

Manufacturing in the Metro Area

Industry Statistics

Manufacturing is a vital industry to the Seven-County Metro Area’s economy and labor market. In fact, with 3,995 establishments supplying 168,117 covered jobs, Manufacturing was the region’s second largest-employing industry during annual 2021. Fully one-in-ten Metro Area jobs are Manufacturing jobs. This data comes from the Minnesota Department of Employment and Economic Development’s Quarterly Census of Employment and Wages (QCEW).

Manufacturing is also a high-paying industry within the Metro Area. In 2021, the industry’s average wage of \$85,488 was 15.0% higher than the average wage across all industries, \$74,360. As such, the average Manufacturing worker in the Metro Area makes more than \$11,100 more per year than the average worker across all industries.

Table 1. Seven-County Metro Area Industry Statistics, Annual 2021

Industry	Number of Jobs	Share of Total Jobs	Number of Firms	Total Payroll (\$1,000s)	Avg. Annual Wage
Total, All Industries	1,676,409	100.0%	87,498	\$124,700,189	\$74,360
Health Care and Social Assistance	277,674	16.6%	12,343	\$16,394,972	\$59,020
Manufacturing	168,117	10.0%	3,995	\$14,383,588	\$85,488
Retail Trade	154,990	9.2%	8,296	\$6,015,404	\$38,792
Educational Services	128,290	7.7%	2,285	\$7,828,230	\$60,892
Professional, Scientific, and Technical Services	122,510	7.3%	11,227	\$13,838,452	\$112,892
Finance and Insurance	111,979	6.7%	4,861	\$14,678,014	\$130,936
Accommodation and Food Services	109,580	6.5%	6,150	\$2,743,706	\$24,804
Administrative and Support Services	89,745	5.4%	4,411	\$4,510,356	\$50,128
Management of Companies	76,939	4.6%	927	\$11,105,255	\$144,352
Construction	75,774	4.5%	6,774	\$6,347,739	\$83,720
Wholesale Trade	75,494	4.5%	4,994	\$7,495,578	\$99,216
Transportation and Warehousing	70,597	4.2%	2,028	\$4,479,462	\$63,336
Public Administration	69,627	4.2%	803	\$5,189,839	\$74,516
Other Services	50,909	3.0%	10,118	\$2,264,775	\$44,408
Information	30,601	1.8%	1,811	\$3,152,666	\$103,012
Arts, Entertainment, and Recreation	27,225	1.6%	1,736	\$1,432,465	\$52,832
Real Estate and Rental and Leasing	26,257	1.6%	4,309	\$1,799,957	\$68,536
Utilities	6,246	0.4%	105	\$808,665	\$129,688
Agriculture	3,327	0.2%	291	\$139,056	\$41,860
Mining	524	0.0%	38	\$92,009	\$173,472

Source: DEED Quarterly Census of Employment and Wages (QCEW)

DEED’s QCEW data allows for a finer look into the Manufacturing industry in the Metro Area. Out of 21 specific Manufacturing subsectors ([NAICS 3-digit sectors](#)), Computer and Electronic Product Manufacturing is the largest-employing. During annual 2021, this sector had 34,098 jobs at 317 establishments in the Metro Area. The average annual wage for this sector, \$114,036, was also significantly higher than the average annual wage for all Manufacturing jobs. Zooming in even further (NAICS 4-digit sectors), about 70% of the region’s Computer and Electronic Product Manufacturing jobs (23,626 jobs) fall within Navigational, Measuring, Electromedical, and Control Instruments Manufacturing. 5,662 jobs fall within Semiconductor and Other Electronic Component Manufacturing and 3,692 jobs fall within Computer and Peripheral Equipment Manufacturing.

Following Computer and Electronic Product Manufacturing, the Metro Area’s largest-employing Manufacturing sectors include Fabricated Metal Product Manufacturing (24,916 jobs); Miscellaneous Manufacturing (20,318 jobs); and Machinery Manufacturing (16,650 jobs). It should be noted that nearly 80% of the region’s Miscellaneous Manufacturing jobs fall within Medical Equipment and Supplies Manufacturing.

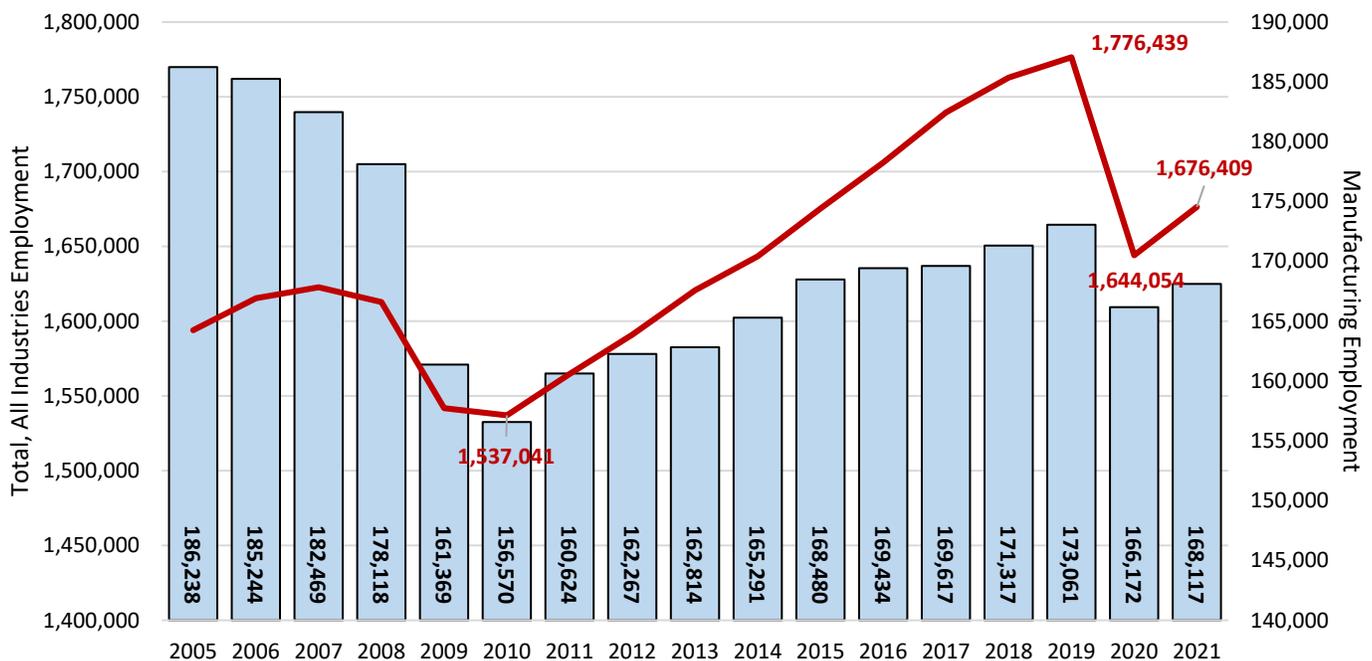
Table 2. Seven-County Metro Area Manufacturing Statistics, Annual 2021

Industry	Number of Jobs	Share of Total Jobs	Number of Firms	Total Payroll (\$1,000s)	Avg. Annual Wage
Total, All Industries	1,676,409	100.0%	87,498	\$124,700,189	\$74,360
Manufacturing	168,117	10.0%	3,995	\$14,383,588	\$85,488
Computer and Electronic Product Manufacturing	34,098	20.3%	317	\$3,889,308	\$114,036
Fabricated Metal Product Manufacturing	24,916	14.8%	773	\$1,900,588	\$76,232
Miscellaneous Manufacturing	20,318	12.1%	605	\$1,652,008	\$81,276
Machinery Manufacturing	16,650	9.9%	369	\$1,404,382	\$84,292
Printing and Related Support Activities	11,371	6.8%	407	\$804,126	\$70,668
Food Manufacturing	10,639	6.3%	268	\$618,333	\$58,084
Plastics and Rubber Products Manufacturing	10,570	6.3%	179	\$742,875	\$70,304
Chemical Manufacturing	9,267	5.5%	148	\$1,018,208	\$109,824
Wood Product Manufacturing	5,373	3.2%	100	\$366,270	\$68,120
Electrical Equipment, Appliance, and Component Manufacturing	4,626	2.8%	95	\$383,281	\$82,888
Furniture and Related Product Manufacturing	4,030	2.4%	224	\$363,406	\$90,272
Paper Manufacturing	3,856	2.3%	69	\$303,318	\$78,676
Primary Metal Manufacturing	2,474	1.5%	41	\$181,245	\$73,268
Nonmetallic Mineral Product Manufacturing	2,413	1.4%	95	\$189,493	\$78,104
Beverage and Tobacco Product Manufacturing	2,289	1.4%	102	\$116,883	\$51,168
Transportation Equipment Manufacturing	1,870	1.1%	73	\$132,414	\$70,772
Petroleum and Coal Products Manufacturing	1,818	1.1%	16	\$246,760	\$135,876
Textile Product Mills	859	0.5%	56	\$35,786	\$41,600
Apparel Manufacturing	319	0.2%	45	\$13,269	\$41,444
Textile Mills	180	0.1%	7	\$8,730	\$48,620
Leather and Allied Product Manufacturing	177	0.1%	10	\$12,903	\$72,748

Source: DEED Quarterly Census of Employment and Wages (QCEW)

Figure 1. Manufacturing Trends in the Seven-County Metro Area, 2005-2021

Manufacturing Total, All Industries



Source: DEED Quarterly Census of Employment and Wages

Manufacturing employment in the Seven-County Metro Area was not spared from the impacts of the COVID-19 recession. Between annual 2019 and 2020, Manufacturing employment in the region dropped by 4.0%. This was

equivalent to approximately 6,889 jobs. For reference, total employment in the region dropped by 7.5% between annual 2019 and 2020, or 132,385 jobs. Between annual 2020 and 2021, Manufacturing employment expanded by 1.2%, equivalent to approximately 1,945 jobs. This rate of growth was slightly less than that for the total of all jobs in the region, which grew by 2.0% between 2020 and 2021 (Figure 1).

Annual trends do mask employment changes that occur on a quarterly basis. For example, employment losses during COVID were most extreme between the second quarters of 2019 and 2020. During that period, Manufacturing employment dropped by 5.6% (-9,664 jobs). For reference, total employment in the region dropped by 13.1% (-233,435 jobs) during that period. Between the second quarters of 2020 and 2021, Manufacturing employment in the Metro Area expanded by 1.8% (+2,991 jobs). Total employment in the region during that period expanded by 8.2% (+127,832 jobs).

DEED’s Quarterly Census of Employment and Wages data is currently updated through the first quart of 2022. As of that time, the region had 4,071 Manufacturing establishments supplying 171,368 jobs. This was up 4.7% (+7,767 jobs) from the industry’s lowest point of employment during the COVID-19 recession.

Table 3 highlights annual employment trends in specific Manufacturing subsectors between 2019 and 2021. Those subsectors losing the most jobs between annual 2019 and 2020 included Printing and Related Support Activities (-1,551 jobs); Fabricated Metal Product Manufacturing (-1,345 jobs); Food Manufacturing (-943 jobs); Machinery Manufacturing (-881 jobs); and Computer and Electronic Product Manufacturing (-872 jobs).

Between annual 2020 and 2021, those Manufacturing subsectors gaining the most jobs included Fabricated Metal Product Manufacturing (+915 jobs); Machinery Manufacturing (+798 jobs); Plastics and Rubber Product Manufacturing (+750 jobs); and Food Manufacturing (+722 jobs). Those subsectors losing the most jobs between annual 2020 and 2021 included Computer and Electronic Product Manufacturing (-1,049 jobs); Miscellaneous Manufacturing (-455 jobs); and Printing and Related Support Activities (-328 jobs) (Table 3).

Table 3. Seven-County Metro Area Manufacturing Employment Trends, 2019 – 2021

Industry	2021 Number of Jobs	2019 – 2020 Job Change		2020 – 2021 Job Change	
		Numeric	Percent	Numeric	Percent
Total, All Industries	1,676,409	-132,385	-7.5%	+32,355	+2.0%
Manufacturing	168,117	-6,889	-4.0%	+1,945	+1.2%
Computer and Electronic Product Manufacturing	34,098	-872	-2.4%	-1,049	-3.0%
Fabricated Metal Product Manufacturing	24,916	-1,345	-5.3%	+915	+3.8%
Miscellaneous Manufacturing	20,318	+147	+0.7%	-455	-2.2%
Machinery Manufacturing	16,650	-881	-5.3%	+798	+5.0%
Printing and Related Support Activities	11,371	-1,551	-11.7%	-328	-2.8%
Food Manufacturing	10,639	-943	-8.7%	+722	+7.3%
Plastics and Rubber Products Manufacturing	10,570	-336	-3.3%	+750	+7.6%
Chemical Manufacturing	9,267	+204	+2.3%	+361	+4.1%
Wood Product Manufacturing	5,373	+205	+4.1%	+141	+2.7%
Electrical Equipment, Appliance, and Component Manufacturing	4,626	-139	-2.8%	-131	-2.8%
Furniture and Related Product Manufacturing	4,030	-128	-3.1%	+18	+0.4%
Paper Manufacturing	3,856	+40	+1.0%	-269	-6.5%
Primary Metal Manufacturing	2,474	-511	-15.6%	-296	-10.7%
Nonmetallic Mineral Product Manufacturing	2,413	-76	-3.2%	+149	+6.6%
Beverage and Tobacco Product Manufacturing	2,289	-411	-17.0%	+276	+13.7%
Transportation Equipment Manufacturing	1,870	-114	-6.8%	+318	+20.5%
Petroleum and Coal Products Manufacturing	1,818	N/A	N/A	N/A	N/A
Textile Product Mills	859	-88	-10.6%	+114	+15.3%
Apparel Manufacturing	319	-47	-13.1%	+8	+2.6%
Textile Mills	180	-26	-13.0%	+6	+3.4%
Leather and Allied Product Manufacturing	177	+4	+2.3%	-1	-0.6%

Source: DEED Quarterly Census of Employment and Wages

Industry Projections

According to DEED's Employment Outlook data, Manufacturing employment in the Seven-County Metro Area is anticipated to increase by 1.0% between 2020 and 2030. This is equivalent to approximately 1,729 net new jobs. This is a slower projected growth rate than for the total of all industries in the region during that period, +6.2%. Zooming in, largest-projected employment growth between 2020 and 2030 is anticipated within Miscellaneous Manufacturing, Chemical Manufacturing, Fabricated Metal Product Manufacturing, Machinery Manufacturing, and Computer and Electronic Product Manufacturing. Employment losses are projected within Printing and Related Support Activities, Paper Manufacturing, Textile Product Mills, Apparel Manufacturing, Petroleum and Coal Products Manufacturing, Textile Mills, and Leather and Allied Product Manufacturing (Table 4).

Table 4. Seven-County Metro Area Industry Employment Projections, 2020 – 2030
Sorted by Total Change

NAICS	Industry	2020 Estimated Employment	2030 Projected Employment	Percent Change	Total Change
000000	Total, All Industries	1,817,290	1,930,563	+6.2%	+113,273
31	Manufacturing	166,580	168,309	+1.0%	+1,729
339	Miscellaneous Manufacturing	20,845	21,713	+4.2%	+868
325	Chemical Manufacturing	8,947	9,679	+8.2%	+732
332	Fabricated Metal Product Manufacturing	24,087	24,724	+2.6%	+637
333	Machinery Manufacturing	15,915	16,474	+3.5%	+559
334	Computer and Electronic Product Manufacturing	35,225	35,664	+1.2%	+439
311	Food Manufacturing	9,921	10,334	+4.2%	+413
337	Furniture and Related Product Manufacturing	4,018	4,296	+6.9%	+278
326	Plastics & Rubber Products Manufacturing	9,838	10,090	+2.6%	+252
335	Electrical Equipment and Appliances	4,765	4,991	+4.7%	+226
327	Nonmetallic Mineral Product Manufacturing	2,280	2,422	+6.2%	+142
321	Wood Product Manufacturing	5,273	5,325	+1.0%	+52
312	Beverage & Tobacco Product Manufacturing	2,009	2,047	+1.9%	+38
331	Primary Metal Manufacturing	2,773	2,806	+1.2%	+33
336	Transportation Equipment Manufacturing	1,558	1,578	+1.3%	+20
316	Leather and Allied Product Manufacturing	178	171	-3.9%	-7
313	Textile Mills	178	168	-5.6%	-10
324	Petroleum & Coal Products Manufacturing	1,877	1,833	-2.3%	-44
315	Apparel Manufacturing	313	265	-15.3%	-48
314	Textile Product Mills	745	646	-13.3%	-99
322	Paper Manufacturing	4,127	3,637	-11.9%	-490
323	Printing and Related Support Activities	11,708	9,446	-19.3%	-2,262

DEED Employment Outlook

It should be noted that despite projected employment net gains or losses, there is also anticipated to be significant employment openings due to current workers leaving their occupations between 2020 and 2030. These openings, known as labor market exit openings, can be due to current workers retiring. This level of analysis is only available for occupations and occupational groups within DEED's Employment Outlook tool. According to this data, Production Occupations in the Seven-County Metro Area are projected to decline by 0.6% between 2020 and 2030. This is equivalent to approximately 689 fewer jobs. However, there are projected to be approximately 39,961 labor market exit openings in Production Occupations in the region during that period (Table 5).

Table 5. Seven-County Metro Area Occupational Group Projections, 2020 – 2030

Occupation	Estimated 2020 Employment	Projected 2030 Employment	Percent Change	Numeric Change	Labor Market Exit Openings
Total All Occupations	1,817,290	1,930,563	+6.2%	+113,273	773,335
Production Occupations	106,474	105,785	-0.6%	-689	39,961

Source: DEED Employment Outlook

Occupational Employment and Wages

The Department of Employment and Economic Development’s Occupational Employment and Wage Statistics (OEWS) showcases specific employment and hourly wage data at the state and regional levels. Table 6 reveals those 25 top-employing production occupations in the Seven-County Metro Area, along with hourly wage percentiles. For example, First-Line Supervisors of Production and Operating Workers is the largest-employing production occupation in the Metro Area with an estimated 6,240 jobs. The median wage for such workers was \$31.83 in 2021.

Beyond First-Line Supervisors of Production and Operating Workers, those production occupations with higher median hourly wages in the Metro Area include Tool and Die Makers (\$30.43); Machinists (\$25.26); Welders, Cutters, Solderers, and Brazers (\$24.48); CNC Operators (\$24.34); and Prepress Technicians and Workers (\$24.06).

Table 6. Top-Employing Production Occupations in the Seven County Metro Area, 2021

SOC Code	Occupational Title	Estimated Employment	Hourly Wage Percentiles				
			10 th	25 th	Median	75 th	90 th
000000	Total, All Occupations	1,642,620	\$14.48	\$18.31	\$24.47	\$39.36	\$60.66
510000	Production Occupations	102,080	\$14.79	\$18.30	\$20.83	\$25.05	\$31.30
511011	First-Line Supervisors of Production and Operating Workers	6,240	\$23.81	\$28.22	\$31.83	\$39.86	\$49.78
514041	Machinists	5,880	\$18.87	\$21.93	\$25.26	\$30.99	\$37.92
519061	Inspectors, Testers, Sorters, Samplers, and Weighers	5,530	\$15.06	\$18.88	\$23.76	\$28.24	\$30.62
512028	Electrical, electronic, and electromechanical assemblers, except coil winders, tapers, and finishers	4,720	\$15.00	\$18.30	\$18.88	\$23.76	\$28.42
514121	Welders, Cutters, Solderers, and Brazers	4,210	\$19.35	\$22.44	\$24.48	\$29.92	\$31.53
515112	Printing Press Operators	4,120	\$16.56	\$18.30	\$21.38	\$25.11	\$31.14
519111	Packaging and Filling Machine Operators and Tenders	3,690	\$14.63	\$15.14	\$18.98	\$23.21	\$24.25
519161	Computer Numerically Controlled Tool Operators	3,110	\$18.45	\$20.18	\$24.34	\$30.76	\$33.33
519198	Helpers--Production Workers	2,690	\$14.48	\$14.52	\$14.87	\$18.48	\$20.66
513092	Food Batchmakers	2,270	\$11.29	\$12.71	\$15.01	\$20.96	\$24.47
514031	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	2,270	\$13.71	\$16.67	\$19.28	\$23.88	\$27.05
514072	Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	2,140	\$14.79	\$15.86	\$18.74	\$23.30	\$29.95
513011	Bakers	1,700	\$14.04	\$14.75	\$18.48	\$19.50	\$23.77
516011	Laundry and Dry-Cleaning Workers	1,400	\$14.26	\$14.28	\$14.86	\$18.42	\$18.73
519124	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	1,390	\$15.93	\$18.99	\$23.43	\$29.86	\$37.62
514081	Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	1,240	\$18.30	\$18.74	\$22.07	\$23.90	\$28.34
515113	Print Binding and Finishing Workers	1,110	\$15.00	\$18.79	\$22.90	\$23.84	\$30.02
516031	Sewing Machine Operators	1,050	\$14.28	\$14.97	\$16.34	\$18.75	\$22.89
519196	Paper Goods Machine Setters, Operators, and Tenders	1,030	\$16.05	\$19.28	\$23.18	\$24.70	\$30.53
514033	Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic	1,010	\$16.29	\$18.30	\$18.99	\$23.81	\$27.40
517011	Cabinetmakers and Bench Carpenters	990	\$18.30	\$18.54	\$19.00	\$24.14	\$25.17
514021	Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and Plastic	900	\$18.74	\$18.99	\$19.88	\$24.47	\$30.33
513021	Butchers and Meat Cutters	890	\$14.79	\$18.30	\$19.59	\$23.45	\$29.39
514111	Tool and Die Makers	880	\$18.87	\$24.04	\$30.43	\$32.53	\$39.04
515111	Prepress Technicians and Workers	740	\$18.45	\$20.10	\$24.06	\$29.91	\$30.62

The Manufacturing industry sector includes numerous non-production occupations. Table 7 reveals those 12 non-production occupations with the highest levels of employment in Manufacturing. These occupations range from Management Occupations and Office and Administrative Support Occupations to Sales Occupations, Transportation and

Material Moving Occupations, and Engineering Occupations. This variety of occupations within Manufacturing begins to reveal the countless ways an individual can enter and advance within the Manufacturing industry.

Table 7. Non-Production Occupations in Manufacturing in the Seven-County Metro Area, 2021

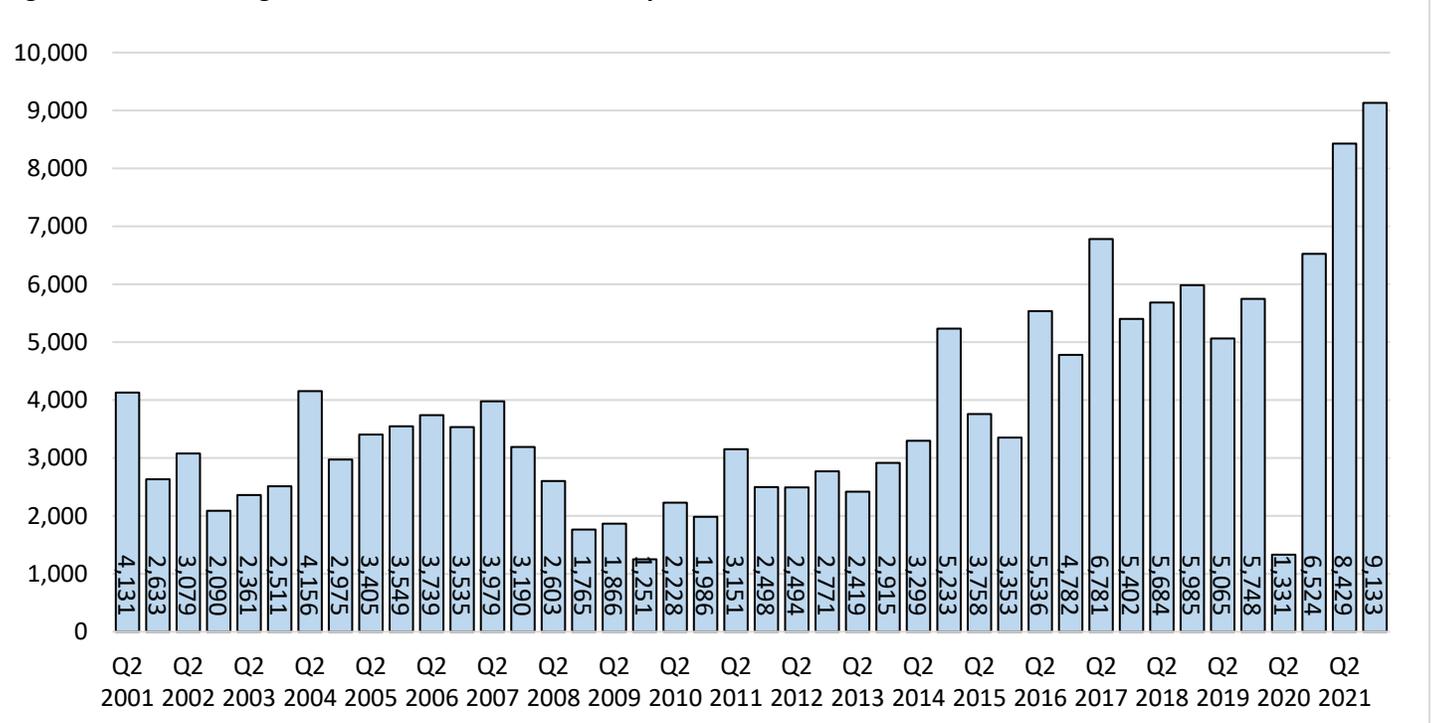
SOC Code	Occupational Title	Estimated Employment	Hourly Wage Percentiles				
			10 th	25 th	Median	75 th	90 th
000000	Total, All Occupations	1,642,620	\$14.48	\$18.31	\$24.47	\$39.36	\$60.66
434051	General and Operations Managers	37,730	\$19.98	\$30.15	\$49.18	\$75.89	>\$99.99
414012	Customer Service Representatives	34,720	\$14.67	\$18.53	\$23.15	\$24.25	\$30.31
533032	Sales Representatives, Wholesale and Manufacturing	17,230	\$18.98	\$24.55	\$32.17	\$49.32	\$64.91
433031	Heavy and Tractor-Trailer Truck Drivers	16,250	\$19.91	\$24.58	\$28.33	\$31.91	\$39.80
499071	Bookkeeping, Accounting, and Auditing Clerks	14,380	\$16.56	\$19.97	\$24.09	\$29.93	\$31.42
172112	Maintenance and Repair Workers, General	12,710	\$17.85	\$19.81	\$23.91	\$29.91	\$32.81
435071	Industrial Engineers	9,450	\$31.34	\$39.39	\$49.78	\$63.29	\$66.43
172141	Shipping, Receiving, and Inventory Clerks	8,420	\$14.94	\$18.45	\$19.39	\$23.95	\$29.71
499041	Mechanical Engineers	3,980	\$30.36	\$37.55	\$41.54	\$50.83	\$64.30
113051	Industrial Machinery Mechanics	3,590	\$23.90	\$29.24	\$31.09	\$38.61	\$40.33
173026	Industrial Production Managers	3,070	\$37.48	\$42.07	\$58.64	\$79.02	>\$99.00
111021	Industrial Engineering Technologists and Technicians	2,430	\$23.63	\$24.25	\$30.88	\$38.41	\$41.81

Hiring Demand

According to DEED’s Job Vacancy Survey, there were 9,133 Manufacturing job vacancies during the fourth quarter of 2021 in the Seven-County Metro Area. This was a 40.0% increase in Manufacturing job vacancies from the fourth quarter of 2020, and represented the most such job vacancies on record. As can be seen from Figure 2, Manufacturing job vacancies dropped significantly during the second quarter of 2020 due to the impacts of COVID-19 on the region’s labor market. Such vacancies, however, quickly rebounded in the fourth quarter of 2020 and have increased since that time.

The median wage offer for Manufacturing vacancies in the Metro Area during the fourth quarter of 2021 was \$20.37. This was significantly higher than the median wage offer for the total of all vacancies in the region, \$14.71.

Figure 2. Manufacturing Job Vacancies in the Seven-County Metro Area, Q2 2001 - Q4 2021



Ramsey County Manufacturing

Table 1. Ramsey County Industry Statistics, Annual 2021

Industry	Number of Jobs	Share of Total Jobs	Number of Firms	Total Payroll (\$1,000s)	Avg. Annual Wage
Total, All Industries	312,008	100.0%	14,394	\$22,040,692,976	\$70,616
Health Care and Social Assistance	66,077	21.2%	2,461	\$3,743,145,464	\$56,680
Educational Services	29,724	9.5%	458	\$1,732,078,659	\$58,032
Manufacturing	27,455	8.8%	642	\$2,538,634,979	\$92,404
Public Administration	27,158	8.7%	326	\$2,150,393,280	\$79,196
Retail Trade	23,194	7.4%	1,442	\$895,270,534	\$38,584
Accommodation and Food Services	19,100	6.1%	1,177	\$470,591,314	\$24,388
Finance and Insurance	16,629	5.3%	635	\$1,672,077,007	\$100,464
Administrative and Support Services	16,594	5.3%	613	\$748,853,142	\$45,084
Management of Companies	16,521	5.3%	146	\$2,577,959,531	\$156,208
Professional, Scientific, and Technical Services	13,819	4.4%	1,571	\$1,315,279,838	\$95,108
Wholesale Trade	11,755	3.8%	673	\$1,099,628,246	\$93,444
Construction	11,693	3.7%	776	\$988,623,215	\$84,344
Other Services	10,632	3.4%	1,931	\$537,046,686	\$50,440
Transportation and Warehousing	6,212	2.0%	283	\$390,991,001	\$62,868
Information	5,179	1.7%	274	\$519,144,537	\$100,360
Real Estate and Rental and Leasing	4,519	1.4%	679	\$294,252,287	\$65,104
Arts, Entertainment, and Recreation	4,333	1.4%	279	\$221,181,892	\$52,676
Utilities	1,315	0.4%	16	\$136,573,442	\$104,052
Agriculture	67	0.0%	10	N/A	\$45,812
Mining	33	0.0%	4	N/A	\$146,640

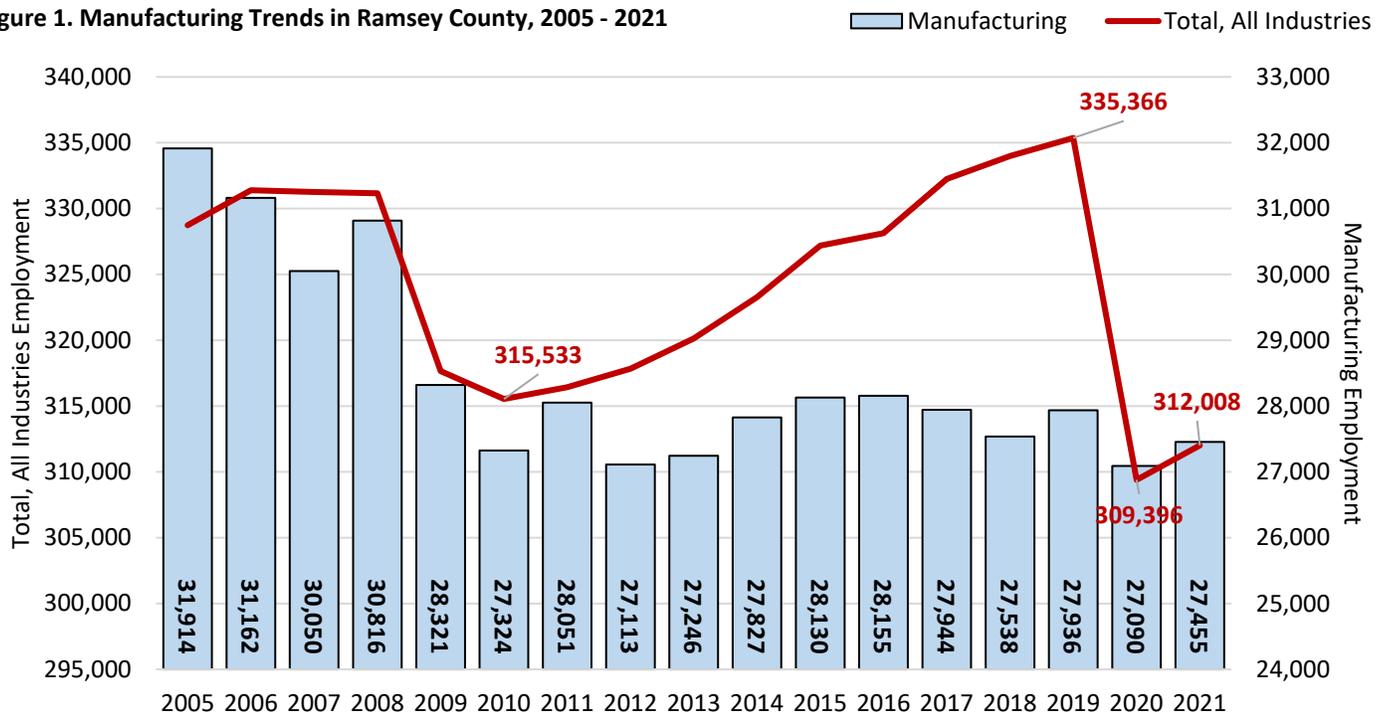
Source: DEED Quarterly Census of Employment and Wages (QCEW)

Table 2. Ramsey County Manufacturing Statistics, Annual 2021

Industry	Number of Jobs	Share of Total Jobs	Number of Firms	Total Payroll (\$1,000s)	Avg. Annual Wage
Total, All Industries	312,008	100.0%	14,394	\$22,040,693	\$70,616
Manufacturing	27,455	8.8%	642	\$2,538,635	\$92,404
Computer and Electronic Product Manufacturing	8,487	30.9%	48	\$1,092,936	\$128,596
Miscellaneous Manufacturing	3,058	11.1%	108	\$248,759	\$81,380
Printing and Related Support Activities	2,777	10.1%	84	\$224,525	\$80,808
Fabricated Metal Product Manufacturing	2,379	8.7%	109	\$178,788	\$75,088
Machinery Manufacturing	2,302	8.4%	49	\$191,019	\$82,940
Plastics and Rubber Products Manufacturing	2,164	7.9%	27	\$134,357	\$62,036
Food Manufacturing	1,877	6.8%	39	\$117,628	\$62,608
Paper Manufacturing	1,131	4.1%	17	\$88,463	\$78,208
Chemical Manufacturing	1,090	4.0%	29	\$129,970	\$119,184
Primary Metal Manufacturing	737	2.7%	10	\$48,124	\$65,364
Nonmetallic Mineral Product Manufacturing	349	1.3%	21	\$21,440	\$61,048
Wood Product Manufacturing	270	1.0%	18	\$16,095	\$59,540
Beverage and Tobacco Product Manufacturing	262	1.0%	18	\$10,852	\$42,016
Transportation Equipment Manufacturing	176	0.6%	10	\$13,095	\$74,152
Furniture and Related Product Manufacturing	156	0.6%	24	\$7,594	\$48,464
Electrical Equipment, Appliance, and Component Manufacturing	139	0.5%	12	\$9,945	\$71,552
Apparel Manufacturing	45	0.2%	6	\$2,027	\$45,032
Textile Product Mills	16	0.1%	8	\$845	\$51,272

Source: DEED Quarterly Census of Employment and Wages (QCEW)

Figure 1. Manufacturing Trends in Ramsey County, 2005 - 2021



Source: DEED Quarterly Census of Employment and Wages

Table 3. Ramsey County Manufacturing Employment Trends, 2019 – 2021

Industry	2021 Number of Jobs	2019 – 2020 Job Change		2020 – 2021 Job Change	
		Numeric	Percent	Numeric	Percent
Total, All Industries	312,008	-25,970	-7.7%	+2,612	+0.8%
Manufacturing	27,455	-846	-3.0%	+365	+1.3%
Computer and Electronic Product Manufacturing	8,487	+224	+2.9%	+408	+5.1%
Miscellaneous Manufacturing	3,058	-20	-0.7%	+212	+7.4%
Printing and Related Support Activities	2,777	-555	-17.1%	+92	+3.4%
Fabricated Metal Product Manufacturing	2,379	-165	-6.3%	-86	-3.5%
Machinery Manufacturing	2,302	-105	-4.4%	+19	+0.8%
Plastics and Rubber Products Manufacturing	2,164	+75	+4.4%	+386	+21.7%
Food Manufacturing	1,877	+30	+1.6%	+19	+1.0%
Paper Manufacturing	1,131	+89	+6.8%	-276	-19.6%
Chemical Manufacturing	1,090	+122	+10.3%	-215	-16.5%
Primary Metal Manufacturing	737	-316	-24.7%	-225	-23.4%
Nonmetallic Mineral Product Manufacturing	349	-72	-18.1%	+24	+7.4%
Wood Product Manufacturing	270	-12	-4.4%	+7	+2.7%
Beverage and Tobacco Product Manufacturing	262	-67	-23.8%	+47	+21.9%
Transportation Equipment Manufacturing	176	-23	-9.7%	-37	-17.4%
Furniture and Related Product Manufacturing	156	-8	-5.1%	+8	+5.4%
Electrical Equipment, Appliance, and Component Manufacturing	139	-7	-4.8%	-1	-0.7%
Apparel Manufacturing	45	-14	-23.0%	-2	-4.3%
Textile Product Mills	16	-5	-14.3%	-14	-46.7%

Source: DEED Quarterly Census of Employment and Wages

**Table 4. Distinguishing Manufacturing Industries in Ramsey County, Annual 2021
Sorted by Location Quotient**

Industry	Number of Jobs	Share of Ramsey County's Total Jobs	Location Quotient	Share of Statewide Industry Jobs
Computer and Electronic Product Manufacturing	8,487	2.7%	1.8	20.0%
Printing and Related Support Activities	2,777	0.9%	1.4	15.9%
Primary Metal Manufacturing	737	0.2%	1.3	14.6%
Paper Manufacturing	1,131	0.4%	1.2	14.0%
Plastics and Rubber Products Manufacturing	2,164	0.7%	1.1	12.4%
Miscellaneous Manufacturing	3,058	1.0%	1.0	11.8%

Source: DEED Quarterly Census of Employment and Wages