

Employment in New York State



Research and
Statistics

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At a Glance

New York State had 9,381,900 total nonfarm jobs in October 2016, including 7,933,200 private sector jobs, after seasonal adjustment. The state's seasonally adjusted private sector job count decreased by 0.1% between September and October 2016, while the nation's job count increased by 0.1%. From October 2015 to October 2016, the number of private sector jobs increased by 1.1% in the state and by 1.7% in the nation (not seasonally adjusted).

In October 2016, New York State's seasonally adjusted unemployment rate increased from 5.0% to 5.2%. The comparable unemployment rate for the nation was 4.9% in October 2016.

New York State's Index of Coincident Economic Indicators decreased at an annual rate of 3.3% in October 2016.

Change in Nonfarm Jobs

October 2015 - October 2016

(Data not seasonally adjusted, net change in thousands)

	Net	%
Total Nonfarm Jobs	94.1	1.0%
Private Sector	89.9	1.1%
Goods-producing	-6.3	-0.7%
Nat. res. & mining	-0.3	-5.4%
Construction	0.4	0.1%
Manufacturing	-6.4	-1.4%
Durable gds.	-7.9	-3.0%
Nondurable gds.	1.5	0.8%
Service-providing	100.4	1.2%
Trade, trans. & util.	7.3	0.5%
Wholesale trade	10.3	3.0%
Retail trade	-10.7	-1.1%
Trans., wrhs. & util.	7.7	2.7%
Information	0.6	0.2%
Financial activities	-1.7	-0.2%
Prof. & bus. svcs.	10.8	0.8%
Educ. & health svcs.	55.6	2.9%
Leisure & hospitality	15.6	1.7%
Other services	8.0	2.0%
Government	4.2	0.3%

Catalyst for economic growth...

The Jobs of Tomorrow: STEM Occupations and the New York State Workforce

"The future of the economy is in STEM. That's where the jobs of tomorrow will be."

James Brown, Executive Director
STEM Education Coalition

Introduction

The STEM (science, technology, engineering and math) fields are receiving increasing amounts of attention in the media today. This is because they are catalysts for economic growth, as they bolster innovation while improving productivity across the workforce.

Although very competitive, STEM careers offer many advantages, including relatively high wages and growing employment opportunities. Here, we summarize a recent State Department of Labor report that looks at STEM occupations in New York.

Defining STEM

The acronym "STEM" is widely used, but there is no commonly agreed upon definition of STEM. In response, the Standard Occupational Classification Policy Committee (SOCPC) in 2012 developed a list of 120 "core" (non-health care) and more than 60 health care STEM job titles. Our analysis focuses on the core STEM job titles only, since core and health care STEM occupations face very different challenges. Due to data limitations, post-secondary teacher titles on SOCPC's core STEM list were excluded from our analysis. All STEM data presented in this article are from Economic Modeling Specialists International (EMSI).

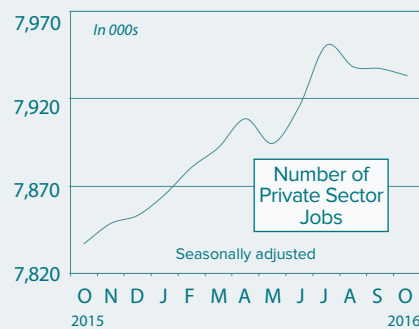
NYS STEM Workforce Overview

Between 2010 and 2015, overall

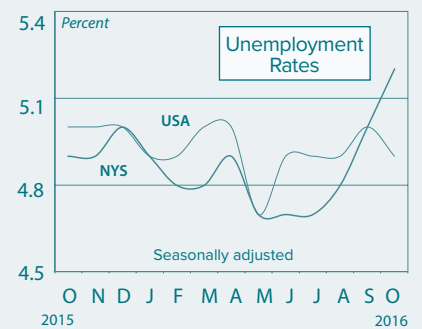
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In October...

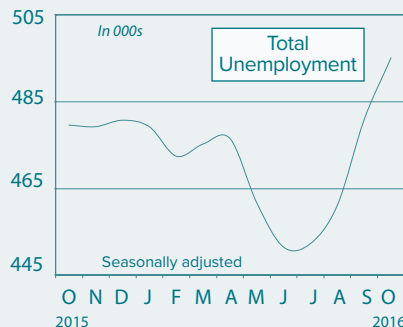
...NYS private sector jobs decreased



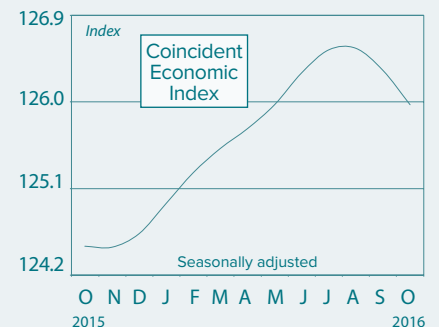
...NYS unemployment rate increased



...NYS unemployment increased



...NYS economic index decreased



Focus on the Hudson Valley

Health Care Sector Boosts Hudson Valley Economy
by Johnny Nelson, Labor Market Analyst, Hudson Valley

Health care is a significant employer in the Hudson Valley. With a total job count of 123,530 in 2015, it accounts for 16.5% of the region's private sector employment, according to data from the Quarterly Census of Employment and Wages. The sector is also diverse, consisting of the three broad industry groups listed below. Total health care jobs in the Hudson Valley grew by 8,150, or 7.1%, in 2010-2015.

In 2015, total wages paid out by the region's health care sector were just under \$6.9 billion, or 16.3% of the Hudson Valley's regional total. Average pay for health care workers was \$55,670 in 2015.

Defining Health Care

The health care sector consists of three broad industry groups:

- Ambulatory health care
- Nursing and residential care facilities
- Hospitals

Ambulatory health care includes the offices of physicians, dentists and other medical providers, such as laboratories, freestanding surgical centers and home health care. With 55,310 workers in 2015, ambulatory is the sector's largest employer in the Hudson Valley. In addition, it was the sector's fastest-growing industry in 2010-2015 on both a net (+5,170) and percentage basis (+10.3%). This industry's average pay level was \$63,660 in 2015.

Nursing and residential care facilities provide nursing, supervisory or other types of care as required by their residents. In 2015, it was the Hudson Valley's second largest health care industry, with 36,780 workers. The industry's

job count grew by 1,670, or 4.7%, between 2010 and 2015. Nursing and residential care had the lowest average pay (\$36,570) among the region's health care industries.

Of the three industries, hospitals had the smallest employment count, with 31,430 workers, and the highest average pay (\$63,960) in the region in 2015. This is also the slowest-growing health care industry. It added jobs at a rate of 4.4%, or 1,320, from 2010 to 2015.

Why is Health Care Employment Growing?

A number of factors have contributed to long-term growth in the health care sector. One is the development of new technologies. A second factor is growing American incomes. As consumers reach higher income levels, they tend to spend a greater proportion of their money on a wide variety of health care goods and services. A third contributing factor is the aging of the Baby Boomers. As this group ages, they will have more long-term medical needs. Finally, national health care reform has expanded access to medical insurance coverage. This is driving up demand from consumers who previously did not have coverage.

HV Health Care Initiatives

With the growing demand for health care workers in the Hudson Valley, there are a number of initiatives currently underway to help expand the region's health care workforce. One example is "Jobs Waiting," a new, federally funded job training program that aims to train 500 long-term unemployed individuals for work in the health care sector. The program is led by Westchester County



in partnership with the Westchester-Putnam Workforce Board. It is managed by the Westchester County Association.

HV Health Care Projects

There are several projects across the region at various stages of development. Crystal Run Healthcare operates more than 30 medical facilities in the region. It opened a new multi-specialty outpatient facility in Rockland County earlier this year. The Westchester Medical Center Health Network is building a \$230 million ambulatory care pavilion at its Valhalla campus. This is expected to create about 180 permanent jobs. Vassar Brothers Medical Center (VBMC), the flagship hospital of the Health Quest medical network, recently broke ground on its new \$466 million medical pavilion in the City of Poughkeepsie. The medical network has about 300 open positions, with most located at VBMC. Another wave of hiring is expected when the new pavilion is completed in early 2019.

Summing Up

Steady growth in the health care sector has been a key driver of job growth throughout the region. With sector growth expected to continue, especially in ambulatory health care, demand will remain strong for a wide variety of related occupations in the Hudson Valley.

The Jobs of Tomorrow... from page 1

employment in core STEM job titles grew by 10.5%, or 45,440, to 478,340 in New York State. STEM careers tend to be more financially lucrative than others. In 2015, the median hourly wage for core STEM job titles was \$41.74, which is almost 60% higher than the comparable wage for non-STEM job titles.

STEM careers typically require a bachelor's degree or higher. However, there are also certain STEM occupations in which an associate degree and/or a post-secondary vocational certificate are the only pre-requisites.

Largest STEM Occupations

The table on page 3 shows the 15 core

STEM job titles with the most jobs in the state in 2015. STEM employment is relatively concentrated in the 15 largest titles; their combined employment of more than 312,000 accounts for about 65% of statewide STEM jobs. All top 15 STEM job titles added jobs in 2010-2015. Combined, they grew by 38,500 jobs, accounting for more than four out of every five jobs added in the STEM field over this time period.

The largest STEM occupations are primarily focused in computer science-related job titles. Software developer (applications), which had a job count of 46,630 in 2015, is the largest STEM title in New York. Among the 15 largest STEM occupations, it has the third highest

median hourly earnings (\$49.93). This job title also has the most annual openings (2,400) of any STEM occupation in the state.

With an employment count of 43,960, computer user support specialist is the second largest STEM title. The occupation's hourly wage rate (\$25.72) puts it at the low end among the 15 largest STEM titles. However, it is the one STEM title on this list that does not require a bachelor's degree. Workers in this title usually need training in vocational schools, related on-the-job experience, or an associate degree.

Computer systems analysts rank in third place, with a total job count of 36,700 in the

Continued on page 3

Unemployment Rates in New York State

Data Not Seasonally Adjusted

	OCT '15	OCT '16		OCT '15	OCT '16		OCT '15	OCT '16
New York State	4.7	5.0	Hudson Valley	4.2	4.2	Finger Lakes	4.5	4.6
Capital	4.1	4.0	Dutchess	4.1	4.1	Genesee	4.2	4.3
Albany	4.0	4.0	Orange	4.3	4.3	Livingston	4.3	4.6
Columbia	3.4	3.5	Putnam	4.0	4.0	Monroe	4.6	4.7
Greene	4.8	4.6	Rockland	4.2	4.2	Ontario	4.0	4.0
Rensselaer	4.2	4.1	Sullivan	4.8	4.7	Orleans	5.3	5.1
Saratoga	3.8	3.7	Ulster	4.3	4.2	Seneca	4.5	4.3
Schenectady	4.3	4.3	Westchester	4.2	4.3	Wayne	4.4	4.6
Warren	4.6	4.6	Mohawk Valley	4.9	4.7	Wyoming	4.4	4.6
Washington	4.2	4.1	Fulton	5.6	5.2	Yates	4.1	4.0
Central New York	4.7	4.6	Herkimer	4.9	4.7	Western New York	4.9	5.0
Cayuga	4.8	4.5	Montgomery	5.7	5.1	Allegany	4.8	4.7
Cortland	4.7	4.8	Oneida	4.7	4.6	Cattaraugus	5.2	5.4
Madison	4.6	4.6	Otsego	4.3	4.2	Chautauqua	5.4	5.6
Onondaga	4.4	4.3	Schoharie	4.7	4.7	Erie	4.8	4.8
Oswego	6.0	5.8	North Country	5.4	5.2	Niagara	5.3	5.4
Southern Tier	4.9	4.8	Clinton	5.0	4.9	Long Island	4.1	4.1
Broome	5.3	5.2	Essex	4.9	4.5	Nassau	4.0	4.0
Chemung	5.4	5.3	Franklin	5.4	5.1	Suffolk	4.3	4.2
Chenango	4.7	4.8	Hamilton	4.1	4.1	New York City	5.1	5.6
Delaware	4.8	4.8	Jefferson	5.6	5.7	Bronx	7.1	7.7
Schuyler	5.2	4.8	Lewis	5.4	5.9	Kings	5.3	5.8
Steuben	5.6	5.4	St. Lawrence	5.6	5.3	New York	4.4	5.0
Tioga	4.9	4.9				Queens	4.5	4.9
Tompkins	3.6	3.6				Richmond	5.1	5.6

The Jobs of Tomorrow... from page 2

15 Largest STEM Occupations New York State, 2015

SOC Code	Occupations	Jobs, 2015	Net Change, 2010-2015	Median Hourly Earnings	Percent Females
15-1132	Software Developers, Applications	46,630	8,950	\$49.93	20%
15-1151	Computer User Support Specialists	43,960	4,600	\$25.72	26%
15-1121	Computer Systems Analysts	36,700	5,640	\$44.97	32%
11-3021	Computer and Information Systems Managers	25,770	3,630	\$73.81	27%
15-1142	Network and Computer Systems Administrators	24,640	2,180	\$41.87	18%
15-1131	Computer Programmers	19,610	1,780	\$40.35	22%
15-1133	Software Developers, Systems Software	18,870	2,170	\$52.83	20%
41-4011	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	15,490	940	\$39.25	28%
17-2051	Civil Engineers	14,770	1,110	\$41.48	13%
17-1011	Architects, Except Landscape and Naval	11,880	3,060	\$37.51	29%
15-1152	Computer Network Support Specialists	11,200	730	\$34.87	25%
17-2141	Mechanical Engineers	10,920	570	\$39.95	7%
17-2071	Electrical Engineers	10,850	440	\$45.98	7%
19-3031	Clinical, Counseling, and School Psychologists	10,420	480	\$39.52	66%
15-1134	Web Developers	10,370	2,220	\$35.73	31%

state in 2015. This job title has a median wage of \$44.97/hour, ranking it fifth highest among the 15 top STEM occupations. About 75% of workers in this job title hold at least a bachelor's degree, including 25% who possess a graduate or professional degree.

Summary

The STEM field represents the future of the economy and where many of the jobs of tomorrow will be found. The information presented here should be useful to students, job seekers and others interested in the current and future outlook for STEM jobs.

To learn more about STEM occupations in New York State, see labor.ny.gov/stats/PDFs/STEM-Occupations-in-NYS.pdf.

by *Johny Nelson and David Quickenton*

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Regional Analysts' Corner

CAPITAL

James Ross — 518-242-8245

Over the past year, private sector jobs in the Capital Region rose by 200 to 434,500 in October 2016. Employment gains were largest in educational and health services (+2,200), natural resources, mining and construction (+500) and other services (+200). Job losses were greatest in leisure and hospitality (-2,300) and information (-300).

CENTRAL NY

Karen Knapik-Scalzo — 315-479-3391

Private sector jobs in the Syracuse metro area rose over the year by 800, or 0.3 percent, to 265,100 in October 2016. Growth was centered in trade, transportation and utilities (+1,400), educational and health services (+1,000) and financial activities (+400). The largest job losses occurred in professional and business services (-2,000) and manufacturing (-500).

FINGER LAKES

Tammy Marino — 585-258-8870

Private sector jobs in the Rochester metro area increased over the year by 400, or 0.1 percent, to 454,800 in October 2016. Gains were concentrated in educational and health services (+2,900) and financial activities (+1,300). Job losses were largest in professional and business services (-1,700), manufacturing (-1,200) and trade, transportation and utilities (-1,200).

HUDSON VALLEY

John Nelson — 914-997-8798

For the year ending October 2016, private sector jobs in the Hudson Valley increased by 10,300, or 1.3 percent, to 797,300. Growth was greatest in educational and health services (+7,500), professional and business services (+2,100), trade, transportation and utilities (+1,900) and leisure and hospitality (+1,600). Losses were centered in financial activities (-1,100) and manufacturing (-1,000).

LONG ISLAND

Shital Patel — 516-934-8533

Private sector jobs on Long Island increased by 11,700, or 1.0 percent, to 1,140,800 in the 12 months ending October 2016. Employment gains were largest in educational and health services (+10,700), natural resources, mining and construction (+1,900) and leisure and hospitality (+1,800). Losses were greatest in professional and business services (-2,200), financial activities (-700) and manufacturing (-600).

MOHAWK VALLEY

Mark Barbano — 315-793-2282

Private sector jobs in the Mohawk Valley declined by 600, or 0.4 percent, to 148,700 in the 12 months ending October 2016. Employment gains were largest in natural resources, mining and construction (+200). Job losses were greatest in educational and health services (-300), manufacturing (-200) and trade, transportation and utilities (-200).

NEW YORK CITY

James Brown — 718-613-3971

Private sector jobs in New York City rose by 65,400, or 1.8 percent, to 3,790,900 for the year ending October 2016. Job growth was greatest in educational and health services (+24,900), professional and business services (+15,500), leisure and hospitality (+14,300), other services (+6,000), trade, transportation and utilities (+3,400) and natural resources, mining and construction (+3,300). Losses were centered in financial services (-3,600).

SOUTHERN TIER

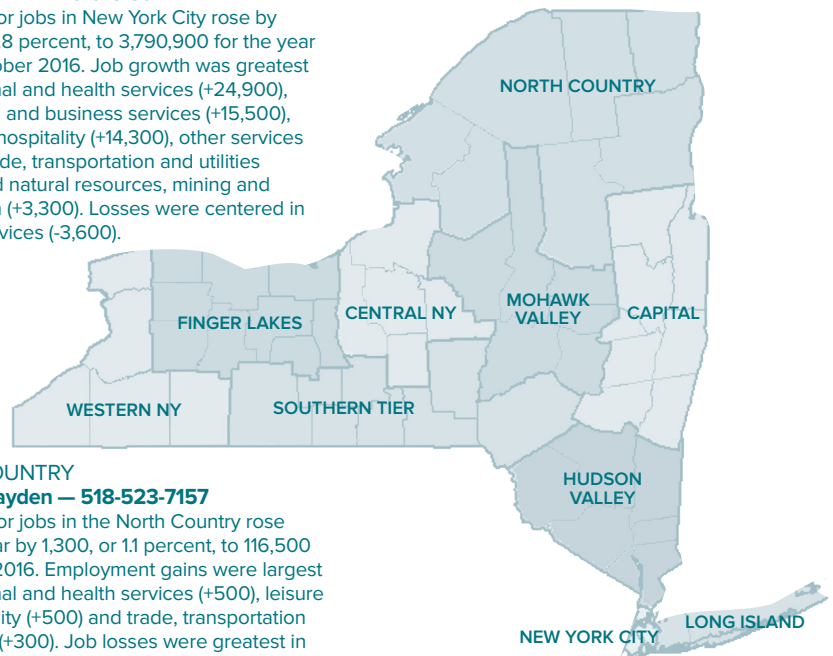
Christian Harris — 607-741-4485

Private sector jobs in the Southern Tier increased over the year by 1,300, or 0.5 percent, to 237,800 in October 2016. Employment gains were largest in educational and health services (+2,700) and natural resources, mining and construction (+200). Losses were centered in trade, transportation and utilities (-900) and manufacturing (-700).

WESTERN NY

John Slenker — 716-851-2742

Over the past year, private sector jobs in the Buffalo-Niagara Falls metro area increased by 5,200, or 1.1 percent, to 478,500 in October 2016. Growth was centered in leisure and hospitality (+2,200), trade, transportation and utilities (+2,000), financial activities (+1,200) and professional and business services (+800). Losses were greatest in manufacturing (-1,100) and other services (-400).



NORTH COUNTRY

Anthony Hayden — 518-523-7157

Private sector jobs in the North Country rose over the year by 1,300, or 1.1 percent, to 116,500 in October 2016. Employment gains were largest in educational and health services (+500), leisure and hospitality (+500) and trade, transportation and utilities (+300). Job losses were greatest in manufacturing (-300).