

STEM Occupations in New York State

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A Division of the New York State Department of Labor

STEM Occupations in New York State

Introduction

"STEM" is used to refer to occupations that involve studies in these four fields:

- Science
- <u>T</u>echnology
- Engineering
- Mathematics

STEM jobs are a catalyst for regional economic growth as they bolster innovation while improving productivity across the workforce. Although very competitive, STEM careers offer many advantages, including:

- Relatively high wages
- Low unemployment rates
- Growing employment opportunities

In addition, STEM careers tend to be more financially lucrative than non-STEM careers. In New York State, the 2015 median hourly wage for job titles classified as "STEM Core" jobs was \$41.74, which is almost 60% higher than the comparable wage (\$24.65) for non-STEM job titles. STEM careers typically require a bachelor's degree or higher, but there also exist certain STEM occupations in which an associate degree and/or a post-secondary vocational certificate are the only pre-requisites needed for entry.

All statewide and regional STEM data presented in this report come from Economic Modeling Specialists International (EMSI), an economic software firm that specializes in employment data and labor market analysis.

Defining STEM

The acronym "STEM" is widely used in discussions across government, academia and business, given the recent increased emphasis on innovation and its implications for the economy and labor market. The discussion and analyses quickly get confounded, however, since there is no commonly agreed upon definition of STEM.

In July 2011, the U.S. Office of Management and Budget asked the Standard Occupational Classification Policy Committee (SOCPC) to recommend options for defining STEM occupations based on the 2010 Standard Occupational Classification system. This request was made in order

to enhance comparability of data across statistical agencies and organizations studying the STEM workforce for policymaking purposes, including educational and workforce planners. This definition, unlike previous attempts, also includes higher-level health care occupations. The number of jobs in these health-related occupations is almost twice the number of non-health or "core" STEM occupations.

Including health-related STEM job titles in this report would heavily skew much of the analysis. For example, females constitute just over 1 in 4 workers in core STEM occupations (indicative of a need to recruit more women to the field), but more than half of workers in all STEM occupations. Similarly, the health care and core STEM occupations face very different challenges, so this report will focus on core STEM job titles only.

See Appendix A at the end of this report for a list of core STEM job titles, based on the SOCPC's recommendations, used in this analysis. Due to data limitations, post-secondary teacher titles (all with SOC code 25-10XX), which were originally on SOCPC's core STEM list, were excluded from our analysis; these titles are presented separately in Appendix B.

Regional Trends in Core STEM Employment

In New York State, between 2010 and 2015, employment in core STEM job titles grew by 10.5%, or 45,444, to 478,338 (see Table 1). Over the same time period, the nation's core STEM job count grew by 11.3%.

Growth in core STEM employment was concentrated in certain regions of the state (see Table 2). From 2010 to 2015, growth in STEM employment was strongest in these regions:

- New York City (+21.0%)
- Capital Region (+9.0%)
- Finger Lakes (+7.0%)
- Long Island (+3.0%)
- Western New York (+1.0%)

Meanwhile, these labor market regions experienced declines in their STEM employment levels over the 2010 to 2015 period:

- North Country (-12.0%)
- Mohawk Valley (-9.0%)
- Southern Tier (-7.0%)
- Hudson Valley (-4.0%)
- Central New York (-1.0%)

The Core STEM Workforce in New York State

Additional demographic information regarding the core STEM workforce in New York State is presented in Tables 3, 4 and 5. As shown in Table 3, almost 75% of workers in core STEM jobs are male.

Table 4 provides information on the age breakdown of the STEM workforce. The 25-34 age group is the largest with 124,582 workers. This translates into just over one-quarter (26.5%) of all STEM workers in the state. The second largest category is the 35-44 age group, which had 123,115 workers, accounting for 26.2% of the statewide STEM workforce. In third place is the 45-54 age group with 112,187 workers, or 23.8% of STEM workers in New York State. These three age categories together account for more than three-quarters of all core STEM jobs in the state.

Table 5 shows the racial and ethnic breakdown of workers in New York State's core STEM occupations in 2015. Groups accounting for at least 5% of the STEM workforce and their overall share of STEM workers in New York State in 2015 include:

- White (69.1%)
- Asian (16.6%)
- Hispanic or Latino (6.7%)
- Black or African American (6.5%)

Industries with the Most Core STEM Employment

Table 6 shows the 15 statewide industries with the most core STEM jobs in 2015. These STEM jobs are relatively concentrated as the five largest industries had a combined employment base of 180,422 in 2015, accounting for almost 40% of overall core STEM employment in New York State. The five statewide industries with the largest number of core STEM jobs in 2015 include:

- Computer system design and related services (68,348)
- Architectural, engineering and related services (45,340)
- Scientific research and development services (27,252)
- Management of companies and enterprises (21,390)
- Local government, excluding education and hospitals (18,092)

Occupations with the Most Core STEM Employment

Table 7 shows the 15 core STEM job titles with the most employment in New York State in 2015. This set of largest STEM occupations, which is primarily focused in computer science-related titles, had combined employment of just over 312,000, or about 65% of core

STEM jobs in New York State. All 15 of these largest STEM occupations grew between 2010 and 2015. Combined, they grew by 38,500 jobs, accounting for more than four out of every five jobs added in the core STEM field over this time period.

Among the top 15 STEM occupational titles, software developers (applications) with an employment count of 46,629 in 2015 is the single largest one. Moreover, this job title had the most annual openings (2,400) of any STEM occupation in the state. Women are very much underrepresented in this occupation, accounting for just 20% of those employed.

The 15 largest STEM job titles have a wide salary range. At the low end, computer user support specialists have a median hourly wage of \$25.72. At the high end, computer and information systems managers have a median hourly wage of \$73.81. Outside of computer user support specialists, which typically only require a vocational certificate and some college experience for job entry, most of the rest of the occupations in the top 15 group require at least a bachelor's degree.

Core STEM Occupations with the Most Net Job Growth, 2010-2015

Table 8 shows the 15 core STEM job titles with the most employment growth between 2010 and 2015. Computer science-related titles dominate this list, accounting for 10 of the top 15 spots.

What's also interesting is that STEM job growth over the past five years is concentrated in relatively few job titles. Of the 39,355 jobs added in 2010-2015 by occupations on the top 15 list, almost half (19,192) are accounted for by just the top three growing occupations, all of which are computer related: software developers (applications), computer systems analysts and computer user support specialists.

Core STEM Occupations with the Highest Salaries

Table 9 presents information on the 15 core STEM job titles with the highest median salaries in 2015. As expected, the occupations at the very top of the list are all manager titles. The three core STEM occupations with the highest median salaries in 2015 include:

- Computer and information systems managers (median hourly salary of \$73.81)
- Architectural and engineering managers (\$68.58)
- Natural sciences managers (\$64.65)

Also of note is the fact that many of these highest paying core STEM occupations have relatively low employment levels. Among the 15 best-paying job titles, seven have overall employment of less than 1,000, including three with job counts of less than 300.

STEM Occupations with the Highest Share of Female Workers

Table 10 presents information on the 15 core STEM job titles with the highest share of female workers. The top 15 STEM occupations with the largest concentration of female employees are all in the life, physical and social science fields (i.e., SOC codes with prefix 19).

Looking at individual occupational titles, clinical, counseling and school psychologist has the largest percentage (66%) of employees that are women. In fact, all job titles rounding out the top 5 list are social science occupations including:

- Psychologists, all other (63%)
- Industrial- organizational psychologists (59%)
- Sociologists (51%)
- Survey researchers (50%)

As was the case with the list of highest paying core STEM occupations, many of the job titles with the highest share of female workers have relatively low employment levels. Among the 15 best-paying job titles, eight have overall employment of less than 1,000, including four with job counts of less than 300.

Summary

STEM job titles represent the future of the economy and where many of the jobs of tomorrow will be. This report offers a rich set of labor market statistics that are specific to New York State and its 10 labor market regions. We hope this information will be useful to students, job seekers and others interested in the current and future outlook for STEM jobs.

For Further Information

Questions regarding this report should be directed to Kevin Jack, Statewide Labor Market Analyst. He can be reached via email at Kevin.Jack@labor.ny.gov or by phone at (518) 457-3800.

Table 1: Occupational Summary for Core STEM Occupations, New York State

(Standard Occupational Classification Policy Committee)

478,338	10.5%	\$41.74/hr
Jobs (2015)	% Change (2010-2015)	Median Hourly Earnings
	Nation: 11.3%	Nation: \$40.00/hr

Source: EMSI

Table 2: Regional Trends in Core STEM Jobs, New York State, 2010-2015

	Region	2010 Jobs	2015 Jobs	Change	% Change	Median Hourly Earnings
•	Capital Region	33,019	35,917	2,898	9%	\$36.76
•	Central NY	18,160	17,971	-189	-1%	\$36.24
•	Finger Lakes	32,803	35,238	2,435	7%	\$34.89
•	Hudson Valley	43,815	42,175	-1,640	-4%	\$41.61
•	Long Island	52,675	54,132	1,457	3%	\$40.14
•	Mohawk Valley	6,685	6,102	-583	-9%	\$32.49
•	New York City	182,976	220,487	37,511	21%	\$46.73
•	North Country	4,339	3,838	-501	-12%	\$28.98
•	Southern Tier	16,417	15,229	-1,188	-7%	\$34.32
•	Western NY	28,715	28,920	205	1%	\$32.49

Table 3: Core STEM Occupations, Gender Breakdown, New York State, 2015

	Gender	2015 Jobs	2015 Percent	
•	Males	351,448	74.7%	
•	Females	118,997	25.3%	

Table 4: Core STEM Occupations, Age Breakdown, New York State, 2015

	Age	2015 Jobs	2015 Percent
•	14-18	1,340	0.3%
•	19-24	27,735	5.9%
•	25-34	124,582	26.5%
•	35-44	123,115	26.2%
•	45-54	112,187	23.8%
•	55-64	67,295	14.3%
•	65+	14,190	3.0%

Table 5: Core STEM Occupations, Race/Ethnicity Breakdown, New York State, 2015

	Race/Ethnicity	2015 Jobs	2015 Percent
)	White	324,909	69.1%
	Asian	78,187	16.6%
	Hispanic or Latino	31,698	6.7%
	Black or African American	30,802	6.5%
)	Two or More Races	3,789	0.8%
	American Indian or Alaska Native	647	0.1%
	Native Hawaiian or Other Pacific Islander	412	0.1%

Table 6: Top 15 Industries Employing Core STEM Occupations, New York State, 2015

NAICS	Industry	STEM Jobs in Industry (2015)	Net Change, 2010 - 2015	Percent of STEM Jobs in Industry (2015)	Percent of Total Jobs in Industry (2015)
5415	Computer Systems Design and Related Services	68,348	17,028	14.0%	63.5%
5413	Architectural, Engineering, and Related Services	45,340	7,410	9.8%	64.0%
5417	Scientific Research and Development Services	27,252	2,036	5.9%	52.5%
5511	Management of Companies and Enterprises	21,390	1,830	4.4%	15.1%
9039	Local Government, Excluding Education and Hospitals	18,092	(685)	3.7%	4.0%
5191	Other Information Services	14,245	5,807	3.4%	33.3%
6113	Colleges, Universities, and Professional Schools	16,243	1,451	3.3%	6.2%
5416	Management, Scientific, and Technical Consulting Services	13,779	3,488	2.9%	18.9%
9029	State Government, Excluding Education and Hospitals	13,337	(1,244)	2.7%	8.7%
9036	Education and Hospitals (Local Government)	10,953	(452)	2.2%	1.9%
5241	Insurance Carriers	9,549	145	2.0%	12.0%
9011	Federal Government, Civilian	9,451	(1,921)	1.9%	8.1%
5613	Employment Services	8,950	1,826	1.9%	5.8%
4234	Professional and Commercial Equipment and Supplies Merchant Wholesalers	8,349	224	1.7%	22.7%
6221	General Medical and Surgical Hospitals	7,708	302	1.6%	2.3%

Table 7: Top 15 Largest Core STEM Occupations, New York State, 2015

SOC Code	Occupation	2015 Jobs	Net Change, 2010- 2015	2015 Location Quotient	Annual Openings	Median Hourly Earnings	Percent Females
15-1132	Software Developers, Applications	46,629	8,948	0.96	2,400	\$49.93	20%
15-1151	Computer User Support Specialists	43,961	4,603	1.07	1,517	\$25.72	26%
15-1121	Computer Systems Analysts	36,702	5,641	1.02	1,571	\$44.97	32%
11-3021	Computer and Information Systems Managers	25,771	3,631	1.16	1,014	\$73.81	27%
15-1142	Network and Computer Systems Administrators	24,642	2,176	1.02	742	\$41.87	18%
15-1131	Computer Programmers	19,609	1,781	1.05	826	\$40.35	22%
15-1133	Software Developers, Systems Software	18,871	2,172	0.74	691	\$52.83	20%
41-4011	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	15,488	943	0.71	507	\$39.25	28%
17-2051	Civil Engineers	14,770	1,112	0.83	657	\$41.48	13%
17-1011	Architects, Except Landscape and Naval	11,879	3,063	1.96	784	\$37.51	29%
15-1152	Computer Network Support Specialists	11,202	728	0.88	300	\$34.87	25%
17-2141	Mechanical Engineers	10,917	567	0.61	452	\$39.75	7%
17-2071	Electrical Engineers	10,854	439	0.95	322	\$45.98	7%
19-3031	Clinical, Counseling, and School Psychologists	10,421	479	1.53	330	\$39.52	66%
15-1134	Web Developers	10,365	2,218	1.24	565	\$35.73	31%

Table 8: Top 15 Growth Core STEM Occupations, based on Net Change, New York State, 2010-2015

SOC Code	Occupation	2015 Jobs	Net Change, 2010-2015	Location Quotient	Annual Openings	Median Hourly Earnings	Percent Females
15-1132	Software Developers, Applications	46,629	8,948	0.96	2,400	\$49.93	20%
15-1121	Computer Systems Analysts	36,702	5,641	1.02	1,571	\$44.97	32%
15-1151	Computer User Support Specialists	43,961	4,603	1.07	1,517	\$25.72	26%
11-3021	Computer and Information Systems Managers	25,771	3,631	1.16	1,014	\$73.81	27%
17-1011	Architects, Except Landscape and Naval	11,879	3,063	1.96	784	\$37.51	29%
15-1134	Web Developers	10,365	2,218	1.24	565	\$35.73	31%
15-1142	Network and Computer Systems Administrators	24,642	2,176	1.02	742	\$41.87	18%
15-1133	Software Developers, Systems Software	18,871	2,172	0.74	691	\$52.83	20%
15-1131	Computer Programmers	19,609	1,781	1.05	826	\$40.35	22%
17-2051	Civil Engineers	14,770	1,112	0.83	657	\$41.48	13%
41-4011	Sales Reps, Wholesale and Manufacturing, Technical and Scientific Products	15,488	943	0.71	507	\$39.25	28%
15-2031	Operations Research Analysts	5,710	832	0.90	262	\$43.24	40%
17-3011	Architectural and Civil Drafters	6,379	825	1.04	236	\$26.17	21%
15-1152	Computer Network Support Specialists	11,202	728	0.88	300	\$34.87	25%
15-1143	Computer Network Architects	7,840	682	0.83	234	\$54.07	15%

Table 9: Top 15 Highest Earning Core STEM Occupations, New York State, 2015

SOC Code	Occupation	2015 Jobs	Net Change, 2010-2015	Location Quotient	Annual Openings	Median Hourly Earnings	Percent Females
11-3021	Computer and Information Systems Managers	25,771	3,631	1.16	1,014	\$73.81	27%
11-9041	Architectural and Engineering Managers	7,146	218	0.62	259	\$68.58	8%
11-9121	Natural Sciences Managers	2,145	(16)	0.61	52	\$64.65	42%
17-2171	Petroleum Engineers	268	(13)	0.12	8	\$61.93	9%
19-2012	Physicists	1,092	56	1.06	31	\$59.79	14%
15-1111	Computer and Information Research Scientists	881	21	0.50	18	\$56.25	27%
19-3011	Economists	750	(22)	0.57	22	\$55.90	31%
15-2011	Actuaries	2,424	200	1.68	110	\$55.50	30%
15-2021	Mathematicians	64	(1)	0.26	Insf. Data	\$54.43	43%
15-1143	Computer Network Architects	7,840	682	0.83	234	\$54.07	15%
15-1122	Information Security Analysts	4,946	645	0.86	190	\$53.68	22%
17-2011	Aerospace Engineers	735	(192)	0.17	24	\$53.40	12%
15-1133	Software Developers, Systems Software	18,871	2,172	0.74	691	\$52.83	20%
19-2011	Astronomers	60	2	0.47	Insf. Data	\$51.33	Insf. Data
17-2161	Nuclear Engineers	595	(60)	0.54	17	\$51.14	9%

Table 10: Top 15 Core STEM Occupations with the Highest Share of Female Workers, New York State, 2015

SOC Code	Occupation	2015 Jobs	Net Change 2010-2015	Location Quotient	Annual Openings	Median Hourly Earnings	Percent Females
19-3031	Clinical, Counseling, and School Psychologists	10,421	479	1.53	330	\$39.52	66%
19-3039	Psychologists, All Other	662	(24)	0.79	18	\$49.22	63%
19-3032	Industrial-Organizational Psychologists	81	10	1.47	4	\$35.36	59%
19-3041	Sociologists	643	100	3.53	30	\$32.64	51%
19-3022	Survey Researchers	571	(45)	0.64	16	\$31.00	50%
19-3099	Social Scientists and Related Workers, All Other	2,462	66	1.07	64	\$38.63	49%
19-1021	Biochemists and Biophysicists	1,943	148	0.96	85	\$31.78	49%
19-1042	Medical Scientists, Except Epidemiologists	8,984	654	1.32	405	\$36.49	49%
19-4099	Life, Physical, and Social Science Technicians, All Other	5,069	467	1.10	296	\$23.86	48%
19-4061	Social Science Research Assistants	5,763	559	3.13	339	\$19.23	48%
19-3091	Anthropologists and Archeologists	207	(31)	0.45	3	\$34.05	48%
19-3094	Political Scientists	120	(11)	0.41	Insf. Data	\$49.95	48%
19-1041	Epidemiologists	229	(7)	0.64	7	\$32.94	47%
19-1022	Microbiologists	1,462	54	1.05	55	\$35.62	46%
19-1029	Biological Scientists, All Other	783	(72)	0.36	23	\$36.07	46%

Appendix A: Core STEM Occupational Titles Used in This Analysis

(Standard Occupational Classification Policy Committee)

SOC Code	Occupation
11-3021	Computer and Information Systems Managers
11-9041	Architectural and Engineering Managers
11-9121	Natural Sciences Managers
15-1111	Computer and Information Research Scientists
15-1121	Computer Systems Analysts
15-1122	Information Security Analysts
15-1131	Computer Programmers
15-1132	Software Developers, Applications
15-1133	Software Developers, Systems Software
15-1134	Web Developers
15-1141	Database Administrators
15-1142	Network and Computer Systems Administrators
15-1143	Computer Network Architects
15-1151	Computer User Support Specialists
15-1152	Computer Network Support Specialists
15-1199	Computer Occupations, All Other
15-2011	Actuaries
15-2021	Mathematicians
15-2031	Operations Research Analysts
15-2041	Statisticians

15-2091	Mathematical Technicians
15-2099	Mathematical Science Occupations, All Other
17-1011	Architects, Except Landscape and Naval
17-1012	Landscape Architects
17-1021	Cartographers and Photogrammetrists
17-1022	Surveyors
17-2011	Aerospace Engineers
17-2021	Agricultural Engineers
17-2031	Biomedical Engineers
17-2041	Chemical Engineers
17-2051	Civil Engineers
17-2061	Computer Hardware Engineers
17-2071	Electrical Engineers
17-2072	Electronics Engineers, Except Computer
17-2081	Environmental Engineers
17-2111	Health and Safety Engineers, Except Mining Safety Engineers and Inspectors
17-2112	Industrial Engineers
17-2121	Marine Engineers and Naval Architects
17-2131	Materials Engineers
17-2141	Mechanical Engineers
17-2151	Mining and Geological Engineers, Including Mining Safety Engineers
17-2161	Nuclear Engineers
17-2171	Petroleum Engineers
17-2199	Engineers, All Other
17-3011	Architectural and Civil Drafters
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17-3012	Electrical and Electronics Drafters
17-3013	Mechanical Drafters
17-3019	Drafters, All Other
17-3021	Aerospace Engineering and Operations Technicians
17-3022	Civil Engineering Technicians
17-3023	Electrical and Electronics Engineering Technicians
17-3024	Electro-Mechanical Technicians
17-3025	Environmental Engineering Technicians
17-3026	Industrial Engineering Technicians
17-3027	Mechanical Engineering Technicians
17-3029	Engineering Technicians, Except Drafters, All Other
17-3031	Surveying and Mapping Technicians
19-1011	Animal Scientists
19-1012	Food Scientists and Technologists
19-1013	Soil and Plant Scientists
19-1021	Biochemists and Biophysicists
19-1022	Microbiologists
19-1023	Zoologists and Wildlife Biologists
19-1029	Biological Scientists, All Other
19-1031	Conservation Scientists
19-1032	Foresters
19-1041	Epidemiologists
19-1042	Medical Scientists, Except Epidemiologists
19-1099	Life Scientists, All Other
19-2011	Astronomers
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19-2012	Physicists
19-2021	Atmospheric and Space Scientists
19-2031	Chemists
19-2032	Materials Scientists
19-2041	Environmental Scientists and Specialists, Including Health
19-2042	Geoscientists, Except Hydrologists and Geographers
19-2043	Hydrologists
19-2099	Physical Scientists, All Other
19-3011	Economists
19-3022	Survey Researchers
19-3031	Clinical, Counseling, and School Psychologists
19-3032	Industrial-Organizational Psychologists
19-3039	Psychologists, All Other
19-3041	Sociologists
19-3051	Urban and Regional Planners
19-3091	Anthropologists and Archeologists
19-3092	Geographers
19-3094	Political Scientists
19-3099	Social Scientists and Related Workers, All Other
19-4011	Agricultural and Food Science Technicians
19-4021	Biological Technicians
19-4031	Chemical Technicians
19-4041	Geological and Petroleum Technicians
19-4051	Nuclear Technicians
19-4061	Social Science Research Assistants
	17

Environmental Science and Protection Technicians, Including Health
Forensic Science Technicians
Forest and Conservation Technicians
Life, Physical, and Social Science Technicians, All Other
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products
Sales Engineers

Appendix B: Core STEM Occupational Titles Excluded From This Analysis

(Standard Occupational Classification Policy Committee)

SOC Code	Occupation
25-1021	Computer Science Teachers, Postsecondary
25-1022	Mathematical Science Teachers, Postsecondary
25-1031	Architecture Teachers, Postsecondary
25-1032	Engineering Teachers, Postsecondary
25-1041	Agricultural Sciences Teachers, Postsecondary
25-1042	Biological Science Teachers, Postsecondary
25-1043	Forestry and Conservation Science Teachers, Postsecondary
25-1051	Atmospheric, Earth, Marine, and Space Sciences Teachers, Postsecondary
25-1052	Chemistry Teachers, Postsecondary
25-1053	Environmental Science Teachers, Postsecondary
25-1054	Physics Teachers, Postsecondary
25-1061	Anthropology and Archeology Teachers, Postsecondary
25-1062	Area, Ethnic, and Cultural Studies Teachers, Postsecondary
25-1063	Economics Teachers, Postsecondary
25-1064	Geography Teachers, Postsecondary
25-1065	Political Science Teachers, Postsecondary
25-1066	Psychology Teachers, Postsecondary
25-1067	Sociology Teachers, Postsecondary
25-1069	Social Sciences Teachers, Postsecondary, All Other

Appendix C: Data Sources and Calculations

Location Quotient

Location quotient (LQ) is a way of quantifying how concentrated a particular industry, cluster, occupation, or demographic group is in a region as compared to the nation. It can reveal what makes a particular region unique in comparison to the national average.

Occupation Data

EMSI occupation employment data are based on final EMSI industry data and final EMSI staffing patterns. Wage estimates are based on Occupational Employment Statistics (QCEW and Non-QCEW Employees classes of worker) and the American Community Survey (Self-Employed and Extended Proprietors). Occupational wage estimates also affected by county-level EMSI earnings by industry.

Industry Data

EMSI industry data have various sources depending on the class of worker:

- 1. For QCEW Employees, EMSI primarily uses the QCEW (Quarterly Census of Employment and Wages), with supplemental estimates from County Business Patterns and Current Employment Statistics.
- Non-QCEW employee data are based on a number of sources, including QCEW, Current Employment Statistics (CES), County Business Patterns, U.S. Bureau of Economic Analysis (BEA) State and Local Personal Income reports, the National Industry-Occupation Employment Matrix (NIOEM), the American Community Survey (ACS), and Railroad Retirement Board statistics.
- 3. Self-Employed and Extended Proprietor classes of worker data are primarily based on the ACS, Nonemployer Statistics, and BEA State and Local Personal Income Reports.

Projections for QCEW and Non-QCEW Employees are informed by NIOEM and long-term industry projections compiled and published by individual states.

Staffing Patterns Data

The staffing pattern data in this report are compiled from several sources using a specialized process. For QCEW and Non-QCEW Employees classes of worker, sources include Occupational Employment Statistics, the National Industry-Occupation Employment Matrix, and the American Community Survey. For the Self-Employed and Extended Proprietors classes of worker, the primary source is the American Community Survey, with a small amount of information from Occupational Employment Statistics.

State Data Sources

This report uses state data from the following agency: New York Department of Labor, Division of Research and Statistics.

This workforce product was funded by a grant awarded by the U.S. Department of Labor's Employment and Training Administration. The product was created by the recipient and does not necessarily reflect the official position of the U.S. Department of Labor. The Department of Labor makes no guarantees, warranties, or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timeliness, usefulness, adequacy, continued availability, or ownership. This product is copyrighted by the institution that created it. Internal use by an organization and/or personal use by an individual for non-commercial purposes is permissible. All other uses require the prior authorization of the copyright owner.

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