processing workers	680	\$19.90	High School or equiv.
514072	Molding, Coremaking & Casting Machine Setters & Operators	1,870	\$20.45	High School or equiv.
533032	Truck Drivers, Heavy & Tractor-Trailer	18,870	\$30.79	High School or equiv.
512028	Electrical, electronic, and electromechanical assemblers	3,000	\$21.71	High School or equiv.
519124	Coating, Painting, & Spraying Machine Setters & Operators	1,300	\$24.41	High School or equiv.
513092	Food Batchmakers	2,720	\$18.67	High School or equiv.
519196	Paper Goods Machine Setters, Operators, & Tenders	1,180	\$23.51	High School or equiv.
515113	Print Binding & Finishing Workers	1,380	\$23.33	High School or equiv.
517011	Cabinetmakers & Bench Carpenters	1,080	\$23.97	High School or equiv.
519032	Cutting & Slicing Machine Setters, Operators, & Tenders	590	\$29.45	High School or equiv.
514111	Tool & Die Makers	740	\$30.67	Vocational training

*Source: DEED Occupational Employment & Wage Statistics, Minnesota Educational Requirements 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 (see Table 7).

**Table 7. Twin Cities Top 20 Office-related Manufacturing Occupations, 2024 Wage Data**

SOC Code	SOC Occupational Title	Estimated Regional Employment	Median Hourly Wage	MN Educational Requirements for Occupations
414012	Sales Representatives, Mfg., exc. Technical Products	19,760	\$38.69	High School or equiv.
434051	Customer Service Representatives	42,440	\$23.74	High School or equiv.
172112	Industrial Engineers	13,860	\$49.94	Bachelor's degree
111021	General & Operations Managers	44,460	\$51.01	Bachelor's degree
435071	Shipping, Receiving, & Traffic Clerks	8,270	\$23.15	High School or equiv.
113051	Industrial Production Managers	3,310	\$61.86	Bachelor's degree
172141	Mechanical Engineers	3,820	\$49.05	Bachelor's degree
433031	Bookkeeping, Accounting, & Auditing Clerks	16,210	\$26.12	High School or equiv.
173026	Industrial Engineering Technicians	3,670	\$33.44	Associate degree
131020	Buyers and Purchasing Agents	7,430	\$39.22	Bachelor's degree
439061	Office Clerks, General	32,970	\$23.42	High School or equiv.
414011	Sales Representatives, Mfg., Technical Products	4,360	\$48.24	Bachelor's degree
435061	Production, Planning, & Expediting Clerks	5,530	\$29.17	High School or equiv.
132011	Accountants & Auditors	21,180	\$39.33	Bachelor's degree
537065	Stockers and Order Fillers	23,360	\$19.08	High School or equiv.
119041	Engineering Managers	3,190	\$83.35	Bachelor's degree
172071	Electrical Engineers	2,820	\$51.38	Bachelor's degree
151252	Software Developers	30,950	\$63.34	Bachelor's degree
173023	Electrical & Electronic Engineering Technicians	1,160	\$35.92	Associate degree

*Source: DEED Occupational Employment & Wage Statistics, Minnesota Educational Requirements for Occupations*

### Industry Outlook

According to DEED’s 2020 to 2030 Employment Outlook data, the Twin Cities manufacturing industry is projected to gain another 1,729 jobs over the next decade, a 1% increase. That is in contrast to overall growth of

6.2% in the total of all industries in the Twin Cities, but is in line with the state of Minnesota as a whole, which is projected to gain about 3,990 manufacturing jobs from 2020 to 2030, a 1.3% increase.

Seven of the 21 sectors are expected to see job declines in the next decade, with the most severe losses projected in Printing and Related Support Activities, Paper Manufacturing, and Textile Product Mills. Those three industries are expected to lose a combined 2,850 jobs from 2020 to 2030.

Comparatively, 14 of the 21 sectors are expected to see job gains in the region. The largest gains are expected in Miscellaneous Manufacturing, Chemical Manufacturing, and Fabricated Metal Product Manufacturing. These 3 sectors are expected to gain over 600 jobs each from 2020 to 2030 (see Table 8).

**Table 8. Twin Cities Manufacturing Industry Projections, 2020-2030**

NAICS Code	Industry	Estimated Employment 2020	Projected Employment 2030	Percent Change 2020-2030	Numeric Change 2020-2030
<b>0</b>	<b>Total, All Industries</b>	<b>1,817,290</b>	<b>1,930,563</b>	<b>6.2%</b>	<b>113,273</b>
<b>31</b>	<b>Manufacturing</b>	<b>166,580</b>	<b>168,309</b>	<b>1.0%</b>	<b>1,729</b>
311	Food Manufacturing	9,921	10,334	4.2%	413
312	Beverage & Tobacco Product Manufacturing	2,009	2,047	1.9%	38
313	Textile Mills	178	168	-5.6%	-10
314	Textile Product Mills	745	646	-13.3%	-99
315	Apparel Manufacturing	313	265	-15.3%	-48
316	Leather & Allied Product Manufacturing	178	171	-3.9%	-7
321	Wood Product Manufacturing	5,273	5,325	1.0%	52
322	Paper Manufacturing	4,127	3,637	-11.9%	-490
323	Printing & Related Support Activities	11,708	9,446	-19.3%	-2,262
324	Petroleum & Coal Products Manufacturing	1,877	1,833	-2.3%	-44
325	Chemical Manufacturing	8,947	9,679	8.2%	732
326	Plastics & Rubber Products Manufacturing	9,838	10,090	2.6%	252
327	Nonmetallic Mineral Product Mfg.	2,280	2,422	6.2%	142
331	Primary Metal Manufacturing	2,773	2,806	1.2%	33
332	Fabricated Metal Product Manufacturing	24,087	24,724	2.6%	637
333	Machinery Manufacturing	15,915	16,474	3.5%	559
334	Computer & Electronic Product Mfg.	35,225	35,664	1.2%	439
335	Electrical Equipment & Appliances Mfg.	4,765	4,991	4.7%	226
336	Transportation Equipment Manufacturing	1,558	1,578	1.3%	20
337	Furniture & Related Product Mfg.	4,018	4,296	6.9%	278
339	Miscellaneous Manufacturing	20,845	21,713	4.2%	868

Source: Employment Outlook

### Occupational Outlook

The projected job gains in the manufacturing industry contrast to the projection of production occupations. Production occupations are expected to decrease by 0.6% from 2020 to 2030 in the Twin Cities. However, the region is still 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 114,737 total openings for production occupations in the region, including occupation transfer openings, or jobs that open up due to a worker changing careers.

However, 31 of the 70 production occupations are expected to see new job growth from 2020 to 2030, led by Machinists, Production Workers, All Other, Welders, Cutters, Solderers, and Brazers, Packaging and Filling

Machine Operators and Tenders, and First-Line Supervisors of Production and Operating Workers, which are all projected to grow more than 200 jobs each.

In contrast, the biggest declines are projected for Inspectors, Testers, Sorters, Samplers, and Weighers, Printing Press Operators, Print Binding and Finishing Workers, and Prepress Technicians and Workers, which are all expected to lose a combined 2,200 jobs in the next 10 years.

Regardless of growth or decline, every occupation is expected to at least have some total openings from 2020 to 2030 due to labor force exits and occupations transfers. The largest number of total openings are projected for Miscellaneous Assemblers and Fabricators, Machinists, and First-Line Supervisors of Production and Operating Workers, which are all expected to have at least 4,200 total openings in the region (see Table 9).

**Table 9. Top 25 Twin Cities Production Occupation Projections, 2020-2030**

SOC Code	SOC Occupational Title	Estimated Employment 2020	Projected Employment 2030	Percent Change 2020-2030	Numeric Change 2020-2030	* Labor Force Exit Openings 2020-2030
<b>0</b>	<b>Total, All Occupations</b>	<b>1,817,290</b>	<b>1,930,563</b>	<b>6.2%</b>	<b>113,273</b>	<b>773,335</b>
<b>510000</b>	<b>Production Occupations</b>	<b>106,474</b>	<b>105,785</b>	<b>-0.6%</b>	<b>-689</b>	<b>39,961</b>
511011	First-Line Supervisors of Production & Operating Workers	6,171	6,390	3.5%	219	1,889
512028	Electrical, electronic, & electromechanical assemblers	5,563	5,728	3.0%	165	2,269
512041	Structural Metal Fabricators & Fitters	381	340	-10.8%	-41	81
513011	Bakers	1,645	1,732	5.3%	87	940
513021	Butchers & Meat Cutters	718	694	-3.3%	-24	287
513022	Meat, Poultry, & Fish Cutters & Trimmers	131	136	3.8%	5	54
513091	Food & Tobacco Roasting, Baking, & Drying Machine Op.	133	141	6.0%	8	54
513092	Food Batchmakers	2,069	2,201	6.4%	132	992
513093	Food Cooking Machine Operators & Tenders	224	235	4.9%	11	162
513099	Food Processing Workers, All Other	121	120	-0.8%	-1	43
514021	Extruding & Drawing Machine Setters, Operators	1,012	991	-2.1%	-21	349
514023	Rolling Machine Setters, Operators, & Tenders	340	327	-3.8%	-13	116
514031	Cutting, Punching, & Press Machine Setters, Operators	2,778	2,711	-2.4%	-67	871
514032	Drilling & Boring Machine Tool Setters, Operators	111	90	-18.9%	-21	33
514033	Grinding, Lapping, Polishing, & Buffing Machine Setters	1,495	1,451	-2.9%	-44	664
514034	Lathe & Turning Machine Tool Setters, Operators	135	132	-2.2%	-3	43
514035	Milling & Planing Machine Setters, Operators	30	25	-16.7%	-5	9
514041	Machinists	6,394	6,885	7.7%	491	2,220
514051	Metal-Refining Furnace Operators & Tenders	241	249	3.3%	8	54
514052	Pourers & Casters, Metal	57	55	-3.5%	-2	12
514071	Foundry Mold & Coremakers	219	210	-4.1%	-9	70
514072	Molding, Coremaking, & Casting Machine Setters	1,924	1,891	-1.7%	-33	620
514081	Multiple Machine Tool Setters, Operators, & Tenders	1,947	2,086	7.1%	139	656
514111	Tool & Die Makers	1,322	1,297	-1.9%	-25	483
514121	Welders, Cutters, Solderers, & Brazers	3,860	4,176	8.2%	316	1,057
514122	Welding, Soldering, & Brazing Machine Operators	773	756	-2.2%	-17	201
514191	Heat Treating Equipment Setters, Operators, & Tenders	117	112	-4.3%	-5	37
514193	Plating Machine Setters, Operators, & Tenders	655	623	-4.9%	-32	208
514199	Metal Workers & Plastic Workers, All Other	277	282	1.8%	5	91
515111	Prepress Technicians & Workers	705	582	-17.4%	-123	244
515112	Printing Press Operators	3,840	3,456	-10.0%	-384	1,324

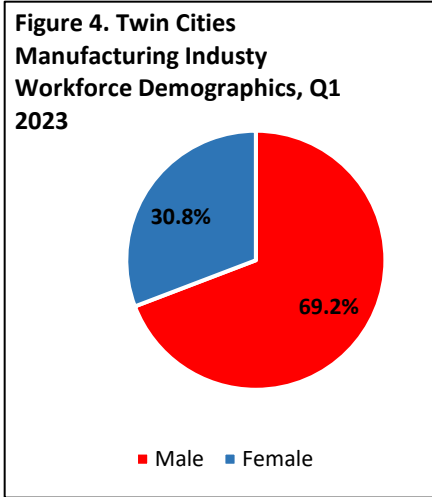
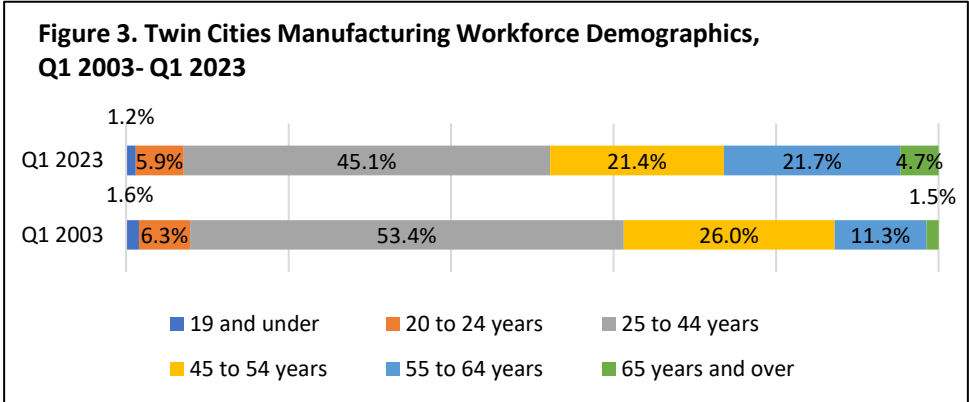


515113	Print Binding & Finishing Workers	1,197	989	-17.4%	-208	538
516011	Laundry & Dry-Cleaning Workers	1,343	1,443	7.4%	100	901
516021	Pressers, Textile, Garment, & Related Materials	385	342	-11.2%	-43	160
516031	Sewing Machine Operators	1,328	1,263	-4.9%	-65	784
516062	Textile Cutting Machine Setters, Operators, & Tenders	76	68	-10.5%	-8	39
516063	Textile Knitting & Weaving Machine Setters, Operators	42	40	-4.8%	-2	22
516064	Textile Winding, Twisting, & Drawing Machine Setters	26	26	0.0%	0	14
517011	Cabinetmakers & Bench Carpenters	1,279	1,416	10.7%	137	507
517021	Furniture Finishers	265	299	12.8%	34	166
518012	Power Distributors & Dispatchers	78	69	-11.5%	-9	19
518013	Power Plant Operators	237	190	-19.8%	-47	56
518021	Stationary Engineers & Boiler Operators	693	722	4.2%	29	342
518031	Water & Wastewater Treatment Plant & System Op.	845	788	-6.7%	-57	230
518091	Chemical Plant & System Operators	800	797	-0.4%	-3	187
518099	Plant & System Operators, All Other	24	25	4.2%	1	6
519011	Chemical Equipment Operators & Tenders	739	738	-0.1%	-1	162
519012	Separating, Filtering, Clarifying, Precipitating Operators	329	317	-3.6%	-12	71
519021	Crushing, Grinding, & Polishing Machine Setters	213	214	0.5%	1	72
519022	Grinding & Polishing Workers, Hand	124	109	-12.1%	-15	39
519023	Mixing & Blending Machine Setters, Operators	718	755	5.2%	37	249
519032	Cutting & Slicing Machine Setters, Operators	728	719	-1.2%	-9	324
519041	Extruding, Forming, Pressing, & Compacting Setters	650	694	6.8%	44	185
519061	Inspectors, Testers, Sorters, Samplers, & Weighers	6,081	5,279	-13.2%	-802	2,183
519071	Jewelers & Precious Stone & Metal Workers	285	287	0.7%	2	153
519081	Dental Laboratory Technicians	527	610	15.7%	83	255
519082	Medical Appliance Technicians	372	412	10.8%	40	176
519083	Ophthalmic Laboratory Technicians	363	418	15.2%	55	175
519111	Packaging & Filling Machine Operators & Tenders	3,625	3,852	6.3%	227	1,542
519123	Painting, Coating, & Decorating Workers	165	172	4.2%	7	47
519124	Coating, Painting, & Spraying Machine Setters	2,103	2,220	5.6%	117	597
519151	Photographic Process Workers & Processing Machinists	307	227	-26.1%	-80	123
519161	Computer Numerically Controlled Tool Operators	2,501	2,447	-2.2%	-54	847
519162	Computer Numerically Controlled Tool Programmers	485	616	27.0%	131	188
519191	Adhesive Bonding Machine Operators & Tenders	276	270	-2.2%	-6	153
519192	Cleaning, Washing & Metal Pickling Equipment Operators	98	102	4.1%	4	34
519195	Molders, Shapers, & Casters, Except Metal & Plastic	161	210	30.4%	49	67
519196	Paper Goods Machine Setters, Operators, & Tenders	1,122	1,038	-7.5%	-84	487
519198	Helpers--Production Workers	2,805	2,742	-2.2%	-63	1,302
519199	Production Workers, All Other	3,767	4,119	9.3%	352	1,350

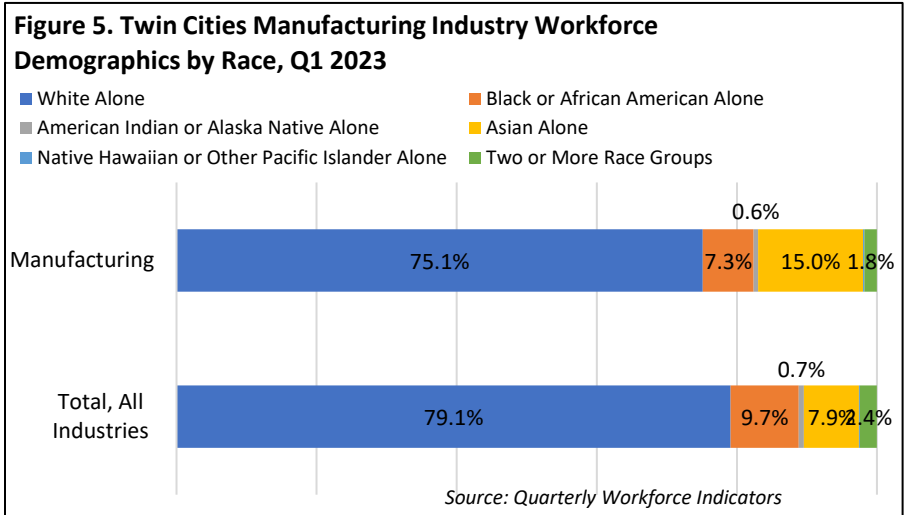
\* Labor Force exit Openings are the projected number of workers leaving an occupation and exiting the labor market entirely (most labor force exits are related to workers retiring) Source: DEED Employment Outlook

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 quarter 1 of 2023, over one-fourth (26.4%) of workers in the industry were 55 years or older, up from just 12.8% of the workforce back in quarter 1 of 2003. In contrast, less than 7.1% of workers in the industry were under 25 years of age, down from almost 7.9% in 2003. Likewise, the percent of workers from 25 to 44 years of age dropped from 53.4% of the total in 2003 to just 45.1% in 2023 (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 69.2% of workers (see Figure 4), and about 80% reporting white as their race (see Figure 5).



However, the racial diversity of the workforce has changed over time, with the number of manufacturing workers identifying as white alone declining by 21.3% from quarter 2003 to 2023, compared to a 69% increase in the number of jobholders of other race groups. Likewise, the number of Hispanic or Latino workers in manufacturing jumped by 69.2% from 2003 to 2023.



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 in the future.



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