

What Occupational Location Quotients Say About New England, 2014

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The concentration of *forest fire inspectors and prevention specialists* in New Hampshire was nearly 24 times that of the nation in 2014.

The location quotient for *forest fire inspectors and prevention specialists* was 23.45, the highest location quotient among occupations in New Hampshire, though only 180 were employed in that position.

A location quotient is a ratio that compares the concentration of

a resource or activity, such as employment, in a defined area to the same measure in another, usually larger, area. For example, location quotients can be used to compare employment by occupation in a state to that of the nation. A location quotient equal to 1.0 indicates the areas have the same concentration of workers in the occupation. A location quotient higher than 1.0 indicates a higher concentration of workers in the smaller area, while a location

quotient lower than 1.0 indicates a lower concentration of workers in that occupation in the smaller geographic area.

Occupational location quotients were calculated using employment estimates from the Occupational Employment Statistics (OES) survey.¹ Comparing the concentration of occupational employment provides insights into the composition of jobs by geographic area. A high location

¹ Bureau of Labor Statistics, US Department of Labor. http://www.bls.gov/oes/oes_emp.htm#scope The OES survey covers all full-time and part-time wage and salary workers in nonfarm industries. The survey does not include the self-employed, owners and partners in unincorporated firms, household workers, or unpaid family workers. In Sector 11 - Agriculture, forestry, fishing and hunting, the survey covers only NAICS codes 1133, 1151, and 1152 and covers all other NAICS sectors.

Top 10 Occupations by Location Quotient, New England States, 2014

SOC	Title	Employment	Location Quotient
New Hampshire			
33-2022	Forest Fire Inspectors and Prevention Specialists	180	23.48
51-4199	Metal Workers and Plastic Workers, All Other	1,070	10.44
51-6099	Textile, Apparel, and Furnishings Workers, All Other	420	5.60
51-2023	Electromechanical Equipment Assemblers	1,050	4.82
53-2021	Air Traffic Controllers	500	4.69
51-4071	Foundry Mold and Coremakers	240	4.38
25-1053	Environmental Science Teachers, Postsecondary	110	4.27
35-2015	Cooks, Short Order	3,190	3.80
37-3019	Grounds Maintenance Workers, All Other	280	3.26
29-9099	Healthcare Practitioners and Technical Workers, All Other	580	3.05
Connecticut			
15-2011	Actuaries	1,180	4.50
33-2021	Fire Inspectors and Investigators	570	4.09
13-2053	Insurance Underwriters	3,790	3.39
29-1066	Psychiatrists	930	3.05
19-3022	Survey Researchers	550	2.95
25-1113	Social Work Teachers, Postsecondary	390	2.89
51-2011	Aircraft Structure, Surfaces, Rigging, and Systems Assemblers	1,410	2.85
51-4012	Computer Numerically Controlled Machine Tool Programmers, Metal and Plastic	840	2.77
51-4034	Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic	1,330	2.57
17-2121	Marine Engineers and Naval Architects	240	2.56

Continued on page 2

Top 10 Occupations by Location Quotient, New England States, 2014 (continued)

SOC	Title	Employment	Location Quotient
Maine			
45-4022	Logging Equipment Operators	1,240	10.98
33-2022	Forest Fire Inspectors and Prevention Specialists	70	9.19
45-4023	Log Graders and Scalers	80	6.28
25-1043	Forestry and Conservation Science Teachers, Postsecondary	40	5.44
25-1051	Atmospheric, Earth, Marine, and Space Sciences Teachers, Postsecondary	230	4.91
33-3031	Fish and Game Wardens	120	4.86
39-3093	Locker Room, Coatroom, and Dressing Room Attendants	320	4.17
49-3051	Motorboat Mechanics and Service Technicians	350	3.95
49-2094	Electrical and Electronics Repairers, Commercial and Industrial Equipment	1,050	3.67
53-7032	Excavating and Loading Machine and Dragline Operators	750	3.63
Massachusetts			
19-3032	Industrial-Organizational Psychologists	220	8.25
41-9012	Models	850	6.70
27-4013	Radio Operators	170	6.15
29-2053	Psychiatric Technicians	7,280	4.59
17-2031	Biomedical Engineers	2,090	4.24
19-1042	Medical Scientists, Except Epidemiologists	10,000	4.04
19-1022	Microbiologists	1,980	3.90
25-1031	Architecture Teachers, Postsecondary	670	3.78
15-2041	Statisticians	2,310	3.49
19-1099	Life Scientists, All Other	800	3.46
Rhode Island			
25-1031	Architecture Teachers, Postsecondary	190	7.61
51-9071	Jewelers and Precious Stone and Metal Workers	570	7.16
51-6061	Textile Bleaching and Dyeing Machine Operators and Tenders	250	6.36
15-1111	Computer and Information Research Scientists	380	4.52
25-4011	Archivists	70	3.96
25-2059	Special Education Teachers, All Other	520	3.85
25-1082	Library Science Teachers, Postsecondary	60	3.79
33-9099	Protective Service Workers, All Other	1,460	3.77
47-3016	Helpers--Roofers	150	3.67
51-6063	Textile Knitting and Weaving Machine Setters, Operators, and Tenders	270	3.41
Vermont			
51-7021	Furniture Finishers	320	9.42
47-5051	Rock Splitters, Quarry	60	6.81
27-2032	Choreographers	80	6.18
51-3091	Food and Tobacco Roasting, Baking, and Drying Machine Operators and Tenders	230	5.38
25-1053	Environmental Science Teachers, Postsecondary	60	5.34
25-1125	History Teachers, Postsecondary	260	4.97
47-2022	Stonemasons	120	4.96
25-1124	Foreign Language and Literature Teachers, Postsecondary	330	4.81
51-9193	Cooling and Freezing Equipment Operators and Tenders	80	4.43
19-1032	Foresters	90	4.25

quotient, however, may not equate to a high number of jobs; it is a simply a comparison of the relative share of an occupation in two geographic areas.

What are the Implications of a Location Quotient?

Location quotients for occupations provide a workforce view of an area’s economic base. By definition, a location quotient value higher than 1.0 indicates the concentration of that occupation in the area – in this case, a state - is higher than that of the comparison area – in this case, the nation. By identifying the industries most commonly employing workers in these occupations, the importance of those industries to the local economy can also be determined.

➤ In New Hampshire, there were high concentrations of *forest fire inspectors and prevention specialists, metal workers and plastics workers, all other, and textile, apparel, and furnishings workers, all other*, reflecting the strength of specialized manufacturing as well as the national forest.

- The high location quotients of *logging equipment operators, forest fire inspectors and prevention specialists, and log graders and scalers* in Maine illustrate the importance of the forest industry to that state.
- In Connecticut, high concentrations of *actuaries, fire inspectors and investigators, and insurance underwriters* reflect the importance of the insurance industry.
- The importance of biomedical research businesses was reflected in Massachusetts by a high concentration of *biomedical engineers, medical scientists, except epidemiologists, and microbiologists*.

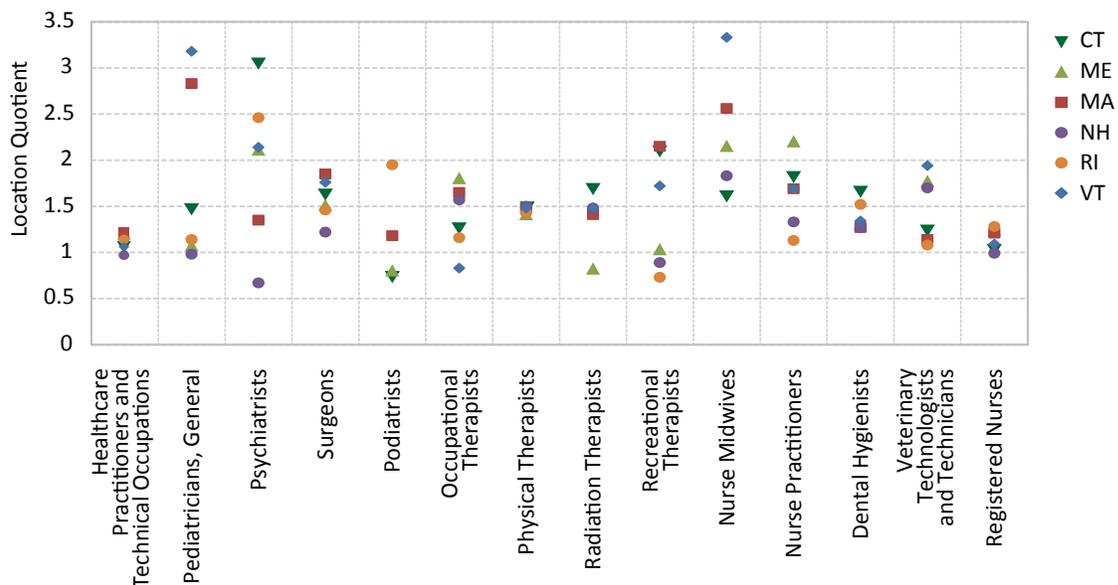
industry, which accounts for roughly 16 percent or more of private employment among the New England states. The location quotient for the Healthcare practitioner and technical occupations group in each New England state was very close to the national rate, ranging from 0.97 in New Hampshire to 1.22 in Massachusetts.

Individual occupations in the group showed regional similarities and differences. Each of the New England states had similar concentrations of *registered nurses* as the nation, with location quotients ranging from 0.99 in New Hampshire to 1.28 in Rhode Island. On the other hand, the concentration of *psychiatrists* in New Hampshire was roughly two-thirds of the national rate (location quotient of 0.67); while Connecticut had three times the national rate, with a location quotient of 3.05. In Vermont, the location quotient for *nurse midwives* was 3.33, compared to 1.86 in New Hampshire, 2.56 in Massachusetts, and 2.15 in Maine.

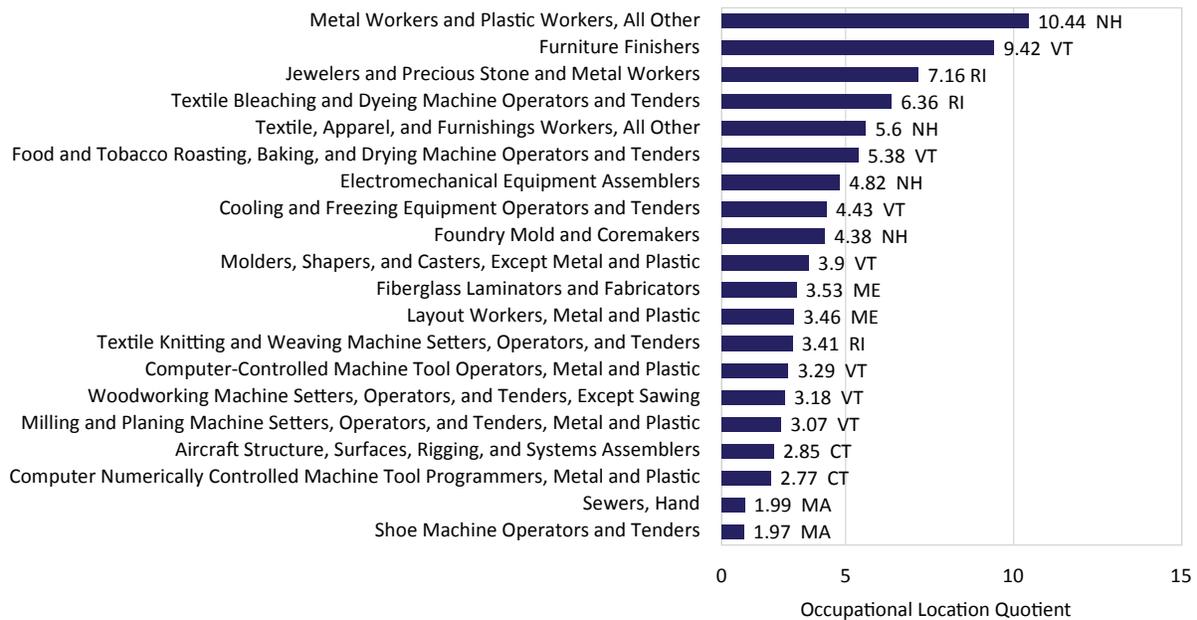
Location Quotients of Healthcare Practitioner and Technical Occupations

A majority of workers in *Healthcare practitioner and technical occupations* are employed in the *Health care and social assistance*

Location Quotients of Select Healthcare Practitioners and Technical Occupations in New England, 2014



Highest Location Quotients in Production Occupations in New England, 2014



Location Quotients of Production Occupations

Most workers in production occupations are employed in the *Manufacturing* industry. The *Manufacturing* industry accounts for roughly 10 percent of total private employment in the New England states. The concentration of all production occupations in New England was slightly below or equal to that of the nation, with location quotients ranging from 0.73 in Massachusetts to 1.06 in New Hampshire.

Unlike the healthcare occupations illustrated above, detail production occupations were not consistently

found in all New England states. Each state had a different mix of occupations, as well as a different mix of location quotients for the occupations.

Comparing 20 production occupations in the New England states having the highest location quotient provides some insight into the manufacturing specialty areas in each state. For example, Vermont had high location quotients for *food and tobacco roasting, baking, and drying machine operators*, and *cooling and freezing equipment operators and tenders*. These occupations are commonly found in the *Food product manufacturing* industry.

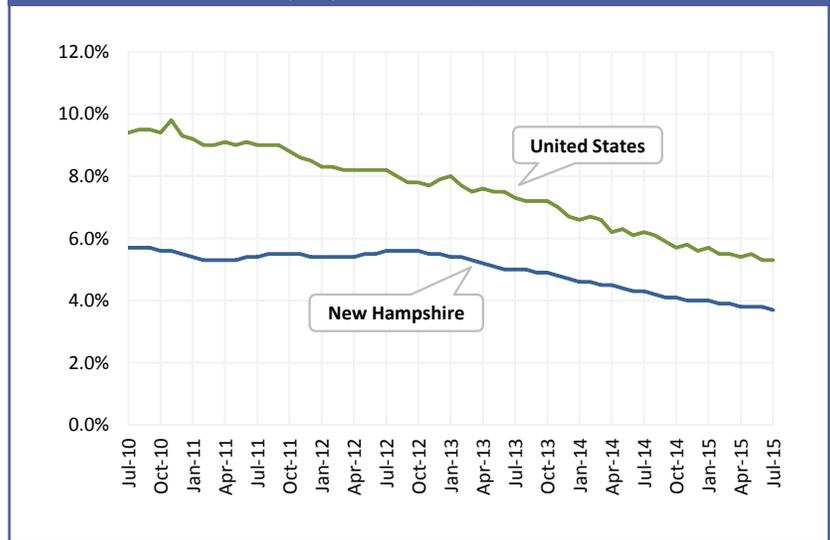
In New Hampshire, *metal workers and plastic workers, all other* had the highest location quotient among production occupations in the New England states. This occupation is commonly found in *Primary metal manufacturing* and *Fabricated metal product manufacturing*, two of the strongest manufacturing sub-sectors in the state. In Massachusetts, *hand sewers and shoe machine operators and tenders* had location quotients just below two. Even though these location quotients were at the bottom of the top 20 for New England, the concentration of these occupations was twice that of the nation.

Seasonally Adjusted Estimates

Unemployment Estimates by Region

Seasonally Adjusted	Jul-15	Jun-15	Jul-14
United States	5.3%	5.3%	6.2%
Northeast	5.2%	5.4%	6.0%
New England	4.7%	4.8%	5.8%
Connecticut	5.4%	5.7%	6.4%
Maine	4.6%	4.7%	5.7%
Massachusetts	4.7%	4.7%	5.7%
New Hampshire	3.7%	3.8%	4.3%
Rhode Island	5.8%	5.9%	7.6%
Vermont	3.6%	3.6%	4.1%
Mid Atlantic	5.4%	5.6%	6.1%
New Jersey	5.9%	6.1%	6.5%
New York	5.4%	5.5%	6.1%
Pennsylvania	5.4%	5.4%	5.5%

Local Area Unemployment Statistics (LAUS) Unemployment Rate, NH and US



Current Employment Statistics (CES) by Place of Establishment

Sector	Number of Jobs			Change from Previous	
	Jul-15	Jun-15	Jul-14	Month	Year
Total Nonfarm	657,300	653,900	649,700	3,400	7,600
Total Private	569,000	565,600	558,700	3,400	10,300
Mining and Logging	900	900	900	0	0
Construction	23,700	24,000	23,200	-300	500
Manufacturing	67,900	67,700	66,700	200	1,200
Durable Goods	51,300	51,100	50,100	200	1,200
Non-Durable Goods	16,600	16,600	16,600	0	0
Trade, Transportation, and Utilities	141,200	140,800	136,900	400	4,300
Wholesale Trade	27,600	27,300	27,200	300	400
Retail Trade	97,200	97,500	94,700	-300	2,500
Transportation, Warehousing, and Utilities	16,400	16,000	15,000	400	1,400
Information	12,500	12,400	12,100	100	400
Financial Activities	35,900	36,000	35,900	-100	0
Finance and Insurance	29,100	29,300	29,000	-200	100
Real Estate and Rental and Leasing	6,800	6,700	6,900	100	-100
Professional and Business Services	74,400	73,100	73,900	1,300	500
Professional, Scientific, and Technical Services	33,000	32,400	32,600	600	400
Administrative and Support and Waste Management and Remediation Services	33,000	32,800	33,200	200	-200
Education and Health Services	118,500	117,400	116,100	1,100	2,400
Educational Services	29,700	29,700	29,300	0	400
Health Care and Social Assistance	88,800	87,700	86,800	1,100	2,000
Leisure and Hospitality	67,600	67,200	67,000	400	600
Arts, Entertainment, and Recreation	11,600	11,700	11,100	-100	500
Accommodation and Food Services	56,000	55,500	55,900	500	100
Other Services	26,400	26,100	26,000	300	400
Government	88,300	88,300	91,000	0	-2,700
Federal Government	7,500	7,600	7,400	-100	100
State Government	24,800	24,400	24,900	400	-100
Local Government	56,000	56,300	58,700	-300	-2,700

Current month is preliminary; past months are revised

Prior data and area data are available on our Web site at www.nhes.nh.gov/elmi/statistics/ces-data.htm

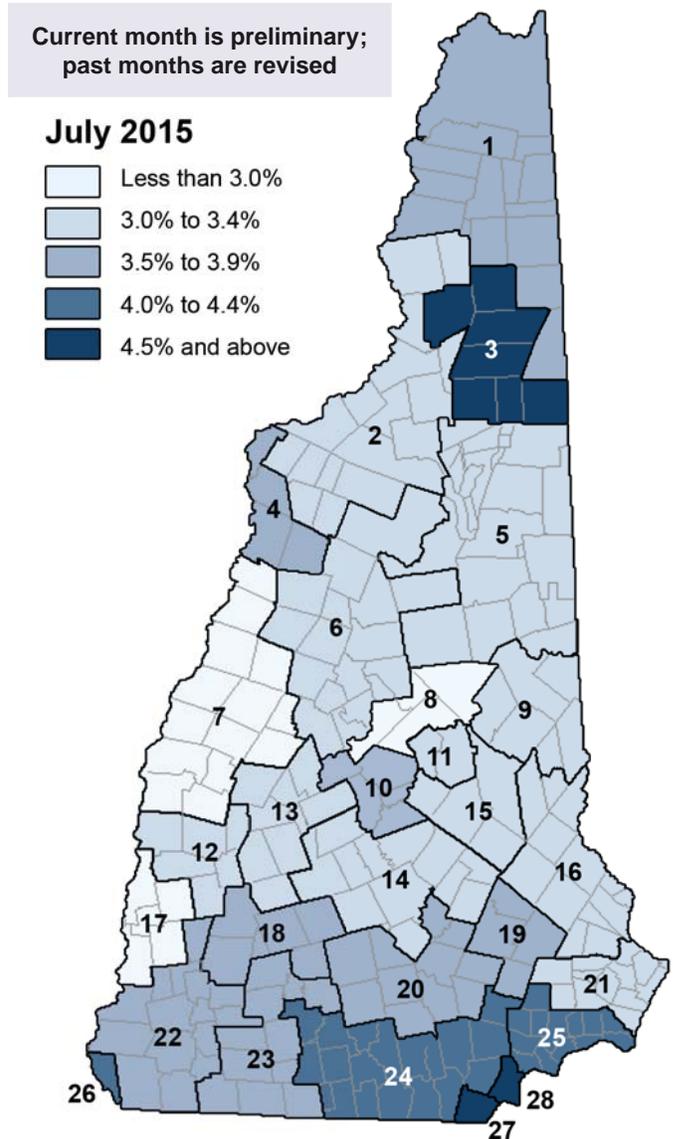
Not Seasonally Adjusted Estimates by Place of Residence

Labor Force Estimates			
New Hampshire	Jul-15	Jun-15	Jul-14
Total Civilian Labor Force	758,980	754,240	753,770
Employed	731,800	727,470	722,610
Unemployed	27,180	26,770	31,160
Unemployment Rate	3.6%	3.5%	4.1%
United States (# in thousands)	Jul-15	Jun-15	Jul-14
Total Civilian Labor Force	158,527	158,283	157,573
Employed	149,722	149,645	147,265
Unemployed	8,805	8,638	10,307
Unemployment Rate	5.6%	5.5%	6.5%

Unemployment Rates by Area			
Counties	Jul-15	Jun-15	Jul-14
Belknap	3.1%	3.2%	3.6%
Carroll	3.2%	3.3%	3.4%
Cheshire	3.6%	3.6%	4.2%
Coös	4.2%	4.9%	5.4%
Grafton	3.1%	3.1%	3.5%
Hillsborough	3.8%	3.8%	4.4%
Merrimack	3.2%	3.2%	3.6%
Rockingham	3.8%	3.8%	4.4%
Strafford	3.4%	3.3%	4.1%
Sullivan	3.1%	2.9%	3.4%

Map Key	Labor Market Areas	Jul-15	Jun-15	Jul-14
1	Colebrook, NH-VT LMA, NH Portion	3.9%	4.4%	4.9%
2	Littletton, NH-VT LMA, NH Portion	3.2%	3.2%	3.6%
3	Berlin NH Micropolitan NECTA	5.1%	6.1%	6.7%
4	Haverhill, NH LMA	3.5%	3.3%	3.7%
5	Conway, NH-ME LMA, NH Portion	3.1%	3.4%	3.3%
6	Plymouth, NH LMA	3.3%	3.4%	3.6%
7	Lebanon, NH-VT Micropolitan NECTA, NH Portion	2.9%	2.8%	3.3%
8	Meredith, NH LMA	2.9%	2.9%	3.3%
9	Wolfeboro, NH LMA	3.4%	3.5%	3.8%
10	Franklin, NH LMA	3.6%	3.5%	3.9%
11	Laconia, NH Micropolitan NECTA	3.3%	3.2%	3.8%
12	Claremont-Newport, NH LMA	3.2%	3.0%	3.5%
13	New London, NH LMA	3.3%	3.1%	3.7%
14	Concord, NH Micropolitan NECTA	3.1%	3.1%	3.5%
15	Belmont, NH LMA	3.1%	3.2%	3.6%
16	Dover-Durham, NH-ME Metropolitan NECTA, NH Portion	3.4%	3.3%	4.1%
17	Charlestown, NH LMA	2.7%	2.8%	3.2%
18	Hillsborough, NH LMA	3.8%	3.6%	4.0%
19	Raymond, NH LMA	3.5%	3.4%	4.0%
20	Manchester, NH Metropolitan NECTA	3.5%	3.4%	4.1%
21	Portsmouth, NH-ME Metropolitan NECTA, NH Portion	3.2%	3.1%	3.7%
22	Keene, NH Micropolitan NECTA	3.6%	3.6%	4.2%
23	Peterborough, NH LMA	3.5%	3.4%	4.1%
24	Nashua, NH-MA NECTA Division, NH Portion	4.0%	4.0%	4.6%
25	Seabrook-Hampstead Area, NH Portion, Haverhill-Newburyport-Amesbury MA-NH NECTA Division	4.3%	4.2%	5.2%
26	Hinsdale Town, NH Portion, Brattleboro, VT-NH LMA	4.0%	3.9%	4.9%
27	Pelham Town, NH Portion, Lowell-Billerica-Chelmsford, MA-NH NECTA Division	4.7%	4.6%	5.7%
28	Salem Town, NH Portion, Lawrence-Metuen-Salem, MA-NH NECTA Division	4.5%	4.6%	5.1%

Unemployment Rates by Region			
Not Seasonally Adjusted	Jul-15	Jun-15	Jul-14
United States	5.6%	5.5%	6.5%
Northeast	5.5%	5.3%	6.4%
New England	4.9%	4.9%	6.0%
Connecticut	5.6%	5.4%	6.9%
Maine	4.0%	4.6%	5.3%
Massachusetts	4.9%	4.9%	6.0%
New Hampshire	3.6%	3.5%	4.1%
Rhode Island	5.8%	5.6%	7.8%
Vermont	3.6%	3.6%	4.1%
Mid Atlantic	5.7%	5.4%	6.6%
New Jersey	6.2%	5.6%	7.1%
New York	5.4%	5.2%	6.5%
Pennsylvania	5.9%	5.6%	6.4%



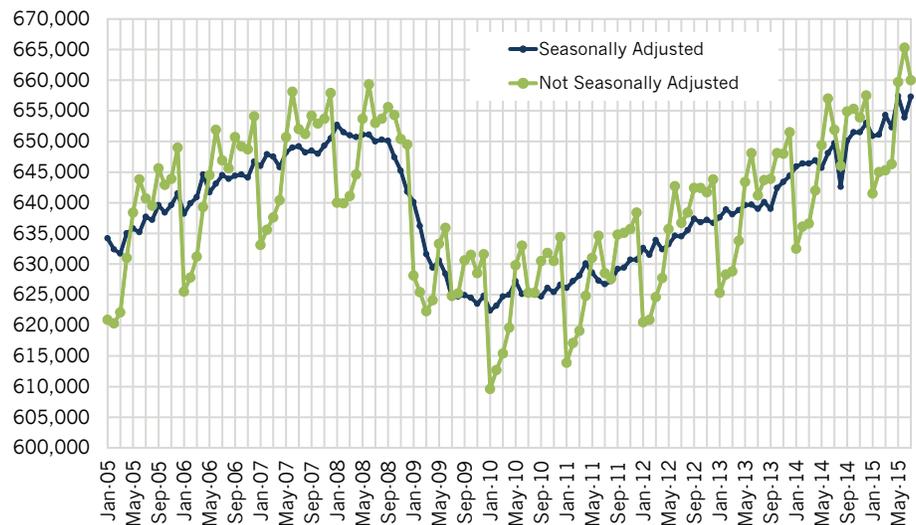
New Hampshire unemployment and labor force estimates are calculated using a regression model which depends on Current Population Survey (CPS) estimates. City and town estimates are calculated using the Bureau of Labor Statistics "Handbook Method" and then adjusted to the State levels.

Monthly Analysis of Current Employment Statistics (CES)

New Hampshire Nonfarm Employment Statewide Not Seasonally Adjusted

	Number of Jobs			Change from previous:	
	Jul-15	Jun-15	Jul-14	Month	Year
	preliminary	revised			
Total All Supersectors	660,000	665,300	651,900	-5,300	8,100
Private Employment Total	583,700	578,700	572,800	5,000	10,900
Mining and Logging	1,000	1,000	1,000	0	0
Construction	25,400	25,300	24,700	100	700
Manufacturing	68,100	68,300	66,900	-200	1,200
Durable Goods	51,500	51,500	50,300	0	1,200
Non-Durable Goods	16,600	16,800	16,600	-200	0
Trade, Transportation and Utilities	142,400	142,700	137,600	-300	4,800
Wholesale Trade	27,800	27,400	27,400	400	400
Retail Trade	98,500	98,800	95,700	-300	2,800
Transportation and Utilities	16,100	16,500	14,500	-400	1,600
Information	12,500	12,500	12,200	0	300
Financial Activities	36,700	36,300	36,400	400	300
Professional and Business	75,100	74,700	75,000	400	100
Education and Health	116,400	117,000	114,700	-600	1,700
Leisure and Hospitality	79,100	74,400	77,700	4,700	1,400
Other Services	27,000	26,500	26,600	500	400
Government Total	76,300	86,600	79,100	-10,300	-2,800
Federal Government	7,600	7,600	7,400	0	200
State Government	21,900	22,100	22,000	-200	-100
Local Government	46,800	56,900	49,700	-10,100	-2,900

Total Nonfarm Employment Trend for July 2015

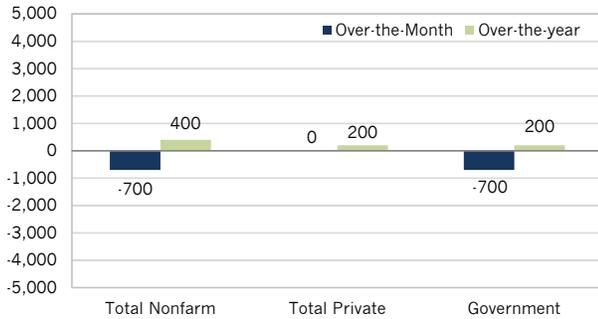


Not Seasonally Adjusted Estimates by Place of Establishment

Nonfarm Employment by Metropolitan Statistical Areas

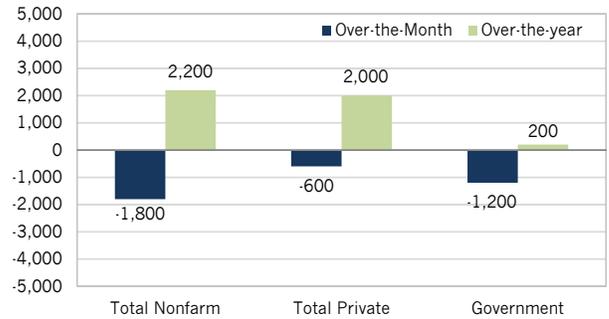
Dover-Durham NH-MA Metro NECTA

July 2015



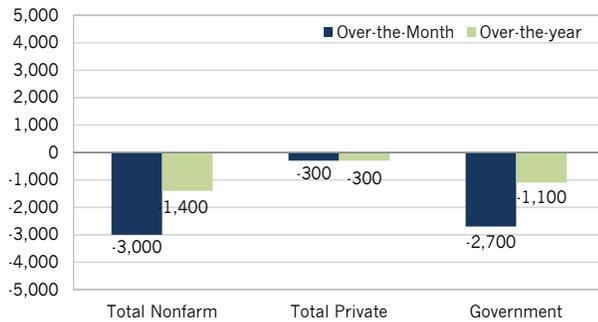
Manchester Metro NECTA

July 2015



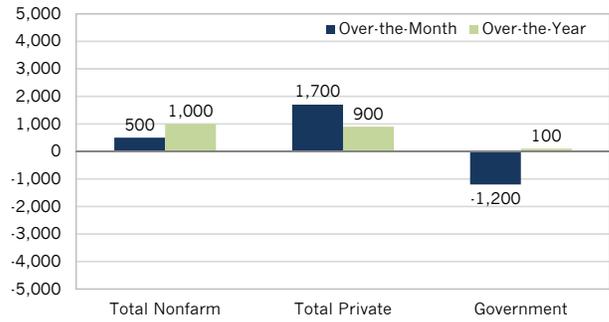
Nashua NH-MA NECTA Division

July 2015



Portsmouth NH-MA Metro NECTA

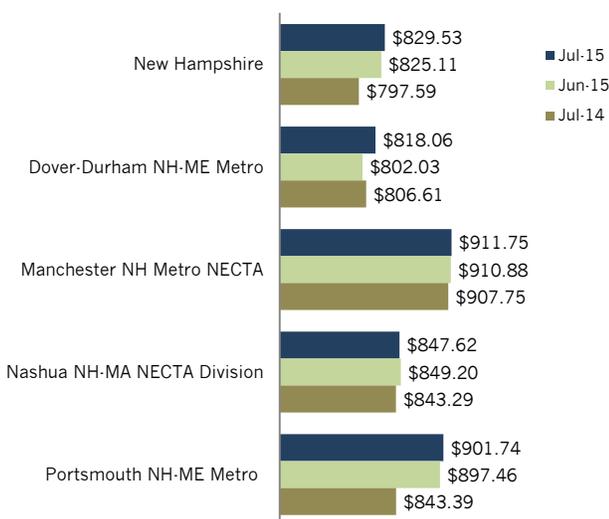
July 2015



Total Private Average Weekly Earnings Data

Private All Employees Average Weekly Earnings

July 2015



Production Workers Average Weekly Earnings

July 2015

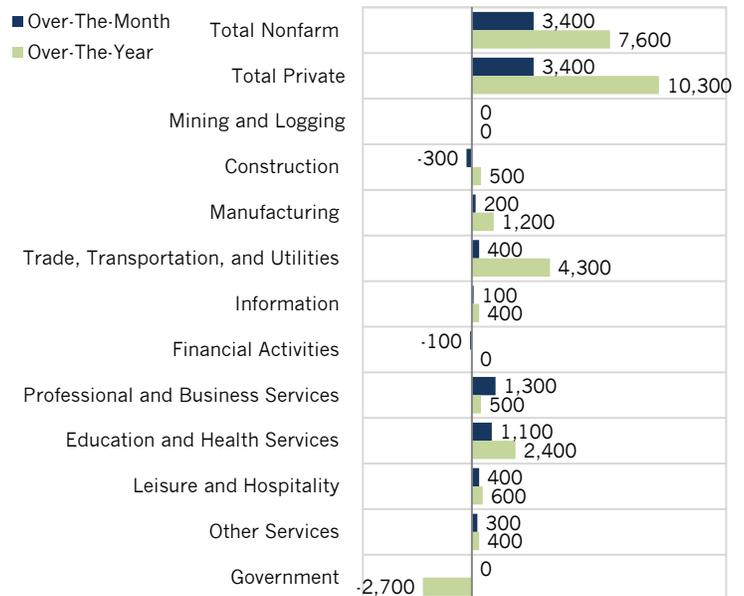


Sector data for the four areas and hours and earnings data are available on our web site: www.nhes.nh.gov/elmi/statistics/ces-data.htm

Seasonally Adjusted Statistical Analysis of Nonfarm Employment

- Preliminary total nonfarm employment rose to 657,300, from June to July. This was a gain of 3,400 jobs.
- Employment in Professional and business services increased by 1,300 jobs over-the-month.
- From July 2014 to July 2015, preliminary Total nonfarm employment rose by 7,600 jobs. All of this job growth was in the Private sector.
- Over-the-year, Trade, transportation, and utilities gained 4,300 jobs.
- Changes in seasonally adjusted data reflect underlying economic changes and allow for comparisons of different time periods.

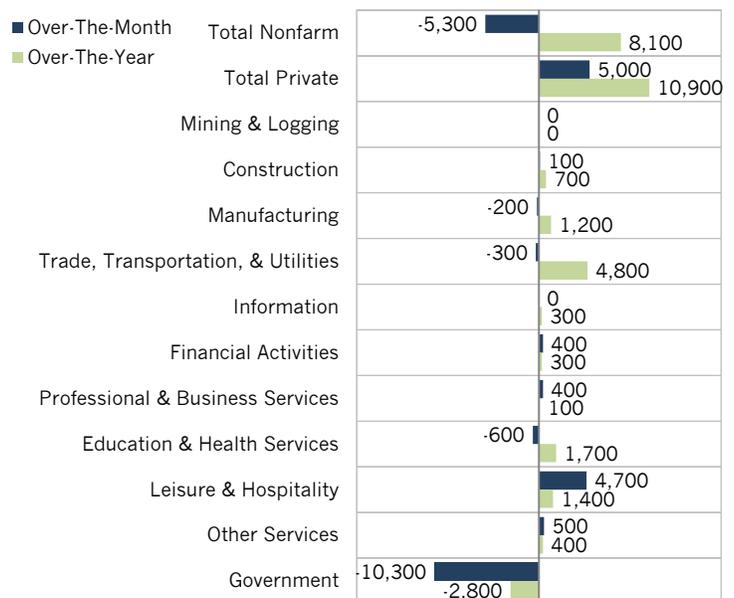
Seasonally Adjusted July 2015 Change



Not Seasonally Adjusted Statistical Analysis of Nonfarm Employment

- New Hampshire's not seasonally adjusted employment levels dropped to 660,000, a decrease of 5,300 jobs from June to July.
- Over-the-month, Government lost 10,300 jobs, bringing employment levels to a low of 76,300 jobs.
- From July 2014 to July 2015, Total nonfarm employment increased by 8,100 jobs.
- Nearly 60 percent of the over-the-year increase was in Trade, transportation, and utilities, up 4,800 jobs over-the-year.
- Changes in not seasonally adjusted data are due to seasonal patterns in hiring, as well as underlying economic changes.

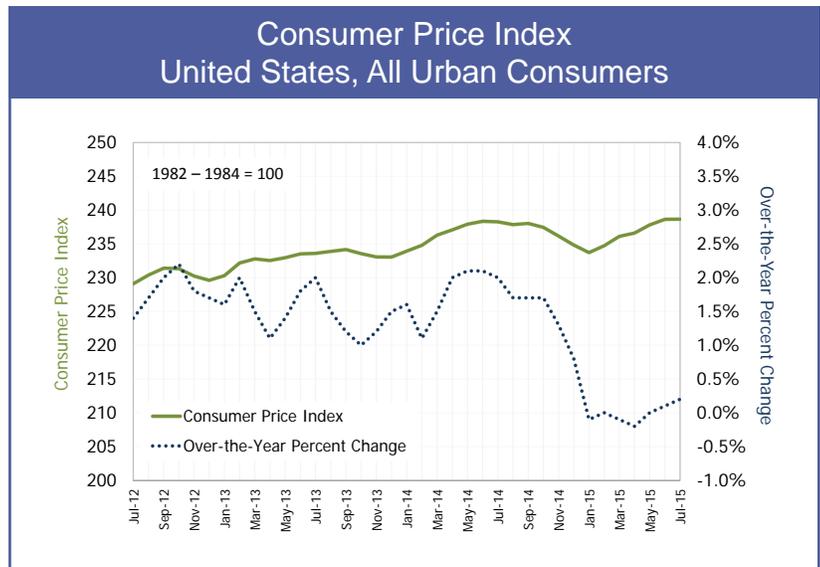
Not Seasonally Adjusted July 2015 Change



For further analysis, see the *Detailed Monthly Analysis of Industry Employment Data* on our web site: www.nhes.nh.gov/elmi/statistics/ces-data.htm

Consumer Price Index				
United States, All Urban Consumers, Not Seasonally Adjusted (CPI-U) (1982-1984=100)				
Jul-15	Jun-15	Jul-14	Change from Previous	
			Month	Year
238.654	238.638	238.250	0.2%	0.0%

Northeast, All Urban Consumers, Not Seasonally Adjusted (CPI-U) (1982-1984=100)				
Jul-15	Jun-15	Jul-14	Change from Previous	
			Month	Year
253.405	253.626	253.833	-0.2%	-0.1%



Unemployment Compensation Claims Activity						
	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15
Initial Claims	4,177	3,424	3,705	2,528	3,773	2,851
Continued Weeks Claimed	29,563	34,494	24,049	20,779	19,458	20,108
Average payment for a week of unemployment	\$292.73	\$293.24	\$298.17	\$304.35	\$314.20	\$295.61

New Hampshire Economic Conditions is published monthly in coordination with the Bureau of Labor Statistics and the Employment and Training Administration of the U.S. Department of Labor.

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New Hampshire Employment Security
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Concord 228-4100	Conway 447-5924
Keene 352-1904	Laconia 524-3960
Littleton 444-2971	Manchester 627-7841
Nashua 882-5177	Portsmouth 436-3702
Salem 893-9185	Somersworth 742-3600

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