

## Information Technology Profile

At the occupational level, Minnesota is home to around 110,000 Information Technology (IT) workers. Sometimes confused for an industry, the IT field is actually better classified as a set of occupations. While focused more heavily in certain sectors, IT employment is spread across every industry, since every industry utilizes some amount of computer technology.

According to DEED's Occupational Employment & Wage Statistics (OEWS) data, Minnesota was home to approximately 108,000 workers in IT and computer-related occupations, formally classified under Standard Occupational Classification (SOC) codes as "Computer & Mathematical Occupations." Additionally, just under 11,000 people were employed as Computer & Information Systems Managers in Minnesota. Combined, these occupations accounted for about 3.7% of total employment in the state, compared to about 3.8% nationwide. This indicates that IT occupations are slightly more concentrated nationally than in Minnesota. However, certain occupations such as Statisticians, Actuaries, and Software Developers show higher location quotients in Minnesota (see Table 1).

**Table 1. Minnesota Information Technology Occupational Statistics, 2025**

Occupation	Estimated Statewide Employment	Median Hourly Wage	Location Quotient	U.S. Median Hourly Wage
<b>Total, All Occupations</b>	<b>2,920,470</b>	<b>\$26.22</b>	<b>1.0</b>	<b>\$24.13</b>
Computer & Information Systems Managers	10,710	\$83.44	0.9	\$83.17
<b>Computer &amp; Mathematical Occupations</b>	<b>97,460</b>	<b>\$50.02</b>	<b>1.0</b>	<b>\$51.61</b>
Software Developers	39,580	\$60.73	1.3	\$64.89
Computer User Support Specialists	14,740	\$30.71	1.1	\$29.42
Computer Systems Analysts	10,580	\$52.05	1.1	\$50.61
Network & Computer Systems Administrators	4,420	\$47.08	0.7	\$47.20
Computer Occupations, All Other	3,710	\$48.63	0.4	\$53.13
Data Scientists	3,500	\$57.45	0.8	\$54.90
Computer Network Support Specialists	3,410	\$37.60	1.2	\$35.76
Software Quality Assurance Analysts & Testers	2,930	\$51.16	0.8	\$50.03
Information Security Analysts	2,550	\$62.82	0.8	\$60.90
Computer Network Architects	2,010	\$61.77	0.6	\$63.58
Computer Programmers	1,960	\$52.88	0.9	\$48.11
Web & Digital Interface Designers	1,510	\$41.42	0.7	\$47.83
Web Developers	1,470	\$48.70	1.0	\$44.34
Operations Research Analysts	1,300	\$43.51	0.6	\$44.51
Statisticians	1,010	\$39.08	1.8	\$50.37
Database Administrators	970	\$47.41	0.7	\$51.01
Database Architects	910	\$63.59	0.7	\$66.30
Actuaries	830	\$53.24	1.5	\$61.33
Computer Hardware Engineers	560	\$63.65	0.4	\$75.59
Computer & Information Research Scientists	50	\$64.25	0.1	\$68.70

*Source: Occupational Employment & Wage Statistics*

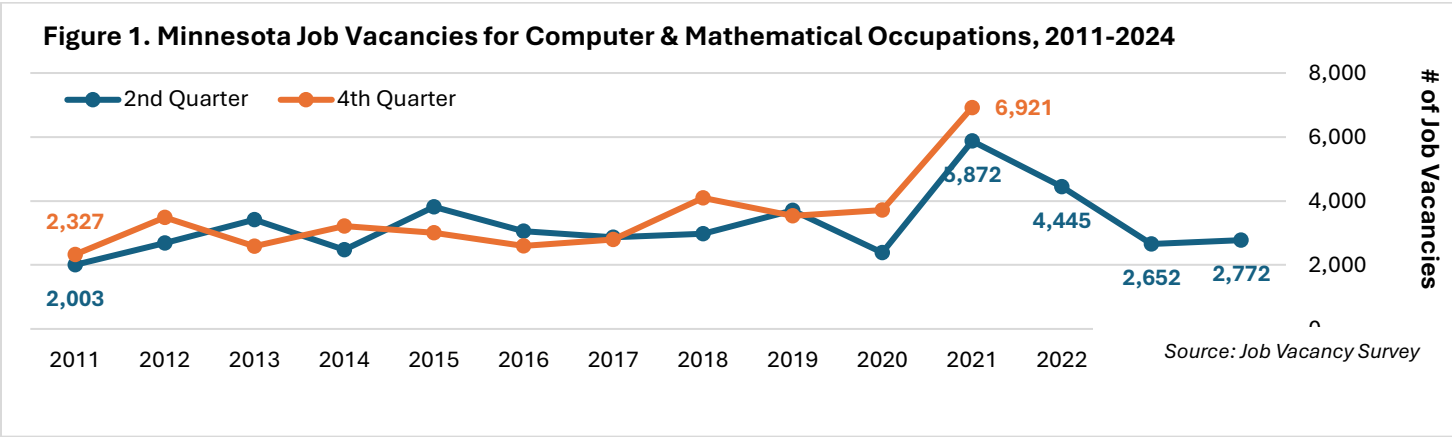
In addition to the high concentrations, wages for these IT occupations were also relatively high. The median hourly wage for Computer & Mathematical Occupations was \$50.02, which was almost double the median across all occupations (\$26.22). Over the course of a full-time, year-round work schedule, the median annual wage for computer and mathematical occupations would be just over \$104,000, which would be about \$49,500 higher than the total of all occupations.

Median hourly wages ranged from a low of \$30.71 per hour for Computer User Support Specialists, which was about \$4.50 above the median wage for all occupations; to a high of \$83.44 per hour for Computer & Information Systems Managers. Wages were competitive but slightly lower in Minnesota compared to the U.S., with 9 of the 22 computer-related occupations showing higher median hourly wages here than in the rest of the nation.

It is important to note that about 74.2% of the Computer and Mathematical jobs in the state are located in the 7-County Twin Cities metro area, about 14 percentage points higher than the share of all occupations that are located in the metro. The other 25.8% of Computer and Mathematical jobs were spread across Greater Minnesota. Wages are also higher in the Twin Cities than in Greater Minnesota, though were more competitive in Southeast Minnesota.

### Occupational Demand

According to DEED’s [Job Vacancy Survey](#), steady economic growth in the state has created a steady rise in the number of openings for IT occupations across Minnesota. The 6,921 job vacancies reported by employers for computer occupations in the fourth quarter of 2021 was the highest number on record, before dropping back slightly to 4,445 vacancies in the second quarter of 2022. The most recent job vacancy survey in 2024 showed 2,772 job vacancies. Job vacancies have increased over time, but in recent years, have cooled off to pre-pandemic levels (Figure 1).



The median wage offer for these vacancies jumped to \$49.52 per hour in 2024 from a recent low of \$30.19 in 2020. About 89% of the IT job vacancies required postsecondary education and almost all required at least a year of prior work experience – with wage offers closely tied to experience and training requirements (see Figure 2 and Table 2). Only 2% of posted IT openings in 2024 were part-time, as compared to 28% of vacancies across all occupations.

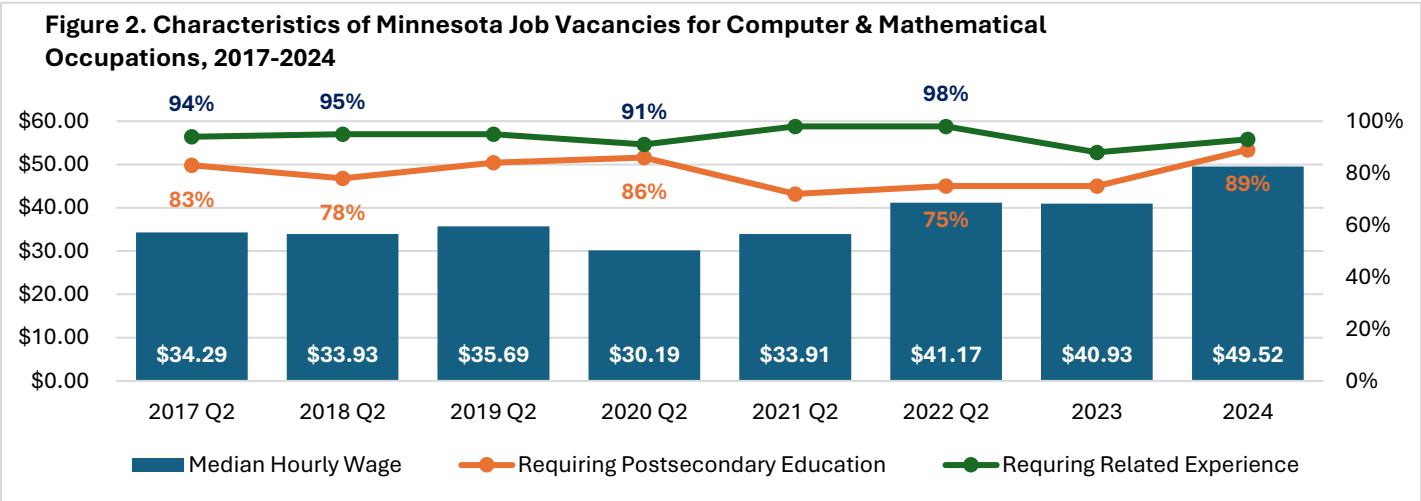


Table 2. Minnesota Computer & Mathematical Occupation Job Vacancies, 2024					
Occupation	Number of Job Vacancies	Median Wage Offer	Percent Part-Time	Percent Requiring Postsecondary Education	Percent Requiring 1+ Years of Work Exp.
<b>Total, All Occupations</b>	<b>120,448</b>	<b>\$20.67</b>	<b>28%</b>	<b>36%</b>	<b>44%</b>
<b>Computer &amp; Mathematical Occupations</b>	<b>2,772</b>	<b>\$49.52</b>	<b>2%</b>	<b>89%</b>	<b>93%</b>
Software Developers	1,199	\$56.92	0%	90%	97%
Computer User Support Specialists	430	\$32.93	6%	70%	83%
Computer Systems Analysts	362	\$51.01	2%	95%	94%
Computer & Information Systems Managers	292	\$59.25	0%	96%	96%
Information Security Analysts	192	\$56.58	4%	92%	98%
Network & Computer Systems Administrators	113	\$37.67	3%	80%	87%
Software Quality Assurance Analysts & Testers	85	\$42.06	2%	98%	97%
Computer Occupations, All Other	49	\$40.58	1%	75%	74%
Computer Network Architects	38	\$46.38	2%	95%	88%
Computer & Information Research Scientists	35	\$52.42	0%	95%	88%
Database Architects	31	\$57.66	3%	96%	100%
Web Developers	25	\$50.54	5%	95%	90%
Web & Digital Interface Designers	20	\$36.93	0%	73%	95%
Database Administrators	16	\$44.16	0%	87%	98%
Computer Programmers	9	\$38.88	0%	96%	98%
Computer Network Support Specialists	7	\$26.72	2%	54%	100%
Source: Job Vacancy Survey					

The vast majority of IT occupations require at least some postsecondary education, with most requiring a bachelor's degree. The lowest requirements were for Computer User Support and Computer Network Support Specialists and Web Designers, where about half required vocational training or an associate degree, making that the most typical requirement for entry into the careers. The rest of the IT positions typically required a bachelor's degree or higher. However, these requirements may be changing along with national trends which show that roles like Software Developers and Network Administrators are lowering requirements for 4-year degrees (see Table 3).

Table 3. Minnesota IT Occupation Typical Education Requirements		
Vocational Training	Associate Degree	
Computer User Support Specialists	Computer Network Support Specialist	Web Developers & Digital Interface Designers
Bachelor's Degree		
Computer & Information Systems Managers	Computer Systems Analysts	Database Administrators & Architects
Computer Network Architects	Network & Computer Systems Administrators	Information Security Analysts
Computer Programmers	Software Developers & Software Quality Assurance Analysts	Computer Occupations, All Other
Computer Hardware Engineers	Advance Degree	
	Computer & Information Research Scientists	Statisticians
Source: DEED MN Educational Requirements for Occupations		

## Occupational Outlook

The increased demand for IT jobs in Minnesota is expected to continue, leading to a projected 15% job expansion from 2022 to 2032. The state is expected to have rising demand for IT workers over the next ten years due to new jobs being created and a large number of replacement openings – jobs that become available as existing workers retire out of the labor force or change careers. In sum, there may be as many as 77,190 total openings for IT occupations in the state over the next decade.

Overall, all but one of the state's computer & mathematical occupations are expected to see new job growth from 2022 to 2032, led by Software Developers, Computer System Analysts, Information Security Analysts, and Data Scientists. In contrast, the only decline is projected for Computer Programmers.

Regardless of growth or decline, every IT occupation is expected to at least have some labor market exit openings from 2022 to 2032. With more than 22,700 labor market exit openings, the largest demand is projected for Software Developers and Computer User Support Specialists, followed by Computer Systems Analysts, Computer Network Support Specialists, and Network & Computer Systems Administrators, which are expected to have over 800 total labor force exit openings in the state (Table 4).

SOC Code	Occupational Title	Estimated Employment 2022	Projected Employment 2032	Percent Change, 2022-2032	Total Change, 2022-2032	Labor Force Exit Openings, 2022-2032	Total Hires, 2022-2032
<b>0</b>	<b>Total, All Occupations</b>	<b>3,135,681</b>	<b>3,280,273</b>	<b>+4.6%</b>	<b>+144,592</b>	<b>+1,531,700</b>	<b>+3,590,115</b>
113021	Computer & Information Systems Managers	10,556	12,112	+14.7%	+1,556	+2,207	+8,788
<b>150000</b>	<b>Computer &amp; Mathematical Occupations</b>	<b>100,293</b>	<b>115,354</b>	<b>+15.0%</b>	<b>+15,061</b>	<b>+22,789</b>	<b>+77,187</b>
151211	Computer Systems Analysts	12,455	13,367	+7.3%	+912	+3,233	+8,435
151212	Information Security Analysts	2,913	3,729	+28.0%	+816	+723	+2,760
151221	Computer & Information Research Scientists	48	58	+20.8%	+10	+13	+43
151231	Computer Network Support Specialists	5,149	5,487	+6.6%	+338	+1,306	+3,827
151232	Computer User Support Specialists	13,194	13,843	+4.9%	+649	+3,320	+9,518
151241	Computer Network Architects	2,371	2,402	+1.3%	+31	+435	+1,282
151242	Database Administrators	1,222	1,304	+6.7%	+82	+320	+807
151243	Database Architects	862	928	+7.7%	+66	+227	+580
151244	Network & Computer Systems Administrators	4,268	4,347	+1.9%	+79	+879	+2,458
151251	Computer Programmers	2,305	1,995	-13.4%	-310	+530	+985
151252	Software Developers	38,586	47,917	+24.2%	+9,331	+7,422	+32,224
151253	Software Quality Assurance Analysts & Testers	2,678	3,183	+18.9%	+505	+738	+2,289
151254	Web Developers	2,251	2,604	+15.7%	+353	+477	+1,844
151255	Web & Digital Interface Designers	1,786	2,014	+12.8%	+228	+530	+1,564
151299	Computer Occupations, All Other	4,517	4,873	+7.9%	+356	+1,137	+3,259
152011	Actuaries	1,149	1,430	+24.5%	+281	+212	+890
152031	Operations Research Analysts	1,582	1,932	+22.1%	+350	+505	+1,403
152041	Statisticians	657	862	+31.2%	+205	+172	+653
152051	Data Scientists	2,290	3,068	+34.0%	+778	+608	+2,360
172061	Computer Hardware Engineers	270	282	+4.4%	+12	+53	+160

Source: Employment Outlook

IT has traditionally been a male-dominated career field, with males holding about 73% of total jobs according to Census data from 2023. However, the IT field is actually more racially diverse, with just 78.3% reporting white as their race, compared to 12% Asian or Pacific Islander, 3.8% Black or African American, and 4.5% of Two or More Races.