CONNECTICUT'S SHORT-TERM EMPLOYMENT OUTLOOK 2021-2023

Connecticut Department of Labor

Office of Research
200 Folly Brook Blvd. Wethersfield, CT 06109

Connecticut's Short-Term Employment Outlook: 2021-2023

July 2022
Office of Research, CT. Department of Labor

Patrick Flaherty
Director of Research

Prepared by:
Matthew Krzyzek
Economist

The Connecticut Economy Two Years After the Start of the Pandemic

In much the same way that 2020 was drastically different than 2019, 2021 proved to be drastically different than 2020. The vaccine rollout and easing COVID restrictions last year helped the economy recover from the initial effects of the pandemic. Unemployment at the state and U.S. level fell precipitously, unemployment claims fell to record lows, and job openings spiked to record highs.

Amid these positive economic signals, several economic challenges persist, including geopolitical instability, the possibility of a COVID-case increase, rising energy costs, and inflation. These variables among others, both positive and negative, will all impact the continued economic recovery as we head towards 2023.

This annual outlook includes a detailed overview of the Connecticut labor market and recent economic trends. The concluding section includes a detailed review of the CT Department of Labor's employment projections through 2023.

Connecticut Current Situation

Current Situation

The past two years have been a period of unprecedented economic change during which labor markets adapted to COVID mitigation. In early 2020, the U.S. economy had a 2-month recession, the shortest on record.[1] U.S. private sector employment peaked in February at 129.6 million and fell by 21 million two months later. Employment began to quickly rebound and more than half of the 21 million private sector jobs lost were recovered by September 2022. The most recent month of data (May 2022) more than two years from the February 2020 pre-COVID employment peak show that the current employment level has recovered 99% of private sector jobs lost nationwide during the recession.

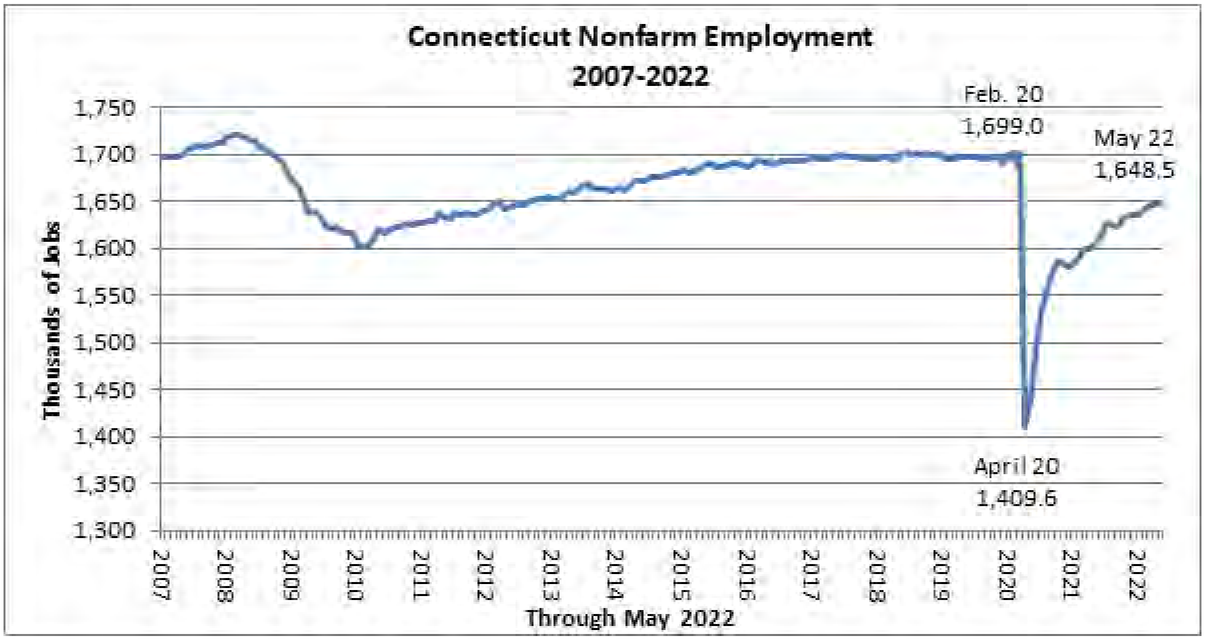
Private Sector Jobs Lost & Recovered Since 2020 in the U.S., CT, & Nearby States (in Thousands)

Area	U.S. Peak	U.S. Trough	Peak/Trough Change		Current Month	Peak to Current Month Change		Recovery
	Feb. 2020	Apr. 2020	#	%	May 2022	#	%	Rate*
United States	**129,625**	**108,609**	**-21,016**	**-16.2%**	**129,418**	**-207**	**-0.2%**	**99.0%**
Connecticut	1,462	1,197	-266	-18.2%	1,426	-36	-2.5%	86.3%
Maine	537	448	-89	-16.6%	537	0	-0.1%	99.6%
Massachusetts	3,280	2,617	-663	-20.2%	3,225	-55	-1.7%	91.8%
New Hampshire	598	489	-109	-18.3%	596	-2	-0.4%	98.1%
New Jersey	3,621	2,919	-702	-19.4%	3,616	-6	-0.2%	99.2%
New York	8,342	6,420	-1,923	-23.0%	7,970	-372	-4.5%	80.7%
Pennsylvania	5,385	4,282	-1,103	-20.5%	5,249	-136	-2.5%	87.7%
Rhode Island	442	337	-105	-23.7%	433	-9	-2.0%	91.6%
Vermont	260	198	-62	-23.7%	247	-13	-4.9%	79.4%

Seasonally Adjusted Source: CT Dept. of Labor & BLS Current Employment Statistics

The table above shows the impact of the COVID recession and recovery on northeast states through May 2022. Every northeast state had 2020 private sector losses that were steeper than the U.S. Connecticut's 18.2% decline was the second lowest in the Northeast. Adjacent states of Massachusetts, New York, and Rhode Island had respective drops of 20.2%, 23.0%, and 23.7%. In the two years since the February 2020 peak, Connecticut has recovered 86.3% of the private sector jobs lost during the COVID-recession, more than New York (80.7%), but less than Massachusetts (91.8%) and Rhode Island (91.6%).

[1] NBER. U.S. Business Cycle Expansions and Contractions. https://www.nber.org/research/data/us-business-cycle-expansions-and-contractions

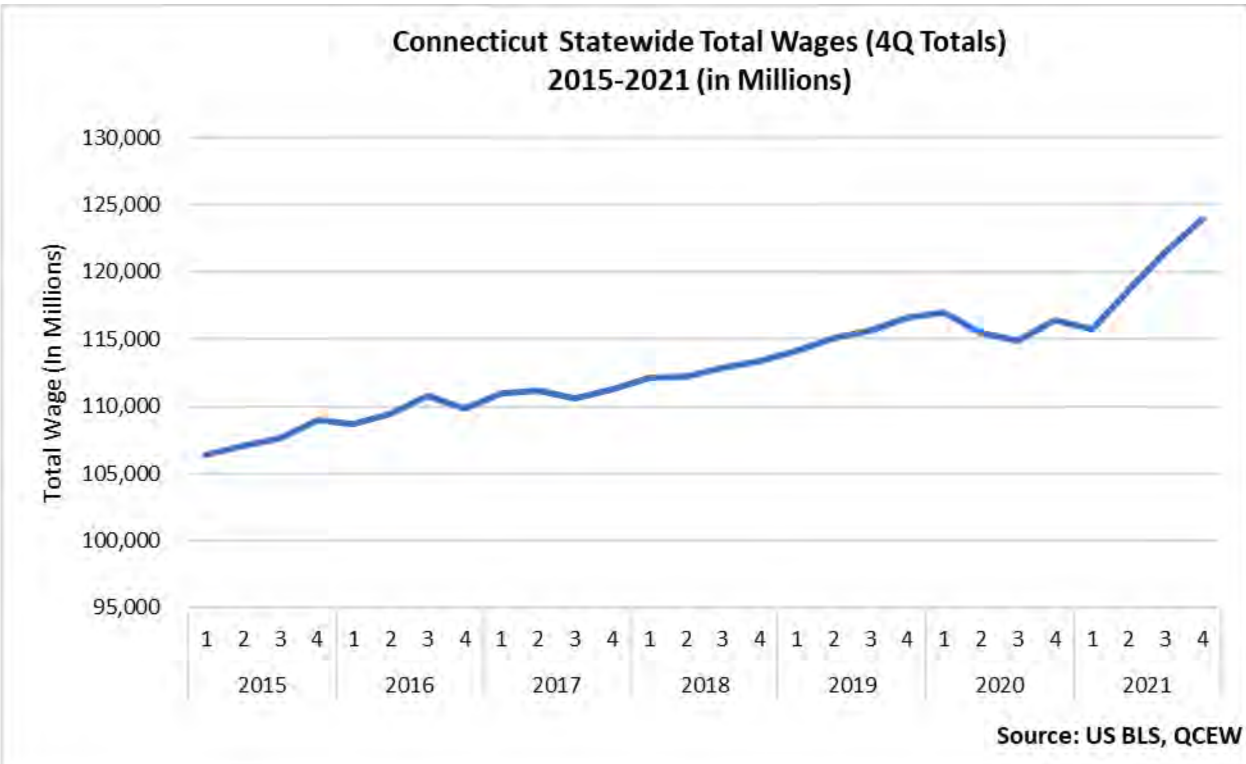


By May 2022, total nonfarm payroll employment in the state was up 16.9% from its April 2020 employment trough and at 97.0% of peak February 2020 levels. Neighboring states of Massachusetts and New York are respectively at 98.0% and 95.5% of peak total nonfarm employment. Total private employment across all three states is even closer to peak, with Connecticut, Massachusetts, and New York respectively at 97.5%, 98.3%, and 95.5% of peak levels.

Within Connecticut, industries that had the largest increases from April 2020 include those heavily impacted by COVID, including Accommodations & Food Services, Other Services, and Retail Trade. From April 2020 through May 2022, those industries were up 119%, 44%, and 24% respectively.

Industry Wage Change

Total wages stalled during 2020 but grew rapidly in 2021 as the economy recovered and employment grew. The impact of the shutdown recession and subsequent recovery on total wages can be seen in the graph below. Four quarter total wages reached a pre-recession peak in the first quarter of 2020 at 116.9 billion dollars, reached a 2020Q3 trough of 114.9 billion, and since 2021Q1 has shown steady increase from 115.7 billion to a series high of 123.9 billion by 2021Q4.

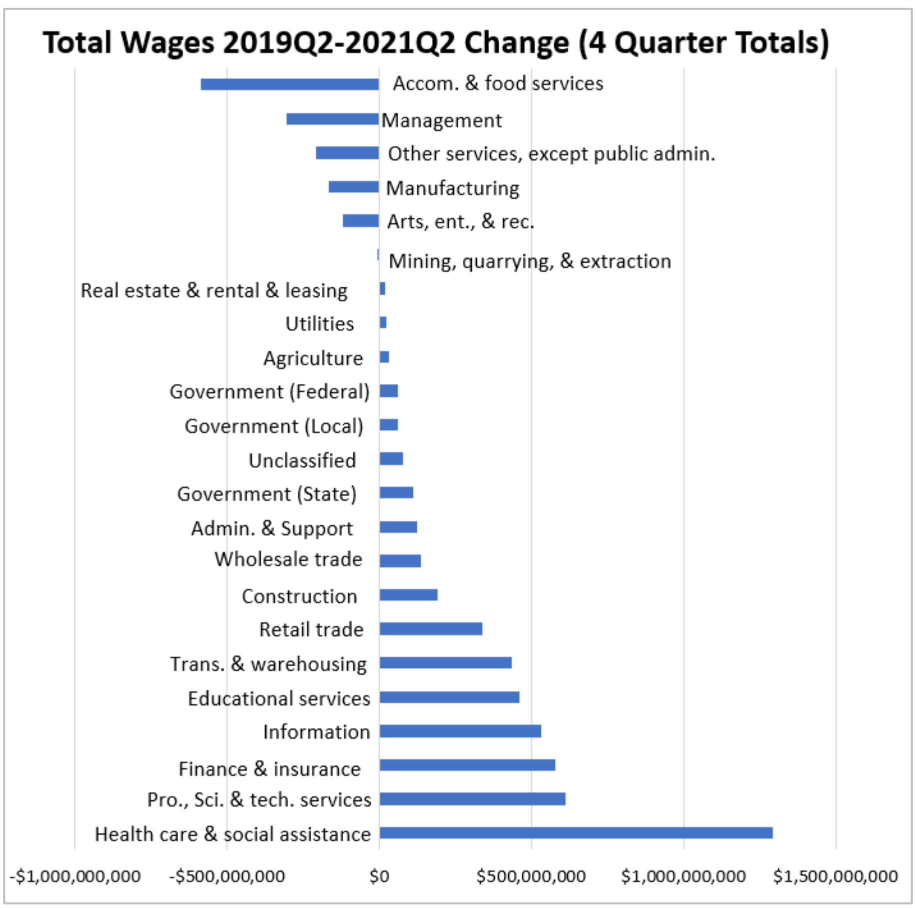


Comparing industry four quarter total wages ending 2019Q2 and 2021Q2 helps illustrate how the state economy was performing in the two years leading up to our 2021-2023 projections. The table on the next page shows that the largest industry total wage growth from the two years ending 2021Q2 occurred in Health Care and Social Assistance (+$1.3 billion or +8.1%), Professional, Scientific, & Technical Services (+$613 mill. or +5.9%), and Finance & Insurance (+$577 mill. or +3.2%). Of the nine sectors that had declines, the largest three were some of the industries heavily impacted by the COVID-lockdowns, including Accommodation and Food Services (-$589 mill. or -17.1%), Management (-$305 mill. or -6.0%), and Other Services ($207 mill. or -9.1%). During this two-year span, overall total wages for the state economy increased from $115 billion to $118.7 billion, an increase of $3.7 billion or +3.2%.

Total Annual Wages by Industry (Four Quarter Totals)

NAICS	Industry	Four Quarter Ending				19Q2-21Q2 Change	
		2019Q2	2020Q2	2021Q2	2021Q4	#	%
00	Total Private	$115,045,310,000	$115,400,810,000	$118,730,220,000	$123,897,410,000	$3,684,910,000	3.2%
11	Agriculture	$174,108,230	$181,770,340	$204,398,620	$211,855,690	$30,290,390	17.4%
21	Mining, quarrying, and extraction	$39,733,460	$38,068,380	$32,091,002	$31,775,211	-$7,642,458	-19.2%
22	Utilities	$677,125,100	$683,312,600	$698,174,400	$681,862,200	$21,049,300	3.1%
23	Construction	$4,245,416,300	$4,212,955,900	$4,438,494,100	$4,572,369,100	$193,077,800	4.5%
31	Manufacturing	$13,548,350,000	$13,612,647,000	$13,380,376,000	$13,694,578,000	-$167,974,000	-1.2%
42	Wholesale trade	$5,838,941,000	$5,763,405,000	$5,974,266,000	$6,368,240,000	$135,325,000	2.3%
44	Retail trade	$6,276,884,000	$6,116,243,000	$6,615,948,000	$6,967,611,000	$339,064,000	5.4%
48-49	Transportation and warehousing	$2,913,212,600	$3,070,110,900	$3,347,630,400	$3,574,229,000	$434,417,800	14.9%
51	Information	$3,704,021,500	$3,910,808,100	$4,233,674,400	$4,494,754,000	$529,652,900	14.3%
52	Finance and insurance	$17,940,322,000	$17,551,957,000	$18,516,962,000	$19,044,813,000	$576,640,000	3.2%
53	Real estate and rental and leasing	$1,406,809,100	$1,469,255,100	$1,426,262,300	$1,474,758,400	$19,453,200	1.4%
54	Prof., sci. and tech. services	$10,414,425,000	$10,576,369,000	$11,027,230,000	$11,611,341,000	$612,805,000	5.9%
55	Management	$5,058,297,000	$5,097,538,000	$4,753,266,300	$4,824,450,000	-$305,030,700	-6.0%
56	Administrative and waste services	$4,256,964,200	$4,220,926,300	$4,380,754,000	$4,739,439,000	$123,789,800	2.9%
61	Educational services	$10,835,692,000	$11,157,083,000	$11,295,679,000	$11,621,696,000	$459,987,000	4.2%
62	Health care and social assistance	$15,876,451,000	$16,431,377,000	$17,169,296,000	$17,815,748,000	$1,292,845,000	8.1%
71	Arts, entertainment, and recreation	$856,141,900	$795,350,300	$738,120,800	$835,188,200	-$118,021,100	-13.8%
72	Accommodation and food services	$3,436,511,000	$3,032,561,900	$2,847,885,400	$3,333,510,700	-$588,625,600	-17.1%
81	Other services, except public admin.	$2,289,172,400	$2,155,533,300	$2,081,944,100	$2,223,858,100	-$207,228,300	-9.1%
92	Government (Federal)	$523,935,500	$553,415,800	$585,047,000	$574,888,500	$61,111,500	11.7%
92	Government (State)	$1,927,757,800	$1,953,301,400	$2,038,029,200	$2,041,172,100	$110,271,400	5.7%
93	Government (Local)	$2,771,019,200	$2,783,890,100	$2,833,080,400	$2,923,294,700	$62,061,200	2.2%
99	Unclassified	$34,016,112	$32,940,132	$111,610,800	$235,980,190	$77,594,688	228.1%

Source: CT DOL, QCEW



From 2019Q2 to 2021Q2, total nonfarm average annual wages increased by $7,358 (+10.7%) to $77,853. The industries with the largest two-year average wage increase were Information (+$29,034), Finance and Insurance (+$13,187), and Wholesale Trade (+$10,411). The only industries with a two-year average wage decline were Mining, Quarrying, and Extraction (-$10,229), and Federal Government employment (-$3,120).

Annual Average Wages By Industry 2019-2021

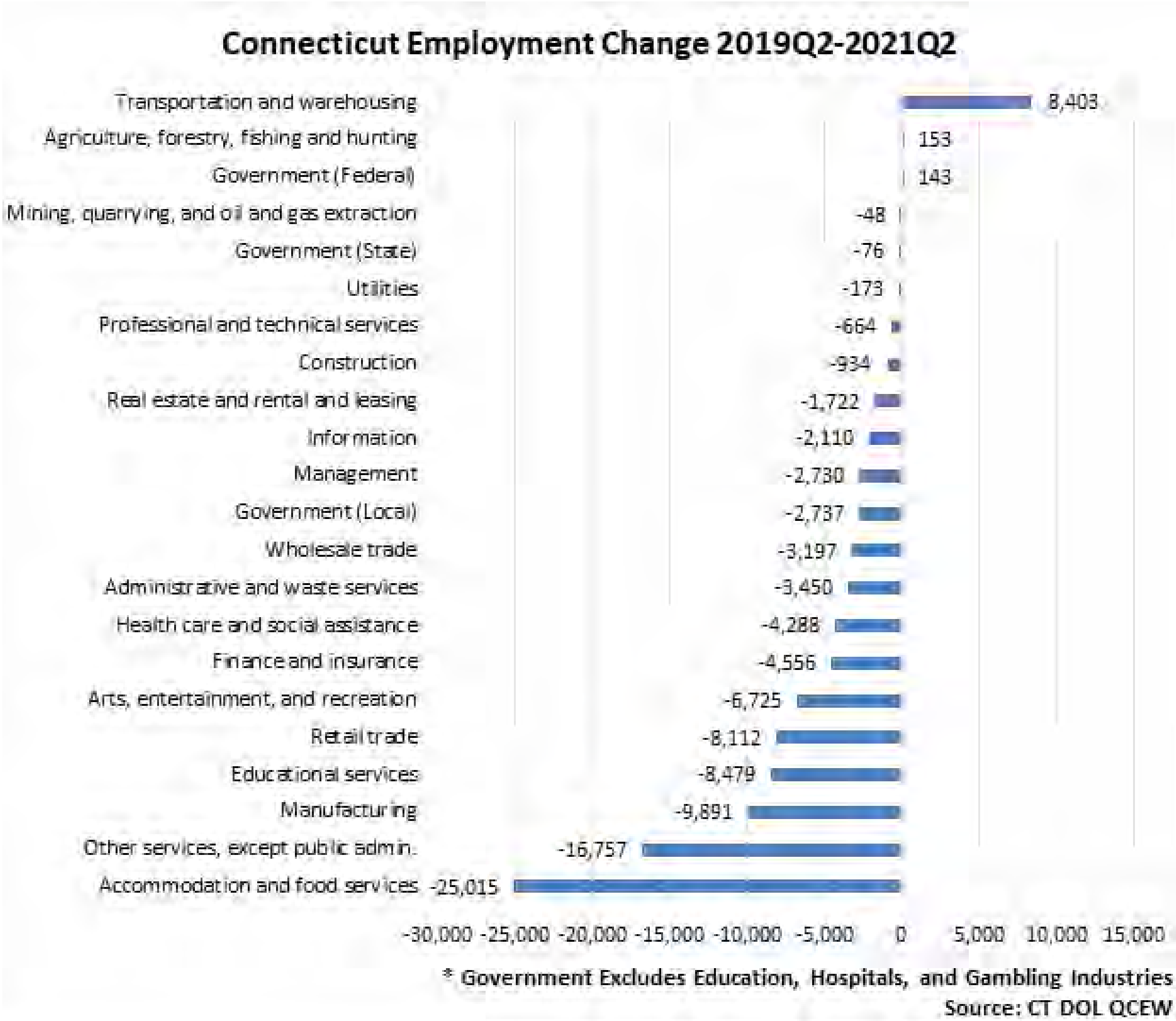
NAICS	Industry	4 Quarter Average Ending				19Q2-21Q2 Change	
		2019Q2	2020Q2	2021Q2	2021Q4	#	%
00	Total Private	68,769	71,762	76,127	77,853	7,358	10.7%
11	Agriculture	36,692	38,552	41,736	43,398	5,044	13.7%
21	Mining, quarrying, and extraction	76,215	74,256	65,986	66,337	-10,229	-13.4%
22	Utilities	131,253	133,292	139,698	137,058	8,444	6.4%
23	Construction	71,153	72,724	76,091	77,102	4,938	6.9%
31	Manufacturing	83,868	85,772	87,985	89,611	4,117	4.9%
42	Wholesale trade	96,098	99,410	106,510	111,208	10,411	10.8%
44	Retail trade	35,214	36,794	39,995	41,659	4,781	13.6%
48-49	Transportation and warehousing	50,663	50,271	50,336	52,136	8,868	14.9%
51	Information	117,359	127,355	146,393	150,348	29,034	24.7%
52	Finance and insurance	174,978	174,117	188,165	195,453	13,187	7.5%
53	Real estate and rental and leasing	70,104	74,865	77,343	79,210	7,239	10.3%
54	Prof., sci. and tech. services	108,492	111,536	118,491	121,867	9,999	9.2%
55	Management	152,347	156,926	154,040	158,572	1,692	1.1%
56	Administrative and waste services	46,760	49,003	51,897	54,046	5,137	11.0%
61	Educational services	63,608	66,555	69,602	70,594	5,994	9.4%
62	Health care and social assistance	55,086	57,456	60,699	62,290	5,613	10.2%
71	Arts, entertainment, and recreation	29,791	32,837	35,830	36,056	6,038	20.3%
72	Accommodation and food services	24,265	24,828	26,235	28,167	1,970	8.1%
81	Other services, except public admin.	34,271	37,624	42,604	44,098	8,333	24.3%
91	Government (Federal)	86,704	87,619	83,583	92,263	-3,120	-3.6%
92	Government (State)	75,990	76,008	79,182	80,108	3,192	4.2%
93	Government (Local)	64,643	66,890	71,106	72,642	6,463	10.0%
99	Unclassified	87,295	92,789	113,956	117,073	26,661	30.5%

Source: CT DOL, QCEW

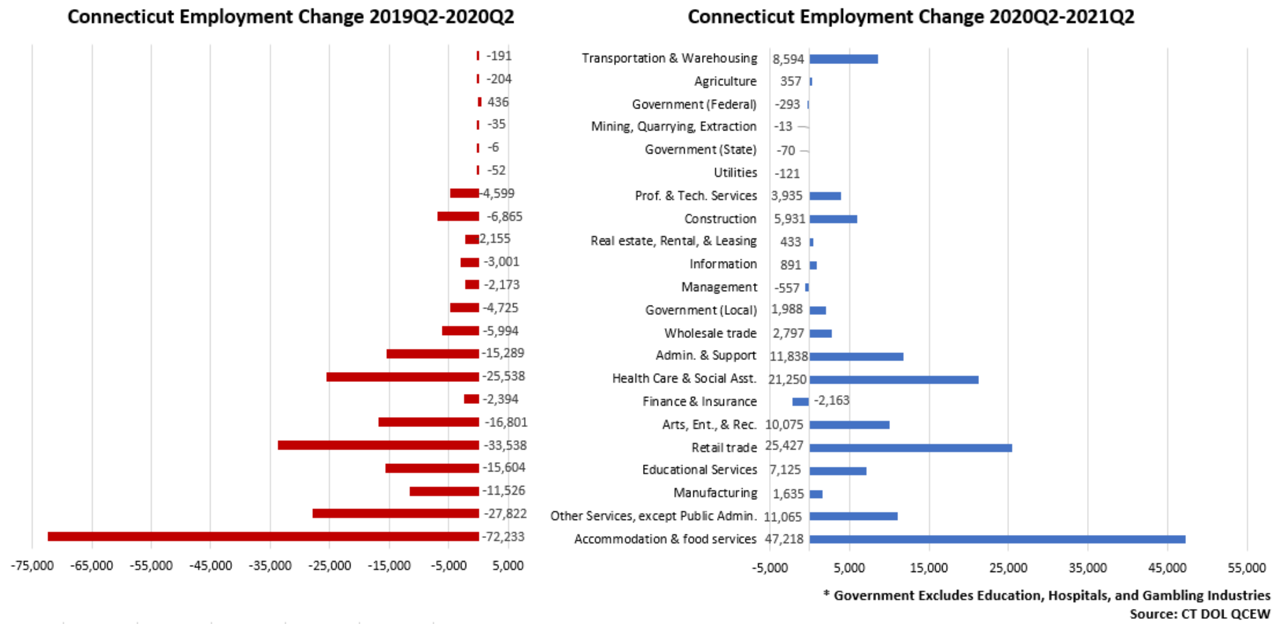
Industry Employment Change 2019-2021

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 2021Q2 through 2023Q2. During the previous two-year period (2019Q2 to 2021Q2), Connecticut's overall employment was down 92,000 jobs or -5.5%. The two-year employment change illustrated on the next page represents the available data used to produce the 2021-2023 employment projections during the first months of 2022. This two-year change spans a year before and after the 2020Q2 employment trough during the beginning of the COVID Pandemic.

The three sectors with the largest two-year losses from 2019Q2 to 2021Q2 were Accommodation & Food Services, Other Services, and Manufacturing as is shown in the figure below. Most industries were down over the two-year period, except for Transportation & Warehousing, Agriculture, and Federal Government employment.



The two-year period prior to the projection base shown above encompasses the year before the recession and first year of recovery. The charts on the following page show one year change to better illustrate how specific industries fared during the recession and subsequent recovery. The two charts have the same industry order as the above chart to illustrate how the two-year change overlays a broader range of employment shifts during the years ending 2020Q2 and 2021Q2.



During the first year of employment recovery, 16 industries had employment gains from 2020Q2 to 2021Q2. The largest gains occurred in the industries that were hardest hit by the recession, including Accommodation & Food Services (+47,218), Retail Trade (+25,427) and Health Care & Social Assistance (+21,250). Slight losses were had within Mining & Extraction, State Government, Utilities, and Federal Government. Larger losses were had in Management (-557) and Finance & Insurance (-2,163). The Finance & Insurance losses continue a longer-term trend of decline that began in 2007.

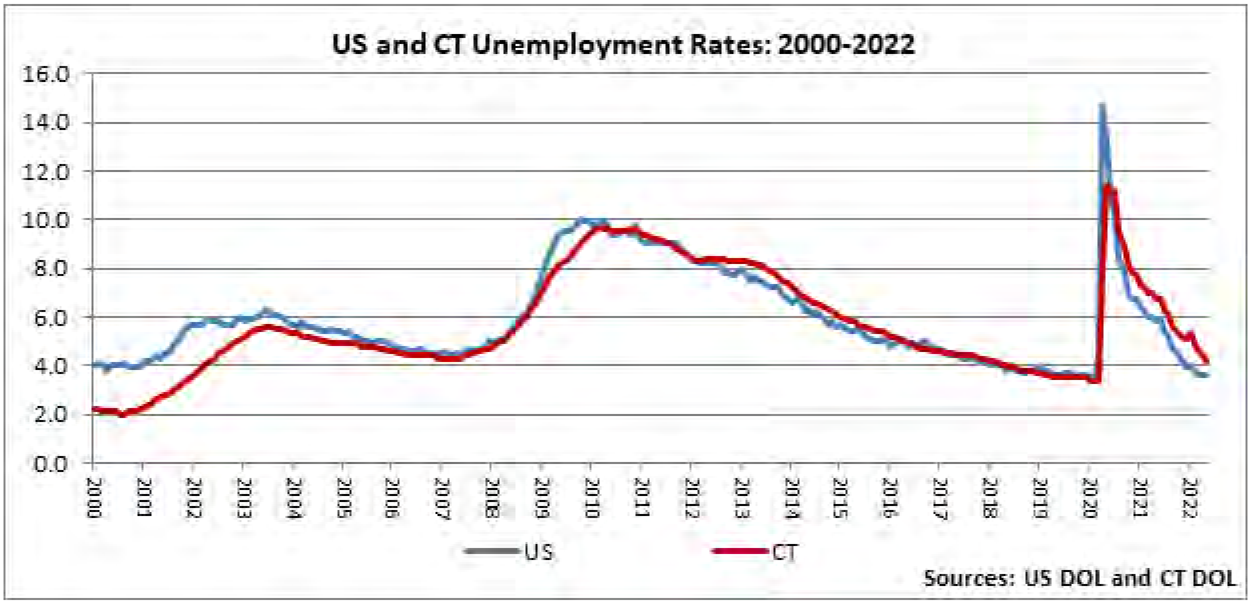
Annual Average Employment By Industry 2019-2021

NAICS	Industry	4 Quarter Average Employment				19Q2-21Q2 Change	
		2019Q2	2020Q2	2021Q2	2021Q4	#	%
00	Total Private	1,672,928	1,608,115	1,559,638	1,591,435	-113,290	-6.8%
11	Agriculture, forestry, fishing and hunt	4,745	4,715	4,897	4,882	152	3.2%
21	Mining, quarrying, and oil and gas ext	521	513	486	479	-35	-6.7%
22	Utilities	5,159	5,126	4,998	4,975	-161	-3.1%
23	Construction	59,666	57,931	58,331	59,303	-1,334	-2.2%
31	Manufacturing	161,544	158,707	152,076	152,822	-9,468	-5.9%
42	Wholesale trade	60,760	57,976	56,091	57,264	-4,669	-7.7%
44	Retail trade	178,248	166,228	165,419	167,253	-12,829	-7.2%
48-49	Transportation and warehousing	57,502	61,071	66,505	68,555	8,868	14.9%
51	Information	31,561	30,708	28,920	29,896	-2,642	-8.4%
52	Finance and insurance	102,529	100,806	98,408	97,439	-4,121	-4.0%
53	Real estate and rental and leasing	20,067	19,626	18,441	18,618	-1,627	-8.1%
54	Prof., sci. and tech. services	95,993	94,825	93,064	95,279	-2,929	-3.1%
55	Management	33,202	32,484	30,857	30,424	-2,345	-7.1%
56	Administrative and waste services	91,039	86,136	84,413	87,693	-6,626	-7.3%
61	Educational services	170,352	167,636	162,290	164,628	-8,062	-4.7%
62	Health care and social assistance	288,214	285,984	282,859	286,014	-5,355	-1.9%
71	Arts, entertainment, and recreation	28,738	24,221	20,601	23,164	-8,137	-28.3%
72	Accommodation and food services	141,623	122,142	108,553	118,347	-33,070	-23.4%
81	Other services, except public admin.	66,795	57,292	48,867	50,430	-17,929	-26.8%
91	Government (Federal)	6,043	6,316	7,000	6,231	957	15.8%
92	Government (State)	25,369	25,699	25,738	25,480	370	1.5%
93	Government (Local)	42,867	41,619	39,843	40,243	-3,024	-7.1%
99	Unclassified	390	355	979	2,016	590	151.3%

Source: CT DOL, QCEW

Unemployment Rate

The past two years have had some of the largest unemployment rate swings on record. In the beginning of 2020, the rate was at 50 year low. As the lockdowns commenced in March 2020, U.S. and state unemployment rates shifted from 4.4% (U.S.) and 3.8% (CT) to respective peaks of 14.7% for the U.S. in April 2020 and 11.4% in May 2020 for Connecticut. These were the highest respective unemployment rates on record. In the months since those peaks, the U.S. and Connecticut have had sharp declines, with the U.S. down to 3.6% as of May 2022. Connecticut's unemployment rate is currently 4.2%, 0.6 percentage points above the U.S. level.



Additional detail at the U.S. level by demographics highlights how the labor market had drastically improved for many groups within the U.S. economy through the peak month before the NBER-declared recession.[2] After peaking in April 2020, every demographic group in the table on the next page is within two percentage points of February 2020 pre-COVID levels.

The table also show unemployment rates for females peaked higher for males as the shutdown more heavily impacted industries with larger female employment shares. As of May, both genders are at 3.6 percent, which is just above February 2020 levels.

[2] National Bureau of Economic Research (NBER) Business Cycle Expansions and Contractions https://www.nber.org/cycles.html

US Unemployment Rate Change - Trough, Peak, and Current Month

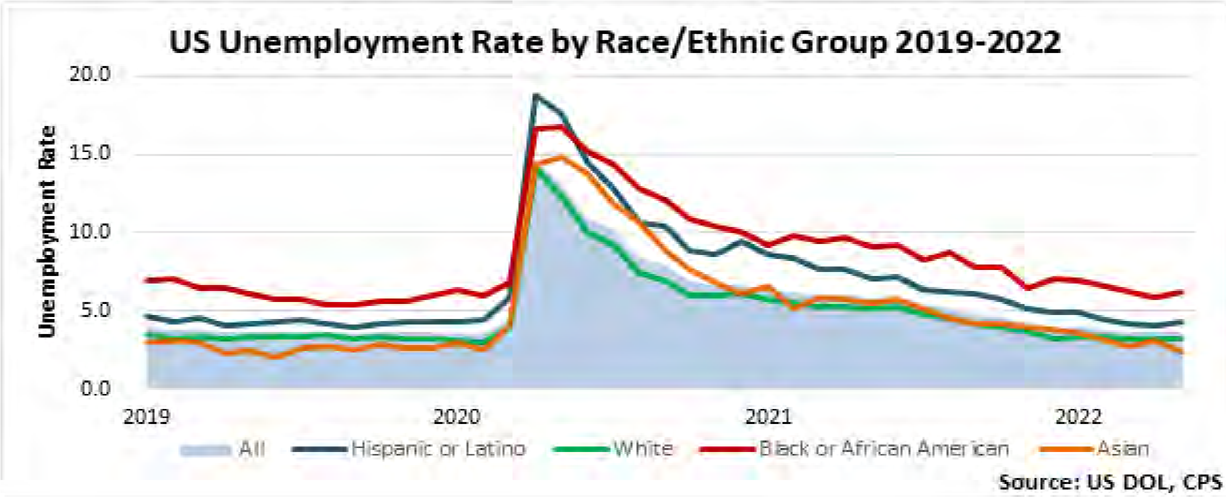
Group	UR Trough Feb. 2020	UR Peak April 2020	Current Month May 2022	% Pt. Change UR Trough to Peak	Peak to May 2022
All	3.5	14.7	3.6	11.2	-11.1
Male	3.5	13.5	3.6	10.0	-9.9
Female	3.4	16.1	3.6	12.7	-12.5
Age					
Under 25	7.8	27.4	7.8	19.6	-19.6
25-54	3.0	12.8	3.1	9.8	-9.7
Over 55	2.6	13.6	2.7	11.0	-10.9
Race/Ethnic Group					
Asian	2.5	14.4	2.4	11.9	-12.0
Black or African American	6.0	16.6	6.2	10.6	-10.4
White	3.0	14.1	3.2	11.1	-10.9
Hispanic or Latino	4.4	18.8	4.3	14.4	-14.5

Source: US DOL, CPS

By age cohort, the under 25 age group had the largest percentage point increase, up 19.6 points. That increase is 3.5 times higher than February 2020 levels. The 25-54 and over 54 cohorts had smaller percentage point changes, but due to them having much lower base levels, their rates respectively increased by 4.3 and 5.2 times their February 2020 levels. As of May 2022, the under 25 U.S. population has an unemployment rate of 7.8%, and the two other cohorts have rates of 3.1 and 2.7 percent.

By available race and ethnic group in the U.S., the Hispanic or Latino group had the highest peak unemployment rate of 18.8% and the largest percentage point drop, falling by 14.5 percentage points to 4.3% as of May 2021. The Black or African American population had a slightly lower peak rate of 16.6% but has subsequently had the highest unemployment rate among available demographic groups in May 2022.

The Asian and White U.S. populations had the lowest base month unemployment rates, peaked at 14.4 and 14.1 percent, and were respectively 2.4% and 3.2% as of May 2022.



Corresponding Connecticut unemployment rates by age and demographic groups are available annually through 2021 and are shown on the next page. When comparing the four years of data shown in the table, the 2020 recession resulted in unemployment rate peaks for the under 25 and 25-54 age groups that were lower than their respective 2010 highs, but the over 54 group had a 2020 unemployment rate peak above 2010 levels.

The table also illustrates how unemployment rates for Black and Hispanic Populations fell dramatically through 2019 and how those two groups experienced differing rate change through 2020. Hispanic unemployment rates increased by 4.5 percentage points while the unemployment rate for Black/African Americans in Connecticut shifted slightly over the year from 7.3 percent to 7.4 percent. From 2020-2021, the Black/African American unemployment rate was down 1.2 percentage points and the Hispanic or Latino rate was down 1.6 percentage points. The unemployment rate for the White cohort was 7.6 percent in 2020 and was down to 6.4 percent in 2021. These rates are derived from the BLS LAUS expanded state demographic series and are subject to possible state-level sample size issues.[3]

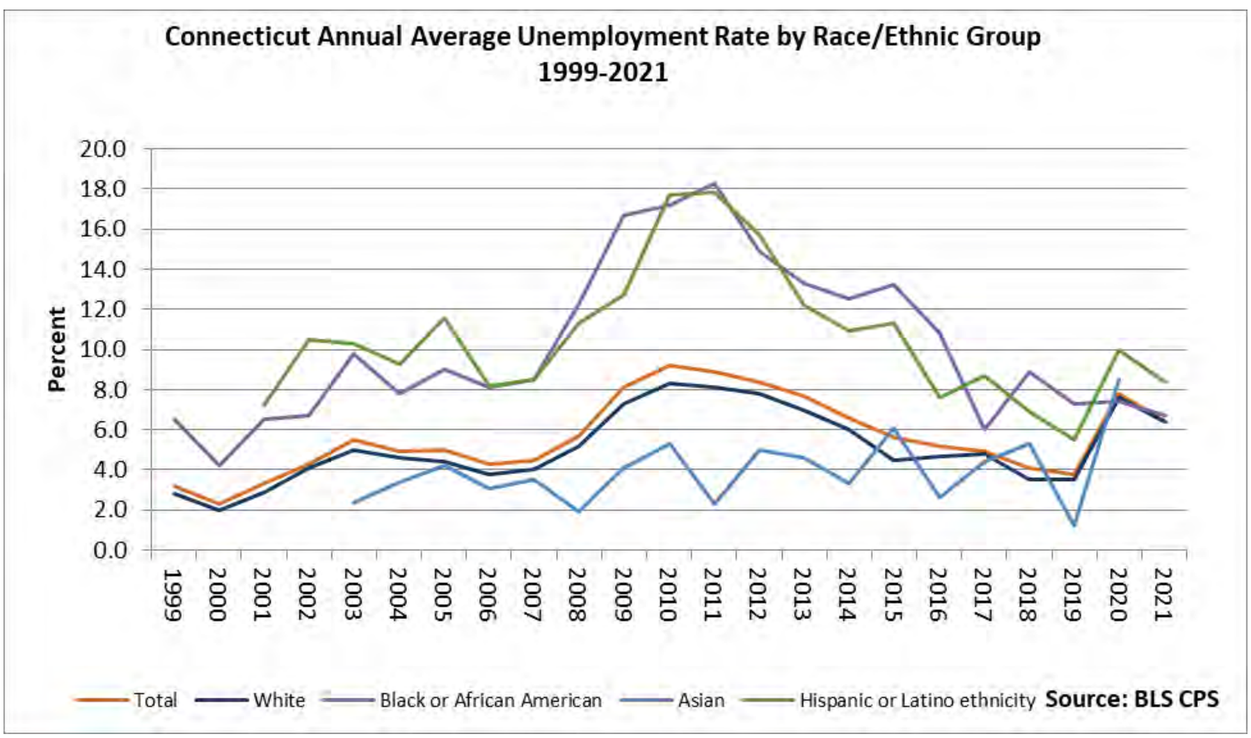
[3] BLS LAUS Expanded State Demographic Data available here: https://www.bls.gov/lau/ex14tables.htm
and data notes: https://www.bls.gov/lau/notescps.htm

CT Annual Unemployment Rate Change

Group	Prior UR High 2010	UR Low 2019	2020	2021	19-20 % Pt Change	20-21 % Pt Change
Total	9.2	3.8	7.8	6.4	4	-1.4
Men	9.9	4.2	8.3	6.6	4.1	-1.7
Women	8.4	3.4	7.2	6.2	3.8	-1
Age						
Under 25	18.4	11.2	15.5	12.5	4.3	-3.0
25-54	8.2	2.7	6.4	5.4	3.7	-1.1
Over 55	6.6	3.2	7.3	6.4	4.1	-0.9
Race/Ethnic Group						
White	8.3	3.5	7.6	6.4	4.1	-1.2
Black or African American	17.2	7.3	7.4	6.7	0.1	-0.7
Asian	5.3	1.2	8.5	n/d	7.3	n/d
Hispanic or Latino	17.7	5.5	10.0	8.4	4.5	-1.6

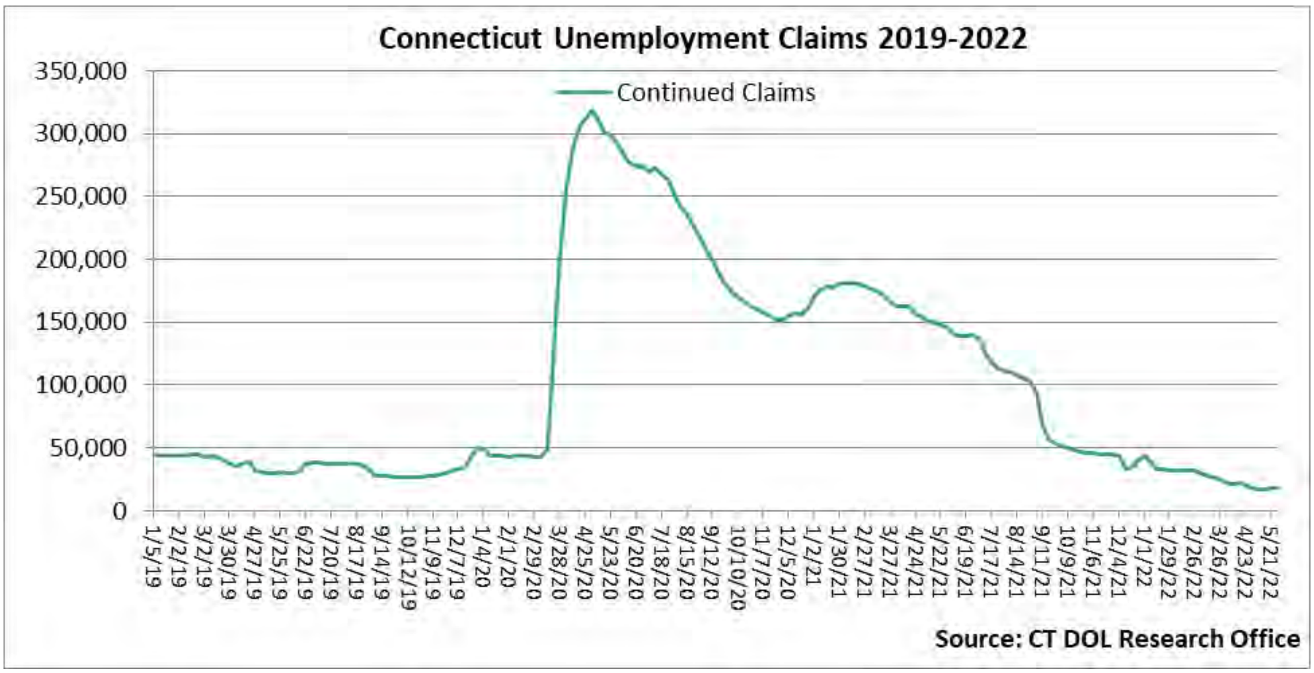
n/d = no data **Source: US DOL, LAUS**

The following graph shows annual average unemployment rates by race/ethnic group in Connecticut. In 2021, all demographic groups with available data had unemployment rate decreases. Prior to this, every group saw 2019-20 unemployment rate increases, the largest increase occurred for the Hispanic group, up 4.5 percentage points and the smallest increase occurred within the African American group, which increased from 7.3 to 7.4 percent. In 2021, every group with available data saw unemployment rates decline. Note that unemployment rates for the Asian and Hispanic or Latino Ethnicity demographic groups aren't available for every year in the series.



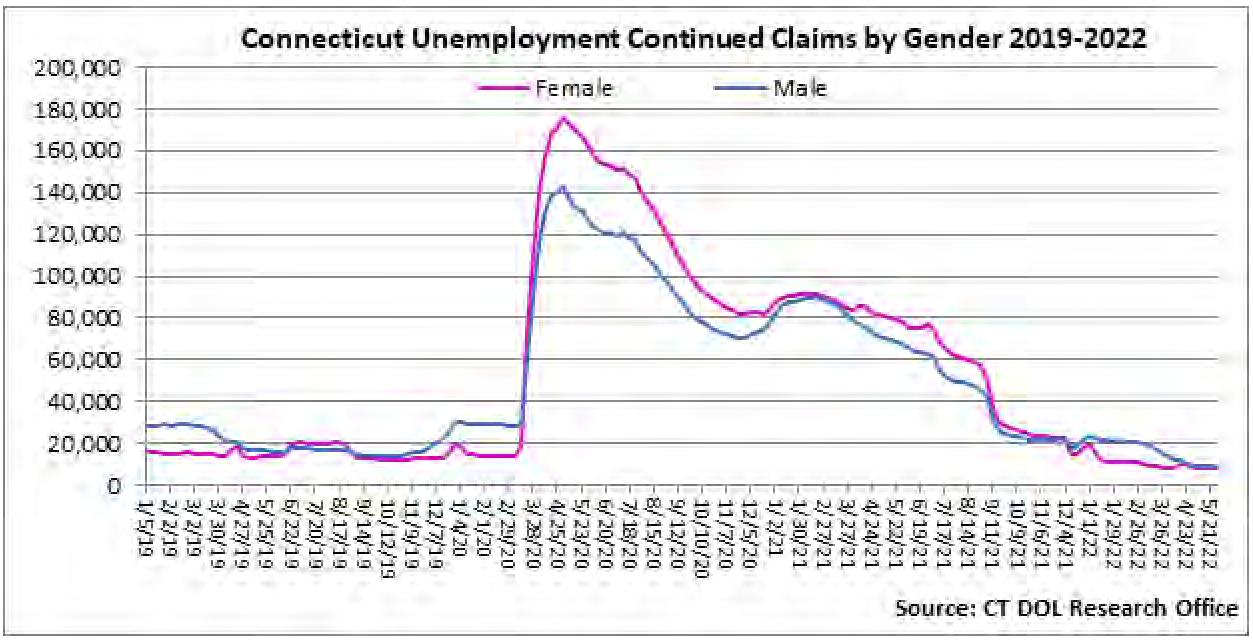
Unemployment Claims

During the first half of 2020, unemployment claims due to the COVID shutdown spiked to unprecedented levels. Initial claims in Connecticut went from 6,667 new claims during the week ending March 7th, 2020 to 79,046 a week later, nearly 12-fold increase. 62% of initial claims for the week ending March 14th involved workers who had annual prior earnings of $35,000 or less and only 7% of initial claims involved workers with prior earning over $75,000. During subsequent weeks, continued claims peaked at 318,846 as of 5/2/20, over 10x higher than levels a year prior. The graph below illustrates how continued claims steadily declined through May 2022.



As of the week of May 28th, 2022, there were 18,047 continued unemployment claims, down 88% from a year earlier, when there were 145,178 continued claims during the week ending May 29th, 2021. The last week of May 2022 compares even more starkly to two years ago, when there were 291,701 continued claims during the week ending May 30th, 2020. In two years continued claims in the state are down 94 percent. Unemployment insurance claims are at present below pre-pandemic levels, which highlights how tight the current labor market is.

The recession and the employment shutdowns disproportionately impacted industries in the service sector that could not adapt to remote work. The industries with the largest increase in unemployment continued claims during the recession were Accommodations & Food Services, Health Care & Social Assistance, and Retail Trade. These industries are majority female. As a result, female continued claims exceeded corresponding male levels from late March 2020 through the end of November 2021. As overall claims continued to fall, male continued claims exceeded female levels from December 2021 to May 2022, which was also the norm during the pre-pandemic period. The 2020 recession was different than the 2007-2009 Great Recession, which had higher male unemployment as a result of the industries hardest hit during that downturn such as Construction and Manufacturing. In the most recent weeks, both male and female claims have been very low by historic standards.



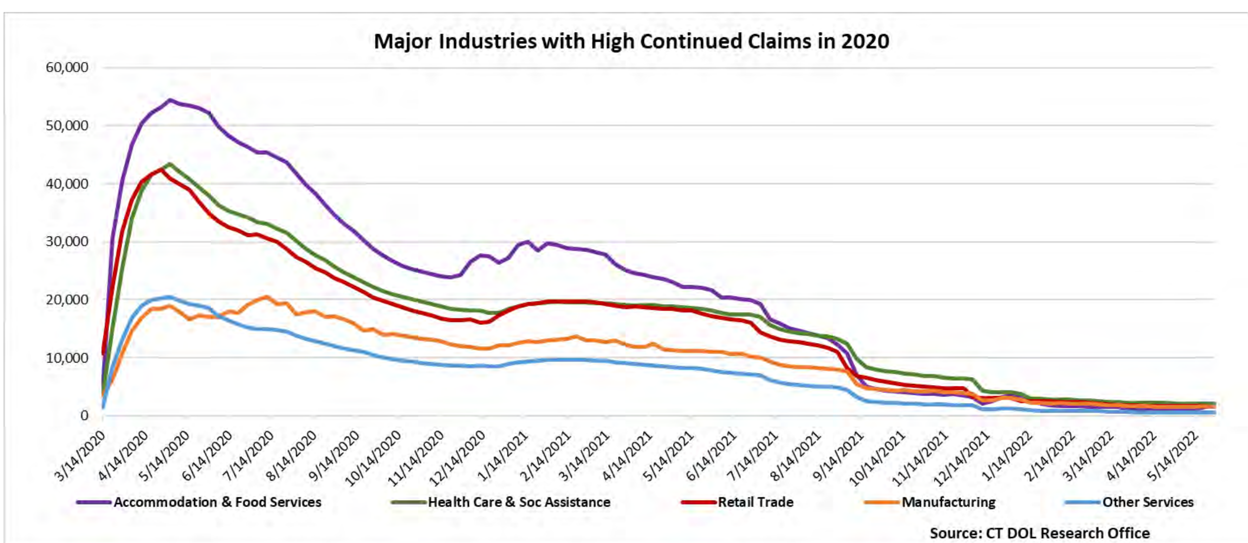
The table on the next page details the large industry-level drops that have occurred in recent years. Over the past year, every sector had continued claims decline, 19 of 22 available industries have continued claims down 81% or more, and 7 were down 90% or more. As a share of the overall 1-year change, 41% of the 127,131 continued claims decline occurred in Accommodation & Food Services (-19,935 cont. claims), Health Care & Social Assistance (-16,047 cont. claims), and Retail Trade (15,978 cont. claims). These three industries had the largest early 2020 claims increases and also had the largest drops from late May 2020 to late May 2021, when the industries accounted for a combined 47% of total declines.

Connetiuct Continued Claims by Industry

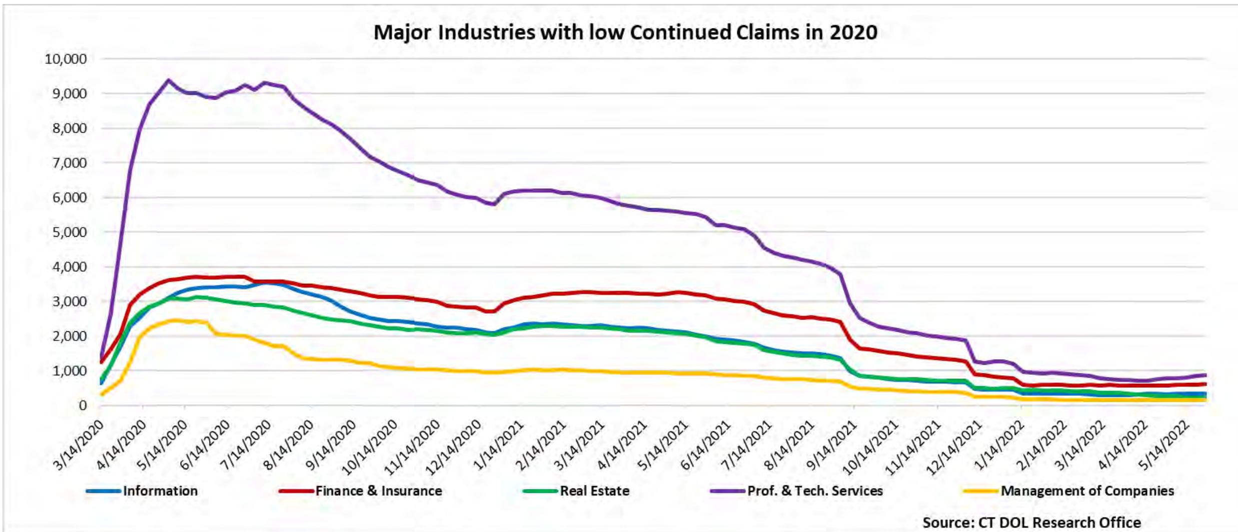
Industry	Most Recent Week	1 Year Ago	Total Claims Peak	Pre Shutdown	1 Year Change		Recent Week to Peak Change		Recent Week to Pre-Shutdown Change		Share of Total Continued Claims	
	5/28/2022	5/29/2021	5/2/2020	3/14/2020	#	%	#	%	#	%	5/28/2022	5/29/2021
Total	18,047	145,178	318,910	48,668	-127,131	-88%	-300,863	-94%	-30,621	-63%	100%	100%
Agric., Forestry, Fishing & Hunting	57	364	513	354	-307	-84%	-456	-89%	-297	-84%	0.3%	0.3%
Mining/Quarrying	2	29	62	48	-27	-93%	-60	-97%	-46	-96%	0.0%	0.0%
Utilities	27	91	105	46	-64	-70%	-78	-74%	-19	-41%	0.1%	0.1%
Construction	1,619	7,339	15,077	7,531	-5,720	-78%	-13,458	-89%	-5,912	-79%	9.0%	5.1%
Manufacturing	1,586	11,024	19,050	3,603	-9,438	-86%	-17,464	-92%	-2,017	-56%	8.8%	7.6%
Wholesale Trade	672	4,711	9,771	1,540	-4,039	-86%	-9,099	-93%	-868	-56%	3.7%	3.2%
Retail Trade	1,653	17,631	42,471	3,757	-15,978	-91%	-40,818	-96%	-2,104	-56%	9.2%	12.1%
Transp. & Warehousing	741	6,632	13,598	3,556	-5,891	-89%	-12,857	-95%	-2,815	-79%	4.1%	4.6%
Information	326	1,990	3,106	646	-1,664	-84%	-2,780	-90%	-320	-50%	1.8%	1.4%
Finance & Insurance	605	3,169	3,621	1,253	-2,564	-81%	-3,016	-83%	-648	-52%	3.4%	2.2%
Real Estate	215	1,953	3,073	749	-1,738	-89%	-2,858	-93%	-534	-71%	1.2%	1.3%
Prof. & Tech. Services	879	5,423	9,386	1,388	-4,544	-84%	-8,507	-91%	-509	-37%	4.9%	3.7%
Management of Companies	144	914	2,422	309	-770	-84%	-2,278	-94%	-165	-53%	0.8%	0.6%
Admin. & Support Svces.	1,469	13,062	18,696	6,629	-11,593	-89%	-17,227	-92%	-5,160	-78%	8.1%	9.0%
Educational Services	618	6,093	14,728	1,713	-5,475	-90%	-14,110	-96%	-1,095	-64%	3.4%	4.2%
Health Care & Soc Assistance	2,128	18,175	43,421	3,683	-16,047	-88%	-41,293	-95%	-1,555	-42%	11.8%	12.5%
Arts, Ent., & Recreation	172	2,956	9,211	1,488	-2,784	-94%	-9,039	-98%	-1,316	-88%	1.0%	2.0%
Accommodation & Food Services	1,702	21,637	54,386	4,795	-19,935	-92%	-52,684	-97%	-3,093	-65%	9.4%	14.9%
Other Services	532	7,899	20,554	1,607	-7,367	-93%	-20,022	-97%	-1,075	-67%	2.9%	5.4%
Self Employed	128	1,365	12,161	195	-1,237	-91%	-12,033	-99%	-67	-34%	0.7%	0.9%
Public Administration	256	2,127	3,908	632	-1,871	-88%	-3,652	-93%	-376	-59%	1.4%	1.5%
Other/Unknown	2,516	10,594	19,590	3,146	-8,078	-76%	-17,074	-87%	-630	-20%	13.9%	7.3%

Source: CT DOL Research Office

The following graph illustrates the five industries with the highest peak UI continued claims from March 14th, 2020 through May 28, 2022. Four of the displayed sectors peaked on May 2nd, Manufacturing peaked two months later during the week ending July 11th, 2020. All five of the industries had gradual declines through the fourth quarter of 2020 and flattened out with some increase during the first half of 2021. A noticeable downward shift in claims across the five industries occurred in September 2021. By May 2022, all five of the industries had fewer than 2,200 continued claims, having respectively fallen from tens of thousands at the start of the pandemic.



Many major industries with the smallest level of recent continued claims are those that had peak claims of only a few thousand. These industries were those that were better able to adapt to lockdown protocols and/or were deemed essential. These industries also experienced a September 2021 shift down and all had respective claims totals in May 2022 of under 1,000.



Accommodation & Food Services had the largest increase in unemployment claims as COVID-mitigation policies shut down operations at many restaurants and venues. From the first quarter of 2020 to the second quarter, employment fell by 45% and claims rose precipitously, peaking at 54,386 by May 2020, or 17% of total claims. In two years since that UI claims peak, Accommodation & Food Services has seen employment increase and claims fall. Claims are currently 1,702 as of May 28th, 2022, down 92% from a year ago, and down 97% from the total claims peak of May 2, 2020.

Health Care and Social Assistance, the largest employing sector of the economy had the second highest increase in claims, peaking at 43,421 continued claims by early May 2020. Despite the essential nature of this sector overall, the pandemic caused many non-essential medical procedures to be postponed or avoided, which resulted in the layoff increase. Current unemployment claims in the sector are down to 2,128 as of late May 2022, which is down 88% over the year and down 95% from peak levels. Employment has increased steadily in recent months. By 2021Q4, the sector is at 94% of pre-pandemic 2019Q4 levels. By component industry, Ambulatory Health Care is at 99% of 2019Q4 levels, Hospitals have regained employment equal to pre-pandemic levels 2 years ago, Social Assistance is at 92%, and Nursing & Residential Care Facilities is at 85%. The nature of COVID on the nursing home industry, along with longer term trends suggest that employment growth will lag as demand weakens and people seek alternatives. Correspondingly, it can be expected that other areas of Health Care & Social Assistance such as Home Health Care Services will increase as people seek to remain in their homes as they age and/or require additional medical care.

Retail Trade experienced employment disruptions during the pandemic similar to Accommodation and Food Services. Unemployment claims increased by over 10-fold from early 2020 through May of that year, as pandemic mitigation severely dampened that industry. As consumers adapted and shifted to online shopping, growth in Transportation & Warehousing increased. Retail Trade unemployment claims through 2022 were roughly equal to the total claims count for the much larger Health Care and Social Assistance sector, falling from 42,471 continued claims in May 2020 to 1,653 by May 28, 2022. Employment in this sector has commensurately increased from a 2020Q2 low of 140,500 to 168,570 by 2021Q4. This recent employment level is down 6% from 2019Q4 levels, longer term trends of employment decline in this sector may impede continued recovery. The sector had a recent employment peak in the 2015Q4 of 190,670 and had been trending downward in the years leading up to the pandemic.

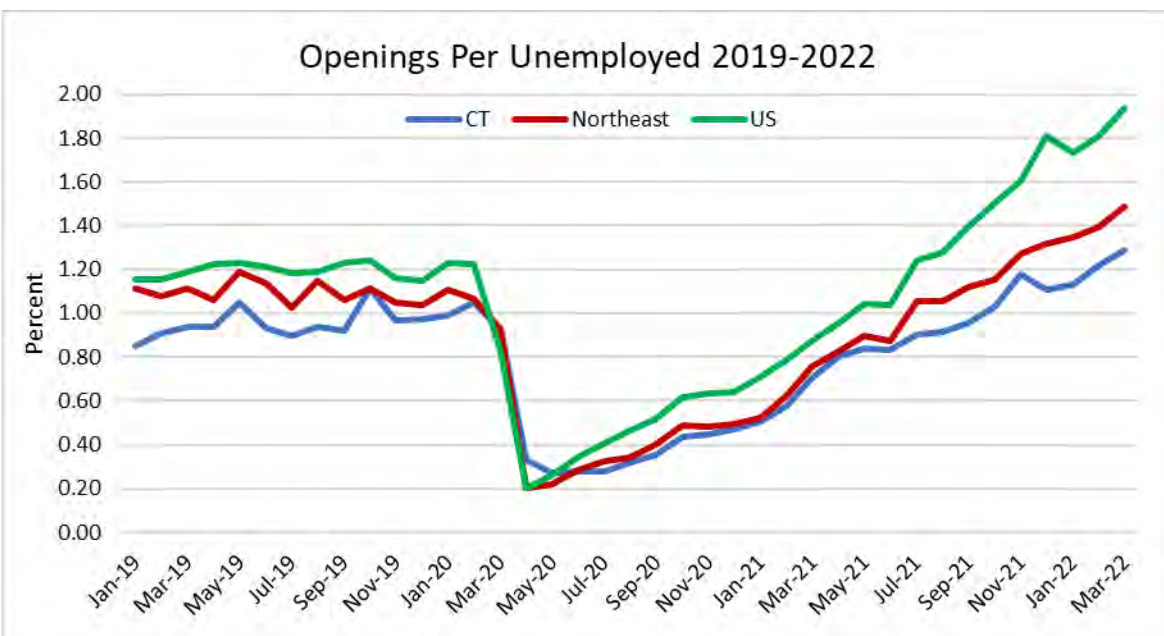
As the state continues its recovery and add jobs, unemployment claims in hardest-hit industries have fallen to record lows. The most recent week of total continued claims during the week ending May 28, 2022 is less than 6% of peak May 2, 2020 levels of 318,910 and down 88% from a year earlier during the week ending May 29, 2021. Every industry had fewer claims than a year before, and every industry has fewer claims during the most recent week than they did during March 14, 2020, the last week before the COVID lockdowns.

This precipitous fall in unemployment insurance claims indicates that the current labor market is quickly rebounding from the steep and (thankfully) short early 2020 recession. Unemployment levels have fallen by 63%, from 11.4% in May 2020 to 4.2% as of May 2022. This tightening labor market will present challenges for employers and workforce development agencies as they seek to increase the supply of labor to meet their needs and foster economic growth in the state.

Job Openings Amid a Tight Labor Market

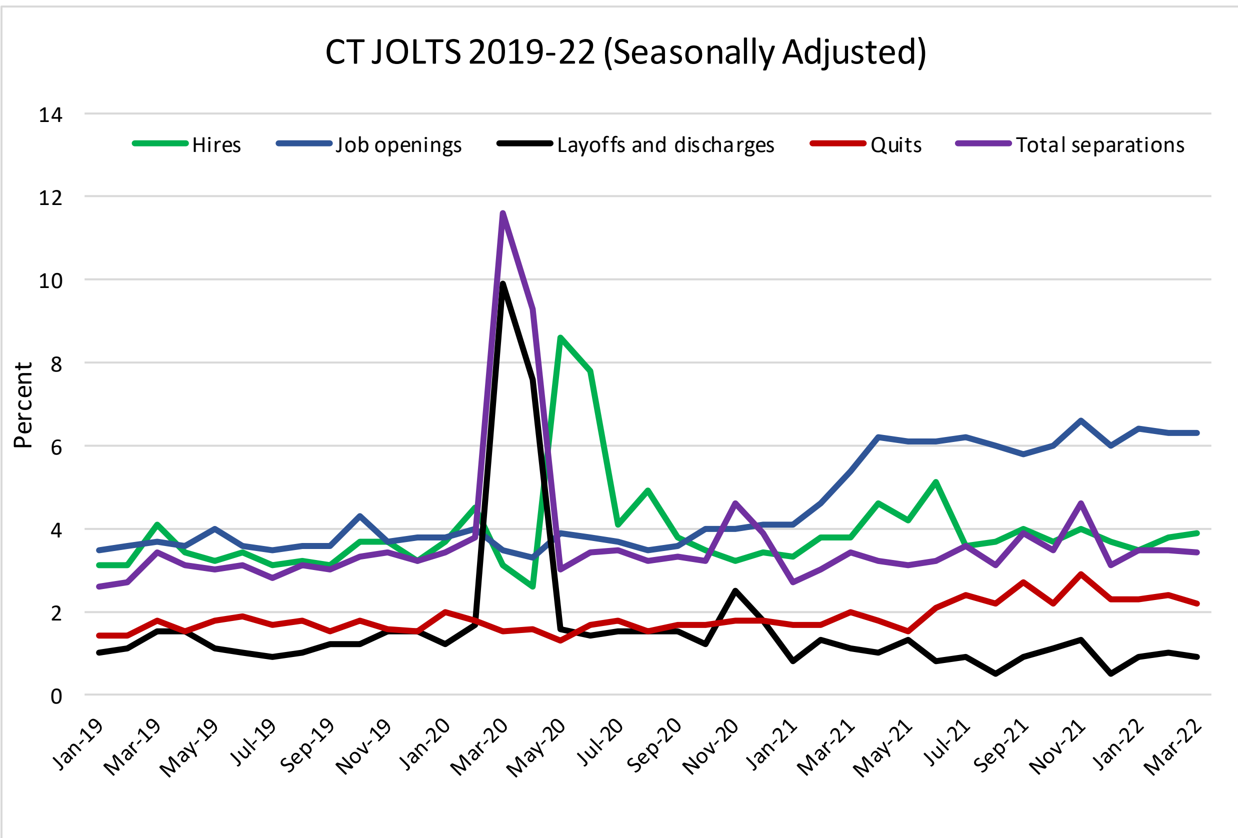
The continued effect of the pandemic and its impact on labor markets is illustrated by a look at the BLS Job Openings and Labor Turnover Survey (JOLTS). JOLTS provides information on labor demand and turnover at the U.S., regional, and state level. This information includes estimates of job openings, new hires, layoffs, quits, and other labor market movements. The BLS began to publish official state-level monthly JOLTS data during October 2021.

In the year before the early 2020 COVID-recession, the economy had a very tight labor market. The unemployment rate was below 4% and the U.S. and Northeast both had more openings than unemployed workers throughout the year. The graph below shows the number of job openings per unemployed worker from early 2019 through March 2022. This ratio experienced an unprecedented decline during early 2020. In February 2020, Connecticut had 1.05 job openings per unemployed worker, a level in line with the Northeast (1.07). The U.S. rate was higher. Two months later, as COVID-related unemployment spiked, there were only 0.33 openings per unemployed worker in Connecticut and 0.20 in both the Northeast and U.S. Put another way, in April 2020, there were three unemployed workers per opening in the state, and five unemployed workers per opening in the Northeast and U.S.



The graph also illustrates how the three areas have recovered in the subsequent two years. As the economy improved, unemployment fell, and businesses looked to expand. The U.S. has experienced an unprecedented spike in job openings per unemployed. As of March 2022, there were nearly two openings for every unemployed person in the country. In the Northeast, there were 1.47 openings per unemployed worker and Connecticut had 1.28 openings per unemployed worker. This represents a significant “seller’s market” for labor as employers scramble to fill job openings from expansion and from vacancies as existing workers retire or find employment elsewhere.

In addition to Openings, the JOLTS data show Hires and Separations. Separations are both voluntary (Quits) and involuntary (Layoffs and Discharges). Openings and Quits reinforce each other. With Openings high, workers are more willing to quit their jobs to seek other opportunities knowing that the odds of finding another job are higher. At the same time, each quit is a potential opening that will need to be refilled.



The above graph shows the rate of Hires, Separations, and Openings in Connecticut. The BLS calculates the job openings rate by dividing the number of openings by the sum of employment and openings. The hires, quits, layoffs & discharges, and total separations rates are computed by dividing the number of workers who, respectively, were hired, quit their jobs, were laid off or discharged, and were otherwise separated, by the number of people employed.[4] In February 2020, the hires and job openings rates were 4.5 and 4.0, respectively. These levels were among the highest on record at that time. The Separations measures (Layoffs and Quits) were each below two percent, lower than most months of the preceding ten years. Layoffs spiked during the next two months and Hires jumped after the two-month shutdown and have generally remained above their pre-COVID level since. By late 2021, the job opening rate surpassed six percent. The gap between Quits and Layoffs was much wider in early 2022 than before the pandemic. As of March 2022, the vast majority of separations in Connecticut were voluntary.

Labor Force Participation Rates

	February 2020		April 2022	
	LFPR	% of U.S. Average	LFPR	% of U.S. Average
United States	**63.4**	**100.0%**	**62.2**	**100.0%**
Connecticut	66.9	105.5%	64.2	103.2%
Massachusetts	65.9	103.9%	66.0	106.1%
Rhode Island	63.9	100.8%	63.2	101.6%
New York	61.0	96.2%	59.4	95.5%
New Jersey	64.0	100.9%	62.6	100.6%

Source: CT Dept. of Labor

In addition to Quits, the number of Openings is affected by the decreased Labor Force Participation Rate (LFPR). The LFPR is the percent of the population (age 16 and above) that is either working or looking for work. In February 2020, the national LFPR was 63.4%. It fell to 60.2% in April 2020 and was 62.2% in April 2022 (see table above). The 1.2%-point difference between the pre-pandemic 63.4% and 62.2% represents over three million workers. In Connecticut, the Labor Force Participation Rate was 66.9% in February 2020 and fell to a pandemic low of 63.2% (not much lower than the nation's pre-pandemic level). As of April 2022, it was 64.2% — two full percentage points higher than the national average. Returning Connecticut's Labor Force Participation Rate to its pre-COVID level would bring more than 79,000 workers back into the labor force.

---

[4] BLS. Handbook of Methods. Chapter 18. Job Openings and Labor Turnover Survey. https://www.bls.gov/opub/hom/pdf/jlt20130314.pdf

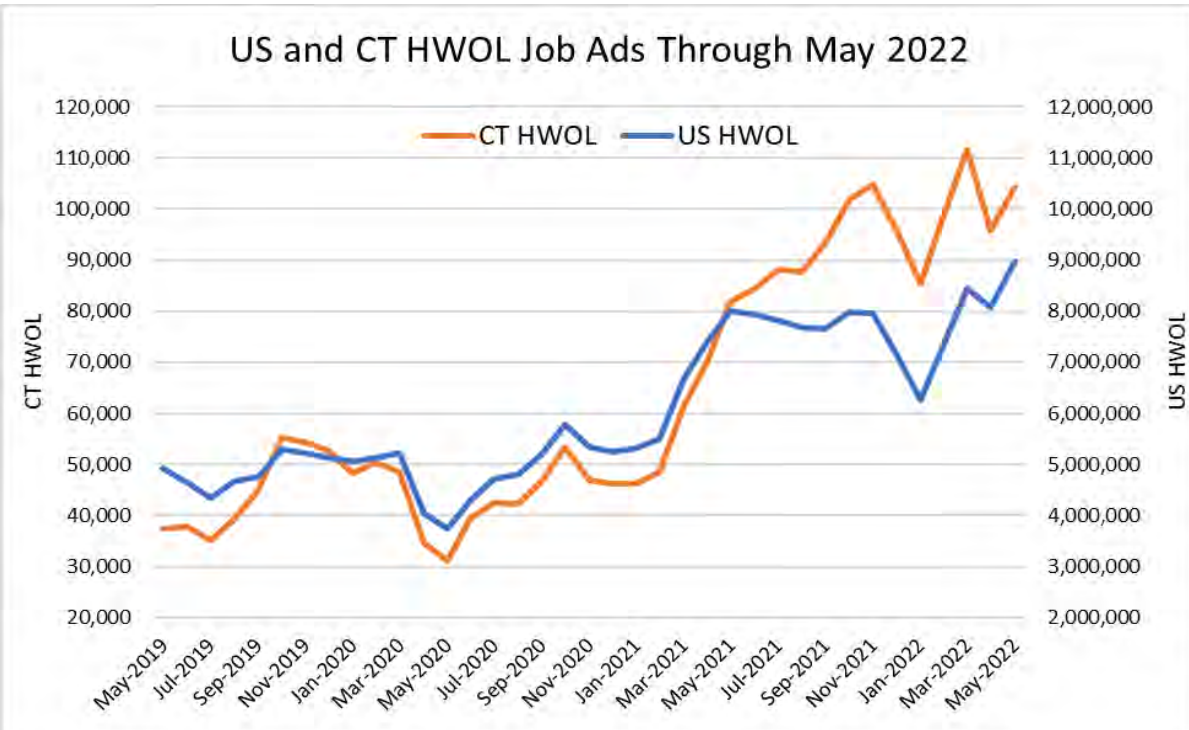
Additional Thoughts on JOLTS

The labor markets in both the state and U.S. are in one of the tightest periods in decades with more total job openings than unemployed workers for the better part of the past year. Unemployment rates have fallen below 5 percent and job openings have been at or near all-time highs during the first quarter of 2022. The number of people collecting unemployment benefits in Connecticut has fallen to the lowest level since 1988. In addition to openings, the JOLTS data series illustrate the movements within the labor market. The increased pace of quits means that hiring must also accelerate just to maintain the same level of employment with growth requiring even more hiring. One of the unexpected consequences of the COVID pandemic is that the dynamism of the labor market has increased both nationally and in Connecticut in contrast to previous recessions which saw years-long decreases in the rates of Hiring, Quits, and Openings.

Help Wanted Online

A consequence of the current increase in job vacancies has been an increase in the number of job postings captured within the Help Wanted Online (HWOL) data series. It is important to make the distinction that HWOL job postings don't necessarily equate to a job opening, as employers could post ads for a variety of reasons other than filling a hire. The following graph illustrates the increase in job ads that has occurred in the past two years at both the U.S. and state levels. As of May 2022, U.S. and Connecticut total job ads are respectively 2.4 and 3.3 times larger than corresponding May 2020 levels.[5]

[5] Additional monthly HWOL data is available on the CT DOL Website: https://www1.ctdol.state.ct.us/lmi/hwol.asp



Tabulations of job postings are a real-time display of the types of skills and occupations employers are interested in. During the most recent full month of data, May 2022, there were 106,633 job postings, up from 81,869 a year ago in May 2021, and over three times the total count of 31,246 during May 2020. The above graph illustrates the increase in job ads that has occurred in the past two years at both the State and U.S. levels. From May 2020 to May 2022, U.S. and Connecticut total job ads are respectively up 89.4% and 109% respectively.

Comparing the skills found in postings before and after the pandemic-recession of early 2020 can help illustrate what skills are most-commonly looked for by employers in the state.

In May 2022, across all job postings, the most cited skills include broadly applicable skills such as Customer Service, Scheduling, Sales, Budgeting, Project Management, Customer Contact, Retail Industry Knowledge, Patient Care, Teaching, and Repair. This top 10 skill list looks very similar to the top 10 for May 2019. When comparing the two years all but one of the May 2022 skills were also in the top 10 three years ago. This suggests that employers are broadly seeking an array of employee skills that were similar to the pre-recession period. During the month of May in 2020 and 2021, top skills that relate to COVID-mitigation included use of personal protective equipment, cleaning, and vaccination.

Beyond shifts in specific skills found in job ads, comparing the minimum-advertised educational requirements across years helps give an indicator of what employers are looking for during the current period of record job openings. Among job postings that have educational requirements, in May 2019, 52% required a bachelor's degree, 33% required a high school diploma, and 6% required a masters. By May 2022, bachelor’s was 43%, high school diploma was 44%, and masters was 5%. At present, the industries with the most ads are Health Care & Social Assistance, Finance & Insurance, and Retail Trade.

The Impact of the COVID Recession on Connecticut Employment using QWI

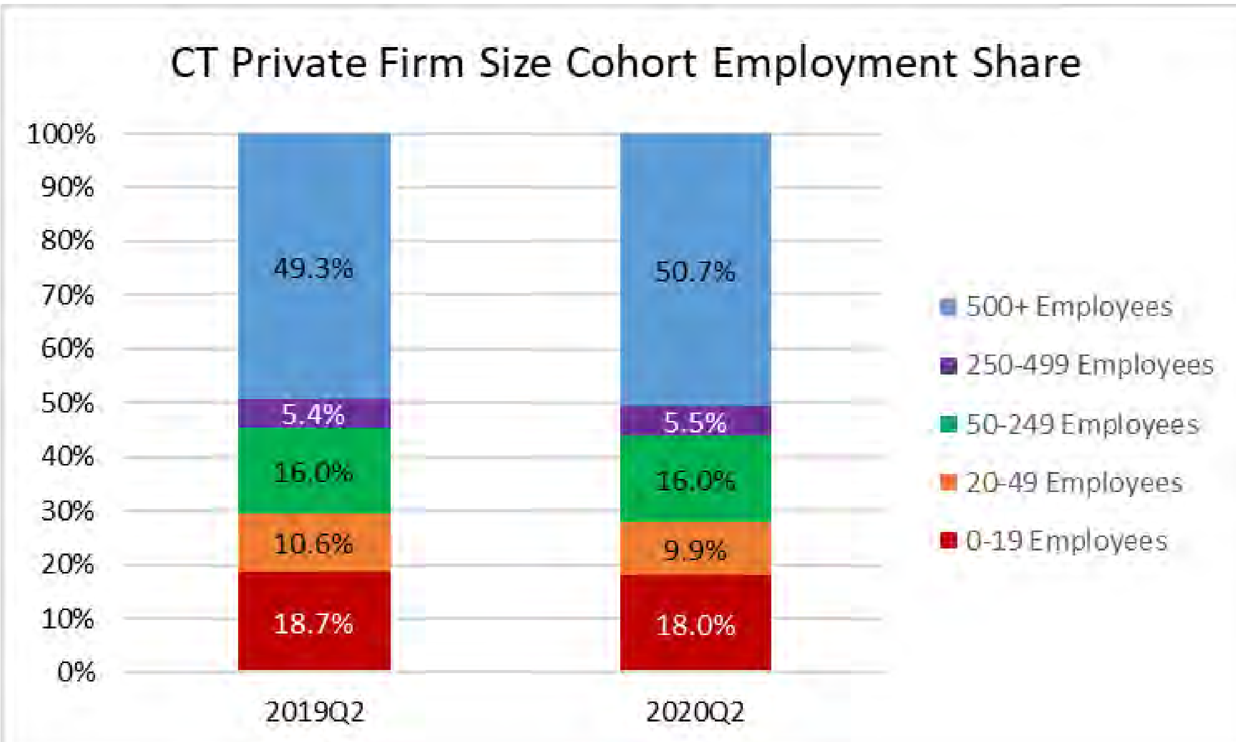
Hires and Separations

The U.S. Census Quarterly Workforce Indicators (QWI) provides a great deal of information about the dynamics of the labor market, including hiring and separations by industry and demographic characteristics such as gender, age, and race. The QWI also provides data regarding employment by firm size.

The Hires and Separations information will be of particular interest as we track the economic recovery from the pandemic. While the net change in jobs receives the most attention, hires and separations are many times greater than the net change each month. In 2019 (the year before the pandemic) hires averaged 241,273 per quarter in Connecticut and were over 293,000 in the third quarter of 2021. Hires are only half of the story; the other half is separations which jumped to over 326,000 in the first quarter of 2020 during the COVID shutdown and were over 230,000 during the second quarter of 2021 (latest available). The age profile of separations shows that the number of separations increased in the first quarter of 2020 compared to the first quarter of 2019 for all age groups (not surprising given that the COVID shutdown affected everyone). Consistent with other employment data, separations increased the most in the Accommodation & Food Services, Health Care & Social Assistance, and Retail Trade sectors.

Firm Size Employment Loss During the Beginning of Pandemic

Data on firm size show that larger firms in Connecticut lost proportionately less employment than smaller ones during the worst quarter of the pandemic (the 2nd quarter of 2020, a quarter that included the COVID shutdown). When comparing 2020Q2 to 2019Q2, overall private employment fell by 141,818, with firms with 250 or more employees showing proportionally smaller declines than firms with less than 50 workers. This aggregate comparison of quarterly counts isn't longitudinal, i.e., it doesn't track specific firm employment migration from one size cohort to another over time. What it shows is that smaller firms in 2020Q2 comprised a smaller share of overall employment than they did a year prior.



The following table details the employment shifts shown in the above chart. While employment fell for firms in all size categories, the percent losses were greater for smaller firms than larger ones. Firms with less than 50 employees lost 59,987 and those with 250 or more were down 58,332, which amount to percent losses of -14.4% and -7.5% respectively.

CT Private Firm Size Employment % Change: 19Q2-20Q2

	All Firm Sizes	0-19 Emp.	20-49 Emp.	50-249 Emp.	250-499 Emp.	500+ Emp.
2019 Q2	1,425,905	266,900	150,493	228,582	77,182	702,748
2020 Q2	1,284,087	230,847	126,559	205,083	70,232	651,366
YtY # Change	-141,818	-36,053	-23,934	-23,499	-6,950	-51,382
YtY % Change	-9.9%	-13.5%	-15.9%	-10.3%	-9.0%	-7.3%

Connecticut's losses for the firms with fewer than 50 employees were lower than neighboring states. For firms with more than 500 employees, Connecticut had larger percent declines. In Connecticut, firms with 50-249 employees lost proportionately more jobs than Rhode Island, equivalent losses to Massachusetts, and fewer than New York.

Private Firm Size Employment % Change: CT and Adjacent States 19Q2-20Q2

Area	All Firm Sizes	0-19 Emp.	20-49 Emp.	50-249 Emp.	250-499 Emp.	500+ Emp.
Connecticut	-9.9%	-13.5%	-15.9%	-10.3%	-9.0%	-7.3%
Massachusetts	-8.2%	-14.3%	-17.9%	-10.3%	-7.3%	-3.6%
New York	-10.4%	-20.9%	-20.1%	-15.7%	-6.7%	-3.8%
Rhode Island	-10.0%	-15.9%	-17.7%	-7.7%	-5.7%	-6.7%

Overall Connecticut Industry Trends Illustrated in QWI

As previously noted, during the second quarter of 2020 — the quarter of the COVID shutdown — total private employment was down 141,817 or -9.9% from the second quarter of 2019. Just over half (50.1%) of that decline occurred in three industries, Accommodation & Food Services (-38,471 or 27.1% of total decline), Other Services (-18,828 or 13.3% share), and Retail Trade (-13,799 or 9.7% share). All but one sector experienced declines during the 2019Q2-2020Q2 period. Transportation & Warehousing was up as a result of a shift to online shopping caused by the pandemic and longer-term growth trends. Transportation & Warehousing has been growing in the state since 2010 and was up 12.4% over the year ending 2020Q1.

Industry Employment Change by Size Cohort

The following table shows 2020Q2 employment by industry by firm size and percent change from 2019Q2. For the total economy, firms with 20-49 employees (-15.9%) and 0-19 employees (-13.5%) had the largest declines. For the larger firms, the declines were proportionately smaller the larger the firm size. Firms with 500 or more employees had a 7.3 percent decline.

2020 Q2 Industry Employment by Firm Size Cohort and Percent Change (2019Q to 2020Q2)

	industry	All Firm Sizes		0-19 Employees		20-49 Employees		50-249 Employees		250-499 Employees		500+ Employees	
0	**All NAICS Sectors**	**1,284,088**	**-9.9%**	**230,847**	**-13.5%**	**126,559**	**-15.9%**	**205,083**	**-10.3%**	**70,232**	**-9.0%**	**651,366**	**-7.3%**
11	Agriculture	4,125	-0.9%	1,458	-7.1%	697	-19.5%	965	19.0%	330	8.9%	675	10.1%
21	Mining, Quarrying, & Extraction	460	-1.9%	251	9.1%	S	S	23	-8.0%	S	S	169	-12.0%
22	Utilities	3,873	-23.4%	140	-9.1%	88	18.9%	119	-51.4%	203	0.0%	3,323	-24.1%
23	Construction	53,592	-4.7%	24,050	-4.7%	10,139	-9.6%	10,978	1.5%	1,405	-8.8%	7,020	-5.4%
31	Manufacturing	158,296	-3.0%	14,945	-9.4%	15,668	-7.3%	32,495	-4.3%	10,310	-2.7%	84,879	-0.4%
42	Wholesale Trade	56,449	-4.3%	9,896	-7.0%	6,732	-3.7%	10,646	-7.8%	5,016	-0.8%	24,159	-2.4%
44	Retail Trade	160,338	-7.9%	24,323	-13.0%	11,712	-13.7%	18,992	-4.4%	1,978	-38.3%	103,333	-5.7%
48	Transportation & Warehousing	49,281	0.5%	3,840	-16.2%	2,493	-14.9%	4,088	-17.2%	1,436	-58.0%	37,425	12.9%
51	Information	30,536	-7.0%	2,879	1.1%	1,759	-13.1%	3,181	0.0%	858	-3.4%	21,859	-8.5%
52	Finance & Insurance	99,602	-1.6%	9,602	-4.2%	3,786	1.6%	8,803	-1.9%	3,952	-10.8%	73,459	-0.8%
53	Real Estate & Rental & Leasing	18,774	-1.7%	6,043	-6.1%	2,061	-7.2%	3,105	6.6%	955	27.2%	6,610	-2.3%
54	Prof., Sci., & Tech. Services	92,222	-2.2%	23,350	-6.4%	9,873	-5.0%	13,315	3.6%	4,308	-4.5%	41,375	-0.4%
55	Management	31,873	-0.8%	731	-0.8%	777	23.3%	2,640	-10.4%	2,473	-7.0%	25,252	0.4%
56	Administrative & Support	77,459	-11.1%	14,266	-4.7%	6,099	-8.9%	9,811	-13.7%	5,649	-1.3%	41,633	-13.9%
61	Educational Services	S	S	S	S	S	S	S	S	S	S	S	S
62*	Health Care & Social Assistance*	255,419	-2.6%	35,828	12.6%	19,486	-9.5%	51,069	-9.9%	21,802	-6.4%	127,235	-1.4%
71	Arts, Entertainment, & Recreation	16,056	-38.2%	4,490	-27.2%	3,442	-40.3%	4,172	-38.5%	650	-41.7%	3,302	-46.4%
72	Accommodation & Food Services	89,365	-30.1%	24,316	-31.6%	22,104	-33.2%	15,370	-30.6%	2,542	-40.0%	25,034	-23.7%
81*	Other Services*	46,826	-28.7%	26,505	-35.7%	6,439	-20.8%	5,992	-25.5%	1,713	60.2%	6,177	-14.4%

*** Industry total impacted by employer reclassification**

S= Suppressed

Source: CT DOL Analysis of QWI

Over 10%	10% to 0%	0% to -10%	-10% to -20%	-20% 10 -30%	-30% to -40%	-40% or lower

Most industries were down less than 10% across all firm sizes over the 2019Q2-2020Q2 period. The three largest industries, Health Care & Social Assistance, Retail Trade, and Manufacturing were respectively down 2.6%, 7.9%, and 3.0%. Among these three industries, most firm size cohorts had between 0% and 10% declines, with four exceptions. Health & Care and Social assistance saw a 12.6% increase in firms with fewer than 20 employees, Retail Trade had three cohorts with over 10% losses, the largest being those with 250-499 employees, down 38.3%. For manufacturing, the larger the firm size the smaller the decline. Small manufacturers employing 19 or fewer workers fell 9.4% while the largest employers were down 0.4%.

Industries with the largest percent declines across all firm sizes were Arts, Entertainment & Recreation (-38.2%), Accommodation & Food Services (-30.1%) and Other Services (-28.7%).

Larger employers in Arts, Entertainment & Recreation had the largest percent losses, though every firm size experienced declines of 27.2% or more. Firms with 500 or more and 250-499 employees had the largest losses, down 46.4% and 41.7% respectively. That sector was down 9,937 from 2019Q2 to 2020Q2 and the employment share of firms with 50 workers or less increased from 45.9% to 49.4% as the larger firms had larger percent losses.

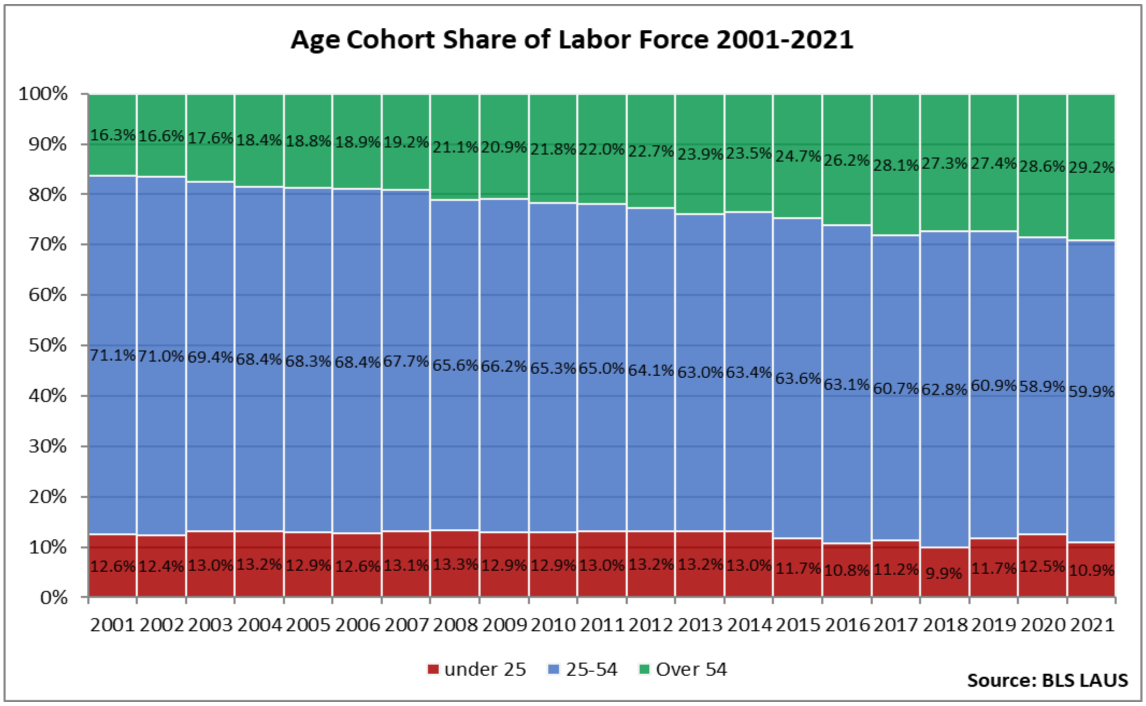
Accommodation & Food Services was the fourth largest private industry in 2019Q2, employing 127,836 workers, with 53.7% of employment in firms of 49 employees or fewer. In 2020Q2, it was the sixth largest after falling 38,471 to 89,365, the largest employment drop of any industry. Employment losses for firms with 249 or fewer employees were within a few percentage points of the 30.1% loss for the industry overall. Firms with 250-499 employees fell by 40.0% and those with 500 or more had a much smaller drop, down 23.7%. This suggests that larger employers within this industry were able to mitigate the COVID recession better than smaller employers.

Labor Force Participation

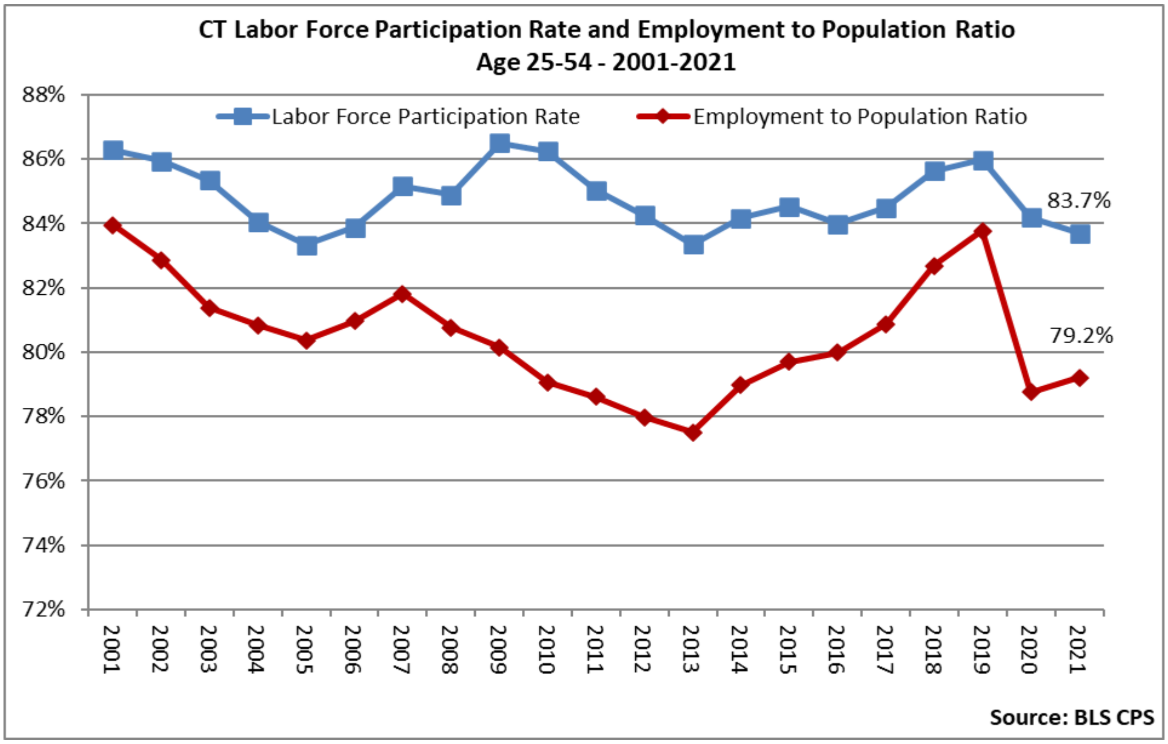
The beginning of 2022 has been a strong period of growth for the Connecticut labor market. After languishing at below 64% through much of 2021, the state's labor force participation rate (LFPR) broke past 64% during the first half of the year. This was driving by a large increase in the underlying employment population ratio (EPR), which grew from below 60% in 2021 to nearly 62%.

Labor Force by Age

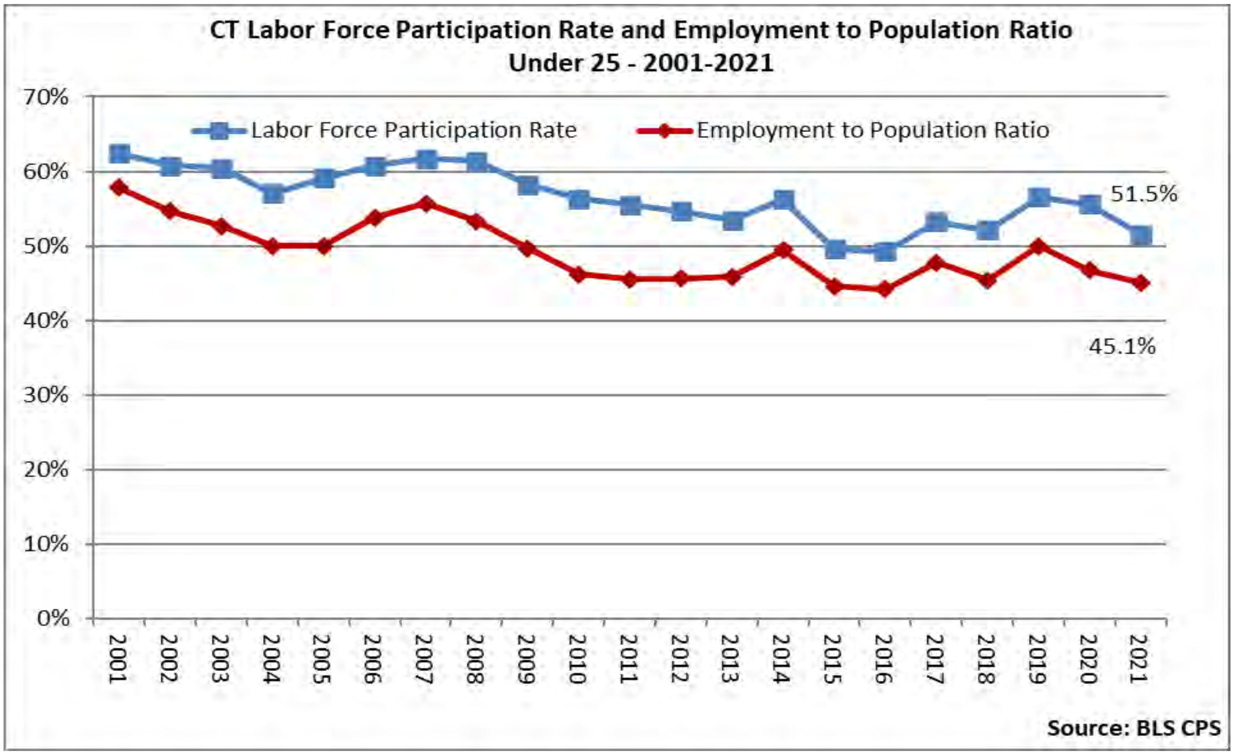
State-level annual average labor force data by age is available from 2001 through 2021. Over the past 20 years, the portion of the labor force over age 54 has grown from 16.3% of the labor force in 2001, to 22.0% in 2011, and 29.2% by 2021. The under 25 group had a steady labor market share around 13% from 2001-2014. It slid to 9.9% by 2018, saw some increase in 2019 and 2020, and slid to 10.9% in 2021.



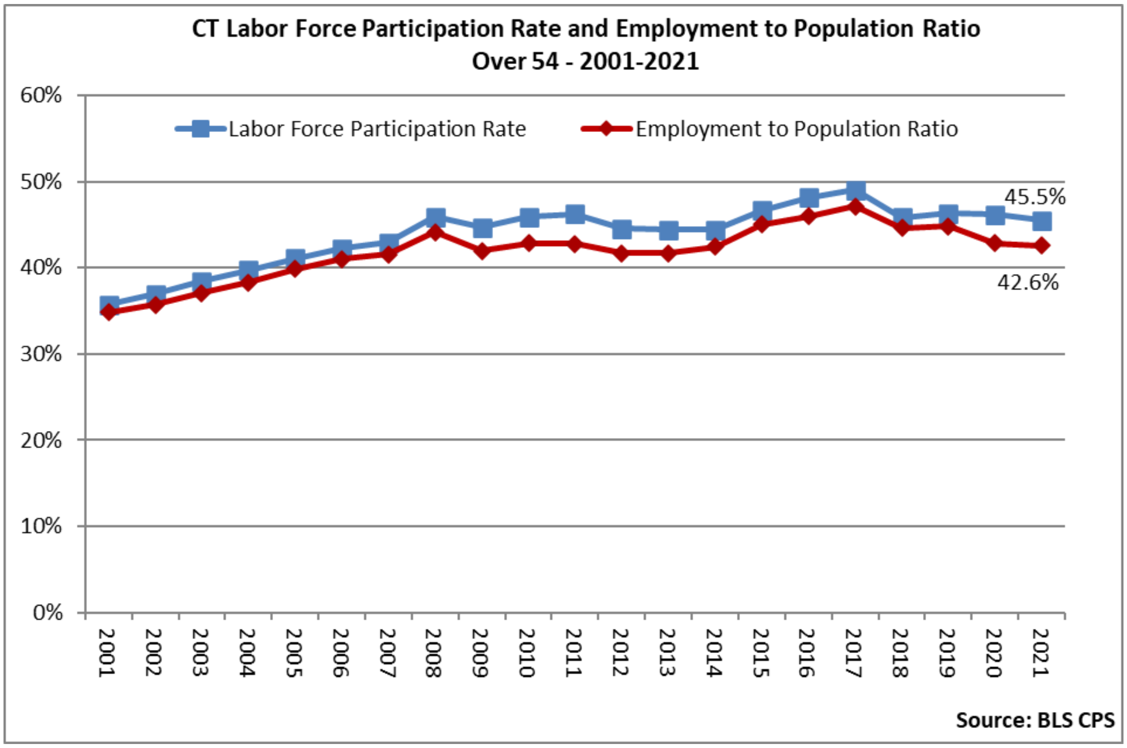
The graph on the next page shows annual average Labor Force Participation Rate (LFPR) and Employment/Population Ratio (EPR) for prime age workers in Connecticut from 2001 to 2021. Since reaching a 2013 trough of 83.4 percent, overall prime age LFPR has remained between that level and 86 percent (2019). In 2021, it fell to 83.7%, just 0.3 percentage points above 2013 levels. The graph also illustrates the stark drop in employment to population ratio, which fell from 83.8% in 2019 to 78.8% a year later. In 2021 EPR is up to 79.2%, which is comparable to rates had in 2014 and 2015.



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 2007 recession, the cohort gradually fell from a 2007 peak of 61.7% to a low of 49.3% in 2016. Since that series low, the under 25 LFPR had trended upward, rising to a 2019 level of 56.6%. In 2020 and 2021 overall LFPR slid to 51.5%, and the employment to population ratio fell from 50.0% in 2019 to 45.1% in 2021.



For the over 54 cohort, LFPR reached a high of 49% in 2017 and fell to the mid-40s during the four subsequent years through 2021. It remained relatively flat in 2020 and 2021 as the employment to population ratio fell from 44.8% in 2019 to 42.6%. From 2020-2021, The over 54 population grew by 18,000 and the labor force fell remained unchanged at 535,000. This over 54 population growth was due to the net effect of the 55-64 aged population falling by -22,000 and the over 64 population increasing by 40,000. Though the over 54 labor force was unchanged at 535,000 from 20-21, but there was some shift between the younger component 55-64 cohort (-12,0000) and the 65 and over cohort (+12,000).



Changing Demographic Composition of Connecticut's Labor Force

The largest shift in Connecticut's labor force during the past 10 years has been the growth of the Hispanic labor force, which rose from 10.2% of the total labor force in 2010 to 16.5% in 2021. During this time, White labor force share fell from 84.8% in 2010, to 77.6% in 2020, and grew to 79.0% in 2021 as its labor force decreased at a slower rate than the total labor force. The Black/African American labor force share increased from 9.5% to 12.5% in 2020 and was down slightly to 12.2% of the population in 2021. 2021 data for the Asian race/ethnic group isn't available, but from 2010 to 2020 it increased from 4.4% to 7.7%.

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

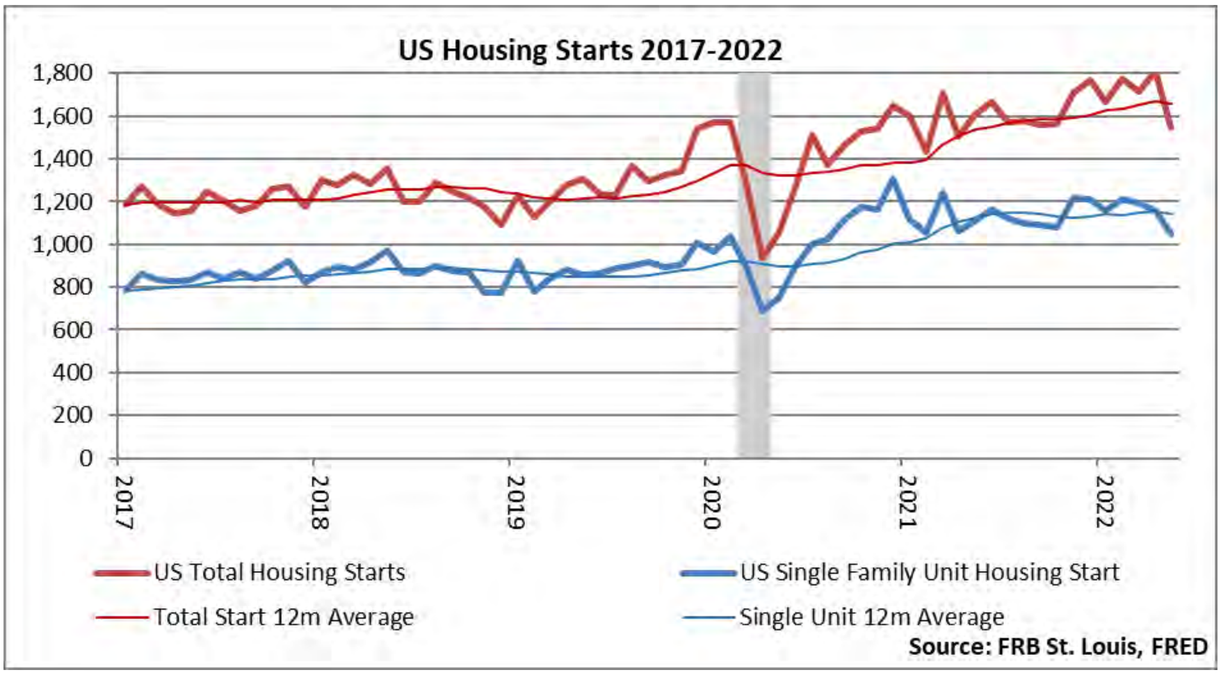
Race/Ethnic Group	2000		2010		2019		2020		2021	
	#	%	#	%	#	%	#	%	#	%
Total	1,746	100.0%	1,892	100.0%	1,914	100.0%	1,868	100.0%	1,834	100.0%
White	1,493	85.5%	1,605	84.8%	1,549	80.9%	1,451	77.7%	1,448	79.0%
Asian	n/d	n/d	83	4.4%	102	5.3%	144	7.7%	n/d	n/d
Black or African American	201	11.5%	180	9.5%	216	11.3%	234	12.5%	224	12.2%
Hispanic or Latino ethnicity	n/d	n/d	193	10.2%	285	14.9%	279	14.9%	303	16.5%

n/d = no data

Source: BLS, Geographic Profile

Housing

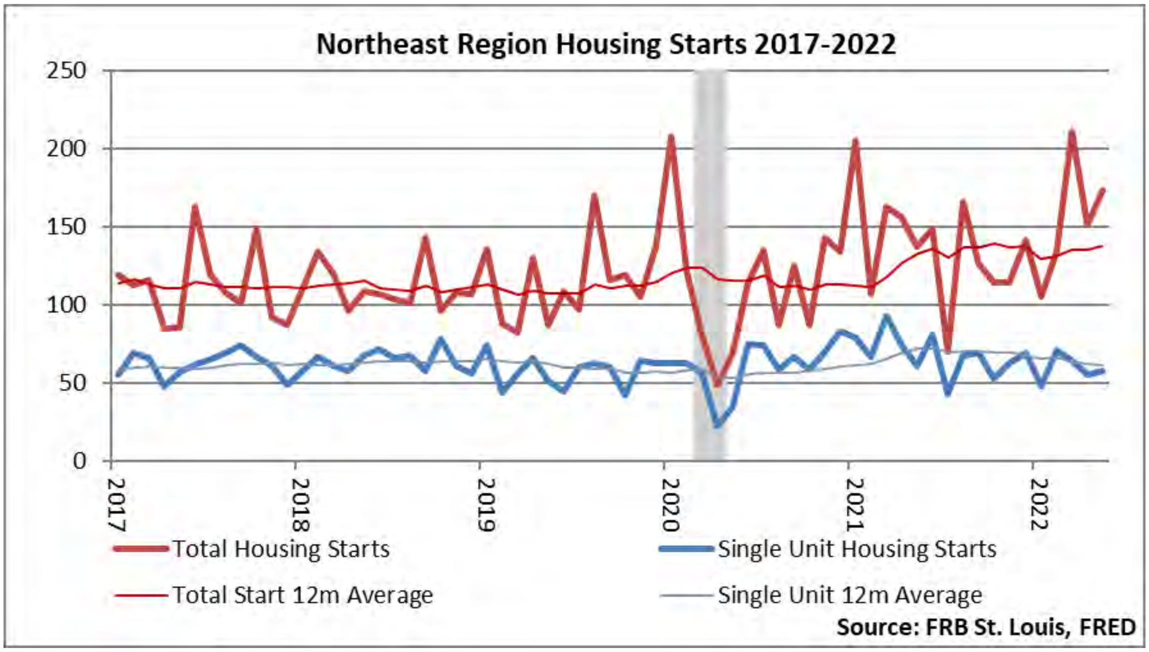
From early 2020 to early 2022, the U.S. housing market experienced strong growth. Buyers leaving cities added to demand that was already bolstered by people seeking larger homes as remote work and schooling became pandemic norms. At the U.S. level, housing starts took a sharp and brief dip during the recession and quickly recovered, growing steadily through early 2022. Total starts shown in the graph below have taken a sharp dip in recent months amid interest rate increases. Recent statements from the Federal Reserve mean that continued rate increases will be a drag on housing demand as they will impact how much housing consumers can afford.[6] Despite the recent drop, total housing starts in 2022 are at levels not seen since the second half of 2006.



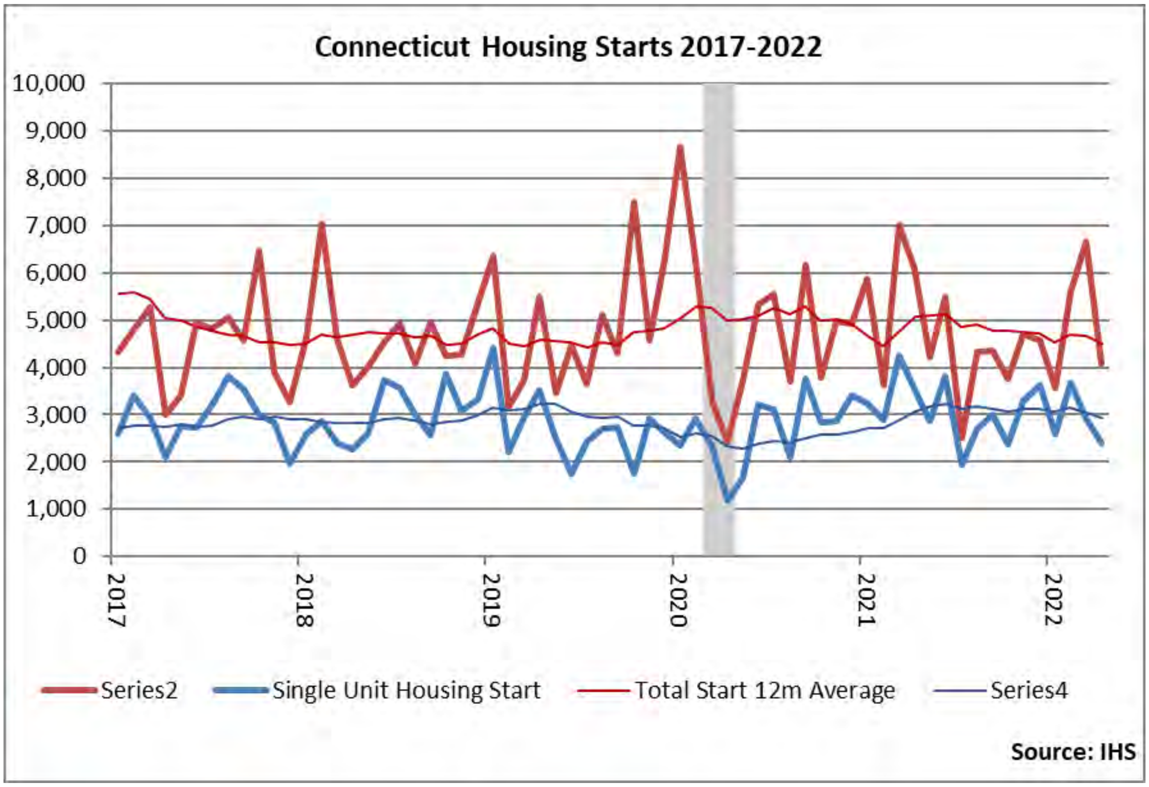
Equivalent data for the Northeast shows that total starts in the region fell from a January 2020 peak of 209,000 starts to 49,000 by April 2020 with single unit starts down 67% from 63,000 to 23,000. Throughout much of 2021, total and single housing starts for the region grew at a slower rate than the U.S., indicating that other census regions were experiencing stronger growth. By March 2022, total Northeast starts reached 211,000, exceeding the pre-COVID peak. The 12-month moving average for total starts shows more growth in total starts than single unit starts in the past year, which hovered closer to pre-COVID levels. This slower Northeast housing start growth relative to the U.S. is likely

[6] Timiraos, Nick & Fairless, Tom. "Powell Says Fed Must Accept Higher Recession Risk to Combat Inflation," *Wall Street Journal*. June 29, 2022, https://www.wsj.com/articles/powell-says-pandemic-could-alter-inflation-dynamics-11656509259

influenced by its slower population growth and scarcity of developable land in much of the region compared to less-densely populated parts of the country.



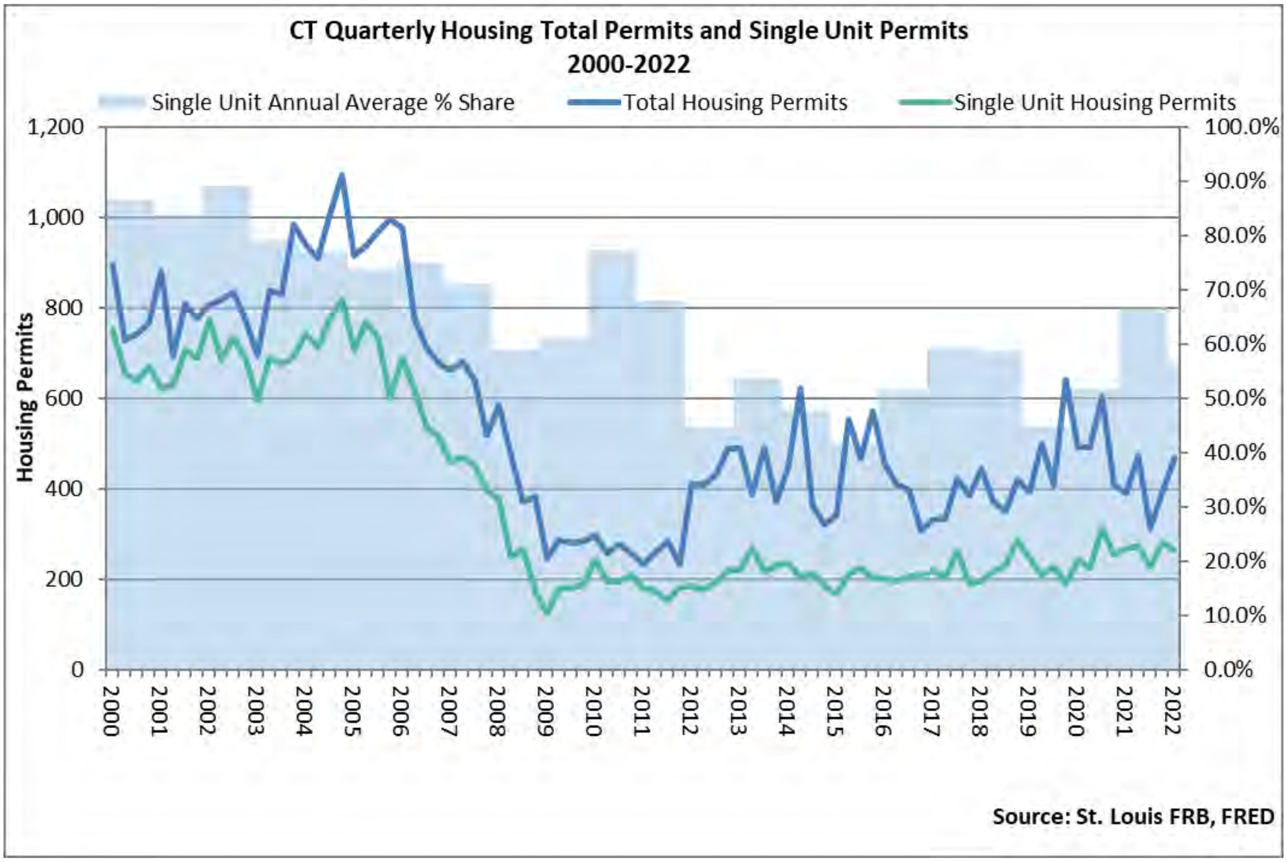
Available housing starts data from IHS Markit show that Connecticut experienced shifts similar to the Northeast region in some ways and different in others. Total starts fell from January to April 2020 by 72% and single unit starts fell by 48%, corresponding Northeast Regional data from the St. Louis FED fell by 75.8% and 63.5% respectively. After rebounding by mid-2020, Connecticut total housing starts didn't share in the 12-month average growth experienced by the Northeast and U.S., it began sliding in mid-2021 to levels below those of early 2020. Single Unit Housing starts had a differing trajectory. The single unit 12 month moving average began to fall in mid-2019 and gradually increased through mid-2021 to levels near 2019 highs. From mid-2021 through April 2022 its 12-month average has held steady at around 3,000 starts. During this period the moving average for total starts in Connecticut decreased.

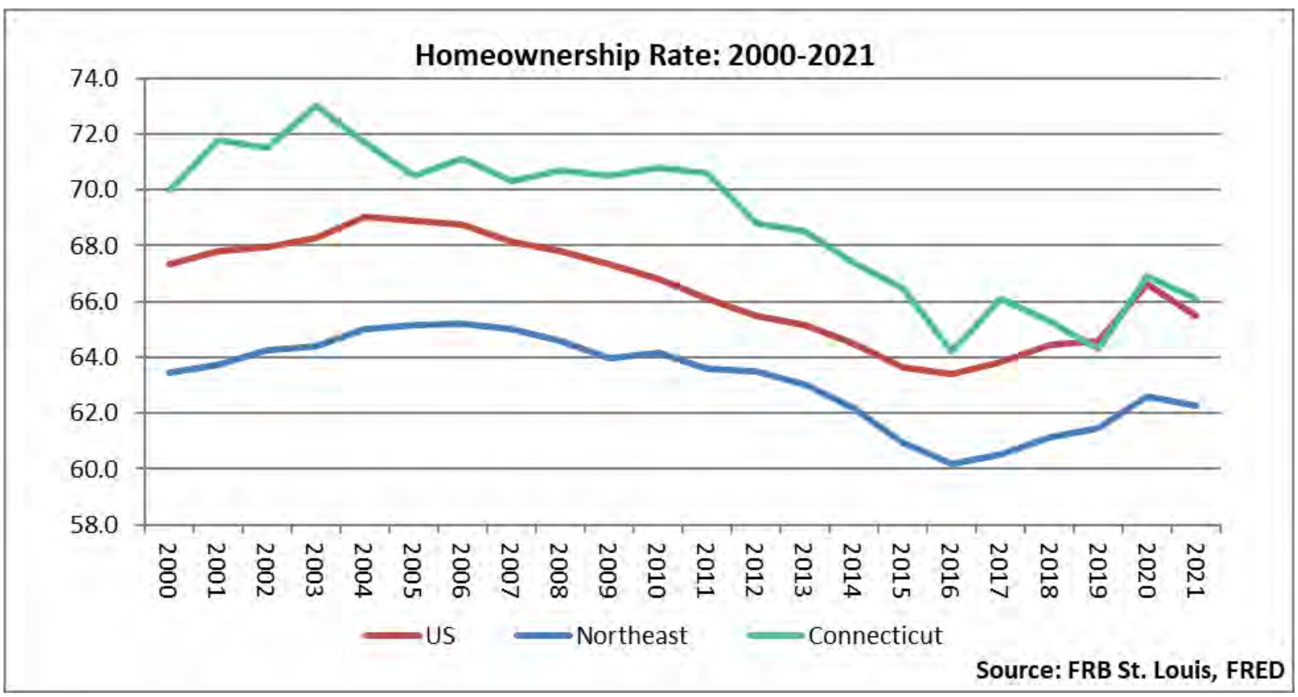


A breakout of single and total housing permits in Connecticut is shown in the graph on the next page. Prior to the Great Recession of 2007-2009, Connecticut housing permits were routinely above 3,000 per year and with single housing units were over 74% or more of total permits on any year from 2000-2006. From 2007 to 2011, total permits slid to an annual low of 1,007 with 68% for single housing units. In the years leading up to the COVID recession, single unit permits remained below 300 units per quarter as total housing permits grew. During this time many Connecticut cities such as Hartford and New Haven saw an increase in downtown apartment unit developments and developers in surrounding suburban towns began to build multi-unit condos in predominately single-unit neighborhoods.[7]

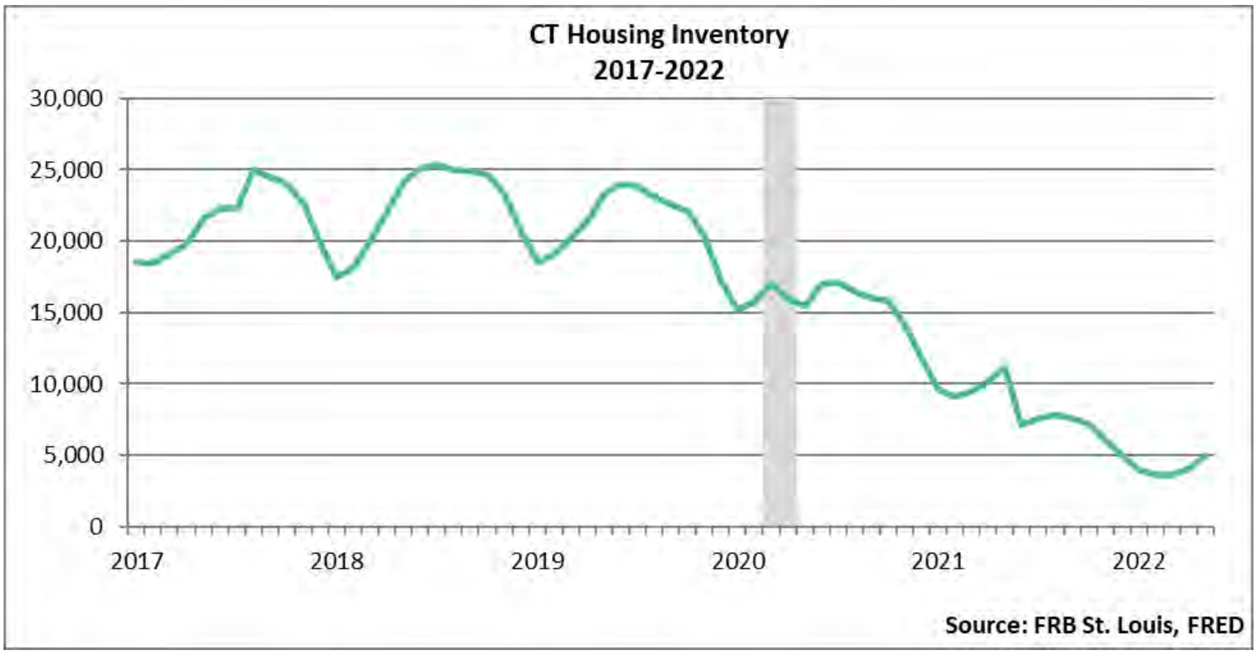
In 2020 and 2021 as COVID shifted preferences, the share of single unit housing permits increased as the number multi-unit permits dwindled and single unit permits remained stable. During the first quarter of 2022, there were 265 single housing unit permits, down 5% from 2021Q4. Total permits are up 19%, from 292 units to 467.

[7] Puffer, Michael. Red-Hot Hartford, New Haven multifamily sectors evolve along different paths. Hartford Business Journal. July 4th 2022. https://www.hartfordbusiness.com/article/red-hot-hartford-new-haven-multifamily-sectors-evolve-along-different-paths

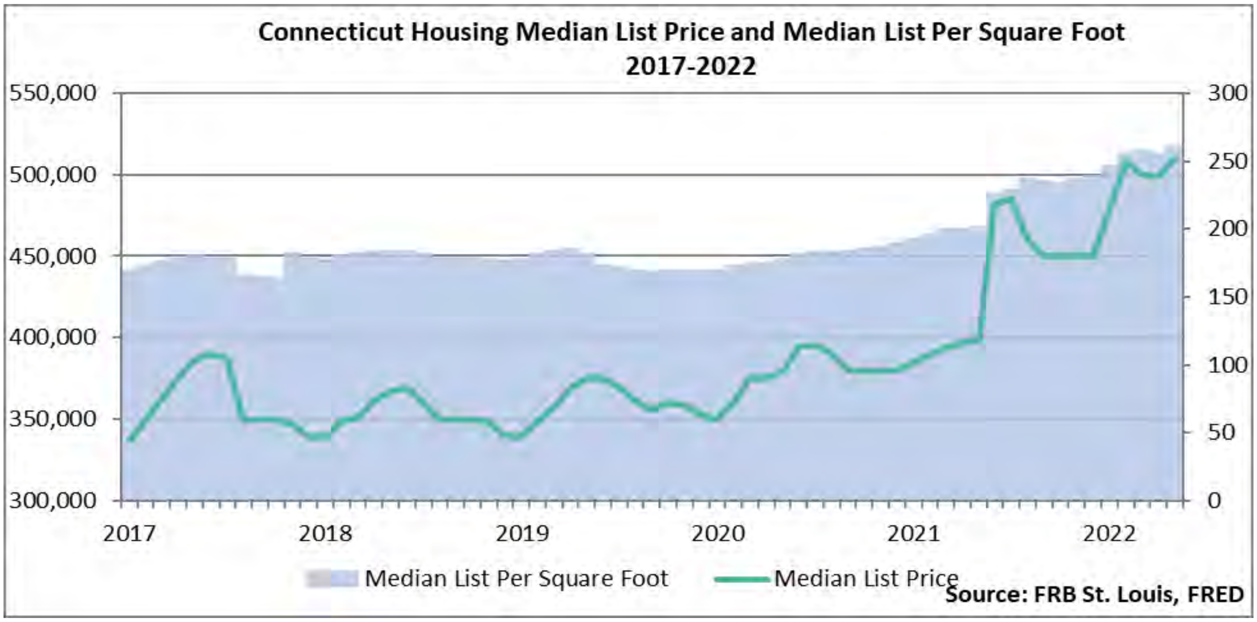

CT Quarterly Housing Total Permits and Single Unit Permits
2000-2022
Single Unit Annual Average % Share
Total Housing Permits
Single Unit Housing Permits
Housing Permits
1,200
1,000
800
600
400
200
0
100.0%
90.0%
80.0%
70.0%
60.0%
50.0%
40.0%
30.0%
20.0%
10.0%
0.0%
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
Source: St. Louis FRB, FRED


Homeownership Rate: 2000-2021
74.0
72.0
70.0
68.0
66.0
64.0
62.0
60.0
58.0
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
US
Northeast
Connecticut
Source: FRB St. Louis, FRED

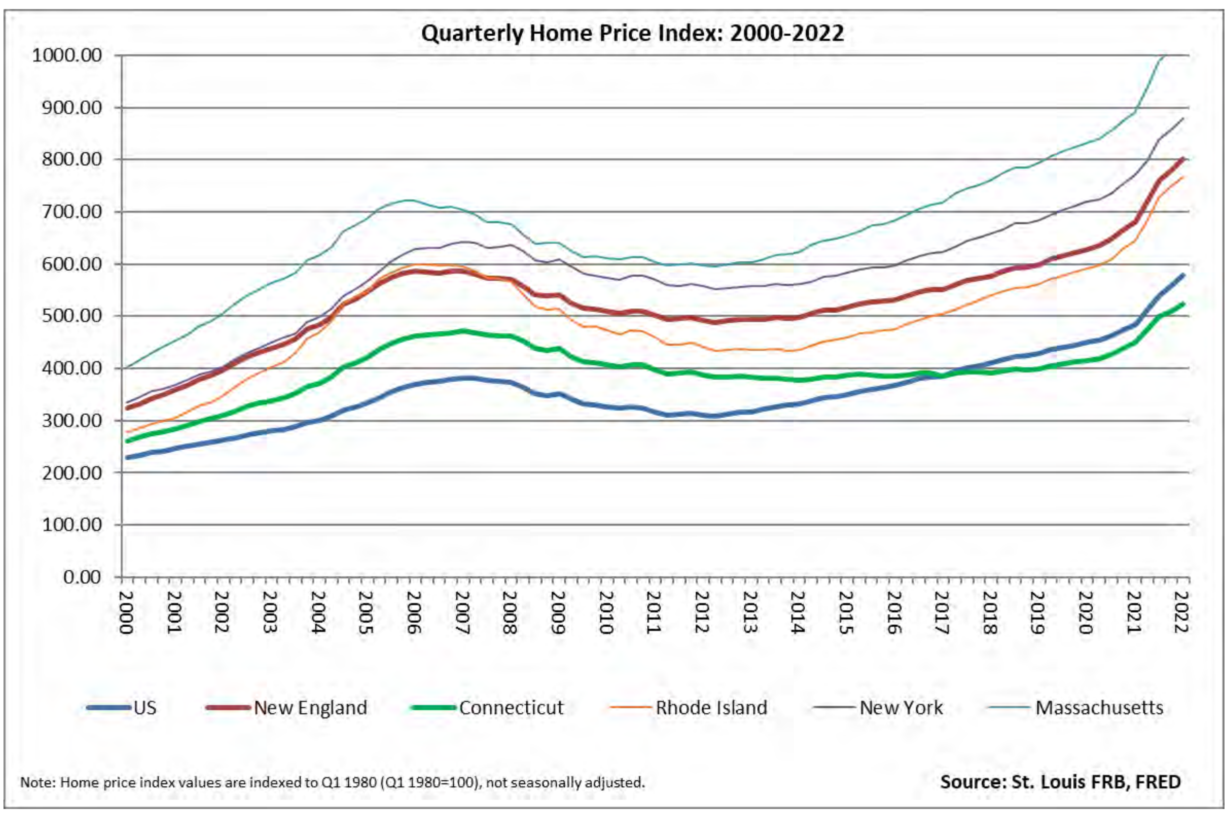
in recent years, the home ownership rate for the Northeast and U.S. had been on an increase. The northeast was up 2.4 percentage points to 62.6% over the 2016-2020 period and the U.S. had gains of 3.2 percentage points to 66.6%. The U.S. gains converged on the Connecticut homeownership rate which had been consistently above the larger regions from 2000-2019. From 2020-2021, all three geographic areas had homeownership rate decreases. Connecticut's homeownership rate from 2019-2021 was 64.3, 66.9, and 66.1 percent respectively.



Connecticut's housing inventory steadily declined as its homeownership rate increased. Prior to the COVID recession it exhibited fairly consistent seasonality, ranging between 17,000-26,000 per month from 2017-2019. Housing inventory fell to 15,182 in January 2020 and continued to slide into 2022 to a five year low of 3,600 in February 2022. Though up to 4,978 as of May 2022, the current housing inventory is much lower than the month of May in 2017, 2018, and 2019, when it was between 4-5 times above current levels. This extremely tight real estate market will likely help influence rental rate increases in the short term as fewer buyers are able to purchase homes. The lack of housing inventory coincides with the 19% increase in housing permits in 2022Q1.



An unsurprising consequence of the lack of housing inventory is the runup in both median list price and cost per square foot for housing in the state. From 2021-2022 the median list price in Connecticut rose from $399k in May 2021 to $510k in May 2022. This 28% increase in price rose slightly less than the price per square foot, which increased by 29% from $202 to $260 per square foot over the year.



Connecticut's short-term home price increase in 2020 and 2021 amid a housing inventory shortage can also be seen in the quarterly home price index graph shown on the previous page. Therein it illustrates how Connecticut prices had been comparatively flat from 2010 onward relative to neighboring states, New England, and the United States overall. Beginning in 2017, Connecticut's indexed growth closely matched the slope for the United States overall. The neighboring New England States of Massachusetts and Rhode Island are much closer to the higher indexed value for New England, with Mass. a full 25% above that region as of 2022Q1.

The trends highlighted in this broad housing market overview echo expectations for the global housing market. As home prices rose and inventory declined, housing affordability in the U.S. and many countries fell. U.S. home sales are down 40% from their pandemic peak and recent Goldman Sachs estimates forecast U.S. prices will slide 3% through 2024 due in part to interest rate increases.[8] Their research also suggests that the slowdown in home prices isn't exclusive to the U.S., declines have already occurred in many developed countries including Australia, Canada, Sweden, and New Zealand.

---

[8] Goldman Sachs. The Global Housing Market is Starting to Wobble as Central Banks Hike Rates. June 30th, 2022. https://www.goldmansachs.com/insights/pages/the-global-housing-market-is-starting-to-wobble-as-central-banks-hike-rates.html

Connecticut Projections

Through 2023

Connecticut Short-Term Projections

Each year, the Office of Research at the Connecticut Department of Labor produces short-term employment projections by industry and occupation. The current round spans the second quarter of 2021 to the second quarter of 2023. This base quarter coincides with the start of the spring 2021 vaccine rollout and the easing of many COVID-mitigation restrictions. Through 2023Q2, we project overall employment in Connecticut to increase by 6.9% from 1,722,162 to 1,841,001, as is shown in the table below. Note that this topline figure includes projected self-employment and unpaid family workers (UFW). The Goods Producing sector is projected to grow by 7.9% through 2023Q2, with most of that growth occurring in Manufacturing, its largest component industry. The Service Providing sector is projected to grow by 6.6% over two years. This sector represents 86.5% of industry employment in the state. This projected growth suggests that the state will continue its current trend of monthly job growth and will approach pre-pandemic levels of industry employment by mid-2023.

Industry Projections

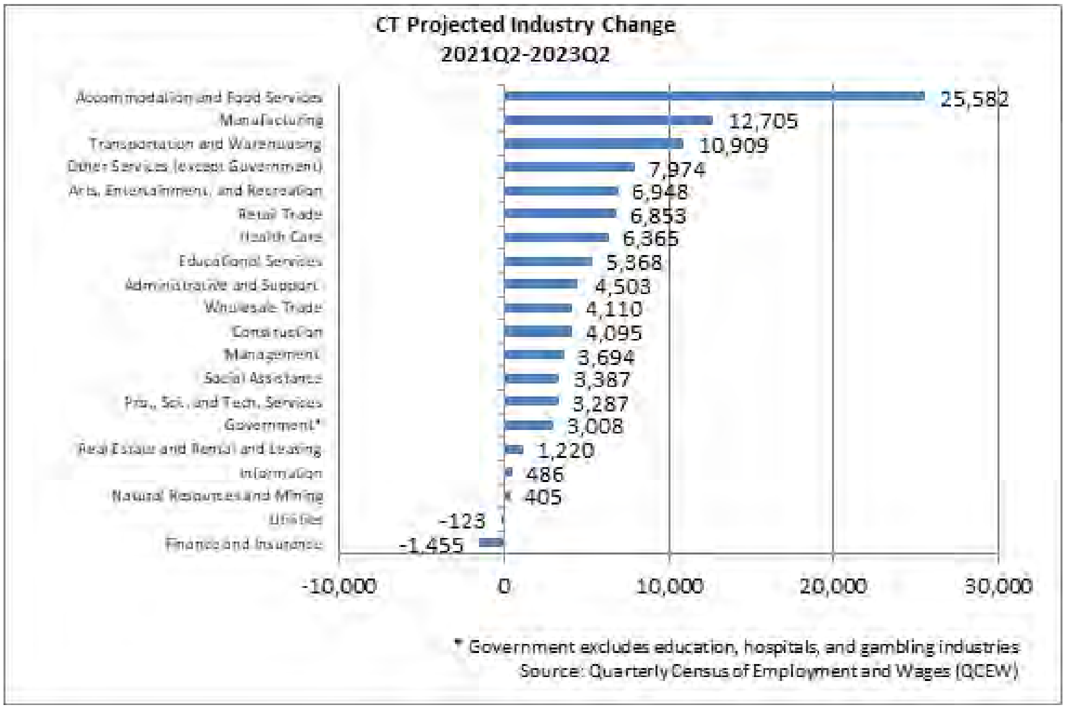
Industry	2021 Q2 Base	2023 Q2 Proj.	Emp Change	% Change
Total All Industries	1,722,162	1,841,001	118,839	6.9%
Self Employed and Unpaid Family Workers, All Jobs	110,677	120,195	9,518	8.6%
Goods Producing	218,045	235,250	17,205	7.9%
Natural Resources and Mining	5,643	6,048	405	7.2%
Construction	59,924	64,019	4,095	6.8%
Manufacturing	152,478	165,183	12,705	8.3%
Services Providing	1,393,440	1,485,556	92,116	6.6%
Wholesale Trade	56,882	60,992	4,110	7.2%
Retail Trade	166,112	172,965	6,853	4.1%
Transportation and Warehousing	59,703	70,612	10,909	18.3%
Utilities	5,005	4,882	-123	-2.5%
Information	29,583	30,069	486	1.6%
Finance and Insurance	99,567	98,112	-1,455	-1.5%
Real Estate and Rental and Leasing	18,397	19,617	1,220	6.6%
Professional, Scientific, and Technical Services	94,872	98,159	3,287	3.5%
Management of Companies and Enterprises	30,340	34,034	3,694	12.2%
Administrative and Support and Waste Management	88,402	92,905	4,503	5.1%
Educational Services	175,048	180,416	5,368	3.1%
Health Care	217,159	223,524	6,365	2.9%
Social Assistance	68,077	71,464	3,387	5.0%
Arts, Entertainment, and Recreation	23,493	30,441	6,948	29.6%
Accommodation and Food Services	118,238	143,820	25,582	21.6%
Other Services (except Government)	62,337	70,311	7,974	12.8%
Government*	80,225	83,233	3,008	3.7%

*Government excludes education, hospitals, and gambling industries

Projections by Industry

The two major sectors that show the largest projected employment percent increases are those that were heavily impacted by the COVID lockdown. Arts, Entertainment, & Recreation is projected to grow by 29.6% and Accommodation & Food Services by 21.6%. These two sectors had the largest 2020 employment decreases during the second quarter of that year and are experiencing strong rebounds that demonstrate the underlying resilience of the Connecticut economy. The third largest sector growth is expected in Transportation & Warehousing, which isn't recovering from a trough but is continuing a pre-pandemic growth trend that has accelerated as people adapted to the lockdowns and ordered more online. Transportation & Warehousing has experienced increasing annual growth from 2016 through 2020, increasing from 2% in 2016, 3% in 2017, 6% in both 2018 and 2019, and 7% in 2020.

Nearly every industry is projected to add jobs during the projections period. In addition to those mentioned above, Manufacturing is projected to grow by 8.3% (+12,705). Accommodations & Food Services, Transportation & Warehousing, and Manufacturing amounted to a combined 19% of base quarter employment and represent 41% of projected growth. This pattern is heavily influenced by the short-term impact of COVID on the economy. The large growth in Accommodation & Food Services and Transportation & Warehousing follow aforementioned trends while the Manufacturing projection signals that it is expected to regain its pre-COVID growth trend that spanned from mid-2016 through the first months of 2020. Current Employment Statistics data show Manufacturing employment gains over the last 6 months with May 2022 employment of 159,000, just 2,000 jobs below pre-recession February 2020 levels.



The two sectors expected to lose jobs through 2023 are Utilities with a slight 2.5% decline and Finance & Insurance, projected to decrease by 1.5%. The Finance & Insurance declines represent a continuation of a longer-term trend. Its employment peaked in 2007 at 123,453 jobs and was 101,756 in 2019. It fell to just under 100,000 by mid-2020 and was 99,567 during the 2021Q2 projection base quarter.

Projections by Occupation

As noted above, overall employment including self-employed and UFW is projected to grow by 118,839 or +6.9% from 2021Q2 through 2023Q2. In addition to the industry breakdowns discussed in the previous section, projections are also produced for the 22 major occupational groups and over 700 specific occupations. Every occupational group is projected to add jobs during the 2-year projections period, with growth ranging from 3.2% for Legal Occupations to 18.0% for Food Preparation & Serving Related. The five occupational groups with the largest gains are Food Preparation & Serving Related (+21,732 or +18.0%), Transportation & Material Moving (+14,166 or +11.5%), Office & Administrative Support (+8,692 or +3.9%), Management (+8,325 or +6.6%) and Personal Care & Service (+7,817 or +13.3%). These five major occupational groups represent a combined 38% of base quarter employment and 51% of projected growth.

Occupational Projections

SOC	Occupational Group	2021 Q2 Base	2023 Q2 Proj.	Emp Change	% Change
00-0000	**Total, All Occupations**	1,722,162	1,841,001	118,839	6.9%
11-0000	Management	127,059	135,384	8,325	6.6%
13-0000	Business and Financial Operations	100,143	105,298	5,155	5.2%
15-0000	Computer and Mathematical	52,097	55,153	3,056	5.9%
17-0000	Architecture and Engineering	35,389	37,932	2,543	7.2%
19-0000	Life, Physical, and Social Science	12,632	13,392	760	6.0%
21-0000	Community and Social Service	37,804	39,452	1,648	4.4%
23-0000	Legal	16,845	17,381	536	3.2%
25-0000	Education, Training, and Library	122,907	128,084	5,177	4.2%
27-0000	Arts, Design, Entertainment, Sports, and Media	27,828	30,509	2,681	9.6%
29-0000	Healthcare Practitioners and Technical	107,417	111,845	4,428	4.1%
31-0000	Healthcare Support	87,940	92,036	4,096	4.7%
33-0000	Protective Service	32,458	34,075	1,617	5.0%
35-0000	Food Preparation and Serving Related	120,836	142,568	21,732	18.0%
37-0000	Building and Grounds Cleaning and Maintenance	70,447	75,149	4,702	6.7%
39-0000	Personal Care and Service	58,854	66,671	7,817	13.3%
41-0000	Sales and Related	156,032	163,034	7,002	4.5%
43-0000	Office and Administrative Support	225,428	234,120	8,692	3.9%
45-0000	Farming, Fishing, and Forestry	4,296	4,524	228	5.3%
47-0000	Construction and Extraction	61,889	66,635	4,746	7.7%
49-0000	Installation, Maintenance, and Repair	53,105	56,584	3,479	6.6%
51-0000	Production	87,424	93,677	6,253	7.2%
53-0000	Transportation and Material Moving	123,332	137,498	14,166	11.5%

Other large occupational groups, all with base employment of 100,000 or more have projected growth of 7,002 or less and by 5.2% or less. Sales and Related is expected to add 7,002, an increase of 4.5%. Education, Training & Library Occupations has projected gains of 5,177 or +4.2%, Business & Financial Operations is expected to increase by 5,155 or +5.2%, and Healthcare Practitioners & Technical is expected to increase by 4,428 or +4.1%.

Occupational Projections by Educational Attainment

Level of Educational Attainment	2021Q2	2023Q2	Emp. Change	% Change
Total All Occupations	**1,722,162**	**1,841,001**	**118,839**	**6.9%**
No formal educational credential	356,606	396,664	40,058	11.2%
High school diploma or equivalent	625,167	663,669	38,502	6.2%
Postsecondary non-degree award	113,111	119,687	6,576	5.8%
Some college, no degree	61,027	64,569	3,542	5.8%
Associate's degree	35,725	37,486	1,761	4.9%
Bachelor's degree	439,020	463,315	24,295	5.5%
Master's degree	35,563	37,383	1,820	5.1%
Doctoral or professional degree	55,943	58,228	2,285	4.1%

Each occupation is assigned an education value based on the minimum education necessary to enter an occupation. Over the two years, 34% of projected job growth will be in occupations that require a credential or degree beyond high school. This share of occupational growth is 11 points above the level projected last year, which reflects the differences between the 2020Q2 base used last year and the 2021Q2 base used for this round of projections. The COVID-recession heavily impacted sectors of the economy that required public-facing operations such as food service, retail, and other employment that was not able to shift to telework or alternative arrangements. The 2021 base quarter reflects the economy one year into its recovery, after many of the hardest hit sectors had regained a large portion of their early 2020 employment losses. This shift was noted last year, which stated that "employment growth to higher levels of educational attainment can be expected in future rounds of short-term projections as the economy recovers from the pandemic".[9]

Connecticut's Projections Compared to Nearby States

Connecticut's projected 2021-2023 growth is shown in the following table is expected to be higher than the northern New England states of Maine, Massachusetts, and New Hampshire, but lower than Rhode Island and Vermont. The lower projected growth to the north may correspond with the higher recovery rates those states have experienced compared to Connecticut, whereas our larger projected growth neighbors of New York and Vermont both have recovery rates currently below 77%.

[9] Krzyzek, Matthew. Short-Term Employment Projections Through 2022. Connecticut Economic Digest. May 2021. https://www1.ctdol.state.ct.us/lmi/digest/articles/May2021.pdf

Two Year Projections - Northeast States

Area	2021	2023	# Change	% Change	Avg. Ann. Openings
Connecticut	1,722,162	1,841,001	118,839	6.9	250,572
Maine	673,680	689,540	15,860	2.4	82,040
Massachusetts	3,494,320	3,621,580	127,260	3.6	211,250
New Hampshire	699,690	725,630	25,940	3.7	90,570
New York	9,486,890	10,132,790	645,900	6.8	1,372,110
Pennsylvania	6,060,370	6,173,770	113,400	1.9	723,040
Rhode Island	491,500	533,410	41,910	8.5	75,740
Vermont	326,770	349,710	22,940	7.0	47,670

Note: Projections Include Self-Employed and Unpaid Family Workers

Conclusions

In many ways, we have an unprecedentedly strong labor market despite high levels of global uncertainty. There are more job openings than unemployed workers, quits are still happening in large numbers, wages are increasing, and the unemployment rate in Connecticut continues to fall. At the U.S. level, the May 2022 unemployment rate of 3.6% is just above the February 2020 pre-COVID rate of 3.5%, which was the lowest level in over 50 years. Amid this tight labor market, risks to continued growth include rising inflation, energy prices, interest rate increases, and global instability from both the conflict in Ukraine and a possible COVID resurgence. Given that unemployment is nearing a 50-year low and CPI inflation is at a 41-year high, more Federal Reserve action to stabilize prices is expected in the short term.[10] Though these broad global conditions are likely to persist for the foreseeable future, at present, the labor market continues to mend and add jobs.

Connecticut's short-term projections show that the state is expected to continue the strong employment growth that has occurred in the past year as it recovers from the sharp and short pandemic-induced recession of 2020. From 2020-2021, employment grew by 2.7% and the annual unemployment rate fell from 7.8% to 6.3%.[11] As of May 2022, the state has an unemployment rate of 4.2% and has recovered 82.5% of 289,000 jobs lost two years ago with current employment at 97% of February 2020 levels. The recovery is still ongoing, but recent economic data and our short-term projections both suggest the state is heading in the right direction.

[10] Lundh, Erik. CPI Reaction-Prices Hit Another 41-year High. The Conference Board. July 13, 2022. https://www.conference-board.org/blog/global-economy/CPI-june-2022?blogid=4
[11] Joo, Jungmin Charles. Connecticut's Economy Rebounds in 2021. Connecticut Economic Digest. March 2022.

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 https://projectionscentral.org/Projections/ShortTerm