THE CONNECTICUT
ECONOMIC DIGEST

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MAY 2017

IN THIS ISSUE...

In March...

Nonfarm Employment
- Connecticut 1,685,400
  - Change over month ..... +0.08%
  - Change over year ..... +0.1%
- United States 145,858,000
  - Change over month ..... +0.07%
  - Change over year ..... +1.5%

Unemployment Rate
- Connecticut 4.8%
- United States 4.5%

Consumer Price Index
- United States 243.801
  - Change over year ..... +2.4%

Short-Term Employment Projections Through 2018

By Matthew Krzyzek, Economist, and Patrick Flaherty, Assistant Director of Research, DOL

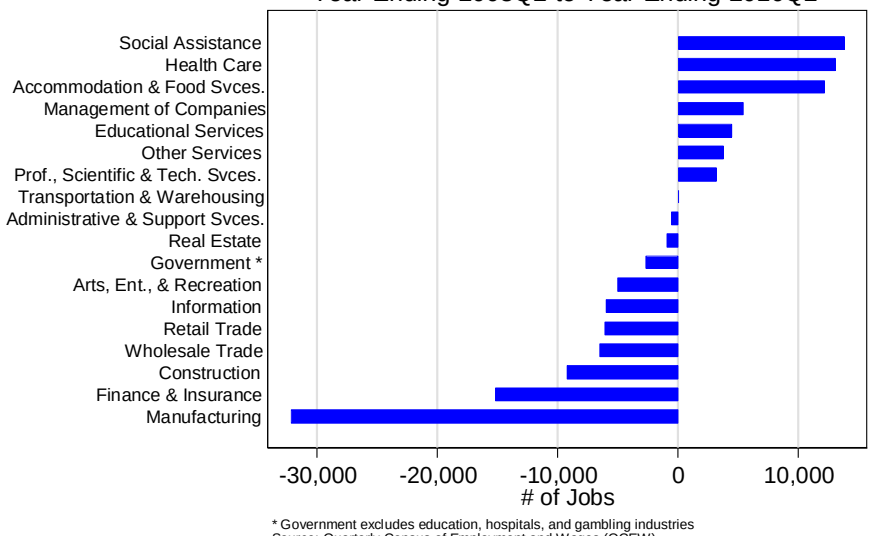
Each year, the Office of Research at the Connecticut Department of Labor produces short-term employment projections by industry and occupation. The projections are based on a careful analysis of the Connecticut economy and labor market.

CURRENT SITUATION

March of 2010 was the first month of payroll job growth after the great recession. Seven years later the Connecticut economy has regained 91,200 jobs or 77% of the 119,100 lost during the "great recession" as of March 2017. Overall employment growth has been dampened by the government sector which is down 14,000 jobs since February 2010. Private sector employment has fared significantly better having recovered 94% of the jobs lost during the downturn.

Household employment, which includes the self-employed, independent contractors, and those who work out of state as well as state residents who have payroll jobs in Connecticut, hit a record high in March 2017. The unemployment rate, which peaked at 9.2% in October 2010 and remained that high through February 2011, was down to 4.8%

Figure 1: Connecticut Employment Change
Year Ending 2008Q2 to Year Ending 2016Q2



* Government excludes education, hospitals, and gambling industries
Source: Quarterly Census of Employment and Wages (QCEW)

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The Connecticut Economic Digest is published monthly by the Connecticut Department of Labor, Office of Research, and the Connecticut Department of Economic and Community Development. Its purpose is to regularly provide users with a comprehensive source for the most current, up-to-date data available on the workforce and economy of the state, within perspectives of the region and nation.

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in March 2017. It first fell below 5 percent in August 2016. In December 2016 it was 4.4 percent, a level last seen in mid-2007. The slight increase during 2017 has occurred during labor force expansion and employment growth, which indicates that discouraged workers are reentering the labor force, a positive sign for the state economy.

Sector Change 2008-2016

In addition to the monthly payroll and employment surveys, comprehensive employment and wage data is collected and published from the Quarterly Census of Employment and Wages (QCEW). The detailed QCEW data forms the basis for the employment and occupational projections. We can also use the QCEW to examine changes in the structure of Connecticut's economy.

Figure 1 shows the employment change from the year ending 2008 Q2 (the peak before the great recession) to the year ending 2016 Q2 (the base quarter for the projections discussed below).

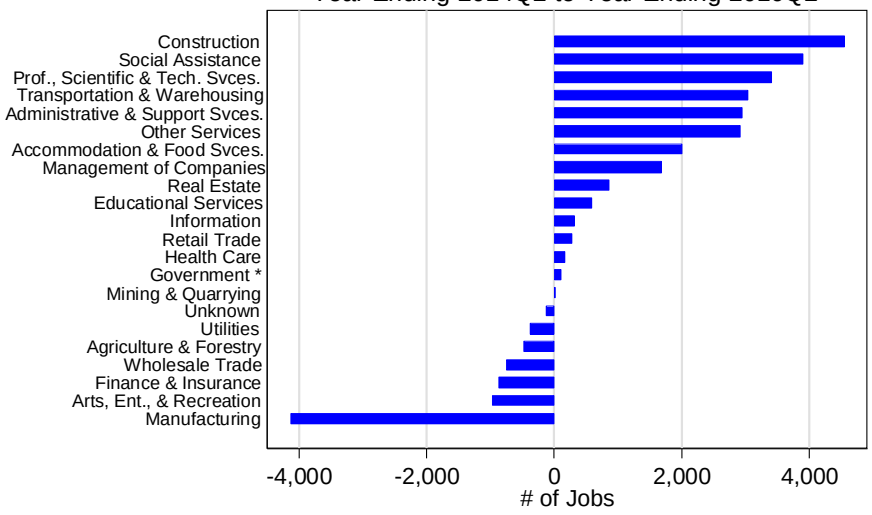
Health Care and Social Assistance have long been bright spots in the Connecticut economy, adding jobs throughout the recession and the recovery. From 2008 to 2016 they added nearly 27,000 jobs. Growth has slowed in the most recent two years, particularly for health care, but both continued to add jobs (**Figure 2**).

Accommodation and Food Services is another sector that has experienced strong employment growth over the recovery. This growth, in part, is the result of a shift of consumer preferences, which can be seen in the comparatively slow recovery of retail jobs. As noted in a recent article in *The Atlantic*, consumers are buying less at stores, buying more online and going out to eat more than they were prior to the recession.[1]

Manufacturing, the sector with the most losses, is down 32,000 jobs (17 percent) since 2008. Seventy-four percent of those losses occurred by 2010; since then manufacturing losses have tempered. Payroll data through March 2017 show an increase in manufacturing from one year prior.

Government, however, continues to decline. Through March 2017 government

Figure 2: Connecticut Employment Change
Year Ending 2014Q2 to Year Ending 2016Q2



* Government excludes education, hospitals, and gambling industries
Source: Quarterly Census of Employment and Wages (QCEW)

Figure 3: Jobs Lost and Recovered Over the Current Business Cycle in the U.S., Connecticut, and Neighboring States

	Peak Emp	Emp Trough	Peak Date	Trough Date	# of decline months	# of recovery months	As of February 2017	% decline	% recovery	% of previous peak	Recovery Rate* (as of February 2017)
United States	138,430,000	129,733,000	Jan. 2008	Feb. 2010	25	84	145,760,000	-6.3%	12.4%	105.3%	184.3%
Connecticut	1,713,300	1,594,200	Mar. 2008	Feb. 2010	23	84	1,682,400	-7.0%	5.5%	98.2%	74.1%
Maine	620,900	590,200	Feb. 2008	Aug. 2010	30	78	620,200	-4.9%	5.1%	99.9%	97.7%
Massachusetts	3,331,600	3,190,600	Apr. 2008	Oct. 2009	18	88	3,603,600	-4.2%	12.9%	108.2%	292.9%
New Hampshire	651,900	621,200	Jan. 2008	Jan. 2010	24	85	677,500	-4.7%	9.1%	103.9%	183.4%
New Jersey	4,094,500	3,835,900	Jan. 2008	Sep. 2010	32	77	4,130,200	-6.3%	7.7%	100.9%	113.8%
New York	8,811,300	8,480,000	Apr. 2008	Oct. 2009	18	88	9,496,900	-3.8%	12.0%	107.8%	306.9%
Pennsylvania	5,822,000	5,564,400	Apr. 2008	Feb. 2010	22	84	5,941,600	-4.4%	6.8%	102.1%	146.4%
Rhode Island	495,700	455,900	Dec. 2006	Jul. 2009	31	91	495,200	-8.0%	8.6%	99.9%	98.7%
Vermont	309,600	294,900	Jun. 2007	Jul. 2009	25	91	315,900	-4.7%	7.1%	102.0%	142.9%

*** Recovery Rate = % of lost jobs that have been recovered -- Source: CT Dept. of Labor & BLS Current Employment Statistics (CES)**

employment at all levels is down more than 21,000 jobs from 2008, with state government down more than 7,000 and local government (including Native American tribal government employment) down nearly 13,000. Excluding education, hospitals and gambling, state government is responsible for more than two-thirds of the decline in overall government employment since 2008. In the past two years, state government has continued to decline while federal and local employment have increased slightly.

Other sectors that declined since 2008 are turning around. Construction gained over 4,000 jobs in the two years ending 2016Q2. Professional, Scientific, and Technical Services and Transportation and Warehousing have experienced similar two year gains of nearly 3,000 each.

Connecticut's Recovery Compared to Other States

As shown in **Figure 3**, Connecticut's 7.0 percent decline during the recession was steeper than that of the U.S. and every northeast state with the exception of Rhode Island, which fell 8.0 percent. Since its February 2010 trough, slow employment growth in Connecticut has caused its recovery rate to lag the rest of the region and the nation.

A key post-recession development has been the significant employment growth of both New York and Massachusetts, which as of February 2017 are at employment levels respectively at 7.8% and 8.2% above peak 2008 levels. This employment growth has consistently outpaced the U.S. recovery overall, with each state experiencing shallower employment troughs and a shorter period of job loss (18 months each vs. 25 months for the U.S.).

The rest of the Northeast states have by and large experienced slower recoveries, with every other state experiencing employment growth below the U.S. rate from March 2014 onward. Prior to that threshold, many Northeast states had employment growth that outpaced the country. Connecticut's growth tracked the U.S. rate until early 2011, when it began its downward divergence. Up until recently, Connecticut's employment growth rate has largely tracked the respective rates of Maine, New Jersey, and Rhode Island, but since mid-2015, employment growth has lagged those of other Northeast states.

As of February 2017, Connecticut's level of employment stood at 98.2% of its March 2008 peak and the state had recovered 74.1% of the 119,100 employment drop it experienced from March 2008 to February 2010. For the two years ending 2016Q2 (the base quarter for the projections), Connecticut employment is up 1.2% compared to up 4.1% in Massachusetts, 3.8% in New York and 2.8% in Rhode Island. After Connecticut, the slowest growing state in our region was Vermont (up 1.5%).

CONNECTICUT SHORT-TERM PROJECTIONS

The current projections are for the period from the second quarter of 2016 to the second quarter of 2018. For this period, we project overall employment in Connecticut to increase by 0.8%, from 1,880,450 to 1,895,489, as is shown in **Figure 4,** slightly faster than the 2015-2017 rate we projected last year. Although second-quarter 2017 employment data isn't yet available, early indications are that Connecticut is on track to meet or exceed the growth projected during the previous projection cycle.

Projections by Industry

The largest major sectors that show significant rate increases are Construction, Other Services, and Professional and Business Services, which we project to grow 2.5%, 2.0%, and 1.8% compared to 0.8% for total employment. After significant

Figure 4: Employment Projections by Industry

Industry	2016 Q2 History	2018 Q2 Projections	Emp Change	% Change
Total All Industries	**1,880,450**	**1,895,489**	**15,039**	**0.8%**
Self Employed and Unpaid Family Workers, All Jobs	171,000	173,260	2,260	1.3%
Goods Producing	222,243	224,148	1,905	0.9%
Natural Resources and Mining	5,689	5,880	191	3.4%
Construction	60,374	61,906	1,532	2.5%
Manufacturing	156,180	156,362	182	0.1%
Service Providing	1,487,207	1,498,081	10,874	0.7%
Trade, Transportation, and Utilities	299,937	300,292	355	0.1%
Information	32,236	31,963	-273	-0.8%
Financial Activities	130,020	130,348	328	0.3%
Professional and Business Services	220,008	224,033	4,025	1.8%
Education and Health Services	471,486	477,071	5,585	1.2%
Leisure and Hospitality	169,873	170,404	531	0.3%
Other Services (except Government)	77,687	79,263	1,576	2.0%
Government	85,960	84,707	-1,253	-1.5%

Figure 5: Projected Employment in Education and Health Services

Industry	2016 Q2 History	2018 Q2 Projections	Emp Change	% Change
Educational Services	186,741	185,726	-1,015	-0.5%
Ambulatory Health Care Services	90,776	93,007	2,231	2.5%
Hospitals	64,818	65,316	498	0.8%
Nursing and Residential Care Facilities	66,454	66,864	410	0.6%
Social Assistance	62,697	66,158	3,461	5.5%

Figure 6: Employment Projections by Occupational Group

Occupational Group	2016 Q2 History	2018 Q2 Projections	Emp Change	% Change
Total, All Occupations	**1,880,450**	**1,895,489**	**15,039**	**0.8%**
Management	144,084	145,647	1,563	1.1%
Business and Financial Operations	104,139	105,461	1,322	1.3%
Computer and Mathematical	48,782	50,067	1,285	2.6%
Architecture and Engineering	36,231	36,712	481	1.3%
Life, Physical, and Social Science	14,615	14,824	209	1.4%
Community and Social Service	41,159	41,960	801	1.9%
Legal	20,948	20,997	49	0.2%
Education, Training, and Library	135,782	135,705	-77	-0.1%
Arts, Design, Entertainment, Sports, and Media	38,677	38,943	266	0.7%
Healthcare Practitioners and Technical	111,092	113,059	1,967	1.8%
Healthcare Support	53,709	54,781	1,072	2.0%
Protective Service	34,251	34,320	69	0.2%
Food Preparation and Serving Related	138,546	139,678	1,132	0.8%
Building and Grounds Cleaning and Maintenance	79,420	80,754	1,334	1.7%
Personal Care and Service	94,812	97,018	2,206	2.3%
Sales and Related	185,618	185,538	-80	0.0%
Office and Administrative Support	270,748	269,637	-1,111	-0.4%
Farming, Fishing, and Forestry	4,052	4,130	78	1.9%
Construction and Extraction	74,551	75,932	1,381	1.9%
Installation, Maintenance, and Repair	56,172	56,522	350	0.6%
Production	96,810	96,467	-343	-0.4%
Transportation and Material Moving	96,252	97,337	1,085	1.1%

losses from the 2008-10 period, Construction is expected to continue the growth it has experienced in recent years. Other Services and Professional and Business Services both currently have employment levels above those experienced in 2008 and are expected to continue to add jobs.

Major industries that are projected to have negative annual average growth rates are Government, down 1.5 percent, and Information, down 0.9 percent over two years. The expected losses in Government and Information employment continue previous declines.

Though slower than the economy overall, the increases projected for Manufacturing and Trade, Transportation, and Utilities represent positive turns for sectors that sustained large losses during the last recession.

Education and Health Services, the largest combined industry sector in the economy, is expected to continue growth that has persisted throughout the business cycle. However, there are some warning signs that some industries within this sector are facing challenging times. As shown in **Figure 5**, Education employment is expected to dip slightly as demographic and fiscal challenges put pressure on public and private education at all levels. At the same time, the largest institutions providing health care (hospitals and residential nursing facilities) are projected to grow at or below the rate of the overall economy – a major change from the years when health care far outstripped overall economic growth.

Projections by Occupation

As noted above, overall employment is projected to grow by 15,039 from 2016Q2 through 2018Q2. The major categories with the largest employment change are Personal Care and

Figure 7: Employment Projections by Minimum Education

Level of Educational Attainment	2016 Q2 History	2018 Q2 Projections	Emp Change	% Change
Total All Industries	**1,880,450**	**1,895,489**	**15,039**	**0.8%**
No formal educational credential	455,895	460,129	4,234	0.9%
High school diploma or equivalent	648,054	650,708	2,654	0.4%
Postsecondary non-degree award	113,881	115,292	1,411	1.2%
Some college, no degree	51,300	50,971	-329	-0.6%
Associate degree	43,841	44,548	707	1.6%
Bachelor's degree	466,561	471,439	4,878	1.0%
Master's degree	38,311	38,944	633	1.7%
Doctoral or professional degree	62,393	63,241	848	1.4%

Service (+2,206), Healthcare Practitioners and Technical (+1,967), and Management (+1,563). The four occupational groups that are projected to decline over the two year projections period are Office and Administrative Support (-1,111), Production (-343), Sales and Related (-80), and Education, Training, and Library (-77) occupations. The expected slowdown in Education, Training, and Library occupations is the result of population declines in the school-aged population.

Each occupation is assigned an education value based on the minimum education necessary to enter an occupation. **Figure 6** shows the breakdown of occupational projections by education value. Over the two years that span the projections period, 56% of job growth will be in occupations that require a credential or degree beyond high school with the largest increase in occupations that require at least a bachelor's degree to enter the occupation. Occupations requiring a master's, doctorate, or professional degree are expected to increase significantly faster than overall employment.

Conclusion

Seven years after the end of the "Great Recession", Connecticut's employment is still growing and is projected to grow over the next two years. However, growth remains slower than the national average and in our neighboring states. The mix of growth is also changing. Health and Education, which have been major sources of job creation in recent years are slowing or even contracting. On the other hand, manufacturing is projected to add jobs after decades of decline. While there will be opportunities at all educational levels there will continue to be demand for educated workers. ■

Data Limitations: The projections in this report have been carefully prepared to ensure accuracy, but by nature are subject to error. Therefore, the information is best used as an indicator of employment trends, rather than an exact count of employment. Additional information on labor market information is available on the Office of Research website: www.ctdol.state.ct.us/lmi. For more detail on the short-term industry and occupational projections, visit: www.projectionscentral.com/Projections/ShortTerm.

1 Thompson, Derek. "What in the World is Causing the Retail Meltdown of 2017?" *The Atlantic*, https://www.theatlantic.com/business/archive/2017/04/retailmeltdownof2017/522384/

GENERAL ECONOMIC INDICATORS

(Seasonally adjusted)	4Q 2016	4Q 2015	CHANGE NO.	CHANGE %	3Q 2016
General Drift Indicator (1996=100)*					
Leading	117.9	116.6	1.3	1.1	118.4
Coincident	117.2	117.2	0.0	0.0	117.5
Farmington Bank Business Barometer (1992=100)**	137.3	135.8	1.5	1.1	137.3
Philadelphia Fed's Coincident Index (July 1992=100)***	**Mar**	**Mar**			**Feb**
(Seasonally adjusted)	**2017**	**2016**			**2017**
Connecticut	184.01	176.95	7.06	4.0	184.25
United States	182.29	177.08	5.21	2.9	181.79

*Sources: *Dr. Steven P. Lanza, University of Connecticut **Farmington Bank ***Federal Reserve Bank of Philadelphia*

General Drift Indicators are composite measures of the four-quarter change in three coincident (Connecticut Manufacturing Production Index, nonfarm employment, and real personal income) and three leading (housing permits, manufacturing average weekly hours, and initial unemployment claims) economic variables, and are indexed so 1996 = 100.

The **Farmington Bank Business Barometer** is a measure of overall economic growth in the state of Connecticut that is derived from non-manufacturing employment, real disposable personal income, and manufacturing production.

The **Philadelphia Fed's Coincident Index** summarizes current economic condition by using four coincident variables: nonfarm payroll employment, average hours worked in manufacturing, the unemployment rate, and wage and salary disbursements deflated by the consumer price index (U.S. city average).