CONNECTICUT'S SHORT-TERM EMPLOYMENT OUTLOOK 2017-2019

CONNECTICUT DEPARTMENT OF LABOR
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Connecticut's
Short-Term Employment Outlook:
2017-2019

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The Connecticut Labor Market

POPULATION

Connecticut's outlook is affected by demographic changes.

The Connecticut State Data Center at the University of Connecticut recently released population projections for Connecticut and its towns through 2040.[1] The projections suggest a slowing of population growth but do not show an exodus of young people from Connecticut. Declines in the younger population groups are driven by a low birth rate while migration out of state is concentrated in older age groups. Nevertheless, the number of senior citizens will increase while the school-aged population will decline. Growth with be uneven across cities and towns with some (particularly the largest cities) gaining significant population while others decline. Some of the smallest towns are projected to reverse part of the strong growth they have experienced in recent decades.

<center>**Statewide**</center>

Overview: Connecticut's population increased by over 255,000 from 1970 to 1990 and added an additional 300,000 from 1990 to 2015, a 9.3% increase. Population growth is projected to grow just 1.7% in the 25 years from 2015 to 2040, less than 20% of the growth rate of the previous 25 years. Focusing on the most recent 15 year period and comparing it to the next shows a similar pattern. Population grew 5.5% from 2000 to 2015 but is projected to grow just 1.1% from 2015 to 2030.

Age profile: The age distribution of the population changed from 2000 to 2015 as the largest cohort aged into its 50s and beyond. There will be more changes by 2030 as the number of school and college-aged (age 5 to 24) is expected to decline and the number of those mid-twenties to mid-forties is projected to increase as the "millennial" generation ages. The number of people in their mid-forties through late-fifties will decline as the last of the baby-boomers moves past age 60.

School-Aged population: Connecticut's population aged 5 to 19 fell by just over 1,000 from 2000 to 2015 and is projected to decline nearly 40,000 by 2030. However, some towns will see an expanding school-aged population with three towns (Manchester, Stamford, and West Haven) increasing by more than 2,000 school-aged children each.[2] While the upper end of the 5 to 19 age group may

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1   Details about the projections including on-line data visualizations are available at http://ctsdc.uconn.edu/. Questions about the methodology for producing the projections should be directed to the Connecticut State Data Center through the above-referenced website.

2   The Connecticut State Data Center website says that projections are NOT intended for use when considering individual school enrollment or school district enrollment planning as these projections do not include school enrollment nor include data on school choice or other dynamics related to school enrollment.

<center>3</center>

include those no longer in school, for towns losing school-aged population the largest declines are all in the age 10 to 14 cohort.   Similarly, in towns gaining school-aged population, the largest increases are in the age 10 to 14 group. As noted, these are population projections, not projections of school enrollment. Nevertheless, these projections suggest there will be towns with significant increases in school-aged population even as the statewide number of people of school-age will be declining.

Senior population: Connecticut is projected to see an increase of more than 84,000 in the population aged 70 and over from 2015 to 2030. Nearly every town will see a population increase for this age group. For example, Oxford, Newtown, Wallingford, and Southington are projected to see the largest increases in the population aged 70 and above.   The enormous increase in Oxford is a good illustration of the difference between a projection and a forecast and shows the limitations of the projections.   Oxford has seen a significant number of seniors moving into town over recent decades.   The models used to create the projections assume this trend will continue. A forecast (which tried to predict exactly how many seniors would be living in Oxford in 2030) would need to consider other factors such as the availability of housing for seniors and not just past trends. Nevertheless, the projections are a useful indication of where things are headed, even though other factors – from economic events to policy changes – will affect the course of population growth in Connecticut.

LABOR MARKET

Unemployment Rate

Unemployment rates are one of the most commonly reported measures of overall economic performance. The US unemployment rate climbed precipitously from levels below 5 percent in late 2007 to a peak of 10 percent in October 2009, the highest level since 1982. It has since fallen to 3.9 percent as of May 2018, a level last seen in November, 2000. Connecticut's unemployment rate peaked a year later in November 2010 at 9.3 percent and has since fallen to 4.5 percent as of May, 2018.

US and CT Unemployment Rate: 2000-2018

Source: US DOL
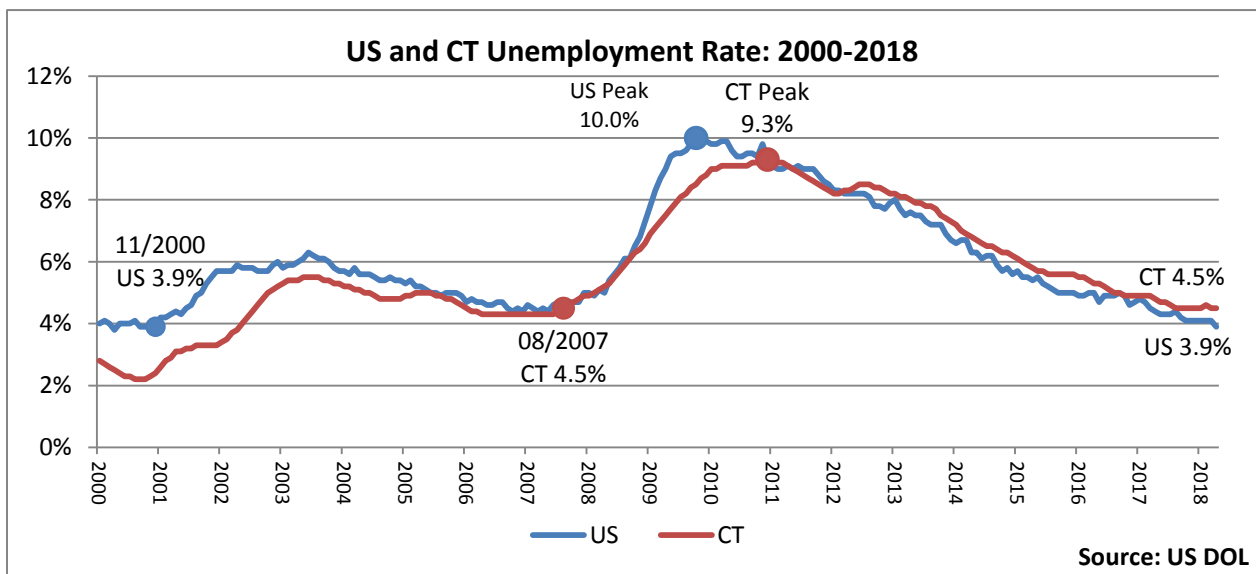
When compared to the US, the unemployment rate in Connecticut has undergone some notable shifts in the past 18 years. Prior to the last recession, Connecticut's rate was characteristically below that of the US, with particularly large percentage point differences during the 2001 and 2007-09 recessions. Since 2012 Connecticut's unemployment rate has been between 0.0 and 0.6 percentage points above that of the US.

Difference between US and CT Unemployment Rate 2000-2018
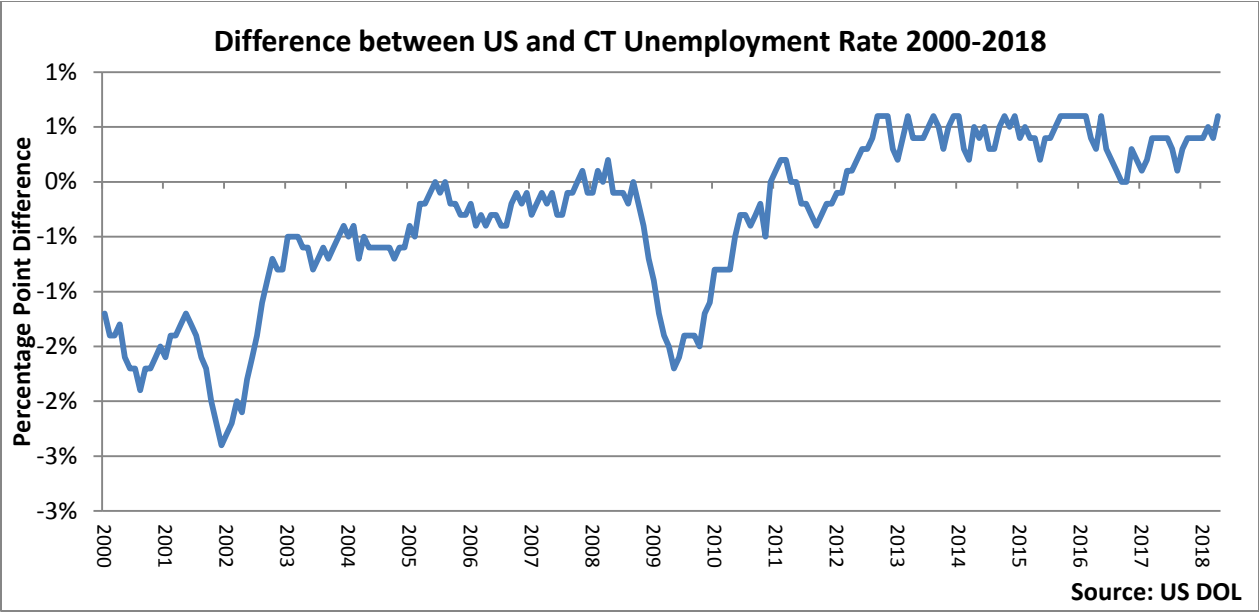
A key driver of this difference during the recovery and expansion phase of the current business cycle has been the varied pace of economic growth experienced throughout the country. The following graph shows the unemployment rates for the US and its four US Census regions from the past four years and illustrates how the northeast has had less unemployment rate decline than the rest of the country.

Unemployment Rate by Census Region 2014-2018
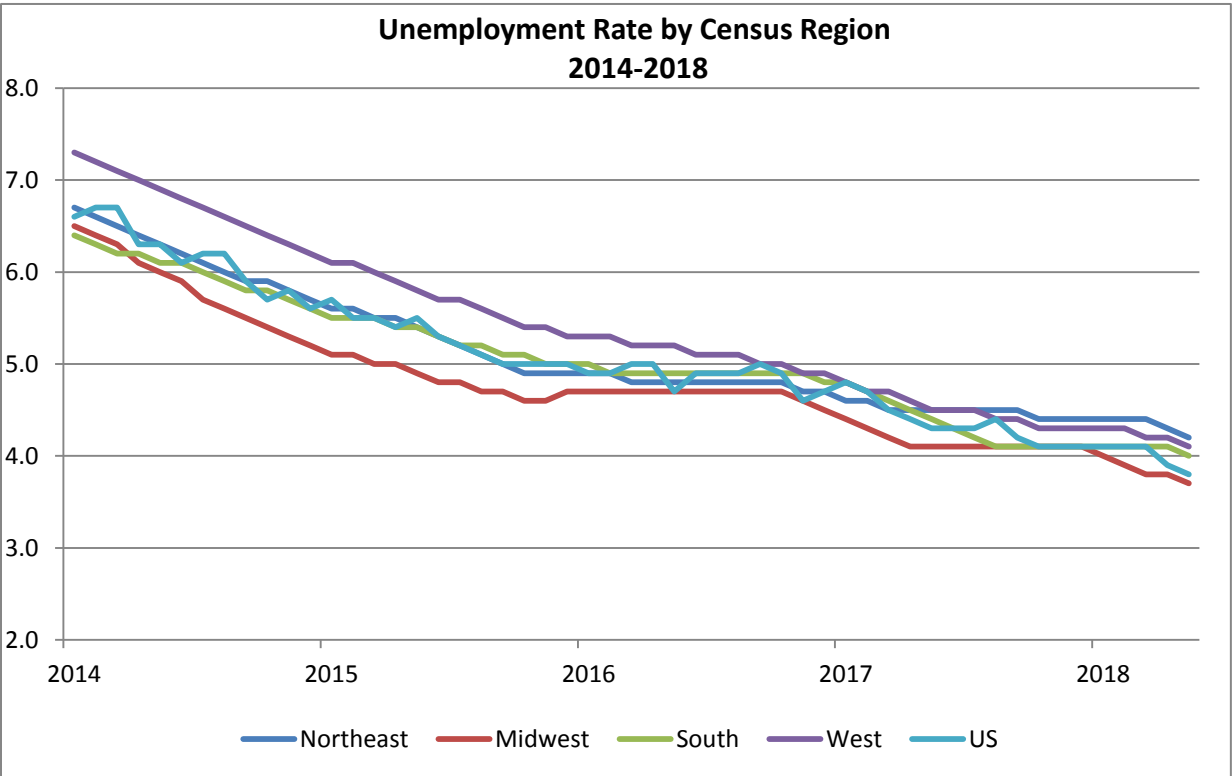
The northeast region is comprised of New England, New York, New Jersey, and Pennsylvania. Graph 4 displays the unemployment rates for northeast states and shows the varied economic impact of the recovery on Connecticut and nearby states. Massachusetts and northern New England states have had unemployment rates much lower than the rest of the northeast or the US overall, though in the past year the US rate has continued to fall while Connecticut, New Jersey, New York, and Rhode Island experience unemployment rates persistently around 4.5 percent. The northern New England states have vastly different labor market characteristics than the rest of the region and the low statewide unemployment rate in Massachusetts is heavily impacted by the Boston metropolitan area.
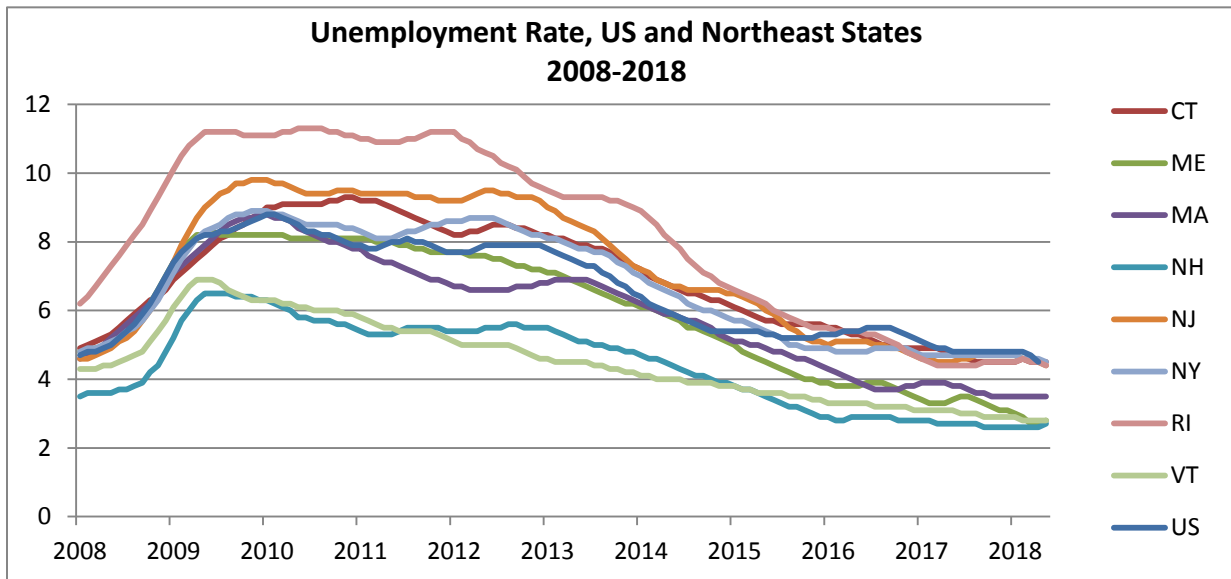
Labor Force Participation

Annual average labor force participation peaked in 2008 at 69 percent, a level not seen since the early 1990s. After reaching a low of 64.9 percent in 2013 it has edged upward to 66.6 percent in 2017. This participation rate is 0.3 pts below 2004 levels, while corresponding employment to population ratios is 0.3 pts above 2004 levels. Though the 2017 annual average data shows an increase over prior years, monthly data not seasonally adjusted and available through May 2018 indicate that LFPR peaked in March 2017 at 66.7 percent and was most recently 65.6 percent. US LFPR likewise peaked that March and was 62.7 percent as of May 2018.

CT Labor Force Participation Rate and Employment to Population Ratio Age 16 and older 2001-2017

Source: BLS LAUS
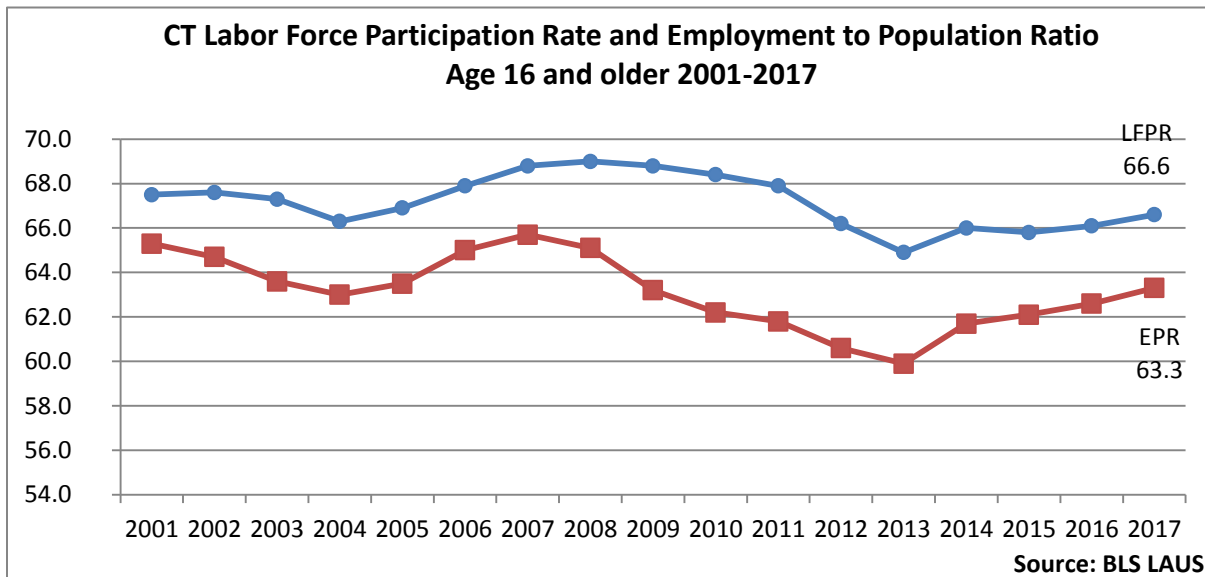
Labor Force Participation by Age Cohorts

State-level age cohort labor force participation rate annual average data is available from 2001 through 2017[3]. Breaking down the overall labor force participation rate into three component age cohorts helps pinpoint contributing demographic trends.

The changes to Connecticut's population outlined in the first section of this report are echoed by the increasing share of the labor force over age 54. Since 2001, prime aged workers have decreased by 10.4 percent, while older workers have grown to 28.1 percent of the labor force, increasing by almost 2 percent from 2016-2017 alone. These three cohort groups exhibit varied levels of attachment to the labor force (reflected in different labor force participation rates), as those under age 25 are very likely to be in school and the population over 54 gradually leaves the labor force for retirement. Prime aged workers (age 25-54) unsurprisingly have the highest likelihood of being in the labor force, but cyclical and demographic factors also impact the overall levels of that group.

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[3] Bureau of Labor Statistics. Expanded State Employment Status Demographic Data. https://www.bls.gov/lau/ex14tables.htm

Age Cohort Share of Labor Force 2001-2017

Year	Over 54	Prime Age	Under 25
2001	16.3%	71.1%	12.6%
2002	16.6%	71.0%	12.4%
2003	17.6%	69.4%	13.0%
2004	18.4%	68.4%	13.2%
2005	18.8%	68.3%	12.9%
2006	18.9%	68.4%	12.6%
2007	19.2%	67.8%	13.1%
2008	21.1%	65.6%	13.3%
2009	20.9%	66.2%	12.9%
2010	21.8%	65.3%	12.9%
2011	22.0%	65.0%	13.0%
2012	22.7%	64.1%	13.2%
2013	23.9%	62.9%	13.2%
2014	23.5%	63.4%	13.0%
2015	24.7%	63.6%	11.7%
2016	26.2%	63.0%	10.8%
2017	28.1%	60.7%	11.2%

Legend: ■ Under 25 ■ Prime Age ■ Over 54

Source: BLS LAUS

The following graph shows annual average LFPR and employment to population ratios (EPR) for prime age workers in Connecticut from 2000 to 2017. Since reaching a 2013 trough of 83.4 percent in 2013, overall prime age LFPR has remained between 84.0 and 84.5 percent. During this span, as unemployment decreased, the employment to population ratio posted strong gains, increasing from 77.5 percent to 80.8%, the highest EPR since 2008. This relation between labor force and employment corresponds with decreasing prime age unemployment, which fell by roughly 31,000 from 2013 to 2017.

CT Labor Force Participation Rate and Employment to Population Ratio Prime Age 2001-2017
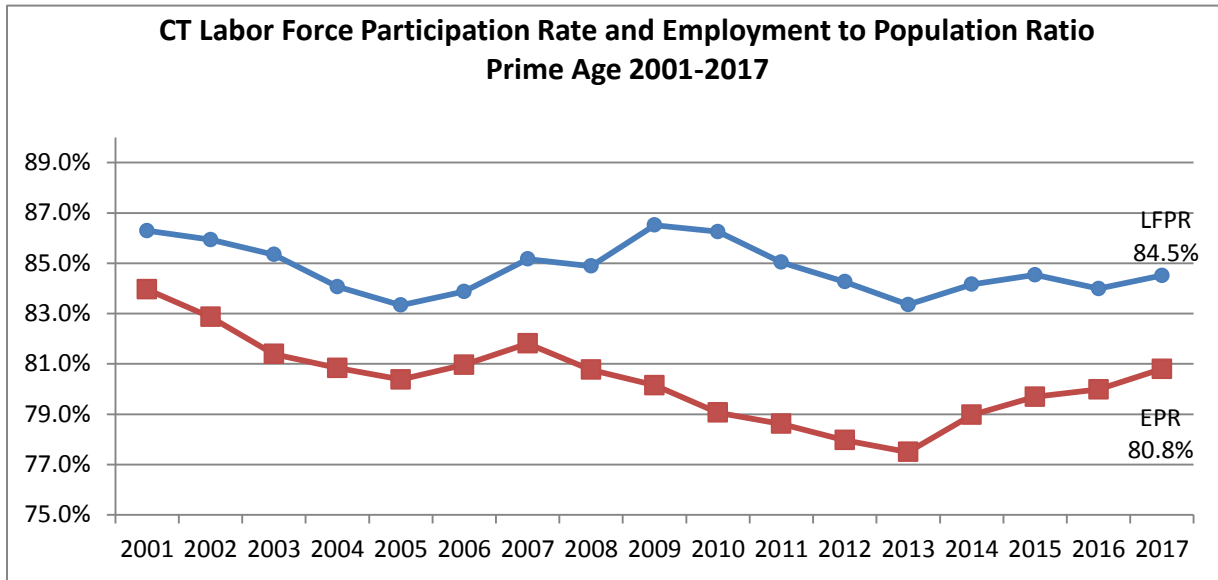
The younger 16 to 24 age cohort has LFPR below that of prime age workers due primarily to school enrollment. In the early 2000s, the cohort's peaks and troughs largely corresponded with the overall labor force. Since the recession, the cohort has gradually fallen from a 2007 peak of 61.7% to a low of 49 percent in 2016. Unlike prime aged workers, which saw its LFPR and EPR diverge during the recession due to EPR shifts, young workers in Connecticut have had a declining LFPR in the wake of the recession while corresponding EPR remained relatively steady. From 2010 through 2013 the LFPR fell three percentage points while EPR held at 46 percent. After a 2014 uptick, the LFPR and EPR for young workers dipped below 50 and 45 percent. From 2016 to 2017 the LFPR and EPR both increased to 53 and 47.7 percent.

CT Labor Force Participation Rate and Employment to Population Ratio Under Age 25 2001-2017

LFPR
53.0%

EPR
47.7%
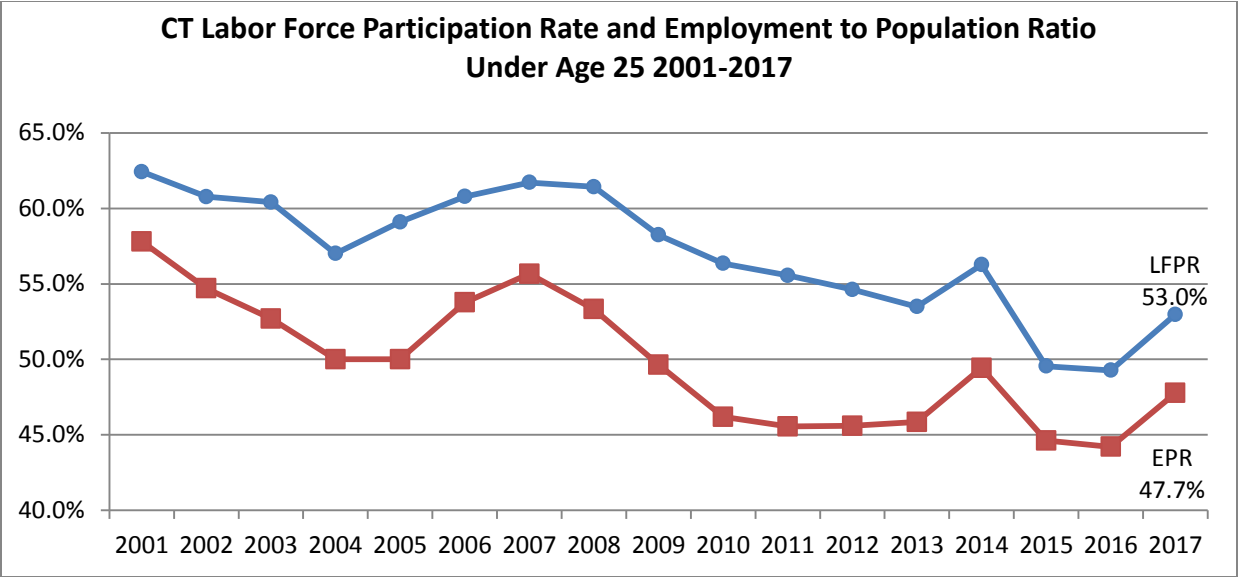
As Connecticut's labor force ages, the steady participation rate increase of the over 54 workforce is a positive labor market shift for the state. In recent years the participation rate for workers over 54 has edged upward significantly, increasing to a series high of 48.1 percent in 2017, having jumped by 1.4 percentage points from a year before. This cohort's steadily increasing LFPR mirrors national trends and has been shown to be driven by the 55-64 population. Another notable attribute of this age cohort is the very close relationship between labor force participation and employment to population ratio, indicating that few unemployed older workers remain in the labor force.

CT Labor Force Participation Rate and Employment to Population Ratio Over 54 2001-2017

LFPR
49.1%

EPR
47.2%
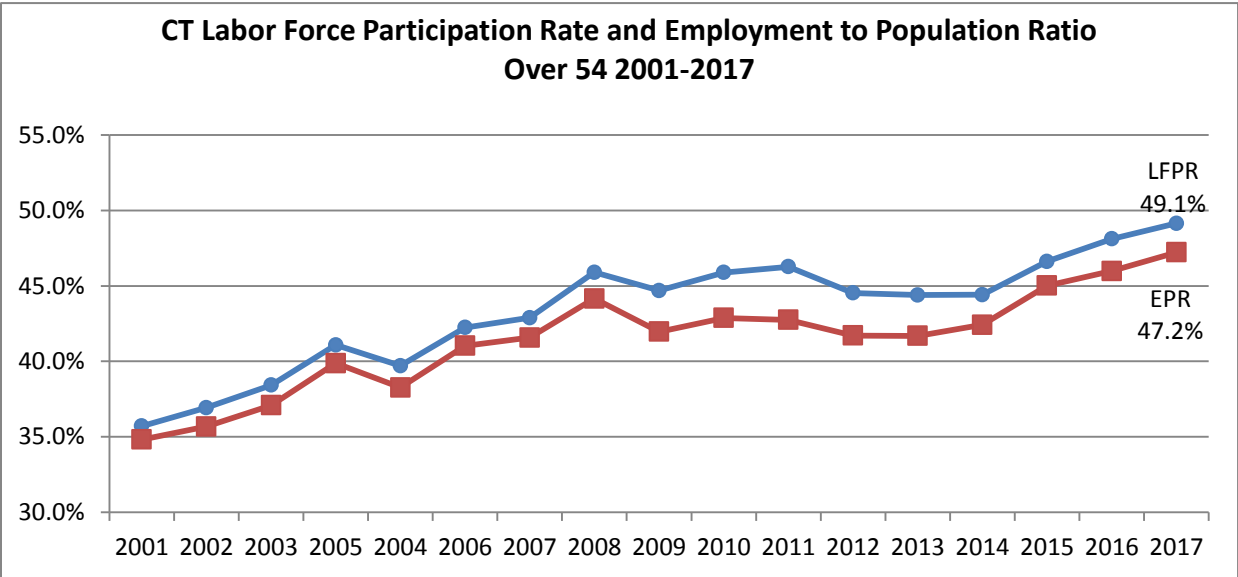
Age Cohort Industry Employment Share

The US Census Bureau's Quarterly Workforce Indicators enables examination of age cohort employment by industry. The table below shows age cohort employment share by industry sector in Connecticut for the four quarter averages ending 1997Q3, 2007Q3, and 2017Q3 (the most recent quarter of available data).

The sectors with largest percentage of younger workers are NAICS 72, 71, and 44-45. Two of these sectors, Accommodations and Food Services and Retail Trade saw the share of youth employment fall by 5.2 and 4.6 percentage points from 2007-2017, more than the overall 1.5 percentage point youth employment decline. The other of the three largest youth-share sectors, Arts, Entertainment and Recreation saw a 2.6 percentage point increase over that ten year span. This NAICS 71 increase in youth employment share was the only substantial ten year increase, Manufacturing and Utilities respectively increased by 0.5 and 0.2 percentage points.

Labor Force Share by Age Cohort, Four-Quarter Average Employment Ending 1997Q3, 2007Q3, 2017Q3*

NAICS Sector	Industry	under 25			prime age			over 54		
		1997	2007	2017	1997	2007	2017	1997	2007	2017
00	All Industries	12.4%	13.1%	11.7%	74.3%	67.6%	62.4%	13.3%	19.3%	26.0%
11	Agriculture, Forestry, Fishing and Hunting	19.6%	21.4%	17.0%	67.5%	57.8%	55.8%	12.9%	20.9%	27.2%
21	Mining, Quarrying, and Oil and Gas Extraction	6.2%	8.7%	6.6%	73.4%	68.3%	55.7%	20.4%	23.1%	37.3%
22	Utilities	1.5%	2.8%	3.0%	86.7%	74.9%	63.0%	11.8%	22.3%	34.0%
23	Construction	9.5%	11.3%	8.9%	78.0%	72.1%	66.1%	12.5%	16.6%	25.0%
31-33	Manufacturing	5.9%	5.7%	6.1%	77.6%	70.8%	58.7%	16.5%	23.5%	35.2%
42	Wholesale Trade	8.3%	7.0%	5.5%	79.2%	73.7%	65.7%	12.5%	19.3%	28.8%
44-45	Retail Trade	27.6%	29.4%	24.8%	60.3%	54.0%	53.5%	12.1%	16.6%	21.7%
48-49	Transportation and Warehousing	9.0%	9.5%	8.5%	77.3%	71.0%	64.9%	13.6%	19.5%	26.6%
51	Information	10.0%	9.2%	8.2%	80.0%	73.4%	68.0%	10.0%	17.4%	23.8%
52	Finance and Insurance	6.5%	6.5%	4.5%	83.8%	78.3%	70.6%	9.7%	15.1%	24.9%
53	Real Estate and Rental and Leasing	14.9%	12.4%	7.5%	69.6%	64.9%	61.9%	15.5%	22.8%	30.5%
54	Professional, Scientific, and Technical Services	9.1%	8.4%	6.6%	80.3%	74.7%	69.0%	10.6%	16.9%	24.4%
55	Management of Companies and Enterprises	6.7%	6.7%	5.5%	79.6%	74.6%	68.0%	13.7%	18.7%	26.5%
56	Admin. and Support	15.8%	14.4%	11.4%	71.4%	67.4%	63.9%	12.8%	18.2%	24.7%
61	Educational Services	4.4%	7.1%	6.4%	76.8%	65.9%	62.9%	18.7%	26.9%	30.6%
62	Health Care and Social Assistance	9.1%	9.4%	8.2%	78.0%	70.6%	65.9%	13.0%	20.0%	25.9%
71	Arts, Entertainment, and Recreation	20.5%	19.5%	22.1%	67.9%	61.3%	53.2%	11.6%	19.2%	24.7%
72	Accommodation and Food Services	35.6%	36.6%	31.4%	57.1%	53.2%	54.7%	7.3%	10.2%	13.9%
81	Other Services (except Public Admin.)	15.0%	16.2%	12.9%	69.6%	62.8%	60.6%	15.4%	21.0%	26.5%
92	Public Administration	4.3%	4.5%	4.1%	80.4%	72.5%	64.9%	15.3%	23.0%	31.0%

*Example: 2017 data contains the average of the quarterly employment for 2016Q4, 2017Q1, 2017Q2, and 2017Q3   Source: US Census Bureau QWI

The employment share of workers over 54 exhibited much more substantial shifts. That age cohort was up 6.6 percentage points over ten years and nearly doubled over twenty. Every industry sector experienced an increase in its share of over 54 workers, ranging between 3.7 percentage points (both NAICS 62 and 72) and 14.1 percentage points (NAICS 21). Major sectors that experienced the largest increases were Manufacturing (+11.7 points), Utilities (+11.7 points), and Finance and Insurance (+9.8 points). As this age cohort continues to grow, accommodating their needs and preparing for their eventual retirement will help minimize institutional knowledge loss and prolonged vacancies.

Changing Demographic Composition of Connecticut's Labor Force

In addition to annual average age cohort labor market data, information by gender, race, and ethnicity is also available. The data is sometimes unavailable due to sample size issues, but does reveal some shifts occurring within the Connecticut labor market. Breaking down the four available race/ethnic data cohorts into percent shares of the overall labor force shows that the largest race/ethnic group shift in Connecticut's labor force since 2001 has been the increasing share of the Hispanic population, which rose from 5.6% to 14.9% through 2017.

Connecticut Labor Force Share by Race/Ethnic Group

Race/Ethnic Group	2001	2003	2009	2016	2017
White	87.0%	86.0%	85.3%	83.0%	83.9%
Black/African American	10.7%	9.2%	9.3%	9.9%	10.7%
Asian	S	3.2%	4.2%	5.2%	S
Hispanic	5.6%	8.7%	9.2%	15.2%	14.9%
S = data suppressed					**Source: BLS**

The graph below shows annual average unemployment rates by race/ethnic group in Connecticut. It shows the varied cyclicality experienced across groups over time. The graph illustrates the significant drop in rates for Black and Hispanic populations in Connecticut in recent years, though those groups still trend well above other cohorts.
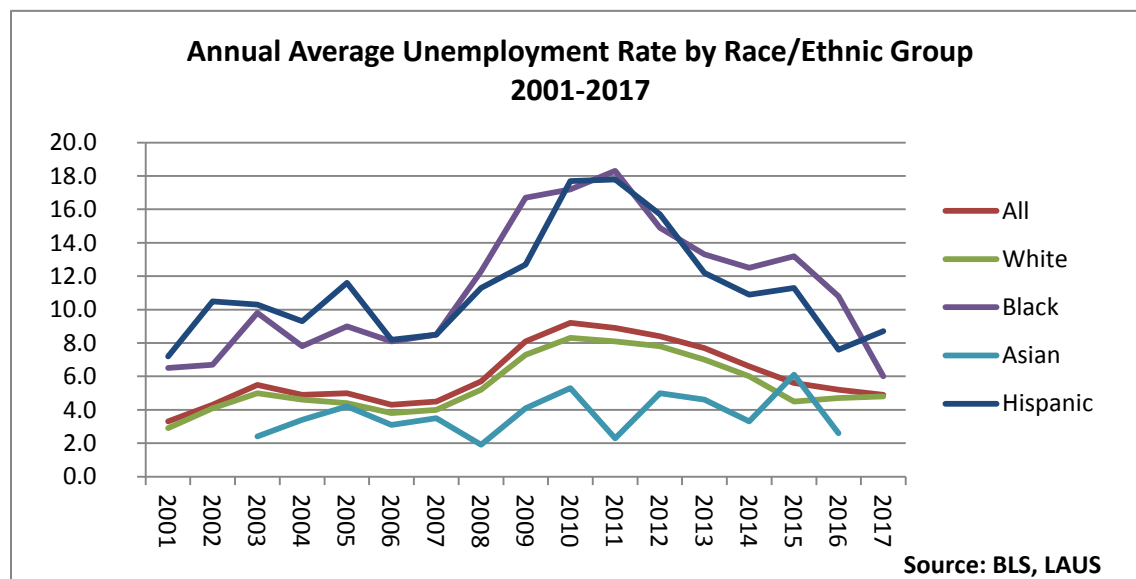
Connecticut Industry Overview

Current Situation

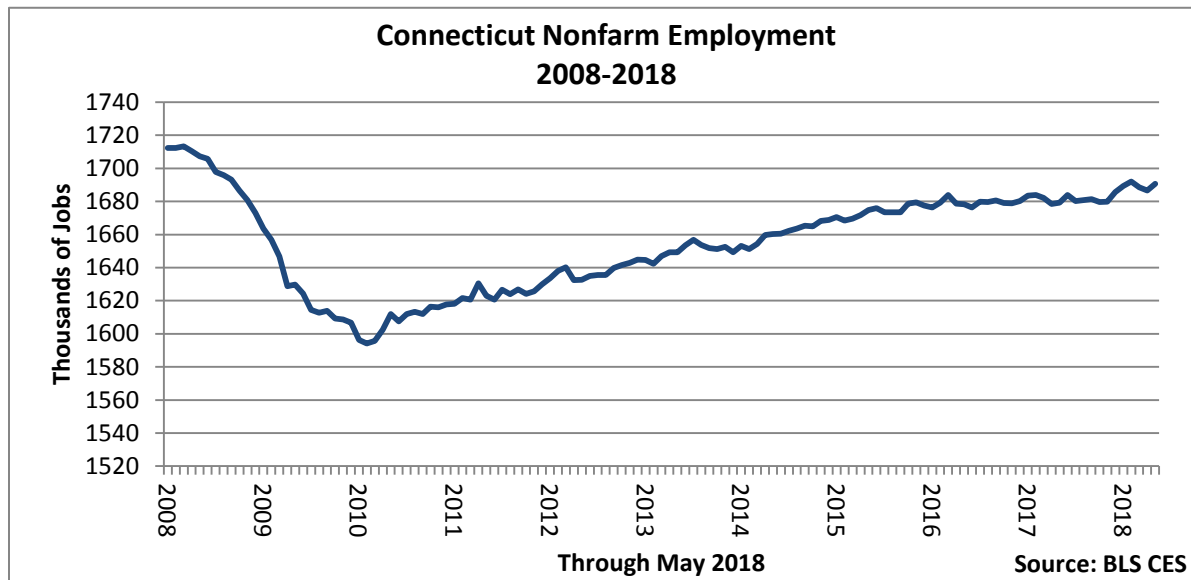Connecticut is off to a good start in 2018, after a year of slow employment growth in 2017. As of May 2018, employment is up 11.5 thousand jobs year over year. Private sector employment gained 13.8 thousand jobs since May 2017 while the public sector was down 2,300.

Connecticut Nonfarm Employment 2008-2018

Through May 2018   Source: BLS CES

Connecticut Compared to Other States

Connecticut has recovered the number of private sector jobs lost during the previous recession. However, over the past six years, Connecticut's job growth has been significantly slower than the nation's and that of our neighbor states. The table below shows total nonfarm, private, and government employment from May 2012 to May 2018 for the US, Connecticut, and nearby states. Connecticut's nonfarm employment is up 3.6 percent over this six-year period with the private sector up 67,100 jobs (4.8%) and government employment down -9,100 jobs or -3.8%.

Employment Change 2012-2018 by Sector Type - US, and Selected States

Area	Total Nonfarm				Private				Government			
	May 2012	May 2018	# Change	% Change	May 2012	May 2018	# Change	% Change	May 2012	May 2018	# Change	% Change
United States	133,958,000	148,662,000	14,704,000	11.0%	112,047,000	126,336,000	14,289,000	12.8%	21,911,000	22,326,000	415,000	1.9%
Connecticut	1,632,700	1,690,700	58,000	3.6%	1,393,700	1,460,800	67,100	4.8%	239,000	229,900	-9,100	-3.8%
Massachusetts	3,299,300	3,652,100	352,800	10.7%	2,862,700	3,201,200	338,500	11.8%	436,600	450,900	14,300	3.3%
Maine	599,200	630,100	30,900	5.2%	497,100	529,700	32,600	6.6%	102,100	100,400	-1,700	-1.7%
New Hampshire	631,400	683,900	52,500	8.3%	539,900	595,800	55,900	10.4%	91,500	90,100	-1,400	-1.5%
New York	8,788,400	9,614,800	826,400	9.4%	7,324,900	8,166,300	841,400	11.5%	1,463,500	1,448,500	-15,000	-1.0%
Rhode Island	465,100	500,300	35,200	7.6%	404,600	439,700	35,100	8.7%	60,500	60,600	100	0.2%
Vermont	304,800	314,600	9,800	3.2%	249,200	258,700	9,500	3.8%	55,600	55,900	300	0.5%

Sector Change

 Health Care and Social Assistance makes up the largest combined industry sector in the state (and in all states) comprising over 18 percent of Connecticut employment. This sector has consistently added jobs throughout both the recession and recovery. Growth for that sector has slowed in the most recent two years, particularly for Health Care, but both have continued to add jobs. In the past five years (year ending 2nd Quarter 2012 to 2nd Quarter 2017) Health Care has grown by approximately 5,000 jobs while Social Assistance has added nearly 10,000. This continues a long-term trend; Social Assistance has steadily increased as a share of that combined-sector since the early 1990s. Hospital consolidation in recent years has also contributed to this shift. As is shown below, Social Assistance has added nearly three times as many jobs as Health Care over the two years ending 2017 Q2.

 Accommodation and Food Services is the third largest growing sector and unlike Health Care or Social Assistance, its growth shows few signs of slowing down. It added more than 11,000 jobs from 2012 to 2017, and was the sector with the most job growth during the two years leading up to the short-term projection base quarter of 2017Q2. This shift is consistent with changing consumer preferences and is also occurring at the national level.

Connecticut Employment Change
Year Ending 2015Q2-Year Ending 2017Q2

Sector	Employment Change
Accom. & Food Services	~3,250
Social Assistance	~2,900
Other Services	~2,600
Transportation & Warehousing	~2,300
Admin. & Support Services	~2,150
Construction	~1,350
Heath care	~950
Arts, Ent., & Recreation	~800
Prof., Sci., & Tech. Services	~750
Real Estate	~350
Management of Companies	~0
Information	~-150
Utilities	~-300
Wholesale Trade	~-450
Retail Trade	~-650
Finance & Insurance	~-1,000
Manufacturing	~-1,700
Educational Services	~-1,950
Government*	~-2,150

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

Manufacturing

In recent years Connecticut manufacturers, industry groups, and researchers have noted that the sector was poised for growth and ready to hire thousands of workers and expand their operations in the state[4]. 2017 appears to be the year when Manufacturing took a notable vector shift and began to add jobs. This marks a significant bright spot for the Connecticut economy, considering that manufacturing employment had been flat for almost ten years after falling by nearly half since 1990.

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[4] De Avila, Joseph. Connecticut Submarine Maker Struggles to Find Workers. Wall Street Journal, 11/15/17.
https://www.wsj.com/articles/connecticut-submarine-maker-struggles-to-find-workers-1510757796

**Manufacturing Employment
Connecticut 1990-2018**

Thousands of Jobs

Through May 2018

**Manufacturing Employment
Connecticut 2015-2018**

Thousands of Jobs

Through May 2018
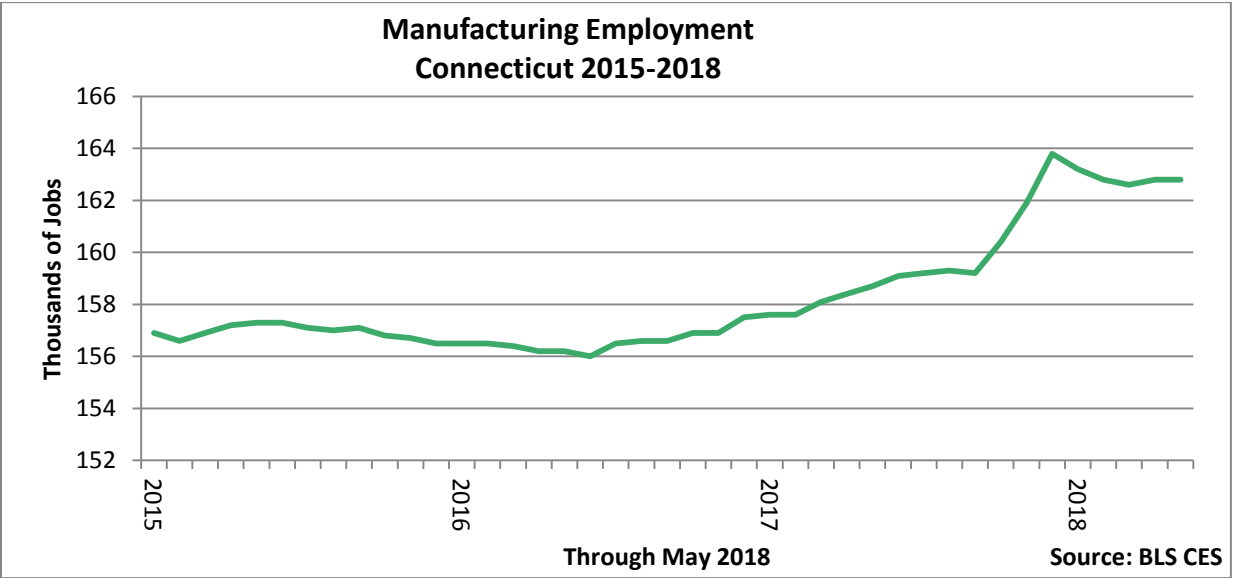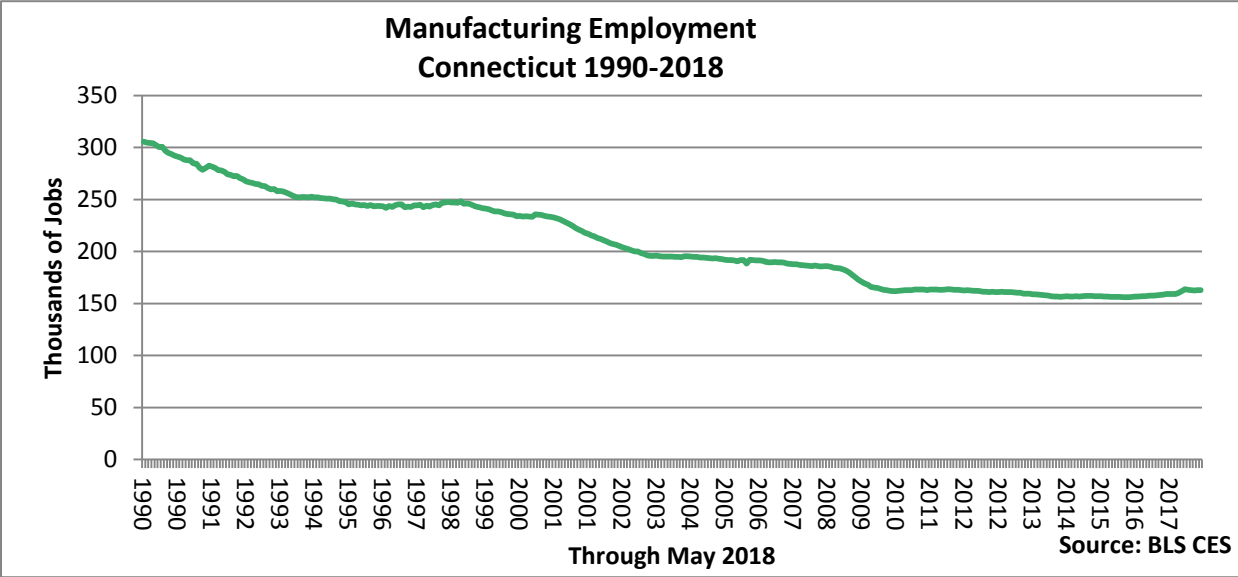
Transportation equipment is Connecticut's largest manufacturing industry, which includes both aerospace and shipbuilding and encompasses about 28 percent of manufacturing employment in the state.

Connecticut Manufacturing Employment
2017

Industry	Employment (approx.)
Transportation equipment Manuf.	~44,000
Fabricated metal product Manuf.	~29,000
Machinery Manuf.	~13,000
Computer and electronic product Manuf.	~11,000
Miscellaneous Manuf.	~9,000
Food Manuf.	~8,000
Electrical equipment and appliance mfg.	~8,000
Chemical Manuf.	~8,000
Plastics and rubber products Manuf.	~6,000
Printing and related support activities	~5,500
Primary metal Manuf.	~4,000
Paper Manuf.	~3,000
Furniture and related product Manuf.	~3,000
Nonmetallic mineral product Manuf.	~2,500
Beverage and tobacco product Manuf.	~2,000
Textile product mills	~1,000
Wood product Manuf.	~1,000
Textile mills	~700
Petroleum and coal products Manuf.	~400
Leather and allied product Manuf.	~200
Apparel Manuf.	~100

Source: CT DOL, QCEW

Aerospace products and parts manufacturing is a component industry of transportation equipment. In 2017, Connecticut's Aerospace employment was the fifth highest in the country.

Aerospace Employment by State - 2017

Source: BLS, QCEW
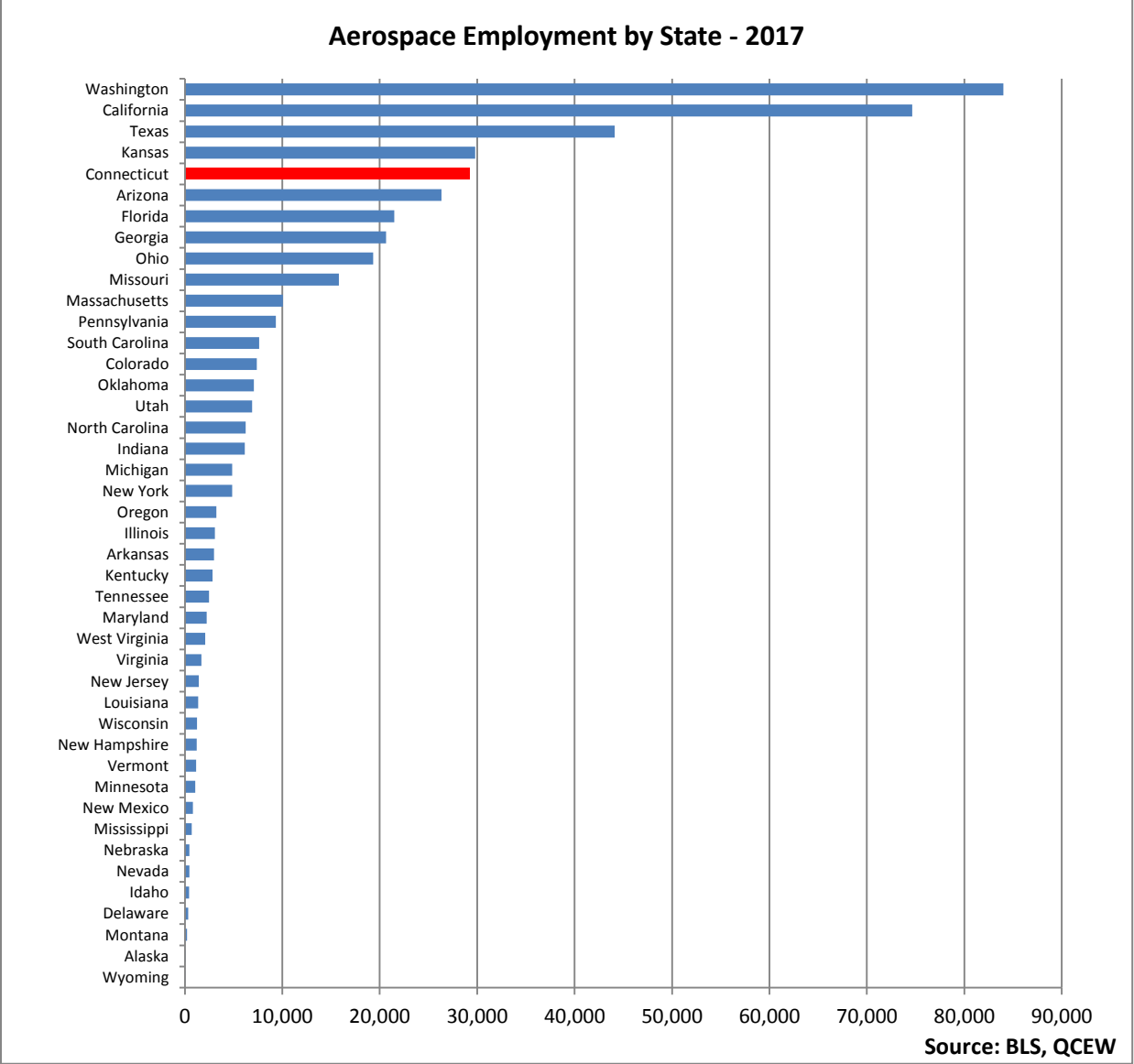
Over the past year, overall manufacturing growth was heavily concentrated in transportation equipment, accelerating a multi-year trend. Other areas in manufacturing that are shedding jobs are doing so at much lower levels than previous years. Machinery manufacturing and computer and electronic product manufacturing in particular have had declines much less than the year before.

Manufacturing Employment Change 2016 to 2017

| Category |
|---|
| Transportation equipment Manuf. |
| Chemical Manuf. |
| Furniture and related product Manuf. |
| Food Manuf. |
| Miscellaneous Manuf. |
| Beverage and tobacco product Manuf. |
| Fabricated metal product Manuf. |
| Primary metal Manuf. |
| Paper Manuf. |
| Textile mills |
| Apparel Manuf. |
| Wood product Manuf. |
| Printing and related support activities |
| Petroleum and coal products Manuf. |
| Nonmetallic mineral product Manuf. |
| Textile product mills |
| Plastics and rubber products Manuf. |
| Machinery Manuf. |
| Electrical equipment and appliance mfg. |
| Computer and electronic product Manuf. |

(Horizontal axis: -1,000 to 3,000)

Source: CT DOL, QCEW

Shipbuilding represents about 28 percent of transportation equipment manufacturing employment, and has grown by almost 20 percent over two years ending in 2017Q3. Unlike other manufacturing areas, shipbuilding has shown very little cyclicality since 2000.

NAICS 3366: Ship and Boat Building Employment

(Vertical axis: 0 to 14,000; Horizontal axis: 2000 to 2017)

Source: US Census, QWI

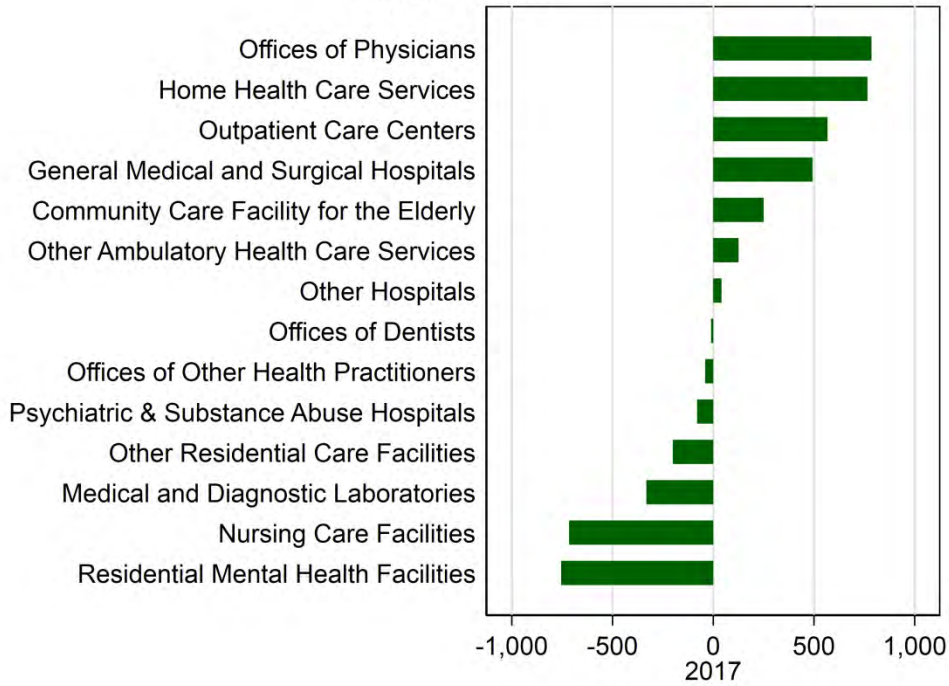Data significantly distorted, fuzzed value released

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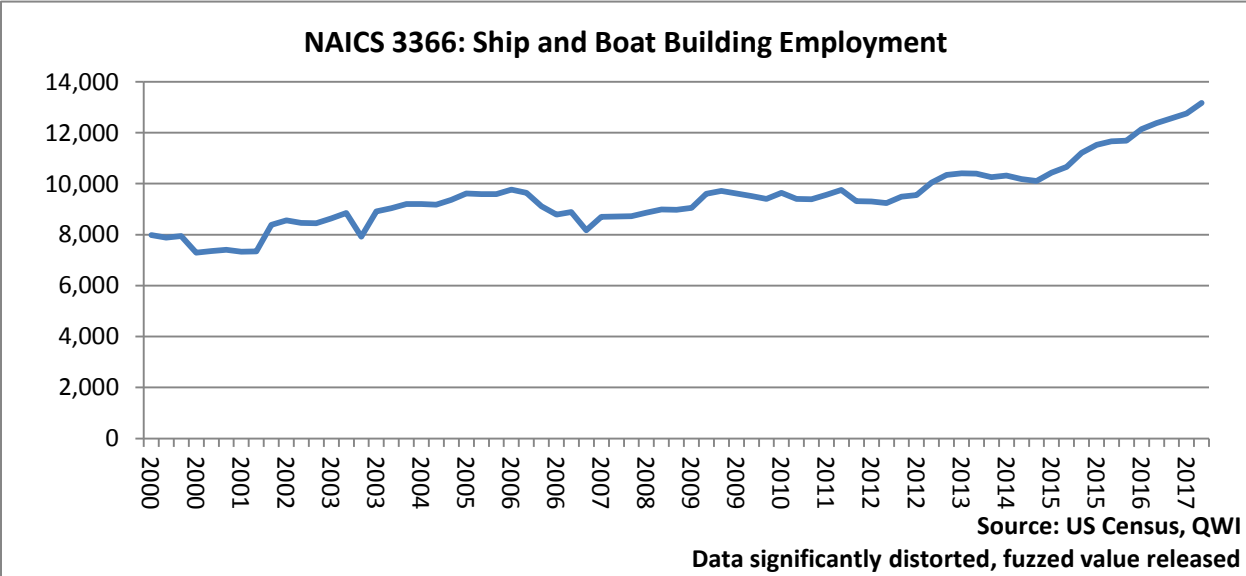
The portion of the manufacturing workforce over age 54 continues to increase suggesting that the need to replace retiring workers will only grow in coming years.

Manufacturing Employment by Age Cohort 1997-2016

Source: US Census, QWI
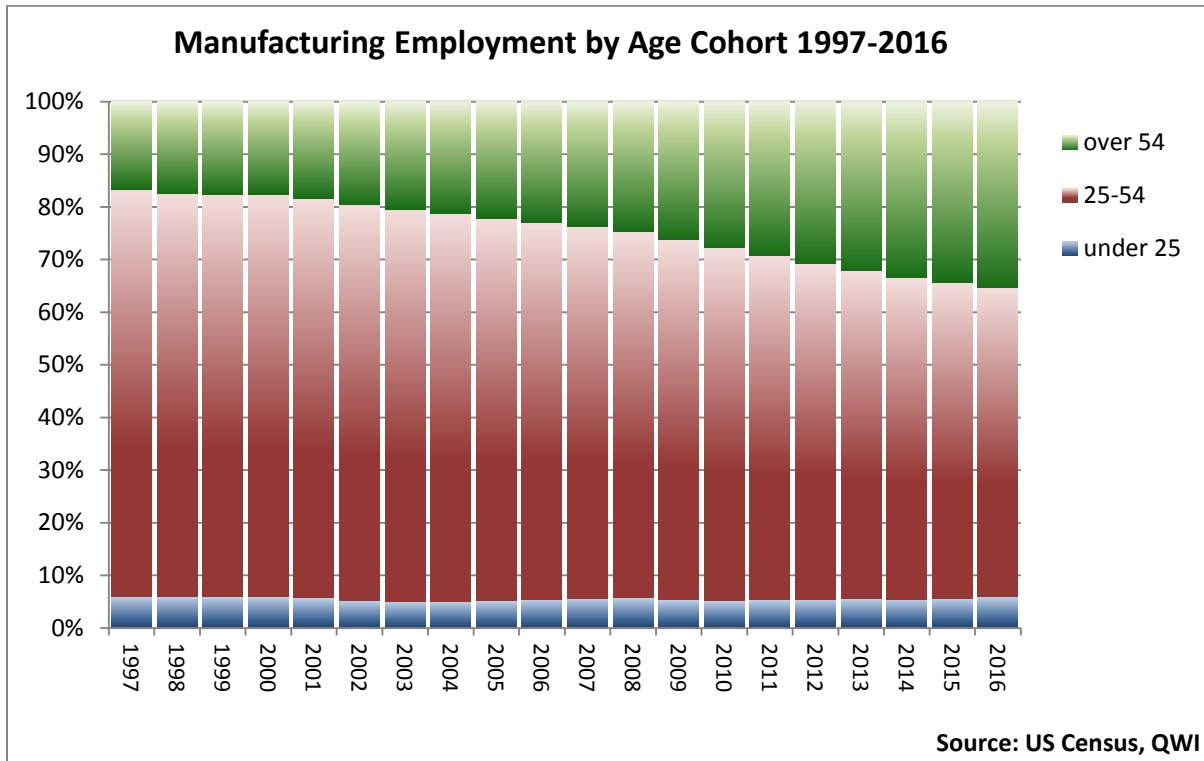
Health Care:

Consistent with the aging population, employment in Connecticut's health care sector has continued to expand. However there are structural changes within the sector which has implications for the outlook. Ambulatory care settings, such as Offices of Physicians, Home Health Care Services, and Outpatient Care Centers have been adding jobs which residential facilities such as nursing homes have been contracting. While employment at general hospitals increased slightly in 2017, employment remains well below peak.

Health Care Employment Change
2016 to 2017

Offices of Physicians	
Home Health Care Services	
Outpatient Care Centers	
General Medical and Surgical Hospitals	
Community Care Facility for the Elderly	
Other Ambulatory Health Care Services	
Other Hospitals	
Offices of Dentists	
Offices of Other Health Practitioners	
Psychiatric & Substance Abuse Hospitals	
Other Residential Care Facilities	
Medical and Diagnostic Laboratories	
Nursing Care Facilities	
Residential Mental Health Facilities	

-1,000   -500   0   500   1,000
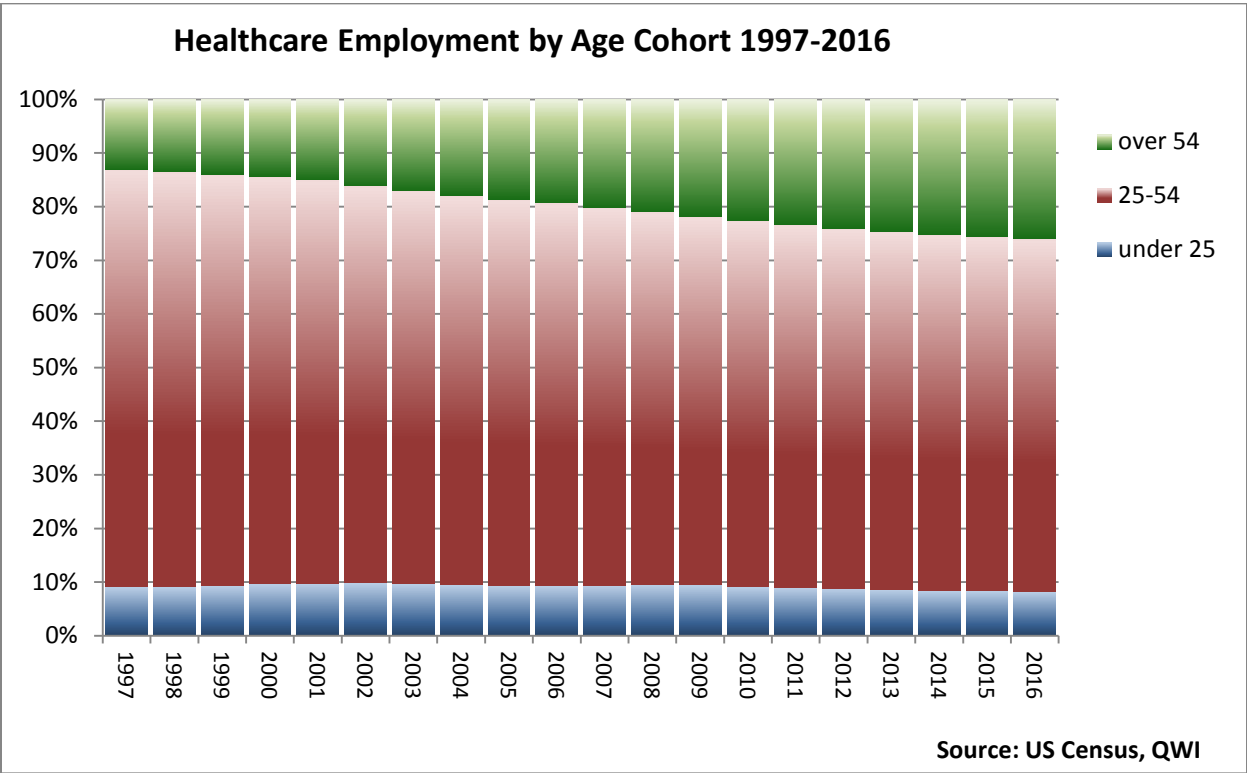2017

Connecticut Employment
NAICS 6221: General Medical and Surgical Hospitals
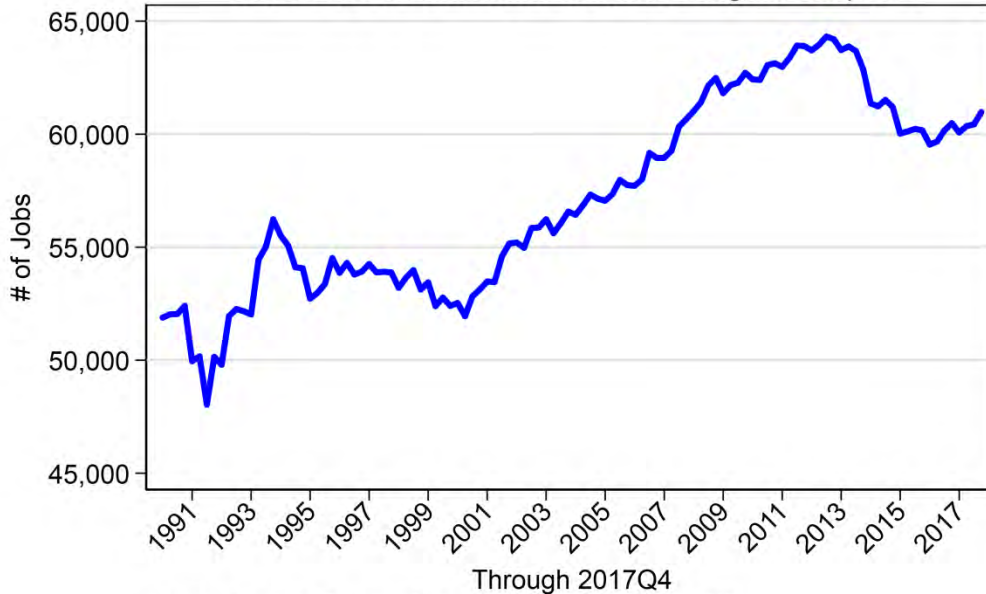
Through 2017Q4
Source: Quarterly Census of Employment and Wages (QCEW)

As with other sectors in the economy, the portion of the healthcare workforce aged 55 and over is increasing.

Healthcare Employment by Age Cohort 1997-2016

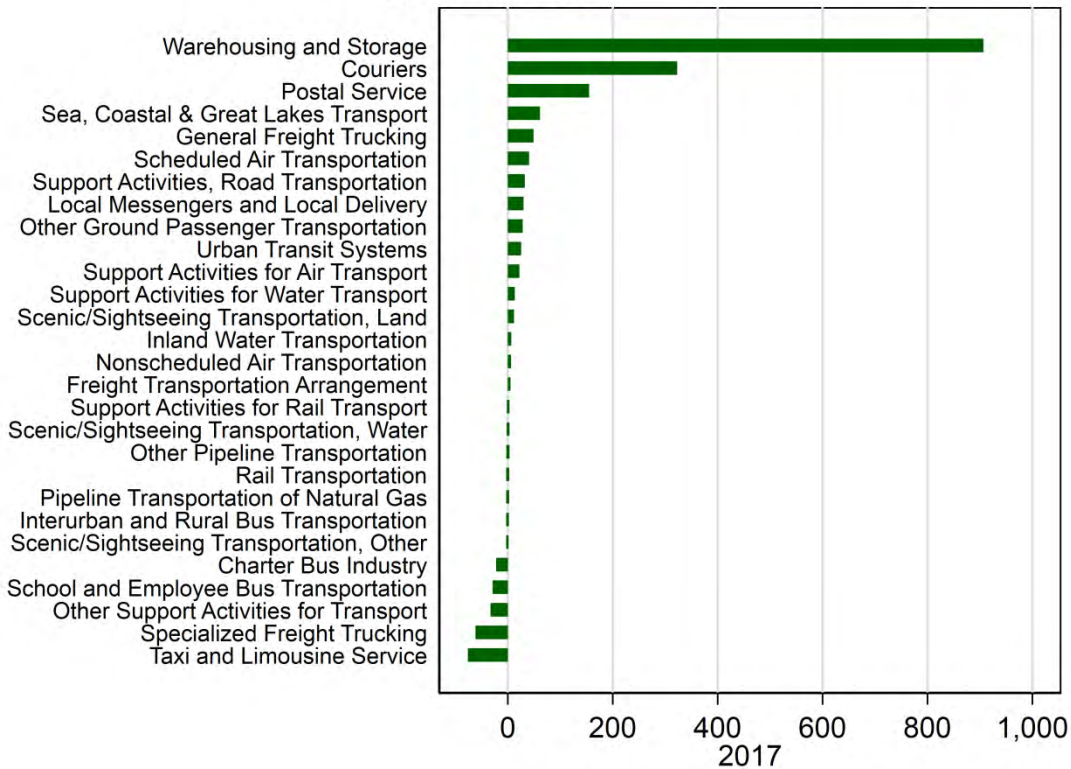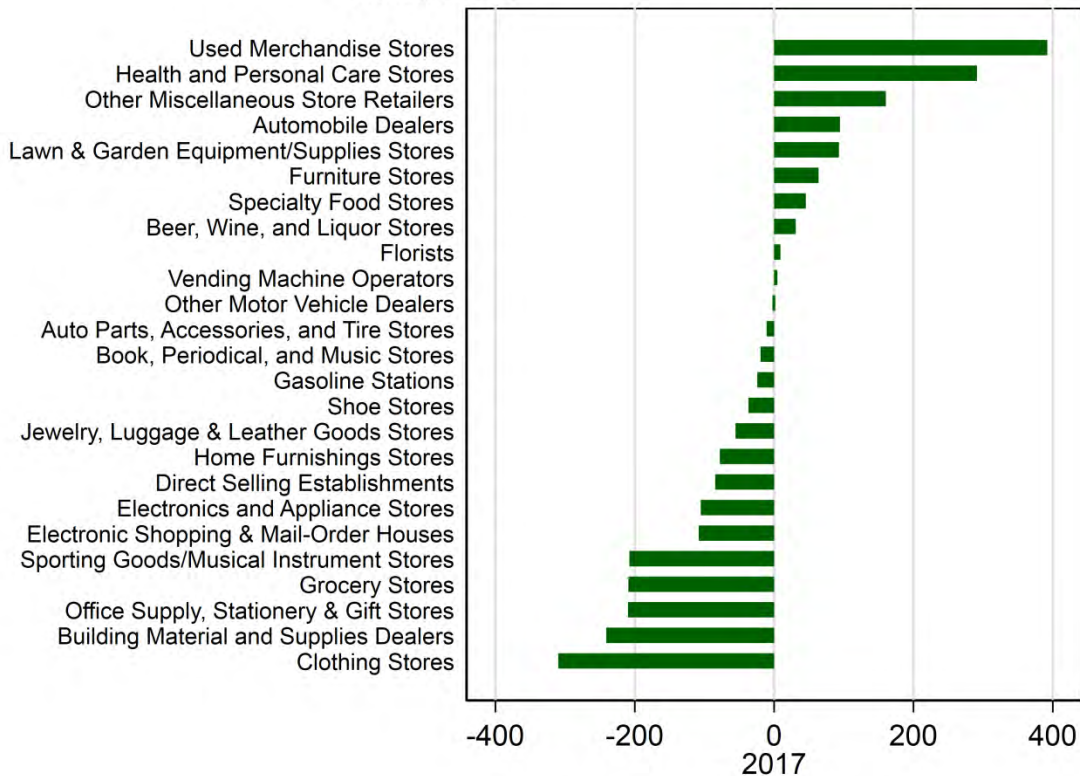
Legend:
- over 54
- 25-54
- under 25

Retail & Warehousing:

Consumer behavior has changed in Connecticut and nationally with implications for Connecticut employment. The ability to buy many goods on line for home delivery has reduced demand for employment in the Retail sector while creating jobs in the transportation, delivery, and warehousing industries. As the charts show, most industries within the retail sector declined in 2017 and announcements of bankruptcies and store closing suggest further declines are ahead. On the other hand, 2017 saw a big jump in the Warehousing and Store sector with strong prospects for future expansion.

Transportation and Warehousing Employment Change 2016 to 2017

Categories (top to bottom):
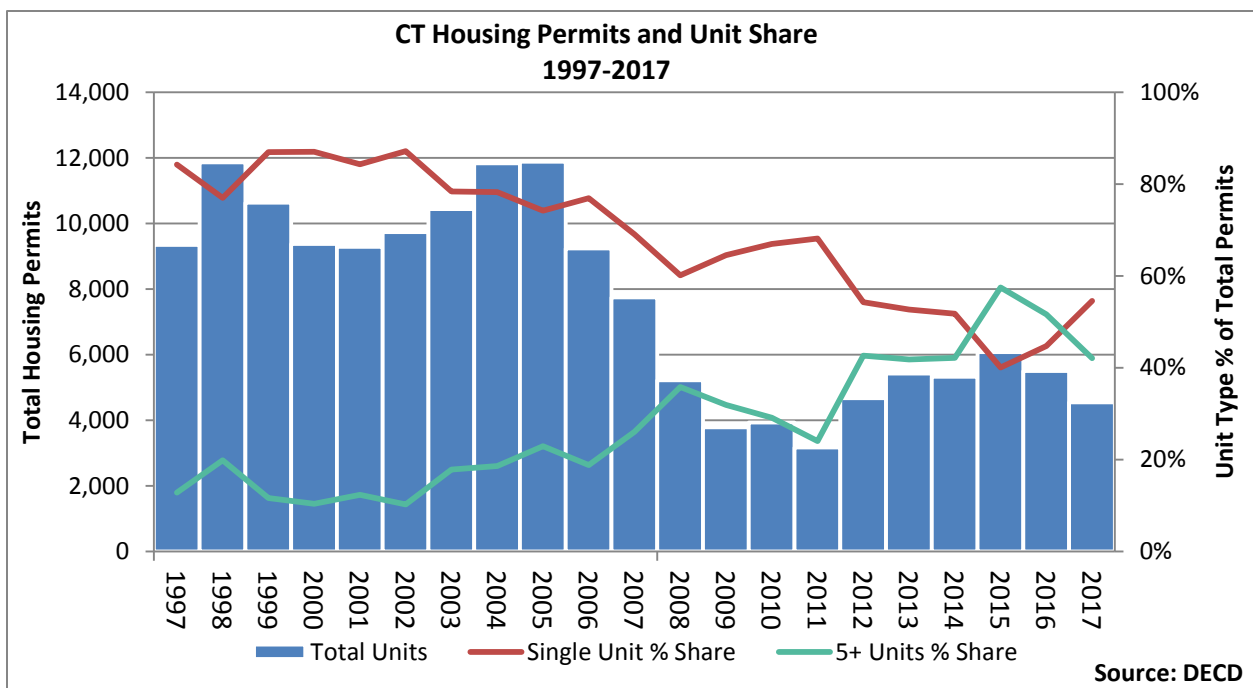Warehousing and Storage
Couriers
Postal Service
Sea, Coastal & Great Lakes Transport
General Freight Trucking
Scheduled Air Transportation
Support Activities, Road Transportation
Local Messengers and Local Delivery
Other Ground Passenger Transportation
Urban Transit Systems
Support Activities for Air Transport
Support Activities for Water Transport
Scenic/Sightseeing Transportation, Land
Inland Water Transportation
Nonscheduled Air Transportation
Freight Transportation Arrangement
Support Activities for Rail Transport
Scenic/Sightseeing Transportation, Water
Other Pipeline Transportation
Rail Transportation
Pipeline Transportation of Natural Gas
Interurban and Rural Bus Transportation
Scenic/Sightseeing Transportation, Other
Charter Bus Industry
School and Employee Bus Transportation
Other Support Activities for Transport
Specialized Freight Trucking
Taxi and Limousine Service

X-axis: 0, 200, 400, 600, 800, 1,000
2017

Retail Trade Employment Change 2016-2017

Categories (top to bottom):
Used Merchandise Stores
Health and Personal Care Stores
Other Miscellaneous Store Retailers
Automobile Dealers
Lawn & Garden Equipment/Supplies Stores
Furniture Stores
Specialty Food Stores
Beer, Wine, and Liquor Stores
Florists
Vending Machine Operators
Other Motor Vehicle Dealers
Auto Parts, Accessories, and Tire Stores
Book, Periodical, and Music Stores
Gasoline Stations
Shoe Stores
Jewelry, Luggage & Leather Goods Stores
Home Furnishings Stores
Direct Selling Establishments
Electronics and Appliance Stores
Electronic Shopping & Mail-Order Houses
Sporting Goods/Musical Instrument Stores
Grocery Stores
Office Supply, Stationery & Gift Stores
Building Material and Supplies Dealers
Clothing Stores

X-axis: -400, -200, 0, 200, 400
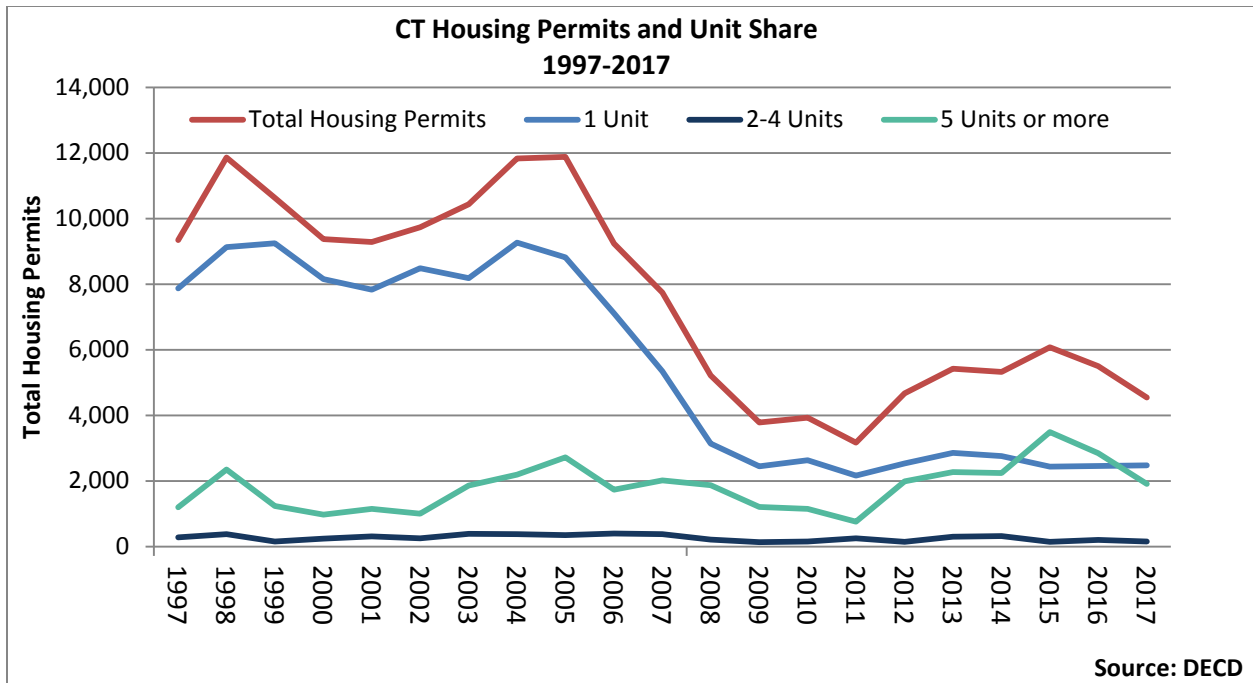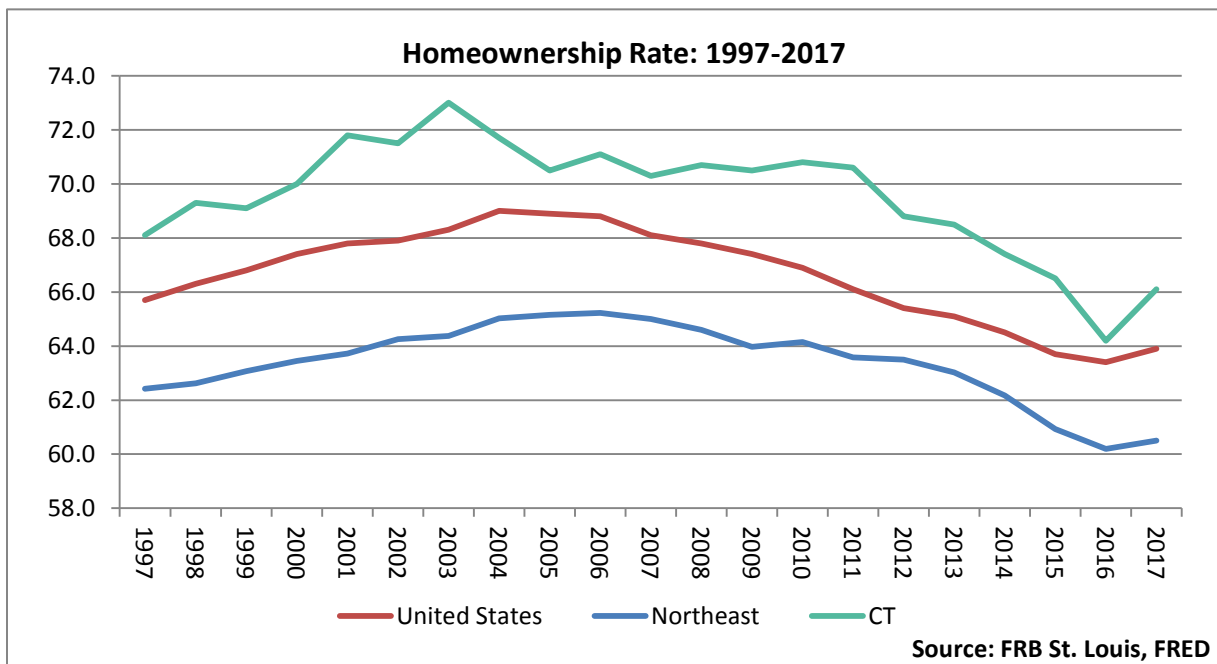2017

Retail Trade and Statewide Employment 2007-2017

HOUSING

The recent trend of multi-unit housing construction in Connecticut has slowed, and homeownership is on the rise. From 2011 through 2015, construction permits for multi-unit housing increased from 24 percent to 57.5 percent of total units, while single unit permits fell to a series low of 40.1 percent. This multi-unit growth was unusual for Connecticut, as it was typically dwarfed by the share of single unit permits. This growth in multi-unit permits drove the rise in overall housing permits from 2011-2015, as the total count of single units remained largely flat. The following graphs illustrate how the increase and subsequent decrease in overall housing permits was driven by the sharp decrease in multi-unit permits. From 2015 to 2017 overall housing permits fell from 6,077 to 4,547 by 2017.

CT Housing Permits and Unit Share 1997-2017

Source: DECD

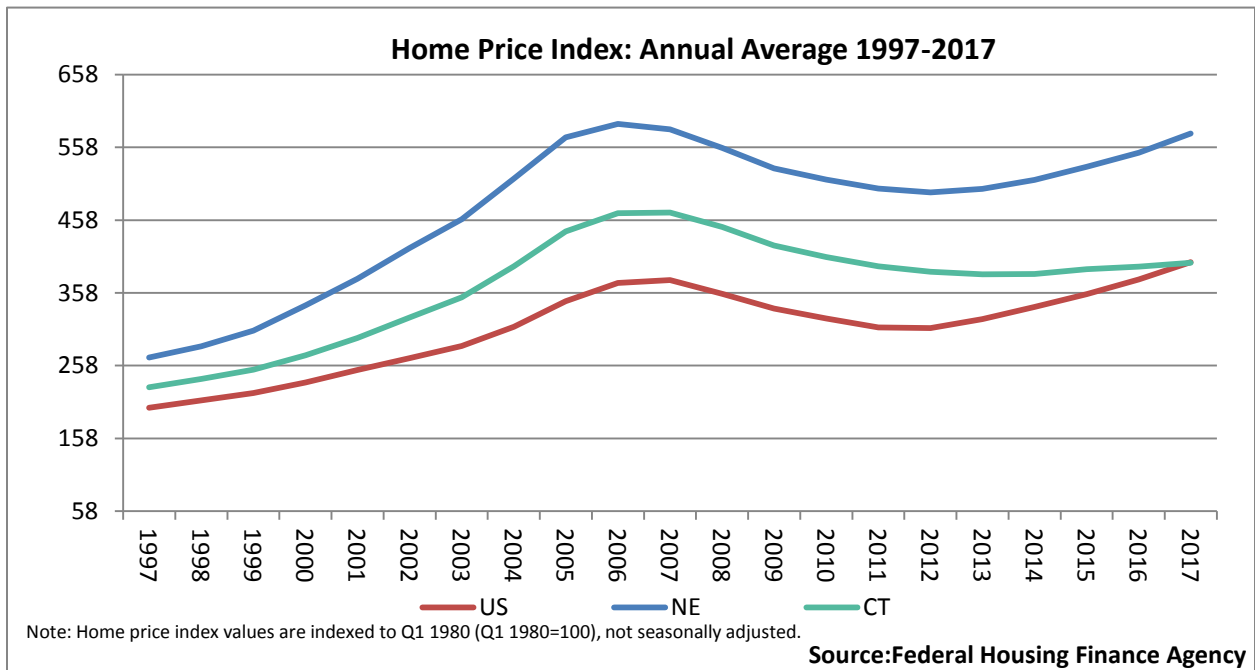**CT Housing Permits and Unit Share**
1997-2017

Source: DECD

This 2015-17 decline in multi-unit construction has occurred amid a sharp increase in Connecticut's homeownership rate. After peaking at 73 percent in 2003, homeownership remained around 70 percent from 2005 through 2011. From 2011 to 2016 it fell by 6.4 percentage points to a series low of 64.2 percent as it shown below. In the most recent year of available data it has increased by almost 2 percentage points, while corresponding rate increases for the northeast and US overall have increased respectively by 0.3 and 0.5 percentage points.

Homeownership Rate: 1997-2017

Source: FRB St. Louis, FRED

Where the Connecticut housing market hasn't seen growth is in its average annual home price. The following graph shows the Federal Housing Finance Agency's Home Price Index for 1997-2017, therein it illustrates how Connecticut's home prices have been flat relative to the US and Northeast. The state's post-peak trough occurred in 2014, two years after the US and Northeast. This slow price growth is likely due in part to short term state population trends and other factors.

Home Price Index: Annual Average 1997-2017

Note: Home price index values are indexed to Q1 1980 (Q1 1980=100), not seasonally adjusted.

Source:Federal Housing Finance Agency

Connecticut Projections
Through 2019

CONNECTICUT SHORT-TERM PROJECTIONS

Overall Change

The following is an outlook on where Connecticut is headed over the next two years. The Connecticut Department of Labor's Office of Research produces a yearly short-term employment forecast to provide insight on labor market activity. The industry and occupational forecasts are derived using data obtained from the Quarterly Census of Employment and Wages (QCEW) and the Occupational Employment Statistics (OES) programs. The current analysis covers the second quarter of 2017 to the second quarter of 2019.

During this period, overall Connecticut employment is projected to increase by 1.1% from 1,896,007 to 1,917,856 as is shown in the table below. This expected growth rate is slightly faster than the 2015-2017 rate projected last year. Although 2018 employment data isn't yet available, early indications are that Connecticut will meet or exceed the growth projected during the previous projections cycle.

Projections by Major Sector

The goods producing sector is expected to grow at 1.3% during the two year projection period, slightly above the 1.1% growth projected for the overall Connecticut economy. This growth amounts to an employment increase of 2,853 jobs, with the largest share coming from Manufacturing (up 1,718 jobs), while the much smaller industry of Construction is expected to grow by 1,258 over the period. Overall growth for the goods producing sector is dampened by slight declines in Natural Resources and Mining, the third industry component of that sector. The overall goods producing sector growth in largely impacted by the notable growth in manufacturing, which is experiencing top-line industry sector growth for the first time in decades. Goods producing sector growth in previous years was driven by employment change in Construction, as it normally comprised a very large share of Goods Producing growth.

The service providing sector of the economy equates to more than three quarters of the overall employment and is projected to grow by 15,794 jobs through 2019Q2, with a growth rate of 1.1%, equal to the rate of total employment in Connecticut. This overall growth projection for service providing industries is comprised of seven growing industries and five expected to contract. Growth is driven by increases in the Leisure and Hospitality and the Health Care and Social Assistance industries, which comprise a combined 76.2% of service providing sector

growth. Five industries are expected to contract by 3,438 jobs, with retail trade comprising 62.3% of job losses within those contracting industries.

Projections by Industry

The largest major sectors that show significant rate increases are Social Assistance and Transportation and Warehousing, which we project to grow by 6.3% and 6.2%, far above the 1.1% growth expected for total employment. Social Assistance (NAICS 624) growth is driven by an 8.2 percent increase of Individual and Family Services (NAICS 624100), which is 59.8% of Social Assistance employment and 77.6% of its expected growth. Transportation and Warehousing increases in Connecticut are driven primarily by the continued trend towards online shopping, which has also caused commiserate declines in Retail Trade employment. Since 2010 Transportation and Warehousing has steadily increased by almost 7,400 jobs to just over 46 thousand as of 2017 and expectations are for this trend will continue in the short term.
Projections by Occupation

Major Industries expected to show the largest declines are Information, down 1.8%, aforementioned Retail Trade, down 1.2%, and Government, down 0.6% over the two year period. The declines in Information and Government employment both continue long term trends, having respectively peaked in 2000 and 2008. The expected decline in Retail Trade, down 2,143 is the largest employment change of any industry sector.

Employment Projections by Industry

Industry	2017 Q2 History	2019 Q2 Projections	Emp Change	% Change
Total All Industries	1,896,077	1,917,856	21,779	1.2%
Self Employed and Unpaid Family Workers, All Jobs	182,838	185,970	3,132	1.7%
Goods Producing	223,673	226,526	2,853	1.3%
Natural Resources and Mining	5,695	5,572	-123	-2.2%
Construction	59,354	60,612	1,258	2.1%
Manufacturing	158,624	160,342	1,718	1.1%
Service Providing	1,489,566	1,505,360	15,794	1.1%
Retail Trade	182,626	180,483	-2,143	-1.2%
Wholesale Trade	62,680	63,459	779	1.2%
Transportation and Warehousing	48,480	51,140	2,660	5.5%
Utilities	5,378	5,046	-332	6.2%
Information	31,637	31,078	-559	-1.8%
Financial Activities	128,197	128,037	-160	-0.1%
Professional and Business Services	219,679	221,884	2,205	1.0%
Educational Services	186,115	185,572	-543	-0.3%
Health care	224,007	227,720	3,713	1.7%
Social Assistance	64,732	68,828	4,096	6.3%
Leisure and Hospitality	172,784	177,007	4,223	2.4%
Other Services (except Government)	79,035	81,370	2,335	3.0%
Government*	84,216	83,736	-480	-0.6%

*Government excludes education, hospitals, and gambling industries

Projections by Occupation

As is noted above, the 1.1 percent projected growth for the overall economy corresponds to an employment increase of 21,779 during the two-year period ending on 2019 Q2. The occupational groups expected to increase the most are Personal Care and Service Occupations, up 3,664 jobs, Food Preparation and Serving Related, up 3,592 jobs, Transportation and Materials Moving Occupations, up 2,367 jobs, and Healthcare Practitioners and Technical, up 2,308 jobs. The three major occupational groups projected to decline over the two-year period are Office and Administrative Support, down 1,736 jobs, Sales and Related, down 979, and Production Occupations, down 160 jobs. Changes in occupational employment driven by the industry changes discussed in the previous section. For example, the growth in Accommodation and Food Services drives the increase in Food Preparation and Serving occupations.

Employment Projections by Occupation

Occupational Group	2017 Q2 History	2019 Q2 Projections	Emp Change	% Change
Total, All Occupations	1,896,077	1,917,856	21,779	1.2%
Management	145,353	147,503	2,150	1.5%
Business and Financial Operations	102,720	104,050	1,330	1.3%
Computer and Mathematical	51,558	52,230	672	1.3%
Architecture and Engineering	35,888	37,281	1,393	3.9%
Life, Physical, and Social Science	13,724	14,010	286	2.1%
Community and Social Service	41,478	42,607	1,129	2.7%
Legal	18,824	18,996	172	0.9%
Education, Training, and Library	136,480	137,000	520	0.4%
Arts, Design, Entertainment, Sports, and Media	39,144	39,388	244	0.6%
Healthcare Practitioners and Technical	114,196	116,504	2,308	2.0%
Healthcare Support	53,831	55,227	1,396	2.6%
Protective Service	34,325	34,304	-21	-0.1%
Food Preparation and Serving Related	140,713	144,305	3,592	2.6%
Building and Grounds Cleaning and Maintenance	81,615	83,453	1,838	2.3%
Personal Care and Service	98,458	102,122	3,664	3.7%
Sales and Related	181,767	180,788	-979	-0.5%
Office and Administrative Support	271,371	269,635	-1,736	-0.6%
Farming, Fishing, and Forestry	4,425	4,362	-63	-1.4%
Construction and Extraction	72,708	74,077	1,369	1.9%
Installation, Maintenance, and Repair	57,386	57,694	308	0.5%
Production	101,162	101,002	-160	-0.2%
Transportation and Material Moving	98,951	101,318	2,367	2.4%

Connecticut's Projections Compared to Other States

Connecticut's projected 2017- 2019 job growth is slower than projected by most other states, although it is faster than the growth projected by seven states, including Delaware, Kansas and Maine. Twenty states are projecting growth under 2% — or less than 1% per year. As shown below, among area states, Massachusetts is projecting the fastest growth (+2.9) while Maine is projecting the slowest – up just 0.2% over two years. Food Preparation and Serving is projected to add the most jobs in three of our neighbor states. Connecticut jobs are expected to grow in this category as well – 3,592 additional jobs or a 2.6% increase. Healthcare support occupations are projected to grow a whopping 8.2% in New York over the two-year period, behind just Arizona and nearly double Massachusetts' 4.4% increase. Connecticut's 2.6% increase in this category is comparable to that in other area states except Maine which is significantly lower. The category

projected to add the most jobs in Connecticut is Personal Care and Service, led by Personal Care Aides, Childcare Workers, Hairdressers & Cosmetologists, and Nonfarm Animal Caretakers.

Statewide Projections

State	2017	2019	# Change	% Change
Massachusetts	3,783,250	3,894,270	111,020	2.9%
New York	9,948,180	10,170,790	222,610	2.2%
Rhode Island	524,750	534,680	9,930	1.9%
New Hampshire	704,260	717,110	12,850	1.8%
Vermont	369,450	373,770	4,320	1.2%
Connecticut	1,896,077	1,917,856	21,779	1.1%
Maine	673,200	674,480	1,280	0.2%

Occupation Group Projected to Add the Most Jobs 2017 to 2019

State	Occupation Group	2017	2019	# Change	% Change
Massachusetts	Food Preparation and Serving	302,900	316,210	13,310	4.4%
New York	Healthcare Support	392,990	425,180	32,190	8.2%
Rhode Island	Food Preparation and Serving	52,500	54,170	1,670	3.2%
New Hampshire	Food Preparation and Serving	59,160	60,800	1,640	2.8%
Vermont	Healthcare Practitioners & Technical	20,100	20,770	670	3.3%
Connecticut	Personal Care and Service	98,458	102,122	3,664	3.7%
Maine	Healthcare Practitioners & Technical	42,910	43,300	390	0.9%

Conclusion

Connecticut's short-term projections show that Connecticut's slow employment growth over the recent few years is likely to continue, and sectors will continue to shift. Manufacturing is picking up while Education expected to slow. Connecticut is also part of a national trend which sees increases in warehousing and transportation while retail is under pressure.

There are both upside and downside risks to these projections. Connecticut is part of the national and global economies and has employment concentration in industries tied to the financial markets. Uncertainty and volatility in the economy and markets could hurt Connecticut. On the other hand, national job growth has been steady in early 2018 and Connecticut has participated in that increase. Our best judgment is that the rapid growth seen in early 2018 will moderate but that growth will continue through the end of the projections period.

Data Limitations

The projections in this report have been carefully prepared to ensure accuracy, but by nature are subject to error. For more detail on the short-term occupational projections, visit: www.projectionscentral.com/Projections/ShortTerm.