

# CONNECTICUT'S SHORT-TERM EMPLOYMENT OUTLOOK 2019-2021

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***Connecticut's  
Short-Term Employment Outlook:  
2019-2021***

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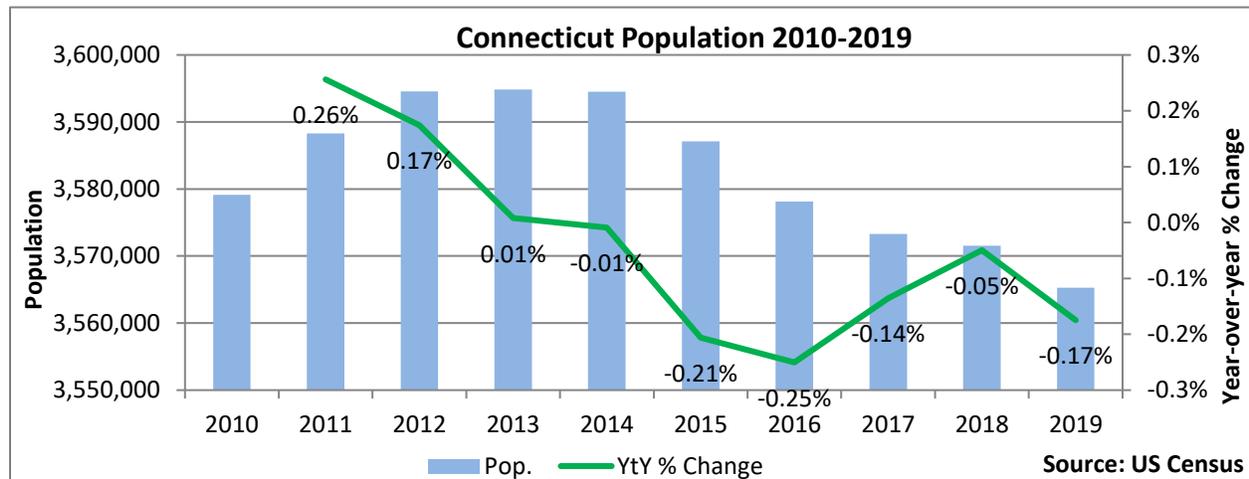
# **The Pandemic, The Recession, and its Impact on Labor Markets**

2020 will be remembered as a pivotal year in world history. For many, no other period in their lifetime has had more things change as swiftly and as drastically as they have this year. In a few short months, a pandemic swept across the globe and caused an unprecedented halt to what had been a historic period of economic expansion. As billions of people adjusted to the current reality, uncertainty due to our ever-evolving understanding of Covid-19 and its impact on public health and the economy will likely cause some drastic shifts to how our labor force operates.

This annual outlook includes a review of various data sources to help contextualize the current state of our labor force demographics and recent economic trends. The concluding section contains short term employment projections that were done in February 2020, just before the economic shutdown occurred. As a result of this, they are best utilized as indicators of where the Connecticut economy was trending and our expectations of where growth was going to occur before the global pandemic black swan event.

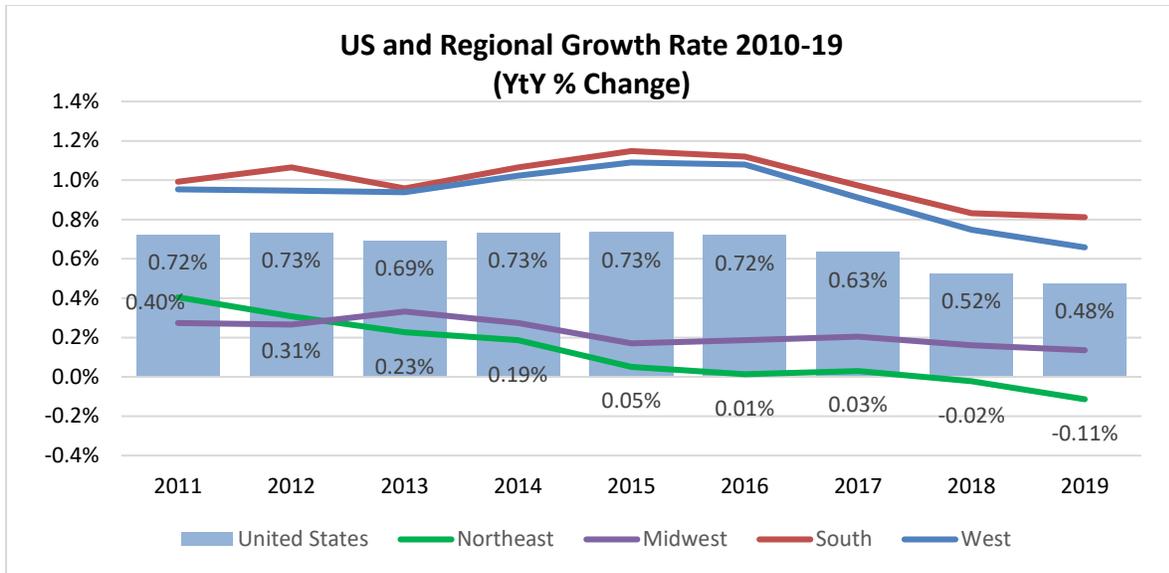
# **The Connecticut Labor Market**

## POPULATION CHANGE 2010-2019



Population change since 2010 has been a challenge for Connecticut’s economy. Since 2010, statewide population peaked in 2013 at 3.59 million and has fallen by 29,554 or 0.8% during the intervening six year through 2019. The figure above illustrates statewide population change over the period and additionally shows year-over-year percent change. The 2018-19 drop of 6,233 represents the largest one-year decline since 2016. This population decline in the state since 2013 has been shown to be driven by net negative domestic migration and dampened by a net inflow of international migration.<sup>1</sup> During the past six years, the United States has grown 3.9%. This growth has been driven by the South and West regions of the country, respectively up 6.1% and 5.6%. The smaller Midwest and Northeast populations grew by 1.1% and 0.14% respectively from 2013-2019. Both the US and its regions have experienced slowing growth rates in recent years, as is illustrated below. For the past two years, the northeast region was the only region to have negative growth, and was down 0.2% and 0.11%.

<sup>1</sup> DeJonge, Alissa. (2020, Jan.) 2020 Economic Outlook: Slowing Growth Globally, Technology Changes Abound. CT Economic Digest



The declining population of the Northeast region from 2017-19 notably is the only instance of a census region contracting during the 2010-19 span. The following table contains a breakdown of that regional change by state and shows the regional losses were driven by New York and buoyed by gains in Maine, Massachusetts, and New Hampshire. Those three states gained a combined 21,269 and all share proximity to the high growth Boston metro area.

**Northeast Region Population Change by State**

Area	2013 (CT Peak Year)	2018	2019	18-19 #change	18-19 %change	19-18 State #Rank	18-19 State %Rank	2019 Regional pop share	Regional share change
United States	315,993,715	326,687,501	328,239,523	1,552,022	0.48%	--	--	--	--
Northeast	55,901,806	56,046,620	55,982,803	-63817	-0.11%	--	--	100%	--
Connecticut	3,594,841	3,571,520	3,565,287	-6,233	-0.17%	46	44	6%	-9.8%
Maine	1,328,009	1,339,057	1,344,212	5,155	0.38%	33	24	2%	8.1%
Massachusetts	6,713,315	6,882,635	6,892,503	9,868	0.14%	24	34	12%	15.5%
New Hampshire	1,326,622	1,353,465	1,359,711	6,246	0.46%	31	20	2%	9.8%
New Jersey	8,856,972	8,886,025	8,882,190	-3,835	-0.04%	43	41	16%	-6.0%
New York	19,624,447	19,530,351	19,453,561	-76,790	-0.39%	50	47	35%	-120.3%
Pennsylvania	12,776,309	12,800,922	12,801,989	1,067	0.01%	40	40	23%	1.7%
Rhode Island	1,055,081	1,058,287	1,059,361	1,074	0.10%	39	37	2%	1.7%
Vermont	626,210	624,358	623,989	-369	-0.06%	41	42	1%	-0.6%

Source: US Census Bureau

Those three states also have 18-19 change share much higher than their regional population share. When comparing its percent of the northeast population to its percent of northeast employment change, the losses in New York are even more striking. New York has lost more population than the overall Northeast region from 2018-19.

## CONNECTICUT COMPARED TO OTHER NET LOSS STATES

From 2018-19, Connecticut was one of nine states with negative population growth and had the fifth largest losses after New York, Illinois, West Virginia, and Louisiana. The following table shows one-year change and change from the state’s population peak year through 2019. Every state except New Jersey had population peaks between 2012 and 2016 and three of the nine states are within the northeast census region.

**States with 2018-19 Population Loss and Peak Year to 2019 Change**

State	2018	2019	18-19 # change	18-19 % change	State Population Peak Year	Peak Year Population	Peak Year to 2019 Change	
							#	%
New York	19,530,351	19,453,561	-76,790	-0.39%	2015	19,654,666	-201,105	-1.02%
Illinois	12,723,071	12,671,821	-51,250	-0.40%	2013	12,895,129	-223,308	-1.73%
West Virginia	1,804,291	1,792,147	-12,144	-0.67%	2012	1,856,872	-64,725	-3.49%
Louisiana	4,659,690	4,648,794	-10,896	-0.23%	2016	4,678,135	-29,341	-0.63%
<b>Connecticut</b>	<b>3,571,520</b>	<b>3,565,287</b>	<b>-6,233</b>	<b>-0.17%</b>	<b>2013</b>	<b>3,594,841</b>	<b>-29,554</b>	<b>-0.82%</b>
Mississippi	2,981,020	2,976,149	-4,871	-0.16%	2014	2,990,468	-14,319	-0.48%
Hawaii	1,420,593	1,415,872	-4,721	-0.33%	2016	1,427,559	-11,687	-0.82%
New Jersey	8,886,025	8,882,190	-3,835	-0.04%	2018	8,886,025	-3,835	-0.04%
Alaska	735,139	731,545	-3,594	-0.49%	2016	741,456	-9,911	-1.34%

**Source: US Census Bureau**

Connecticut’s percent decline from 2018-19 was the second lowest among contracting states. In total, these ten states lost a combined 174,000 residents over the year and were down a combined 0.31%. These statewide declines are dwarfed by gains in growing states. The ten states with the most growth all grew by more than 52,000 and had over the year growth rates between 0.85% and 1.74%. The top five states of Georgia, North Carolina, Arizona, Florida and Texas grew by over 100,000 and had rates between 1.01% and 1.69%.

## CONNECTICUT POPULATION CHANGE BY DEMOGRAPHIC GROUP

Though the state population since 2013 has declined with slowing percent loss in recent years, that topline trend isn’t uniform among every demographic group. Examining available data helps illustrate the continual change of the state population and contextualizes the labor market demographic shifts overviewed in subsequent sections of this outlook.

**CT Race and Ethnic Group Change 2013-2018**

Group	2013		2018		2013-2018 Change	
	#	%	#	%	#	%
<b>Total All Groups Combined</b>	<b>3,596,080</b>	<b>100.0%</b>	<b>3,572,665</b>	<b>100.0%</b>	<b>-23,415</b>	<b>-0.65%</b>
<b>Non-Hispanic All Races</b>	<b>3,068,919</b>	<b>85.3%</b>	<b>2,982,856</b>	<b>83.5%</b>	<b>-86,063</b>	<b>-2.8%</b>
White	2,530,638	70.4%	2,408,190	67.4%	-122,448	-4.8%
Black	370,212	10.3%	387,134	10.8%	16,922	4.6%
American Indian	9,383	0.3%	9,566	0.3%	183	2.0%
Asian or Pacific Islander	158,686	4.4%	177,966	5.0%	19,280	12.1%
<b>Hispanic All Races</b>	<b>527,161</b>	<b>14.7%</b>	<b>589,809</b>	<b>16.5%</b>	<b>62,648</b>	<b>11.9%</b>
White	442,825	12.3%	495,214	13.9%	52,389	11.8%
Black	64,098	1.8%	72,365	2.0%	8,267	12.9%
American Indian	12,505	0.3%	13,972	0.4%	1,467	11.7%
Asian or Pacific Islander	7,733	0.2%	8,258	0.2%	525	6.8%

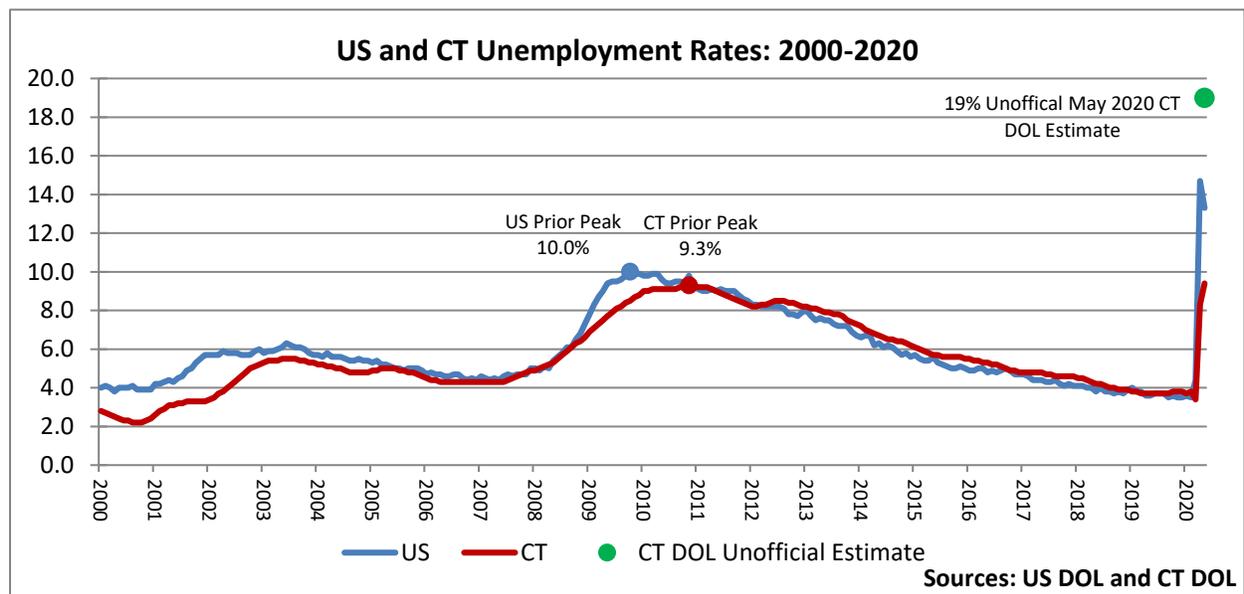
**Source: CT Department of Public Health**

From 2013 to 2018 (the most recent year of data), Connecticut has had pronounced Hispanic and non-White population growth and declines in the Non-Hispanic White population. Note that the data-source is from the CT Department of Public Health and top-line estimates differ slightly from aforementioned US Census figures.

## 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. Up until a few months ago in early 2020, the overall unemployment rate was at historic lows. Since then, Covid-19 employment shutdowns have resulted in unprecedented short-term unemployment increases. During this time, data collection and misclassification issues within the Census Bureau's Current Population Survey have caused Connecticut's unemployment rate to be inaccurate.<sup>2</sup> As of May 2020, the CT Labor Department Office of Research unofficially estimates unemployment to be in the range of 19%.<sup>3</sup> This puts the current unemployment rate at roughly double the prior peak in late 2010. In upcoming months, the data collection issues are expected to be resolved and the state's official unemployment rate should be free of distortion and accurately represent the total job-seeking share of the labor force.



As of February 2020, the last month before Covid-related lockdowns impacted labor markets, the US and CT unemployment rates were 3.5% and 3.8%. Additional detail at the US level by demographics highlights how the labor market had drastically improved for many groups within the US economy

<sup>2</sup> Pilon Matt. (2020, June 5) Shaky Jobs Data Muddies COVID-19, Great Recession Comparisons. Hartford Business Journal.

<sup>3</sup> CT DOL. (2020, June 18) State of Connecticut Labor Situation for May 2020.

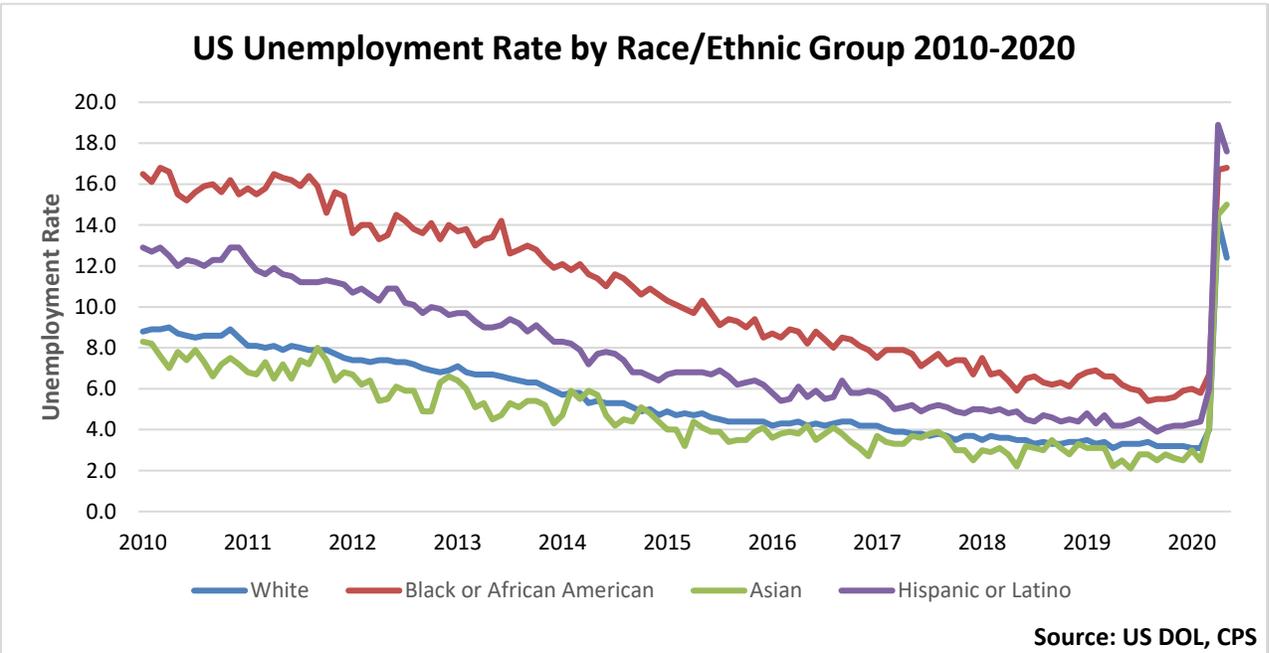
through the peak month before the NBER-declared recession.<sup>4</sup> From the June 2009 trough to the February 2020 business cycle peak, the unemployment rate fell by 6 percentage points overall and between 5.4 (Asian) and 9.0 (Black or African American) percentage points by Race/Ethnicity. The following chart also indicates the peak month and rate for available demographic groups.

**US Unemployment Rate Change - Business Cycle Trough to Peak**

Group	Trough	Peak	% Pt Change	Group Unemp. Rate High	
	June 2009	Feb. 2020		Month/Year	UR
<b>Total Population</b>	9.5	3.5	6.0	Oct. 09	10.0
<b>Male</b>	10.6	3.6	7.0	Oct. 09	11.1
<b>Female</b>	8.3	3.4	4.9	Nov. 10	9.0
<b>Race/Ethnic Group</b>					
<b>White</b>	8.7	3.1	5.6	Oct. 09	9.2
<b>Black or African American</b>	14.8	5.8	9.0	Mar. 10	16.8
<b>Asian</b>	7.9	2.5	5.4	Dec. 09	8.4
<b>Hispanic or Latino</b>	12.1	4.4	7.7	Aug. 09	13.0

Source: US DOL, CPS

The chart below shows how US unemployment rates by race/ethnic groups had steadily declined until the Feb 2020 business cycle peak and rose precipitously thereafter. Each group went from historic lows to historic highs over the course of only a few short weeks.



Source: US DOL, CPS

<sup>4</sup> National Bureau of Economic Research (NBER) Business Cycle Expansions and Contractions <https://www.nber.org/cycles.html>

Corresponding Connecticut unemployment rates by demographic groups are available annually through 2019 and are shown below. The table shows how unemployment rate declines for Black and Hispanic populations have fallen dramatically though 2019, but still hover above levels for other groups. 2019 annual unemployment rate data for the Asian population in Connecticut is suppressed, in 2018 that group had an annual unemployment rate of 5.3%.

**CT Annual Unemployment Rate Change - UR Peak Year and Most Recent Year**

Group	UR High	Recent Year	% Pt	Group Unemp. Rate High	
	2010	2019	Change	Year	UR
<b>Total</b>	9.2	3.8	-5.4	2020	9.2
<b>Men</b>	9.9	4.2	-5.7	2010	9.9
<b>Women</b>	8.4	3.4	-5.0	2011	8.9
<b>Race/Ethnic Group</b>					
<b>White</b>	8.3	3.5	-4.8	2010	8.3
<b>Black or African Amer</b>	17.2	7.3	-9.9	2011	18.3
<b>Asian</b>	5.3	S	S	2010	5.3
<b>Hispanic or Latino</b>	17.7	5.5	-12.2	2011	17.8

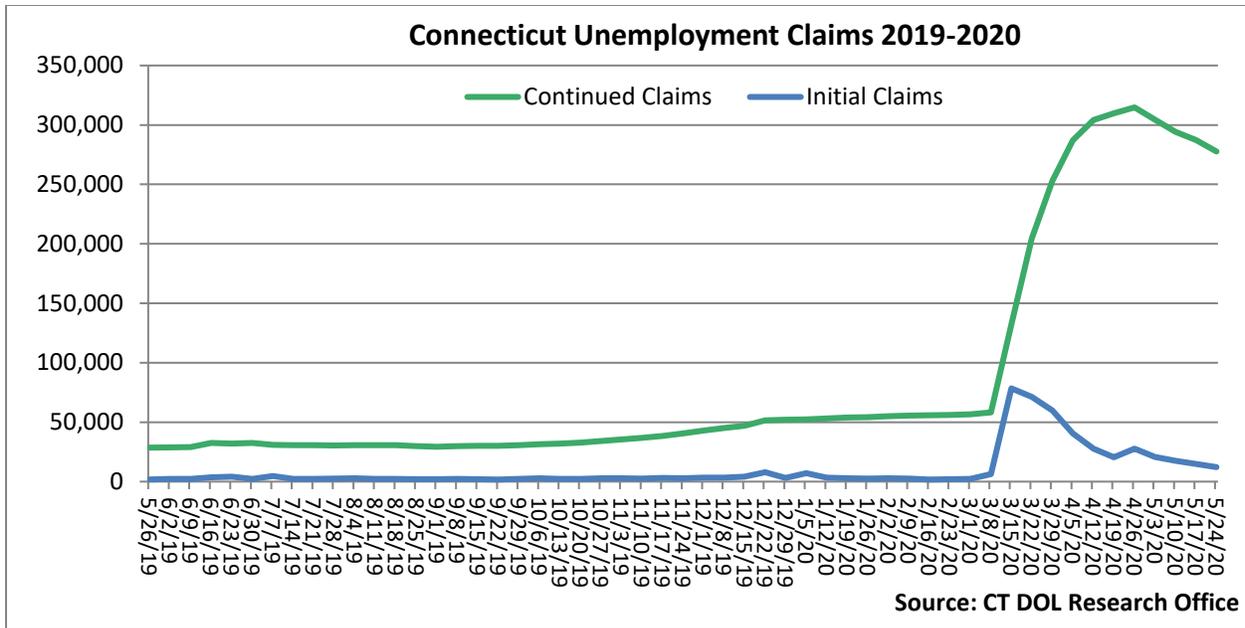
S = Suppressed

Source: US DOL, LAUS

## Unemployment Claims

During the first half of 2020, unemployment claims due to the Covid-19 shutdown spiked to unprecedented levels. Initial claims in Connecticut went from 2,309 during the week of March 1<sup>st</sup> to 78,446 two weeks later. Continued claims have reached a high of over 314-thousand during late April and have fallen to 277-thousand as of late May.<sup>5</sup>

<sup>5</sup> CT DOL Statewide Initial and Continued Unemployment Claims  
<https://www1.ctdol.state.ct.us/lmi/claimsdata.asp>



### Industry Continued Claims

As of the week of May 24<sup>th</sup>, there were 277,684 continued unemployment claims, up from less than 60-thousand in early March and 29-thousand a year earlier. The industries with the largest increases in continued claims were Accommodation & Food Services, Health Care & Social Assistance, and Retail Trade, which all had continued claims exceeding 35,000, up significantly from levels below 6,000 in the beginning of March. These three industries represent 44% of total continued claims as of late May and were 30% of total claims during the first week of March, illustrating how the shutdown has impacted service industry sectors as was outlined in the May edition of the Connecticut Economic Digest<sup>6</sup>

The major industries with the smallest percent increase in claims include Utilities (+32 claims or +167%), Finance & Insurance (+1,315 claims or +199%) and Construction (+7,936 claims or 205%). Industries with lower claims increases are those that lend themselves to telecommuting or were deemed essential during the quarantine shutdown.

A positive distinction of this current downturn is that a much larger share of unemployed are on layoff, which suggests that a larger share of current unemployment will more quickly go back to work than during prior downturns when more unemployed workers were separated from their employers.

<sup>6</sup> Krzyzek, Matthew. Connecticut Projected to Add Fewer Jobs Through 2021. Connecticut Economic Digest. May 2020.

Connecticut Weekly Continued Claims by Industry

Industry	Most Recent Week	Pre-Shutdown	1 Year Ago	3/8/20 to 5/24/20 Change		1 year Change		Share of Total Claims	
	5/24/2020	3/8/2020	5/26/2019	#	%	#	%	5/24/20	5/26/19
<b>Total</b>	277,684	58,234	28,597	219,450	376.8%	249,087	871.1%	100.0%	100.0%
Agric., Forestry, Fishing & Hunting	421	398	112	23	5.8%	309	275.9%	0.2%	0.4%
Mining/Quarrying	51	51	9	0	.%	42	466.7%	0.0%	0.0%
Utilities	99	69	41	30	43.5%	58	141.5%	0.0%	0.1%
Construction	11,148	8,591	2,156	2,557	29.8%	8,992	417.1%	4.0%	7.5%
Manufacturing	15,232	5,410	3,123	9,822	181.6%	12,109	387.7%	5.5%	10.9%
Wholesale Trade	8,396	2,242	1,252	6,154	274.5%	7,144	570.6%	3.0%	4.4%
Retail Trade	35,878	5,354	3,248	30,524	570.1%	32,630	1,004.6%	12.9%	11.4%
Transp. & Warehousing	12,390	2,126	1,130	10,264	482.8%	11,260	996.5%	4.5%	4.0%
Information	3,295	888	551	2,407	271.1%	2,744	498.1%	1.2%	1.9%
Finance & Insurance	3,613	2,065	1,298	1,548	75.1%	2,315	178.4%	1.3%	4.5%
Real Estate	3,047	991	409	2,056	207.5%	2,638	645.1%	1.1%	1.4%
Prof. & Tech. Services	8,525	2,098	1,666	6,427	306.3%	6,859	411.7%	3.1%	5.8%
Management of Companies	2,277	501	366	1,776	354.5%	1,911	522.1%	0.8%	1.3%
Admin. & Support Svces.	18,170	8,231	3,047	9,939	120.8%	15,123	496.3%	6.5%	10.7%
Educational Services	14,238	1,773	903	12,465	703.1%	13,335	1,476.7%	5.1%	3.2%
Health Care & Soc Assistance	36,269	4,851	3,342	31,418	647.7%	32,927	985.2%	13.1%	11.7%
Arts, Ent., & Recreation	8,383	1,639	386	6,744	411.5%	7,997	2,071.8%	3.0%	1.3%
Accom. & Food Services	50,966	4,476	2,303	46,490	1,038.7%	48,663	2,113.3%	18.4%	8.1%
Other Services	17,817	1,855	1,034	15,962	860.5%	16,783	1,623.1%	6.4%	3.6%
Self Employed	7,074	247	144	6,827	2,764.1%	6,930	4,812.5%	2.5%	0.5%
Public Administration	3,759	742	265	3,017	406.6%	3,494	1,318.5%	1.4%	0.9%
Other/Unknown	16,636	3,636	1,812	13,000	357.5%	14,824	818.1%	6.0%	6.3%

Source: CT DOL Research Office

Just as the demographic characteristics of job-loss during the great recession were a reflection of high-loss industries driving up male unemployment, current total claimants are predominately female and under age 30 due to the demographic distribution of industries that currently make up large share of total claims.<sup>7</sup>

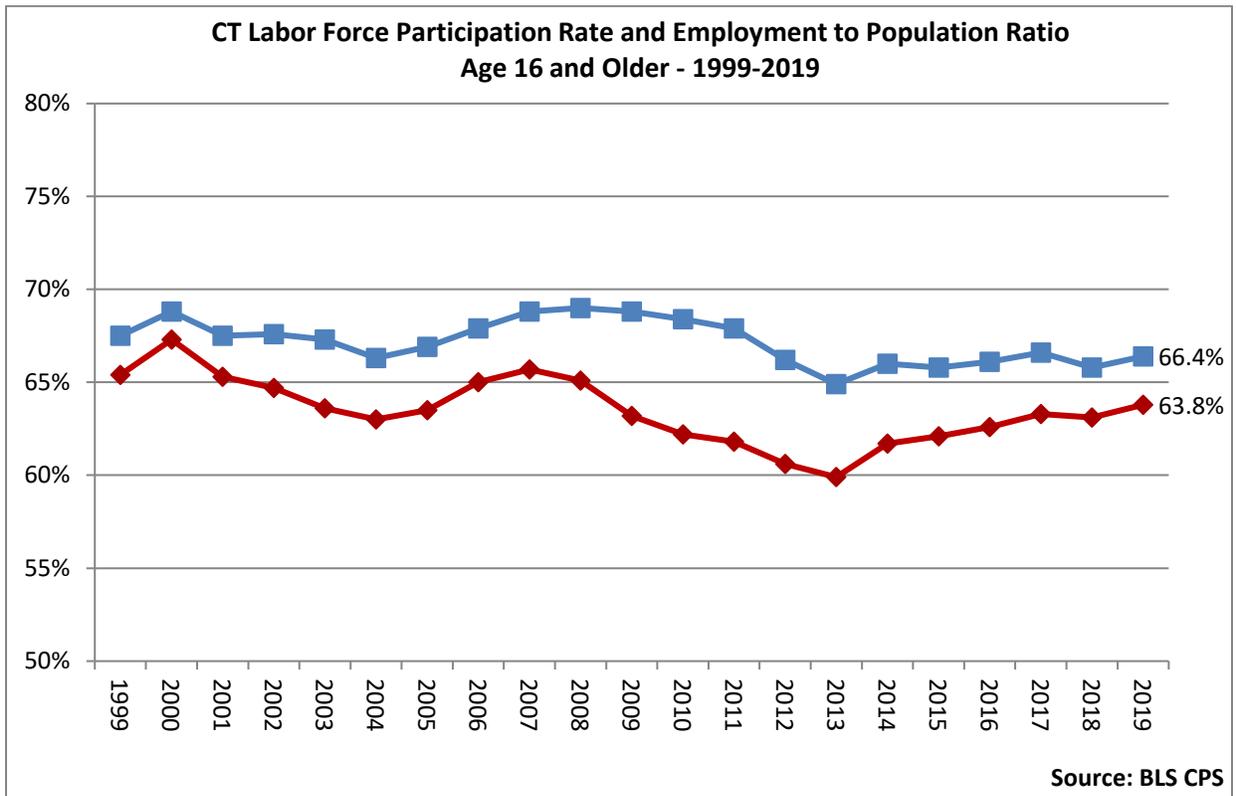
### Labor Force Participation

Connecticut’s annual average labor force participation rate (LFPR) 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 was 66.4 in 2019, up from 65.8 percent in 2018. This increase corresponds with increases across all major age cohorts. Since 2018, the under 25 LFPR is up a sizable 4.1 points, prime age is up 0.4 points, and the over 54 population is up 0.5 points. The muted overall LFPR for the total labor force corresponds with labor force growth in younger and older age cohorts that are less likely to be employed or seeking work. From 2018 to 2019, the overall labor force increased by 17,000. Under 25 and Over 54 age cohorts respectively increased by 36,000 and 6,000 while 25-54 cohort was down 25,000.

The narrowing gap between labor force participation and employment to population ratios (EPR) corresponds with unemployment rate decreases through 2019. From 2010 to 2019, the annual average unemployment rate in Connecticut fell from 9.2 percent to 3.8 percent, the lowest level since 2002. EPR

<sup>7</sup> Ilyankou, Ilya. How Covid-19 is Impacting Our Workforce. CTData.org

peaked in 2007 at 65.7% a year before the Labor Force Participation Rate (LFPR). In 2019 it was 63.8%, its highest level since 2008.



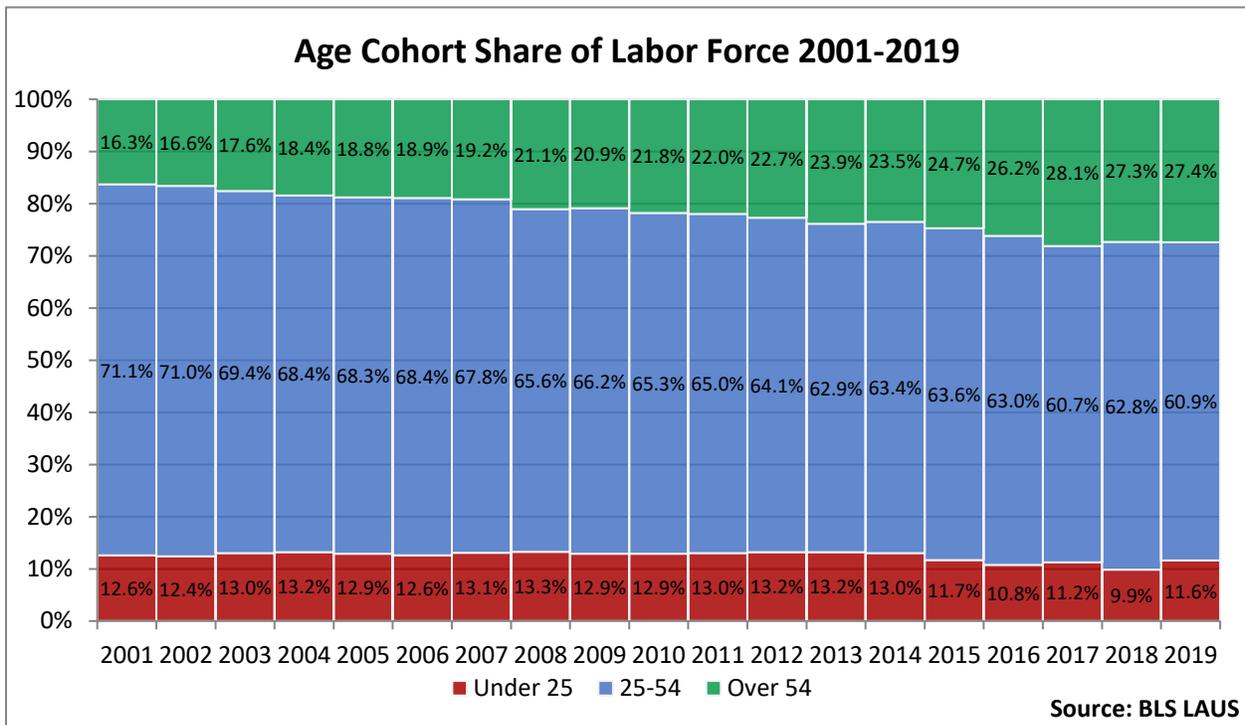
### Labor Force Participation by Age Cohorts

State-level age cohort labor force participation rate annual average data is available from 2001 through 2019<sup>8</sup>. Breaking down the overall labor force participation rate into three component age cohorts helps pinpoint contributing demographic trends.

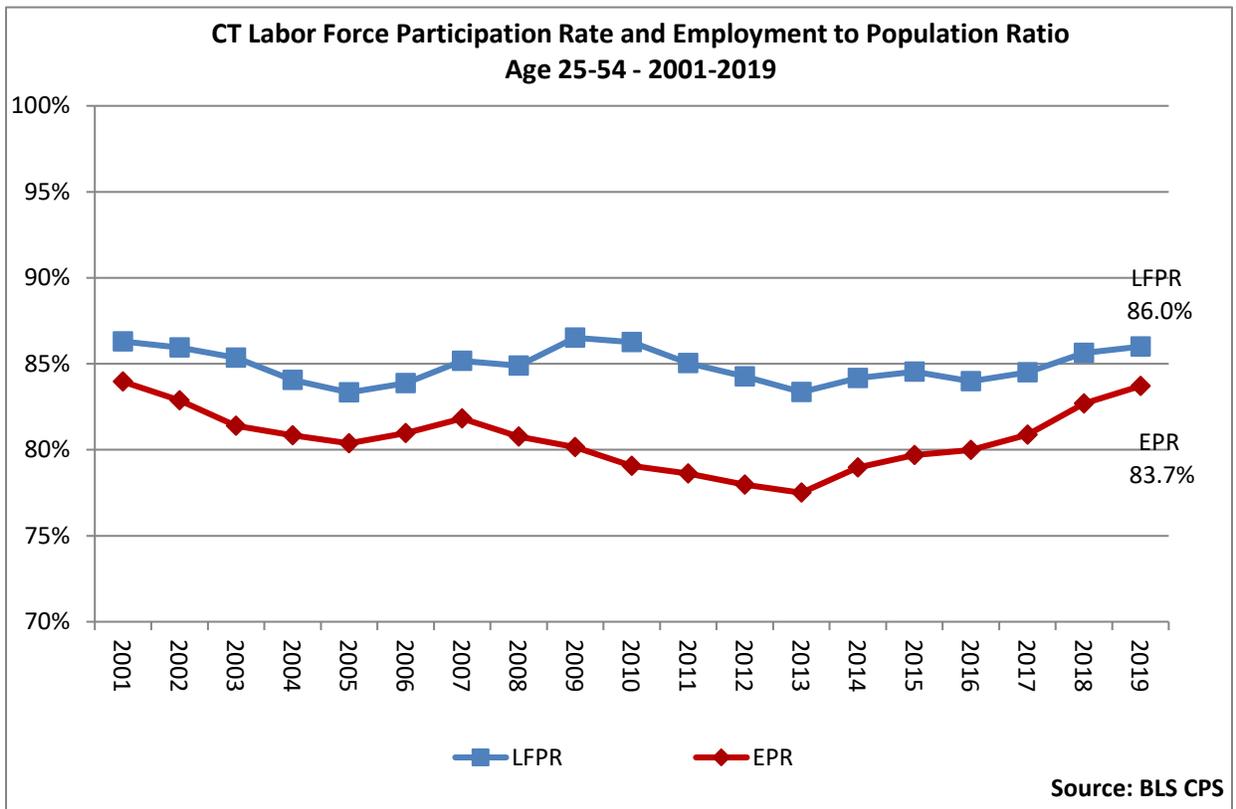
The overall working aged population (over age 16) increased slightly by 3,000 from 2018 to 2019, while the labor force grew by 17,000. Unemployment fell by 6,000 and Employment increased by 23,000.

This overall growth was driven by increases in the under 25 (up 36,000) and Over 54 (up 6,000) labor force age cohorts. The prime age labor force was down 25,000 over the year. The percent share of these broad age cohorts is shown below, which highlights the increasing importance of the over 54 work force in Connecticut. Over the past 10 years that cohort has increased from 20.9% of the labor force to 27.4% as of 2019.

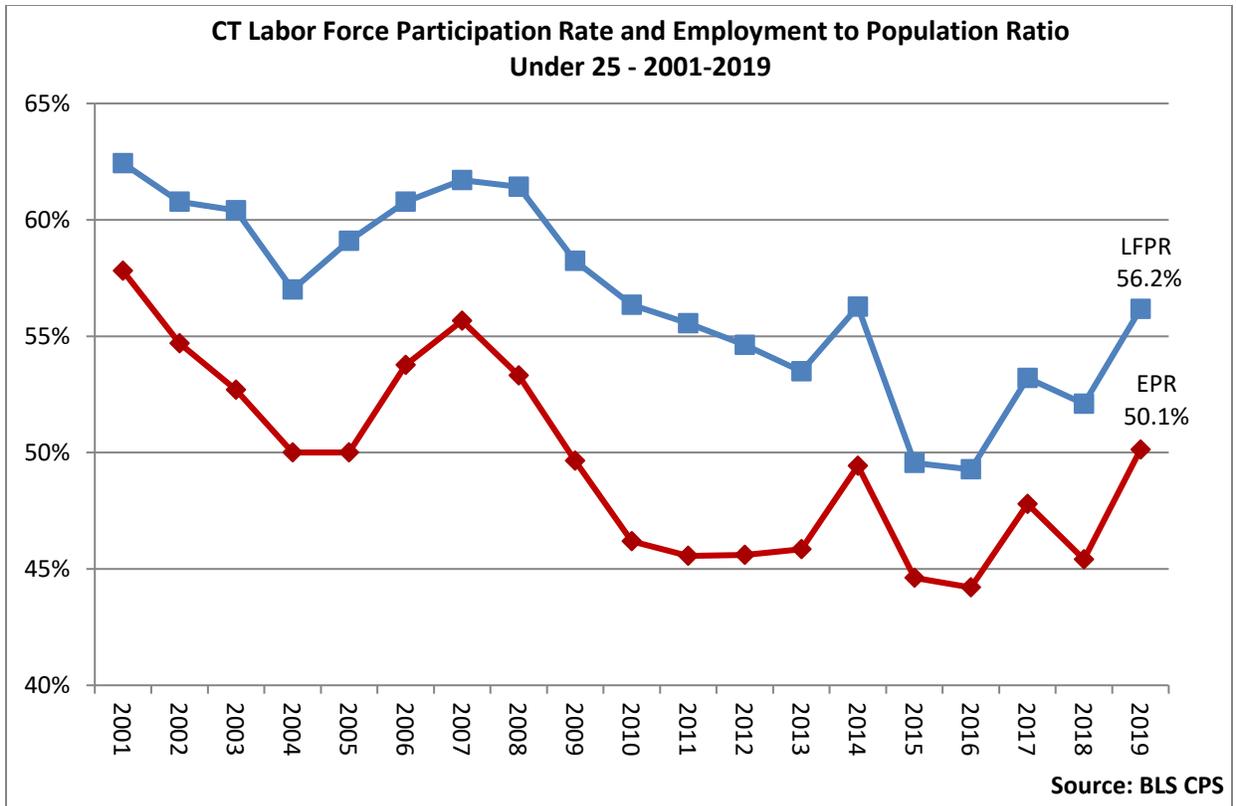
<sup>8</sup> Bureau of Labor Statistics. Expanded State Employment Status Demographic Data. <https://www.bls.gov/lau/ex14tables.htm>



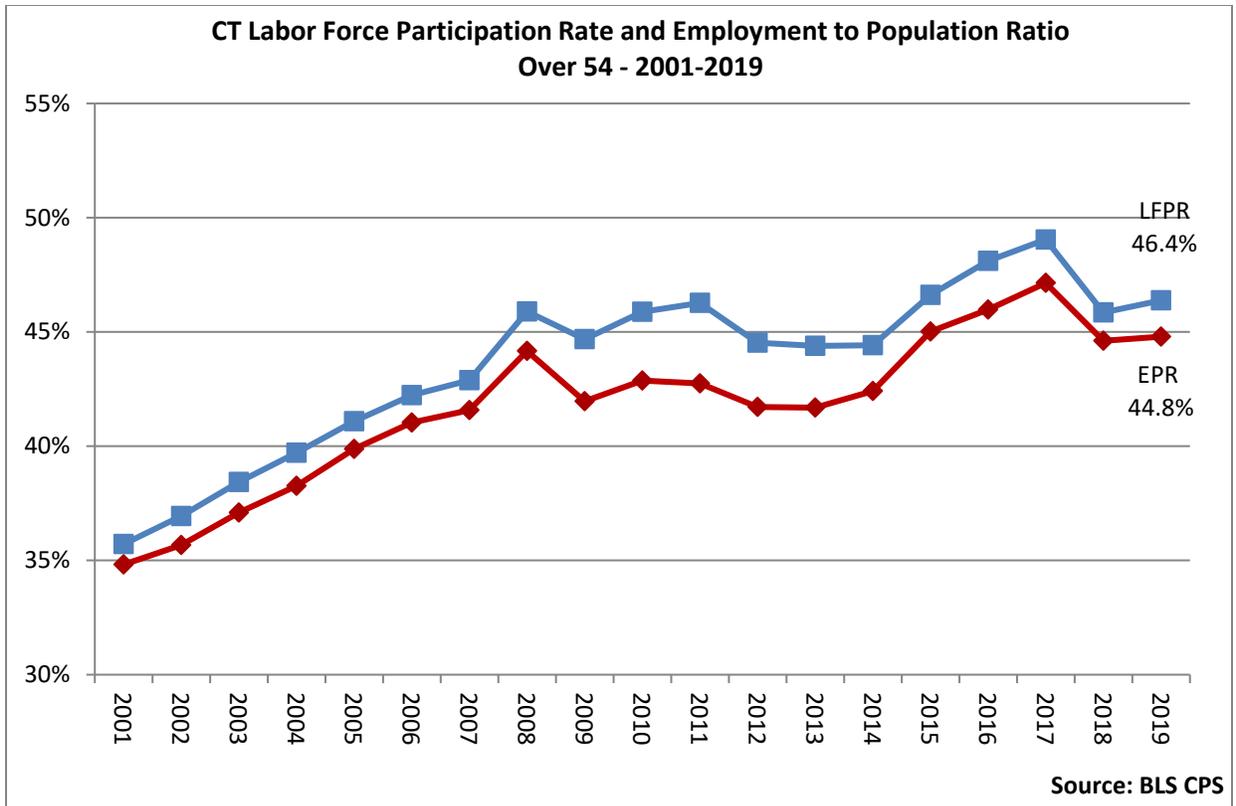
The following graph shows annual average LFPR and EPR for prime age workers in Connecticut from 2000 to 2019. Since reaching a 2013 trough of 83.4 percent in 2013, overall prime age LFPR has remained between 84.0 (2016) and 86 percent (2019). During this span, as unemployment decreased, the EPR posted strong gains, increasing from 77.5 percent to 83.7 percent, its highest level since 2001 and above 2007 peak levels of 81.8 percent. EPR is up a percentage point since 2018 and shows a narrowing gap below LFPR, indicative of declining unemployment in the state through 2019.



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 49.3% in 2016. Since that series low, the under 25 LFPR has trended upward, rising in two of the past three years. In 2019, 56.2% of the population age 16-24 was in the labor force.



As Connecticut’s labor force ages, the steady participation rate increase of the over 54 work force from 2001-2017 had been positive labor market shift for the state. In 2018 that trend shifted with sharp LFPR and EPR drops of 3.2 percentage points and 2.5 percentage points respectively from 2017, by 2019 LFPR and EPR had increased slightly to 46.4 and 44.8%. This drop in participation rates is driven by the steady increase in 65 and older component population for this age cohort. From 2017 to 2019, the 65 and over population increased by 29,000 and its labor force increased by 3,000. The impact of this demographic aging within the 54 and over cohort is that overall participation rates for this group will fall even if the labor force size remains the same. From 2006-2019, the LFPR for the 55-64 population was between 70.1 and 74.9 percent, for 65 and over it was between 18.9 and 25.8 percent. This shift to retirement age for 54 and over cohort is an important consideration given that this cohort amounts to an increasing share of the overall workforce.



### 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 and shows some interesting shifts within the Connecticut labor market. Breaking down the four available race/ethnic cohorts into percent shares shows that the largest shift in Connecticut’s labor force during the past 10 years has been the growth of the Hispanic cohort, which rose from 9.2% to 14.9% through 2019.

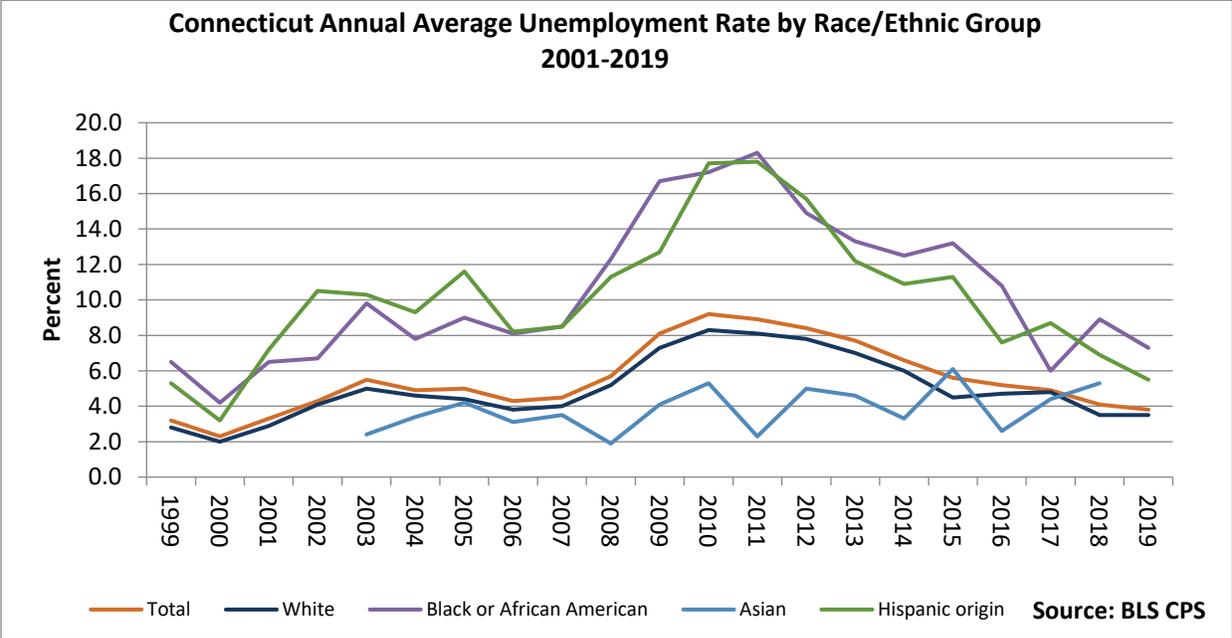
### Connecticut Labor Force Share by Race/Ethnic Group (# in Thousands)

Race/Ethnic Group	2009		2018		2019	
	#	%	#	%	#	%
Total	1,890	100.0%	1,898	100.0%	1,915	100.0%
White	1,612	85.3%	1,568	82.6%	1,550	80.9%
Black/African American	176	9.3%	208	11.0%	216	11.3%
Asian	80	4.2%	91	4.8%	n/d	n/d
Hispanic	173	9.2%	270	14.2%	285	14.9%

n/d = no data

Source: BLS

The following graph shows annual average unemployment rates by race/ethnic group in Connecticut. The unemployment rate for the Asian labor force has consistently been below other rates but recently converged with statewide and White populations as their rates fell through 2018, the last year of available data for that cohort. The graph also shows the recent drop in rates for Black and Hispanic populations in Connecticut, though those groups trend above other cohorts.



**Examining the Composition of Employment by Demographics and Firm Size**

The Quarterly Workforce Indicators (QWI) dataset allows for detailed analysis of industry employment by various demographic characteristics and employment measures. Given the recent business cycle shift from expansion to recession, a review of data on the varied behavior of small and large firms across the business cycle is important to help illustrate possible trends that may occur as the Connecticut economy recovers. This section utilizes state-level firm size data which is available through 2017.

In recent years, industries such as manufacturing, health care, and warehousing have driven overall growth. In addition, there have been other important trends in Connecticut’s labor market. For example, in the ten-year period from 2007 to 2017, employment at private firms in Connecticut has gotten older,

less male, and less white. At the same time, the share with a bachelor's degree or more has fallen. Employment in firms with 500 or more employees has increased while employment at smaller firms has fallen.

### Demographics of Employment Change

Private sector job growth was quite modest from 2007 to 2017, a period that spanned the great recession. However, the number of workers aged 55 and over increased 37% in that ten-year period. The portion aged 55 and over increased from less than 20% to more than 25% of all workers. The number of workers aged 25 to 54 declined as the last of the baby boom aged into the 55 and over group while the number under age 25 declined due to lower birthrates in recent decades and a drop in labor force participation for those aged 16 to 18.

	Connecticut Demographics of All Firms			Percentage Pt. Change	
	1997	2007	2017	97-07	07-17
<b>Total All workers</b>	1,388,101	1,433,266	1,440,336	--	--
<b>By Age</b>					
Under 25	13.6%	14.3%	12.5%	0.7	-1.8
25-54	73.6%	67.2%	62.2%	-6.4	-5.0
Over 54	12.8%	18.5%	25.3%	5.7	6.8
<b>By Sex</b>					
Male	51.3%	50.5%	49.8%	-0.8	-0.7
Female	48.7%	49.5%	50.2%	0.8	0.7
<b>By Education</b>					
Less than High School	8.9%	9.0%	11.1%	0.1	2.1
High School	22.9%	21.5%	21.9%	-1.4	0.4
Some College	25.6%	25.7%	26.0%	0.1	0.3
Bachelor's degree or higher	29.1%	29.5%	28.5%	0.4	-1.0
Education N/A (age 24 or less)	13.6%	14.3%	12.5%	0.7	-1.8
<b>By Race</b>					
White	86.8%	83.1%	79.5%	-3.7	-3.6
Black	9.3%	10.9%	12.9%	1.6	2.0
Amer. Indian or Alaska Native Indian	0.4%	0.4%	0.5%	0.0	0.1
Asian	2.5%	4.2%	5.2%	1.7	1.0
Native Hawaiian or Pacific Islander	0.1%	0.1%	0.2%	0.0	0.1
2 or more	1.0%	1.3%	1.8%	0.3	0.5
<b>By Ethnicity</b>					
Not Hispanic or Latino	92.5%	89.1%	86.0%	-3.4	-3.1
Hispanic or Latino	7.5%	10.9%	14.0%	3.4	3.1

Source: US Census Bureau, Quarterly Workforce Indicators

Looking at other demographic factors, in each of the past two decades, there was a gender shift from majority male employment to just over 50% female by 2017. At the same time, the number of white and non-Hispanic or Latino workers has declined while all other groups have seen increases with Black or African-American employment up 18% and employment of Hispanic or Latino workers up 28% in the ten years from 2007 to 2017.

While nearly two-thirds of those employed in Connecticut have at least some college, the number employed with a Bachelor's degree or higher decreased from 2007 to 2017 while there has been an increase in the number with less than a high school diploma.

### **Demographics by Firm Size**

The demographic composition of employment does not vary dramatically based on firm size. However, there are some differences.

When compared to all firms, smaller firms employ proportionally more young, male, and white workers. Smaller firms also are more likely to employ people with lower educational attainment and more workers over 54. In total, 30.2% of private sector employment works at small firms.

Firms with 50-499 employees have an age distribution similar to the average for all firm sizes. These mid-sized firms also employ proportionally more non-white and Hispanic workers than small firms. 21.9% of private sector workers are employed by mid-sized firms.

Large firms, those that employ over 499 workers, employ 47.9% of private sector employment across all industries in Connecticut. They employ proportionally more prime age workers and have the lowest share of younger and older workers when compared to the other firm size groups. Their gender distribution is roughly aligned with the private sector total. Their workforce is more likely to have a bachelor's degree or higher when compared to other firm sizes.

## Connecticut Demographics of Workforce at Small vs Large Firms - 2017

	All Firms	<50 Emp.	50-499 Emp.	>499 Emp.
<b>Total All workers</b>	100.0%	30.2%	21.9%	47.9%
<b>By Age</b>				
Under 25	12.5%	14.3%	21.6%	43.9%
25-54	62.2%	59.5%	21.9%	49.2%
Over 54	25.3%	26.2%	22.0%	46.8%
<b>By Sex</b>				
Male	49.8%	51.3%	48.2%	49.6%
Female	50.2%	48.7%	51.8%	50.4%
<b>By Education</b>				
Less than High School	11.1%	11.5%	12.1%	10.3%
High School	21.9%	22.8%	22.8%	20.9%
Some College	26.0%	25.8%	26.5%	26.0%
Bachelor's degree or higher	28.5%	25.5%	26.3%	31.4%
Education N/A (age 24 or less)	12.5%	14.3%	12.3%	11.5%
<b>By Race</b>				
White	79.5%	84.3%	78.3%	77.0%
Black	12.9%	8.1%	15.3%	14.8%
Amer. Indian or Alaska Native Indian	0.5%	0.5%	0.6%	0.4%
Asian	5.2%	5.4%	3.9%	5.8%
Native Hawaiian or Pacific Islander	0.2%	0.2%	0.2%	0.1%
2 or more	1.8%	1.7%	1.9%	1.8%
<b>By Ethnicity</b>				
Not Hispanic or Latino	86.0%	86.7%	84.0%	86.6%
Hispanic or Latino	14.0%	13.3%	16.0%	13.4%

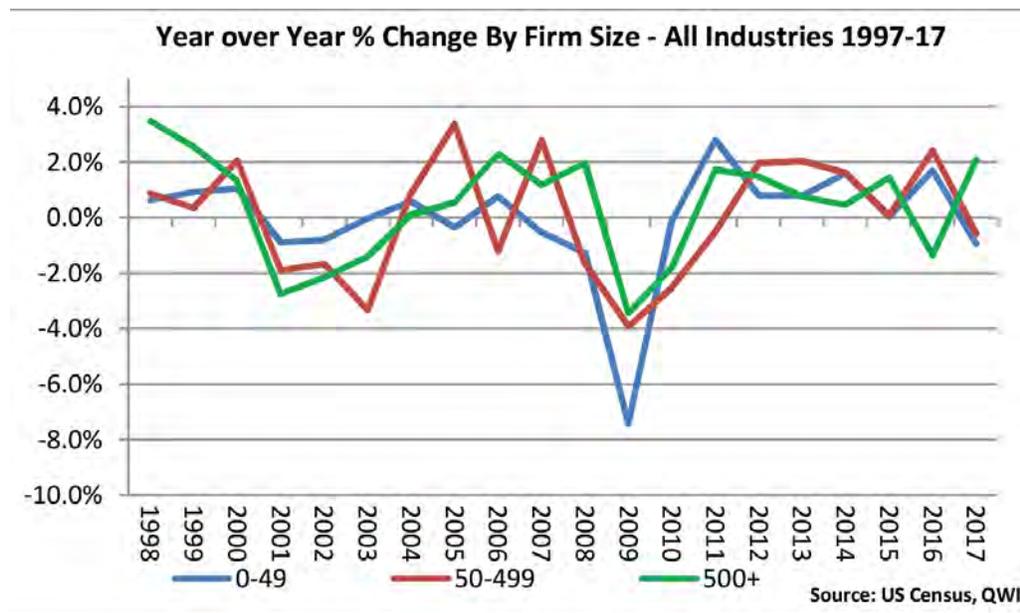
**Source: US Census Bureau, Quarterly Workforce Indicators**

## Employment Change by Firm Size 1997-2017

The graph below shows year-over-year change in employment by firm size. Small firms begin adding jobs after downturns before medium and large firms. Existing research on cyclicalities and firm size has shown that larger firms typically shrink faster during downturns and larger firms expand more slowly after recessions. Large firms also add more jobs than smaller firms later during expansions. The Connecticut data is somewhat consistent with these findings which can be seen in the graph during the

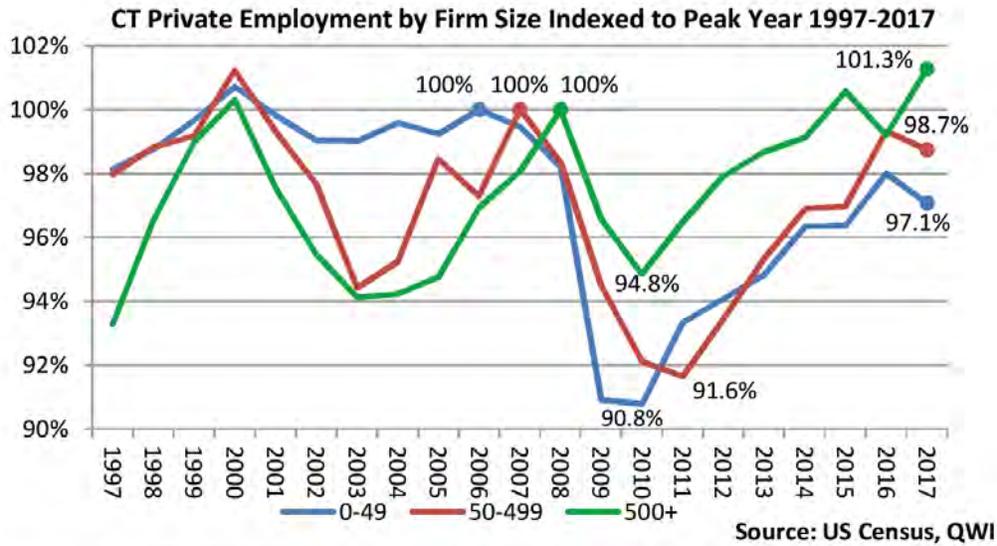
1998-00 and 2006-08 periods.<sup>9</sup> In the late 1990s large firms had large year-over-year employment gains before the 2001 recession; they also shed jobs during the downturn at a larger rate during the recession and began adding jobs more slowly when compared to smaller firm size cohorts. The behavior of firm size cohorts in Connecticut during the 2007-2009 recession shows that smaller firms shed jobs before large firms with steeper losses during the recession, but added jobs sooner, which corresponds with some of the findings of Moscarini and Postel-Vinay (2018).

This data must be used with caution because it does not track specific firms. The numbers are affected when a firm migrates from one cohort to another. For example, if a medium-sized firm grows to become a large firm this will become a drop in employment in medium-sized firms and an increase in employment in large firms.



The chart shows total private Connecticut employment by firm size indexed to their respective peak year to illustrate how the distribution of employment has changed. Large firms peaked a year after mid-sized firms and two years after small firms and were down 5.2 points in 2010. By 2017 employment at large firms was 1.3 percentage points above its 2008 peak.

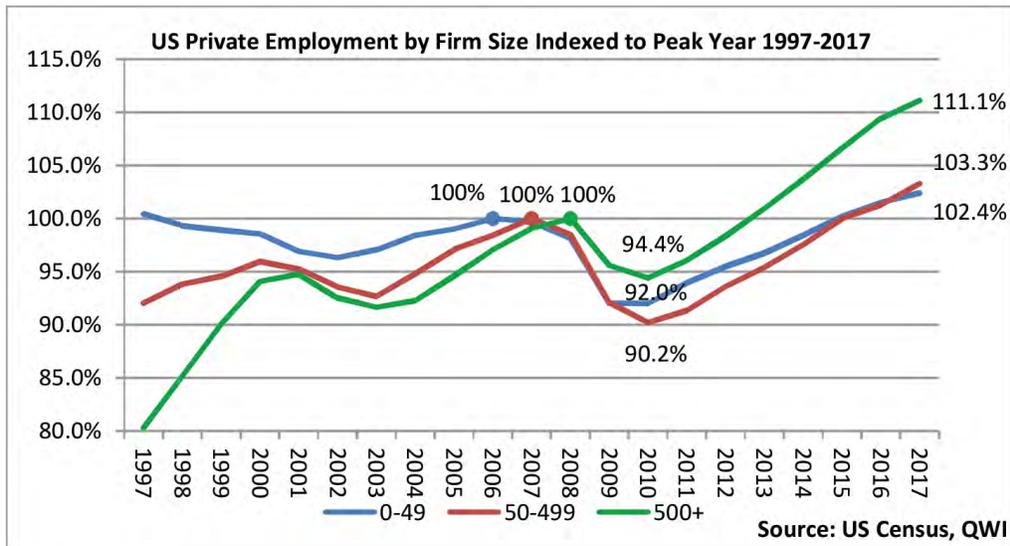
<sup>9</sup> Moscarini, G., & Postel-Vinay, F. 2018. The Cyclical Job Ladder. Annual Review of Economics, 10, 184-186.



Employment at medium and small sized firms fell by much more during the recession: down 8.4 and 9.2 percentage points, respectively. In 2017 both were below their prerecession total employment levels. This indicates that the distribution of employment in Connecticut in recent years has shifted to larger firms as smaller ones lag in overall job growth. Before 2008, large firms never exceeded 46.6% of total private employment and small firms were 31-32%. By 2017, the share of large and small firms was 47.9% and 30.2% respectively.

**Connecticut vs. the U.S.**

The U.S. exhibited a similar pattern to Connecticut. Nationally, firms of all sizes continue to add jobs late into the business cycle. Employment at large firms troughed in 2010 and by a similar percent loss to Connecticut large firms. They also surpassed peak levels in 2013, which is when Connecticut large firms started their expansion. Since 2013, large firms have grown faster in the U.S. overall than they have in Connecticut, up 11.1% as of 2017.



Small and medium firms nationwide also declined more than large firms and similarly lagged in employment gains, not reaching expansion until 2015. That year in Connecticut, small and medium firms were between 96 and 97 percent of peak levels.

The rate of business formation in recent years could be one of the variables impacting the lack of employment growth in the state.<sup>10</sup> Nationally, a subset of business formation statistics that includes applications for new businesses likely to have payroll employment peaked in 2006Q1 at 394,000 and hasn't exceeded 331,000 since late 2008.<sup>11</sup> Connecticut peaked at 3,287 in 2006Q2 and hasn't exceeded 2,561 since 2008Q4. As of the third quarter of 2019, High-Propensity Business Applications for the U.S. and Connecticut are respectively at 82.0 and 75.5 percent of their peak levels.

### Industry Composition of Firm Size

Examination of employment change by size class and industry highlights the dominance of large firms in driving employment growth in most sectors.

Small firm employment since 2007 is down -11,494 or -2.6% overall through 2017 and 11 of 17 sectors have negative growth. The industries with the largest small firm employment declines are Construction (-9,118 or -18.9%), Retail Trade (-8,596 or -16.3%), and Manufacturing (-6,509 or -15.9%). The six industries with small firm industry growth include large gains in Accommodation & Food Services

<sup>10</sup> Boark, Josh (2019, Sept. 5) A slowdown in US business formation poses a risk to economy. Associated Press <https://apnews.com/e7179fc8b9dc4399818f2038b75ec423>

<sup>11</sup> U.S. Census Bureau, High-Propensity Business Applications for the United States [HPBUSAPPSAUS] and Connecticut [HPBUSAPPSACT], Federal Reserve Bank of St. Louis FRED; <https://fred.stlouisfed.org/series/HPBUSAPPSAUS> and <https://fred.stlouisfed.org/series/HPBUSAPPSACT>

(+13,411 or 24.7%), Other Services (6,334 or 15.1%) and Health Care & Social Assistance (+5,020 or 9.6%).

Medium sized firms had the fewest number of positive change sectors, 5 of 17. Large gains in Health Care (+11,832 or 17.2%) and Transportation & Warehousing (+1,529 or 24.8%) correspond with long term industry growth trends. The former has consistently added jobs overall and the latter began adding jobs in 2010 due to the consumer preference shift to online shopping. Other sectors such as Accommodation & Food Services and Finance & Insurance show percent increases larger than the combined rates for those industries overall. For Finance & Insurance, the only employment growth was in medium sized firms.

Large firm employment since 2007 is up 20,623 or 3.1% overall through 2017 and 11 of 17 available sectors are above 2007 levels. The industries with the biggest Large firm employment gains are Health Care & Social Assistance (+18,036 or 16.9%), Prof. Sci. & Tech. Services (+10,153 or 32.7%) and Admin. & Support (+7,219 or 17.9%). Major industries with 10-year large firm employment declines include Finance & Insurance (-14,754 or -15.7%) and Manufacturing (-16,505 or -16.5%). Manufacturing has been increasing since 2016 but had not reached its 2007 level by 2017. The large firm decline for Finance & Insurance matches the corresponding rate for small firms and represents a continued trend for that industry overall. Construction, Retail Trade, Real Estate, Professional Scientific & Technical Services, and Administrative & Support Services all showed growth in employment in firms with 500 or more employees and contractions in the other firm size categories in the 2007 to 2017 period.

**Connecticut Private Employment Employment Change by Firm Size: 2007-2017**

Industry Name	# Change				% Change			
	All Sizes	<50	50-499	over 499	All Sizes	<50	50-499	over 499
<b>All Industries</b>	7,066	-11,494	-2,064	20,623	0.5%	-2.6%	0.5%	3.1%
<b>Mining, Quarrying, &amp; Extracting</b>	-161	-54	-15	-93	-23.1%	-14.5%	-44.1%	-32.3%
<b>Utilities</b>	-1,213	55	-333	-935	-18.3%	24.4%	-29.9%	-17.6%
<b>Construction</b>	-9,429	-9,118	-2,248	1,936	-14.4%	-18.9%	-17.3%	32.5%
<b>Manufacturing</b>	-31,275	-6,509	-8,262	-16,505	-16.1%	-15.9%	-15.5%	-16.5%
<b>Wholesale Trade</b>	-4,976	-2,553	-735	-1,688	-7.3%	-11.8%	-4.1%	-6.0%
<b>Retail Trade</b>	-5,858	-8,596	-3,025	5,763	-3.1%	-16.3%	-10.9%	5.4%
<b>Transport. &amp; Warehousing</b>	4,168	-1,263	1,549	3,883	10.0%	-13.7%	24.8%	14.8%
<b>Information</b>	-6,347	-475	-1,686	-4,186	-16.2%	-9.2%	-24.4%	-15.4%
<b>Finance and Insurance</b>	-16,281	-2,655	1,128	-14,754	-13.0%	-15.3%	7.9%	-15.7%
<b>Real Estate</b>	-1,013	-1,014	-1,071	1,072	-4.9%	-10.2%	-22.2%	17.8%
<b>Pro., Sci., &amp; Tech. Services</b>	4,937	-3,960	-1,257	10,153	5.4%	-9.8%	-6.5%	32.7%
<b>Management</b>	5,289	355	-415	5,351	18.9%	31.0%	-6.7%	25.9%
<b>Admin. &amp; Support</b>	4,238	-2,406	-575	7,219	4.9%	-8.8%	-3.1%	17.9%
<b>Health Care &amp; Social Assistance</b>	34,889	5,020	11,832	18,036	15.3%	9.6%	17.2%	16.9%
<b>Arts, Ent., &amp; Rec.</b>	3,380	1,630	281	1,468	14.0%	13.4%	3.4%	37.8%
<b>Accom. &amp; Food Services</b>	18,333	13,411	4,780	140	16.7%	24.7%	20.6%	0.4%
<b>Other Services (except Public Admin.)</b>	5,231	6,334	-2,460	1,357	9.0%	15.1%	-22.5%	24.8%

Source: US Census, QWI

Over the ten-year period from 2007 to 2017, Connecticut employment gains have been concentrated in firms with 500 or more employees. The workforce is aging. Employment projections indicate that the demographic shifts highlighted in this article will continue in coming years. Employment growth in Connecticut will require workers to fill new jobs and replace workers who are leaving the workforce due to retirement. This is perhaps the largest challenge facing firms of all sizes. This article used QWI data to illustrate how private sector employment has changed through 2017, the most recent year of data. Other measures of total private employment in Connecticut indicate that the expansion described in this article has continued to add private sector jobs through 2018 and into 2019.

Though firm size data isn't available past 2017, the following tables includes a demographic breakdown of every major sector during the most recent 4 quarter average to help identify the current recession's likely impact on specific demographic groups in the state.

Composition of Connecticut Industry By Demographics - Four Quarter Average Ending 2019Q3

Demographic Group	All Industries	Agric.	Mining	Utilities	Const.	Manuf.	Whole. Trade	Retail Trade	Trans. & Ware.	Info.	Fin. & Ins.	Real Estate	Pre-,Sd., Tech.	Mgmt	Admin. & Sup.	Ed. Svc.	Health Care Soc. Astt.	Arts, Ent. Rec.	Accom. Food Svc.	Other	Public Admin.
<b>Total All Workers</b>	<b>1,640,937</b>	<b>4,742</b>	<b>521</b>	<b>6,865</b>	<b>62,270</b>	<b>165,247</b>	<b>61,173</b>	<b>179,651</b>	<b>49,799</b>	<b>35,698</b>	<b>104,931</b>	<b>20,438</b>	<b>95,510</b>	<b>33,276</b>	<b>92,417</b>	<b>164,669</b>	<b>272,245</b>	<b>36,206</b>	<b>140,415</b>	<b>65,697</b>	<b>51,135</b>
<b>By Sex</b>																					
Male	797,613	2,720	433	5,476	51,844	118,343	42,559	91,538	33,423	21,602	47,704	11,879	50,143	15,197	53,523	56,058	56,889	18,973	63,933	27,531	27,849
Female	843,325	2,022	87	1,465	11,069	47,322	18,008	86,186	17,001	14,169	56,318	8,592	45,213	17,709	38,620	108,659	214,754	17,710	76,737	38,960	22,724
<b>By Age</b>																					
Under 25	188,530	767	38	215	5,710	10,978	3,239	42,432	4,963	2,817	4,731	1,465	6,250	1,896	10,232	9,895	21,697	9,493	41,348	8,193	2,181
25-54	1,008,814	2,606	264	4,214	40,456	96,033	38,871	94,061	32,210	24,102	71,456	12,520	64,645	21,778	58,256	103,667	177,582	18,422	76,346	39,313	32,013
Over 54	443,593	1,369	226	2,514	16,747	58,654	18,456	41,230	13,250	8,852	27,834	6,486	24,463	9,232	23,654	51,155	72,364	8,767	22,977	18,985	16,380
<b>By Education</b>																					
Less than HS	178,906	810	63	476	8,259	20,473	6,361	20,333	7,945	2,555	6,143	2,642	6,470	2,744	15,056	11,792	31,436	2,989	19,363	8,670	4,125
High School	955,770	1,112	170	1,526	18,033	43,683	14,521	40,784	14,181	6,124	15,887	4,954	15,326	6,249	21,846	29,661	59,614	6,656	28,520	16,027	10,886
Some College	431,609	1,146	147	2,060	17,649	47,282	17,356	42,178	14,100	9,021	25,202	5,765	22,864	8,770	24,142	41,362	82,143	8,185	29,001	17,736	15,502
Bachelor's Degree or higher	466,122	908	109	2,665	13,260	43,249	19,090	31,996	9,234	15,253	52,049	5,645	44,448	13,248	20,866	72,006	76,753	9,360	22,439	15,665	17,880
N/A (Under Age 25)	188,530	767	30	214	5,710	10,978	3,239	42,433	4,963	2,817	4,731	1,464	6,250	1,896	10,232	9,895	21,697	9,493	41,348	8,193	2,180
<b>By Race</b>																					
White	1,302,808	4,137	494	6,166	56,874	138,926	52,245	140,072	35,765	30,038	88,212	16,950	77,357	26,302	68,440	140,395	192,171	32,079	103,622	51,381	41,084
Black	212,594	314	12	551	3,959	13,174	5,328	24,530	11,882	3,206	7,357	2,540	4,988	4,089	17,372	14,225	61,411	2,911	18,952	8,551	7,234
Asian	84,317	146	4	118	852	10,031	1,890	7,699	1,209	1,808	6,878	483	11,460	1,885	3,307	7,069	11,060	761	11,857	4,838	963
Amer. Indian or Alaska Native	8,578	43	5	26	309	805	248	1,094	355	112	210	118	261	106	781	444	1,311	165	1,440	381	372
Native Hawaiian or P.I.	2,525	15	5	91	264	70	313	313	117	33	91	43	94	37	257	125	390	42	383	116	41
2 or More Races	90,015	88	7	77	830	2,466	787	4,015	1,097	574	1,274	337	1,186	488	1,985	2,460	5,301	726	4,218	1,225	878
Not Hispanic or Latino	1,409,480	3,642	493	6,433	55,175	141,762	53,308	147,305	39,382	32,843	96,639	16,616	88,863	29,584	67,667	151,740	232,389	32,751	111,859	55,776	45,244
Hispanic or Latino	231,457	1,101	27	508	7,738	23,904	7,258	30,417	11,041	2,927	7,393	3,855	6,495	3,322	24,475	12,976	39,254	3,932	28,811	10,715	5,329

S- Value suppressed because it does not meet U.S. Census Bureau Publication Standards.

Source: US Census, QWI

Demographic Group	All Industries	Agric.	Mining	Utilities	Const.	Manuf.	Whole. Trade	Retail Trade	Trans. & Ware.	Info.	Fin. & Ins.	Real Estate	Pre-,Sd., Tech.	Mgmt	Admin. & Sup.	Ed. Svc.	Health Care Soc. Astt.	Arts, Ent. Rec.	Accom. Food Svc.	Other	Public Admin.
<b>Total All Workers</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>
<b>By Sex</b>																					
Male	48.6%	57.3%	83.0%	79.8%	83.3%	71.6%	69.6%	51.0%	67.1%	60.5%	45.5%	58.1%	52.5%	45.7%	57.9%	34.0%	20.9%	52.4%	45.5%	41.9%	54.5%
Female	51.4%	42.6%	16.7%	21.3%	17.8%	28.6%	29.4%	48.0%	34.1%	39.7%	53.7%	42.0%	47.3%	53.2%	41.8%	66.0%	78.9%	48.9%	54.7%	59.3%	44.4%
<b>By Age</b>																					
Under 25	11.5%	16.2%	7.3%	3.1%	9.2%	6.6%	5.3%	23.6%	10.0%	7.9%	4.5%	7.2%	6.5%	5.7%	11.1%	6.0%	8.0%	26.2%	29.4%	12.5%	4.3%
25-54	61.5%	54.9%	50.6%	61.4%	65.0%	58.1%	63.5%	52.4%	64.7%	67.5%	68.1%	61.3%	67.7%	65.4%	63.0%	63.0%	65.2%	50.9%	54.4%	59.8%	62.6%
Over 54	27.0%	28.9%	43.4%	36.6%	26.9%	35.5%	30.2%	23.0%	26.6%	24.8%	26.5%	31.7%	25.6%	27.7%	25.6%	31.1%	26.6%	24.2%	16.4%	28.9%	32.0%
<b>By Education</b>																					
Less than HS	10.9%	17.1%	13.1%	6.9%	13.3%	12.4%	10.4%	11.3%	16.0%	7.2%	5.9%	12.9%	6.8%	8.2%	16.3%	11.5%	11.5%	8.3%	20.3%	13.5%	8.1%
High School	21.7%	23.4%	32.7%	22.2%	29.0%	26.4%	23.7%	28.5%	17.2%	15.1%	24.2%	24.2%	16.0%	18.8%	23.6%	18.0%	21.9%	18.4%	20.3%	24.4%	21.3%
Some College	26.3%	24.2%	28.2%	30.0%	28.2%	28.6%	28.4%	23.5%	28.3%	25.3%	24.0%	28.2%	23.9%	26.4%	26.1%	25.1%	30.2%	22.6%	20.7%	27.0%	30.3%
Bachelor's Degree or higher	29.6%	19.1%	20.9%	38.8%	21.3%	26.2%	31.2%	18.5%	18.5%	42.7%	49.6%	46.3%	39.8%	39.8%	22.6%	43.7%	28.2%	16.0%	16.0%	23.8%	35.0%
N/A (Under Age 25)	11.5%	16.2%	5.8%	3.1%	9.2%	6.6%	5.3%	23.6%	10.0%	7.9%	4.5%	7.2%	6.5%	5.7%	11.1%	6.0%	8.0%	26.2%	29.4%	12.5%	4.3%
<b>By Race</b>																					
White	79.4%	87.2%	94.9%	89.8%	91.3%	84.1%	85.4%	78.0%	71.8%	84.1%	84.1%	82.9%	81.0%	79.0%	74.1%	85.3%	70.6%	88.6%	73.9%	78.2%	80.3%
Black	13.0%	6.6%	2.3%	8.0%	6.4%	8.0%	13.7%	13.7%	23.9%	9.0%	7.0%	12.4%	5.2%	12.3%	18.8%	8.6%	8.0%	8.0%	13.5%	13.0%	14.1%
Asian	5.1%	3.1%	0.7%	1.7%	1.4%	6.1%	3.1%	4.3%	2.4%	5.1%	6.6%	3.1%	12.0%	5.7%	3.6%	4.3%	4.1%	2.1%	8.4%	7.4%	1.9%
Amer. Indian or Alaska Native	0.5%	0.9%	\$	0.4%	0.5%	0.2%	0.4%	0.6%	0.7%	0.3%	0.2%	0.6%	0.3%	0.3%	0.8%	0.3%	0.5%	0.5%	1.0%	0.8%	0.7%
Native Hawaiian or P.I.	0.2%	0.3%	\$	0.1%	0.1%	0.2%	0.1%	0.2%	0.2%	0.1%	0.1%	0.2%	0.1%	0.1%	0.3%	0.1%	0.1%	0.1%	0.3%	0.2%	0.1%
2 or More Races	1.8%	1.9%	1.4%	1.1%	1.3%	1.5%	1.3%	2.2%	2.2%	1.6%	1.2%	1.6%	1.2%	1.5%	2.1%	1.5%	1.9%	2.0%	3.0%	1.9%	1.7%
<b>By Ethnicity</b>																					
Not Hispanic or Latino	85.9%	76.8%	94.5%	91.7%	88.6%	85.8%	87.1%	82.0%	79.1%	92.0%	92.1%	81.4%	93.0%	88.9%	73.2%	92.1%	85.4%	90.5%	79.7%	84.9%	88.5%
Hispanic or Latino	14.1%	23.2%	5.1%	7.4%	12.4%	14.5%	11.9%	16.9%	22.2%	8.2%	7.0%	18.8%	6.8%	10.0%	26.5%	7.9%	14.4%	10.9%	20.1%	16.3%	10.4%

S- Value suppressed because it does not meet U.S. Census Bureau Publication Standards.

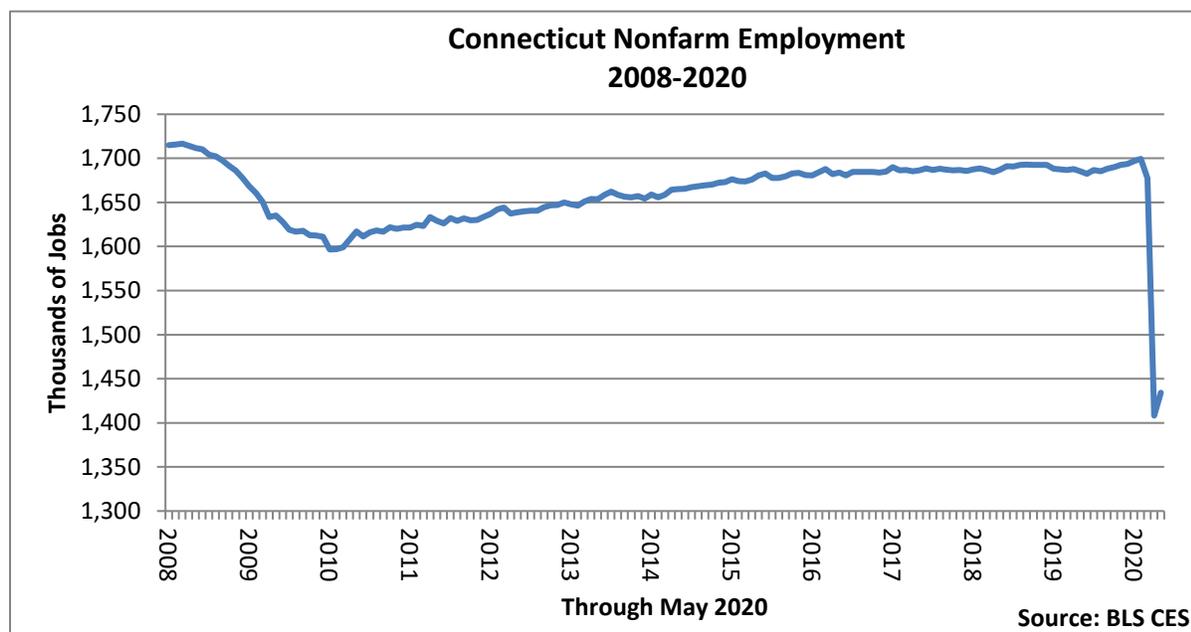
Source: US Census, QWI

## **Connecticut Current Situation**

## Current Situation

In the months leading up to the Covid-derived recession, the Connecticut economy began to send mixed signals as the state and US economies experienced the longest business cycle expansion in history. The state posted its first year of total nonfarm employment decline in 2019 after eight years of increases while the overall unemployment rate continued to fall. Additional indicators added to the mixed messaging, Connecticut real personal income had its 6<sup>th</sup> year consecutive year of increase and an annual diffusion index of 58 state economic indicators dropped to its lowest level since 2010, indicative of slowing but still positive growth.<sup>12</sup>

During the first two months of this year, Connecticut's labor market appeared to be improving. Total Nonfarm employment was 1,699.5 thousand by February, up 12 thousand or 0.7% from February 2019. This was its highest level since late 2008. Industries such as Transportation and Warehousing (+10.7%) and Real Estate (+5.5%) had sizable employment increases over the year. The impact of Covid-19 on employment has been swift and severe.



By April of this year, total nonfarm in the state was down 291.3 thousand jobs from that February peak. Industries that lost the most jobs in the short term were those most significantly impacted by the Covid-19 shutdown such as Arts, Entertainment, & Recreation, Leisure & Hospitality, and Accommodations & Food Services had 12 month percent losses of over 50%

<sup>12</sup> Joo, Jungmin Charles. (2020, March) Connecticut's Overall Economy Sends Mixed Signals in 2019. Connecticut Economic Digest.

through April. Industries more able to shift to remote and/or those deemed essential experienced much smaller losses. The slight gains in federal employment shown in the tables below likely relate to decennial census hiring which typically causes a very large short term temporary employment increase in that sector.

**Connecticut Employment by Industry (in thousands)**

Naics	Industry	Peak Month Feb 2020	Mar 2020	April 2020	May 2020	Feb-April Change	April-May Change
0	Total Nonfarm	1699.5	1677.4	1408.2	1434	-17.1%	1.8%
21	Mining and Logging	0.6	0.6	0.5	0.6	-16.7%	20.0%
23	Construction	60.5	60.2	50.2	53.4	-17.0%	6.4%
31	Manufacturing	162.5	162.8	151	153.4	-7.1%	1.6%
42	Wholesale Trade	59	59	56.6	57.3	-4.1%	1.2%
44	Retail Trade	173.5	171.9	133.4	136.3	-23.1%	2.2%
48 & 22	Transportation, Warehousing, and Utilities	61.2	60.9	50.9	52.4	-16.8%	2.9%
51	Information	31.5	31.4	29.7	28.4	-5.7%	-4.4%
52	Finance and Insurance	103.2	102.5	101.3	100.5	-1.8%	-0.8%
53	Real Estate and Rental and Leasing	21.1	20.5	18.5	18.2	-12.3%	-1.6%
54	Pro., Sci., & Tech. Services	96.8	97	89	88.8	-8.1%	-0.2%
55	Management of Companies and Enterprises	34	34.1	32.3	32.6	-5.0%	0.9%
56	Administrative and Support	91.7	93	74.9	78.2	-18.3%	4.4%
61	Educational Services	68.9	67.2	61.3	63.4	-11.0%	3.4%
62	Health Care and Social Assistance	275.1	272.1	235.4	237.9	-14.4%	1.1%
71	Arts, Entertainment, and Recreation	27.9	27.2	11.5	12.5	-58.8%	8.7%
72	Accommodation and Food Services	130	117.4	58.5	66.9	-55.0%	14.4%
81	Other Services	64.7	64.5	40.7	45.4	-37.1%	11.5%
92	Government	237.3	235.1	212.5	207.8	-10.5%	-2.2%

Source: BLS, CES

**Connecticut Employment - 12 Month Change by Industry (in thousands)**

Naics	Industry	2019		2020		12 Month Change	
		April	May	April	May	Ending April 2020	Ending May 2020
0	Total Nonfarm	1687.9	1685.4	1408.2	1434	-16.6%	-14.9%
21	Mining and Logging	0.5	0.5	0.5	0.6	0.0%	20.0%
23	Construction	60.7	59.8	50.2	53.4	-17.3%	-10.7%
31	Manufacturing	162	162.2	151	153.4	-6.8%	-5.4%
42	Wholesale Trade	60	59.9	56.6	57.3	-5.7%	-4.3%
44	Retail Trade	176.4	175.7	133.4	136.3	-24.4%	-22.4%
48 & 22	Transportation, Warehousing, and Utilities	55.4	55.4	50.9	52.4	-8.1%	-5.4%
51	Information	31.3	31.4	29.7	28.4	-5.1%	-9.6%
52	Finance and Insurance	103.7	103.5	101.3	100.5	-2.3%	-2.9%
53	Real Estate and Rental and Leasing	20.1	20.1	18.5	18.2	-8.0%	-9.5%
54	Pro., Sci., & Tech. Services	95.8	95.9	89	88.8	-7.1%	-7.4%
55	Management of Companies and Enterprises	32.9	33	32.3	32.6	-1.8%	-1.2%
56	Administrative and Support	90.9	90.3	74.9	78.2	-17.6%	-13.4%
61	Educational Services	66.6	66.6	61.3	63.4	-8.0%	-4.8%
62	Health Care and Social Assistance	271.6	271.5	235.4	237.9	-13.3%	-12.4%
71	Arts, Entertainment, and Recreation	28.8	28.6	11.5	12.5	-60.1%	-56.3%
72	Accommodation and Food Services	129.8	129.7	58.5	66.9	-54.9%	-48.4%
81	Other Services	65.5	65.4	40.7	45.4	-37.9%	-30.6%
92	Government	235.9	235.9	212.5	207.8	-9.9%	-11.9%

Source: BLS, CES

By May 2020, preliminary numbers indicate that sectors most impacted by the lockdown had the largest increase from that April low; Accommodations & Food Service (+14.4% since April), Leisure and Hospitality (+13.4% since April), and Arts, Entertainment & Recreation (+8.7% since April). The state economy is up 25,800 jobs over the month, recovering roughly 8.9% of the Jobs lost from the February 2020 employment peak and final month before the recession. From April to May almost every industry added jobs, which hopefully portends a quick recovery as restrictions to nonessential sectors are lifted. Given the unprecedented nature of the shutdown, there is still much debate on the speed and trajectory of the employment recovery as the situation is continually evolving with many unknowns. Additional months of employment data will help give a better idea of how long lasting the recession will be. More information on various economic projections are included in the concluding section of this outlook.

## INDUSTRY SECTOR WAGE CHANGE 2017-2019

Total annual wages by industry is an important measure of the overall impact of major sectors on the Connecticut economy. In 2019, total annual wages statewide amounted to \$116.6 billion dollars, an increase of 4.8% from 2017. The largest 2 year increases in total industry annual wages were Healthcare & Social Assistance (+\$1.1 Bill.), Manufacturing (+\$758.6 mill.), and Professional & Technical Services (+\$669.8 mill.). The four declining net change industries were Finance and Insurance (-\$169.1 mill.), Wholesale Trade (-\$57.7 mill.), Unclassified (-\$10.4 mill.), and Mining (-\$1.0 mill.).

NAICS	Industry	Annual Average Wage		17-19 Change	
		2017	2019	#	%
00	Statewide Total	\$66,636	\$69,803	\$3,167	4.8%
	Total private	\$67,269	\$70,575	\$3,306	4.9%
11	Agriculture, forestry, fishing and hunting	\$35,873	\$37,497	\$1,624	4.5%
21	Mining, quarrying, and oil and gas extraction	\$76,736	\$77,618	\$882	1.1%
22	Utilities	\$124,275	\$135,003	\$10,728	8.6%
23	Construction	\$68,641	\$72,340	\$3,699	5.4%
31-33	Manufacturing	\$81,864	\$85,031	\$3,167	3.9%
42	Wholesale trade	\$94,403	\$97,720	\$3,317	3.5%
44-45	Retail trade	\$33,500	\$35,832	\$2,332	7.0%
48-49	Transportation and warehousing	\$47,367	\$48,804	\$1,437	3.0%
51	Information	\$103,094	\$120,413	\$17,319	16.8%
52	Finance and insurance	\$168,734	\$174,425	\$5,691	3.4%
53	Real estate and rental and leasing	\$66,314	\$72,630	\$6,316	9.5%
54	Professional and technical services	\$103,550	\$111,054	\$7,504	7.2%
55	Management of companies and enterprises	\$154,552	\$159,976	\$5,424	3.5%
56	Administrative and waste services	\$45,582	\$47,437	\$1,855	4.1%
61	Educational services	\$64,917	\$69,528	\$4,611	7.1%
62	Health care and social assistance	\$51,633	\$54,856	\$3,223	6.2%
71	Arts, entertainment, and recreation	\$28,604	\$30,171	\$1,567	5.5%
72	Accommodation and food services	\$21,845	\$23,184	\$1,339	6.1%
81	Other services, except public administration	\$33,397	\$34,867	\$1,470	4.4%
99	Unclassified	\$88,397	\$93,045	\$4,648	5.3%
92	Total Government	\$62,624	\$64,841	\$2,217	3.5%
92	Federal Government	\$74,530	\$76,922	\$2,392	3.2%
92	State Government	\$70,884	\$70,976	\$92	0.1%
92	Local Government	\$57,733	\$60,713	\$2,980	5.2%

Source: US DOL, QCEW

From 2017-2019, total nonfarm annual average wages increased by \$3,167 (+4.8%) to \$69,803. The Industries with the largest 2-year wage increase were the high earning Information (+\$17,319), Utilities (+\$10,728), and Professional & Technical Services (+\$7,504) sectors. The three lowest annual average wage growth sectors were State Government (+\$92), Mining (+\$882) and Accommodation & Food Service (\$1,339).

**Annual Annual Wages by Industry 2017-19**

NAICS	Industry	Annual Average Wage		17-19 Change	
		2017	2019	#	%
00	Statewide Total	\$66,636	\$69,803	\$3,167	4.8%
	Total private	\$67,269	\$70,575	\$3,306	4.9%
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53	Real estate and rental and leasing	\$66,314	\$72,630	\$6,316	9.5%
54	Professional and technical services	\$103,550	\$111,054	\$7,504	7.2%
55	Management of companies and enterprises	\$154,552	\$159,976	\$5,424	3.5%
56	Administrative and waste services	\$45,582	\$47,437	\$1,855	4.1%
61	Educational services	\$64,917	\$69,528	\$4,611	7.1%
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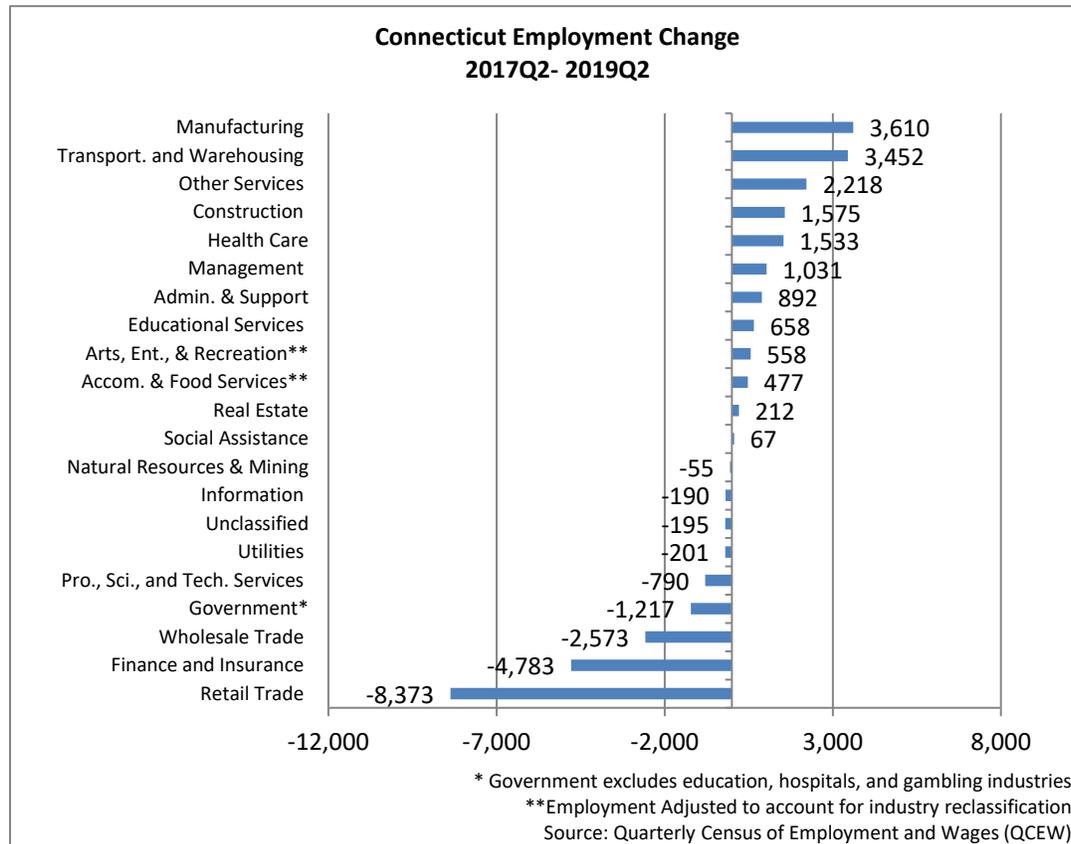
Source: US DOL, QCEW

**Sector Change 2017-2019**

Each year, the Connecticut Department of Labor produces short term projections by industry and occupation. The most recent projections are for the two-year period 2019Q2 through 2021Q2. During the previous two-year period (2017Q2 to 2019Q2), Connecticut’s overall employment fell by 2,093 jobs, or 0.1%. The two-year employment change illustrated below represents the available data used to produce the 2019-2021 employment projections during the first months of 2020.

The three sectors with the largest two-year gains were Manufacturing, Transportation and Warehousing, and Other Services which increased by 3,610, 3,452, and 2,218 jobs, respectively,

from 2017Q2 to 2019Q2 shown in the figure below. These three sectors also had the most growth from 16Q2 to 18Q2, but had lower growth during the most recent 2-year period.



Transportation and Warehousing growth is due primarily to the increased number of internet retailer warehousing distribution centers in the state, which began adding Connecticut locations in late 2015. This growth accelerated through 2019 and was up 9.7% over the year ending 2019Q4. The growth in this sector corresponds with declining retail employment due to shifting consumer preferences.

The three sectors with the largest declines were Wholesale Trade (-2,573), Finance and Insurance (-4,783), and Retail Trade (-8,373). These three sectors had larger two-year losses during then 17Q2-19Q2 period than they did during the 16Q2-18Q2 period. The losses in Retail Trade represent an acceleration of an employment declines that began in late 2016. Finance and Insurance losses continue a trend of decline that has persisted since its employment peak in late 2006.

# **Connecticut Projections Through 2021**

## **CONNECTICUT SHORT-TERM PROJECTIONS**

### **The Global Pandemic and Projections**

The whole world has changed in the few short weeks since we completed the latest short-term projections in February 2020. At the time, the U.S. unemployment rate was lower than it had been at any time since the late 1960s and Connecticut jobs were growing. Since then, the COVID-19 health crisis and the related shutdown of nonessential businesses caused a drastic shift in the employment outlook. This caused unemployment claims to spike and by April, many leading analysts<sup>13</sup> declared that there is a 100% chance that the U.S. economy has entered a recession.

In early May, the Connecticut Department of Labor noted that “Connecticut’s economy has also been affected by the health crisis and the shutdowns and has seen a large increase in unemployment claims and will clearly suffer a recession along with the nation.”<sup>14</sup> By June, the National Bureau of Economic Research (NBER) determined that peak U.S. economic activity occurred in February 2020, marking the end of a record 128 month expansion and the beginning of a recession.<sup>15</sup> There are currently many unknowns about how long this recession will last, and as such, the following projections through the second quarter of 2021 represent a “best case” scenario – that while severe, the recession will be short and the national and Connecticut economies will bounce back early next year so that by next summer we’ll be back on track. We will then discuss the risks to this outlook which are, unfortunately, all on the downside.

### **Overall and Major Sector 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 every February 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 2019 to the second quarter of 2021.

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<sup>13</sup> One example among many, Bloomberg Economics

<sup>14</sup> Krzyzek, Matthew. (2020, May) Connecticut Projected to Add Fewer Jobs Through 2020. CT Economic Digest.

<sup>15</sup> Hall, Robert Et. Al. (2020, June 8<sup>th</sup>) Determination of the February 2020 Peak in US Economic Activity. NBER.

In February 2020, the Connecticut Department of Labor's Office of Research projected that Connecticut's overall employment increase by 0.4% from 2019Q2 to 2021Q2. The employment trends and projections noted indicate our expectations of where the economy was heading before the Covid-caused recession. Employment was projected to increase in Connecticut from 1,815,649 to 1,822,595 with Health Care, Transportation & Warehousing, and Social Assistance adding the most jobs.

The projected two-year employment growth of 6,950 jobs is comparable to many northeast states. Almost every other New England state had projected growth of 1.5% or less. This slow projected employment growth corresponds in part with slow/negative population growth noted earlier in this outlook. Massachusetts' 2.3% projected two-year growth differentiates it from the rest of the region and is driven in large part by its Boston metropolitan area. Additionally, neighboring New York projected 2.0% growth through 2021 despite factors such as a declining overall population in recent years.<sup>16</sup>

### **Projections by Industry**

The sectors driving overall growth in Connecticut include the industries mentioned above as well as Other Services and Accommodations & Food Services. In total, these sectors were projected to add over 10,000 jobs through 2021Q2. Declining industries we expected to dampen overall growth include sizable declines in Retail Trade of over 3,000 and additional smaller declines in Finance & Insurance, Administrative & Support, Manufacturing, Government, Utilities, Information and Construction. In total we projected 12 out of 20 industries to add jobs through 2021Q2.

More than three quarters of Health Care growth is in Ambulatory Health Care which is projected to grow by 3.1%, roughly twice the rate of Health Care overall. The other two components of Health Care, Hospitals and Nursing & Residential Care Facilities are projected to grow by 0.7% and 0.6%, respectively. These two industries have experienced relatively flat employment over the past five years, while Ambulatory care is up 7.8% from 2014Q2 to 2019Q2.

Nearly two-thirds of the projected growth in the Transportation & Warehousing sector is in Couriers & Messengers and Warehousing & Storage. The growth of these two industries is the result of increased consumer demand for online shopping. Since 2014, Couriers and Messengers (which includes package delivery services) employment is up 33% and Warehousing and Storage employment is up 38%.

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<sup>16</sup> Short-Term Occupational Projections by State are available at <https://www.projectionscentral.com/Projections/ShortTerm>

The Social Assistance sector provides a wide variety of services directly to clients, including Individual & Family Services, Vocational Rehabilitation, Child Day Care, and Community Food & Housing.<sup>17</sup> Our projected two year growth of 2.7% is driven by increases in Individual and Family Services, which account for 67% of Social Assistance growth.

Eight industries are projected to decrease through 2021Q2, with the largest losses occurring in Retail Trade and Finance & Insurance. These two industries are projected to decline by 1.8% and 1.1%, respectively, and both represent long term employment trends. Retail has been declining since late 2015 and fell by 4.5% from 2017Q2-2019Q2. Most of that decline occurred in Food & Beverage Stores and Clothing & Clothing Accessories Stores, which accounted for half of employment losses in retail overall. Through 2021Q2, our projections indicate that those two industries will account for 46 percent of losses in Retail Trade. Finance & Insurance employment peaked statewide in 2007 and has steadily contracted through 2019, falling 17.4% over that 12-year span. Credit Intermediation & Related Activities (banking) and Insurance Carriers & Related Activities have each fallen by more than 8,000 from 2007-2019 with decreases of 26.6% and 12.2%, respectively. Our projections expect another 1.1% decline through 2021Q2.

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<sup>17</sup> Bureau of Labor Statistics. Industries at a Glance: Social Assistance: NAICS 624  
<https://www.bls.gov/iag/tgs/iag624.htm>

Industry	2019 Q2 History	2021 Q2 Projections	Emp Change	% Change
<b>Total All Industries</b>	1,815,649	1,822,595	6,946	0.4%
<b>Self Employed and Unpaid Family Workers, All Jobs</b>	105,509	106,144	635	0.6%
<b>Goods Producing</b>	228,844	228,209	-635	-0.3%
Natural Resources and Mining	5,640	5,806	166	2.9%
Construction	60,957	60,664	-293	-0.5%
Manufacturing	162,247	161,739	-508	-0.3%
<b>Services Providing</b>	1,481,296	1,488,242	6,946	0.5%
Wholesale Trade	60,126	60,180	54	0.1%
Retail Trade	174,271	171,085	-3,186	-1.8%
Transportation and Warehousing	51,839	54,048	2,209	4.3%
Utilities	5,177	4,802	-375	-7.2%
Information	31,447	31,130	-317	-1.0%
Finance and Insurance	103,452	102,291	-1,161	-1.1%
Real Estate and Rental and Leasing	20,178	20,318	140	0.7%
Professional, Scientific, and Technical Services	95,653	96,412	759	0.8%
Management of Companies and Enterprises	33,076	33,263	187	0.6%
Administrative and Support	92,113	91,467	-646	-0.7%
Educational Services	186,771	187,652	881	0.5%
Health Care	225,565	229,424	3,859	1.7%
Social Assistance	64,789	66,515	1,726	2.7%
Arts, Entertainment, and Recreation	30,357	31,252	895	2.9%
Accommodation and Food Services	143,527	144,543	1,016	0.7%
Other Services (except Government)	79,922	81,205	1,283	1.6%
Government*	83,033	82,655	-378	-0.5%
Unclassified	105,509	106,144	635	0.6%

\*Government excludes education, hospitals, and gambling industries

### Projections by Occupation

Nearly all (18 out of 22) occupational groups were projected to add jobs by 2021Q2 when we prepared our short-term projection in February. The three projected to increase the most through 2021Q2 are Personal Care & Service Occupations, up 2,455 jobs, or 2.4%, Healthcare Practitioners & Technical Occupations, up 1,947 jobs, or 1.8%, and Transportation & Material Moving Occupations, up 1,753 jobs, or 1.7%. These three groups represent 43% of the projected gains in the growing occupational groups driven by increases in industries such as Health Care and Transportation & Warehousing.

The four occupational groups projected to decline through 2021Q2 are Sales & Related, down 1.5%, Production Occupations, down 1.5%, Office & Administrative Support, down 1.2%, and

Protective Service Occupations, down 0.2%.

Occupational Group	2019 Q2 History	2021 Q2 Projections	Emp Change	% Change
<b>Total, All Occupations</b>	<b>1,815,649</b>	<b>1,822,595</b>	<b>6,946</b>	<b>0.4%</b>
Farming, Fishing, and Forestry	4,258	4,361	103	2.4%
Personal Care and Service	102,347	104,802	2,455	2.4%
Healthcare Support	54,546	55,602	1,056	1.9%
Healthcare Practitioners and Technical	109,470	111,417	1,947	1.8%
Transportation and Material Moving	105,137	106,890	1,753	1.7%
Community and Social Service	40,276	40,928	652	1.6%
Life, Physical, and Social Science	12,974	13,140	166	1.3%
Food Preparation and Serving Related	139,604	141,243	1,639	1.2%
Architecture and Engineering	35,870	36,281	411	1.1%
Building and Grounds Cleaning and Maintenance	75,281	76,019	738	1.0%
Computer and Mathematical	50,170	50,650	480	1.0%
Management	136,679	137,918	1,239	0.9%
Education, Training, and Library	129,145	130,168	1,023	0.8%
Arts, Design, Entertainment, Sports, and Media	34,210	34,331	121	0.4%
Legal	15,038	15,087	49	0.3%
Business and Financial Operations	96,768	96,949	181	0.2%
Construction and Extraction	59,502	59,593	91	0.2%
Installation, Maintenance, and Repair	56,619	56,701	82	0.1%
Protective Service	33,482	33,430	-52	-0.2%
Office and Administrative Support	264,774	261,499	-3,275	-1.2%
Production	95,517	94,103	-1,414	-1.5%
Sales and Related	163,982	161,483	-2,499	-1.5%

### Occupational Projections by Wage

The Department of Labor does not project wages. However, we do collect and publish detailed wage information about every occupation in the economy.<sup>18</sup> In 2019, the median overall Connecticut wage was \$47,979. Occupations earning \$30,000 a year or less make up 21% of occupational employment and are projected to grow by 1,630 jobs through 2021Q2, or 23.5% of total growth, despite declines in the two largest occupations in this wage tier, Retail Salespersons and Cashiers. On the other hand, Personal Care Aids is expected to add the most jobs for occupations under \$30,000/year, up 1,220 jobs, or 3.5%.

<sup>18</sup> The Occupational Employment Statistics (OES) <https://www1.ctdol.state.ct.us/lmi/wages/default.asp>

Occupations with wages between \$30,000 and \$60,000 include Medical Assistants, Secretaries & Administrative Assistants, Cooks, and Tractor-Trailer Truck Drivers. Overall occupational growth for this wage tier is expected to be relatively flat, growing by 0.1% over two years. Though flat overall, specific occupations within this wage tier are expected to have large employment. The occupation with the largest projected increase is Laborers & Freight, Stock & Material Movers, up 508 jobs, expected decreases are within the Secretaries & Administrative Assistants and Customer Service Representatives Occupations, down 747 and 612, respectively. This group encompasses 41% of total employment and is expected to amount to 11.7% of overall growth.

A majority of the projected two-year job growth is projected to occur in occupations with a median annual wage of \$60,000 or more. The occupations projected to add the most jobs are Registered Nurses (591 jobs, or 1.8%), Applications Software Developers (365 jobs, or 3.1%) and Financial Managers (301 jobs, or 1.9%). Almost 300 specific occupations fall within this category, and most are expected to see employment increases. Of the 78 expected to lose jobs through 2021, Executive Secretaries & Administrative Assistants and First-Line Supervisors of Office & Administrative Support Workers are expected to lose the most, down 353 and 214, respectively. These occupations making \$60,000 or more amount to 36.2% of 2019 employment and represent 56.1% of projected change, with 24.9% of overall growth occurring in occupations with median annual wages between \$90,000 and \$120,000.

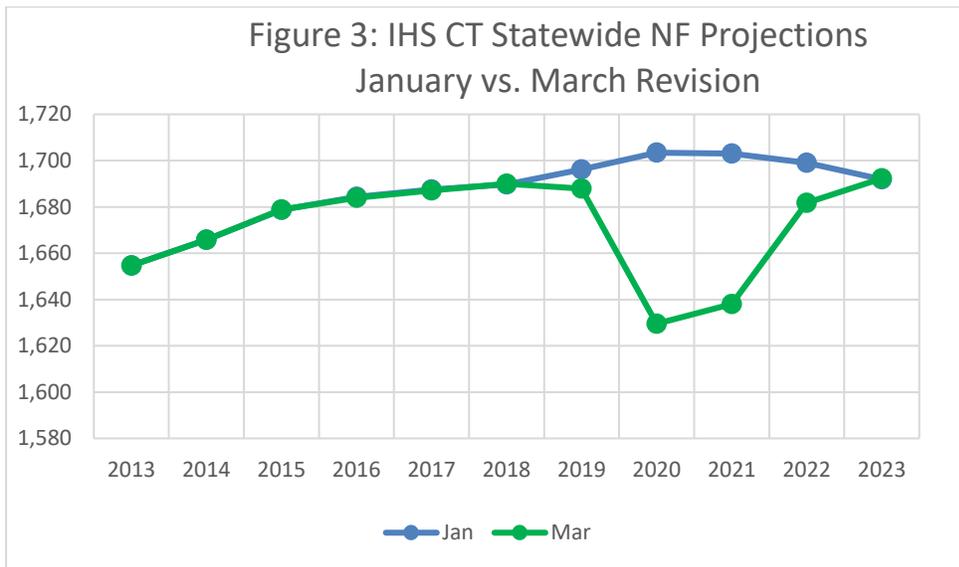
There are over 700 occupations in the economy, and this outlook has touched on those that were projected to show the greatest increases over the next two years. There will be openings in virtually every occupation – even those that are contracting – as workers retire or move on to other jobs and need to be replaced. Detailed information about every occupation in the Connecticut economy, including projections, wages, and required skills, is available on the Connecticut Department of Labor Office of Research website.

## **RISKS TO THE PROJECTIONS**

In the weeks since the Department of Labor completed its short-term projections in February 2020, the world changed dramatically with the outbreak of COVID-19 and the resulting economic contraction. When the projections were prepared showing quite modest growth they were a baseline scenario with, in our judgment, equal chances that growth would be faster or slower than we projected. Now they are a “best case scenario” – for employment to achieve the levels described above strong growth in early 2021 will need to offset the 2020 losses that are now inevitable.

### **The Impact of COVID-19 on Projections**

The health crisis has dramatically changed the national – indeed the global – outlook. The national unemployment rate in February (the month we completed our projections) was 3.5%, and there were 1.7 million workers collecting unemployment benefits in the country with approximately 200,000 workers per week filing initial unemployment claims. At the same time (February) there were more than 7 million job openings so the prospects were good that many of these workers would soon find work. As of April 11, 16 million U.S. workers were collecting unemployment and an additional 4.4 million had filed initial claims the following week. These numbers are unprecedented and no one knows for certain how these events will impact the economic outlook. What follows is a review of what some forecasters are saying.



In March, **IHS Global Insight** revised its forecast of Connecticut employment, reducing their forecast for 2020 by 74,000 jobs with jobs starting to grow slowly in 2021 with employment back to previously forecast levels by 2023. In revising their forecast, the largest decreases (from their previous forecast) were in Retail Trade, Manufacturing and Accommodation and Food Service. On the other hand, they increased their projections for Health Care & Social Assistance, Government, and Transportation and Warehousing, but of course the declines far outweighed the gains.

**McKinsey & Co.** outlines various COVID-19 recovery scenarios where public health and economic responses were modeled as ineffective, partially effective, and high effective interventions. For Connecticut, if the virus is effectively contained, GDP decline of less than 10% during 2020Q2 with full recovery by the end of 2020Q4 is expected. Under a muted recovery scenario GDP is expected to remain below 90% of 2019Q4 levels through the end of 2020. The sectors projected to drive overall declines

include Leisure & Hospitality, Retail Trade, Other Services, and Transportation & Utilities.<sup>19</sup> Industries that are categorized by McKinsey as highly vulnerable to the recent slowdown include Accommodation (90% of industry employment vulnerable), Recreation (87%), Personal & Laundry (64%) and Retail (64%). The least likely to incur job losses include Agriculture (6%), Professional Services (11%), Finance (11%), and Public Administration (14%). Additional industry variables identified as at higher risk for impact by COVID-19 include industries with lower wages, lower educational attainment, and a higher share of small businesses with fewer than 99 workers. Corresponding occupations that align with industries heavily impacted by the social distancing slowdown include Food Service, Customer Services & Sales and Office Support, which account for nearly 60% of employment McKinsey determines to be vulnerable.

The *Wall Street Journal's* April 2020 economist survey notes that 17 million Americans have sought unemployment insurance benefits in recent weeks and expects another 14.4 million more jobs will be lost in coming months, bringing the US unemployment rate to an estimated 13% by June.<sup>20</sup> The journal also notes that upcoming layoffs have the possibility to include sectors of the economy initially thought to be insulated from the slowdown such as Finance & Insurance and Business Services. A key distinction of the recent slowdown is that a large percentage of unemployment is due to temporary layoffs, whereas during the 2007-2009 recession, far fewer workers were unemployed temporarily. In March 2020, unemployment due to temporary layoffs amounted to 26.5% of unemployment, almost double typical levels. The number of temporary layoffs was 1.8 million in March 2020, up 130.7% from a month before and up 113.4% above March 2019 levels.

In late March, **Goldman Sachs** published a widely referenced GDP and unemployment forecast for the US economy. It projects that the unemployment rate will increase from 3.5% to 9.0% over coming quarters. It estimates that the decline in overall GDP will likely be concentrated in Labor-intensive industries and is likely to disproportionately affect low-wage occupations prone to temporary layoffs.<sup>21</sup> These expected declines correspond with recent Congressional Budget Office (CBO) projections that US GDP will decline 7.0% during 2020Q2 and that the US unemployment rate to exceed 10%.<sup>22</sup>

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<sup>19</sup> McKinsey & Company. [COVID-19 Economic Response and Recovery in Connecticut](#). April 7, 2020.

<sup>20</sup> Wall Street Journal. [A Second Round of Coronavirus Layoffs Has Begun. Few Are Safe](#) April 14, 2020.

<sup>21</sup> Goldman Sachs. [US Daily: A Sudden Stop for the US Economy](#). March 20, 2020.

<sup>22</sup> Congressional Budget Office. [Updating CBO's Economic Forecast to Account for the Pandemic](#). April 2, 2020.

## **Conclusion**

Earlier this year and only a few months ago, expectations of where the US and global economies were heading were drastically different than the present outlook. Since then, a pandemic radically altered daily life and economic functions. The effects on the economy have been severe, but the question is for how long. A prolonged national recession will severely harm Connecticut. On the other hand, a quick rebound could get Connecticut back on track by the middle of next year. When the recovery comes, we expect long term Connecticut trends of growth in Health Care, Transportation Equipment Manufacturing, and Transportation and Warehousing to continue.

At the federal level, the swiftly passed CARES act and other stimulus will inject more liquidity into the economy than occurred during the 2007-2009 recession. Additional policies such as direct payment to taxpayers from the Treasury and additional unemployment insurance payments seek to help forestall the impact of decreased consumer spending. These quick responses make our projections of a return to modest growth in Connecticut by 2021 a possible best-case scenario. As the global pandemic unfolds and its impact evolves, economic projections will be revised as new policy is adopted to help mitigate the global contraction.

## **Data Limitations**

The Department of Labor's short-term 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](http://www.projectionscentral.com/Projections/ShortTerm)