FY 2023 Midterm
Economic Report of the Governor

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The United States Economy

For the nation, 2021 was notable for the rapid recovery from the pandemic induced lows in the economy. The recovery was so strong that inflationary pressures began to build in the economy as American consumers spent federal stimulus funds or drew-down from savings that were bolstered earlier in the pandemic, as lockdowns initially limited spending opportunities or the first rounds of federal stimulus inflated bank balances. Throughout the year, supply chain disruptions and labor shortages were reported as consumers' purchases rose and interest rates remained favorable for financing capital goods. Although interest rates were certainly favorable compared to historical norms, they began to rise early in 2021, with the ten-year Treasury rate climbing from approximately 1.0% early in the year to just under 1.7% by calendar year end. Commodity prices also climbed, with oil rising from just under $50 per barrel to the mid-$70 per barrel range for West Texas Intermediate. Financial markets also reflected the underlying strength of the recovery with the S&P 500 rising 30.0% in calendar 2021, which also encouraged consumer spending. Additional federal stimulus measures were passed under the $1.9 trillion American Rescue Plan Act of 2021 which included, but was not limited to, another round of economic impact payments to individuals, $350 billion for the Coronavirus State and Local Fiscal Recovery Fund, and expansions to the Child Tax Credit and Earned Income Tax Credit.

Overall, U.S. real Gross Domestic Product (GDP) rose 5.7% in calendar year 2021 compared to calendar year 2020 and had recovered all of its pandemic-induced losses by the first quarter of calendar year 2021. Similarly, December 2021 data shows national employment rose with the nation regaining 84.0% of all the jobs it had lost during the pandemic after total employment levels dropped by 14.7% from February to April of 2020. Inflation increasingly became a topic of concern as the year progressed with the U.S. Consumer Price Index for all items rising 7.0% in the December over December period, the largest percent change since 1981.

The Connecticut Economy

Similar to the national economy, the state's economy continued its recovery in calendar year 2021 from the COVID-19 pandemic-induced recession. Much of this recovery can be attributed to the rapid adoption of vaccines in Connecticut, which allowed for an accelerated reopening of the state's economy, along with the unprecedented levels of federal economic stimulus.

At the peak of the pandemic, Connecticut had lost approximately 17.2% of its workforce, or roughly 292,400 jobs between February and April of 2020. Since April of 2020, the state has regained about 74.6% – or about 218,000 – of the jobs lost as of December 2021 data. This level of employment in the state still remains about 5.7% below the levels experienced prior to the 2008 Great Recession. From February to May of 2020, the state's unemployment rate grew from 3.7% to 11.4%, but has since fallen to 5.8% as of December 2021 employment data. For comparison, during the 2008 Great Recession, the highest that the unemployment rate reached was about 9.7% in March of 2010.

Due to the pandemic-induced recession, real Gross State Product (GSP), a measure of all economic activity in the state, declined by 12.6% in Connecticut between the fourth quarter of calendar year 2019 and the second quarter of calendar year 2020. As of the third quarter of calendar year 2021, the state is still 2.2% below pre-pandemic levels. Projections indicate that real GSP in Connecticut is expected to make a full

recovery to pre-pandemic levels by the end of the second quarter of calendar year 2022. Additionally, Connecticut's real GSP never fully recovered from the 2008 Great Recession and, as of the third quarter of calendar year 2021, the state remains about 8.3% below pre-2008 Great Recession levels. Projections show that the state should reach levels attained prior to the 2008 Great Recession around the second quarter of calendar year 2025.

Personal income continued to show growth in 2021, rising by 4.8% in quarter three of 2021 from quarter three of 2020. This compares to a 5.2% growth in personal income for the United States over the same period. Since the last recession's low in quarter one of 2009, per capita personal income has grown substantially by 37.2% from $59,400 to just under $81,500 in quarter three of 2021. In state fiscal year 2021, Connecticut remained the top ranked state for per capita personal income, however, Massachusetts ranked second at $400 per capita less than Connecticut.

In calendar year 2021, the 2020 decennial census was released by the federal government. Between 2010 and 2020, Connecticut's population grew by 0.9% over the 10-year period. On a state-by-state basis, Connecticut ranked 47th for population growth between 2010 and 2020. Additionally, after years of net out-migration, Connecticut had modest in-migration in FY 2021 of approximately 10,312 persons.

Despite the onset of the COVID-19 pandemic, Connecticut's finances have remained strong. In FY 2021, the state ended with a General Fund surplus of $475.9 million, not including the transfer of $1,421.5 million to the Budget Reserve Fund bringing that fund's balance to $4.7 billion, or 22.8% of total expenditures in the ensuing fiscal year, a significant increase from just over $200 million in FY 2017. For the second time in Connecticut's history—and for the second consecutive year—the Budget Reserve Fund has reached its statutory limit of 15% of expenditures. Any amount in excess of the 15% threshold ($61.6 million at the end of FY 2020 and $1,618.3 million at the end of FY 2021) will be transferred to reduce the State's long-term unfunded liabilities. Reflecting all this positive news, as well as the state's strong finances and fiscal responsibility measures adopted over the last several years, all four of the credit rating agencies upgraded Connecticut's credit rating.

Economic Assumptions of the Governor's Budget

The U.S. economy is projected to grow 4.8% in FY 2022. Growth in the U.S. economy is expected to slow to 3.3% growth in FY 2023 and 2.4% in FY 2024, before leveling off around 2.5% in FY 2025 and FY 2026. Inflation has been increasing significantly over the last few months and is expected to grow by 5.7% by the end of FY 2022. In FY 2023, inflation is expected to drop to 2.7% before hovering in the 2.1% range for FY 2024 through FY 2026. The U.S. unemployment rate is projected to decline to 3.5% in FY 2023 from 4.3% in FY 2022 following the pandemic highs and remain in the 3.5% to 4.0% range through FY 2026. Housing starts are projected to drop-off dramatically in FY 2023 by an estimated 11.2%, after increasing by 17.7% in FY 2021 and 0.3% in FY 2022. In the out-years, housing starts will continue to decline in the nation by 4.3% in FY 2024 and by 0.1% in FY 2025. New vehicle sales are projected to decrease by 15.7% in FY 2022 due to the supply chain problems around the globe with limited inventory of vehicles for sale. However, with the combination of people returning to work and the continuation of low interest rates, U.S. new vehicle sales are projected to increase by 21.6% in FY 2022 and are expected to increase by 4.6% in FY 2024 before reaching a somewhat steady growth in the out-years.

Connecticut's real GSP is expected to close FY 2022 with growth at 4.1%, and to grow by 3.0% in FY 2023 before stabilizing around 1.8% in FY 2024 through FY 2026. Real GSP is projected to make a full recovery by the end of quarter two of calendar year 2022 after dropping 12.6% between quarter four of 2019 and

quarter two of 2020. Personal income is projected to increase by 2.5% by the end of FY 2022 before growing by 4.5% in FY 2023 and staying in that range through FY 2026. Due to federal stimulus measures, personal income in Connecticut did not decline during the pandemic because of large transfer payments from the federal government, however, wages and salaries were impacted negatively due to lower levels of employment. Data shows that wages and salaries exceeded pre-pandemic levels in the fourth quarter of 2020. Wages and salaries in the state are projected to increase by 9.1% in FY 2022 and 6.2% in FY 2023 before leveling off in the 4.0% range in the out-years.

Connecticut's employment growth is projected to increase by 3.7% in FY 2022 and 2.3% in FY 2023. Employment growth in the outyears is minimal at 0.2% from FY 2024 through FY 2026. FY 2026 levels of employment will be 2.1% below the previous peak in FY 2008. The state's unemployment rate is projected to be slightly lower, but still remain somewhat in line with the national rate throughout the forecast period with a rate of 5.9% in FY 2022 and 4.3% in FY 2023 and FY 2024.

The following table provides the forecast for several U.S. and Connecticut economic indicators.

TABLE A-1
U.S. AND CONNECTICUT ECONOMIC INDICATORS

	U.S. Real GDP (Billions of Dollars)		CT Real GSP (Millions of Dollars)		U.S. Housing Starts (Millions)		CT Housing Starts	
Fiscal Year	Value	Growth	Value	Growth	Value	Growth	Value	Growth
2021	18,938	1.6%	241.7	-0.4%	1.6	17.7%	5,026.7	-1.9%
2022	19,849	4.8%	251.6	4.1%	1.6	0.3%	4,487.9	-10.7%
2023	20,496	3.3%	259.1	3.0%	1.4	-11.2%	5,481.3	22.1%
2024	20,988	2.4%	263.6	1.8%	1.3	-4.3%	5,439.2	-0.8%
2025	21,508	2.5%	268.5	1.9%	1.3	-0.1%	5,526.6	1.6%
2026	22,034	2.4%	273.5	1.9%	1.3	-0.6%	5,526.5	0.0%

	U.S. Employment (Millions)		CT Employment (Thousands)		U.S. Unemployment Rate		CT Unemployment Rate	
Fiscal Year	Value	Growth	Value	Growth	Value	Growth	Value	Growth
2021	143.0	-2.8%	1,571.3	-3.7%	6.9%	0.9	8.4%	3.1
2022	149.4	4.5%	1,630.0	3.7%	4.3%	-2.7	5.9%	-2.5
2023	152.9	2.3%	1,668.1	2.3%	3.5%	-0.7	4.3%	-1.6
2024	154.1	0.8%	1,671.5	0.2%	3.8%	0.2	4.3%	0.0
2025	155.2	0.7%	1,675.1	0.2%	3.9%	0.1	4.5%	0.2
2026	156.1	0.6%	1,677.4	0.1%	4.0%	0.1	4.5%	0.0

	Consumer Price Index		U.S. New Vehicle Sales (Millions)		CT Personal Income (Millions of Dollars)	
Fiscal Year	Value	Growth	Value	Growth	Value	Growth
2021	263.1	2.3%	16.3	8.3%	289,263.1	5.2%
2022	278.2	5.7%	13.8	-15.7%	296,599.5	2.5%
2023	285.6	2.7%	16.7	21.6%	310,011.5	4.5%
2024	291.5	2.1%	17.5	4.6%	323,634.7	4.4%
2025	297.5	2.1%	17.7	1.3%	339,098.0	4.8%
2026	303.9	2.1%	17.3	-2.6%	355,065.3	4.7%

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REVENUE FORECAST

TABLE A-2
STATE OF CONNECTICUT - GENERAL FUND REVENUES
(In Millions)

	Actual Revenue 2020-21	Projected Revenue Current Rates 2021-22	Proposed Revenue Changes 2021-22	Net Projected Revenue 2021-22
Taxes				
PIT - Withholding	$ 7,243.8	$ 7,626.9	$ -	$ 7,626.9
PIT - Estimates and Finals	3,096.6	2,989.1	-	2,989.1
Sales & Use Tax	4,792.7	4,567.3	-	4,567.3
Corporation Tax	1,153.1	1,200.6	-	1,200.6
Pass-Through Entity Tax	1,549.7	1,485.8	-	1,485.8
Public Service Tax	243.7	262.4	-	262.4
Inheritance & Estate Tax	303.3	164.4	-	164.4
Insurance Companies Tax	229.8	232.4	-	232.4
Cigarettes Tax	351.1	324.2	-	324.2
Real Estate Conveyance Tax	385.0	317.4	-	317.4
Alcoholic Beverages Tax	79.1	76.6	-	76.6
Admissions & Dues Tax	36.0	27.3	-	27.3
Health Provider Tax	1,037.7	974.7	-	974.7
Miscellaneous Tax	14.4	62.0	-	62.0
Total Taxes	$ 20,516.0	$ 20,311.1	$ -	$ 20,311.1
Less Refunds of Taxes	(1,857.5)	(1,651.7)	-	(1,651.7)
Less Earned Income Tax	-	(166.8)	-	(166.8)
Less R&D Credit Exchange	(7.1)	(6.6)	-	(6.6)
Total - Taxes Less Refunds	$ 18,651.4	$ 18,486.0	$ -	$ 18,486.0
Other Revenue				
Transfers-Special Revenue	$ 410.3	$ 402.2	$ -	$ 402.2
Indian Gaming Payments	228.9	246.0	-	246.0
Licenses, Permits, Fees	329.6	352.1	-	352.1
Sales of Commodities	22.9	23.4	-	23.4
Rents, Fines, Escheats	183.1	160.0	-	160.0
Investment Income	2.9	3.3	-	3.3
Miscellaneous	257.8	227.4	-	227.4
Less Refunds of Payments	(37.7)	(62.6)	-	(62.6)
Total - Other Revenue	$ 1,397.8	$ 1,351.8	$ -	$ 1,351.8
Other Sources				
Federal Grants	$ 1,496.3	$ 2,138.4	$ (83.2)	$ 2,055.2
Transfer From Tobacco Settlement	114.5	126.2	-	126.2
Transfers (To)/From Other Funds	112.9	778.8	(580.8)	198.0
Transfer to BRF - Volatility	(1,241.5)	(969.2)	-	(969.2)
Total - Other Sources	$ 482.2	$ 2,074.2	$ (643.1)	$ 1,410.2
Total - General Fund Revenues	$ 20,531.4	$ 21,912.0	$ (643.1)	$ 21,248.0

Projected Revenue Current Rates 2022-23	Proposed Revenue Changes 2022-23	Net Projected Revenue 2022-23
$ 7,991.0	$ (42.9)	$ 7,948.1
2,838.9	-	2,838.9
4,658.8	-	4,658.8
1,180.0	(9.4)	1,170.6
1,567.9	-	1,567.9
269.3	-	269.3
150.2	-	150.2
235.6	7.5	243.1
308.1	-	308.1
244.8	-	244.8
77.0	-	77.0
31.0	-	31.0
991.8	-	991.8
66.5	-	66.5
$ 20,610.9	$ (44.8)	$ 20,566.1
(1,709.1)	(123.0)	(1,832.1)
(143.8)	-	(143.8)
(6.8)	-	(6.8)
$ 18,751.2	$ (167.8)	$ 18,583.4
$ 402.9	$ -	$ 402.9
251.8	-	251.8
327.5	-	327.5
23.9	-	23.9
164.9	-	164.9
4.8	-	4.8
219.9	-	219.9
(63.8)	-	(63.8)
$ 1,331.9	$ -	$ 1,331.9
$ 1,833.9	$ 92.6	$ 1,926.5
122.1	-	122.1
1,428.0	(250.0)	1,178.0
(773.4)	-	(773.4)
$ 2,610.6	$ (157.4)	$ 2,453.2
$ 22,693.7	$ (325.2)	$ 22,368.5

Explanation of Changes

Personal Income Tax
Accelerate existing pensions & annuities exemption to 100% in tax year 2022.

Corporation Tax
Expand student loan employer tax credit eligibility to all CHESLA borrowers.

Insurance Companies Tax
Captive insurers initiative.

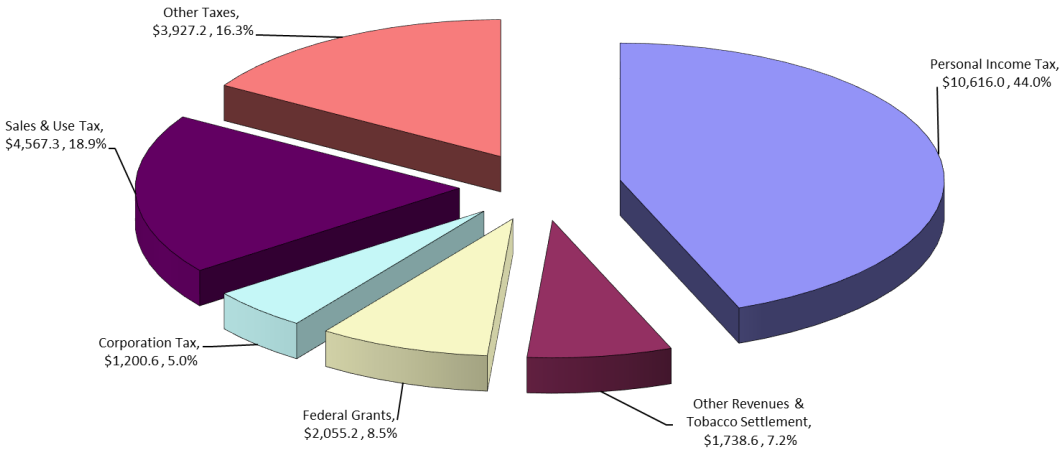
Refunds of Taxes
Expand the property tax credit value from $200 to $300, accelerate the reversion to full eligibility for the property tax credit to tax year 2022.

Federal Grants
Revenue gain attributable to expenditure changes, reservation of revenue in FY 2022 for use in FY 2023.

Transfers-Other Funds
Reduce revenue replacement from ARPA federal stimulus, other revenue transfers from General Fund in FY 2022

GENERAL FUND REVENUES FY 2022
(In Millions)

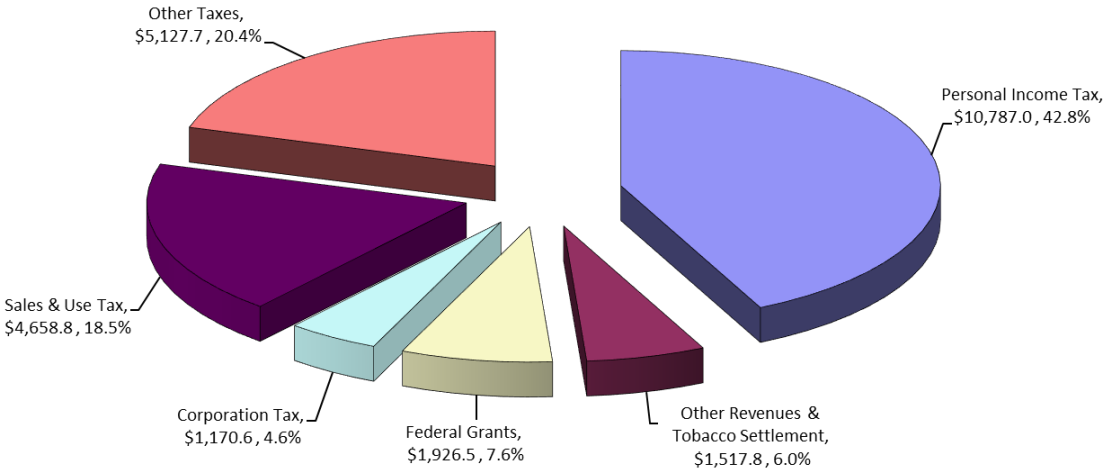
TOTAL $21,248.0 MILLION*



* Refunds are estimated at $1,651.7 million, R&D Credit Exchange is estimated at $6.6 million, Earned Income Tax Credit is estimated at $166.8 million, Refunds of Payments are estimated at $62.6 million, and Transfers to the Budget Reserve Fund are estimated to be $969.2 million.

General Fund Revenues FY 2023
(In Millions)

TOTAL $22,368.5 MILLION*



* Refunds are estimated at $1,832.1 million, R&D Credit Exchange is estimated at $6.8 million, Earned Income Tax Credit is estimated at $143.8 million, Refunds of Payments are estimated at $63.8 million, and Transfers to the Budget Reserve Fund are estimated to be $773.4 million.

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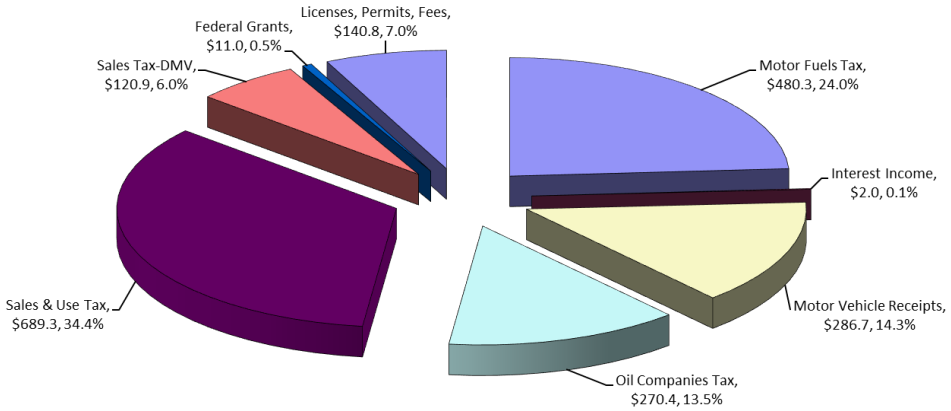
TABLE A-3

STATE OF CONNECTICUT
SPECIAL TRANSPORTATION FUND REVENUES
(In Millions)

	Actual Revenue 2020-21	Projected Revenue Current Rates 2021-22	Proposed Revenue Changes 2021-22	Net Projected Revenue 2021-22
Taxes				
Motor Fuels Tax	$ 475.2	$ 480.3	$ -	$ 480.3
Oil Companies Tax	229.1	270.4	-	270.4
Sales & Use Tax	482.9	689.3	-	689.3
Sales Tax - DMV	117.2	120.9	-	120.9
Highway Use	-	-	-	-
Total Taxes	$ 1,304.3	$ 1,560.9	$ -	$ 1,560.9
Less Refunds of Taxes	(11.8)	(18.5)	-	(18.5)
Total - Taxes Less Refunds	$ 1,292.5	$ 1,542.4	$ -	$ 1,542.4
Other Sources				
Motor Vehicle Receipts	$ 321.4	$ 286.7	$ -	$ 286.7
Licenses, Permits, Fees	130.7	140.8	-	140.8
Interest Income	1.9	2.0	-	2.0
Federal Grants	12.0	11.0	-	11.0
Transfers From (To) Other Funds	24.5	(5.5)	-	(5.5)
Less Refunds of Payments	(5.4)	(5.0)	-	(5.0)
Total - Other Sources	$ 485.2	$ 430.0	$ -	$ 430.0
Total - STF Revenues	$ 1,777.7	$ 1,972.4	$ -	$ 1,972.4

FISCAL YEAR 2022 - TOTAL $1,972.4 MILLION*



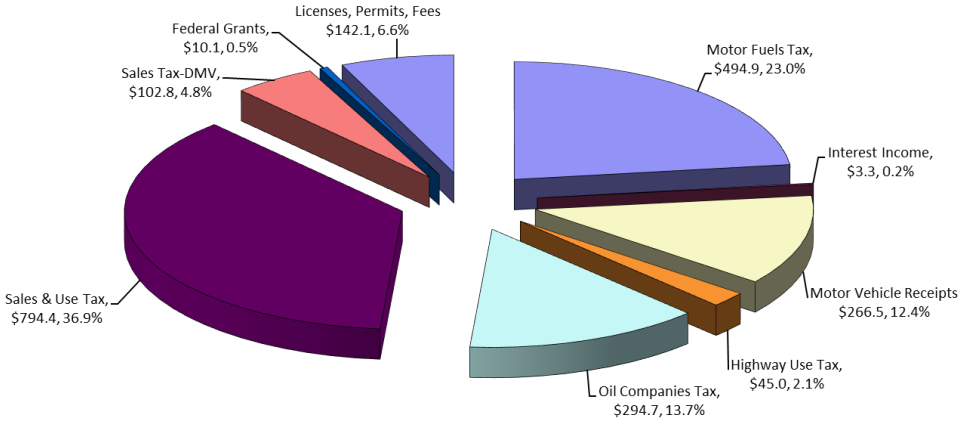
* Refunds are estimated at $23.5 million and Transfers to Other Funds at $5.5 million.

Projected Revenue Current Rates 2022-23	Proposed Revenue Changes 2022-23	Net Projected Revenue 2022-23
$ 494.9	$ -	$ 494.9
294.7	-	294.7
794.4	-	794.4
102.8	-	102.8
45.0	-	45.0
$ 1,731.8	$ -	$ 1,731.8
(16.2)	-	(16.2)
$ 1,715.6	$ -	$ 1,715.6
$ 266.5	$ -	$ 266.5
142.1	-	142.1
3.3	-	3.3
10.1	-	10.1
(5.5)	-	(5.5)
(2.5)	-	(2.5)
$ 414.0	$ -	$ 414.0
$ 2,129.6	$ -	$ 2,129.6

Explanation of Changes

No revenue-related policy changes are being proposed as part of the Governor's FY 2023 Midterm adjustments.

FISCAL YEAR 2023 - TOTAL $2,129.6 MILLION*



*Refunds are estimated at $18.7 million and Transfer to Other Funds at $5.5 million.

IMPACT OF THE GOVERNOR'S BUDGET ON THE STATE'S ECONOMY

A government budget has three purposes: it outlines necessary and desirable public services, it estimates how much these services will cost, and it defines the resources that are required to provide these services. The budget is a fundamental policy document of every level of government. As proposed, enacted and implemented, it represents a consensus regarding what government realistically can and ought to do.

The economic implications of government budgets are significant. Government expenditures and investments at the federal, state, and local level are important dimensions of the national economy, accounting for about 17.6% of gross domestic product. The Governor's budget will account for an estimated 6.7% of Connecticut's gross state product in FY 2023, and state government's expenditure and revenue actions will inevitably influence the state's economy.

Transportation, Environment, and Broadband Connectivity

Investments in Transportation and Transportation Infrastructure

The Federal Infrastructure Investment & Jobs Act (IIJA) presents the opportunity for historic levels of investment in our transportation infrastructure. Governor Lamont is providing necessary resources to ensure Connecticut is in position to support, plan, and administer the many investments offered in the federal infrastructure bill.

The IIJA provides funding for our state's highway programs and improvements to our public transportation network. Additional resources are provided for bridge replacements and repair with a focus on climate change mitigation, resilience, equity, and safety for cyclists and pedestrians. The IIJA also provides funding for airport infrastructure development to improve and modernize Connecticut's airports. The IIJA includes significant new funding for rails to repair and improve the Northeast Corridor – as well as the state's ports and inland waterways.

To invest in his vision for faster travel time to New York City, the Governor has included funding to launch two new rail services with express access for riders into the city. The Penn-Keystone Express service, operated by Amtrak service, will provide one express train each weekday and will be the first commuter express service of its kind to originate from the Springfield/New Haven Corridor through Hartford and down to Penn Station. In addition, the Governor is proposing 3 express trains, seven days a week, from New Haven's Union Station to Grand Central Terminal. This Metro-North Railroad service will only have four stops, making it the fastest on the New Haven Line.

Environment

The IIJA also addresses climate change and improves the environment by enhancing the reliability of the energy grid, accelerating the transition to cleaner forms of power generation, funding for coastal resiliency and flood mitigation projects and buildout of electric vehicle charging infrastructure, as well as remediating contaminated brownfield and superfund sites in Connecticut.

Governor Lamont proposes additional investments to supplement and support execution of these environmental and energy related projects. These projects will go a long way to prepare our infrastructure for the impacts of climate change and extreme weather events. Additional projects will improve water

infrastructure across the state and ensure that clean, safe drinking water is a right in all communities by eliminating Connecticut's lead service lines and pipes**.**

Governor Lamont is also seeking to use Coronavirus State and Local Fiscal Recovery Funds outlined in the American Rescue Plan Act to enhance the outdoor recreation and visitor experience through investment in our state parks.

Broadband Connectivity

As the COVID-19 global health crisis brought broadband access to the fore, the state invested in a wide range of broadband projects to get our residents connected to quality high-speed internet. Through IIJA funding and funding from the American Rescue Plan Act, we will take steps to invest in making sure our residents can reach the heights of their potential by expanding this critical utility and continuing to close the digital divide.

The Governor proposes braiding the funding resources available to Connecticut to make affordable high-speed broadband available for all, promote economic development, and protect consumers. Priority is given to projects that reduce the cost of connecting unserved and underserved areas to the last mile infrastructure and create alternative network connection paths. Defending these networks will also be key to ensure our investments are protected as the number and severity of cyber and ransomware attacks increase.

Criminal Justice

Prevent Crime and Reduce Repeat Crime

Connecticut's violent crime rate is half the U.S. rate and has steadily fallen. Its property crime rate is also below the national rate. In order to continue on that trajectory, Governor Lamont proposes several investments to prevent crime and reduce repeat crime. These programs include taking a public health approach to community violence intervention. Other programs will seek to disrupt the flow of narcotics, bulk cash, and illegal firearms. A statewide gun buyback program and resources to trace illegal guns recovered in crime scenes to their source, will aim to reduce violent crime and keep illegal firearms off the streets.

Investments to Solve Crimes

Governor Lamont proposes using state funding along with American Rescue Plan Act funds to make investments that will allow for crimes to be solved and processed more quickly. These resources aim to bring rapid-response forensic technology to crime scenes, speed up forensic analysis to aid active criminal investigations, and to invest in cities' crime prediction and response technology.

Court Operations

As we navigate our way out of the pandemic, it is important to maintain court operations in accordance with public-health guidance. While taking extra precautions has served in protecting the public and court workers, it has resulted in backlogs of cases. The Governor makes several proposals to enhance remote court operations, including videoconferencing for bail reinterviews at police departments and the ability

to expedite probation officer requests using expedited online applications. Resources are provided to temporarily enhance staffing of public defenders and prosecutors to work through backlogs of cases that have occurred due to the pandemic. Additional court supports include mediation assistance for eviction and foreclosure cases and expanded family services program.

Efficiencies

Information Technology Optimization

Governor Lamont recognizes that like many governments we are well behind the times in our use of technology and modern approaches to many of the services we provide. Optimization is the process of redesigning how the state supports technology in order to maximize the value of the state's Information Technology (IT) employees and expenditures to bring better outcomes for our agencies, taxpayers, and constituents.

Governor Lamont proposes consolidating IT functions under a new organizational structure, the Bureau of Information Technology Solutions (BITS) as a major step towards optimizing state Information Technology in the state. As the State of Connecticut faces an upcoming retirement cliff, IT optimization will help prepare the state to successfully navigate through the retirement surge while providing the opportunity to improve enterprise-wide IT services by sharing reusable solutions and common processes, to accelerate digital government, to apply shared best practices, and to drive greater automation.

Municipal Aid, Education, and Workforce Programs

Sustaining Municipal Aid and Providing Thoughtful Property Tax Relief

This budget provides municipalities with predictability over state support and municipal property tax relief:

1. $160 million investment to reimburse local governments for the revenue impact associated with the Governor's proposal to lower the cap on the motor vehicle tax from 45 mills to 29 mills
    a. This relief will lower tax bills on cars in over 100 towns and cities and provide greater equity among taxpayers;
2. Maintains state's commitment to continue progress towards full implementation of the Education Cost Sharing (ECS) formula;
3. Reauthorizes the alliance district program and creates a new district categorization of "Graduated Alliance Districts" for districts being phased out due to successfully improving educational outcomes.

Supporting Recovery in the K-12 System

The state's commitment to learning recovery inside and outside of the schoolhouse and the social emotional well-being of staff and students is supported with additional targeted federal support, including:

Expanding Support for Learner Engagement and Attendance Program (LEAP)

The Governor proposes providing $26 million to SDE from CSFRF to extend LEAP for two additional fiscal years and to target five additional high need districts. Funds will support students re-engaging with the educational process and enrichment opportunities, augmenting other educational recovery efforts.

Providing Additional Summer Enrichment Opportunities

The Governor recommends $4.5 million from CSFRF to supplement summer enrichment and camp programs during the summer of 2022. These funds will be supplemented by CSFRF allocated last session and ARP ESSER set aside funds from SDE. SDE ran a similar program last summer which reached 93,000 students statewide.

Improving School Air Quality

In response to the heightened awareness of the importance of providing a safe and healthy environment for learning brought about by the pandemic and by the 2021 School Facility Survey produced by DAS, $90 million is provided through CSFRF to DAS to support air quality enhancements. This funding will augment educational recovery efforts and supplement local investments designed to produce a safe learning environment for Connecticut's students, teachers, and other school staff.

Sheff v. O'Neill Settlement

The Governor's budget includes funding to support the recent Sheff v. O'Neill settlement that will end more than 30 years of litigation and court oversight in the case and reflects a historic investment in educational opportunities for Hartford students. Funding of $26.2 million in FY 2023 is included in the budget to support additional choice programming seats and related transportation costs, various extra-curricular activities, and wrap-around supports for choice education opportunities. The state anticipates providing approximately 1,497 seats for Hartford resident students by FY 2029. The budget provides for approximately 440 seats for Hartford residents in FY 2023.

Supporting Early Care and Education

The Governor's budget continues a commitment to the provision and maintenance of high-quality early care and education in Connecticut. To ensure that Connecticut will emerge from the pandemic with a stable, high-quality system of early childhood education and childcare, funding is maintained for childcare providers above current enrollment levels. In addition to federal aid provided through the Office of Early Childhood to providers, the state provided approximately $9.6 million from July to December of FY 2022 in state funded supplemental payments to childcare providers and has committed to funding providers' full allocation regardless of enrollment for the beginning of 2023 despite a marked decline in enrollment due to the impact of the pandemic on the childcare system. In addition, the Governor is recommending $1 million in ARPA funding to study the sustainability of the Universal Home Visiting program piloted with ARPA funds allocated in the biennial budget.

Supporting Higher Education

In response to the pandemic's ongoing impact on institutions of higher education and in order to maintain public institutions of excellence additional support of $55.6 million is being provided for the University of Connecticut Health Center to offset the impact of increased costs on the delivery of services to patients. In addition, $20 million is being provided to the Malpractice Trust Fund to restore resources that were

transferred for budget balancing purposes in FY 2010 and FY 2011, ensuring the fund is positioned to support any future claims. Lastly, funding of $28.0 million is being provided to the University of Connecticut and $104.0 million to the Connecticut Colleges and State Universities to mitigate the impact of expiring COVID related federal funds and offset the impact of tuition and programs resulting from increased costs. A portion of the funding will be used to support targeted investments for in-demand degree programs.

Supporting Workforce Development through the Office of Workforce Strategy

The workforce landscape of the 21st century is ever changing and requires states to be strategic in their approach to workforce development. In order to create a workforce development ecosystem that meets the needs of employers and bolsters a thriving economy for the state, Connecticut must invest in a system that strategically aligns education, training and the workforce into a pipeline which fosters economic growth. A high-quality workforce development system will ensure better outcomes for our state's residents and help our businesses to hire and grow in the state.

The Governor's budget builds on commitments to develop the state's workforce pipeline by providing additional resources to the Office of Workforce Strategy (OWS), including an additional $15 million to expand the CareerConnect program. OWS has been at the forefront of rolling out more than $70 million in federal funds to upskill, reskill, and train Connecticut students and workers for in-demand jobs, including investing in pipelines to directly address workforce shortage areas in the healthcare and mental health field through the CareerConnect program. OWS works strategically across institutions of higher education, non-profits, the state's workforce development boards, other state agencies and employers to ensure the state's workforce delivery system is integrated and informed by all stakeholders.

Additional targeted funding is being proposed to bolster workforce including:

Investing in Targeted Career Pathways Through Faculty Recruitment

Funding of $35 million from CSFRF is provided to support onboarding additional nursing and mental health faculty at higher education institutions and related costs. This is anticipated to increase higher education capacity in these fields in recognition of the shortage of nursing and mental health professionals in the state.

Investing in Targeted Career Pathways Through Student Financial Aid

Funding of $20 million from CSFRF is provided to support financial aid for students pursuing a nursing or mental health career pathway degree. This is anticipated to support the shortage of nurses and mental health professionals that has been identified in the state.

Increasing College Opportunities Through Dual Enrollment

Funding of $10.85 million is dedicated from CSFRF to boost career and college readiness through enhanced access to dual enrollment courses and other related opportunities. This investment will build interest among high school students in historically underrepresented communities to pursue careers in nursing and behavioral health care by supporting dual enrollment programs for students interested in, among other programs, degrees in the health care field.

Lastly, the Governor's budget invests $30 million in funding to provide necessary support to the Labor Department, which continues to address the historic level of unemployment insurance claims and numerous pandemic related unemployment insurance programs created in response to the pandemic's impact on businesses and families.

Health and Human Services Initiatives

The pandemic has strained many aspects of the state's health and human services systems, impacting both providers and the clients they serve. By braiding various financial resources – General Fund, anticipated FY 2022 surplus and ARPA funding – the Governor is able to make invest in this area, bridge service gaps and create a more seamless and complete continuum designed to better meet the needs of Connecticut's residents.

Recognizing that more people than ever are dealing with mental health and substance use issues exacerbated by the pandemic, the Governor is directing significant resources to enhance the system across the entire continuum of services – covering the lifespan from infant mental health to adult behavioral health services, including $26.4 million in ARPA funding to complete the expansion of pediatric and adult mobile crisis services to statewide 24/7 coverage. Isolation and restrictions related to the pandemic have especially intensified the mental health needs of the state's youngest citizens with overcrowded emergency departments (EDs) and long wait times for assessment, treatment, and appropriate placement for care. The Governor is providing significant resources to tackle the root causes of that overcrowding and delays in care, including diversionary care like infant and early childhood mental health services with $15 million in ARPA support providing early treatment services to identified youth and parents with attachment issues before they manifest into more serious behavioral health problems. A $5 million infusion is being recommended to add a sub-acute crisis stabilization unit (CSU) and an ambulance entrance to the urgent crisis center (UCC) funded in DCF's FY 2022 budget and three other full service UCCs with $21 million in ARPA funding providing diversionary services across the state that will provide children/youth a place to go for evaluation, treatment, respite, and referral services in a more appropriate setting than an ED. Investments will allow for state-of-the-art inpatient care when that level of care is required with $6.4 million ($12.6 million total including federal share) provided to support the annualized cost of inpatient pediatric mental health rate increases for hospitals that expanded pediatric inpatient bed capacity and an acuity add-on to recognize the unique needs of some of these youth. Resources are provided to license the Albert J. Solnit Children's Center to promote transparency and accountability in the provision of care in the state's psychiatric facility for children that serves a highly vulnerable population of children with complex mental health and trauma histories. Lastly, $15.0 million from ARPA will support capital and temporary staffing costs necessary to develop a new 12-bed specialty psychiatric/medical unit at the Connecticut Children's Medical Center to serve children in the state experiencing medical issues that are related to mental health conditions, thereby preventing children from having to go out-of-state when this more intensive level of care is needed.

The adult behavioral health system is getting an infusion of resources as well. A total of $35.0 million in braided funding – $16.0 million in ARPA funding and $19.0 million from the IT Capital Investment Fund – will support a new electronic health record to modernize patient medical recordkeeping at the state-operated facilities to improve quality, safety, and efficiency.

There are also significant investments in substance use treatment. The substance use disorder (SUD) demonstration waiver will enhance the state's SUD service system and enable federal reimbursement on SUD services for individuals that would ordinarily not be covered under federal law. The additional revenue will be reinvested to strengthen the SUD service system by ensuring that a complete array of services is available.

Several initiatives are proposed to enhance the health care workforce including $17 million in ARPA funding to expand a student loan repayment program for primary care clinicians and extend the program to behavioral health professionals. By alleviating the burden of student loan debt, this program will encourage students from diverse socioeconomic backgrounds to pursue careers in the health care sector and work in underserved communities, which in turn improves health care access and promotes health equity in vulnerable communities hit hard by the pandemic.

The Governor is also making a number of investments to strengthen human services.

ARPA enables states to earn an extra 10% federal reimbursement on a range of Medicaid home and community-based services (HCBS) from April 1, 2021, through March 31, 2022. This extra federal funding (over $213 million for Connecticut) must be reinvested in new qualifying services which support community-based long-term services and supports over the three-year period ending March 31, 2024. Once reinvested as the state-share for Medicaid-supported services, Connecticut will draw an equivalent federal Medicaid match, essentially doubling the state's total investment. Ultimately, the new federal funding will leverage approximately $228 million in new federal reimbursement to match those expenditures, resulting in total expenditures of approximately $461 million over the full three-year period. The 10% HCBS match authorized in ARPA provides an unprecedented opportunity for the state to leverage significant federal resources over the three-year period, with an ongoing cost to the state of approximately $25 million in FY 2025. In total, the Governor's budget appropriates approximately $174.4 million in DSS, the Department of Developmental Services (DDS) and DMHAS.

Investments to strengthen and stabilize human services providers include the shift to acuity-based reimbursement to improve nursing home quality of care, adequacy of staffing and resident outcomes, while also being cognizant of the impact of the public health emergency on the nursing home industry. Funding of $12.8 million ($25.6 million after factoring in the federal share) is added to support the first year of implementation. When fully implemented and annualized over the three-year period, the state will invest $45 million ($90 million after factoring in the federal share) to support this transition, which gives nursing homes predictability regarding their reimbursement and allows for necessary adjustments to their business models.

Investments to improve public health and safety include ARPA funding of $272 million for COVID-19 testing and self-test kits as well as state agency operational expenses, ARPA funding of $70 million to expand resources for lead abatement/remediation, ARPA funding of $3.6 million to apply a public health approach to community gun violence prevention and intervention, funding to support the personnel and systems changes necessary to support increased testing requirements for private and semi-public wells, and $245,000 to fully fund the statutory formula grants to local and district departments of health.

Capital Budget Proposals

Three years ago, Governor Lamont established a plan to keep the growth in General Obligation (GO) bond debt service more in line with revenue growth. The adopted budget for the FY 2022-2023 biennium continued this goal with new GO bond authorizations of $2.0 billion for FY 2022 and $1.9 billion in FY 2023. Over the last three years Governor Lamont has reduced GO bond allocations by 29.2% compared to the average of the previous eight years. These actions have helped to stabilize the growth of the state's long-term liabilities and will provide more budgetary flexibility in the years to come. The Governor is prioritizing bond allocations to areas he feels requires the most investment, which include, affordable housing, municipal aid, school construction, information technology improvements, and addressing deferred maintenance at state facilities.

The Governor's proposed midterm adjustments include $165.0 million in new GO bond authorizations for FY 2023. Proposed authorizations would include funding as follows:

1. $75.0 million to provide the state match towards projects allowed under the Federal Infrastructure Investment and Jobs Act. This will serve as the initial first year match towards an estimated $6.0 billion of Federal infrastructure funds available to the State of Connecticut. These funds will be used for a variety of purposes, including, but not limited to, water infrastructure improvements, electric vehicle charging improvements, and resilient infrastructure.
2. $60.0 million to the Department of Corrections for improvements to the state's prisons and to address long deferred maintenance projects.
3. $15.0 million to the Department of Energy and Environmental Protect for infrastructure improvements at state parks.
4. $15.0 million to the Capital Equipment Purchase Fund to help address state IT equipment needs.

The Governor has recommended no changes to the Special Tax Obligation (STO) bond program authorizations. The adopted budget contained $929.6 million in new authorizations in FY 2023, which along with existing authorizations, will ensure that the state continues to invest in transportation infrastructure. Existing authorizations will provide adequate matching funds for federal programs within the Infrastructure Investment and Jobs Act to take advantage of over $2.6 billion in potential federal assistance over the next 5 years.

Revenue Proposals

The state's fiscal position at the end FY 2021 was in a much better condition than had been envisioned when the COVID-19 pandemic initially struck our state and nation. FY 2021 ended with a General Fund surplus of $475.9 million, the third consecutive year end surplus after several years of subpar fiscal performance in the aftermath of the 2008 global financial crisis. In addition, the state was able to maintain budgetary reserves at the fifteen percent level while making a $1.6 billion contribution to the state's unfunded liabilities. Several factors led to that success, notable among them were our citizen's and state government's response to the public health crisis wrought by COVID-19 which permitted the rapid and safe reopening of the state's economy. Of particular import economically was the unprecedented level of economic stimulus measures enacted by the federal government. Finally, the state's discipline in adhering to the 2017 budgetary reforms permitted the state to capitalize on that improved fiscal position.

In light of the above, the Governor is proposing modest, but impactful, revisions to the state's tax policies. First, in order to create more equity among jurisdictions in the taxation of automobiles in the state, the

Governor is proposing to lower the existing property tax cap of 45 mills on automobiles to 29 mills. This proposal is more fully discussed below, would reimburse towns impacted by lowering the cap at an expected cost of $160.4 million annually. Second, in order to make the state more attractive to retirees, many of whom have flexibility in choosing the location of their residence, the Governor is proposing to accelerate by three years the existing phase-in of the pensions and annuities exemption under the income tax. This provision allows single filers with an adjusted gross income (AGI) of less than $75,000 or joint filers with an AGI of less than $100,000 to exempt 100% of their pension and annuity income from the state income tax, up from the originally scheduled 56%. This continues the concerted effort by the state to retain retirees through other tax policy changes over the years which has included exempting military pensions from the income tax, exempting 50% of any teacher pension from the income tax, including no more than 25% of social security income under the state's income tax, and, beginning in income year 2023, a four-year phased-in exemption for distributions from Individual Retirement Accounts mirroring the AGI limits of the pension and annuity exemption. Third, the Governor is also proposing to accelerate the restoration of the property tax credit on the income tax to full eligibility while increasing the maximum credit amount from $200 to $300. Currently only those filers 65 and over or those with dependents are eligible for the property tax credit. Approximately 400,000 filers currently benefit from the existing property tax credit, but this is expected to double with the restoration to full eligibility. Fourth, to help attract educated younger workers to the state while helping to ameliorate the student loan debt burden, the Governor is also proposing to expand those eligible for the employer student loan tax credit. Under this tax credit, businesses that contribute toward an employee's student loan balance can avail themselves of a 50% tax credit up to $2,625 per employee per income year. The advantage of this credit is that it leverages employer dollars alongside a state tax credit to achieve those public policy goals. In sum, the tax relief proposals contained in this budget would total $335.7 million.

Governor's FY 2023 Midterm Adjustments – Tax Cuts
(In Millions)

	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026
Revenue				
1. Property Tax Credit -- Accelerate Full Eligibility	$ (53.0)	$ -	$ -	$ -
2. Property Tax Credit -- Increase from $200 to $300	(70.0)	(70.0)	(70.0)	(70.0)
3. Pensions & Annuities -- Accelerate to 100%	(42.9)	(29.3)	(15.6)	-
4. Student Loan Tax Credit -- Expand to all CHESLA Borrowers	(9.4)	(9.9)	(10.4)	(10.9)
5. Revenue - Total	$ (175.3)	$ (109.2)	$ (96.0)	$ (80.9)
Expenditures				
6. Lower Car Tax Mill Rate Cap from 45 to 29	$ (160.4)	$ (160.4)	$ (160.4)	$ (160.4)
7. Expenditures - Total	$ (160.4)	$ (160.4)	$ (160.4)	$ (160.4)
8. Grand Total -- Tax Cuts	**$ (335.7)**	**$ (269.6)**	**$ (256.4)**	**$ (241.3)**

There are several other revenue measures contained in the Governor's budget proposal the most significant of which is the elimination of the one-time $559.9 million in federal Coronavirus State Fiscal Recovery Fund (CSFRF) dollars that were assumed when the FY 2022 budget was adopted. Furthermore, the Governor is proposing to reduce by $250 million the level of federal American Rescue Plan Act of 2021 (ARPA) dollars that were assumed in the FY 2023 budget. The state's improved fiscal outlook affords us

this flexibility to eliminate or reduce these one-time funding sources from the budget while freeing up $809.9 million in federal monies for other state uses. Similar to last year's proposals to expand economic opportunity in the state via the gaming and cannabis legislation, the Governor is also reintroducing last year's captive insurer's initiative. This initiative would allow such firms to address any tax payments owed from a prior period without penalty thereby making our state more attractive to this rapidly growing sector in the insurance field.

Providing Significant Tax Relief by Reducing Property Taxes on Motor Vehicles

Like taxes on real property, motor vehicle property taxes in Connecticut vary significantly by jurisdiction. A car with an assessed value of $10,000, for example, can yield a tax bill as low as $110 or as high as $450, depending on where it is registered in the state. In recent years, state law has addressed this disparity by implementing a cap of 45 mills on car taxes levied by municipalities, limiting the impact of property tax disparities on car owners in communities with high tax rates. To provide further relief for these communities and expand the relief to nearly 100 more municipalities, the Governor proposes lowering the limit on car tax rates from 45 mills to 29 mills. Municipalities impacted by this policy would be reimbursed by the state for lost revenue, so this tax burden would not simply shift to homeowners. Reducing the tax limit on cars to 29 mills would impact over 100 municipalities that tax over 1.7 million motor vehicles across the state. Residents of cities and towns with the highest property taxes will benefit most from this significant state investment to relieve local taxes.

In total, the Governor's tax relief and revenue package would lower the tax burden in the state, make it more competitive in attracting and retaining citizens, while not diminishing our recent success in restoring fiscal stability to the state.

Conclusion

Governor Lamont is committed to a fiscally responsible state government which lives within the state's means and promotes Connecticut's quality of life. The Governor's proposed FY 2023 midterm adjustment budget alleviates some tax burden for many residents while addressing the fiscal and economic realities facing the state. The proposed FY 2023 midterm budget maximizes federal aid and stays within the limits outlined by U.S. Treasury as a condition for the receipt of certain federal ARPA dollars. The Governor's budget is balanced, represents limited growth over prior years, remains below the constitutional spending cap, and is compliant with both the volatility and revenue caps.

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E C O N O M I C R E P O R T
O F T H E G O V E R N O R

FY 2023 Midterm

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INTRODUCTION

This report fulfills the requirements of Section 4-74a of the General Statutes which stipulates that:

> "The budget document shall include the recommendations of the Governor concerning the economy and shall include an analysis of the impact of both proposed spending and proposed revenue programs on the employment, production and purchasing power of the people and industries within the state."

This report is also designed to provide a brief profile of the State of Connecticut, the economy of the state, revenues and economic assumptions that support the Governor's budget, and an analysis of the impact of both proposed spending and proposed revenue programs on the economy of the State of Connecticut.

The report focuses on eight areas including: (1) the general characteristics of the state; (2) the profile of employment in the state; (3) an in-depth analysis of important Connecticut sectors; (4) the performance indicators for the United States, the New England region, and Connecticut; (5) a discussion of the most important revenue sources; (6) the economic assumptions of the Governor's budget and a numerical comparison of some of the important indicators used in the preparation of the Governor's budget; (7) the revenue forecasts of the General Fund and the Special Transportation Fund; and (8) the expected impact of the Governor's budget on the economy of the State of Connecticut.

EXECUTIVE SUMMARY

Highlights included in this report are as follows:

Population

Between 2010 and 2020, Connecticut's population grew at a rate of 0.9%, slower than both New England and the nation which experienced a 3.8% and 7.4% increase of population, respectively. The state ranked 47th in the nation for population growth from 2010 to 2020. In FY 2021, Connecticut's population experienced a year over year decline of an estimated 3,600 residents. In the past, Connecticut experienced net out-migration. In FY 2021, the state experienced net in-migration due to the COVID-19 pandemic as people left densely populated urban areas and sought out suburban communities. Overall, the state has experienced net out-migration from FY 2012 to FY 2021 with a deficit of just over 28,000 residents. Current Connecticut population estimates indicate that the relative share of Connecticut's elderly population (age 65+) exceeded the U.S., while its younger age cohorts, those under 45, trailed the nation as a whole. The proportion of residents holding a bachelor's degree in Connecticut is 10.3% higher than the nation, while the proportion of those holding a graduate or professional degree is 37.4% higher than the nation.

Housing

Connecticut's housing starts decreased by 2.0% in FY 2021, a significant shift over FY 2020's increase of 13.4%, a likely consequence of the COVID-19 pandemic as the state begins to return back to normal. Prior to FY 2020, declines have been driven by the multi-family segment of the housing market. FY 2020 saw a reversal of this trend which saw multi-family outpace single-family housing starts, however, it appears that in FY 2021 the prior trend of more single-family housing starts compared to multi-family housing starts resumed. Median existing home prices increased 14.7% in Connecticut in FY 2021, lower than the U.S. as a whole, which saw median home prices increase 16.5%. In FY 2012, the median existing home price in Connecticut was about 56.3% higher than that of the nation and has been decreasing every year since. In FY 2021, Connecticut was only 2.9% greater than the nation's median existing home price. This indicates that the median home price in the nation is getting more expensive and shows that Connecticut is becoming more attractive in this sense. Thirty-year mortgage rates decreased to 2.9% in FY 2021, a 17.9% decrease over the prior year. Nationally, homeowner equity as a percentage of home values improved to 67.3% in FY 2021, reaching their highest level since the housing collapse in FY 2008.

Employment

Employment in both FY 2020 and FY 2021 was hard hit as a result of local restrictions and lockdowns across the country as the nation experienced the height of the COVID-19 pandemic. In FY 2021, Connecticut lost approximately 61,000 non-farm jobs, representing 3.7% decline over the prior year. During the 2008 financial crisis, Connecticut lost approximately 118,000 non-farm jobs, and as of the fourth quarter of calendar year 2019 still had not reached pre-financial crisis peaks before heading into the COVID-19 pandemic. As of the fourth quarter of calendar year 2019, Connecticut had only regained about 94,000 non-farm jobs (about 80.2% of jobs lost). Through the third quarter of calendar year 2021, the state is still behind pre-2008 Great Recession employment levels by about 6.6% or 114,000 jobs.

Manufacturing remains an important sector of Connecticut's economy, representing 9.7% of all non-farm jobs in FY 2021. Connecticut Manufacturing employment declined by 6,700, or 4.2%, in FY 2021, which was slightly more than New England and the United States which saw declines of 3.3% and 2.5% respectively. Nonmanufacturing employment in Connecticut lost approximately 54,300 jobs, or 3.7%, in FY 2021, trailing the U.S.'s decline of 2.8% but slightly better than New England's decline of 4.3%. The largest growth in nonmanufacturing employment in Connecticut came in the transportation and warehousing, which gained 7,700 jobs or a 14.5% increase over the prior year. In FY 2021, Connecticut's unemployment rate averaged 8.4%, which was lower than the U.S. at 6.9% and New England which experienced an average unemployment rate of 7.2%.

Energy

In calendar year 2020, the United States was the world's largest supplier of oil at 18.6% of the world's total. In 2019 Connecticut consumed 2.9 thousand BTU's per 2012 chained dollar of GDP, making it one of the most energy efficient states relative to output. Overall, Connecticut is 44.2% below the nation's per capita energy consumption and ranks 5th in energy efficiency per capita among the fifty states and District of Columbia. Connecticut's energy efficiency is likely due in part to the high relative price of energy in the state. In 2019 Connecticut's overall energy costs were 35.4% higher than the national average and its electricity prices were 76.1% higher than the national average.

Export Sector

Exports play a crucial role in the economy. The U.S. trade deficit in 2020 was $616.1 billion, up from $472.1 billion in 2019. Total trade exports grew 7.3% from 2011 to 2020, while trade imports have grown 11.0% over the same period. Connecticut exports totaled $13.8 billion and accounted for 5.0% of GSP in 2020. Over the past five years, Connecticut's exports have increased by an average of 1.2% per year. Transportation equipment, nonelectrical machinery and chemicals are Connecticut's largest exporting industries and comprise 60.1% of exports in 2020.

Defense Industry

Prime defense contracts tend to be a leading indicator of Connecticut's economic activity. In federal fiscal year (FFY) 2020, Connecticut contractors were awarded $22.4 billion in defense related prime contracts, up 21.8% from the $18.4 billion awarded in FFY 2019. However, as defense contract awards normally take several years to complete, the 3-year moving average is a better reflection of actual production activities. In FFY 2020, this average was $18.5 billion. Connecticut ranked first in the nation in per capita defense contract awards in FFY 2020.

Retail Trade

Connecticut's retail trade in FY 2020 totaled $62.3 billion, a 3.7% increase over FY 2019. Growth in durable sales declined by 1.3% in FY 2020 compared to a growth in non-durable sales of 5.8%. U.S. E-commerce sales continued their rapid growth, increasing an estimated 23.7% compared to a 1.0% decrease in

traditional retail sales. Connecticut retail trade as a percentage of disposable income decreased to 25.9% in FY 2020 from 25.3% in FY 2019.

Nonfinancial Debt

Total nonfinancial debt grew 219.5% between 2000 and 2020, far outpacing GDP growth of 105.8%. Federal indebtedness grew 477.5%, state and local government debt grew 167.8%, business debts grew 168.6% and household debts grew 129.3%. Connecticut's state government debt outstanding at the end of FY 2019 was $40.9 billion, up from $40.3 billion in FY 2018 and $38.8 billion in FY 2017. Connecticut per capita state government debt was $11,325 in FY 2019, far above the fifty state average of $3,539 in FY 2019.

Gross State Product

In FY 2021, Connecticut's real GSP declined by 0.4% over the prior year to $241.7 billion in 2012 dollars, a decline compared to the U.S. and New England which both experienced an increase of 1.6% and 0.9%, respectively. Per capita real GSP in Connecticut was 17.5% higher than that of the U.S.

Personal Income

In FY 2021, real personal income in Connecticut increased 2.8%, compared to 4.9% growth in the U.S. and 3.7% growth in New England. In FY 2021, Connecticut possessed the highest per capita personal income in the nation at $80,323, 30.2% higher than the national average.

Economic Forecast

Connecticut's personal income is expected to increase 4.5% in FY 2023 and 4.4% in FY 2024 to $310.0 and $323.6 billion, respectively. Connecticut is projected to add 38,100 jobs in FY 2023 and 3,400 jobs in FY 2024, or a respective 2.3% and 0.2% growth. The unemployment rate is projected to improve to 4.3% in FY 2023 and remain at 4.3% in FY 2024.

GENERAL CHARACTERISTICS OF THE STATE OF CONNECTICUT

Connecticut is located in southern New England, bordered by Long Island Sound, New York, Massachusetts, and Rhode Island. The state enjoys a favorable location within the region as rail, truck, air transport and ports provide easy access to local and regional markets in the United States, Canada, and even Europe and South America. About one quarter of the total population of the United States and more than 50% of the Canadian population live within a 500-mile radius of Connecticut.

Connecticut is highly urbanized with a population density of 745 persons for each of its 4,842.4 square miles of land, compared with 94 persons per square mile of land for the United States (3,531,905 square miles), based on 2020 census figures. Hartford, the capital, is a center for the insurance industry and a major service center for business and commerce. Industrial activity in the state is concentrated in two regions: the Naugatuck valley, extending from Bridgeport north, and a belt extending from Hartford west to New Britain and Bristol, and south to New Haven.

Demographics

The United States conducts a census every ten years as required by the Constitution. Since the 1970 census, growth in Connecticut and New England has been slower than the nation as a whole.

TABLE 1
CENSUS POPULATION COUNTS
(In Thousands)

	United States		New England		Connecticut	
Year	Number	% Growth	Number	% Growth	Number	% Growth
1930	123,203	16.3	8,166	10.3	1,607	16.3
1940	132,165	7.2	8,437	3.3	1,709	6.3
1950	151,326	14.5	9,314	10.3	2,007	17.4
1960	179,323	18.5	10,509	12.8	2,535	26.3
1970	203,302	13.4	11,847	12.6	3,032	19.6
1980	226,542	11.4	12,349	4.2	3,108	2.5
1990	248,710	9.8	13,207	6.9	3,287	5.8
2000	281,422	13.2	13,923	5.4	3,406	3.6
2010	308,746	9.7	14,445	3.8	3,574	4.9
2020	331,449	7.4	15,116	3.8	3,606	0.9

Source: U.S. Bureau of the Census

Due to the COVID-19 Pandemic, the 2020 Census ended October 15, 2020 instead of July 31, 2020. The Census Bureau reports responses account for 99.98% of all housing units and addresses nationwide. Between 2010 and 2020, Connecticut's population grew by 0.9% or 31,847 residents, compared to the nation's average of 7.4% over the ten-year period. As seen in the following table, overall growth in Connecticut's population is driven by Fairfield County with a 4.4% increase between 2010 and 2020 or 40,590 residents. This was a significant increase when compared to the second fastest growing county in

the state which was Hartford at 0.6%. Middlesex, Windham, Tolland, New London, and Litchfield County all declined in Connecticut, with the largest decrease of 2.5% in Litchfield County.

The only New England state which grew on par with the nation's 7.4% population increase was Massachusetts with a 7.4% increase. New Hampshire and Rhode Island came in second and third at 4.6% and 4.3%, respectively. Vermont's population increased by 2.8% and Maine's population increased by 2.6%. Connecticut had the smallest increase of all the New England States with a 0.9% increase. County population growth in New England reveals greater urbanization between 2010 and 2020, especially in the counties commutable to big cities like Boston and New York City.

In Connecticut, the town with the largest increase in residents between 2010 and 2020 was Stamford. The population increased from 122,643 to 135,470 residents, a 10.5% increase and equates to 12,827 people. The town with the next largest increase of residents in the state was Danbury at 7.0% or 5,625 residents. The town with the highest percent change was Salisbury at 12.1%, but this equates to an increase of only 453 residents. The top ten towns with the highest percent change were Salisbury, Stamford, Cornwall, Bethel, Danbury, Brookfield, Norwalk, Goshen, Rocky Hill and Farmington. These towns are all West of the Connecticut River. The towns that ranked 11 through 20 with the highest percentage change were localized in two areas; around the City of Hartford, and New York City.

The town with the largest population in Connecticut in both 2010 and 2020 was Bridgeport with a current population of 148,654, which is up 4,425 residents from 2010. In 2020, Stamford became the second most populous town whereas in 2010 it had been the fourth. The third and fourth most populated towns in 2020 are New Haven which gained 4,244 residents, and Hartford which lost 3,721 residents. In 2010, New Haven was the second most populous and Hartford was the third. Waterbury was the fifth most populated in both 2010 and 2020. The town rankings for the top five most populated towns did not change except for Stamford's leap from fourth to second.

TABLE 2
COUNTY POPULATION IN CONNECTICUT

County	2010 Census	2010 Percent	2020 Census	2020 Percent	Percent Change
Fairfield	916,829	25.7	957,419	26.6	4.4
Hartford	894,014	25.0	899,498	24.9	0.6
Litchfield	189,927	5.3	185,186	5.1	(2.5)
Middlesex	165,676	4.6	164,245	4.6	(0.9)
New Haven	862,477	24.1	864,835	24.0	0.3
New London	274,055	7.7	268,555	7.4	(2.0)
Tolland	152,691	4.3	149,788	4.2	(1.9)
Windham	118,428	3.3	116,418	3.2	(1.7)
TOTAL	3,574,097	100.0	3,605,944	100.0	0.9

Source: U.S. Bureau of the Census

In FY 2021, Connecticut's population decreased slightly (by about 3,600 people) over the prior year for the third consecutive fiscal year. By comparison, over the last ten fiscal years, population grew modestly

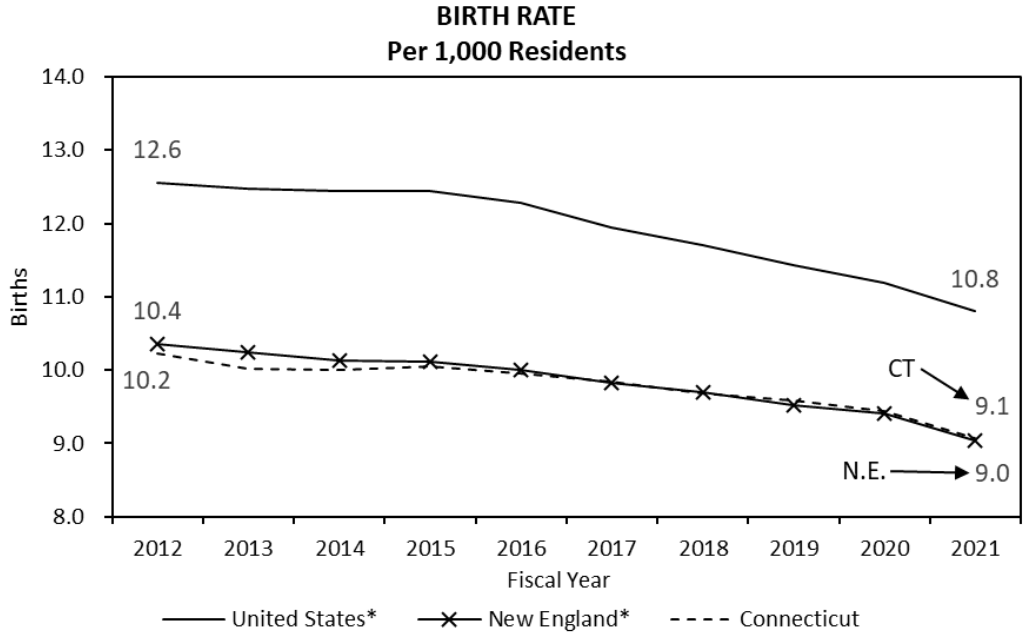
each fiscal year in both the nation as a whole and in New England, except in FY 2021 when New England decreased by 0.1%. The following table shows population for the last ten fiscal years for each of the three geographical areas.

TABLE 3
POPULATION BY FISCAL YEAR
(In Thousands)

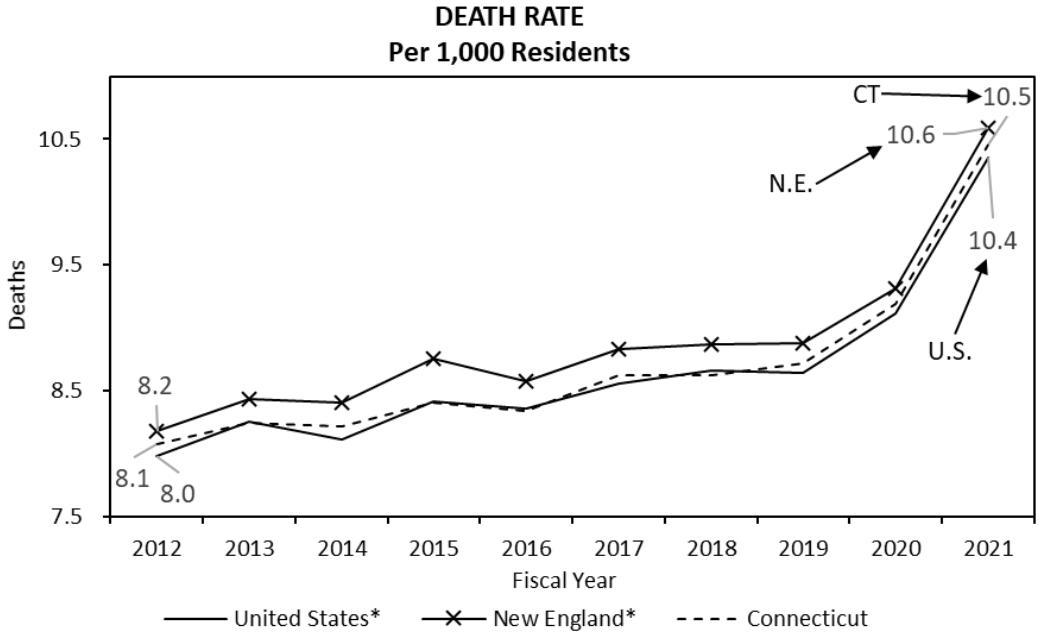
Fiscal	United States*		New England		Connecticut	
Year	Population	% Growth	Population	% Growth	Population	% Growth
2012	313,350.2	0.8	14,618.5	0.6	3,601.2	0.3
2013	315,777.3	0.8	14,701.7	0.6	3,608.6	0.2
2014	318,262.6	0.8	14,785.6	0.6	3,613.3	0.1
2015	320,865.6	0.8	14,850.8	0.4	3,613.3	0.0
2016	323,481.3	0.8	14,905.8	0.4	3,609.6	(0.1)
2017	325,900.7	0.7	14,969.2	0.4	3,608.0	(0.0)
2018	327,936.2	0.6	15,031.6	0.4	3,610.3	0.1
2019	329,650.8	0.5	15,076.4	0.3	3,609.1	(0.0)
2020	331,114.3	0.4	15,106.1	0.2	3,604.8	(0.1)
2021	331,751.9	0.2	15,089.0	(0.1)	3,601.3	(0.1)

*Includes armed forces overseas
Source: Bureau of the Census, IHS Economics

There are two drivers of change in a population. The first is natural change, calculated as births per 1,000 people less deaths per 1,000 people. The natural change in Connecticut was an estimated -1.4 per 1,000 people in FY 2021, down from 2.2 per 1,000 people in FY 2012. This represents a 163.9% decline in the natural change rate over that period. Deaths per 1,000 people in the state have increased rather significantly in FY 2020 and FY 2021 due to the COVID-19 pandemic. Births, in particular, have declined following the Great Recession and have decreased even more as a result of the pandemic. In Connecticut, there were 9.1 births per 1,000 people in FY 2021, down from 10.2 births per 1,000 people in FY 2012. This represents an 11.4% reduction in the birth rate in the state. The birth rate in Connecticut has been essentially the same as the birth rate in New England, but both the state and New England have traditionally been lower than the nation as a whole in every year since FY 2012. The following graph shows the rates of birth in the United States, New England, and Connecticut.

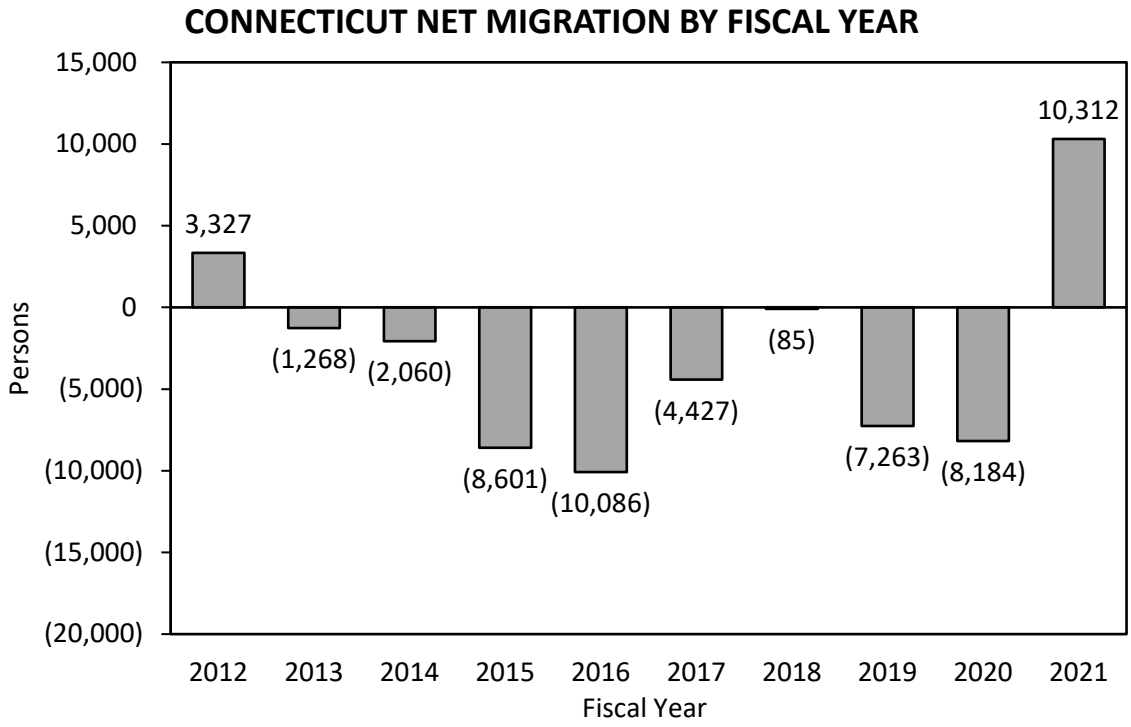


*Sum of states' totals
Source: Bureau of the Census, IHS Markit



*Sum of states' totals
Source: Bureau of the Census, IHS Markit

The second driver of population change is migration. Generally speaking, the domestic migratory pattern in the United States has been towards the South and West. At the same time, international migration has contributed to overall population growth in the nation. Over the past decade, Connecticut has experienced mostly net out-migration. From FY 2013 to FY 2020, out-migration was sufficient to cancel out any population growth from births, resulting in net population declines in those years. However, in FY 2021, the state experienced significant net in-migration which is also a result of the COVID-19 pandemic as people fled densely populated urban locations for more suburban communities. The following graph shows net out-migration for the state in eight of the previous ten fiscal years.



Source: Bureau of the Census, IHS Markit

Age Cohorts

Connecticut tends to be older than the nation as a whole. In 2020, the Bureau of the Census reported the median age in Connecticut was 41.2 years, compared to 38.7 years nationally. In comparison to the rest of the 50 states, Maine had the oldest median age in 2020 at 45.0 years and Utah had the youngest median age at 31.6 years. Connecticut ranks 7th in the nation for the oldest median age; Maine, New Hampshire, and Vermont are the only Northeastern states that have an older median age population than Connecticut. An older population in the state has implications both for private economic activity and for demand for state government services. The following table summarizes the estimated population by age cohort during calendar year 2020 for Connecticut and the United States. Cohorts age 45 and older represent a larger portion of the population in Connecticut compared to the United States. The 0-17 and 25-44 age cohorts represent a smaller portion of the population in Connecticut than the nation as a whole. In Connecticut, there is a particularly large population in the 55-64 age cohort. As this cohort ages out of the workforce, there will be significant change, challenges, and opportunities in the Connecticut economy.

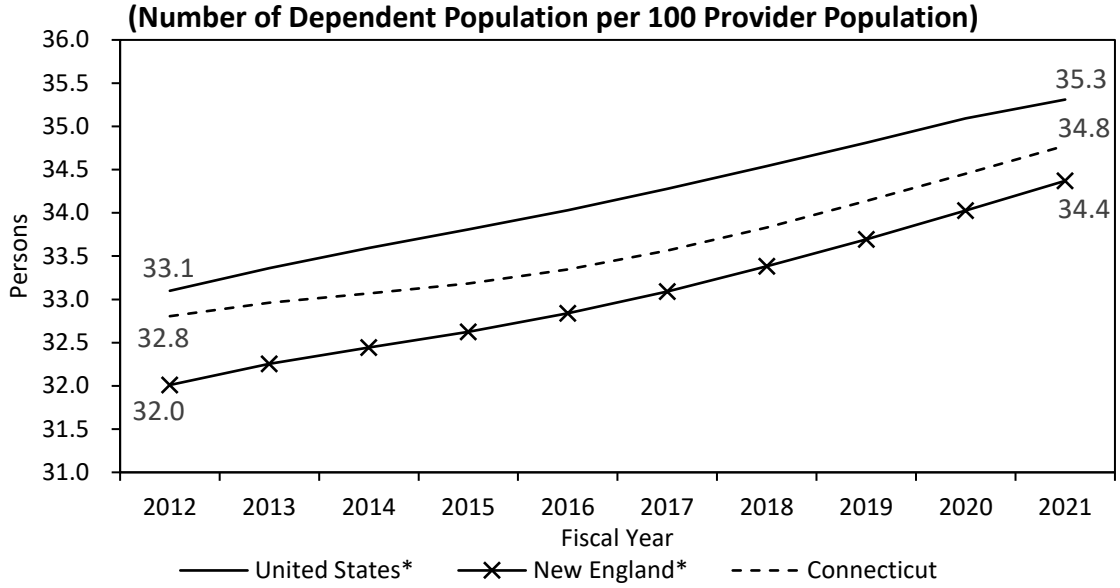
When comparing the median age among all 169 towns in Connecticut for 2019, the town with the oldest median age was Salisbury at 57.1 years and the youngest median age was Mansfield at 21.0 years. Connecticut's major cities have some of the youngest median ages of all the towns in the state. In 2019, New Haven had a median age of 30.8 years, Hartford at 32.1 years, Bridgeport at 34.3 years, and Waterbury and Stamford at 34.8 and 36.9 years, respectively.

TABLE 4
POPULATION BY AGE COHORT
Calendar Year 2020 Population Estimates Program by U.S. Census Bureau

	Connecticut		United States	
Age Cohort	Population	% of Total	Population	% of Total
0-17 Years	717,513	20.2	72,659,527	22.1
18-24 Years	339,915	9.6	30,034,200	9.1
25-34 Years	449,296	12.6	45,828,469	13.9
35-44 Years	433,410	12.2	42,614,407	12.9
45-54 Years	458,778	12.9	40,236,188	12.2
55-64 Years	512,050	14.4	42,428,610	12.9
65+ Years	646,044	18.2	55,682,718	16.9
Total	3,557,006	100.0	329,484,119	100.0

Source: Bureau of the Census – 2020 American Community Survey

DEPENDENCY RATIO
(Number of Dependent Population per 100 Provider Population)



*Based on sum of states' population data
Source: Bureau of the Census, IHS
The previous graph shows the dependency ratio for Connecticut, New England, and the United States over the previous ten fiscal years. The dependency rate is calculated as the number of dependent population

per 100 provider population. “Dependent population” means either those age 14 or younger and those over the age of 65. “Provider population” means those aged 15 to 64. No consideration is made as to whether members of each group are currently participating in the labor force, a limit to this analysis. As the graph shows, the dependency rate in Connecticut has been below the nation each year since FY 2012. The dependency ratio in Connecticut was 34.8 persons per 100 provider population in FY 2021, compared to 35.3 in the United States and 34.4 in New England. The lower ratio in Connecticut is the result of a smaller proportion of those age 14 or younger in the state. While these individuals tend to consume many state services in the short run, they also represent the future provider population.

Educational Attainment

One of Connecticut’s greatest economic strengths is a highly educated and talented workforce. This workforce gives the state a competitive edge in areas such as professional services and advanced manufacturing. The following table summarizes the highest level of educational attainment during calendar year 2020 for Connecticut and the United States, according to the Bureau of the Census. Note that the proportion of those holding a bachelor’s degree in Connecticut is 10.3% higher than the nation, while the proportion of those holding a graduate or professional degree is 37.4% higher than the nation.

TABLE 5
HIGHEST EDUCATIONAL ATTAINMENT, POPULATION 25 YEARS AND OVER
Calendar Year 2020

	Connecticut*	United States*	Connecticut as a % of U.S.
Less than high school	8.4%	10.6%	78.9%
High school diploma or equivalent	24.6%	25.9%	95.0%
Some college, no degree	16.4%	19.6%	83.7%
Associate's degree	8.2%	8.8%	93.1%
Bachelor's degree	23.5%	21.3%	110.3%
Graduate or professional degree	18.9%	13.8%	137.4%

*Note, columns may not add to 100.0% due to rounding
Source: Bureau of the Census

Households

Demand for goods and services depends upon the level of household income and the total number of households. The number of households is a function of household size and population; for example, for a given population, as the size of the household declines, the number of households increases, which causes higher demand for housing and automobiles as well as household goods and services.

The number of households in Connecticut in FY 2021 was an estimated 1,421,608, up 0.2% from FY 2020. This continues the relatively consistent trend over the ten previous fiscal years as Connecticut has experienced relatively flat or declining population that has affected economic growth. The previous years with upticks in growth may reflect the long-term trend toward smaller household size. Family households include a householder and one or more other persons living in the same household who are related by birth, marriage, or adoption. Non-family households include a householder living alone or with non-relatives.

TABLE 6
HOUSEHOLDS
(In Thousands)

Fiscal	United States*		New England		Connecticut	
Year	Households	% Growth	Households	% Growth	Households	% Growth
2012	118,217.3	0.8	5,725.1	0.5	1,374.5	0.4
2013	118,967.3	0.6	5,729.1	0.1	1,369.4	(0.4)
2014	119,877.1	0.8	5,762.2	0.6	1,376.5	0.5
2015	121,021.1	1.0	5,786.0	0.4	1,378.8	0.2
2016	121,982.8	0.8	5,822.4	0.6	1,386.7	0.6
2017	123,175.9	1.0	5,880.4	1.0	1,395.4	0.6
2018	124,718.2	1.3	5,950.4	1.2	1,412.8	1.2
2019	126,259.4	1.2	6,016.2	1.1	1,424.3	0.8
2020	126,821.0	0.4	6,021.6	0.1	1,419.1	(0.4)
2021	128,083.1	1.0	6,049.3	0.5	1,421.6	0.2

*Sum of states' data
Source: Bureau of the Census, IHS Markit

Housing

Housing plays an integral role in our nation's economy. According to the National Association of Home Builders, the housing sector was about 17.1% of national gross domestic product (GDP) in FY 2021. Housing starts, or the number of housing units on which construction has begun, reached a nadir in FY 2011. This dramatic decline in the aftermath of the 2008 Great Recession negatively impacted homebuilders and contributed to the high unemployment rate nationwide. While starts have rebounded in recent years, growth in New England and Connecticut has been slower and more uneven than the nation as a whole for most of the last ten fiscal years. Between FY 2012 and FY 2021, starts grew at an annual rate of 9.5% in the United States, versus 6.4% in New England and 3.7% in Connecticut. Starts increased in Connecticut in FY 2020 by 13.4% over the prior year but declined in FY 2021 by 2.0% over FY 2020. By comparison, housing starts in New England and the United States increased in FY 2021 by 17.7% and 14.6%, respectively. The decreases in housing starts in Connecticut in FY 2017 through FY 2019, shown in the table below, were driven entirely by a decline in starts of multi-family units.

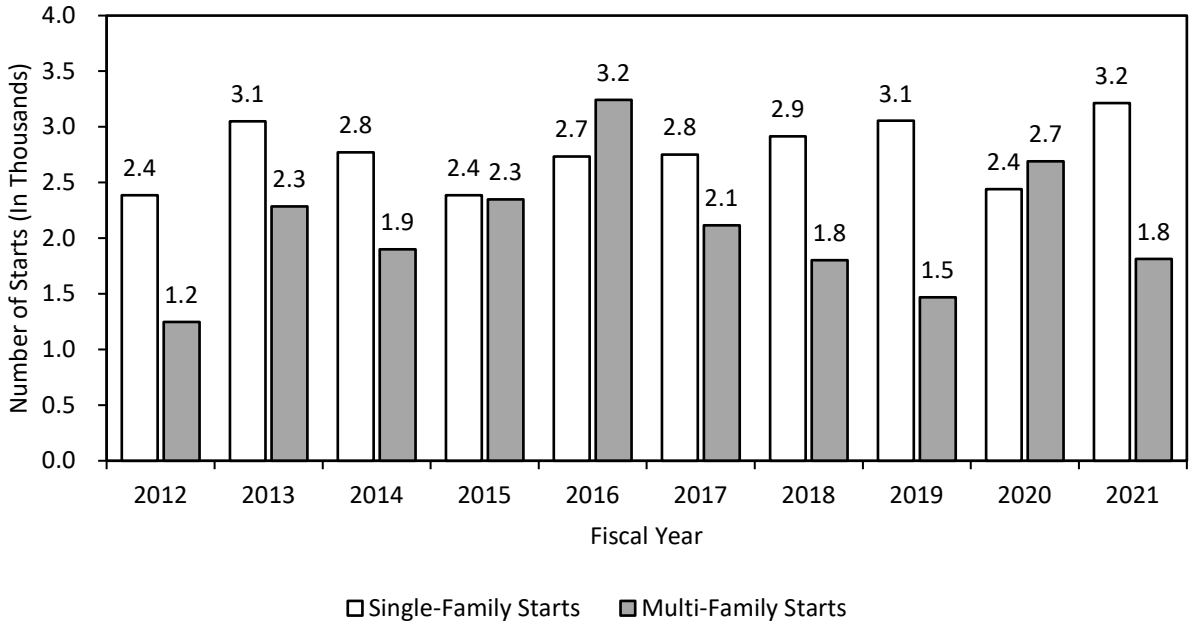
TABLE 7
HOUSING STARTS
(In Thousands)

Fiscal	United States		New England		Connecticut	
Year	Number	% Growth	Number	% Growth	Number	% Growth
2012	684.4	20.1	20.3	8.2	3.6	2.7
2013	877.4	28.2	24.4	20.7	5.3	46.9
2014	953.1	8.6	26.3	7.8	4.7	(12.5)
2015	1,053.8	10.6	26.6	1.0	4.7	1.4
2016	1,151.5	9.3	32.7	22.8	6.0	26.2
2017	1,199.9	4.2	32.1	(1.8)	4.9	(18.6)
2018	1,250.6	4.2	32.8	2.3	4.7	(3.0)
2019	1,218.0	(2.6)	30.0	(8.5)	4.5	(4.1)
2020	1,317.3	8.1	30.8	2.5	5.1	13.4
2021	1,550.8	17.7	35.3	14.6	5.0	(2.0)

Source: U.S. Department of Commerce, Bureau of the Census, IHS Markit

In Connecticut, the mix of starts has been significantly different than it was prior to the 2008 Great Recession. In FY 2016, starts in multi-family housing units actually exceeded those for single-family units and reached a record high. Since then, multi-family starts have decreased year over year as single-family starts have increased—until the COVID-19 pandemic reached the United States in FY 2020. The trend reversed in FY 2020 as starts of single-family homes decreased, multi-family starts increased and, similar to FY 2016, the number of starts of multi-family homes surpassed those of single-family homes. In FY 2021, starts reverted back to the same trend that was seen in FY 2017 through FY 2019 where single-family starts exceeded multi-family starts. The trends in more recent years may have been driven by demographic changes and shifting preferences in the state. As the size of the average household has decreased and the Connecticut population has aged, demand for smaller and more affordable housing units has increased. The following graph shows both single- and multi-family housing starts in Connecticut by fiscal year.

CONNECTICUT SINGLE-FAMILY AND MULTI-FAMILY STARTS
(In Thousands)



Source: U.S. Department of Commerce, Bureau of the Census, IHS

Household Formations

Given that housing starts were low through the 2008 recession, it is no surprise that household formation has also been depressed. New households may be formed when children move out of their family's home, individuals live singly after previously sharing a residence, or couples separate. Households are reduced when young people move back home with their parents or individuals pass away. The number of households is also impacted by both in- and out-migration. Connecticut has typlically been a net out-migration state in the last ten years. While the number of households in the United States has grown modestly over the last decade, the number of households in Connecticut has remained relatively flat until FY 2018 when they grew by 1.2%. In FY 2020 and FY 2021, the United States saw increases of 0.6% and 0.7%, respectively, whereas Connecticut fell by 0.4% in FY 2020 and grew by 0.2% in FY 2021. Since FY 2012, household formations in Connecticut have grown by approximately 47,000. In comparison to the United States, the annual growth rate from FY 2012 to FY 2021 was 0.4% for Connecticut and 0.8% for the United States. The following table summarizes household formation data for both the United States and Connecticut.

TABLE 8
HOUSEHOLD FORMATIONS
(In Thousands)

Fiscal Year	United States Total Households	Change in Households from Previous Year	Connecticut Total Households	Change in Households from Previous Year
2012	118,855	1.0%	1,375	0.4%
2013	120,139	1.1%	1,369	-0.4%
2014	121,104	0.8%	1,377	0.5%
2015	122,331	1.0%	1,379	0.2%
2016	123,530	1.0%	1,387	0.6%
2017	124,150	0.5%	1,395	0.6%
2018	125,305	0.9%	1,413	1.2%
2019	126,319	0.8%	1,424	0.8%
2020	127,139	0.6%	1,419	-0.4%
2021	128,070	0.7%	1,422	0.2%

Source: U.S. Bureau of the Census, IHS Markit

Median Sales Price of Housing

Median sales price is the midpoint price at which half of the sales are above and half are below the price. In FY 2021, the median sales price for existing homes in the nation was 94.2% above the FY 2012 level, while in Connecticut the median sales price is above the FY 2012 level by 27.9%. Historically, the median price of an existing family home has been much higher in Connecticut than in the nation. That gap has closed considerably over the past decade. In FY 2021, the median price of a home in Connecticut was 2.9% higher than the national average compared to FY 2012 when the median price in Connecticut was 56.3% higher. Given that growth in the median sales price of housing has been increasing in Connecticut since FY 2014 and growth in nation has been increasing since FY 2013, housing prices have grown faster in the nation over the last ten fiscal years compared to Connecticut. In other words, housing in Connecticut is trending to be more affordable than housing in the nation. The following table summarizes data on the median sale price for existing single-family homes.

The U.S. housing affordability index decreased to 167.5 in FY 2021 compared to 171.1 in FY 2020. To interpret the housing affordability index, a value of 100 means that a family with the median income has exactly enough income to qualify for a mortgage on a median-priced home, assuming a 20% down payment. A value above 100 signifies that a family earning the median income has more than enough income to qualify for a mortgage loan on a median-priced home. The affordability index continues to remain above the 100 benchmark. The following table summarizes the affordability index over the previous ten fiscal years.

TABLE 9
MEDIAN SALES PRICE OF EXISTING HOMES IN CONNECTICUT AND THE UNITED STATES
(By Fiscal Year)

Fiscal Year	Median Price U.S.	U.S. % Change	Median Price CT	CT % Change	CT as a % of U.S.	U.S. Affordability Index
2012	$167,975	(0.6)	$262,596	(3.1)	156.3	191.6
2013	$185,758	10.6	$262,281	(0.1)	141.2	193.7
2014	$201,750	8.6	$265,120	1.1	131.4	165.4
2015	$214,908	6.5	$265,710	0.2	123.6	167.3
2016	$227,267	5.8	$267,385	0.6	117.7	165.7
2017	$241,058	6.1	$270,646	1.2	112.3	163.4
2018	$253,967	5.4	$277,687	2.6	109.3	155.0
2019	$264,717	4.2	$284,205	2.3	107.4	150.5
2020	$280,158	5.8	$292,619	3.0	104.4	171.1
2021	$326,258	16.5	$335,733	14.7	102.9	167.5
'12-'21 Change	$158,283	94.2	$73,136	27.9		
'12-'21 CAGR*		7.7		2.8		

*Compound annual growth rate
Source: National Association of Realtors, Federal Housing Finance Agency, IHS Economics

Housing Finance

In FY 2021, thirty-year fixed mortgage rates averaged 2.90%, down from 3.53% in FY 2020, and the lowest level recorded, according to Freddie Mac. Federal Reserve policy in response to both the 2008 recession and the COVID-19 pandemic have put downward pressure on mortgage rates during the housing market collapse and recent recovery. The low interest rates seen in FY 2020 and FY 2021 helped boost home sales in FY 2021.

TABLE 10
30 YEAR FIXED-RATE MORTGAGES

Fiscal Year	Average Rate	% Change	Fiscal Year	Average Rate	% Change
2012	4.01	(12.7)	2017	3.86	1.6
2013	3.53	(12.1)	2018	4.15	7.8
2014	4.33	22.9	2019	4.43	6.6
2015	3.91	(9.7)	2020	3.53	(20.3)
2016	3.80	(3.0)	2021	2.90	(17.9)

Source: Freddie Mac

Delinquency rates on mortgages have decreased in recent years, following a turbulent period in the aftermath of the 2007 housing bust. According to economic data from the Federal Reserve, the

delinquency rate on single family residential mortgages was 2.7% in FY 2021, which was a slight increase over the 2.4% delinquency rate registered in FY 2020. FY 2020 levels were the lowest since FY 2007.

Total Home Sales

Total home sales in Connecticut have not returned to levels experienced prior to the housing crisis, however, home sales in the nation have recovered significantly. FY 2021 data shows that the nation only remains about 10% below levels that were reached in FY 2005 compared to Connecticut which still remains about 43% below FY 2005 levels. Causes may include deferred household formations, stricter lending standards, decreased real estate speculation, and a trend toward renting instead of owning. The following table shows home sales for Connecticut, New England, and the United States by state fiscal year. Total home sales in Connecticut increased in FY 2021 by 25.7%, with about 47,300 sales—the highest level since about 65,100 home sales were recorded in the state in FY 2007. Total home sales in FY 2021 also increased in both New England and the United States, by 22.3% and 20.5%, respectively. As the COVID-19 pandemic hit the nation in early 2020, the combination of mortgage interest rates dropping significantly, people moving to the suburbs from densely populated areas, widespread adoption of remote working policies, and federal stimulus all may have contributed to the substantial increase in home sales in Connecticut in FY 2021. The housing market seemed to have thrived from late spring in 2020 well into the summer months of 2021.

TABLE 11
TOTAL HOME SALES
(In Thousands)

Fiscal	United States*		New England		Connecticut	
Year	Number	% Change	Number	% Change	Number	% Change
2012	4,431.7	9.7	166.3	4.8	34.4	3.9
2013	4,924.2	11.1	186.3	12.0	39.6	15.3
2014	4,950.8	0.5	188.4	1.1	39.3	(0.9)
2015	5,098.3	3.0	192.1	1.9	39.2	(0.3)
2016	5,343.3	4.8	212.7	10.7	43.0	9.8
2017	5,516.7	3.2	218.9	2.9	44.3	3.0
2018	5,476.7	(0.7)	207.5	(5.2)	42.0	(5.2)
2019	5,232.5	(4.5)	200.5	(3.4)	41.6	(0.9)
2020	5,165.0	(1.3)	188.1	(6.2)	37.6	(9.6)
2021	6,224.2	20.5	230.0	22.3	47.3	25.7

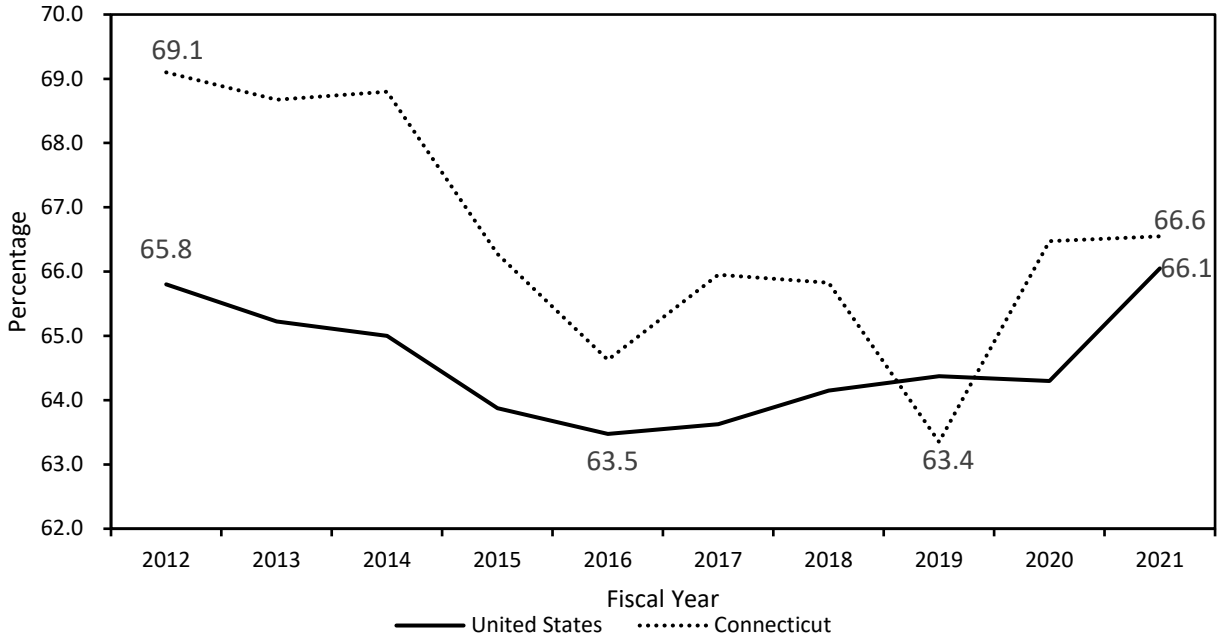
* Sum of States' Home Sales
Source: National Association of Realtors, IHS

Homeownership and Home Equity

Homeownership experienced a long-term decline in the years following the 2007 housing crisis. This may be attributed to a number of factors, including weak economic growth, stricter lending standards, and younger Americans deferring their first home purchase. Since reaching a low in FY 2016, homeownership rates have been gradually rising in the United States until declining by 0.1% in FY 2020. Connecticut

followed a trend similar to the nation until FY 2016. As the nation's homeownership rates increased over the next few fiscal years, Connecticut saw a mix of increases and declines. Connecticut experienced a new low point in FY 2019 with a homeownership rate of 63.4%. The state then recorded its greatest year-over-year increase in homeownership rates in FY 2020 over the last 15 fiscal years. In FY 2019, the homeownership rate in Connecticut was 63.4% compared to 66.5% in FY 2020 and 66.6 in FY 2021. The following graph shows homeownership rates in FY 2012 through FY 2021. Historically, Connecticut has had higher homeownership rates than the national average. In FY 2019, the homeownership rate in Connecticut fell below the national homeownership rate, with the United States at 64.4% compared to 63.4% in Connecticut. The historical trend continued in FY 2020 and FY 2021 where Connecticut, again, registered homeownership rates greater than the nation.

HOMEOWNERSHIP RATES IN THE UNITED STATES AND CONNECTICUT



Source: U.S. Census Bureau

While the rate of homeownership has declined in the last decade, the home equity rate has increased. Nationally, owners' equity in their homes has increased from 46.4% in FY 2012 to 67.3% in FY 2021. Two factors have pushed owners' equity higher over the last decade. First, home values have nominally recovered from the housing bust. The Case-Shiller Home Price Index, which measures home values using data on sales prices of single-family homes, exceeded its previous peak set in September of 2016. Second, the same economic and regulatory forces that have reduced homeownership have also reduced the overall indebtedness resulting from home mortgages. The following table summarizes owners' equity data from the Federal Reserve.

TABLE 12
OWNERS' EQUITY AS A PERCENTAGE OF
HOUSEHOLD REAL ESTATE
(In Billions)

Fiscal Year	Home Values*	Home Mortgages*	Home Equity
2012	18,167.4	9,746.8	46.4%
2013	18,867.0	9,518.2	49.6%
2014	20,517.0	9,416.3	54.1%
2015	21,920.5	9,376.9	57.2%
2016	23,433.0	9,485.1	59.5%
2017	25,211.4	9,687.0	61.6%
2018	27,147.8	9,949.4	63.4%
2019	28,777.1	10,224.4	64.5%
2020	30,398.7	10,514.6	65.4%
2021	33,691.3	11,002.4	67.3%

Source: Federal Reserve "Flow of Funds" Table B.101
*In Nominal Dollars

EMPLOYMENT PROFILE

Employment Estimates

The employment estimates for most of the tables included in this section are from the U.S. Bureau of Labor Statistics and the Connecticut Labor Department. They are developed as part of the federal-state cooperative Current Employment Statistics (CES) Program. The estimates for the state and the labor market areas are based on the responses to surveys of 5,000 Connecticut employers registered with the Unemployment Insurance program. Companies are chosen to participate based on specifications from the U.S. Bureau of Labor Statistics. As a general rule, all large establishments are included in the survey as well as a sample of smaller employers. It should be noted, however, that this method of estimating employment may result in under-counting jobs created by agricultural and private household employees, self-employed individuals and unpaid family workers who are not included in the sample. The survey only counts total business payroll employment in the economy.

The COVID-19 pandemic led governors across the country to impose a variety of public health measures, including restricting travel and significantly curtailing social interaction (i.e., sporting events, concerts, etc.). This resulted in massive downturns in employment over a short period of time. In Fiscal Year 2020, Connecticut experienced over 291,000 job losses from February through April, the peak of the pandemic in the northeast region, after government restrictions were put in place. Employment continued to be curbed in FY 2021, and, as of January 2022, the pandemic continues to be a problem.

To provide a broader employment picture, the following table, based on residential employment, was developed. Total residential employment is estimated based on household surveys which include individuals excluded from establishment employment figures such as self-employed and workers in the agricultural sector. By this measure, residential employment decreased by 150,000 jobs between FY 2020 and FY 2021. Likewise, the level of establishment employment based on the employer survey response decreased by 61,100 jobs in FY 2021.

The following table provides a ten fiscal year historical profile of residential and establishment employment in Connecticut.

TABLE 13
CONNECTICUT SURVEY EMPLOYMENT COMPARISONS
(In Thousands)

Fiscal Year	Residential Employment	% Growth	Establishment Employment	% Growth
2012	1,744.5	0.49	1,641.3	0.82
2013	1,715.5	(1.66)	1,654.6	0.81
2014	1,738.7	1.35	1,666.2	0.70
2015	1,783.1	2.55	1,681.3	0.91
2016	1,788.2	0.29	1,689.9	0.51
2017	1,816.2	1.56	1,695.2	0.32
2018	1,818.2	0.11	1,696.7	0.09
2019	1,842.1	1.31	1,698.6	0.11
2020	1,806.0	(1.96)	1,632.4	(3.89)
2021	1,656.0	(8.30)	1,571.3	(3.74)

Source: U.S. Bureau of Labor Statistics, Connecticut Department of Labor, IHS Economics

Nonagricultural Employment

Nonagricultural employment includes all persons employed except federal military personnel, the self-employed, proprietors, unpaid family workers, farm and household domestic workers. Nonagricultural employment is comprised of the broad manufacturing sector and the nonmanufacturing sector. These two components of nonagricultural employment are discussed in detail in the following sections.

The following table shows a ten fiscal year historical profile of nonagricultural employment in the United States, the New England region, and Connecticut.

TABLE 14
NONAGRICULTURAL EMPLOYMENT
(In Thousands)

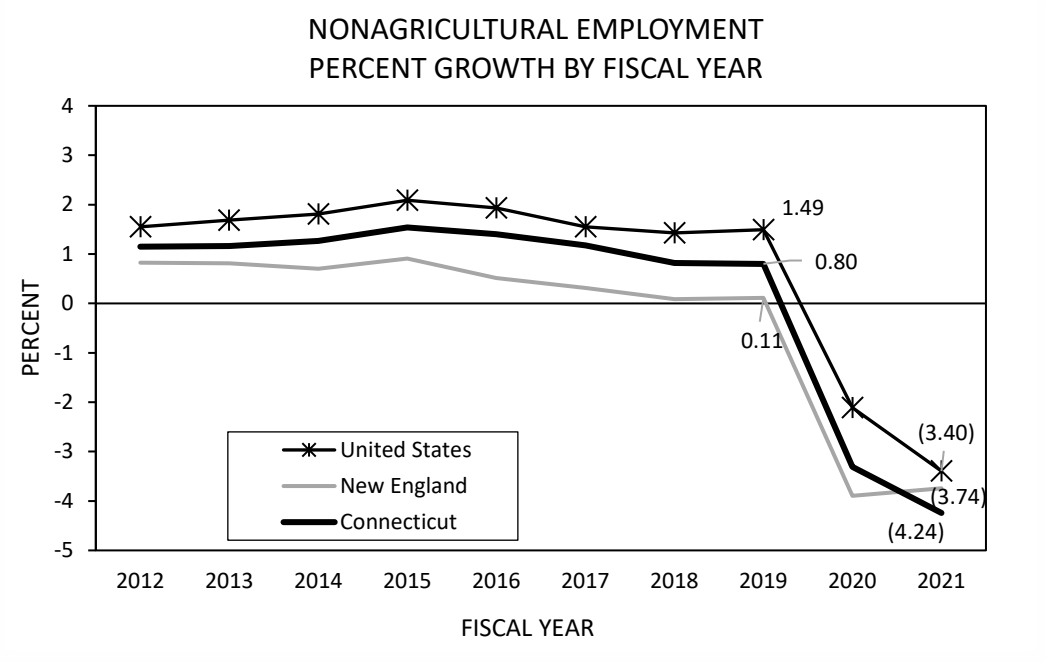
Fiscal	United States		New England		Connecticut	
Year	Number	% Growth	Number	% Growth	Number	% Growth
2012	133,206	1.55	6,922	1.15	1,641	0.82
2013	135,449	1.68	7,003	1.16	1,655	0.81
2014	137,899	1.81	7,091	1.26	1,666	0.70
2015	140,779	2.09	7,200	1.54	1,681	0.91
2016	143,500	1.93	7,301	1.40	1,690	0.51
2017	145,722	1.55	7,387	1.17	1,695	0.32
2018	147,806	1.43	7,447	0.82	1,697	0.09
2019	150,011	1.49	7,507	0.80	1,699	0.11
2020	146,847	(2.11)	7,258	(3.31)	1,632	(3.89)
2021	141,861	(3.40)	6,951	(4.24)	1,571	(3.74)

Source: U.S. Bureau of Labor Statistics, Connecticut Labor Department, IHS Economics

In Connecticut, approximately 43% of total personal income is derived from wages earned by workers classified in the nonagricultural employment sector. Thus, increases in employment in this sector lead to increases in personal income growth and consumer demand. In addition, nonagricultural employment can be used to compare similarities and differences between economies, whether state or regional, and to observe structural changes within economies. These factors make nonagricultural employment figures a valuable indicator of economic activity.

Connecticut experienced positive growth in nonagricultural employment from FY 2004 through FY 2008. After reaching a peak in FY 2008, Connecticut lost approximately 100,000 nonagricultural jobs due to the Great Recession. As of FY 2019 Connecticut had regained approximately 79,200 nonagricultural jobs. FY 2020 saw a reversal of positive employment growth with a loss of 66,200 jobs in a single fiscal year. This trend continued in FY 2021 with an additional decrease of 61,100 jobs between FY 2020 and FY 2021.

These changes in employment are directly related to the COVID-19 pandemic which resulted in government-mandated shutdowns and significant employment losses starting in the second half of FY2020. Reversals of shutdowns occurred in FY2021, but employment has not yet recovered to its pre-pandemic levels. The following chart provides a graphic presentation of the growth rates in nonagricultural employment for the state, New England region, and nation over a ten fiscal year period and clearly shows the impact of the COVID-19 pandemic.



Source: U.S. Bureau of Labor Statistics, Connecticut Labor Department, IHS Economics

The following table shows employment growth rates for the United States and the State of Connecticut over six decades beginning in FY 1950. This table highlights the robust growth of nonagricultural employment for Connecticut prior to 1990 juxtaposed against the modest 2.3% growth between 1990 and 2000, and the negative 4.5% growth during the 2000-2010 time period which was significantly impacted by the Great Recession. U.S. growth was negative in the 2000-2010 period for the first time in five decades with a 0.5% decline. Recovery from the Great Recession from 2010 to 2020 produced a 13.0% growth rate for the United States and a 1.1.% growth rate for Connecitcut. As of 2021, employment growth has declined for both the United States and Connecticut by 2.8% and 3.8%, respectively.

Throughout the last two decades, while manufacturing employment in Connecticut has been steadily declining, employment growth in nonmanufacturing industries has surged. Relatively rapid growth in the nonmanufacturing sector is a trend that is evident nationwide and reflects the increasing importance of the service industry. This shift in employment provides for relatively more stable economic growth in the long run through the moderation of the peaks and troughs of economic cycles. In FY 2021, approximately 90% of the state's workforce was employed in nonmanufacturing jobs, up from roughly 50% in the early 1950s.

TABLE 15
NONAGRICULTURAL EMPLOYMENT
LONG-TERM GROWTH RATES
(Not Seasonally Adjusted)

Fiscal Year		US Growth Rate	CT Growth Rate	US Cumulative Growth Rate	CT Cumulative Growth Rate
1950	1960	23.4%	24.6%	23.4%	24.6%
1960	1970	31.6%	31.9%	62.4%	64.4%
1970	1980	27.3%	17.8%	106.7%	93.6%
1980	1990	20.4%	16.4%	148.8%	125.3%
1990	2000	20.0%	2.4%	198.7%	130.7%
2000	2010	-0.5%	-4.4%	197.2%	120.5%
2010	2020	13.0%	1.1%	235.8%	122.9%
2020	2021	-2.8%	-3.8%	226.5%	114.5%

Source: U.S. Bureau of Labor Statistics

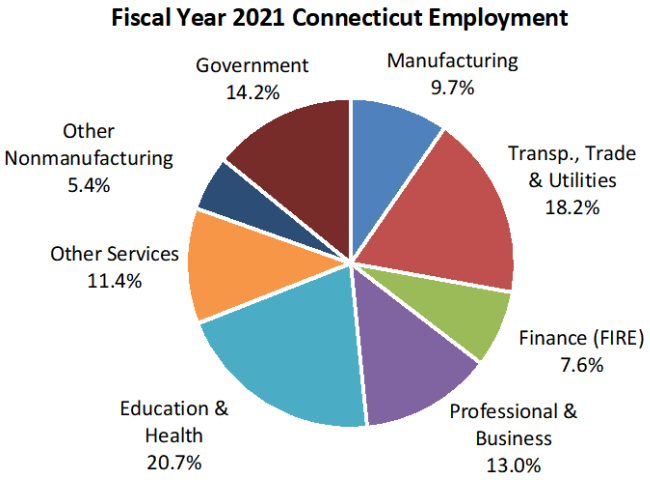
The following table depicts the decrease in the ratio of manufacturing employment to total employment in Connecticut over the last six decades.

TABLE 16
CONNECTICUT RATIO OF MANUFACTURING EMPLOYMENT
TO TOTAL EMPLOYMENT
(In Thousands)

Fiscal Year	Total Employment	Manufacturing Employment	NonMfg. Employment	Mfg. Employment as a Percentage of Total Employment
1950	766.1	379.9	386.2	49.6
1955	874.7	423.1	451.6	48.4
1960	915.2	407.1	508.1	44.5
1965	1,033.0	436.2	596.8	42.2
1970	1,198.1	441.8	756.3	36.9
1975	1,224.6	389.8	834.8	31.8
1980	1,428.4	440.8	987.6	30.9
1985	1,558.2	408.0	1,150.2	26.2
1990	1,623.5	341.0	1,282.5	21.0
1995	1,564.0	250.6	1,313.4	16.0
2000	1,690.0	235.3	1,454.7	13.9
2005	1,666.3	194.3	1,472.0	11.7
2010	1,614.8	163.4	1,451.4	10.1
2020	1,632.4	158.6	1,473.8	9.7
2021	1,571.3	151.9	1,419.5	9.7

Source: U.S. Bureau of Labor Statistics, Connecticut Labor Department

The chart on the right provides a breakdown of Connecticut employment in FY 2021. As is evident, Connecticut employment is highly concentrated in nonmanufacturing employment sectors with only 9.7% of Connecticut laborers employed in the manufacturing sector. The services sector, which includes the professional and business, education and health, government, finance, and leisure and hospitality segments (included in Other Services), is clearly the leading sector with 66.7% of those working employed in that classification. Between 2020 and 2021, the only sector which experienced a gain in employment was Transportation, Trade, and Utilities with a 0.9 percentage point increase.

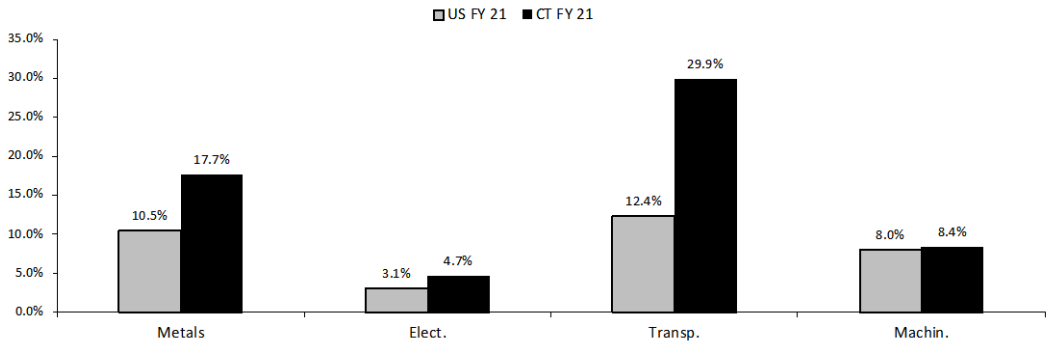


Manufacturing Employment

Even with declines in overall manufacturing employment, the ratio of manufacturing employment to total employment still defines Connecticut as one of the major manufacturing and industrial states in the country. Within this broad definition, the manufacturing sector can be further broken down into several major components.

Over the last decade the state's distribution of manufacturing employment has changed slightly. Defense expenditures have enhanced the transportation equipment sector as evidenced by the percentage of total state manufacturing employment in that sector at 29.9% in FY 2021, up from 25.8% in FY 2012. Employment in the fabricated metals sector as a percent of total state manufacturing has remained stable over the past decade at approximately 17.4% in FY 2012 and 17.7% in FY 2021. The other major manufacturing sectors, industrial machinery, and electrical equipment and appliances make up approximately 8.4% and 4.7% of the total manufacturing sector respectively in FY 2021. The distribution of employment figures within the manufacturing sector highlights that Connecticut manufacturing is diversified, but has a greater reliance on the metals and transportation equipment sectors.

COMPARISON OF MANUFACTURING EMPLOYMENT IN CERTAIN SECTORS
(As A Percentage Of Total Manufacturing Employment)



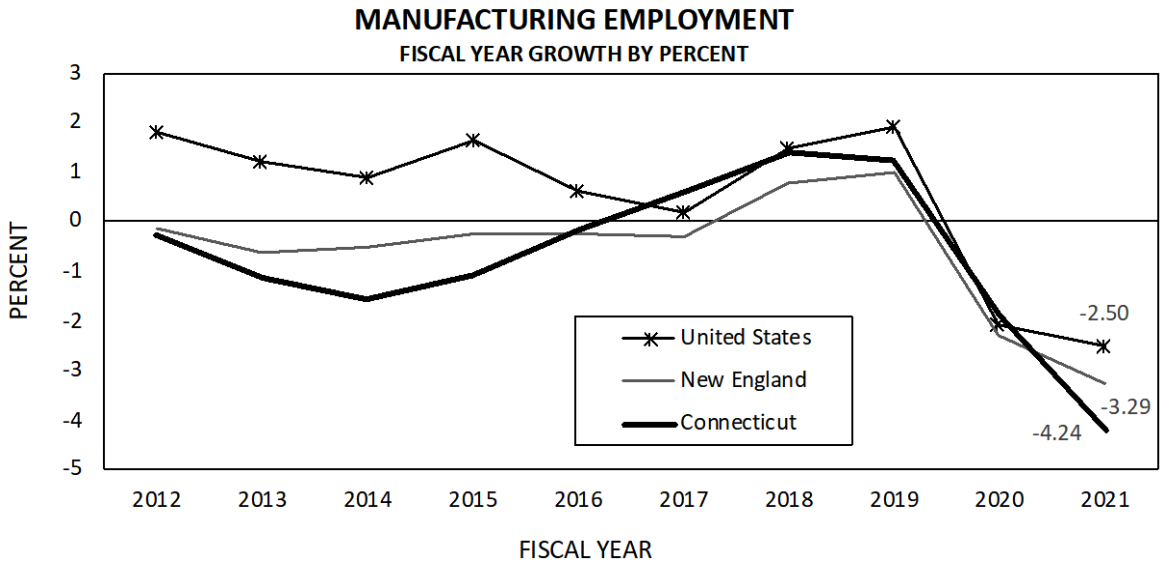
Source: U.S. Bureau of Labor Statistics, Connecticut Labor Department, IHS Economics

In FY 2020, manufacturing employment in the state of Connecticut saw a decline after three annual increases in FY 2017, FY 2018 and FY 2019. The United States also saw a decline of 2.10% in FY 2020, likely a consequence of the COVID-19 pandemic. The downward trend continued in 2021 as the pandemic continued, with a decline of 2.50% in the United States and 4.24% in Connecticut.

TABLE 17
MANUFACTURING EMPLOYMENT
(In Thousands)

Fiscal	United States		New England		Connecticut	
Year	Number	% Growth	Number	% Growth	Number	% Growth
2012	11,833.8	1.79%	600.9	-0.15%	162.9	-0.28%
2013	11,977.6	1.21%	597.3	-0.61%	161.1	-1.12%
2014	12,083.8	0.89%	594.0	-0.55%	158.6	-1.56%
2015	12,279.0	1.62%	592.4	-0.26%	156.9	-1.09%
2016	12,354.5	0.61%	590.9	-0.25%	156.6	-0.20%
2017	12,373.3	0.15%	589.0	-0.33%	157.5	0.57%
2018	12,552.2	1.45%	593.5	0.77%	159.7	1.41%
2019	12,788.3	1.88%	599.4	0.99%	161.7	1.24%
2020	12,519.1	-2.10%	585.6	-2.29%	158.6	-1.91%
2021	12,205.5	-2.50%	566.4	-3.29%	151.9	-4.24%

Source: U.S. Bureau of Labor Statistics, Connecticut Labor Department



Source: U.S. Bureau of Labor Statistics, Connecticut Labor Department

Historically, manufacturing employment closely parallels the business cycle, typically expanding when the economy is healthy and contracting during recessionary periods, as it did during the early 1980s. However, this relationship changed in the latter part of the 1980s, as contractions in manufacturing employment were not initially accompanied by a recession. Other factors, such as heightened foreign competition, smaller defense budgets, and improved productivity, played a significant role in affecting the overall level of manufacturing employment in Connecticut.

The erosion of the state's manufacturing base reflects the national trend away from traditional industries, both durable and nondurable. More of U.S. demand is being satisfied by foreign producers who can manufacture goods more cheaply. The upward trend of higher productivity has enabled Connecticut manufacturers to make more with fewer workers. Even with the structural change, manufacturing employment in Connecticut still accounts for 9.7% of all nonfarm payroll jobs, compared with 8.5% in the U.S. and 8.2% in New England through FY 2021. The following table provides a breakdown of the state's manufacturing employment by industry and indicates percentage changes for the year and for a ten-year period for each of the manufacturing sectors.

Manufacturing employment continued to decline in FY 2020 over FY 2021. Connecticut saw the largest percent decline of 4.24% compared to the United States' 2.50%, and New England's 3.29% decline. In the past ten years, the only growth to occur within the manufacturing industry in Connecticut occurred in transportation equipment with a 7.4% increase. This gain was substantially offset by reductions in the remaining industry types. The largest decline occurred in electrical equipment and appliances which dropped 27.6%, printing and related support activities which dropped 23.6%, and chemicals which dropped 17.6%.The percent change from FY 2012 to 2021 demonstrates the overall decline in manufacturing employment over the last decade which has only been exacerbated by the COVID-19 pandemic.

TABLE 18
CONNECTICUT MANUFACTURING EMPLOYMENT BY INDUSTRY
(In Thousands)

	FY	FY	FY	Percent Change	
Industry	2012	2020	2021	2020-2021	2012-2021
Transportation Equipment	42.3	46.8	45.5	(2.8)	7.4
Fabricated Metal Products	28.8	29.0	26.9	(7.4)	(6.7)
Electrical Equipment and Appliances	9.8	7.5	7.1	(4.4)	(27.6)
Chemicals	8.8	7.7	7.2	(6.3)	(17.6)
Printing and Related Support Activities	5.6	4.9	4.3	(13.2)	(23.6)
Machinery	14.7	13.1	12.8	(2.5)	(13.0)
All Other	52.9	49.6	48.1	(3.0)	(9.1)
Total Mfg. Employment	162.9	158.6	151.9	(4.2)	(6.8)

Source: U.S. Bureau of Economic Analysis, Connecticut Labor Department, IHS Economics

Nonmanufacturing Employment

The nonmanufacturing sector is comprised of industries that provide a service. Services differ significantly from manufactured goods in that the output is generally intangible, is produced and consumed concurrently, and cannot be inventoried. Connecticut's nonmanufacturing sector consists of the industries listed in the following table. Over the last three decades, nonmanufacturing employment has risen in importance to the Connecticut economy, reflecting the overall national trend away from manufacturing.

Nonmanufacturing employment lost approximately 54,400 positions and decreased by approximately 3.7% from FY 2020 to 2021. This decline was due in large part to a downturn in the services sector which fell by 5.7% (42,700 job losses). The leisure and hospitality sector saw the most significant contraction with a decline of 11.9%, a consequence of COVID-19 pandemic lockdowns and travel restrictions. The transportation and warehousing sector experienced the largest percentage growth from FY 2020 to 2021 with a 14.5% gain during that period and was largely unaffected by pandemic related lockdowns.

Over the last ten years the state has seen significant shifts within nonmanufacturing employment. Finance and insurance, once a reliable growing employment sector, has declined 12.7% since FY 2012, a loss of 14,700 jobs, and shows no signs of improvement. The government sector also has experienced a significant contraction over the last ten years, losing more than 7,700 jobs over that period. Connecticut state and local employment includes casino employees who work for the state's two tribal governments and can significantly impact the number of jobs gained or lost. On the opposite end of the spectrum, the transportation and warehousing sector has experienced substantial growth with nearly 21,100 jobs added.

The following table provides detail on Connecticut's nonmanufacturing employment by industry and indicates percentage changes for the year and over a ten-year period for each of the sectors.

TABLE 19
CONNECTICUT NONMANUFACTURING EMPLOYMENT BY INDUSTRY
(In Thousands)

				Percent Change	
	FY	FY	FY	FY 2020 to	FY 2012 to
Industry	2012	2020	2021	FY 2021	FY 2021
Construction & Mining	52.3	58.3	57.2	(2.01)	9.36
Information	31.3	30.7	28.2	(8.24)	(9.83)
Transp., Trade & Utilities	**289.2**	**282.5**	**285.6**	**1.12**	**(1.23)**
Transpo & Warehousing	40.0	53.4	61.1	14.47	52.91
Utilities	6.0	5.1	5.1	(1.24)	(15.71)
Wholesale	62.2	57.8	55.0	(4.96)	(11.68)
Retail	181.0	166.1	164.5	(0.98)	(9.12)
Finance (FIRE)	**134.0**	**122.2**	**118.9**	**(2.75)**	**(11.27)**
Finance & Insurance	115.3	102.6	100.6	(1.93)	(12.74)
Real Estate	18.7	19.7	18.3	(7.08)	(2.14)
Services	**725.6**	**749.9**	**707.2**	**(5.70)**	**(2.54)**
Professional & Business	204.4	213.2	204.3	(4.21)	(0.08)
Education & Health	320.5	339.0	324.5	(4.29)	1.23
Leisure & Hospitality	140.1	136.9	120.6	(11.92)	(13.88)
All Other Services	60.6	60.7	57.8	(4.75)	(4.57)
Government	**246.1**	**230.2**	**222.5**	**(3.36)**	**(9.59)**
Federal	17.8	18.4	19.1	3.44	6.87
State & Local	228.2	211.8	203.4	(3.95)	(10.87)
Total Nonmanufacturing	**1,478.3**	**1,473.8**	**1,419.5**	**(3.69)**	**(3.98)**

Note: Totals may not agree with detail due to rounding.

Source: U.S. Department of Commerce, Bureau of Economic Analysis, IHS Economics

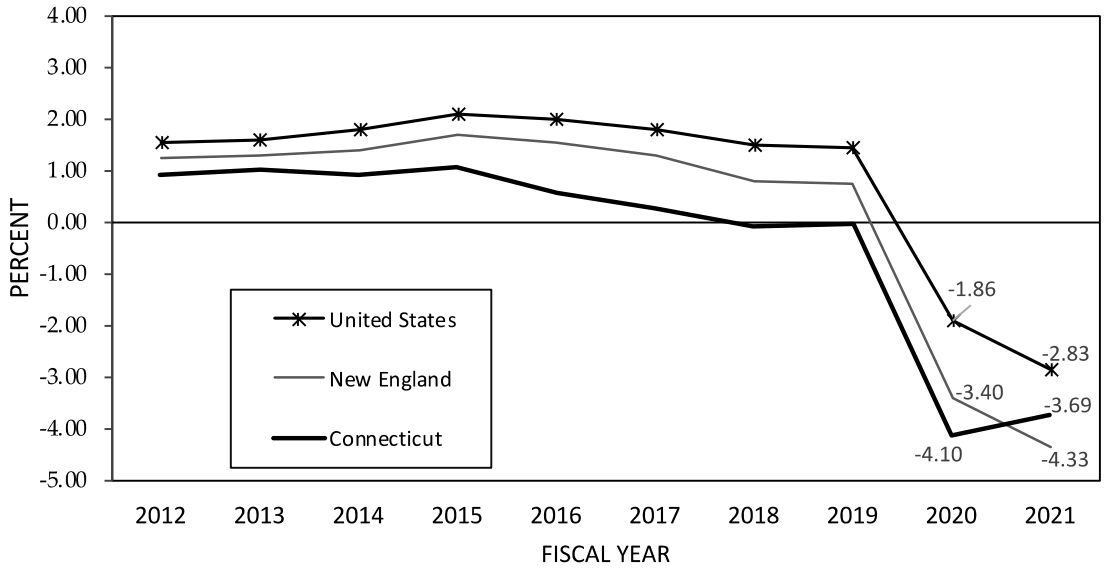
The following table and chart provide a ten fiscal year profile of nonmanufacturing employment in the United States, the New England region, and Connecticut.

TABLE 20
NONMANUFACTURING EMPLOYMENT
(In Thousands)

	United States		New England		Connecticut	
FY	Number	% Change	Number	% Change	Number	% Change
2012	121,243	1.6	6,321.3	1.3	1,478.3	0.9
2013	123,215	1.6	6,405.5	1.3	1,493.5	1.0
2014	125,451	1.8	6,497.3	1.4	1,507.6	0.9
2015	128,132	2.1	6,608.0	1.7	1,524.4	1.1
2016	130,736	2.0	6,710.4	1.5	1,533.3	0.6
2017	133,137	1.8	6,797.9	1.3	1,537.8	0.3
2018	135,177	1.5	6,853.7	0.8	1,537.0	(0.0)
2019	137,133	1.4	6,907.5	0.8	1,536.9	(0.0)
2020	134,576	(1.9)	6,672.7	(3.4)	1,473.8	(4.1)
2021	130,767	(2.8)	6,384.1	(4.3)	1,419.5	(3.7)

Source: U.S. Bureau of Labor Statistics, Connecticut Labor Department

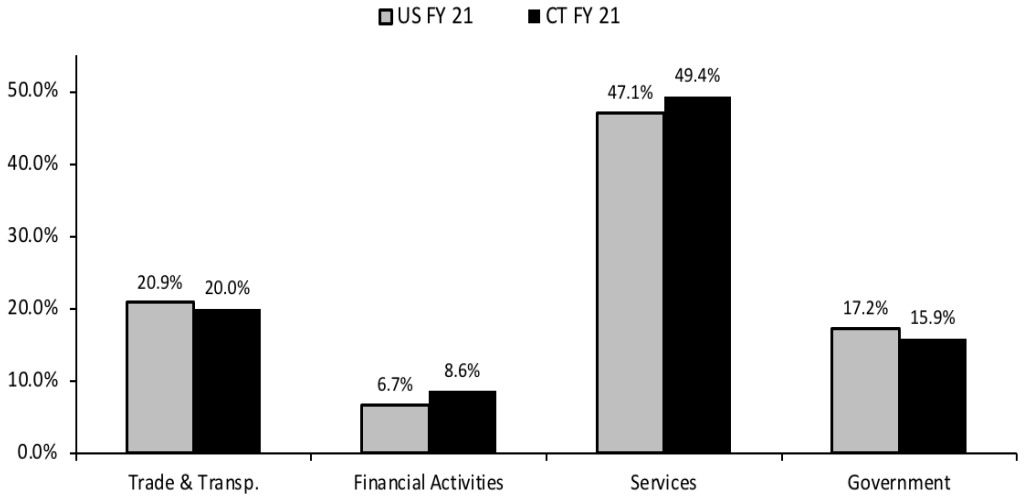
NONMANUFACTING EMPLOYMENT
FISCAL YEAR GROWTH BY PERCENT



Source: U.S. Bureau of Labor Statistics, IHS Economics

The following chart provides a comparison of select nonmanufacturing sectors in Connecticut to national results.

COMPARISON OF NONMANUFACTURING EMPLOYMENT IN CERTAIN SECTORS
(As A Percentage Of Total Non-Manufacturing Employment)



Source: U.S. Bureau of Labor Statistics, IHS Economics

Average annual salaries for Connecticut's nonmanufacturing industries are listed in the following table. The figures were derived by dividing total wage and salary disbursements by employment. Percent changes over the previous year and over the decade are also provided.

TABLE 21
AVERAGE CONNECTICUT NONMANUFACTURING ANNUAL SALARIES

				Percent Change	
				FY 2020 to	FY 2012 to
Industry	2012	2020	2021	FY 2021	FY 2021
Construction	$60,533	$75,667	$81,320	7.5	34.3
Information	79,689	125,505	155,963	24.3	95.7
Transportation, Trade and Utilities	47,361	54,842	57,639	5.1	21.7
Wholesale Trade	85,653	100,512	110,852	10.3	29.4
Retail Trade	31,718	37,796	41,128	8.8	29.7
Financial Activities	139,639	163,632	175,529	7.3	25.7
Professional & Business Svcs	76,768	93,733	101,685	8.5	32.5
Educational & Health Svcs	48,321	57,757	63,480	9.9	31.4
Leisure & Hospitality	22,548	29,242	28,981	-0.9	28.5
Government	54,965	65,986	67,303	2.0	22.4
Federal Government	104,382	107,426	108,760	1.2	4.2
State & Local Government	53,725	64,947	66,293	2.1	23.4

Source: U.S. Bureau of Economic Analysis, IHS Economics

Unemployment Rate

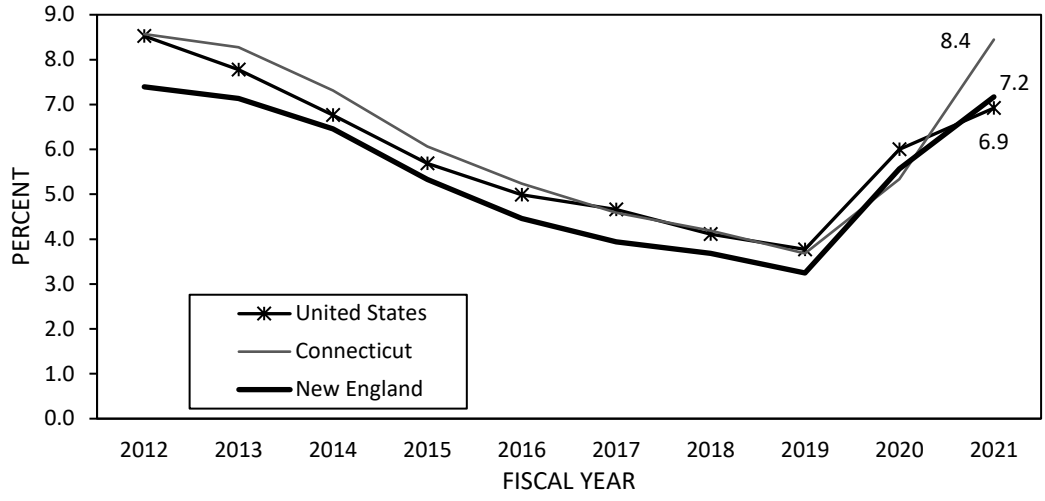
The unemployment rate is the proportion of persons in the civilian labor force who do not have jobs but are actively looking for work. The rate is based upon a monthly survey in which household members are asked a series of questions, one of which is whether a jobless person has looked for work at some time during the preceding four weeks. Those looking for work are considered part of the labor force and are unemployed. The following table shows the unemployment rate for the U.S., the New England region, and Connecticut over a ten-year period. Unemployment rates rose considerably due to the pandemic induced recession. Connecticut's unemployment rate and the national average were 8.4% and 6.9% respectively for FY 2021.

TABLE 22
UNEMPLOYMENT RATES (%)

Fiscal Year	United States	New England	Connecticut
2012	8.5	7.4	8.6
2013	7.8	7.1	8.3
2014	6.8	6.5	7.3
2015	5.7	5.3	6.1
2016	5.0	4.5	5.2
2017	4.7	3.9	4.6
2018	4.1	3.7	4.2
2019	3.8	3.2	3.7
2020	6.0	5.6	5.3
2021	6.9	7.2	8.4

Source: U.S. Department of Commerce, Bureau of the Census, IHS Markit

UNEMPLOYMENT RATES
BY FISCAL YEAR



Source: U.S. Bureau of Labor Statistics, IHS Economics

SECTOR ANALYSIS

Energy

The cost of energy has an outsized impact on the economy. For most consumers, transportation and household energy are major expenses. Many improvements to energy efficiency, such as fuel-efficient cars and replacement windows, require significant capital investment. Therefore, it is difficult for consumers to react to changes in energy prices in the short-term, often necessitating spending decisions in other areas. Just as increases in the price of oil can negatively impact consumers, price decreases can put money back into consumers' pockets.

The United States, like the rest of the industrialized world, relies heavily on three fossil fuels: crude oil, coal, and natural gas. The following three sections describe energy production and consumption for the world, the United States, and Connecticut.

Worldwide

World oil supply and demand among countries and regions continued to be significantly imbalanced in 2020. Unlike in prior years where both supply and demand increase, supply decreased and demand decreased by 9.3% due to the pandemic induced recession. The following table illustrates the disparity between the world's suppliers of oil and its users. Members of the Organization of Petroleum Exporting Countries (OPEC) continued to supply more oil than they consumed. As an example, Saudi Arabia produced 11.04 million barrels per day (MBPD) while consuming 3.54 MBPD, generating 7.50 MBPD surplus. The Organization for Economic Cooperation and Development (OECD), on the other hand, consumed more than it supplied. In 2020, the OECD consumed 40.28 MBPD, while supplying only 28.22 MBPD, registering a 12.07 MBPD deficit.

The United States had a 4.1% dependency rate on foreign oil supplies in 2020, down from 12.3% in 2019. This figure was significantly below the ten-year average of 39.2% for the period ending in 2019. The nation accounted for 19.4% of global demand and 18.6% of global supply. Similar deficits between supply and demand also exist in mature economies such as China, Japan, France, and Germany. The United States has become increasingly less reliant on foreign oil in recent years due to the development of new oil production technologies as well as increasing fuel efficiency. Prior to the Arab oil embargo of 1973, the United States was the largest oil producer in the world. After four decades, the U.S. became the largest producer again in 2014.

China and India, the world's two most populous countries, had different oil consumption trends. China continued an upward trend while India had a significant decrease. The two countries account for a combined 21.4% of the worldwide demand total in 2020. China, the world's second largest consumer, switched from a net exporter of oil in 1993, and began running an increasing oil deficit as its economy continued to grow at a brisk pace. In 2020, China consumed 14.23 MBPD while supplying 3.90 MBPD, registering a 10.32 MBPD deficit. China had a 72.6% dependence rate on foreign oil in 2020, significantly larger than the United States.

TABLE 23
WORLD OIL SUPPLY AND DEMAND
Calendar Year 2020

	Supply			Demand	
	Millions of Barrels Per Day	% of Total		Millions of Barrels Per Day	% of Total
Total OECD (a)	28.22	31.9%	Total OECD	40.28	45.5%
United States	16.48	18.6%	United States	17.18	19.4%
Canada	5.14	5.8%	Canada	2.28	2.6%
Mexico	1.91	2.2%	Mexico	1.31	1.5%
Other OECD	4.70	5.3%	Japan	3.27	3.7%
			Germany	2.05	2.3%
Total OPEC (b)	31.12	35.2%	France	1.31	1.5%
Saudi Arabia	11.04	12.5%	Italy	1.05	1.2%
United Arab Emirates	3.66	4.1%	United Kingdom	1.19	1.3%
Iran	3.08	3.5%	Other OECD	10.65	12.0%
Iraq	4.11	4.7%			
Other OPEC	9.22	10.4%	Total Non-OECD	48.20	54.5%
			Russia	3.24	3.7%
All Other	29.06	32.9%	China	14.23	16.1%
Russia	10.67	12.1%	India	4.67	5.3%
China	3.90	4.4%	Saudi Arabia	3.54	4.0%
Other	14.49	16.4%	Other	22.52	25.5%
Total 2020 Supply	88.39	100.0%	**Total 2020 Demand**	88.48	100.0%
Total 2019 Supply	94.96		**Total 2019 Demand**	97.60	
Change	-6.57	-6.9%	Change	-9.12	-9.3%

Notes:
(a) The OECD includes the United States, Western and some Eastern European countries, some Latin American countries, Israel, Australia, Canada, Japan, and New Zealand.
(b) The OPEC includes Algeria, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, and Venezuela.
(c) Totals may not add due to rounding.

Source: 2021 BP Statistical Review of World Energy

United States

The U.S. has the largest demand for world oil. While the country contains 4.3% of the world population and produces 18.6% of world oil, it consumes 19.4% of world oil. The nation has long been a net energy importer, although America's energy dependence has decreased in the last decade compared to the years prior to the 2008 Great Recession. America's dependence on net energy imports remained fairly steady from 2013 to 2016, but since 2017 has been declining year over year. According to the Energy Information Administration's *Monthly Energy Review*, the U.S. consumed 92.9 quadrillion British Thermal Units (QBTU's) of energy in 2020, 78.5% of which were from fossil fuels.

National energy consumption rose steadily during the 1990s and 2000s before peaking in 2007 at 100.9 QBTU's. Since 2007, U.S. energy consumption has remained fairly steady until peaking again in 2018 at 101.2 QBTU's. Changes in energy consumption are driven by overall economic conditions, price changes, and increases in energy efficiency. The following table displays energy usage in the U.S. in 2020 by fuel type and by economic sector. Petroleum products are currently the most important energy source for the U.S. economy. The 32.2 quadrillion petroleum-generated BTU's accounted for 34.7% of U.S. energy consumption, followed by natural gas at 31.5 QBTU's and coal at 9.2 QBTU's.

TABLE 24
U.S. ENERGY CONSUMPTION IN 2020
(Quadrillion BTU's)

	Resi-dential	Com-mercial	In-dustrial	Trans-portation	Electric Generation	Total	% of Total
Fossil Fuels							
Natural Gas	4.8	3.3	10.5	1.0	12.0	31.5	33.9
Petroleum	0.9	0.8	8.4	21.9	0.2	32.2	34.7
Coal	0.0	0.0	0.9	0.0	8.2	9.2	9.9
Nuclear	0.0	0.0	0.0	0.0	8.2	8.2	8.9
Renewables							
Hydroelectric	0.0	0.0	0.0	0.0	2.6	2.6	2.8
Other*	0.8	0.3	2.3	1.3	4.4	9.0	9.7
Electricity	5.0	4.4	3.1	0.0	0.0	12.5	13.4
Electric Losses	9.3	8.1	5.8	0.0	(35.6)	(12.3)	(13.3)
Total Demand	20.8	16.8	31.1	24.3	0.0	92.9	100.0

Notes: *Includes power generated from wood, biofuels, wind, waste, geothermal, tide, and solar/photovoltaic, as well as imported electricity.
Totals may not add due to rounding.
Source: U.S. Dept. of Energy, Energy Information Administration

The U.S. lags other developed countries in utilizing renewable energy. Hydroelectricity, for example, provided approximately 7.3% of electric generation in the U.S., compared to approximately 60% in Canada. Capital investments in alternative renewable energy from solar, hydroelectric, wind, biofuels, and geothermal have increased dramatically in the U.S.; nonetheless, their share of power production remains relatively small. As of May 2021, the United States had 93 operable nuclear reactors in service and two

reactors that are currently under construction. Nuclear generation accounted for about 19% of domestic electricity net generation in 2019. The U.S. is the world's largest nuclear power producer, accounting for more than 30% of worldwide nuclear electricity production.

There are five energy-use sectors: residential, commercial, industrial, transportation, and electric power generation. The first four sectors are end-users, while the last one is an intermediate-user consisting of all utility and non-utility facilities and equipment used in the electricity industry. The industrial sector was the largest end-user of energy, consuming 31.1 QBTU's in 2020, followed by transportation at 24.3 QBTU's, residential at 20.8 QBTU's, and commercial at 16.8 QBTU's.

In contrast to the relatively smooth trends in the other sectors, industrial consumption has shown the greatest fluctuation, dropping sharply in 1975, 1980-83, 2001-03, and 2008-09 in response to high oil prices and economic slowdowns. The electric power generation sector consumes and also produces energy. Energy losses occur throughout the entire electrical system beginning with utility generation in fossil-fired, nuclear or hydroelectric power plants all the way to the end-users. Of the electricity generated, it is estimated that about 5% is lost in transmission and distribution.

Crude Oil Prices

Following the collapse of oil prices in the midst of the 2008 Great Recession, the refiner's acquisition cost rebounded, rising to around $100 per barrel in 2011 and hovered near that level through the first half of 2014. However, beginning in the fall of 2014, the cost of a barrel of oil began to decline significantly due to oversupply in the global market. In September 2015, the composite refiner acquisition cost was $44.38 a barrel; a more than 50% reduction from September 2014. Acquisition costs dropped another 16.8% from 2015 to 2016. In real terms, annual average refiner's acquisition costs dropped in each successive year following that peak through 2016, but experienced growth of 22.3% in 2017, 24.1% in 2018, a decrease of 9.4% in 2019, and a significant decrease of 33.9% in 2020 to $34.98 a barrel due to the pandemic induced recession. The decrease between 2020 and the first three quarters of 2021 was not as dramatic at 6.3%.

TABLE 25
CRUDE OIL PRICES AND U.S. CONSUMPTION
Refiners' Crude Oil Acquisition Costs* Per Barrel

Calendar Year	In Current Dollars	In 2012 Dollars	Percent Change
2012	100.93	100.93	26.6%
2013	100.49	98.76	-2.2%
2014	92.02	88.78	-10.1%
2015	48.39	46.22	-47.9%
2016	40.66	38.45	-16.8%
2017	50.68	47.04	22.3%
2018	64.38	58.36	24.1%
2019	59.38	52.88	-9.4%
2020	39.75	34.98	-33.9%
2021**	38.20	32.55	-6.9%

Note: * Adjusted using implicit price deflator for gross domestic product.
** Average for the first three quarters.
Source: U.S. Department of Energy, Energy Information Administration, Bureau of Economic Analysis

Shale Energy

Oil producers in the United States are increasingly able to extract natural gas and petroleum from shale formations across the country. The overall increase in production of these fuels is attributable to the development of horizontal drilling and hydraulic fracturing ("fracking") technology. In the process of fracking, producers pump a mixture of water, sand, and chemicals into shale wells to extract natural gas and petroleum. In conjunction with horizontal drilling, this technique has made the development of shale energy sources economically feasible. As a result, energy resources in the country have increased. The ability to use fracking technology to extract fossil fuels has reduced the United States' dependency on foreign energy.

Efficiency

Increasing efficiency has been a focal point of the nation's energy conservation policy. Energy regulatory agencies have been aggressively protecting the environment by promoting energy-efficient products over the past two decades. The National Appliance Energy Conservation Act of 1987 set minimum efficiency standards for 13 appliances and prohibited the sale if standards were not met. In 1992, the EPA embarked upon "*Energy Star*" as a voluntary labeling program to identify and promote energy-efficient products to reduce greenhouse gas emissions. The *Energy Star* label includes appliances, electronics, heating and cooling equipment, office equipment, lighting, commercial food services, and new buildings and plants with additional energy-saving features that are 20–30% more efficient than standard homes. To promote energy efficient buildings in the U.S., Leadership in Energy and Environmental Design (LEED), a non-profit

organization under the U.S. Green Building Council (USGBC), provides green building rating standards for environmentally sustainable construction and design.

Aside from energy conservation, increased productivity also promotes energy efficiency. Productivity, a crucial ingredient in the economy's long-term vitality, is a measure of economic efficiency which relates to how effectively economic inputs are converted into output. Productivity is measured by comparing the amount of goods and services produced with the inputs that are used in production. A measure of efficiency is the amount of energy used to produce a dollar of Gross Domestic Product (GDP). The following table compares U.S. consumption of fuel sources and illustrates the nation's improvement in energy efficiency.

TABLE 26
U.S. PRIMARY ENERGY CONSUMPTION & ENERGY EFFICIENCY

	U.S. Energy Consumption		GDP	BTU	
Calendar	Total	Annualized	Billion	Per $1 GDP	Annualized
Year	Quadrillion BTU's	% Change*	(In 2012$)	(In 2012$)	% Change*
1990	84.4	2.0	9,371.5	9,010	(1.2)
1995	90.9	1.5	10,637.0	8,549	(1.0)
2000	98.7	1.7	13,138.0	7,513	(2.6)
2005	100.1	0.3	14,901.3	6,718	(2.2)
2010	97.5	(0.5)	15,649.0	6,231	(1.5)
2011	96.9	(0.7)	15,891.5	6,095	(2.2)
2012	94.4	(2.6)	16,254.0	5,806	(4.7)
2013	97.1	2.9	16,553.3	5,867	1.0
2014	98.3	1.2	16,932.1	5,804	(1.1)
2015	97.4	(0.9)	17,390.3	5,599	(3.5)
2016	97.3	(0.0)	17,680.3	5,505	(1.7)
2017	97.6	0.3	18,079.1	5,398	(1.9)
2018	101.2	3.7	18,606.8	5,437	0.7
2019	100.3	(0.9)	19,032.7	5,270	(3.1)
2020	92.9	(7.3)	18,384.7	5,055	(4.1)

*Annualized percent change calculated using a compound annualized growth rate formula

Source: U.S. Dept. of Energy, Energy Information Administration, Monthly Energy Review,
U.S. Dept. of Commerce, Bureau of Economic Analysis

Between 1990 and 2020, energy consumption per dollar of real GDP decreased at a compound annual rate of 1.9% per year. In 1990, 9,010 BTU's of energy were required to produce $1 of GDP measured in 2012 dollars. In 2020, that number was 5,055 BTU's, a 43.9% reduction. The long-term decline in energy consumption per dollar of GDP resulted from efficiency improvements and a structural shift from energy intensive industries to those that consume less energy but create more value added products, such as

finance, banking, and professional services. However, improvements in energy efficiency vary from period to period, depending upon energy prices, consumers' consumption habits, and technology improvements. Efficiency tends to stagnate when fuel prices decline; as oil prices fall, the incentive to conserve energy diminishes.

Oil Stability Program

To protect against supply disruptions, the United States created a Strategic Petroleum Reserve (SPR) under the Energy Policy and Conservation Act of 1975 (EPCA). The SPR program was established as a 750 million barrel capacity crude oil reserve with the objective of achieving a maximum draw-down rate within 15 days of the notice to proceed, and currently has a design capacity of 714 million barrels. In December of 2009, the SPR reached a record inventory of 726.6 million barrels. The SPR was created as an emergency response tool for the President should any threatening disruptions in oil sales occur. However, there are also non-emergent sales of crude oil from the SPR. 10.1 million barrels of crude oil are to be drawn and sold in 2020 and 2021 under the Consolodated Appropriations Act of 2018. The Secretary of Energy is also required to draw down and sell 58 million barrels from the the SPR over eight consecutive years, starting in 2018, because of Section 403 of the Bipartisal Budget Act of 2015. As of August 2021, the reserve held 621.3 million barrels of crude oil.

Connecticut

Connecticut is one of the most energy efficient states in the nation. The state consumed 2.93 thousand BTU's per 2012 chained dollar of Gross State Product in 2019, the latest available data. Connecticut was one of the most efficient states based on this measure, behind only the District of Columbia, New York, Massachusetts, and California. Connecticut was 44.2% below the national average of 5.25 thousand BTU's. When measuring energy consumption in Connecticut and the United States among the end-use sectors on a per capita basis (end-use sectors include residential, commercial, industrial, and transportation sectors and excludes energy consumption needed for electric generation), Connecticut consumed 206.4 million BTU's per capita in 2019. Connecticut ranks 45th among the 50 states plus the District of Columbia, leaving Rhode Island, Hawaii, California, New York, and Florida with per capita end-use energy consumption lower than Connecticut's level. Connecticut was 32.4% below the national figure of approximately 305.4 million BTU's per capita. The state has few local energy sources, and it must import nearly all the energy that it consumes. This situation affects Connecticut consumers' energy choices and results in prices that are higher than the national average. In 2019, Connecticut residents spent $24.31 per million BTU, compared to $17.96 for the nation.

TABLE 27
CONSUMER ENERGY PRICES IN THE UNITED STATES AND CONNECTICUT
Nominal Dollars per Million BTU in 2019

	Natural Gas	Motor Gasoline	Distillate Fuel Oil*	All Petroleum**	Retail Electricity	Total Energy
Connecticut	$6.96	$21.94	$20.41	$21.42	$54.68	$24.31
United States	$5.31	$21.61	$20.90	$19.38	$31.05	$17.96
CT as a % of the U.S.	131%	102%	98%	111%	176%	135%

Notes: * Includes diesel fuels and fuel oils used for residential space heating.
** Includes motor gasoline, residential and distillate fuel oil, liquefied petroleum gases, and jet fuel, etc.

Source: U.S. Department of Energy, Energy Information Administration, State Energy Data 2019

The above table compares various prices to the national average for natural gas, motor gasoline, distillate fuel oil, residential electricity, and total average energy paid by consumers in 2019, the latest data available. Overall energy costs in Connecticut in 2019 were 35% higher than the national average, with retail electricity prices 76.0% higher than the national average

TABLE 28
CONNECTICUT ENERGY CONSUMPTION IN 2019
(Trillion BTU's)

Fuels	Resi-dential	Com-mercial	In-dustrial	Trans-portation	Electric Generation	CT Total	% of CT Total	% of US Total
Natural Gas	53.8	59.4	25.3	6.9	147.7	293.1	39.8	23.2
Petroleum	61.7	14.9	17.5	225.3	0.3	319.7	43.4	27.6
Coal	0.0	0.0	0.0	0.0	0.9	0.9	0.1	8.2
Nuclear	0.0	0.0	0.0	0.0	174.7	174.7	23.7	6.1
Hydroelectric	0.0	0.0	0.0	0.0	3.8	3.8	0.5	1.8
Other*	10.8	3.0	3.9	0.0	13.3	31.0	4.2	6.3
Deliv. Elec.	42.6	41.5	10.5	0.6	0.0	95.2	12.9	9.4
Deliv. Losses	70.9	69.0	17.4	1.0	(340.7)	(182.4)	(24.8)	17.3
Total Demand	239.8	187.7	74.6	233.8	0.0	736.0	100.0	100.0
% of Total-CT	32.6	25.5	10.1	31.8	0.0	100.0		
% of Total-U.S.	15.2	13.0	23.6	21.6	26.6	100.0		

Note: * Other includes power generated from wood, biofuels, wind, waste, geothermal, tide, and solar/photovoltaic, as well as imported electricity.
** Totals may not add due to rounding.

Source: U.S. Department of Energy, Energy Information Administration, State Energy Data 2019

The preceding table displays the amount and percentage share of total energy consumed in Connecticut by fuel source and sector in 2019, the latest available data. Compared to the nation, petroleum and natural gas provide more of Connecticut's energy needs, while coal provides significantly less. Petroleum remains the main source of energy in Connecticut because it is easily transported. Fuel oil provides for Connecticut's energy needs because it is a significant source to heat homes. In 2020, 38.9% of Connecticut households used fuel oil for home heating, followed by natural gas at 36.3%, electricity at 17.3%, liquefied petroleum gases (propane/butane) at 4.9%, and others at 2.7%. Consumption fuel oil used for heating has been falling as more home and businnesess convert to natural gas. The state's petroleum products are received at the ports in New Haven, New London, and Bridgeport, and shipped by barge up the Connecticut River to central Connecticut. Additionally, a pipeline runs from New Haven to Springfield, Massachusetts, supplying petroleum to Hartford and northern Connecticut.

Connecticut is also more reliant on nuclear energy and less reliant on coal for electric generation than the United States. In 2020, the latest data available, the state generated 41.2 million net megawatt hours of electricity, primarily from natural gas. Retail sales within the state were at 27.9 million megawatt hours of electricity. This implies that Connecticut was more than 100% electricity self-sufficient, unlike in 2000, when the state generated 56.8% of its own demand and relied on imports from other states and Canada for the balance of its need while certain nuclear reactors were shut down for servicing. The power grid that supplies electricity to the entire state is owned and operated by both private and municipal electric companies. Transmission lines connect Connecticut with New York, other New England states, and Canada. These interconnections allow the companies serving Connecticut to meet large or unexpected electric load requirements from resources located outside of Connecticut's borders.

All electric utilities in the state are members of the New England Power Pool and operate as part of the regional bulk power system. An independent system operator, ISO New England Inc., operates this regional system. In 2020, there were 1,680,136 electric consumers in Connecticut. Of these, 90.5% were residential customers, 9.2% were commercial customers, and 0.3% were industrial and transportation customers. Approximately 93.5% of the electricity was sold by two investor-owned companies: Eversource and United Illuminating.

Natural gas is delivered to Connecticut through interstate pipelines that traverse the state. Natural gas pipeline supplies are generally shipped to Connecticut from Canada and the Gulf of Mexico area. Connecticut also receives liquefied natural gas (LNG) through interstate pipelines from a terminal located in Boston, Massachusetts which is supplied by LNG tanker ships. Natural gas service is provided to parts of the state through one municipal and three publicly traded gas distribution companies. Since 1996, the state's Public Utilities Regulatory Authority (PURA; formerly DPUC) has allowed some competitive market forces to enter the natural gas industry in the state. Commercial and industrial gas consumers can choose non-regulated suppliers for their natural gas requirements. Natural gas is delivered to consumers using the local distribution company's mains and service pipelines. Connecticut's distribution companies pay higher transportation costs as it is located at or near the end of the interstate pipelines.

Gasoline Consumption and Automotive Fuel Economy

According to 2019 data, highway vehicles in the U.S. consumed approximately 94.7% of all gasoline, with about 5.3% used for other purposes such as agriculture, aviation, construction, and boating. In 2019, the latest data available, gasoline consumption in the U.S. totaled 146.3 billion gallons, with Connecticut accounting for 1.5 billion gallons, 1.04% of the nation's consumption. The table below shows gasoline consumption for the U.S. and Connecticut since 1995.

In 2019, Connecticut residents consumed 420.6 gallons of gasoline per capita, versus 442.7 gallons per capita for the nation. Per capita consumption is attributable to several factors, including gas prices, income levels, traffic conditions, average weight of vehicles, distance residents drive to work or shop, and percentage of workers telecommuting or ride sharing. As one of the smallest and most densely populated states in the nation, Connecticut residents generally commute shorter distances to work and shop. Per capita consumption reached a peak in 2005 in both the nation and Connecticut, and has been declining faster in Connecticut than in the U.S. since then. Between 2005 and 2019, per capita consumption decreased by 8.6% in Connecticut, versus 6.7% for the nation. This has reduced Connecticut's per capita consumption to 95.0% of the U.S. amount in 2019.

As the state with the highest per capita personal income in the nation, Connecticut residents tend to own more automobiles. Connecticut residents owned 353 private and commercial automobiles per 1,000 residents in 2019, versus 327 for the nation. Also, Connecticut had 732 driver licenses per 1,000 residents in 2019, compared to 697 licenses for the nation. Connecticut residents trail the nation as a whole in the use of carpooling. The United States Census Bureau estimates that in 2019, of those commuting to work by car, 7.5% of Connecticut residents carpooled, versus 8.9% for the nation as a whole.

TABLE 29
GASOLINE CONSUMPTION IN THE UNITED STATES & CONNECTICUT

Calendar Year	U.S.* Total Gallons (000's)	Annualized % Change**	CT Total Gallons (000's)	Annualized % Change**	Gallons Per Capita U.S.*	Gallons Per Capita CT	CT/U.S. (%)
1995	120,875,789	1.9%	1,302,750	0.0%	453.3	391.7	86.4%
2000	132,279,950	1.8%	1,476,340	2.5%	468.2	432.4	92.3%
2005	140,338,710	1.2%	1,614,697	1.8%	474.3	460.3	97.0%
2006	140,320,089	0.0%	1,566,875	-3.0%	469.7	445.3	94.8%
2007	140,436,133	0.1%	1,567,360	0.0%	465.7	444.0	95.4%
2008	136,499,418	-2.8%	1,494,164	-4.7%	448.4	421.2	93.9%
2009	136,877,949	0.3%	1,512,081	1.2%	445.7	424.3	95.2%
2010	137,592,937	0.5%	1,514,622	0.2%	444.3	422.9	95.2%
2011	135,204,475	-1.7%	1,467,953	-3.1%	433.1	408.3	94.3%
2012	134,998,800	-0.2%	1,449,384	-1.3%	429.0	402.0	93.7%
2013	135,595,239	0.4%	1,438,625	-0.7%	427.6	398.4	93.2%
2014	137,883,016	1.7%	1,434,867	-0.3%	431.4	397.0	92.0%
2015	141,757,545	2.8%	1,479,844	3.1%	440.0	409.7	93.1%
2016	144,885,278	2.2%	1,515,941	2.4%	446.3	420.1	94.1%
2017	144,575,062	-0.2%	1,514,021	-0.1%	442.3	419.6	94.9%
2018	145,235,172	0.5%	1,520,748	0.4%	441.8	421.2	95.3%
2019	146,286,973	0.7%	1,517,405	-0.2%	442.7	420.6	95.0%
Average	**2014-2019**				440.7	414.7	94.1%

* Fifty states plus Washington, D.C.

** Annual growth calculated using compound annual growth rate formula

Source: U. S. Dept. of Transp., Federal Highway Administration, Office of Highway Policy Information, IHS

Corporate Average Fuel Economy (CAFE)

The United States Department of Transportation (DOT) is required to set corporate average fuel economy (CAFE) standards for automobile fuel efficiency. This responsibility is administered by the National Highway Traffic Safety Administration (NHTSA). The measurement of CAFE is performed by manufacturers and reported to the U.S. Environmental Protection Agency. Federal law imposes a civil penalty of $5.50 for each tenth of a MPG by which a manufacturer's CAFE level falls short of the standard, multiplied by the total number of passenger automobiles or light trucks produced by the manufacturer in that model year (MY). According to NHTSA data, total fleet performance in MY 2017, the most recent data available, was 33.4 miles per gallon, while the fleet standard was 33.8 miles per gallon. This was a 35.8% improvement in the total fleet fuel efficiency since 2004, when the total fleet performance was 24.6 miles per gallon.

Fluctuations in Gasoline Prices

Short-term gasoline prices have long been known for their drastic volatility, often rising and dropping markedly over short periods of time. The average retail gasoline price for all grades in the U.S. in October of 2021 was $3.38 per gallon, compared to $2.25 in October of 2020, $2.72 in October of 2019, and $2.94 in October of 2018. The average retail price for all grades hit an all-time high of $4.11 in July of 2008, before plummeting to $1.75 in December that same year. Since 2008, the average monthly price for a gallon of gasoline in the U.S. has only fallen below $2.00 per gallon twice: in February of 2016 when it was $1.87 per gallon, and during the height of the COVID-19 pandemic in April and May of 2020 when it was $1.95 per gallon. Changes in gasoline prices are determined by the cost of crude oil, supply and demand of fuel, any disruption of refinery operations, inventory levels, seasonality and weather conditions, the regulation of environmental standards, and geopolitical conditions.

The long run nominal price shows a relatively stable upward trend except for sharp upticks in the early 1980s and the early part of the just concluded decade. The following table shows the history of retail motor gasoline prices in the U.S. Prices averaged approximately 30 cents per gallon during the 1950s through the early 1970s. Prices began increasing after the Arab oil embargo in 1973. They rose to an average of $3.30 per gallon in 2008 before declining to an average of $2.41 per gallon in 2009. The annual average price has hovered around $3.50 through 2014, and has been closer to $2.50 in more recent years. The real prices listed are adjusted for inflation in 2012 dollars. In 2012, the average real price reached a high of $3.68 per gallon.

TABLE 30
RETAIL MOTOR GASOLINE PRICES
(Dollars per Gallon, Regular Gasoline)

Calendar Year	Nominal Price	Real Price*	Calendar Year	Nominal Price	Real Price*
1950	$0.27	$2.06	2010	2.84	2.95
1960	0.31	1.86	2011	3.58	3.64
1970	0.36	1.66	2012	3.68	3.68
1980	1.25	2.96	2013	3.58	3.51
1990	1.16	1.82	2014	3.44	3.32
2000	1.52	1.95	2015	2.52	2.41
2005	2.31	2.64	2016	2.25	2.13
2006	2.62	2.91	2017	2.53	2.35
2007	2.84	3.07	2018	2.81	2.55
2008	3.30	3.50	2019	2.69	2.40
2009	2.41	2.53	2020	2.26	1.99

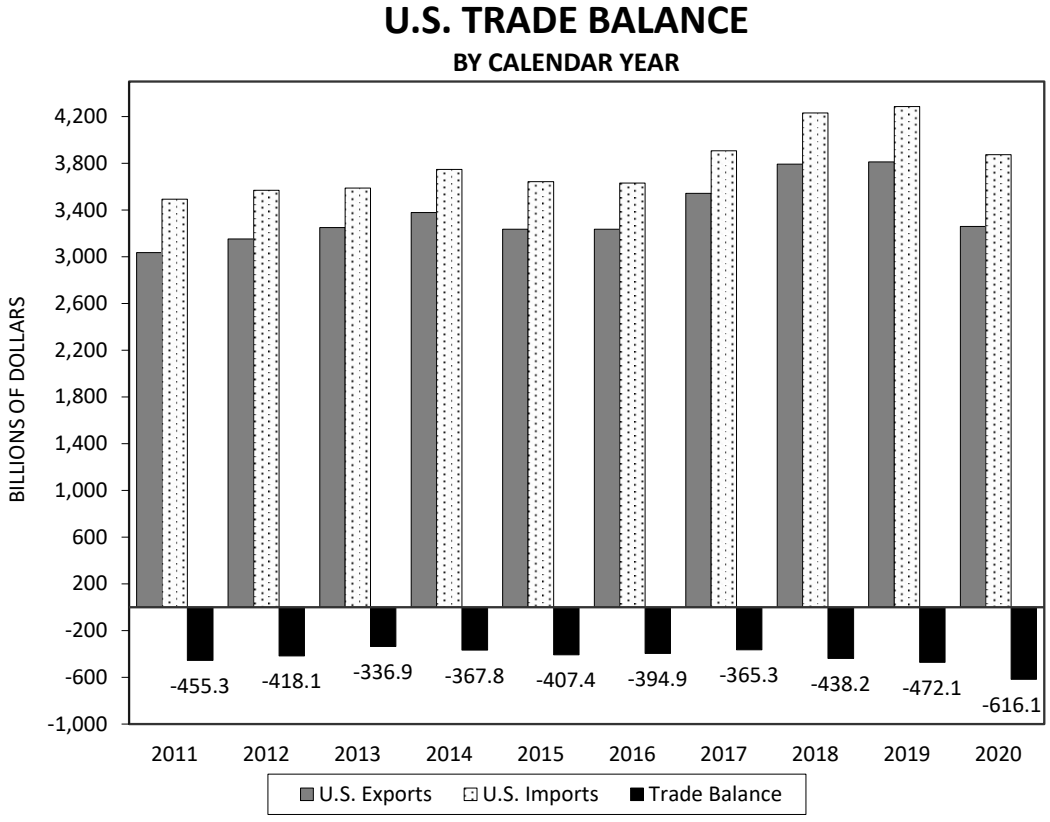
Note: Prices for 1950 to 1970 are leaded regular; 1980 and after are unleaded regular.
* Adjusted by GDP Price Deflator (2012=100)

Source: U.S. Dept. of Energy, Energy Information Administration, Bureau of Economic Analysis, IHS Economics

Export Sector

Trade has played an important role in the U.S. economy. Exports and a favorable balance of payments have traditionally been important to the growth of the U.S., affecting employment, production, and income. The United States is the world's largest goods and service trading nation and the growth in real exports of goods and services has been an important factor in driving the country's economic expansion over the last half century. Total trade exports have grown 7.3% from 2011 through 2020, while total trade imports have grown 11.0% over the same time period.

The following graph illustrates the United States' trade balance for the past ten years. In 2020, the trade deficit increased to $616.1 billion, up from $472.1 billion in 2019. The graph also illustrates the significant impact the COVID-19 pandemic played on trade. Both U.S. exports and U.S. imports dropped by 14.5% and 9.6% respectively over 2019. The full impact of the COVID-19 pandemic on global trade still remains to be seen. Through 2021 supply chain issues, border closings, and restrictive travel have all continued to destablize global trade.



Source: U.S. Department of Commerce, Bureau of Economic Analysis

United States' trade balances in the past two decades have generally improved during recession years and deteriorated during recovery and expansionary periods. Unlike previous expansionary cycles, since 2009 the U.S. trade balance has remained relatively stable with little net change year over year. The prior deficit peak occurred in 2006 with a trade deficit of $806.7 billion, or 30.9% higher than the 2020 deficit of $616.1 billion.

TABLE 31
U.S. TRADE DEFICIT BY CATEGORY
(In Billions of Dollars)

	2019			2020		
	Exports	Imports	Balance	Exports	Imports	Balance
Total Trade	**3,812.5**	**4,284.6**	**(472.1)**	**3,258.6**	**3,874.7**	**(616.1)**
Merchandise	**1,652.1**	**2,513.6**	**(861.5)**	**1,428.8**	**2,350.8**	**(922.0)**
Foods/Beverages	131.0	151.6	(20.6)	139.3	155.4	(16.1)
Industrial Supplies & Materials	526.4	525.6	0.8	450.4	430.1	20.3
Capital Goods, Excluding Autos	548.0	679.1	(131.2)	460.5	648.5	(188.0)
Autos	162.8	376.0	(213.3)	127.9	311.3	(183.4)
Consumer Goods	205.0	655.5	(450.5)	174.0	641.1	(467.1)
Others	79.0	125.8	(46.8)	76.7	164.5	(87.7)
Services	**876.3**	**591.1**	**285.2**	**705.6**	**460.3**	**245.3**
Travel & Transportation	318.1	254.9	63.1	142.8	114.3	28.5
Business Services	394.9	248.6	146.3	404.6	254.1	150.5
Royalties & License fees	115.5	41.7	73.8	113.8	43.0	70.8
Other Services	47.8	45.9	1.9	44.4	48.9	(4.4)
Investment Income	**1,284.1**	**1,179.9**	**104.2**	**1,124.2**	**1,063.6**	**60.6**
Direct Investment	569.1	232.9	336.2	495.7	179.2	316.5
Portfolio Investment Income	424.4	506.8	(82.3)	383.3	489.2	(105.9)
U.S. Gov't Receipts/Payments	159.2	286.9	(127.7)	166.3	294.2	(127.9)
Other Investment Income	131.4	153.4	(22.0)	78.9	101.0	(22.1)
			Net Change From Previous Year			
Total Trade	**18.8**	**52.7**	**(33.9)**	**(553.8)**	**(409.9)**	**(143.9)**
Merchandise	**(24.8)**	**(42.1)**	**17.2**	**(223.3)**	**(162.8)**	**(60.5)**
Foods/Beverages	(2.2)	3.3	(5.5)	8.3	3.9	4.5
Industrial Supplies & Materials	(10.5)	(54.6)	44.2	(76.0)	(95.5)	19.5
Capital Goods, Excluding Autos	(15.5)	(15.1)	(0.4)	(87.5)	(30.6)	(56.8)
Autos	3.9	4.0	(0.1)	(34.8)	(64.7)	29.9
Consumer Goods	(0.5)	7.9	(8.4)	(31.0)	(14.5)	(16.5)
Others	(0.1)	12.5	(12.6)	(2.3)	38.6	(40.9)
Services	**14.6**	**27.2**	**(12.6)**	**(170.7)**	**(130.8)**	**(39.8)**
Travel & Transportation	(3.8)	11.0	(14.8)	(175.3)	(140.6)	(34.6)
Business Services	17.6	16.2	1.4	9.7	5.6	4.2
Royalties & License fees	0.7	(1.0)	1.7	(1.8)	1.3	(3.0)
Other Services	0.1	1.0	(0.9)	(3.3)	3.0	(6.3)
Investment Income	**29.1**	**67.6**	**(38.5)**	**(159.9)**	**(116.3)**	**(43.6)**
Direct Investment	(16.2)	(2.4)	(13.7)	(73.4)	(53.7)	(19.7)
Portfolio Investment Income	11.9	18.6	(6.6)	(41.2)	(17.6)	(23.6)
U.S. Gov't Receipts/Payments	10.6	21.9	(11.3)	7.2	7.3	(0.1)
Other Investment Income	22.7	29.6	(6.9)	(52.5)	(52.4)	(0.2)

Note: Net changes were derived before rounding to billions.
Source: U.S. Bureau of Economic Analysis

Merchandise Trade

According to the U.S. Department of Commerce, international trade is classified into three categories: merchandise trade, service transactions, and investment income. There are six subcategories within Merchandise Trade: Foods and Beverages; Industrial Supplies and Materials; Capital Goods Excluding Autos; Autos; Consumer Goods; and others. The deficit in merchandise trade increased by $60.5 billion for a total deficit of $922.0 billion in 2020, up from $861.5 billion in 2019. This increase was partially attributable to Capital Goods, Excluding Autos, which experienced the largest negative change in trade balance compared to 2019.

Of the total trade deficit of $616.1 billion in 2020, consumer goods accounted for the largest portion, reaching $467.1 billion. Consumer goods consist of durables and nondurables. Durable goods include household and kitchen appliances such as radio and stereo equipment, televisions and video receivers, bicycles, watches, toys and sporting goods. Nondurables include footwear, apparel, medical, dental and pharmaceutical preparations. The trade deficit in the consumer goods category increased in 2020 by $16.5 billion.

The second largest portion of the deficit occurred in Capital Goods, Excluding Autos. This category includes machinery, and equipment but excludes automobiles and parts. In 2020, the U.S. imported $648.5 billion worth of these goods compared to the $460.5 billion that the U.S. exported. The Capital Goods trade deficit at $188.0 billion represents a $56.8 billion increase from the deficit of $131.2 billion in 2019.

Service Transactions

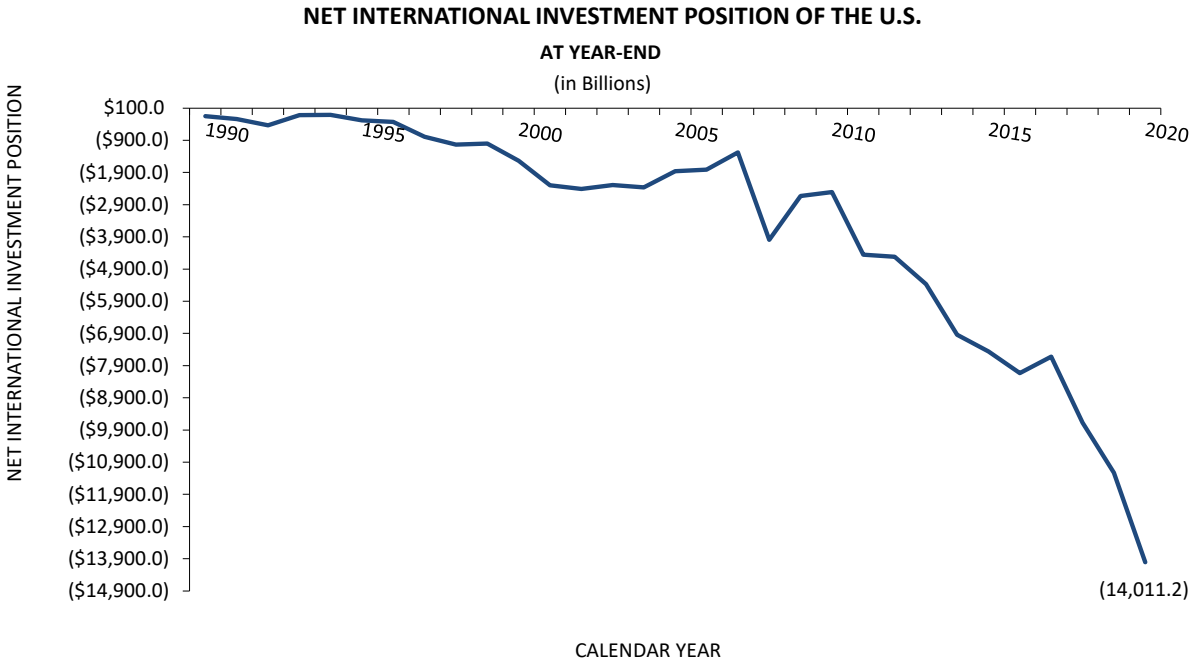
The United States is highly competitive in the delivery of services, although at a lower level than it was just a year ago. The surplus in service transactions decreased to $245.3 billion in 2020, from a surplus of $285.2 billion in 2019. Imports decreased 22.1% to $460.3 billion while exports of services decreased 19.5% to $705.6 billion. Of the $245.3 billion total surplus in 2020, $150.5 billion was attributable to business services.

Investment Income

Investment income contains two components: 1) receipts generated from U.S.-owned assets abroad including direct investments, other private securities such as U.S. government-owned securities, corporate bonds and stocks, and 2) compensation receipts of workers employed abroad in international organizations and foreign embassies stationed in the U.S., including wages, salaries, and benefits. Payments are the counterpart of U.S. receipts; they are paid on foreign-owned assets invested in the U.S. There are six major types of foreign assets in the United States, including U.S. government securities held by foreign governments and the private sector, direct investments, and liabilities captured by private bonds, corporate stocks and U.S. banks. The balance in investment income registered a surplus of $60.6 billion in 2020.

According to the U.S. Bureau of Economic Analysis, in calendar 2020 foreign assets in the U.S., measured at current cost, increased by $5,927.9 billion, or 14.7%, to $46,267.6 billion, compared to a increase of $3,148.1 billion, or 10.8%, to $32,256.3 billion for U.S. assets abroad. This placed U.S. international investment at a net negative $14,011.2 billion. Historically, U.S. direct investment in assets abroad exceeded foreign direct investment in the U.S. However, this trend ended in the late 1980s, and foreign

direct investment began to grow rapidly over the last couple decades. In 2020, the U.S.'s direct investment abroad was $9,405.1 billion and foreign direct investment in the U.S. was $11,977.9 billion, registering a net investment decline of $2,572.7 billion. Foreign assets in the United States are mostly in securities such as bonds and stocks issued by the U.S. Treasury and corporations. The significant growth in the net international investment position (NIIP) deficit should be a cause for concern as there has been no country that was able to maintain a large deficit over the long-term. Adjustments, such as policies to significantly depreciate the U.S. dollar, would be required to bring the United States back into alignment.



Source: U.S. Bureau of Economic Analysis

Tariffs

Tariffs are taxes placed on the import of goods or services and are used to restrict imports by increasing the price of the goods or services purchased from outside the United States. This policy has been used throughout history primarily for protecting national industries from global competition and as a form of revenue generation. Tariffs can have unintended consquences. By design, tarrifs reduce competition, which can result in less efficient domestic industries which could lead to a drag on economic growth. The United States is no stranger to tariffs and has been using them to protect domestic industries since the country's founding.

The Trump Administration introduced several new tariffs through the use of executive order and not an act of Congress in order to adjust the imbalance in the United States' trade deficit and protect certain industries believed to be negatively impacted by global trade policies. In January 2018, tariffs of 30% to 50% were imposed on solar panels and washing machines. In March 2018, additional tariffs were added, including a 25% tariff on raw steel and a 10% tariff on raw aluminum. Certain countries, such as Argentina,

Canada, and Mexico were later exempted from the tariffs through trade agreements. In September 2018, a 10% tariff was placed on various goods imported from China which increased to 25% for certain items throughout 2019, although this was subsequently lowered to 10% in July 2019. In early 2020, the Trump Administration has rolled back various tariffs on Canadian and Chinese products. Since taking office in January 2021, the Biden administration has largely continued the tariffs issued under the prior administration.

Calculating the cost of these new tariffs can be difficult given the relatively brief time that they have been in place and the evolving nature of their coverage and associated costs. In 2019, the Congressional Budget Office estimated that the relative impact of the tariffs and the associated retaliatory tariffs would reduce U.S. GDP by roughly 0.3% by 2020. As a result of this reduction, the average real household income is expected to be reduced by $580 (in 2019 dollars). Over the longer term it is anticipated that the impact will level off as businesses and consumers adjust their behavior.

Connecticut Exports

In Connecticut, the export sector has assumed an important role in the state's overall economic growth. State exports of goods for the past five years averaged 5.5% of Gross State Product (GSP).

The state's economy benefits from goods produced not only for direct shipment abroad but also from those that are ultimately exported from other states. These indirect exports are important in industries whose products require further processing such as primary metals, fabricated metal products and chemicals. In addition, indirect exports are important in industries whose products constitute components and parts for assembly into machinery, electrical equipment and transportation equipment. According to figures published by the United States Department of Commerce, which were adjusted and enhanced by the World Institute for Social and Economic Research to capture a greater proportion of indirect exports, Connecticut exports of commodities totaled $13,827.7 million in 2020, down 14.9% from 2019. The dramatic decline is largely attributable to the COVID-19 pandemic as lockdowns across the world restrained global trade.

In 2020 the Connecticut industries that rely most heavily on exports were Transportation Equipment (NAICS 336), Nonelectrical Machinery (NAICS 333) and Chemicals (NAICS 325). The top three industries accounted for 60.1% of Connecticut's foreign sales in 2020. The following table shows the breakdown of major products by NAICS code for the past five years. In 2020, transportation equipment, which includes aircraft engines and spare parts, gas turbines, and helicopters and spacecraft accounted for 35.3% of total exports down from 42.7% of exports in 2019. In terms of average annual growth from 2016 to 2020, Chemcials posted the strongest growth at 10.8%, followed by Miscellaneous Manufacturing at 6.9%.

Overall growth in exports of commodities for the past five years averaged -1.0%, as 2020 was greatly impacted by the pandemic. Exports of $13.8 billion are estimated to account for 5.0% of Connecticut Gross State Product (GSP) in 2020, which is lower than the 5.6% level in 2019.

TABLE 32
COMMODITY EXPORTS ORIGINATING IN CONNECTICUT BY PRODUCT
(In Millions of Dollars)

NAICS	Industry	2016	2017	2018	2019	2020	Percent of 2020 Total	Average Growth 16-20
322	Paper	137.0	152.2	157.6	145.1	124.9	0.9%	-2.3%
325	Chemicals	865.0	954.5	1,224.5	1,054.4	1,303.4	9.4%	10.8%
326	Plastics and Rubber	224.9	269.9	297.7	346.4	256.8	1.9%	3.4%
331	Primary Metal	505.1	410.8	323.8	295.1	211.4	1.5%	-19.6%
332	Fabricated Metal	790.3	829.5	901.6	962.2	896.8	6.5%	3.2%
333	Machinery, exc. Elec.	1,769.7	1,945.7	2,259.1	2,180.8	2,130.9	15.4%	4.8%
334	Comp. & Electronic	1,108.7	1,132.4	1,260.4	1,176.9	1,032.4	7.5%	-1.8%
335	Electrical Equipment	958.9	983.6	919.6	895.6	945.1	6.8%	-0.4%
336	Transportation Equip.	6,216.3	6,066.4	7,673.6	6,939.9	4,880.6	35.3%	-5.9%
339	Misc. MFG	327.3	312.6	339.1	382.5	427.0	3.1%	6.9%
	Other	1,490.9	1,734.1	2,046.5	1,864.3	1,618.3	11.7%	2.1%
Total Commodity Exports		14,394.0	14,791.6	17,403.5	16,243.3	13,827.7	100.0%	-1.0%
	% Growth	-5.6%	2.8%	17.7%	-6.7%	-14.9%		
Gross State Product ($M)		263,670.3	271,582.7	280,692.0	288,109.1	276,422.9		1.2%
		1.6%	3.0%	3.4%	2.6%	-4.1%		
Exports as a % of GSP		5.5%	5.4%	6.2%	5.6%	5.0%		5.5%

Source: World Institute for Strategic Economic Research (WISERTrade.org)

The bulk of Connecticut's exports are shipped by air from Bradley International Airport and by sea from the port of New Haven. In 2020, exports originating from Connecticut totaled $13.8 billion, with 67.7% of the total being shipped by air, 14.1% being delivered by sea, and the remaining 18.2% being transported inland by railroad or truck to Canada, Mexico or other states for further shipment to other countries. This compares with 55.4% by air, 17.6% by sea, and 27.5% by land for exports totaling $4.5 billion in 1990. This reflects the demand for meeting just-in-time inventory requirements, with the majority of goods transported by air as that mode of transportation provides more frequent departures and faster transit times.

The following table shows the ten major foreign countries to which Connecticut firms export their products. Germany is the largest destination country in 2020 at 15.8% of total exports, followed by Canada, United Kingdom, China, and France. These five countries accounted for 50.7% of total state exports in 2020. Exports to Netherlands have grown the fastest in the past five years at an average growth rate of 13.9%.

TABLE 33
COMMODITY EXPORTS ORIGINATING IN CONNECTICUT BY COUNTRY
(In Millions of Dollars)

Destination	2020 Rank	2016	2017	2018	2019	2020	Percent of 2020 Total	2016-2020 Average Growth Rate
Germany	1	1,641.7	1,823.8	2,332.3	2,541.5	2,189.9	15.8%	7.5%
Canada	2	1,634.8	1,907.3	1,964.1	1,952.9	1,670.4	12.1%	0.5%
United Kingdom	3	893.2	1,300.1	1,484.4	1,451.7	1,153.3	8.3%	6.6%
China	4	798.3	795.0	942.6	1,262.4	1,098.0	7.9%	8.3%
France	5	1,954.6	2,114.1	3,177.8	1,859.6	894.3	6.5%	-17.8%
Netherlands	6	499.1	619.4	769.5	773.7	840.9	6.1%	13.9%
Mexico	7	1,061.2	1,036.9	947.7	810.1	753.8	5.5%	-8.2%
South Korea	8	364.7	539.3	422.5	476.7	452.7	3.3%	5.6%
Singapore	9	333.7	399.5	623.3	552.5	425.4	3.1%	6.3%
Japan	10	525.4	546.7	627.5	402.0	397.6	2.9%	-6.7%
Other Areas		4,687.4	3,709.6	4,111.8	4,160.1	3,951.5	28.6%	-4.2%
Total		14,394.0	14,791.6	17,403.5	16,243.3	13,827.7	100.0%	-1.0%

Source: World Institute for Strategic Economic Research (WISERTrade.org)

In an effort to create jobs and investment, the Connecticut Department of Economic and Community Development has continued to work with a number of foreign companies to establish branches in Connecticut. As a result of this work, foreign countries continually invest and own firms in the state. This foreign investment is an important stimulus for Connecticut's economic growth and future productivity as 6.4% of the state's total private industry employment in 2018 was a result of foreign investment. In 2018, 115,000 Connecticut workers were employed by foreign-controlled companies, an increase of 11,400 since 2014. Major sources of foreign investment in Connecticut in 2018 included the Netherlands, the United Kingdom, Germany, and France.

Connecticut's Defense Industry

The defense industry is an integral part of Connecticut's manufacturing sector and has been since the inception of the United States as a nation. The state's economy is still affected by the volume of defense contracts awarded or subcontracted to Connecticut firms.

In federal fiscal year (FFY) 2020, contractors in the state were awarded $22.4 billion worth of defense-related prime contracts, with the heaviest concentration in the state's transportation equipment sector. This was up 22% from the $18.4 billion received in awards in FFY 2019. Of the total awarded, the following five companies were the top contractors in the state, primarily for the described areas of work:

1. General Dynamics Corp. — Submarines
2. Raytheon Technologies — Aerospace
3. Sikorsky Aircraft Corp. — Aircraft
4. ApiJect Systems Corp. — Pharmaceuticals
5. Sonalysts Inc. — Research, Development & Engineering

The following table shows the distribution of prime defense contracts in the state by program or type of work, with a heavy reliance on submarines, jet engines, and rotary wing aircraft (helicopters), which is very different from the national distribution of all contracts awarded. This concentration in large weapon programs play a role in the volatility of state awards.

TABLE 34
VALUE OF PRIME CONTRACT AWARDS BY PROGRAM IN FFY 2020
(In Millions)

Connecticut Program	Value	Percent	United States Program	Value	Percent
Combat Ships and Landing Vessels	$11,273.4	50.4%	Aircraft - Fixed Wing	$49,309.2	12.3%
Gas Turbines and Jet Engines	4,445.0	19.9%	Combat Ships and Landing Vessels	24,204.7	6.0%
Aircraft - Rotary Wing	2,455.6	11.0%	Engineering and Tech Support Services	19,088.4	4.8%
Maintenance and Repair of Equipment	990.1	4.4%	Guided Missiles	18,005.6	4.5%
Aircraft Research and Development	657.1	2.9%	General Health Care	12,554.2	3.1%
Other	2,534.3	11.3%	Other	277,084.2	69.2%
Total	$22,355.6	100.0%	Total	$400,246.3	100.0%

Source: General Services Administration (SAM.gov)

The following table displays the geographic distribution of prime defense contracts within the state, with the majority of the work in Fairfield, New London and Hartford Counties.

TABLE 35
GEOGRAPHIC DISTRIBUTION OF CONNECTICUT PRIME AWARDS
(And Total Awards in Thousands of Dollars)

	FFY 2016	FFY 2017	FFY 2018	FFY 2019	FFY 2020
Fairfield	28.1%	30.9%	20.1%	28.9%	19.7%
Hartford	33.0%	21.8%	39.3%	44.5%	26.4%
Litchfield	0.2%	0.3%	0.3%	0.2%	0.1%
Middlesex	0.1%	0.2%	0.1%	0.3%	0.1%
New Haven	0.6%	0.7%	0.6%	0.5%	0.3%
New London	37.9%	46.1%	39.3%	25.6%	53.3%
Tolland	0.1%	0.1%	0.1%	0.1%	0.1%
Windham	0.0%	0.1%	0.1%	0.1%	0.0%
State Total	100.0%	100.0%	100.0%	100.0%	100.0%
State Total	$14,132,111	$11,646,592	$14,695,644	$18,357,989	$22,355,563

Source: General Services Administration (SAM.gov)

Prime defense contracts have tended to be "leading" indicators of the state's economic activity. This means that changes in defense contract awards precede changes in employment. However, new defense contract awards cannot be directly converted into anticipated employment gains or losses because: a.) contracts have different terms and different completion dates; b.) subcontracting on prime awards may be done by firms in different states; c.) research and development contracts are usually capital intensive rather than labor intensive; d.) there often exists a time lag between contract award and funding availability; and e.) as productivity improvements are achieved over time by manufacturers, the same (or greater) amount of work can be done by fewer employees. Nearly all defense related employment within Connecticut falls under the Bureau of Labor Statistics' Transportation Equipment category.

To compare the relative volatility of contract awards with defense related employment, the coefficient of variation is used: the larger the number, the greater the volatility. It is derived by dividing the standard deviation of a variable by its mean. The coefficient of variation for the state's defense contract awards over the past decade was 0.256 compared with 0.055 for transportation equipment employment. This implies that the fluctuations in transportation employment are milder than the fluctuations in defense contract awards. Because most defense contract awards are long-term projects, there is usually a backlog of unfinished orders in the pipeline, allowing continued employment even if new contracts are not received.

Real defense contract awards in Connecticut —the value of contracts after accounting for inflation— increased from $12.5 billion in FFY 2011 to $22.4 billion in FFY 2020. This represents an annual percentage growth rate of 5.0% per year from FFY 2011 to FFY 2020.

Table 36
CONNECTICUT DEFENSE CONTRACT AWARDS AND RELATED EMPLOYMENT

Federal Fiscal Year	Defense Contract Awards ($ 000's)	% Growth	Connecticut Transportation Equipment Employment ($ 000's)	% Growth	Defense Contract Awards in 2011 Dollars ($ 000's)	% Growth
2011	12,491,131	11.1	42.17	(0.3)	11,969,472	8.3
2012	12,745,300	2.0	42.19	0.1	11,923,360	(0.4)
2013	10,028,168	(21.3)	41.57	(1.5)	9,230,068	(22.6)
2014	13,207,270	31.7	40.28	(3.1)	11,961,473	29.6
2015	12,147,134	(8.0)	40.43	0.4	10,967,370	(8.3)
2016	14,132,111	16.3	41.40	2.4	12,644,260	15.3
2017	11,646,592	(17.6)	43.38	4.8	10,209,694	(19.3)
2018	14,695,644	26.2	45.37	4.6	12,579,393	23.2
2019	18,357,989	24.9	46.71	3.0	15,427,691	22.6
2020	22,355,563	21.8	46.30	(0.9)	18,518,460	20.0
Coeffcient of Variation	0.256		0.055		0.215	

Sources: U.S. Department of Defense, Bureau of Labor Statistics; Federal Procurement Data System, IHS

TABLE 37
COMPARISON OF U.S. AND CONNECTICUT DEFENSE CONTRACT AWARDS

	Connecticut				United States			
Federal Fiscal Year	Defense Contract Awards ($ Millions)	% Growth	3-Year Moving Average ($ Millions)	% Growth	Defense Contract Awards ($ Millions)	% Growth	3-Year Moving Average ($ Millions)	% Growth
2011	12,491	11.1	11,861	0.8	329,486	1.9	327,952	(2.5)
2012	12,745	2.0	12,158	2.5	319,271	(3.1)	324,003	(1.2)
2013	10,028	(21.3)	11,755	(3.3)	268,851	(15.8)	305,869	(5.6)
2014	13,207	31.7	11,994	2.0	260,734	(3.0)	282,952	(7.5)
2015	12,147	(8.0)	11,794	(1.7)	253,286	(2.9)	260,957	(7.8)
2016	14,132	16.3	13,162	11.6	278,780	10.1	264,267	1.3
2017	11,647	(17.6)	12,642	(4.0)	300,824	7.9	277,630	5.1
2018	14,696	26.2	13,491	6.7	336,353	11.8	305,319	10.0
2019	18,358	24.9	14,900	10.4	360,145	7.1	332,441	8.9
2020	22,356	21.8	18,470	24.0	400,246	11.1	365,582	10.0
Coefficient of Variation	0.256				0.152			

Source: U.S. Department of Defense, General Services Administration (SAM.gov)

The coefficient of variation for Connecticut's defense contract awards over the past decade was 0.256, compared to 0.152 for the U.S., reflecting greater volatility in the state's annual levels of defense contract awards compared to the national level. Over the last several years Connecticut has seen more volatility as the U.S. Department of Defense has approved increasingly larger contracts to Connecticut contractors.

As defense contract awards normally take several years to complete, the three-year moving average is a better reflection of actual production activities. Overall changes in defense funding and expansions in Connecticut have historically been more severe and more volatile than the national average. Both factors have negative implications for the state's economy. Volatility imposes difficulties for the industry in terms of long-term planning, making future capital investments riskier and decreasing the dollars devoted to research and development.

Connecticut's total defense awards, based on a three-year moving average, increased at an annual growth rate of 5.0% during the nine-year period from 2011 to 2020, compared to a growth rate of 1.2% for the nation.

The relative share of defense-related production activity, measured by the size of the moving average of defense contract awards compared to Gross State Product (GSP), was at or below 2.0% in the late 1990s and has generally hovered around 4.0% to 5.0% since then. In comparison, this share was 9.8% in 1982. The following table provides a ten-year history of U.S. and Connecticut defense awards and the proportion of state GSP such awards represent.

In FFY 2020, while Connecticut ranked fourth nationally in total defense contracts awarded, it ranked first in per capita defense dollars awarded with a figure of $6,207. This figure was more than five times the national average of $1,208. In 2019, Connecticut ranked fifth in total defense contracts awarded and first in per capita defense dollars awarded with a figure of $5,148. This was about four times the national average of $1,097 for that year.

While defense spending began ramping down in the 2010's due to the wind-down of the Afghanistan and Iraq wars, Connecticut saw a significant change in defense spending in December 2019, when President Trump approved a spending bill with approximately $738 billion in federal funding for military and defense projects for FFY 2020. Projects manufactured in Connecticut include nine Virginia-class submarines to be partly manufactured by Electric Boat; engines for F-35 jets and the B-21 Raider made by Pratt & Whitney; and Black Hawk, CH-53K heavy lift, and combat rescue helicopters produced by Sikorsky Aircraft Corporation.

TABLE 38
CONNECTICUT DEFENSE CONTRACT AWARDS AND GSP

Federal Fiscal Year	Connecticut Defense Contract Awards ($ Millions)	U.S. Defense Contract Awards ($ Millions)	CT as % of U.S.	CT GSP Current Dollars ($ Millions)	3-year Average CT Awards ($ Millions)	CT Awards as % of CT GSP
2011	12,491	329,486	3.8%	236,453	11,861	5.3%
2012	12,745	319,271	4.0%	242,528	12,158	5.3%
2013	10,028	268,851	3.7%	244,148	11,755	4.1%
2014	13,207	260,734	5.1%	246,363	11,994	5.4%
2015	12,147	253,286	4.8%	260,227	11,794	4.7%
2016	14,132	278,780	5.1%	265,563	13,162	5.3%
2017	11,647	300,824	3.9%	271,013	12,642	4.3%
2018	14,696	336,353	4.4%	278,177	13,491	5.3%
2019	18,358	360,145	5.1%	285,457	14,900	6.4%
2020	22,356	400,246	5.6%	281,345	18,470	7.9%

Source: General Services Administration (SAM.gov), Bureau of Economic Analysis, IHS Markit

Some of the primary defense systems of interest to Connecticut include:

1. CH-53K Heavy Lift Helicopter
2. UH-60 Utility Helicopter (Black Hawk)
3. S-70i Black Hawk Helicopter
4. CH-148 Cyclone Helicopter
5. HH-60W Combat Rescue Helicopter (Pave Hawk)
6. F-15 Aircraft
7. F-16 Aircraft
8. F-35 Lightning Aircraft
9. H-92 Super Hawk Helicopter
10. KC-46A Pegasus Aircraft
11. Virginia Class Submarine

TABLE 39
COMPARISON OF STATE PRIME CONTRACT AWARDS
Federal Fiscal Year 2020

State	Prime Contract Awards ($ 000's)	Rank	$ Per Capita Prime Contract Awards	Rank	State	Prime Contract Awards ($ 000's)	Rank	$ Per Capita Prime Contract Awards	Rank
Connecticut	**22,355,563**	**4**	**6,207**	**1**	Rhode Island	678,016	41	618	26
Virginia	40,329,542	2	4,672	2	North Carolina	5,972,830	20	572	27
Maryland	19,903,312	5	3,224	3	New Jersey	5,282,752	21	569	28
Texas	71,699,568	1	2,457	4	Utah	1,843,301	33	562	29
Arizona	17,272,062	7	2,412	5	Nevada	1,734,140	34	558	30
Massachusetts	16,118,241	8	2,295	6	Ohio	6,498,418	17	551	31
Kentucky	9,652,961	11	2,142	7	Louisiana	2,546,639	28	547	32
Missouri	12,949,036	10	2,104	8	South Carolina	2,752,837	26	537	33
Mississippi	5,993,285	19	2,026	9	Indiana	3,628,046	24	535	34
Alaska	1,471,848	37	2,008	10	Illinois	6,455,097	18	504	35
Maine	2,687,781	27	1,972	11	Nebraska	890,413	39	454	36
Alabama	9,131,559	12	1,817	12	Michigan	4,476,585	22	444	37
Hawaii	2,415,628	29	1,661	13	New York	8,660,612	13	429	38
Colorado	7,178,673	15	1,242	14	Kansas	1,115,118	38	380	39
New Hampshire	1,679,457	35	1,219	15	North Dakota	261,476	47	336	40
Pennsylvania	13,325,280	9	1,025	16	Tennessee	2,246,726	30	325	41
New Mexico	1,981,230	32	936	17	South Dakota	279,586	46	315	42
Washington	7,023,072	16	911	18	West Virginia	548,885	43	306	43
California	34,900,289	3	883	19	Montana	310,073	45	286	44
Oklahoma	3,248,497	25	820	20	Minnesota	1,568,339	36	275	45
Florida	17,624,588	6	818	21	Oregon	863,232	40	204	46
Georgia	8,182,587	14	763	22	Arkansas	592,787	42	197	47
Wisconsin	4,326,624	23	734	23	Delaware	168,671	49	170	48
Vermont	465,865	44	724	24	Wyoming	86,715	50	150	49
Iowa	2,089,793	31	655	25	Idaho	220,770	48	120	50
U.S. Total	400,246,266		1,208						

Source: General Services Administration (SAM.gov), Bureau of the Census, IHS Markit Economics

Retail Trade in Connecticut

Consumer spending on goods and services, ranging from pencils to refrigerators to haircuts to electricity, accounted for approximately 68% of the nation's gross domestic product (GDP) in FY 2020. During the last decade, variations in retail trade closely matched variations in GDP growth, making retail trade an important barometer of economic health.

The North American Industry Classification System (NAICS) includes establishments that engage in selling merchandise for personal or household consumption and rendering services incidental to the sale of the goods in the retail trade industry. The NAICS codes for retail trade are from NAICS 44 to NAICS 45. In general, retail establishments are classified via these codes according to the principal lines of commodities sold (e.g., apparel, groceries) or the usual trade designation (e.g., liquor store, drug store).

The following table shows the major group in each NAICS code as well as the state's retail trade history for the past two fiscal years. Retail sales reflect the pulse of economic conditions: they perform strongly as the economy expands and perform poorly during a recession. Connecticut retail trade in FY 2020 totaled $62.3 billion, a 3.7% increase over FY 2019 and the tenth straight year of increased total trade.

TABLE 40
RETAIL TRADE IN CONNECTICUT
(In Millions)

NAICS	Industry	FY 2019	% of Total	FY 2020	% of Total	% Change
441	Motor Vehicle and Parts Dealers	$11,435	19.0%	$11,068	17.8%	-3.2%
442	Furniture and Home Furnishings Stores	2,043	3.4	1,902	3.1	-6.9
443	Electronics and Appliance Stores	1,630	2.7	1,744	2.8	7.0
444	Building Material and Garden Supply Stores	3,331	5.5	3,488	5.6	4.7
445	Food and Beverage Stores	10,873	18.1	11,664	18.7	7.3
446	Health and Personal Care Stores	4,124	6.9	4,347	7.0	5.4
447	Gasoline Stations	3,792	6.3	3,261	5.2	-14.0
448	Clothing and Clothing Accessories Stores	3,083	5.1	2,724	4.4	-11.7
451	Sporting Goods, Hobby, Book and Music Stores	936	1.6	857	1.4	-8.4
452	General Merchandise Stores	5,465	9.1	5,625	9.0	2.9
453	Miscellaneous Store Retailers	7,917	13.2	8,026	12.9	1.4
454	Nonstore Retailers	5,451	9.1	7,569	12.2	38.8
	Total	60,080	100.0%	$62,275	100.0%	3.7%
Durables (NAICS 441,442, 443, 444)		$18,439	30.7%	$18,203	29.2%	-1.3%
Nondurables (All Other NAICS)		$41,641	69.3%	$44,072	70.8%	5.8%

Source: Connecticut Department of Revenue Services

Retail trade can be broken down into two major categories; durable and nondurable goods. Durable goods are items that are expected to last three years or more and include items such as automobiles, furniture, and appliances. Durable goods are normally big-ticket items that are sensitive to the overall economic climate. Purchases of such goods increase when interest rates decrease or when consumers' incomes grow, and consumer confidence increases. Essentially, these transactions occur primarily when consumers feel the economy is on the right track and when more disposable income is being spent as the result of the price of borrowing going down or when consumers' earnings go up. Durable goods and sales declined by 1.3% in FY 2020, a reduction after the state experienced signficiant growth of 8.7% in FY 2019. Nondurable goods have a shorter life span and include items such as food, gas, apparel, and other miscellaneous products. Sales of nondurable goods are typically less volatile as most items are deemed "necessities" and consumption is relatively insensitive to price variations. The previous table shows that Connecticut sales of nondurable goods grew by 5.8% in FY 2020.

In addition to the traditional transactions occurring in Connecticut-based "bricks and mortar" establishments, a significant amount of retail activity is also taking place over the internet. According to the U.S. Census Bureau's Retail Indicators Branch, in FY 2020 national retail e-commerce sales are estimated at $681.8 billion, accounting for 12.6% of total retail sales of $5,428.6 billion. Estimated e-commerce retail sales rose by 23.7% in FY 2020 compared to a decline of 1.0% for traditional retail sales. This divergence in growth rates was exacerbated by the COVID-19 pandemic, which resulted in the short-term temporary closure of traditional retail locations in many states across the nation during the March 2020 through June 2020 period.

Historically, the U.S. Supreme Court forbade states from forcing retailers to collect sales tax unless the seller had a physical presence in the state where the purchase was made (physical nexus). The U.S. Supreme Court overturned the prior ruling in June 2018 in *South Dakota v. Wayfair, Inc.*, where it ruled that vendors with more than 200 transactions or sales over $100,000 to residents of South Dakota constituted an economic nexus. In anticipation of the *Wayfair* decision, Public Act 18-152 made remote sellers that make at least $250,000 in sales and more than 200 retail transactions to Connecticut residents liable to collect sales tax effective December 1, 2018. Public Act 19-117, effective July 1, 2019, lowered the threshold for the sales tax physical nexus to match the Wayfair decision and broadened its application to include retail sales of services.

Retail trade as a percentage of disposable income in Connecticut remained relatively flat over FY 2020 and FY 2019 at 25.9%. The state's per capita disposable income of $67,456 in FY 2020 was 30.8% above the national average of $51,587. In FY 2019, Connecticut per capita retail trade was estimated at $17,482.

TABLE 41

RETAIL SALES IN CONNECTICUT BY EMPLOYEES AND ESTABLISHMENTS

	Sales ($M)	Number of Employees	Per Employee Sales ($ 000's)	Per Number of Establish.	Employees Per Establish.	Annual Payroll ($M)
2012	51,632.5	182,528	282.9	12,597	14.5	4,974.5
2017	55,404.5	186,297	297.4	12,391	15.0	5,560.8
Growth (%)	7.3	2.1	5.1	(1.6)	3.7	11.8

Source: U.S. Census Bureau, 2012 and 2017 Economic Census

According to the 2017 economic census on retail sales, a survey that is done once every five years by the U.S. Department of Commerce, Connecticut had $55.4 billion of retail sales, up from $51.6 billion in 2012. The retail trade sector is one of the major sources of jobs in the Connecticut economy and although the number of establishments has declined from 2012 to 2017, the number of employees has increased. In 2017, the sector had 12,391 establishments with 186,297 employees, compared to 12,597 establishments with 182,528 employees in 2012.

Nonfinancial Debt

For many years, national attention has been focused on the issue of the federal budget and trade deficits, as well as the level of indebtedness of domestic nonfinancial entities. Domestic Nonfinancial Debt (DNFD) is the aggregate net indebtedness of all nonfinancial borrowers in the United States. It includes the borrowings of all levels of government, business and households. It excludes the debt of foreigners and the liabilities of financial intermediaries such as commercial banks, thrift institutions and finance companies.

TABLE 42
DOMESTIC NON-FINANCIAL DEBT (DNFD) OUTSTANDING BY SECTOR IN THE U.S.
In Billions of Dollars at Yearend

					2020	Growth	
					% of	(1990	(2000
Private Sector	1990	2000	2010	2020	Total	to 2000)	to 2020)
Households							
Home Mortgages	$2,489.3	$4,816.8	$9,992.3	$10,919.7	17.8%	93.5%	126.7%
Consumer Credit	824.4	1,741.3	2,646.8	4,184.9	6.8%	111.2%	140.3%
Other	330.7	729.8	1,227.1	1,605.9	2.6%	120.6%	120.1%
Total - Households	$3,644.4	$7,287.8	$13,866.2	$16,710.5	27.3%	100.0%	129.3%
Business							
Mortgages	$1,213.0	$1,737.0	$3,526.3	$5,374.0	8.8%	43.2%	209.4%
Corporate Bonds	1,008.2	2,267.7	3,385.4	6,477.3	10.6%	124.9%	185.6%
Other	1,562.2	2,592.0	3,148.4	5,867.1	9.6%	65.9%	126.4%
Total - Business	$3,783.3	$6,596.8	$10,060.1	$17,718.4	28.9%	74.4%	168.6%
Total - Private Sector	$7,427.7	$13,884.6	$23,926.3	$34,428.9	56.2%	86.9%	148.0%
Public Sector							
Federal Government*	$2,830.8	$4,090.0	$10,528.6	$23,621.1	38.6%	44.5%	477.5%
State & Local Gov't	987.4	1,197.9	3,226.7	3,207.7	5.2%	21.3%	167.8%
Total - Public Sector	$3,818.2	$5,287.9	$13,755.3	$26,828.7	43.8%	38.5%	407.4%
Total DNFD	$11,245.9	$19,172.5	$37,681.6	$61,257.6	100.0%	70.5%	219.5%
GDP, 4th Quarter	$6,004.7	$10,435.7	$15,309.5	$21,477.6		73.8%	105.8%
DNFD as a % of GDP	187.3%	183.7%	246.1%	285.2%			

*Excludes intra-governmental holdings of Treasury securities
Source: Board of Governors of the Federal Reserve System, IHS Markit

The preceding table shows the 30-year history from 1990 to 2020 for total DNFD and each of its four components – households, businesses, federal government, and state and local governments. In 2020, the year-end total domestic nonfinancial debt outstanding was $61,257.6 billion, almost three times

GDP. Total non-financial debt between 2000 and 2020 has grown 219.5%, outpacing the growth in GDP of 105.8%.

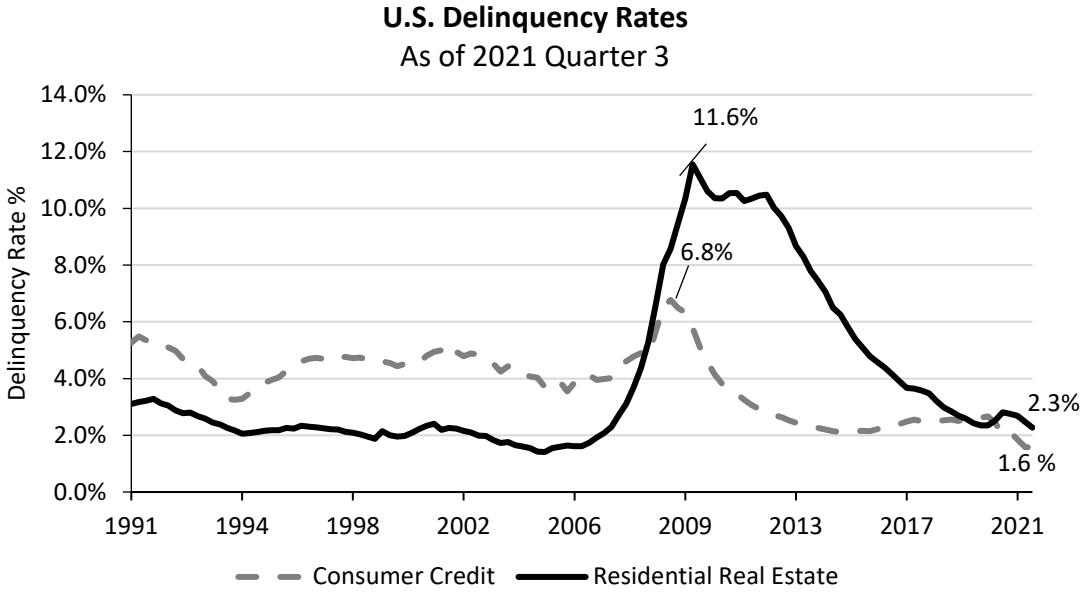
By 2020, of the total $61.3 trillion nonfinancial debt outstanding, the federal government accounted for 38.6%, followed by nonfinancial business at 28.9%, households at 27.3%, and state and local governments at 5.2%. However, debt outstanding in the private sector accounted for 56.2% of the total in 2020, down from 72.4% in 2000. Due to the 2008 financial crisis, deficit spending has led the federal government to overtake the household sector in total outstanding nonfinancial debt. Total nonfinancial debt outstanding has increased from $54.3 trillion in 2019 to $61.3 trillion in 2020 because of additional federal deficit spending brought about by the Coronavirus Disease 2019 (COVID-19) pandemic.

Household Borrowing

Household borrowing, which includes home mortgages, consumer credit, and other miscellaneous items, totaled $16.7 trillion by the end of 2020. Of this sum, home mortgage loans accounted for $10.9 trillion, or 65.3% of household borrowing, followed by consumer credit at $4.2 trillion, or 25.0%, and the remainder for other miscellaneous items.

As shown in the chart below, delinquency rates on all residential real estate loans increased after the onset of the 2008 Great Recession as a correction related to sub-prime and Alt-A mortgages (mortgages that are riskier than prime, but less risky than subprime mortgages) engulfed consumers. From an average rate of 2.3% from 1991 to mid-2008, delinquency rates reached a high of 11.6% in the first quarter of 2010. The increase was due to plunging housing prices coupled with reset provisions on certain mortgages and a slowdown in the economy. By the third quarter of 2019, this figure fell to 2.5% as the national expansion from the 2008 Great Recession continued. In the third quarter of 2020, delinquency rates increased to 2.8% due to the economic impact of the COVID-19 pandemic. Delinquency rates have since decreased to 2.3% as of the third quarter of 2021.

Consumer credit, not secured by real estate, is comprised of non-revolving credit (such as automobile and personal loans) and revolving credit (which includes credit card debt and store charges). Over the years, consumer credit has helped finance a large expansion in spending for consumer non-durables as more consumers rely on credit cards for making purchases online. After averaging 4.4% from 1991 to mid-2008, and reaching 6.8% in mid-2009, delinquency rates on credit card loans have declined to 1.6% in the third quarter of 2021. Consumer credit delinquency rates also showed improvement over the previous year compared to 2.7% in the first quarter of 2020.



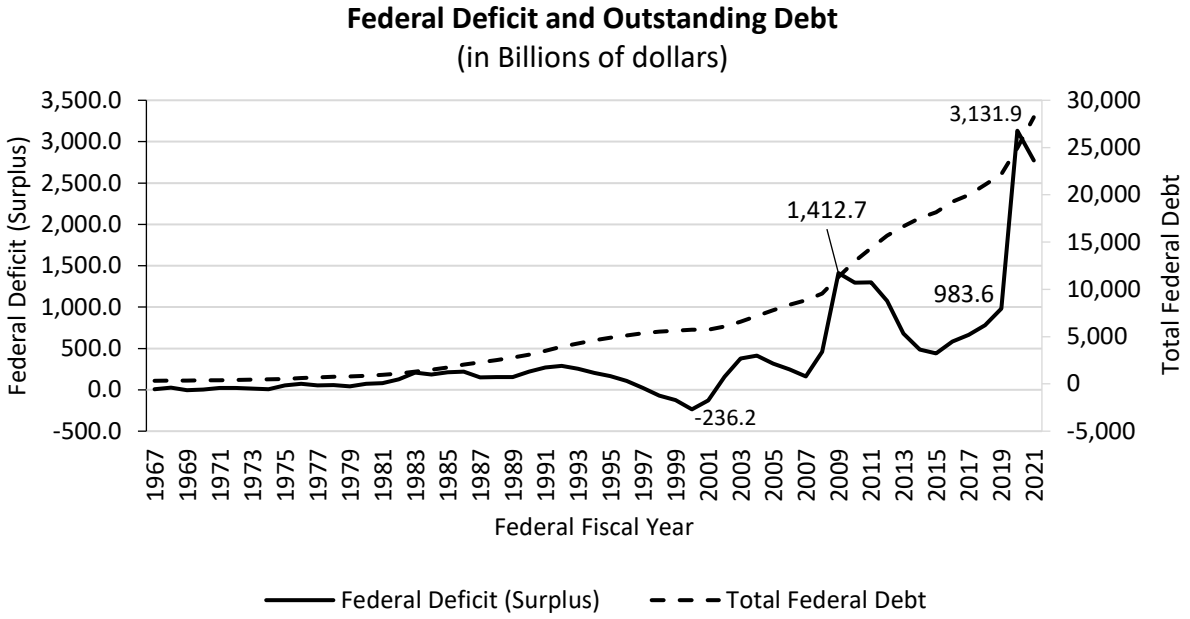
Source: Federal Reserve Bank of St. Louis

Business Borrowing

Business borrowings include debts owed by corporations, nonfarm corporations and farms. Total borrowings were $17.7 trillion at the end of 2020. Borrowing instruments include corporate bonds, commercial paper, municipal securities, bank loans, and mortgages. Mortgages, corporate bonds, and others were divided almost evenly among the total. Prior to the 2008 Great Recession, growth in business borrowings were driven by mortgages which grew 109.1% between 2000 to 2007, compared to 37.9% since 2007. After the Great Recession, growth in business borrowings has been led by corporate bonds, which grew 125.7% between 2007 to 2020, compared to 26.6% between 2000 to 2007.

Government Borrowing

The U.S. budget has long been imbalanced, resulting in annual operating deficits. The federal deficit, relative to the Post-WWII era, started surging in the early 1980s from expansionary fiscal policy and tax cuts, intending to sacrifice a short-term loss in revenue for a long-term gain through more rapid economic growth. This expectation, however, was not fully realized and deficits persisted into the late 1990s.



Note: For the purposes of the above graph, federal deficits are expressed as positive numbers.
Source: Federal Reserve Board of St. Louis

As shown in the graph above, after registering deficits in most of the 1990s, the federal budget on a unified basis, which includes all operating and trust funds such as Social Security and Medicare programs, turned to a surplus in 1998 and peaked at $236.2 billion in federal fiscal year (FFY) 2000. Federal operations turned to deficits again in FFY 2002 reaching a high of $412.7 billion in FFY 2004 before slightly recovering. The onset of the Great Recession boosted federal spending for FFY 2009 through FFY 2012. Contributing factors included the $700 billion financial bailout known as the Troubled Asset Relief Program (TARP), and the $787 billion economic stimulus program provided under the American Recovery and Reinvestment Act (ARRA), along with increases in Medicare, Medicaid, unemployment insurance, Social Security, and defense spending. At the same time, tax receipts declined due to the effects of the recession and tax cuts from the ARRA program. The federal deficit reached a high of $1,412.7 billion in FFY 2009 before dropping dramatically in FFY 2015 to $438.5 billion. Unfortunately, the 2017 Tax Cuts and Jobs Act did not sufficiently stimulate economic growth nor reduce federal expenditures to match federal revenues, thereby exacerbating the federal deficit. The federal government in FFY 2021 spent an estimated $1.75 for every dollar it took in, a decrease of 2.4% from $1.80 in FFY 2020, but an increase of 35.3% compared to $1.30 in FFY 2019. The federal deficit rose to a record high of $3,131.9 billion as of the end of FFY 2020. This record deficit is largely a result of the federal response to the COVID-19 pandemic. This deficit has since decreased to $2,772.2 billion as of the end of FFY 2021.

As the federal operating budget continued to post a deficit, the national debt also increased. By the end of FFY 2021, gross debt outstanding registered $28.2 trillion, up 13.0% from FFY 2019. The U.S.'s deficit of 9.8% of GDP in FFY 2009 had been a record high since WWII, declining to 2.4% in FFY 2015 but then increasing and currently standing at 21.1% in FFY 2021.

According to the U.S. Census Bureau's "State Government Finances," state government debt outstanding in Connecticut at the end of FY 2019, the latest available year, was $40.9 billion, compared to $40.3 billion in 2018 and $38.8 billion in 2017. Connecticut per capita state government debt has increased over the past three years, from $10,737 in FY 2017 to $11,325 in FY 2019. The fifty-state average increased from $3,573 in FY 2018 to $3,539 in FY 2019.

Connecticut's overall credit rating is determined by four major rating agencies: Moody's Investors Service, Standard & Poor's Corporation, Fitch Investors Service, Inc., and Kroll Bond Ratings. The table below shows how Connecticut's General Obligation bonds are rated as of January 2022. In calendar year 2021 all four rating agencies upgraded the state's rating one notch due to the state's strong reserve balances and commitment toward moderating debt levels and addressing long-term liabilities. The rating process provides information for investors about risk. High ratings generally result in lower borrowing costs.

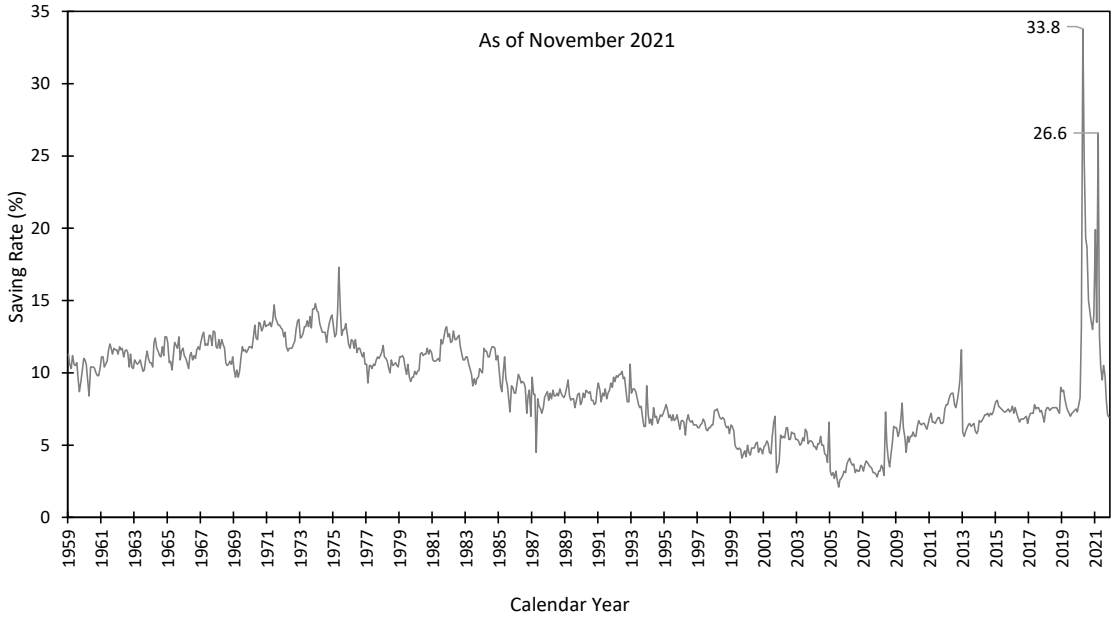
Agency	Rating	Outlook
Moody's Investors Service	Aa3	Stable
Standard & Poor's Corporation	A+	Stable
Fitch Investors Service	AA-	Stable
Kroll Bond Ratings	AA	Stable

Note: Ratings as of January 2022

Savings by U.S. Households

The chart below shows the national savings rate (personal income less personal outlays and personal current taxes) for U.S. consumers from 1959 through November 2020. After remaining at an average of 11.6% between 1959 and 1980, the U.S. savings rate began trending down from a high of 13.2% in late 1981 to a low of 2.2% in mid-2005. The savings rate then climbed back up to 12.0% by December 2012 before falling to 8.3% in February 2020 prior to the COVID-19 pandemic. During the pandemic the savings rate reached a peak of 33.8% in April 2020, the highest on record going back to 1959. The savings rate declined shortly thereafter, but peaked again at 26.6% in March of 2021 after two more rounds of stimulus checks were issued. The savings rate as of November 2021 is 6.9% which is lower than the pre-pandemic rate of 8.3% in February 2020. The average savings rate for the past five years is 10.1%.

SAVINGS BY U.S. HOUSEHOLDS



Source: U.S. Bureau of Economic Analysis, Federal Reserve Bank of St. Louis

Household Balance Sheet

The Federal Reserve Bank's "Flow of Funds Accounts" maintains statistics on the assets, liabilities, and net worth for the household sector. The table below shows these three components beginning with 1970 as an approximate inflection point for numerous changes in the U.S economy such as rising inflation, rising interest rates, expansion of consumer credit, rising participation of women in the workforce, and the beginnings of deregulation. The table then also shows a comparison to 2007, just prior to the global financial crisis, and 2021 for the most recent data.

TABLE 43
Balance Sheet of Households and Non-profit Organizations
In Billions of Dollars

	1970 In Real $*	% of Total	2007 In Real $*	% of Total	2021 Q3	% of Total	Average Growth**
Assets							
Real Estate	7,142.1	23.5%	33,700.6	30.5%	40,924.9	25.2%	3.5%
Stock related	9,602.2	31.7%	40,010.9	36.2%	73,662.4	45.3%	4.1%
Other	13,590.4	44.8%	36,726.6	33.3%	48,090.7	29.6%	2.5%
Time & Saving Deposits	3,774.5	12.4%	10,444.8	9.5%	17,228.8	10.6%	3.0%
Corporate Bonds	207.6	0.7%	1,589.7	1.4%	354.1	0.2%	1.1%
Gov't Securities***	1,018.0	3.4%	3,024.0	2.7%	3,444.7	2.1%	2.4%
Total	30,334.6	100.0%	110,438.1	100.0%	162,678.0	100.0%	3.3%
Liabilities							
Home Mortgages	1,992.5	59.7%	13,854.0	72.7%	11,497.0	64.0%	3.5%
Consumer Credit	931.1	27.9%	3,402.5	17.9%	4,343.3	24.2%	3.1%
Other	411.5	12.3%	1,797.8	9.4%	2,128.4	11.8%	3.3%
Total	3,335.1	100.0%	19,054.3	100.0%	17,968.6	100.0%	3.4%
Net Worth	26,999.5		91,383.8		144,709.4		3.3%
Net Home Equity	5,149.6		19,846.6		29,427.9		3.5%
As a % of Net Worth	19.1%		21.7%		20.3%		
Per Capita Net Worth ($)	130,838.9		301,268.0		435,800.1		2.4%
As a % of Total Assets							
Home Mortgages	6.6%		12.5%		7.1%		
Liabilities	11.0%		17.3%		11.0%		
Net worth	89.0%		82.7%		89.0%		

Note:
* Real dollar is calculated by using the estimated CPI-U for 2021
** Compound annual growth rate from 1970 through 2021 Q3
*** Includes Treasury and Municipal securities

Source: Board of Governors of the Federal Reserve System

Assets

Total assets can be categorized into three components: real estate assets, stock-related assets, and other assets (including bank deposits, bonds, money market fund shares, and consumer durable goods). In the third quarter of 2021, household assets totaled $162.7 trillion with real estate comprising 25.2% of total assets, stocks 45.3%, and the remaining 29.6% in other assets. In 1970, real estate comprised 23.5% of total assets, stocks 31.7%, and all other assets 44.8%. This reflects that stock-related assets rose in importance over the past 45 years relative to real estate and other assets.

From 1955 to 1970, total assets grew at a compound annual growth rate of 3.7%. Total asset growth then slowed slightly in 1970 with a compound annual growth rate of 3.6% through 2007, when real assets reached a peak of $110.4 trillion just prior to the onset of the Great Recession. During that recession total real assets declined sharply falling to $95.1 trillion before recovering to $162.7 trillion by 2021 Q3.

Liabilities

Household liabilities totaled $18.0 trillion in the third quarter of 2021. Home mortgages accounted for 64.0% of the total with consumer credit at 24.2% and other liabilities at 11.8%. This compared to 59.7%, 27.9%, and 12.3%, respectively, in 1970, reflecting a faster growth in home mortgage borrowings. From 1970 to 2007 total liabilities grew at a compound annual growth rate of 4.8%, as financial vehicles such as home equity loans and credit cards became popular. Between 2002 and 2007, the compound annual growth rate in home mortgages, supported by extraordinarily favorable mortgage rates and an aggressive mortgage lending strategy, was 8.9%, outpacing growth in consumer credit (2.5%) and driving growth in total liabilities (7.4%). Consumer credit primarily includes auto loans, personal loans, and credit card balances. Since the Great Recession, annual growth in total liabilities declined by -0.4% per year.

Net Worth

Net worth (assets less liabilities) measures the resulting financial condition of consumers, which affects the overall economy through its wealth impact on consumers' spending and business activities. When measured in 2021 dollars, real net worth grew from $27.0 trillion in 1970 to a pre-recession peak of $91.4 trillion in 2007, before declining to $76.9 trillion in 2008 and rebounding to $144.7 trillion in 2021. Per capita real net worth increased from $130,839 in 1970 to $435,800 in 2021, with an annual growth rate of 2.4%.

Over time, the growth in household net worth has coincided with the additional burden of greater liabilities. In 1970, liabilities accounted for 11.0% of total assets, yet by 2007, just prior to the onset of the Great Recession, they had risen to 17.3% of assets. The primary driver of this change was an increase in home mortgage liability. As of the third quarter of 2021, however, liabilities account for 11.0% of total assets as they did in 1970. Indeed, the ratio of home mortgages to total assets grew from 6.6% in 1970, to 12.5% in 2007, before falling to 7.1% in 2021. The increasing use of debt to finance American lifestyles has also increased the proportion of income that must be devoted to repaying that debt. Debt service, which consists of the required payments on outstanding mortgage and consumer debt, as a percentage of disposable personal income has gradually risen from 10.6% in 1980, the earliest available data, to 13.2% in the fourth quarter of 2007. Debt service has since declined to 9.2% as of second quarter 2021, a result of lower interest rates due to the onset of the Great Recession and the expansionary monetary policy implemented by the Federal Reserve.

PERFORMANCE INDICATORS

This section examines trends in various economic performance indicators for the United States, the New England region and Connecticut. Statistics are provided demonstrating the economic performance of these areas and showing their strengths and weaknesses.

Gross Product

Gross Domestic Product (GDP) is a measure of domestic production produced by the Bureau of Economic Analysis (BEA). GDP is "the market value of the final goods and services produced by labor and property in the United States." GDP is composed of:

- personal consumption expenditures;
- government consumption expenditures and gross investment;
- gross private domestic investment; and
- net exports of goods and services.

While GDP measures economic activity in a geographical area, Gross National Product (GNP) measures the economic activity produced by residents of that area. Unlike Gross Domestic Product, GNP adjusts for income derived from domestic investments in foreign companies and foreign investments in domestic companies. GDP measures all economic activity within a territory and is consistent with other economic indicators such as employment and shipments of manufactured goods.

Because prices of goods and services change over time, nominal GDP will change even if there is no difference in physical output. To measure changes in real output, GDP is adjusted by an index of the general price level and expressed in constant dollars to remove inflationary effects. The Bureau of Economic Analysis uses a chained dollars inflation index to provide an "apples-to-apples" comparison across years, currently based on calendar year 2012.

A state's economic activity is measured using Gross State Product (GSP). Like GDP, GSP is the current market value of all final goods and services produced by labor and property in a state. In FY 2021, the State of Connecticut produced an estimated $286.2 billion in goods and services - $241.7 billion in calendar year 2012 dollars. This was an estimated increase of 1.8% in current dollars and an approximate 0.4% decrease in real (inflation-adjusted) dollars over FY 2020. The declines seen in FY 2020 were largely a result of the restrictions that occurred in 2020 during the March through June period in order to address the COVID-19 public health crisis. Both the New England region and the nation experienced a pullback in economic activity during the same timeframe. However, overall growth in Connecticut GSP has lagged both the region and the nation since FY 2009, the nadir of the 2008 recession. From FY 2012 through FY 2021, nominal gross product has increased by 20.7% in Connecticut, compared to 32.0% in New England and 37.1% in the nation. In real terms, Connecticut's GSP was 0.7% above its FY 2012 level in FY 2021, as growth in the state has been insufficient to keep up with inflation. The following table provides data on the recent ten-year history of gross product.

TABLE 44
GROSS PRODUCT

Millions of Current Dollars

Fiscal	United States*		New England*		Connecticut	
Year	Dollars	% Growth	Dollars	% Growth	Dollars	% Growth
2012	15,941,476	3.9	872,319	2.8	237,157	1.6
2013	16,517,132	3.6	894,111	2.5	241,151	1.7
2014	17,162,792	3.9	912,223	2.0	242,546	0.6
2015	17,945,206	4.6	960,468	5.3	254,832	5.1
2016	18,418,991	2.6	992,915	3.4	260,380	2.2
2017	19,055,083	3.5	1,019,370	2.7	266,977	2.5
2018	20,019,467	5.1	1,062,401	4.2	276,996	3.8
2019	20,940,822	4.6	1,108,559	4.3	284,284	2.6
2020	21,039,570	0.5	1,117,475	0.8	281,144	(1.1)
2021	21,848,839	3.8	1,151,725	3.1	286,213	1.8
% Increase ('12 to '21)		37.1		32.0		20.7

Millions of Constant Dollars**

Fiscal	United States*		New England*		Connecticut	
Year	Dollars	% Growth	Dollars	% Growth	Dollars	% Growth
2012	16,088,270	1.9	882,071	0.8	239,918	(0.6)
2013	16,372,018	1.8	884,407	0.3	238,404	(0.6)
2014	16,707,465	2.0	883,952	(0.1)	234,493	(1.6)
2015	17,216,843	3.0	909,927	2.9	240,709	2.7
2016	17,520,926	1.8	923,985	1.5	241,895	0.5
2017	17,857,619	1.9	935,351	1.2	244,861	1.2
2018	18,362,294	2.8	957,795	2.4	249,562	1.9
2019	18,804,151	2.4	978,397	2.2	250,753	0.5
2020	18,631,290	(0.9)	965,125	(1.4)	242,577	(3.3)
2021	18,938,129	1.6	973,868	0.9	241,653	(0.4)
% Increase ('12 to '21)		17.7		10.4		0.7

* Sum of States' Gross State Products.

** Reported in calendar year 2012 chained dollars

Source: Bureau of Economic Analysis

As growth in some sectors in the economy will outpace other sectors, the composition of gross product will change over time. This is true of both the nation as well as Connecticut. Between FY 2012 and FY 2021, the contribution to Connecticut's GSP from the construction and mining sector has remained the same. Comparatively, contribution to Connecticut's GSP from the information; finance, insurance, and real estate (FIRE); professional and business services; and healthcare and education sectors have increased. Meanwhile, the agriculture, forest & fisheries; manufacturing; transportation, trade, and utilities; leisure and hospitality; other services; and government sectors contribution to Connecticut's GSP have decreased over the same time period. The FIRE and manufacturing sectors have historically played an outsized role in Connecticut's economy. However, in FY 2021, professional and business services and transportation, trade, and utilities exceeded the manufacturing sector's contribution to Connecticut's GSP.

Manufacturing's contribution to national gross domestic product also decreased between FY 2012 and FY 2021. Connecticut GSP as a portion of national GDP decreased between FY 2012 and FY 2021, from 1.5% to 1.3%.

TABLE 45
GROSS PRODUCT BY SOURCE
(In Billions of Current Dollars)

	FY 2012				FY 2021			
Industry	U.S.	%	CT	%	U.S.	%	CT	%
Agriculture, Forest & Fisheries	180.3	1.1	0.4	0.2	210.8	1.0	0.4	0.1
Construction & Mining	907.1	5.7	6.7	2.8	1,146.0	5.2	8.1	2.8
Manufacturing	1,910.0	12.0	28.7	12.1	2,411.4	11.0	31.8	11.1
Transportation, Trade & Utilities	2,610.6	16.4	36.2	15.3	3,571.9	16.3	41.0	14.3
Information	763.1	4.8	10.2	4.3	1,232.2	5.6	15.8	5.5
Finance, Insurance & Real Estate	3,186.9	20.0	66.7	28.1	4,732.2	21.7	84.5	29.5
Professional & Business Services	1,911.6	12.0	27.6	11.6	2,811.1	12.9	33.9	11.9
Health Care & Education	1,384.2	8.7	24.4	10.3	1,876.8	8.6	30.1	10.5
Leisure & Hospitality	602.4	3.8	7.6	3.2	725.5	3.3	8.2	2.9
Other Services	340.7	2.1	4.4	1.9	430.3	2.0	4.9	1.7
Government	2,144.5	13.5	24.2	10.2	2,700.6	12.4	27.3	9.5
Total	15,941.5	100.0	237.2	100.0	21,848.8	100.0	286.2	100.0
Broadly Defined Services*		51.4		59.4		54.0		62.0
CT as a % of U.S. Total GDP			1.5				1.3	

Source: Bureau of Economic Analysis, IHS

Services in the private sector, which include information, professional and technical services, health care and education, FIRE, leisure and hospitality, and other services, increased to 62.0% of Connecticut's total GSP in FY 2021, up from 59.4% in FY 2012. During this period, the contribution to the United State's GDP from services increased to 54.0% of GDP in FY 2021 from 51.4% in FY 2012. Theoretically, Connecticut and the nation's increasingly service-based economies should smooth the business cycle, resulting in longer and shallower recessions and expansions. Activities in service sectors are less susceptible to pent-up demand, less subject to inventory-induced swings, less intensive in capital requirements, and somewhat less vulnerable to foreign competition than the manufacturing sector. Connecticut began moving toward services sooner than the nation as a whole.

Productivity

Gains in gross product may or may not fully reflect a change in the livelihoods of a territory's residents. While gross product may rise, population growth may consume those gains. Therefore, real per capita gross product, which takes into account both increases in population and inflation, provides a better measure of the standard of living among differing economies and the productivity of their residents. The following table shows real per capita gross product, in chained 2012 dollars, for the United States, New England, and Connecticut. In FY 2021, Connecticut's productivity as measured by GSP per capita was 17.5% higher than the United States as a whole. This level has steadily declined since the 2008 recession; Connecticut was 40.0% higher than the nation as a whole in FY 2007 and 29.8% higher in FY 2012. Connecticut's decline in real GSP per capita from FY 2012 to 2021 is likely tied to the performance of two high value-added sectors, manufacturing and finance, insurance, and real estate. Manufacturing has been experiencing a decline overall, while growth in finance, insurance, and real estate slowed in the aftermath of the 2008 global financial crisis.

TABLE 46
REAL PER CAPITA GROSS PRODUCT
(In Chained 2012 Dollars)

	United States		New England		Connecticut		
Fiscal Year	Real GSP Per Capita	% Change	Real GSP Per Capita	% Change	Real GSP Per Capita	% Change	As a % of the U.S.
2012	$51,342.8	1.0%	$60,339.3	0.2%	$66,621.2	-0.9%	129.8%
2013	$51,846.7	1.0%	$60,156.7	-0.3%	$66,065.5	-0.8%	127.4%
2014	$52,495.8	1.3%	$59,784.8	-0.6%	$64,897.5	-1.8%	123.6%
2015	$53,657.5	2.2%	$61,271.3	2.5%	$66,617.8	2.7%	124.2%
2016	$54,163.7	0.9%	$61,988.3	1.2%	$67,014.1	0.6%	123.7%
2017	$54,794.7	1.2%	$62,485.3	0.8%	$67,866.5	1.3%	123.9%
2018	$55,993.5	2.2%	$63,718.7	2.0%	$69,124.8	1.9%	123.5%
2019	$57,042.6	1.9%	$64,895.8	1.8%	$69,477.7	0.5%	121.8%
2020	$56,268.5	-1.4%	$63,889.9	-1.5%	$67,291.9	-3.1%	119.6%
2021	$57,085.2	1.5%	$64,541.5	1.0%	$67,102.6	-0.3%	117.5%

Source: Bureau of Economic Analysis, IHS

Total Personal Income

Total personal income, defined as current income received by persons from all sources including public and private transfer payments but excluding transfers among persons, is a reliable measure of economic performance. Total personal income captures the manufacturing sector through manufacturing wages; the nonmanufacturing sector through wages in such areas as government, wholesale/retail trade, utilities, transportation, mining, and personal services; the private sector through proprietors' income; and a part of agricultural activity via farm properties' income. Personal income was approximately 93.7% of Gross Domestic Product in FY 2021; hence, the two are well-correlated.

The U.S. Department of Commerce defines the various sources of personal income as the following:

Wages and Salaries - the monetary remuneration of employees, including the compensation of corporate officers; commissions, tips, and bonuses; and receipts in kind that represent income to the recipient. Wages and salaries are measured before deductions such as social security contributions and union dues.

Other Labor Income - consists primarily of employer contributions for employee pension and insurance funds and employer contributions for government social insurance.

Property Income - income from dividends, interest, and rents.

Dividends are payments in cash or other assets, excluding stock, by corporations organized for profit, to non-corporate stockholders who are U.S. residents.

Interest is the monetary and imputed interest income of persons from all sources. Imputed interest represents the income received by financial intermediaries from funds entrusted to them by persons reduced by the original amount of funds that are disbursed back to persons. Part of imputed interest reflects the value of financial services rendered without charge to persons by depository institutions. The remainder is property income held by life insurance companies and private non-insured pension funds on behalf of persons, for example, the additions to policyholder reserves held by life insurance companies.

Rental income is the monetary income of persons (except those primarily engaged in the real estate business) from the rental of real property (including mobile homes); the imputed net rental income of owner-occupants of nonfarm dwellings; and the royalties received by persons from patents, copyrights, and rights to natural resources.

Proprietors' Income - the income, including income-in-kind, of sole proprietorships and partnerships and of tax-exempt cooperatives. The imputed net rental income of owner occupants of farm dwellings with certain adjustments is included.

Transfer Payments - income payments to persons, generally in monetary form, for which they do not render current services. These include payments by the government and business to individuals and nonprofit institutions.

Personal Contributions to Social Insurance - contributions made by individuals under the various social insurance programs. Payments by employees and the self-employed (farm and nonfarm) are included as well as contributions that are sometimes made by employers on behalf of their employees (i.e., those customarily paid by the employee but, under special arrangement, paid by the employer).

According to data recorded by the U.S. Bureau of Economic Analysis, personal income for Connecticut residents during FY 2021 was $289.3 billion, a 5.2% increase over FY 2020. Total personal income in Connecticut increased 26.4% from FY 2012 to FY 2021. For the United States, total personal income increased 49.8%, and in the New England region, the increase for the same period was 41.3%.

The following table shows personal income for the United States, the New England region, and Connecticut.

TABLE 47
PERSONAL INCOME
(In Millions)

Fiscal	United States		New England		Connecticut	
Year	Dollars	% Growth	Dollars	% Growth	Dollars	% Growth
2012	13,658,202	5.13	794,778	3.28	228,879	2.00
2013	14,124,426	3.41	809,370	1.84	228,813	(0.03)
2014	14,525,462	2.84	822,179	1.58	230,297	0.65
2015	15,386,053	5.92	869,271	5.73	240,878	4.59
2016	15,880,989	3.22	900,075	3.54	245,439	1.89
2017	16,439,648	3.52	927,712	3.07	249,766	1.76
2018	17,278,409	5.10	968,098	4.35	258,607	3.54
2019	18,100,926	4.76	1,010,405	4.37	268,253	3.73
2020	19,076,032	5.39	1,059,021	4.81	274,967	2.50
2021	20,464,172	7.28	1,123,413	6.08	289,263	5.20

Source: Bureau of Economic Analysis, IHS

Connecticut's sources of personal income vary slightly from those of the United States, with wages and employee salaries accounting for approximately 49.1% of total personal income compared to 48.0% for the nation in FY 2021. The following table shows the sources of personal income for the United States and Connecticut over a ten fiscal year period. The table indicates a shift from manufacturing wages to other sources of income including property income and transfer payments, which were particularly inflated in FY 2021 by various federal COVID-19 pandemic stimulus.

TABLE 48
SOURCES OF PERSONAL INCOME
(In Billions of Dollars)

	Fiscal Year 2012				Fiscal Year 2021			
	U.S.	%	CT	%	U.S.	%	CT	%
Manufacturing Salaries & Wages	719.3	5.3	14.3	6.3	937.8	4.6	16.0	5.5
Nonmanufacturing Salaries & Wages	6,038.6	44.2	98.9	43.2	8,875.4	43.4	126.1	43.6
Proprietors Income	1,299.5	9.5	32.8	14.3	1,763.2	8.6	29.2	10.1
Property Income	2,564.4	18.8	42.5	18.6	3,612.5	17.7	56.8	19.6
Other Labor Income	1,614.2	11.8	25.5	11.1	2,189.1	10.7	31.1	10.8
Transfer Payments (Less Social Insurance)	1,422.3	10.4	14.8	6.5	3,086.1	15.1	30.0	10.4
Total	13,658.2	100.0	228.9	100.0	20,464.2	100.0	289.3	100.0

Note: Totals may not agree with detail due to rounding.
Source: Bureau of Economic Analysis, IHS

Per Capita Personal Income

One of the more important single indicators of a state's performance is the growth in per capita personal income. Per capita income is total personal income divided by the population. On a per capita basis, personal income growth in Connecticut increased 26.4% from FY 2012 to FY 2021, compared to a national increase of 41.6% and a New England region increase of 36.9%.

Per capita personal income in Connecticut for the most recent fiscal year was 7.9% higher than for the New England region and 30.2% higher than for the United States. This is due to the concentration of relatively high paying manufacturing industries and the financial services sector.

The following table shows the growth in per capita personal income for ten fiscal years for the United States, the New England region and Connecticut.

TABLE 49
PER CAPITA PERSONAL INCOME

Fiscal	United States		New England		Connecticut	
Year	Dollars	% Growth	Dollars	% Growth	Dollars	% Growth
2012	43,578	4.29	54,368	2.67	63,556	1.66
2013	44,718	2.62	55,053	1.26	63,408	(0.23)
2014	45,629	2.04	55,607	1.01	63,736	0.52
2015	47,948	5.08	58,534	5.26	66,664	4.59
2016	49,100	2.40	60,384	3.16	67,996	2.00
2017	50,459	2.77	61,975	2.63	69,226	1.81
2018	52,702	4.45	64,404	3.92	71,630	3.47
2019	54,914	4.20	67,019	4.06	74,326	3.76
2020	57,601	4.89	70,106	4.61	76,277	2.62
2021	61,697	7.11	74,452	6.20	80,323	5.30

Source: Bureau of Economic Analysis, U.S. Census Bureau, IHS

The following table shows per capita income for each of the fifty states with their corresponding ranking for FY 2021. In FY 2021, Connecticut ranked number one in the nation based on per capita personal income. Connecticut's figure of $80,323 for per capita personal income is approximately 30.2% higher than the national average.

TABLE 50
PER CAPITA PERSONAL INCOME BY STATE
(Fiscal 2021)

State	Per Capita Income	Rank	State	Per Capita Income	Rank
Connecticut	**$80,323**	**1**	Delaware	$57,597	26
Massachusetts	79,923	2	Wisconsin	56,934	27
New York	75,006	3	Nevada	56,043	28
California	73,719	4	Iowa	55,592	29
New Jersey	73,191	5	Ohio	55,292	30
Washington	69,685	6	Maine	55,260	31
New Hampshire	68,709	7	Montana	54,769	32
Maryland	68,108	8	Michigan	54,445	33
Colorado	66,574	9	Indiana	54,158	34
Illinois	65,302	10	Georgia	53,873	35
Alaska	65,126	11	Missouri	53,678	36
Wyoming	64,187	12	Utah	53,160	37
North Dakota	63,931	13	Louisiana	53,053	38
Minnesota	63,884	14	North Carolina	53,043	39
Virginia	63,830	15	Arizona	52,836	40
Pennsylvania	62,914	16	Tennessee	52,822	41
South Dakota	62,274	17	Oklahoma	51,883	42
Rhode Island	60,624	18	South Carolina	50,453	43
Nebraska	59,818	19	Idaho	49,593	44
Hawaii	59,452	20	Arkansas	49,427	45
Oregon	58,845	21	Kentucky	48,924	46
Vermont	58,826	22	New Mexico	48,231	47
Florida	58,436	23	Alabama	47,203	48
Kansas	57,809	24	West Virginia	46,425	49
Texas	57,745	25	Mississippi	44,015	50
U.S. Average	$61,697				

Source: Bureau of Economic Analysis, U.S. Census Bureau, IHS

Inflation and Its Effect on Personal Income

Inflation is defined as a rise in the general price level (or average level of prices) of all goods and services, or equivalently a decline in the purchasing power of a unit of money. The general price level varies inversely with the purchasing power of a unit of money. Hence, when prices increase purchasing power declines.

To take into account the erosion of purchasing power due to increasing prices, income is deflated by a consumer price index. The Consumer Price Index (CPI) is a measure of the average change in prices over time for a fixed market basket of goods and services. The CPI is a weighted index that is based on prices of food (14.0%), apparel (2.7%), housing (32.4%), transportation (17.1%), medical care (8.5%), education (6.0%), and the other goods that people buy for day-to-day living (19.3%). In addition, all taxes directly associated with the purchase and use of items and services are included in the index. In calculating the index, price changes for the various items in 75 urban areas across the country are averaged together and weighted according to their importance in the spending of the appropriate population group. Local data is then combined to obtain a U.S. city average. Movements of the indexes from one month to another are usually expressed as percentage changes rather than changes in index points, because index point changes are affected by the level of the index in relation to its base period while percentage changes are not. The Bureau of Labor Statistics publishes CPI's for two population groups: a CPI for All Urban Consumers (CPI U) which covers approximately 80 percent of the total population; and a CPI for Urban Wage Earners and Clerical Workers (CPI W) which covers 32 percent of the total population and is a subset of the CPI-U population. The CPI-U includes, in addition to wage earners and clerical workers, groups such as professional, managerial, and technical workers, the self-employed, short-term workers, the unemployed, retirees and others not in the labor force.

The following table shows the Consumer Price Index for All Urban Consumers and its growth over a ten fiscal year period.

TABLE 51
THE U.S. CONSUMER PRICE INDEX
(1982-84=100)

Fiscal Year	CPI	% Growth
2012	227.6	2.94
2013	231.4	1.69
2014	235.0	1.56
2015	236.7	0.72
2016	238.2	0.66
2017	242.7	1.86
2018	248.1	2.25
2019	253.3	2.07
2020	257.3	1.58
2021	263.1	2.29

Source: U.S. Bureau of Labor Statistics, IHS Economics

Real Personal Income

Real personal income is total personal income deflated by the Consumer Price Index, a measure of personal income that usually includes adjustments for changes in prices. The following table shows real personal income growth for the United States, the New England region, and Connecticut since the base period of 1982-84. These figures, because they take into account the effects of inflation, provide a better perspective on overall gains in personal income.

TABLE 52
REAL PERSONAL INCOME
(In Millions)

Fiscal	United States		New England		Connecticut	
Year	Dollars	% Growth	Dollars	% Growth	Dollars	% Growth
2012	6,002,194	2.13	349,271	0.33	100,582	(0.91)
2013	6,104,200	1.70	349,788	0.15	98,887	(1.69)
2014	6,181,337	1.26	349,880	0.03	98,003	(0.89)
2015	6,501,046	5.17	367,292	4.98	101,778	3.85
2016	6,665,881	2.54	377,797	2.86	103,021	1.22
2017	6,774,475	1.63	382,293	1.19	102,924	(0.09)
2018	6,963,455	2.79	390,158	2.06	104,223	1.26
2019	7,147,091	2.64	398,955	2.25	105,919	1.63
2020	7,415,199	3.75	411,661	3.18	106,885	0.91
2021	7,776,712	4.88	426,915	3.71	109,925	2.84

Source: Bureau of Economic Analysis, U.S. Bureau of Labor Statistics, IHS Economics

It is important to note that there are regional differences in prices. Local area CPI indexes are by-products of the national CPI program. Because each local index is a small subset of the national index, it has a smaller sample size and is therefore subject to substantially more sampling and other measurement error than the national index. For that reason, local area indexes show greater volatility than the national index in the short run, although their long-term trends are quite similar. Therefore, the national Consumer Price Index was utilized in the table above to provide the comparisons among the United States, the New England region and Connecticut.

Real Per Capita Personal Income

Real per capita personal income is per capita personal income deflated by the Consumer Price Index and shows how individuals in a geographical entity have fared after adjusting for the effects of inflation. A comparison of the growth rates measures the relative economic performance of each entity as it adjusts personal income growth by population changes.

TABLE 53
REAL PER CAPITA PERSONAL INCOME

Fiscal	United States		New England		Connecticut	
Year	Dollars	% Growth	Dollars	% Growth	Dollars	% Growth
2012	19,151	1.31	23,892	(0.26)	27,930	(1.24)
2013	19,326	0.91	23,792	(0.42)	27,403	(1.89)
2014	19,417	0.47	23,664	(0.54)	27,123	(1.02)
2015	20,259	4.34	24,732	4.52	28,168	3.85
2016	20,609	1.73	25,346	2.48	28,541	1.32
2017	20,793	0.89	25,539	0.76	28,527	(0.05)
2018	21,240	2.15	25,956	1.63	28,868	1.20
2019	21,683	2.08	26,462	1.95	29,348	1.66
2020	22,391	3.27	27,251	2.98	29,650	1.03
2021	23,446	4.71	28,293	3.82	30,524	2.95

Source: U.S. Bureau of Labor Statistics, Bureau of Economic Analysis, IHS Economics

All figures derived by: $\frac{\text{Total Real Personal Income}}{\text{Population}}$

The previous table shows the growth in real per capita personal income for the United States, the New England region, and Connecticut.

TABLE 54
GROWTH IN REAL PER CAPITA PERSONAL INCOME
(Base Year: 1982-1984)

Fiscal	% Growth		% Cumulative Growth	
Year	United States	Connecticut	United States	Connecticut
1950-1960	30.5%	30.0%	30.5%	30.0%
1960-1970	37.7%	39.9%	79.7%	81.9%
1970-1980	15.7%	12.0%	107.9%	103.7%
1980-1990	21.1%	37.7%	151.8%	180.6%
1990-2000	16.0%	18.7%	192.2%	233.0%
2000-2010	4.8%	14.4%	206.2%	281.1%
2010-2020	22.0%	6.2%	273.7%	304.6%
2020-2021	4.7%	2.9%	291.4%	316.5%

Source: Bureau of Labor Statistics, Bureau of Economic Analysis, Census Bureau, IHS

The prior table highlights the cumulative growth in real per capita personal income over the past 71 years. During this 71-year period, Connecticut's cumulative growth in real per capita personal income exceeded that of the United States by 25.1 percentage points. However, since the global financial crisis in 2008, Connecticut's real personal income growth has been weak. Over the most current decade, Connecticut's real per capita personal income growth has lagged the United States at only 6.2%. That gap has closed even further when comparing growth between FY 2021 and FY 2020 where Connecticut's growth was 2.9% compared to 4.7% for the nation. Even though job growth in the state has lagged that of the nation, Connecticut residents' income growth has outperformed that of the nation's over the long-term, but the gap between Connecticut and the nation is narrowing.

Cost of Living Index

Statistics regarding inflation and the cost of living for Connecticut are frequently requested by the public. The two indicators are not the same. An inflation index such as the CPI-U is used to measure purchasing power relative to its historical performance, while the cost of living index is used to measure purchasing power relative to one's geographical peers. In other words, the cost of living index is produced to measure the price level of consumer goods and services for a specific area relative to other jurisdictions at a given time.

A widely used index to measure cost of living differences among urban areas is the *ACCRA Cost of Living Index,* which is produced by The Council for Community and Economic Research (C2ER). This report includes indices for approximately 263 cities and 240 Metropolitan Statistical Areas (MSAs), Metropolitan Statistical Divisions, and Micropolitan Statistical Areas as defined by the U.S. Office of Management and Budget. In Connecticut, the C2ER survey includes the three urban areas from the following MSAs: Stamford in the Bridgeport-Stamford-Norwalk MSA, Hartford in the Hartford-West Hartford-East Hartford MSA, and New Haven in the New Haven-Milford MSA.

The following table shows the cost of living comparison for three neighboring cities: Boston in the Boston-Quincy MTD, Hartford in the Hartford-West Hartford-East Hartford MTA, and New York (Manhattan) in the New York-White Plains-Wayne NY-NJ MTD.

TABLE 55
COMPARISON OF COST OF LIVING

2021 Qtr. 3 Data MTA / MTD	Composite Index	Grocery Items	Housing	Utilities	Trans-portation	Health Care	Misc.*
Hartford, CT	107.8	108.1	98.8	128.7	104.6	105.3	110.5
Boston, MA	148.6	118.3	223.5	126.0	104.3	118.8	122.4
New York**, NY	239.3	141.4	528.7	103.9	121.3	108.6	132.3
Index Weights	100.00%	14.16%	27.87%	9.30%	8.87%	4.69%	35.11%

Note: * Denotes miscellaneous goods and services
** Manhattan

Source: The Council for Community and Economic Research (C2ER), *"ACCRA Cost of Living Index,"* Data for Quarter 3, 2021

The Cost of Living Composite Index is weighted by a "market basket" of approximately 57 goods and services for the typical professional and executive household. It is further broken down into six categories including grocery items, housing, utilities, transportation, health care, and miscellaneous goods and services to reflect the different categories of consumer expenditures. According to data for the third quarter of 2021, the index for the Hartford area, for example, was 107.8. Compared to the national index of 100, this shows that the overall living cost in the Hartford area was higher than the national average by 7.8%. Among the six categories, data for the third quarter of 2021 showed that the cost of utilities in the

Hartford area was the most expensive item at 28.7% higher than the national average, followed by miscellaneous items at 10.5%, grocery items at 8.1%, healthcare at 5.3%, and transportation at 4.6%. Housing was actually less expensive than the national average, registering at 1.2% below the national average. The index, updated quarterly with an annual report published in January of the succeeding year, does not account for differences in state and local government taxes.

Based on third quarter data for 2021, many cities had a relatively higher cost of living than the Hartford area. These include, for example, New York City (Manhattan) at 239.3; San Francisco, California at 186.4; and Washington, D.C. at 154.4. Living costs in most cities in the southern and mountain west states are relatively low; for example, Pueblo, Colorado at 98.3; Meridian, Mississippi at 89.1; and San Antonio, Texas at 92.2. The cost of living in the Hartford area was comparable to other cities in the northeast such as Philadelphia, Pennsylvania; Newark, New Jersey; and Providence, Rhode Island, which registered at 108.4, 121.9, and 115.8, respectively. The cost of living index can provide useful information for relocation decisions. Individuals contemplating a job offer in a certain area may use this index as a guide to evaluate the financial merits of the move. For example, Hartford residents considering a move to New York City (Manhattan) would need a 122.0% increase in after-tax income to maintain their current lifestyle. On the other hand, New York City residents contemplating a move to Hartford could have a 55.0% reduction in after-tax income and still maintain their current standard of living.

The cost of living for metropolitan statistical areas within Connecticut also varies. According to third quarter data for 2021, the ACCRA cost of living index was 133.7 in the Stamford area, 107.8 in the Hartford area, and 117.0 in the New Haven area. These three statistical areas accounted for about 84% of the state's total population. The following table demonstrates the relative index of the components for these three Connecticut regions.

TABLE 56
COMPARISON OF COST OF LIVING IN CONNECTICUT
Hartford, New Haven, and Stamford MTAs

2021 Qtr. 3 Data MSA	Composite Index	Grocery Items	Housing	Utilities	Trans-portation	Health Care	Misc.*
Hartford	107.8	108.1	98.8	128.7	104.6	105.3	110.5
New Haven	117.0	109.1	122.4	133.0	105.0	108.6	115.9
Stamford	133.7	110.6	172.5	134.4	113.0	115.4	119.8
Index Weights	100.00%	14.16%	27.87%	9.30%	8.87%	4.69%	35.11%

Source: The Council for Community and Economic Research (C2ER), "*ACCRA Cost of Living Index,"* Data for Quarter 3, 2021

THE MAJOR REVENUE RAISING TAXES IN THE STATE OF CONNECTICUT

In FY 2021, Connecticut's General Fund derived 91 percent of its revenue from the collection of taxes. To provide an analysis of the overall tax burden on the individuals of each state, the following table was prepared for federal FY 2020. The table shows overall state tax collections as a percentage of personal income. In the table, note that Connecticut ranks 10th, signifying that in nine other states, a greater percentage of an individual's income is collected in state taxes than in Connecticut.

TABLE 57
STATE TAX COLLECTIONS AS A PERCENTAGE OF PERSONAL INCOME
FFY 2020*

State	Percentage	Rank	State	Percentage	Rank
Hawaii	9.34%	1	Montana	5.49%	26
Vermont	9.27%	2	Rhode Island	5.48%	27
North Dakota	9.21%	3	Wyoming	5.45%	28
Delaware	8.23%	4	Oregon	5.35%	29
Minnesota	7.64%	5	North Carolina	5.31%	30
New Mexico	7.33%	6	Michigan	5.29%	31
Arkansas	7.16%	7	Virginia	5.27%	32
West Virginia	6.80%	8	Alabama	5.27%	33
Maine	6.63%	9	Nebraska	5.25%	34
Connecticut	**6.58%**	**10**	Pennsylvania	5.16%	35
Mississippi	6.48%	11	Utah	5.15%	36
New York	6.44%	12	Oklahoma	5.12%	37
Indiana	6.38%	13	Ohio	4.88%	38
Kentucky	6.31%	14	Louisiana	4.82%	39
Iowa	6.30%	15	Arizona	4.79%	40
California	6.22%	16	Tennessee	4.77%	41
Wisconsin	6.20%	17	South Carolina	4.71%	42
Idaho	5.93%	18	Georgia	4.26%	43
Kansas	5.91%	19	Colorado	4.07%	44
Maryland	5.90%	20	Missouri	3.90%	45
Massachusetts	5.85%	21	South Dakota	3.81%	46
New Jersey	5.81%	22	Texas	3.77%	47
Illinois	5.72%	23	Florida	3.56%	48
Washington	5.62%	24	New Hampshire	3.12%	49
Nevada	5.61%	25	Alaska	2.84%	50
U.S. Average	5.39%				

*Based on federal fiscal year from October 2019 through September 2020.
Source: U.S. Census Bureau, "Annual Survey of State Government Tax Collections, 2020"; IHS Markit

Following is a discussion of the major taxes in the State of Connecticut.

Personal Income Tax

For income years commencing on or after January 1, 1991, a personal income tax has been imposed upon income of residents of the state (including resident trusts and estates), part-year residents and certain non-residents who have taxable income derived from or connected with sources within Connecticut. For tax years commencing on or after January 1, 1991, and prior to January 1, 1992, the tax was imposed at the rate of 1.5% on Connecticut taxable income. For tax years commencing on or after January 1, 1992, the separate tax on capital gains, dividends and interest was repealed, and the tax was imposed at the rate of 4.5% of Connecticut taxable income. Beginning with tax years commencing on or after January 1, 1996, a second, lower tax rate of 3% was introduced for a certain portion of taxable income. Beginning with tax years commencing January 1, 2003 the 4.5% rate was increased to 5.0%. Beginning with tax years commencing January 1, 2009, a third higher bracket of 6.5% was introduced on incomes in excess of $500,000 for single filers and $1,000,000 for joint filers. Beginning with tax years commencing January 1, 2011, five new tax brackets replaced all previous brackets greater than the lowest rate. The lowest bracket remained unchanged while the highest bracket imposed a 6.7% tax on incomes in excess of $250,000 for single filers and $500,000 for joint filers. Beginning with tax year commencing January 1, 2015, the 6.7% rate was increased to 6.9% and a new seventh tax bracket was added at a 6.99% rate for incomes in excess of $500,000 for single filers and $1,000,000 for joint filers. The amount of taxable income subject to the lower tax rate has been expanded as set forth in the table below. Depending on federal income tax filing status and Connecticut adjusted gross income, personal exemptions ranging from $15,000 to $24,000 are available to taxpayers, with such exemptions phased out at certain higher income levels. Legislation enacted in 1999 increased the exemption amount for single filers over a certain number of years from $12,000 to $15,000. In addition, tax credits ranging from 75% to 1% of a taxpayer's Connecticut tax liability are also available, again dependent upon federal income tax filing status and Connecticut adjusted gross income (See Table 60 for more details). Neither the personal exemption nor the tax credit is available to a trust or an estate. Also commencing in income year 1996, personal income taxpayers have been eligible for a credit for property taxes paid on their primary residence or on their motor vehicle. The personal income tax generated $10,340.4 million in FY 2021, and $9,397.8 million in FY 2020. In FY 2021, this tax accounted for 50.4% of total General Fund revenue.

TABLE 58
TAXABLE INCOME AMOUNTS SUBJECT TO THE LOWER RATE
WITH THE REMAINDER SUBJECT TO THE HIGHER RATE

			Amount At Low Rate By Filing Status		
Income Year	Low Rate	High Rate	Single	Joint	Head of Household
1996	3.0%	4.5%	$ 2,250	$ 4,500	$ 3,500
1997	3.0%	4.5%	$ 6,250	$12,500	$10,000
1998	3.0%	4.5%	$ 7,500	$15,000	$12,000
1999 - 2002	3.0%	4.5%	$10,000	$20,000	$16,000
2003 - 2008	3.0%	5.0%	$10,000	$20,000	$16,000
2009-2010	3.0%	5.0%-6.5%	$10,000	$20,000	$16,000
2011-2014	3.0%	5.0%-6.7%	$10,000	$20,000	$16,000
2015-Present	3.0%	5.0%-6.99%	$10,000	$20,000	$16,000

The following table compares personal income tax collections as a percentage of personal income for the fifty states for FFY 2020.

TABLE 59
STATE INCOME TAX COLLECTIONS AS A PERCENTAGE OF PERSONAL INCOME
FFY 2020*

State	Percentage	Rank	State	Percentage	Rank
New York	4.09%	1	Idaho	2.47%	23
Oregon	4.06%	2	Utah	2.45%	24
Massachusetts	3.74%	3	Arkansas	2.38%	25
Connecticut	3.69%	4	Kansas	2.36%	26
Minnesota	3.61%	5	Georgia	2.31%	27
Delaware	3.52%	6	Rhode Island	2.29%	28
California	3.47%	7	South Carolina	2.26%	29
Virginia	3.11%	8	Colorado	2.25%	30
Wisconsin	3.10%	9	Alabama	2.21%	31
Maryland	3.01%	10	Missouri	1.99%	32
New Jersey	2.94%	11	Pennsylvania	1.91%	33
Hawaii	2.93%	12	Michigan	1.87%	34
Maine	2.85%	13	Louisiana	1.86%	35
Iowa	2.74%	14	Oklahoma	1.86%	36
Illinois	2.74%	15	Mississippi	1.84%	37
Montana	2.68%	16	Arizona	1.39%	38
West Virginia	2.63%	17	New Mexico	1.37%	39
Kentucky	2.62%	18	Ohio	1.34%	40
Indiana	2.62%	19	New Hampshire	1.00%	41
Nebraska	2.59%	20	North Dakota	0.99%	42
North Carolina	2.50%	21	Tennessee	0.45%	43
Vermont	2.48%	22			
United states	2.48%				

Notes:
* Based on federal fiscal year from October 2019 through September 2020.
** The following states do not levy an income tax and are not included in the U.S. Average: Alaska, Florida, Nevada, South Dakota, Texas, Washington, and Wyoming.

Source: IHS Economics: Bureau of Economic Analysis; U.S. Census Bureau, “2020 Annual Survey of State Government Tax Collections”

The following table shows: A) Connecticut personal income tax exemptions; B) phase out of those exemptions; and C) tax credits available depending on adjusted gross income.

TABLE 60
CONNECTICUT PERSONAL INCOME TAX EXEMPTIONS & CREDITS
Income Year 2021

Single			Married Filing jointly			Head of Household		
Exemption: $15,000			Exemption: $24,000			Exemption: $19,000		
Phase Out: $1K of exemption for each $1K from $30.0K to $45.0K			Phase Out: $1K of exemption for each $1K from $48K to $72K			Phase Out: $1K of exemption for each $1K from $38K to $57K		
AGI From	AGI To	% of Tax	AGI From	AGI To	% of Tax	AGI From	AGI To	% of Tax
$15,000	$18,800	75%	$24,000	$30,000	75%	$19,000	$24,000	75%
$18,800	$19,300	70%	$30,000	$30,500	70%	$24,000	$24,500	70%
$19,300	$19,800	65%	$30,500	$31,000	65%	$24,500	$25,000	65%
$19,800	$20,300	60%	$31,000	$31,500	60%	$25,000	$25,500	60%
$20,300	$20,800	55%	$31,500	$32,000	55%	$25,500	$26,000	55%
$20,800	$21,300	50%	$32,000	$32,500	50%	$26,000	$26,500	50%
$21,300	$21,800	45%	$32,500	$33,000	45%	$26,500	$27,000	45%
$21,800	$22,300	40%	$33,000	$33,500	40%	$27,000	$27,500	40%
$22,300	$25,000	35%	$33,500	$40,000	35%	$27,500	$34,000	35%
$25,000	$25,500	30%	$40,000	$40,500	30%	$34,000	$34,500	30%
$25,500	$26,000	25%	$40,500	$41,000	25%	$34,500	$35,000	25%
$26,000	$26,500	20%	$41,000	$41,500	20%	$35,000	$35,500	20%
$26,500	$31,300	15%	$41,500	$50,000	15%	$35,500	$44,000	15%
$31,300	$31,800	14%	$50,000	$50,500	14%	$44,000	$44,500	14%
$31,800	$32,300	13%	$50,500	$51,000	13%	$44,500	$45,000	13%
$32,300	$32,800	12%	$51,000	$51,500	12%	$45,000	$45,500	12%
$32,800	$33,300	11%	$51,500	$52,000	11%	$45,500	$46,000	11%
$33,300	$60,000	10%	$52,000	$96,000	10%	$46,000	$74,000	10%
$60,000	$60,500	9%	$96,000	$96,500	9%	$74,000	$74,500	9%
$60,500	$61,000	8%	$96,500	$97,000	8%	$74,500	$75,000	8%
$61,000	$61,500	7%	$97,000	$97,500	7%	$75,000	$75,500	7%
$61,500	$62,000	6%	$97,500	$98,000	6%	$75,500	$76,000	6%
$62,000	$62,500	5%	$98,000	$98,500	5%	$76,000	$76,500	5%
$62,500	$63,000	4%	$98,500	$99,000	4%	$76,500	$77,000	4%
$63,000	$63,500	3%	$99,000	$99,500	3%	$77,000	$77,500	3%
$63,500	$64,000	2%	$99,500	$100,000	2%	$77,500	$78,000	2%
$64,000	$64,500	1%	$100,000	$100,500	1%	$78,000	$78,500	1%

Source: General Statutes of the State of Connecticut

The following table shows whether state and local governmental obligations are included in the definition of state income for tax purposes.

TABLE 61
STATE AND LOCAL GOVERNMENT OBLIGATIONS EXEMPTIONS
FOR DETERMINING INDIVIDUAL'S STATE INCOME

State	Own Securities	Other State's Securities	State	Own Securities	Other State's Securities
Alabama	E	T	Montana	E	T
Alaska (no tax)			Nebraska	E	T
Arizona	E	T	Nevada (no tax)		
Arkansas	E	T	New Hampshire	E	T
California	E	T	New Jersey	E	T
Colorado	E	T	New Mexico	E	T
Connecticut	E	T	New York	E	T
Delaware	E	T	North Carolina	E	T
Florida (no tax)			North Dakota	E	T (3)
Georgia	E	T	Ohio	E	T
Hawaii	E	T	Oklahoma	T (4)	T (4)
Idaho	E	T	Oregon	E	T
Illinois	T (1)	T (1)	Pennsylvania	E	T
Indiana	E	E	Rhode Island	E	T
Iowa	T (1)	T	South Carolina	E	T
Kansas	E	T	South Dakota (no tax)		
Kentucky	E	T	Tennessee (no tax)		
Louisiana	E	T	Texas (no tax)		
Maine	E	T	Utah	T (1)	T (1,2)
Maryland	E	T	Vermont	E	T
Massachusetts	E	T	Virginia	E	T
Michigan	E	T	Washington (no tax)		
Minnesota	E	T	West Virginia	E	T
Mississippi	E	T	Wisconsin	T (1)	T (1)
Missouri	E	T	Wyoming (no tax)		

T = Taxable / E = Exempt

(1) Interest earned from some qualified obligations is exempt from the tax.
(2) Income earned from a bond issued by another state is taxable only if such other state imposes a tax on Utah bonds.
(3) Taxable only if long form is used.
(4) Some bonds may be exempt by state law.

Source: The Securities Industry and Financial Markets Association “State Taxation of Municipal Bonds for Individuals”

The following table compares the personal income tax rates and bases for the fifty states and the District of Columbia.

TABLE 62
PERSONAL INCOME TAX BY STATE

	Low Bracket		High Bracket			Low Bracket		High Bracket	
	%	To Net	%	From Net		%	To Net	%	From Net
State	Rate	Income	Rate	Income $	State	Rate	Income $	Rate	Income $
Alabama (3)	2.00	1,000	5.00	6,001	Missouri (1)	1.50	1,073	5.40	8,585
Arizona (1)	3.34	54,544	8.00	327,264	Montana (1)	1.00	3,100	6.90	18,401
Arkansas (3,b)	2.00	4,000	5.90	8,001	Nebraska (1,b)	2.46	6,570	6.84	63,701
California (1)	1.00	17,864	13.30	1,198,024	New Hampshire	(a)			
Colorado (2)	4.55	All			New Jersey (3)	1.40	20,000	10.75	1,000,001
Connecticut (1)	**3.00**	**20,000**	**6.99**	**1,000,001**	New Mexico (1)	1.70	8,000	5.90	315,001
Delaware (1)	2.20	5,000	6.60	60,001	New York (1,c)	4.00	17,150	8.82	2,155,351
Georgia (1)	1.00	1,000	5.75	10,001	N. Carolina (1)	5.25	All		
Hawaii (1)	1.40	4,800	11.00	400,001	N. Dakota (2)	1.10	67,050	2.90	440,601
Idaho (2)	1.13	3,136	6.93	23,521	Ohio (1)	2.85	22,150	4.80	221,301
Illinois (1)	4.95	All			Oklahoma (1)	0.50	2,000	5.00	12,201
Indiana (1)	3.23	All			Oregon (2,b)	4.75	7,300	9.9	250,001
Iowa (1,b)	0.33	1,676	8.53	75,421	Pennsylvania (3)	3.07	All		
Kansas (1)	3.10	30,000	5.70	60,001	Rhode Island(1,b)	3.75	66,201	5.99	150,551
Kentucky (1)	5.00	All			S. Carolina (2)	3.00	6,150	7.00	15,401
Louisiana (1)	2.00	25,000	6.00	100,001	Utah (1)	4.95	All		
Maine (1,b)	5.80	44,950	7.15	106,351	Vermont (1)	3.35	67,450	8.75	248,351
Maryland (1)	2.00	1,000	5.75	300,001	Virginia (1)	2.00	3,000	5.75	17,001
Massachusetts (1)	5.00	All			W. Virginia (1)	3.00	10,000	6.5	60,001
Michigan (1)	4.25	All			Wisconsin (1,b)	3.54	16,160	7.65	355,911
Minnesota (2,b)	5.35	39,810	9.85	276,201	Dist. of Col. (1)	4.00	10,000	8.95	1,000,001
Mississippi (3)	3.00	4,000	5.00	10,001					

The following states do not levy an income tax: Alaska, Florida, Nevada, South Dakota, Texas, Washington & Wyoming.

Note: Tax rates are for married filers filing joint returns and do not include income taxes levied at the local level.

Base: (1) – Modified Federal Adjusted Gross Income
(2) – Modified Federal Taxable Income
(3) – State's Individual Definition of Taxable Income

(a) Income taxes are limited to interest and dividends: 5.0% in NH.
(b) Brackets are indexed for inflation annually.

Source: Tax Foundation

Sales and Use Tax

The sales tax is imposed, subject to certain limitations, on the gross receipts from certain transactions within the state of persons engaged in business in the state including: 1) retail sales of tangible personal property; 2) the sale of certain services; 3) the leasing or rental of tangible personal property; 4) the producing, fabricating, processing, printing, or imprinting of tangible personal property to special order or with material furnished by the consumer; 5) the furnishing, preparing or serving of food, meals or drinks; and 6) the occupancy of hotels or lodging house rooms for a period not exceeding thirty consecutive calendar days.

The use tax is imposed on the consideration paid for certain services, purchases or rentals of tangible personal property used within the state and not subject to the sales tax.

Both the sales and use taxes are levied at a rate of 6.35%. Various exemptions from the tax are provided, based on the nature, use, or price of the property or services involved or the identity of the purchaser. Certain items are taxed at reduced rates. Hotel rooms are taxed at 15%.

The sales and use tax is an important source of revenue for the State of Connecticut. On an all funds basis, the tax generated $5,290.3 million in FY 2021, $4,739.9 million in FY 2020, $4,719.2 million in FY 2019, and $4,529.7 million in FY 2018. In FY 2021, sales and use taxes accounted for 23.3% of the total revenue in the General Fund, compared to 22.5% in FY 2020 and 22.1% in FY 2019.

When analyzing sales taxes, a simple comparison of rates is not an effective way to measure the tax burden imposed. An analysis of the tax base must be undertaken to provide a more meaningful comparison.

To provide a relevant comparison of sales tax burden, two studies are presented. The first study shows sales tax collections as a percentage of personal income. The larger the percentage of personal income going to sales tax collections, the heavier the burden of that tax. The table on the following page shows sales tax collections as a percentage of personal income and the corresponding ranking of the states. Note that Connecticut's tax burden is less than 28 other states. The comparison is based on FY 2020 data. From FY 1991 to FY 2021, Connecticut's sales tax collections as a percentage of personal income dropped from 3.15% to 1.65%, declining from 9th in the nation to 29th, and compared to the national average of 1.95%. This change was primarily due to the reduction in Connecticut's sales tax rate from 8% to 6.35% and an expansion of the exemptions on certain services and goods.

The second study provides an analysis of major sales tax exemptions by state. Connecticut excludes from its sales tax such major items as food products for human consumption, drugs and medicines used by humans, machinery, professional services, residential utilities and motor fuels. Table 64 shows the comparison for major sales tax exemptions.

TABLE 63
SALES TAX COLLECTIONS AS A PERCENTAGE OF PERSONAL INCOME
Fiscal 2020*

State	Tax Rate (%)	Percentage	Rank	State	Tax Rate (%)	Percentage	Rank
Hawaii	4.000**	4.51%	1	Wisconsin	5.000**	1.82%	24
Washington	6.500**	3.33%	2	Rhode Island	7.000	1.82%	25
Nevada	6.850**	3.27%	3	Michigan	6.000	1.75%	26
New Mexico	5.125**	3.22%	4	West Virginia	6.000**	1.73%	27
Mississippi	7.000**	3.07%	5	New Jersey	6.625**	1.72%	28
Tennessee	7.000**	2.78%	6	**Connecticut**	**6.350**	**1.65%**	**29**
Arkansas	6.500**	2.60%	7	California	7.250	1.61%	30
Arizona	5.600**	2.45%	8	North Carolina	4.750**	1.61%	31
Idaho	6.000**	2.40%	9	Louisiana	4.450**	1.52%	32
Texas	6.250**	2.39%	10	Illinois	6.250**	1.51%	33
Indiana	7.000	2.38%	11	Oklahoma	4.500**	1.50%	34
South Dakota	4.500**	2.33%	12	Pennsylvania	6.000**	1.49%	35
Maine	5.500	2.31%	13	South Carolina	6.000**	1.44%	36
North Dakota	5.000**	2.30%	14	Alabama	4.000**	1.31%	37
Florida	6.000**	2.25%	15	Massachusetts	6.250	1.28%	38
Wyoming	4.000**	2.13%	16	Maryland	6.000	1.23%	39
Iowa	6.000**	2.12%	17	Missouri	4.225**	1.20%	40
Kansas	6.500**	2.11%	18	Vermont	6.000**	1.18%	41
Ohio	5.750**	2.07%	19	Georgia	4.000**	1.12%	42
Kentucky	6.000	2.00%	20	New York	4.000**	1.12%	43
Nebraska	5.500**	1.98%	21	Virginia	5.300**	1.09%	44
Utah	6.100**	1.86%	22	Colorado	2.9000**	0.93%	45
Minnesota	6.875**	1.86%	23				

U.S. Average** 1.95%

Notes:

* Based on federal fiscal year from October 2019 through September 2020.

** Local tax rates are additional

*** The following states do not levy a sales tax and are not included in the U.S. Average: Alaska, Delaware, Montana, New Hampshire, and Oregon

Tax rates are effective as of January 1, 2022

Source: Bureau of Economic Analysis, U.S. Census Bureau, "Annual Survey of State Government Tax Collections, 2020"; IHS Markit and Tax Foundation

TABLE 64
MAJOR SALES TAX EXEMPTIONS BY STATE

State	Food	Prescription Drugs	Motor Fuels	Clothes
Alabama	T	E	E	T
Arizona	E	E	E	T
Arkansas	T (1)	E	E	T
California	E	E	T	T
Colorado	E	E	E	T
Connecticut	E	E	E	T
Florida	E	E	T	T
Georgia	T (5)	E	T (1)	T
Hawaii	T	E	T	T
Idaho	T	E	E	T
Illinois	T (1)	T (1)	T	T
Indiana	E	E	T	T
Iowa	E	E	E	T
Kansas	T	E	E	T
Kentucky	E	E	E	T
Louisiana	T (5)	E	E	T
Maine	E	E	E	T
Maryland	E	E	E	T
Massachusetts	E	E	E	E (2)
Michigan	E	E	T	T
Minnesota	E	E	E	E
Mississippi	T	E	E	T
Missouri	T (5)	E	E	T
Nebraska	E	E	E	T
Nevada	E	E	E	T
New Jersey	E	E	E	E
New Mexico	E	E	E	T
New York	E	E	T	E (3)
North Carolina	T (5)	E	E	T
North Dakota	E	E	E	T
Ohio	E	E	E	T
Oklahoma	T	E	E	T
Pennsylvania	E	E	E	E
Rhode Island	E	E	E	E (4)
South Carolina	E	E	E	T
South Dakota	T	E	E	T
Tennessee	T (1)	E	E	T
Texas	E	E	E	T
Utah	T (1)	E	E	T
Vermont	E	E	E	E
Virginia	T (1)	E	E	T
Washington	E	E	E	T
West Virginia	E	E	T	T
Wisconsin	E	E	E	T
Wyoming	E	E	E	T
Total Taxable	13	1	8	38

Note: These states do not levy a sales tax: Alaska, Delaware, Montana, New Hampshire & Oregon.
T = Taxable under the sales tax, E = Exempt from the sales tax (1) Taxed at a reduced rate. (2) Up to a sales price of $175 per item. (3) Up to a sales price of $110 per item. (4) Up to a sales price of $250 per item. (5) Subject to local taxes.
Source: Federation of Tax Administrators and Tax Foundation

Corporation Business Tax

The Corporation Business Tax is imposed on any corporation, joint stock company or association or fiduciary of any of the foregoing which carries on or has the right to carry on business within the state or owns or leases property or maintains an office within the state. Corporations must calculate their liability under three methods: the net income base method, the capital base method, and a minimum tax of $250. The taxpayer's liability is the greatest among these three methods. The corporation business tax generated $1,153.1 million in FY 2021, $934.5 million in FY 2020, and $1,060.9 million in FY 2019. In FY 2021, this tax accounted for 5.6% of total General Fund revenue, compared to 4.9% in FY 2020.

The first method, under which most corporation business tax revenue is derived, is the net income base. Net income means federal gross income (with limited variations) less certain deductions, most of which correspond to the deductions allowed under the Internal Revenue Code of 1986, as amended from time to time. If a corporation is taxable solely within the state, the tax is based upon its entire net income. If a corporation is taxable in another state in which it conducts business, the net income is apportioned to the state based on the percentage of the company's sales within the state. Currently, the income base method is levied at the rate of 7.5%. Public Act 15-244 maintained an existing 20% surcharge for income year 2016 and 2017, declining to 10% in income year 2018. Public Act 19-117 extended the 10% surcharge through income year 2020 and Public Act 21-2 of the June Special Session extended the 10% surcharge through income year 2022. The surcharge does not apply to companies with less than $100 million in annual gross revenue or whose tax liability does not exceed the minimum tax of $250. The surcharge is calculated prior to the application of any credits.

Corporations must also compute their tax under the capital base method. The capital base is the total value of the taxpayer's capital stock, surplus and undivided profits, and surplus reserves, less deficits and stockholdings in private corporations. If a taxpayer is also taxable in another state in which it conducts business, the defined base is apportioned to the state of Connecticut based on the company's economic activity. For income year 2021, the capital base was taxed at a rate of 3.1 mils ($0.0031) per dollar and section 340 of Public Act 19-117 began a phase-out of the capital base method. The phase-out schedule was extended in section 424 of Public Act 21-2 of the June Special Session where this method will be completely phased out for income year 2028.

Numerous tax credits are also available to corporations including, but not limited to, research and development credits of 1% to 6%, credits for property taxes paid on electronic and data processing equipment, and a 5% credit for investments in fixed and human capital.

The table on the following page provides a comparison of the assessed rates for the corporation business tax for the fifty states and the District of Columbia.

TABLE 65
CORPORATION TAX BY STATE
FOR TAX YEAR 2020

State	Low Bracket % Rate	Low Bracket To Net Income $	High Bracket % Rate	High Bracket From Net Income $	State	Low Bracket % Rate	Low Bracket To Net Income $	High Bracket % Rate	High Bracket From Net Income $
Alabama	6.50	All			Nebraska	5.58	100,000	7.81	100,001
Alaska	0.00	25,000	9.40	222,000	Nevada (9)				
Arizona	4.90	All			New Hampshire (10)	7.70	All		
Arkansas	1.00	3,000	6.20	100,001	New Jersey (11)	9.00	All		
California	8.84	All			New Mexico	4.80	500,000	5.90	500,001
Colorado	4.55	All			New York (12)	6.50	All		
Connecticut (1)	**7.50**	**All**			North Carolina	2.50	All		
Delaware	8.70	All			North Dakota (13)	1.41	25,000	4.31	50,001
Florida (2)	4.46	All			Ohio (14)				
Georgia	5.75	All			Oklahoma	6.00	All		
Hawaii (3)	4.40	25,000	6.40	100,001	Oregon	6.60	1.0M	7.60	1.0M+
Idaho	6.925	All			Pennsylvania	9.99	All		
Illinois (4)	9.50	All			Rhode Island	7.00	All		
Indiana (5)	5.25	All			South Carolina	5.00	All		
Iowa	5.50	100,000	9.80	250,001	South Dakota (9)				
Kansas (6)	4.00	All			Tennessee	6.50	All		
Kentucky	5.00	All			Texas (15)				
Louisiana	4.00	25,000	8.00	200,001	Utah	4.95	All		
Maine	3.50	350,000	8.93	3,500,000	Vermont	6.00	10,000	8.50	25,000
Maryland	8.25	All			Virginia	6.00	All		
Massachusetts (7)	8.00	All			Washington (9)				
Michigan	6.00	All			West Virginia	6.50	All		
Minnesota (8)	9.80	All			Wisconsin	7.90	All		
Mississippi	0.00	4,000	5.00	10,001	Wyoming (9)				
Missouri	4.00	All			District of Col.	8.25	All		
Montana	6.75	All							

Note: The table does not include corporate income taxes levied at the local level. These states do not levy a corporate income tax: SD, NV, WA & WY. The following states require a minimum tax: AZ $50; CA $800; CT $250; ID $20; MA $456; MT $50; NJ $500; NY $25; OR $150; RI $400; UT $100; VT $300; District of Columbia $250

(1) Corporate tax liability is the greater of the 7.5% tax on net income, 3.1 mills per dollar tax rate on capital base (phasing out completely by income year 2028), or the minimum tax of $250. A 10% surcharge is imposed for tax years 2018 – 2022 on companies with more than $100 million in annual gross revenue. The surcharge phases out completely in income year 2023.
(2) The FL tax rate may be adjusted downward if certain revenue targets are met.
(3) HI taxes capital gains at 4%.
(4) Sum of corporation income tax rate of 7.00% and a replacement tax of 2.5%.
(5) Rate reduced to 5.50% on 7/1/19, 5.25% on 7/1/20, and 4.90% 7/1/21.
(6) A surtax of 3.0% is imposed on income over $50,000.
(7) Business and manufacturing corporations pay an additional tax of $2.60 per $1,000 on either taxable MA tangible property or taxable net worth allocable to the state (for intangible property corporations).
(8) MN levies a 5.8% tentative min. tax on Alternative Minimum Taxable Income; also imposes a surtax ranging up to $10,480.
(9) These states do not have a corporate income tax, but they levy a gross receipts tax on varying levels. NV 0.051%-0.331% depending on industry; SD N/A; WA 0.471%; WY N/A.
(10) NH levies a Business Enterprise Tax of 0.6% on the enterprise base (total compensation, interest and dividends paid) for businesses with gross receipts over $222,000 or enterprise base over $111,000, adjusted every biennium for CPI. The Business Profits Tax is scheduled to decrease to 7.5% for tax year 2022.
(11) A surtax of 2.5% imposed on income over $1M in 2021. Rate of 7.5% on income less than $100,000 and 6.5% on income less than $50,000.
(12) Rate of 0.0% for qualified manufactures. Minimum tax for all ranges from $25 to $200,000.
(13) ND imposes a 3.5% surtax for filers electing to use the water's edge method to apportion income.
(14) No corporate income tax; Commercial Activity Tax of $150 for gross receipts situsedto Ohio of between $150,000 and $1 million, plus 0.26% of gross receipts over $1 million.
(15) A franchise tax of 0.75% (0.375% for qualifying wholesalers and retailers) is imposed on entities with $1,130,000 of total revenues.

Source: Federation of Tax Administrators. Rates as of January 2021.

Motor Fuels Tax

The state imposes a tax, subject to certain limitations, on (1) gasoline and certain other liquids which are prepared, advertised, offered for sale, sold for use as, or commonly and commercially used as, a fuel in internal combustion engines ("gasoline" or "gasohol"), and (2) all combustible gases and liquids which are suitable and used for generation of power to propel motor vehicles (primarily diesel fuel which is referred to as "special fuels"). The distributors liable for these taxes are those entities which distribute fuel within the state, import fuel into the state for distribution within the state, or produce or refine fuels within the state.

The Gasoline Tax is imposed on each gallon of gasoline or gasohol sold (other than to another distributor) or used within the state by a distributor. The tax on special fuels (the "Special Fuel Tax") is assessed on each gallon of special fuels used within the state in a motor vehicle licensed, or required to be licensed, to operate upon the public highways of the state.

The Special Fuels Tax is paid by vehicle users, and is generally collected by retail dealers of special fuels (primarily diesel fuel). Various exemptions from both taxes are provided, among which are sales to, or use by, the United States, the state of Connecticut, and its municipalities.

The Motor Carrier Road Tax is imposed upon gallons of fuel (primarily diesel fuel) used by business entities ("motor carriers") which operate any of the following vehicles in the state: (1) passenger vehicles seating more than nine persons; (2) road tractors or tractor trucks; or (3) trucks having a registered gross weight in excess of eighteen thousand pounds. Such motor carriers pay the tax on the gallons of fuel which they use while operating such vehicles in the state. The number of gallons subject to the tax is determined by multiplying the total number of gallons of fuel used by the motor carrier during each year by a fraction, the numerator of which is the total number of miles traveled by the motor carrier's vehicles within the state during the year, and the denominator of which is the total number of miles traveled by the motor carrier's vehicles both within and outside the state during the year.

The Gasoline Tax is 25 cents per gallon. Effective July 1, 2021, the Special Fuels and Motor Carrier Taxes decreased by 1.9 cents per gallon from 44.6 cents per gallon in FY 21 to 40.1 cents per gallon in FY 22. The 1983 session of the General Assembly enacted a Special Transportation Fund for highway construction and maintenance and 1 cent per gallon of the motor fuels tax was dedicated to this fund. Beginning July 1, 1984, the Special Transportation Fund was expanded to include all collections from the motor fuels tax.

The table on the following page shows the comparative rates for motor fuel taxes for the 50 states.

TABLE 66

GASOLINE MOTOR FUEL TAXES BY STATE

State	Excise Tax	Other Taxes/ Fees (a)	Total Tax (b)	State	Excise Tax	Other Taxes/ Fees (a)	Total Tax (b)
Alabama	26.00¢	3.21¢	27.21¢	Montana	32.50¢	0.75¢	32.00¢
Alaska	8.95	6.03	14.98	Nebraska (d)	27.70	0.90	28.60
Arizona	18.00	1.00	19.00	Nevada	23.00	27.48	50.48
Arkansas	24.50	0.30	24.80	New Hampshire	22.20	1.63	23.83
California	51.10	15.88	66.98	New Jersey	10.50	40.20	50.70
Colorado	22.00	0.00	22.00	New Mexico	17.00	1.88	18.88
Connecticut	**25.00**	**10.75**	**35.75**	New York	8.05	38.14	46.19
Delaware	23.00	0.00	23.00	North Carolina	36.10	0.25	36.35
Florida	4.00	38.46	42.46	North Dakota	23.00	0.00	23.00
Georgia	28.70	7.39	36.09	Ohio	38.50	0.01	38.51
Hawaii	16.00	34.17	50.17	Oklahoma	19.00	1.00	20.00
Idaho	32.00	1.00	33.00	Oregon	36.00	2.83	38.83
Illinois	39.20	20.36	59.56	Pennsylvania (e)	0.00	58.70	58.70
Indiana	30.00	17.79	47.79	Rhode Island	34.00	1.00	35.00
Iowa	30.00	0.00	30.00	South Carolina	26.00	0.75	26.75
Kansas	24.00	0.03	24.03	South Dakota	28.00	2.00	30.00
Kentucky	24.60	1.40	26.00	Tennessee	26.00	1.40	27.40
Louisiana	20.00	0.01	20.01	Texas	20.00	0.00	20.00
Maine	30.00	0.01	30.01	Utah	31.40	0.01	31.41
Maryland (c)	27.10	9.00	36.10	Vermont	12.10	19.18	31.28
Massachusetts	24.00	2.54	26.54	Virginia	26.20	8.20	34.40
Michigan	26.30	18.82	45.12	Washington	49.40	0.00	49.40
Minnesota	28.50	2.10	30.60	West Virginia	20.50	15.20	35.70
Mississippi	18.00	0.79	18.79	Wisconsin	30.90	2.00	32.90
Missouri	17.00	0.42	17.42	Wyoming	23.00	1.00	24.00

Notes:

(a) Other taxes/fees can include, but is not limited to: State/county/local sales tax, petroleum gross receipts tax, wholesale tax, underground storage tank (UST) fee, environmental fees, surcharges, delivery fees, inspection fees, etc. (varies by state)

(b) The total column in the above table is the sum of the excise taxes and other state taxes/fees represented as cents per gallon. The total tax column does not include the federal excise tax of 18.4 cents per gallon.

(c) Excise tax is indexed to annual change of CPI

(d) Excise tax rate is variable, adjusted every 6 months

(e) No fixed excise tax, the rate is variable and is currently at 57.6 cpg

Source: American Petroleum Institute; Rates effective 7/1/2021

Other Sources

The following tables show the most recent comparative rates or exemptions for some of the other taxes and fees collected by the states.

TABLE 67
CIGARETTE TAXES BY STATE

State	Rate	State	Rate
Alabama (a)	$0.675	Montana	$1.70
Alaska	$2.00	Nebraska	$0.64
Arizona	$2.00	Nevada	$1.80
Arkansas	$1.15	New Hampshire	$1.78
California	$2.87	New Jersey	$2.70
Colorado	$0.84	New Mexico	$2.00
Connecticut	**$4.35**	New York (a)	$4.35
Delaware	$2.10	North Carolina	$0.45
Florida (b)	$1.339	North Dakota	$0.44
Georgia	$0.37	Ohio	$1.60
Hawaii	$3.20	Oklahoma	$2.03
Idaho	$0.57	Oregon	$1.33
Illinois (a)	$2.98	Pennsylvania	$2.60
Indiana	$0.995	Rhode Island	$4.25
Iowa	$1.36	South Carolina	$0.57
Kansas	$1.29	South Dakota	$1.53
Kentucky	$1.10	Tennessee (a)	$0.62
Louisiana	$1.08	Texas	$1.41
Maine	$2.00	Utah	$1.70
Maryland	$2.00	Vermont	$3.08
Massachusetts	$3.51	Virginia (a)	$0.30
Michigan	$2.00	Washington	$3.025
Minnesota (c)	$3.04	West Virginia	$1.20
Mississippi	$0.68	Wisconsin	$2.52
Missouri (a)	$0.17	Wyoming	$0.60

Note: The tax is based on a pack of 20 cigarettes.

(a) Optional county and city sales tax per pack: AL-$0.01-$0.25; IL-$0.10-$4.18; MO-$0.04-$0.07; NYC-$1.50; TN-$0.01; VA-$0.02-$0.15
(b) Includes surcharge of $1 per pack
(c) In addition, MN imposes an in lieu cigarette sales tax determined annually by the Department. The current rate is $0.61 through 12/31/21.

Source: Federation of Tax Administrators, rates as of January 1, 2021.

TABLE 68
INSURANCE COMPANIES TAX BY STATE

State	Domestic Tax Rate % (1)	Foreign Tax Rate % (1)	State	Domestic Tax Rate % (1)	Foreign Tax Rate % (1)
Alabama	0.50-6.00	0.50-6.00	Montana (3)	2.75	2.75
Alaska	0.75-6.00	0.75-6.00	Nebraska (3)	0.25-3.00	0.25-3.00
Arizona (2)	0.66-3.00	0.66-3.00	Nevada	3.50	2.00-3.50
Arkansas	0.75-4.00	0.75-4.00	New Hampshire (4)	1.25-4.00	1.25-4.00
California	0.50-5.00	0.50-5.00	New Jersey	1.05-5.25	1.05-5.25
Colorado	1.00-3.00	1.00-3.00	New Mexico	3.003-4.003	3.003-4.003
Connecticut	**1.50-4.00**	**1.50-4.00**	New York (3,9)	0.70-3.60	0.70-3.60
Delaware (2)	1.75-5.00	1.75-5.00	North Carolina	1.90-5.00	1.90-5.00
Florida (3)	0.75-5.00	0.75-5.00	North Dakota (4)	1.75-2.00	1.75-2.00
Georgia (3)	2.25-4.00	2.25-4.00	Ohio (3,4)	1.00-5.00	1.00-5.00
Hawaii	0.8775-4.68	0.8775-4.68	Oklahoma (3)	2.25-6.00	2.25-6.00
Idaho	1.50	1.50	Oregon (3)	(6)	(6)
Illinois (3)	0.40-3.50	0.40-3.50	Pennsylvania	1.25-5.00	2.00-5.00
Indiana	1.30-2.50	1.30-2.50	Rhode Island	2.00-4.00	2.00-4.00
Iowa	1.00-6.50	1.00-6.50	South Carolina (3)	0.75-6.00	0.75-6.00
Kansas (3)	2.00-6.00	2.00-6.00	South Dakota (3)	1.25-2.50	1.25-2.50
Kentucky (3)	1.50-3.00	1.50-3.00	Tennessee (3,4)	1.75-6.00	1.75-6.00
Louisiana (3)	(5)	(5)	Texas	0.875-4.85	0.875-4.85
Maine (3)	1.00-3.00	1.00-3.00	Utah	0.45-4.25	0.45-4.25
Maryland	2.00-3.00	2.00-3.00	Vermont	2.00-3.00	2.00-3.00
Massachusetts	2.00-5.70	2.00-5.70	Virginia (3,8)	1.00-2.70	1.00-2.70
Michigan (7)	2.50	2.50	Washington	0.95-2.00	0.95-2.00
Minnesota (3)	1.00-3.00	1.00-3.00	West Virginia (3)	1.00-4.55	1.00-4.55
Mississippi (3)	3.00-4.00	3.00-4.00	Wisconsin (3)	2.00-3.50	0.50-3.00
Missouri	1.00-5.00	1.00-5.00	Wyoming	0.75-3.00	0.75-3.00

Note: The tax is based on the net premiums of authorized insurers, including surplus line rates, captive rates, and marine underwriting profits.

(1) Depending upon the type of insurance issued or the type of organization formed.
(2) Plus a surtax of 0.4312% on vehicles in AZ and 0.25% in DE.
(3) Plus a fire marshal's tax not to exceed 1%; 0.3125% in OK; 0.50% in MN, SD, WV; 0.75% in KY, OH, TN; 1.15% in OR; 1.4% in ME; 1.25% & 2% in KS; 2% in WI (domestic only), NY (foreign only), & LA; 2.5% in MO; 4.375% in WI (foreign only); and 0.375% (Domestic) & 0.75% (Foreign) in NE.
(4) With minimum tax of $150 in TN; $200 in NH & ND; and $250 in OH.
(5) Life, health, accident, or service insurers—premiums of $7,000 or less, $140; over $7,000, $140 plus $225 per each additional $10,000 over $7,000; fire, marine, transportation, casualty, surety, workers' comp.--$6,000 or less, $185; over $6,000, $185 plus $300 per each additional $10,000 over $6,000
(6) After 2001, foreign and alien insurers are no longer subject to gross premium tax but are subject to the corporate excise tax.
(7) Rate is the greater of single business tax, income tax, or retaliatory tax.
(8) With minimum tax of $100 on fire, misc. property, marine, homeowners, & farm owners.
(9) 17% MTA surcharge applies in a metropolitan commuter transportation district.

Source: National Association of Insurance Commissioners & The Center for Insurance Policy and Research, Retaliation Guide December 2021

TABLE 69
ALCOHOLIC BEVERAGE EXCISE TAXES BY STATE
(Dollars per Gallon)

State	Distilled Spirits	Wine 14% or Less	Wine 14% to 21%	Beer	State	Distilled Spirits	Wine 14% or Less	Wine 14% to 21%	Beer
Alabama (2)	(1)	1.70	9.16	0.53	Montana	(1)	1.02	(1)	0.14
Alaska	12.80	2.50	2.50	1.07	Nebraska	3.75	0.95	1.35	0.31
Arizona	3.00	0.84	0.84	0.16	Nevada	3.60	0.70	1.30	0.16
Arkansas	2.50	0.75	0.75	0.23	New Hampshire	(1)	0.30	0.30	0.30
California	3.30	0.20	0.20	0.20	New Jersey	5.50	0.88	0.88	0.12
Colorado	2.28	0.28	0.28	0.08	New Mexico	6.06	1.70	1.70	0.41
Connecticut	**5.94**	**0.79**	**0.79**	**0.24**	New York (2)	6.44	0.30	0.30	0.14
Delaware	4.50	1.63	1.63	0.26	North Carolina	(1)	1.00	1.11	0.62
Florida	6.50	2.25	3.00	0.48	North Dakota	2.50	0.50	0.60	0.16
Georgia (2)	3.79	1.51	2.54	0.32	Ohio	(1)	0.30	0.98	0.18
Hawaii	5.98	1.38	1.38	0.93	Oklahoma	5.56	0.72	0.72	0.40
Idaho	(1)	0.45	0.45	0.15	Oregon	(1)	0.67	0.77	0.08
Illinois (2)	8.55	1.39	1.39	0.23	Pennsylvania	(1)	(1)	(1)	0.08
Indiana	2.68	0.47	0.47	0.12	Rhode Island	5.40	1.40	1.40	0.11
Iowa	(1)	1.75	1.75	0.19	South Carolina (3)	2.72	1.08	1.08	0.77
Kansas	2.50	0.30	0.75	0.18	South Dakota	3.93	0.93	1.45	0.27
Kentucky	1.92	0.50	0.50	0.08	Tennessee	4.40	1.21	1.21	1.29
Louisiana (2)	3.03	0.76	1.32	0.40	Texas	2.40	0.20	0.41	0.19
Maine	(1)	0.60	(1)	0.35	Utah	(1)	(1)	(1)	0.42
Maryland	1.50	0.40	0.40	0.09	Vermont	(1)	0.55	(1)	0.27
Massachusetts	4.05	0.55	0.55	0.11	Virginia	(1)	1.51	(1)	0.26
Michigan	(1)	0.51	0.76	0.20	Washington	14.27	0.87	1.75	0.26
Minnesota	5.03	0.30	0.95	0.15	West Virginia	(1)	1.00	1.00	0.18
Mississippi	(1)	0.35	0.35	0.43	Wisconsin (4)	3.25	0.25	0.45	0.06
Missouri	2.00	0.42	0.42	0.06	Wyoming	(1)	(1)	(1)	0.02

(1) Government directly controls sales, revenue generates through markup, store profits, and additional taxes & fees.
(2) Plus additional excise taxes on beer at the local level. Additional local taxes in NYC.
(3) Rates include surtax of $0.18 per gallon for wine.
(4) Distilled spirits rate includes additional $0.03 per gallon for administrative fees.
(5) Connecticut's tax on beer is scheduled to decline from $0.24 per gallon to $0.19 per gallon effective 7/1/2023.

Source: Federation of Tax Administrators, rates as of January 1, 2021.

TABLE 70

GENERAL FUND REVENUES

TAXES ($K)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Personal Income	$8,988,667	$10,770,150	$9,640,164	$9,397,779	$10,340,437
Sales and Use	4,192,203	4,202,246	4,338,061	4,317,730	4,792,675
Corporation	1,037,565	920,746	1,060,877	934,499	1,153,079
Pass-through Entity Tax	-	-	1,172,080	1,241,949	1,549,716
Public Service Corporation	271,504	250,631	262,141	254,076	243,671
Inheritance & Estate	218,660	223,839	225,230	159,538	303,339
Insurance Companies	222,804	230,605	193,803	228,350	229,761
Cigarettes	381,455	376,448	357,494	346,300	351,077
Real Estate Conveyance	209,982	202,526	213,224	176,578	385,028
Alcoholic Beverages	63,155	63,211	64,145	73,080	79,111
Admissions, Dues, Cabaret	39,509	40,272	42,834	39,939	36,022
Miscellaneous	699,331	1,059,928	1,100,087	1,023,041	1,052,109
Total - Taxes	$16,324,835	$18,340,602	$18,670,140	$18,192,858	$20,516,024
Less Refunds of Taxes	(1,263,824)	(1,269,667)	(1,465,368)	(1,491,413)	(1,857,512)
Less Refunds of R&D Credit	(5,485)	(5,664)	(5,370)	(8,628)	(7,093)
Total - Taxes Less Refunds	$15,055,526	$17,065,271	$17,199,401	$16,692,816	$18,651,419
OTHER REVENUE					
Transfer-Special Revenue	$328,716	$339,512	$364,082	$340,090	$410,301
Indian Gaming Payments	269,906	272,957	255,239	164,141	228,883
Licenses, Permits & Fees	275,386	306,165	291,171	307,524	329,568
Sales of Commodities &	39,143	33,238	27,105	26,136	22,872
Rents, Fines & Escheats	151,402	189,428	165,875	154,288	183,115
Investment Income	2,371	15,911	48,950	48,690	2,945
Miscellaneous	330,388	177,307	214,700	256,341	257,766
Less Refunds of Payments	(44,199)	(61,058)	(59,139)	(69,306)	(37,661)
Total - Other Revenue	$1,353,113	$1,273,461	$1,307,982	$1,227,906	$1,397,789
OTHER SOURCES					
Federal Grants	$1,325,237	1,143,075	2,083,774	$1,796,754	$1,496,315
Transfer from Tobacco Fund	118,299	109,700	110,200	136,000	114,500
Transfer From/(To) Other	(149,207)	78,376	(101,814)	(129,620)	112,856
Transfers to BRF – Volatility	-	(1,471,333)	(949,681)	(530,316)	(1,241,460)
Total - Other Sources	$1,294,328	($140,182)	$1,142,479	$1,272,819	$482,211
GRAND TOTAL	$17,702,968	$18,198,550	$19,649,862	$19,193,540	$20,531,418

TAXES	% of Total	% of Total	% of Total	% of Total	% of Total
Personal Income	50.77	59.18	49.06	48.96	50.36
Sales and Use	23.68	23.09	22.08	22.50	23.34
Corporation	5.86	5.06	5.40	4.87	5.62
Pass-through Entity Tax			5.96	6.47	7.55
Public Service Corporation	1.53	1.38	1.33	1.32	1.19
Inheritance & Estate	1.24	1.23	1.15	0.83	1.48
Insurance Companies	1.26	1.27	0.99	1.19	1.12
Cigarettes	2.15	2.07	1.82	1.80	1.71
Real Estate Conveyance	1.19	1.11	1.09	0.92	1.88
Alcoholic Beverages	0.36	0.35	0.33	0.38	0.39
Admissions, Dues, Cabaret	0.22	0.22	0.22	0.21	0.18
Miscellaneous	3.95	5.82	5.60	5.33	5.12
Total - Taxes	92.22	100.78	95.01	94.79	99.93
Less Refunds of Taxes	-7.14	-6.98	-7.46	-7.77	-9.05
Less Refunds of R&D Credit	-0.03	-0.03	-0.03	-0.04	-0.03
Total – Taxes Less Refunds	85.05	93.77	87.53	86.97	90.84
OTHER REVENUE					
Transfer-Special Revenue	1.86	1.87	1.85	1.77	2.00
Indian Gaming Payments	1.52	1.5	1.30	0.86	1.11
Licenses, Permits & Fees	1.56	1.68	1.48	1.60	1.61
Sales of Commodities &	0.22	0.18	0.14	0.14	0.11
Rents, Fines & Escheats	0.86	1.04	0.84	0.80	0.89
Investment Income	0.01	0.09	0.25	0.25	0.01
Miscellaneous	1.87	0.97	1.09	1.34	1.26
Less Refunds of Payments	-0.25	-0.34	-0.30	-0.36	-0.18
Total - Other Revenue	7.64	7.00	6.66	6.40	6.81
OTHER SOURCES					
Federal Grants	7.49	6.28	10.60	9.36	7.29
Transfer from Tobacco Fund	0.67	0.6	0.56	0.71	0.56
Transfer From/(To) Other	-0.84	0.43	-0.52	-0.68	0.55
Transfers to BRF – Volatility	-	-8.08	-4.83	-2.76	-6.05
Total - Other Sources	7.31	-0.77	5.81	6.63	2.35
GRAND TOTAL	100.00	100.00	100.00	100.00	100.00

TABLE 71
SPECIAL TRANSPORTATION FUND REVENUES

TAXES ($K)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Motor Fuels	$498,455	$499,833	$509,701	$478,193	$475,157
Oil Companies	238,354	312,506	313,050	230,356	229,061
Sales and Use Tax	188,380	327,458	370,580	400,908	482,892
DMV Sales	84,951	85,906	87,263	73,126	117,215
Less Refunds of Taxes	-13,236	-10,050	(32,149)	(30,398)	(11,796)
Total – Taxes Less Refunds	$996,904	$1,215,653	$1,248,446	$1,152,186	$1,292,530
OTHER REVENUE					
Motor Vehicle Receipts	$242,912	$253,074	$250,361	$241,643	$321,420
Licenses, Permits & Fees	144,028	141,866	150,144	128,707	130,747
Interest Income	8,995	17,673	37,375	21,754	1,922
Federal Grants	12,168	12,196	12,259	12,315	11,957
Transfer to Other Funds	(6,500)	(5,500)	(5,500)	(35,500)	24,500
Less Refunds of Payments	(4,103)	(4,891)	(4,941)	(4,520)	(5,359)
Total – Other Revenue	$397,499	$414,418	$439,698	$364,399	$485,187
GRAND TOTAL	$1,394,403	$1,630,071	$1,688,144	$1,516,585	$1,777,717

TAXES	% of Total	% of Total	% of Total	% of Total	% of Total
Motor Fuels	35.75	30.66	30.19	31.53	26.73
Oil Companies	17.09	19.17	18.54	15.19	12.89
Sales and Use Tax	13.51	20.09	21.95	26.43	27.16
DMV Sales	6.09	5.27	5.17	4.82	6.59
Less Refunds of Taxes	-0.95	-0.62	-1.90	-2.00	-0.66
Total – Taxes Less Refunds	71.49	74.57	73.95	75.97	72.71
OTHER REVENUE					
Motor Vehicle Receipts	17.42	15.53	14.83	15.93	18.08
Licenses, Permits & Fees	10.33	8.7	8.89	8.49	7.35
Interest Income	0.65	1.08	2.21	1.43	0.11
Federal Grants	0.87	0.75	0.73	0.81	0.67
Transfer to Other Funds	-0.47	-0.34	-0.33	-2.34	1.38
Less Refunds of Payments	-0.29	-0.30	-0.29	-0.30	-0.30
Total - Other Revenue	28.51	25.42	26.04	24.03	27.29
GRAND TOTAL	100.00	99.99	99.99	100.00	100.00

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A P P E N D I X

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Connecticut Resident Population Census Counts

	Population 2010	Rank	Population 2020	Rank	2010-2020 Change	% Change
Total	3,574,097		3,605,944		31,847	0.9
Andover	3,303	147	3,151	147	-152	-4.6
Ansonia	19,249	60	18,918	60	-331	-1.7
Ashford	4,317	136	4,191	139	-126	-2.9
Avon	18,098	65	18,932	59	834	4.6
Barkhamsted	3,799	141	3,647	141	-152	-4.0
Beacon Falls	6,049	123	6,000	123	-49	-0.8
Berlin	19,866	54	20,175	56	309	1.6
Bethany	5,563	126	5,297	126	-266	-4.8
Bethel	18,584	62	20,358	55	1,774	9.5
Bethlehem	3,607	143	3,385	145	-222	-6.2
Bloomfield	20,486	52	21,535	51	1,049	5.1
Bolton	4,980	131	4,858	131	-122	-2.4
Bozrah	2,627	152	2,429	153	-198	-7.5
Branford	28,026	37	28,273	35	247	0.9
Bridgeport	144,229	1	148,654	1	4,425	3.1
Bridgewater	1,727	162	1,662	161	-65	-3.8
Bristol	60,477	13	60,833	14	356	0.6
Brookfield	16,452	71	17,528	68	1,076	6.5
Brooklyn	8,210	110	8,450	109	240	2.9
Burlington	9,301	104	9,519	99	218	2.3
Canaan	1,234	168	1,080	168	-154	-12.5
Canterbury	5,132	130	5,045	130	-87	-1.7
Canton	10,292	95	10,124	97	-168	-1.6
Chaplin	2,305	156	2,151	157	-154	-6.7
Cheshire	29,261	32	28,733	34	-528	-1.8
Chester	3,994	139	3,749	140	-245	-6.1
Clinton	13,260	82	13,185	82	-75	-0.6
Colchester	16,068	72	15,555	74	-513	-3.2
Colebrook	1,485	165	1,361	166	-124	-8.4
Columbia	5,485	127	5,272	127	-213	-3.9
Cornwall	1,420	167	1,567	165	147	10.4
Coventry	12,435	87	12,235	87	-200	-1.6
Cromwell	14,005	79	14,225	79	220	1.6
Danbury	80,893	7	86,518	7	5,625	7.0
Darien	20,732	51	21,499	52	767	3.7
Deep River	4,629	133	4,415	133	-214	-4.6
Derby	12,902	84	12,325	86	-577	-4.5
Durham	7,388	116	7,152	116	-236	-3.2
East Granby	5,148	129	5,214	128	66	1.3
East Haddam	9,126	106	8,875	106	-251	-2.8
East Hampton	12,959	83	12,717	83	-242	-1.9
East Hartford	51,252	19	51,045	19	-207	-0.4
East Haven	29,257	33	27,923	37	-1,334	-4.6
East Lyme	19,159	61	18,693	62	-466	-2.4

Connecticut Resident Population Census Counts

	Population 2010	Rank	Population 2020	Rank	2010-2020 Change	% Change
East Windsor	11,162	94	11,190	91	28	0.3
Eastford	1,749	161	1,649	162	-100	-5.7
Easton	7,490	115	7,605	113	115	1.5
Ellington	15,602	74	16,426	71	824	5.3
Enfield	44,654	22	42,141	23	-2,513	-5.6
Essex	6,683	120	6,733	119	50	0.7
Fairfield	59,404	14	61,512	11	2,108	3.5
Farmington	25,340	44	26,712	43	1,372	5.4
Franklin	1,922	159	1,863	159	-59	-3.1
Glastonbury	34,427	29	35,159	29	732	2.1
Goshen	2,976	150	3,150	148	174	5.8
Granby	11,282	92	10,903	92	-379	-3.4
Greenwich	61,171	10	63,518	10	2,347	3.8
Griswold	11,951	90	11,402	90	-549	-4.6
Groton	40,115	25	38,411	26	-1,704	-4.2
Guilford	22,375	50	22,073	50	-302	-1.3
Haddam	8,346	109	8,452	108	106	1.3
Hamden	60,960	11	61,169	12	209	0.3
Hampton	1,863	160	1,728	160	-135	-7.2
Hartford	124,775	3	121,054	4	-3,721	-3.0
Hartland	2,114	158	1,901	158	-213	-10.1
Harwinton	5,642	125	5,484	125	-158	-2.8
Hebron	9,686	99	9,098	104	-588	-6.1
Kent	2,979	149	3,019	149	40	1.3
Killingly	17,370	68	17,752	66	382	2.2
Killingworth	6,525	121	6,174	121	-351	-5.4
Lebanon	7,308	117	7,142	117	-166	-2.3
Ledyard	15,051	77	15,413	75	362	2.4
Lisbon	4,338	135	4,195	137	-143	-3.3
Litchfield	8,466	108	8,192	111	-274	-3.2
Lyme	2,406	154	2,352	154	-54	-2.2
Madison	18,269	64	17,691	67	-578	-3.2
Manchester	58,241	15	59,713	15	1,472	2.5
Mansfield	26,543	41	25,892	44	-651	-2.5
Marlborough	6,404	122	6,133	122	-271	-4.2
Meriden	60,868	12	60,850	13	-18	0.0
Middlebury	7,575	114	7,574	114	-1	0.0
Middlefield	4,425	134	4,217	135	-208	-4.7
Middletown	47,648	20	47,717	20	69	0.1
Milford	52,759	17	52,044	18	-715	-1.4
Monroe	19,479	59	18,825	61	-654	-3.4
Montville	19,571	57	18,387	64	-1,184	-6.0
Morris	2,388	155	2,256	156	-132	-5.5

Connecticut Resident Population Census Counts

	Population 2010	Rank	Population 2020	Rank	2010-2020 Change	% Change
Naugatuck	31,862	30	31,519	30	-343	-1.1
New Britain	73,206	8	74,135	8	929	1.3
New Canaan	19,738	55	20,622	54	884	4.5
New Fairfield	13,881	81	13,579	80	-302	-2.2
New Hartford	6,970	118	6,658	120	-312	-4.5
New Haven	129,779	2	134,023	3	4,244	3.3
New London	27,620	38	27,367	38	-253	-0.9
New Milford	28,142	36	28,115	36	-27	-0.1
Newington	30,562	31	30,536	31	-26	-0.1
Newtown	27,560	39	27,173	40	-387	-1.4
Norfolk	1,709	164	1,588	163	-121	-7.1
North Branford	14,407	78	13,544	81	-863	-6.0
North Canaan	3,315	146	3,211	146	-104	-3.1
North Haven	24,093	47	24,253	48	160	0.7
North Stonington	5,297	128	5,149	129	-148	-2.8
Norwalk	85,603	6	91,184	6	5,581	6.5
Norwich	40,493	24	40,125	25	-368	-0.9
Old Lyme	7,603	113	7,628	112	25	0.3
Old Saybrook	10,242	96	10,481	93	239	2.3
Orange	13,956	80	14,280	78	324	2.3
Oxford	12,683	85	12,706	84	23	0.2
Plainfield	15,405	75	14,973	76	-432	-2.8
Plainville	17,716	67	17,525	69	-191	-1.1
Plymouth	12,243	88	11,671	88	-572	-4.7
Pomfret	4,247	137	4,266	134	19	0.4
Portland	9,508	101	9,384	101	-124	-1.3
Preston	4,726	132	4,788	132	62	1.3
Prospect	9,405	103	9,401	100	-4	0.0
Putnam	9,584	100	9,224	102	-360	-3.8
Redding	9,158	105	8,765	107	-393	-4.3
Ridgefield	24,638	46	25,033	45	395	1.6
Rocky Hill	19,709	56	20,845	53	1,136	5.8
Roxbury	2,262	157	2,260	155	-2	-0.1
Salem	4,151	138	4,213	136	62	1.5
Salisbury	3,741	142	4,194	138	453	12.1
Scotland	1,726	163	1,576	164	-150	-8.7
Seymour	16,540	70	16,748	70	208	1.3
Sharon	2,782	151	2,680	151	-102	-3.7
Shelton	39,559	26	40,869	24	1,310	3.3
Sherman	3,581	144	3,527	144	-54	-1.5
Simsbury	23,511	48	24,517	46	1,006	4.3
Somers	11,444	91	10,255	95	-1,189	-10.4
South Windsor	25,709	43	26,918	42	1,209	4.7

Connecticut Resident Population Census Counts

	Population 2010	Rank	Population 2020	Rank	2010-2020 Change	% Change
Southbury	19,904	53	19,879	57	-25	-0.1
Southington	43,069	23	43,501	22	432	1.0
Sprague	2,984	148	2,967	150	-17	-0.6
Stafford	12,087	89	11,472	89	-615	-5.1
Stamford	122,643	4	135,470	2	12,827	10.5
Sterling	3,830	140	3,578	143	-252	-6.6
Stonington	18,545	63	18,335	65	-210	-1.1
Stratford	51,384	18	52,355	17	971	1.9
Suffield	15,735	73	15,752	73	17	0.1
Thomaston	7,887	112	7,442	115	-445	-5.6
Thompson	9,458	102	9,189	103	-269	-2.8
Tolland	15,052	76	14,563	77	-489	-3.2
Torrington	36,383	27	35,515	28	-868	-2.4
Trumbull	36,018	28	36,827	27	809	2.2
Union	854	169	785	169	-69	-8.1
Vernon	29,179	34	30,215	32	1,036	3.6
Voluntown	2,603	153	2,570	152	-33	-1.3
Wallingford	45,135	21	44,396	21	-739	-1.6
Warren	1,461	166	1,351	167	-110	-7.5
Washington	3,578	145	3,646	142	68	1.9
Waterbury	110,366	5	114,403	5	4,037	3.7
Waterford	19,517	58	19,571	58	54	0.3
Watertown	22,514	49	22,105	49	-409	-1.8
West Hartford	63,268	9	64,083	9	815	1.3
West Haven	55,564	16	55,584	16	20	0.0
Westbrook	6,938	119	6,769	118	-169	-2.4
Weston	10,179	97	10,354	94	175	1.7
Westport	26,391	42	27,141	41	750	2.8
Wethersfield	26,668	40	27,298	39	630	2.4
Willington	6,041	124	5,566	124	-475	-7.9
Wilton	18,062	66	18,503	63	441	2.4
Winchester	11,242	93	10,224	96	-1,018	-9.1
Windham	25,268	45	24,425	47	-843	-3.3
Windsor	29,044	35	29,492	33	448	1.5
Windsor Locks	12,498	86	12,613	85	115	0.9
Wolcott	16,680	69	16,142	72	-538	-3.2
Woodbridge	8,990	107	9,087	105	97	1.1
Woodbury	9,975	98	9,723	98	-252	-2.5
Woodstock	7,964	111	8,221	110	257	3.2

Source: U.S. Bureau of the Census, April 1, 2010 & 2020

MAJOR U.S. ECONOMIC INDICATORS - STATE FISCAL YEAR BASIS

TABLE 1
U.S. ECONOMIC VARIABLES

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Gross Domestic Product ($B)	15,941.5	16,517.1	17,162.8	17,945.2	18,419.0	19,055.1	20,019.5	20,940.8	21,039.6	21,848.8
Percent Change	3.9%	3.6%	3.9%	4.6%	2.6%	3.5%	5.1%	4.6%	0.5%	3.8%
Real GDP (2012=100)	16,088.3	16,372.0	16,707.5	17,216.8	17,520.9	17,857.6	18,362.3	18,804.2	18,631.3	18,938.1
Percent Change	1.9%	1.8%	2.0%	3.0%	1.8%	1.9%	2.8%	2.4%	-0.9%	1.6%
GDP Deflator (2012=100)	99.1	100.9	102.7	104.2	105.1	106.7	109.0	111.4	112.9	115.4
Percent Change	2.0%	1.8%	1.8%	1.5%	0.9%	1.5%	2.2%	2.1%	1.4%	2.2%
Housing Starts (K)	684.4	877.4	953.1	1,053.8	1,151.5	1,199.9	1,250.6	1,218.0	1,317.3	1,550.8
Percent Change	20.1%	28.2%	8.6%	10.6%	9.3%	4.2%	4.2%	-2.6%	8.1%	17.7%
Unemployment Rate	8.5%	7.8%	6.8%	5.7%	5.0%	4.7%	4.1%	3.8%	6.0%	6.9%
New Vehicle Sales (M)	13.6	15.1	15.9	16.9	17.5	17.3	17.3	17.1	15.1	16.3
Percent Change	11.4%	10.6%	5.5%	6.0%	3.9%	-1.4%	-0.2%	-0.9%	-11.9%	8.3%
Consumer Price Index ('82-'84=100)	227.6	231.4	235.0	236.7	238.2	242.7	248.1	253.3	257.3	263.1
Percent Change	2.9%	1.7%	1.6%	0.7%	0.7%	1.9%	2.2%	2.1%	1.6%	2.3%
Industrial Production Index ('07=100)	96.3	98.3	100.7	102.4	99.4	99.1	101.5	103.3	97.8	97.8
Percent Change	3.2%	2.1%	2.5%	1.7%	-2.9%	-0.4%	2.4%	1.8%	-5.4%	0.0%
Personal Income ($B)	13,658.2	14,124.4	14,525.5	15,386.1	15,881.0	16,439.6	17,278.4	18,100.9	19,076.0	20,464.2
Percent Change	5.1%	3.4%	2.8%	5.9%	3.2%	3.5%	5.1%	4.8%	5.4%	7.3%
Real Personal Income ($B in 2012=100)	13,769.6	14,028.3	14,217.1	14,936.5	15,343.4	15,638.9	16,119.2	16,588.2	17,254.9	18,139.7
Percent Change	2.6%	1.9%	1.3%	5.1%	2.7%	1.9%	3.1%	2.9%	4.0%	5.1%
Disposable Personal Income ($B)	12,183.6	12,520.8	12,806.4	13,515.4	13,935.9	14,445.4	15,201.0	15,958.1	16,883.8	18,117.6
Percent Change	4.7%	2.8%	2.3%	5.5%	3.1%	3.7%	5.2%	5.0%	5.8%	7.3%
Disposable Personal Income ($B in 2012=100)	12,283.1	12,436.0	12,534.8	13,120.8	13,464.5	13,742.2	14,181.5	14,624.9	15,273.3	16,063.1
Percent Change	2.2%	1.2%	0.8%	4.7%	2.6%	2.1%	3.2%	3.1%	4.4%	5.2%

MAJOR U.S. ECONOMIC INDICATORS - STATE FISCAL YEAR BASIS

TABLE 2
U.S. PERSONAL INCOME
(BILLIONS OF DOLLARS)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Personal Income	13,658.2	14,124.5	14,525.5	15,386.1	15,881.0	16,439.7	17,278.4	18,100.9	19,076.0	20,464.2
Percent Change	5.1%	3.4%	2.8%	5.9%	3.2%	3.5%	5.1%	4.8%	5.4%	7.3%
Wages & Salaries	6,757.9	7,036.8	7,269.3	7,678.6	7,973.2	8,261.7	8,697.5	9,124.7	9,343.9	9,813.2
Percent Change	3.6%	4.1%	3.3%	5.6%	3.8%	3.6%	5.3%	4.9%	2.4%	5.0%
Manufacturing Income	719.3	739.0	761.5	796.1	809.9	827.0	866.2	900.0	902.6	937.8
Percent Change	3.5%	2.7%	3.0%	4.5%	1.7%	2.1%	4.7%	3.9%	0.3%	3.9%
Nonmanufacturing Inc.	6,038.6	6,297.8	6,507.8	6,882.5	7,163.4	7,434.7	7,831.4	8,224.7	8,441.3	8,875.4
Percent Change	3.7%	4.3%	3.3%	5.8%	4.1%	3.8%	5.3%	5.0%	2.6%	5.1%
Other Labor Income	1,614.2	1,678.5	1,749.4	1,807.5	1,857.9	1,906.0	2,006.7	2,098.4	2,117.5	2,189.1
Percent Change	2.2%	4.0%	4.2%	3.3%	2.8%	2.6%	5.3%	4.6%	0.9%	3.4%
Proprietor's Income	1,299.5	1,376.5	1,418.3	1,441.7	1,414.2	1,464.1	1,544.9	1,585.3	1,586.7	1,763.2
Percent Change	11.5%	5.9%	3.0%	1.7%	-1.9%	3.5%	5.5%	2.6%	0.1%	11.1%
Farm Income	61.6	77.2	76.0	59.2	45.8	36.8	37.1	33.9	50.0	92.5
Percent Change	17.3%	25.5%	-1.6%	-22.2%	-22.7%	-19.7%	1.0%	-8.8%	47.7%	85.1%
Nonfarm Income	1,238.0	1,299.3	1,342.2	1,382.5	1,368.5	1,427.4	1,507.7	1,551.4	1,536.7	1,670.7
Percent Change	11.3%	5.0%	3.3%	3.0%	-1.0%	4.3%	5.6%	2.9%	-0.9%	8.7%
Rental Income	523.7	553.2	594.1	604.4	619.3	637.3	667.8	689.1	703.1	714.4
Percent Change	10.8%	5.6%	7.4%	1.7%	2.5%	2.9%	4.8%	3.2%	2.0%	1.6%
Personal Dividend Inc.	742.9	834.0	863.8	1,015.6	1,045.7	1,114.4	1,198.2	1,295.2	1,323.2	1,278.7
Percent Change	21.6%	12.3%	3.6%	17.6%	3.0%	6.6%	7.5%	8.1%	2.2%	-3.4%
Personal Interest Income	1,297.8	1,281.0	1,288.0	1,395.4	1,460.2	1,506.0	1,578.9	1,645.3	1,637.4	1,619.4
Percent Change	4.5%	-1.3%	0.5%	8.3%	4.6%	3.1%	4.8%	4.2%	-0.5%	-1.1%
Transfer Payments	2,353.7	2,392.2	2,469.7	2,622.9	2,732.1	2,816.5	2,915.7	3,055.1	3,799.7	4,602.6
Percent Change	0.1%	1.6%	3.2%	6.2%	4.2%	3.1%	3.5%	4.8%	24.4%	21.1%

MAJOR U.S. ECONOMIC INDICATORS - STATE FISCAL YEAR BASIS

TABLE 3
U.S. PERSONAL INCOME AND ITS DISPOSITION
(BILLIONS OF DOLLARS)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Less:										
Contributions to										
Social Insurance	931.3	1,027.7	1,127.0	1,179.9	1,221.5	1,266.3	1,331.2	1,392.0	1,435.3	1,516.5
Percent Change	-2.0%	10.3%	9.7%	4.7%	3.5%	3.7%	5.1%	4.6%	3.1%	5.7%
Equals:										
Personal Income	13,658.2	14,124.5	14,525.5	15,386.1	15,881.0	16,439.7	17,278.4	18,100.9	19,076.0	20,464.2
Percent Change	5.1%	3.4%	2.8%	5.9%	3.2%	3.5%	5.1%	4.8%	5.4%	7.3%
Less:										
Personal Taxes	1,474.6	1,603.6	1,719.1	1,870.7	1,945.1	1,994.3	2,077.4	2,142.8	2,192.3	2,346.6
Percent Change	8.9%	8.8%	7.2%	8.8%	4.0%	2.5%	4.2%	3.1%	2.3%	7.0%
Equals:										
Disposable Income ($B)	12,183.7	12,520.8	12,806.4	13,515.4	13,936.0	14,445.4	15,201.0	15,958.2	16,883.8	18,117.6
Percent Change	4.7%	2.8%	2.3%	5.5%	3.1%	3.7%	5.2%	5.0%	5.8%	7.3%
Less:										
Personal Outlays	11,264.7	11,581.1	11,971.9	12,504.9	12,922.8	13,427.2	14,079.3	14,704.0	14,692.9	15,337.9
Percent Change	3.6%	2.8%	3.4%	4.5%	3.3%	3.9%	4.9%	4.4%	-0.1%	4.4%
Equals:										
Personal Savings	918.9	939.7	834.5	1,010.5	1,013.2	1,018.2	1,121.7	1,254.1	2,190.9	2,779.7
Percent Change	20.1%	2.3%	-11.2%	21.1%	0.3%	0.5%	10.2%	11.8%	74.7%	26.9%
Personal Savings Rate	7.5%	7.5%	6.5%	7.5%	7.3%	7.0%	7.4%	7.9%	13.0%	15.3%

MAJOR U.S. ECONOMIC INDICATORS - STATE FISCAL YEAR BASIS

TABLE 4
U.S. EMPLOYMENT AND THE LABOR FORCE
(MILLIONS OF JOBS)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Establishment Employ.	133.1	135.2	137.5	140.4	143.1	145.5	147.7	149.9	147.1	143.0
Percent Change	1.6%	1.6%	1.7%	2.1%	1.9%	1.7%	1.5%	1.5%	-1.9%	-2.8%
Manufacturing	11.8	12.0	12.1	12.3	12.4	12.4	12.6	12.8	12.5	12.2
Percent Change	1.8%	1.2%	0.9%	1.6%	0.6%	0.2%	1.4%	1.9%	-2.1%	-2.5%
Nonmanufacturing	121.2	123.2	125.5	128.1	130.7	133.1	135.2	137.1	134.6	130.8
Percent Change	1.6%	1.6%	1.8%	2.1%	2.0%	1.8%	1.5%	1.4%	-1.9%	-2.8%
Construction & Mining	6.4	6.6	6.9	7.2	7.3	7.5	7.8	8.1	8.1	8.0
Percent Change	3.2%	2.4%	4.1%	4.7%	2.1%	2.2%	4.3%	4.2%	-0.9%	-1.4%
Information	2.7	2.7	2.7	2.7	2.8	2.8	2.8	2.8	2.8	2.7
Percent Change	-0.5%	0.4%	1.2%	0.7%	1.1%	1.5%	0.4%	1.0%	-1.0%	-5.4%
Public Utility, Trade & Transportation	25.2	25.6	26.0	26.6	27.0	27.3	27.5	27.7	27.1	26.9
Percent Change	1.9%	1.3%	1.9%	2.1%	1.6%	1.2%	0.6%	0.7%	-2.0%	-0.7%
Finance, Insurance & Real Estate	7.7	7.8	7.9	8.0	8.2	8.4	8.5	8.7	8.8	8.8
Percent Change	0.7%	1.3%	1.1%	1.6%	1.9%	2.1%	1.6%	1.9%	1.1%	-0.1%
Services	57.2	58.7	60.1	61.6	63.3	64.8	66.1	67.3	65.4	62.8
Percent Change	2.7%	2.5%	2.4%	2.6%	2.7%	2.4%	2.0%	1.7%	-2.8%	-3.9%
Professional & Business	17.7	18.3	18.8	19.4	19.9	20.3	20.7	21.1	20.9	20.5
Percent Change	3.6%	3.3%	3.1%	3.0%	2.6%	1.9%	2.1%	1.9%	-1.3%	-1.9%
Education & Health	20.6	20.9	21.2	21.7	22.3	22.9	23.4	23.9	23.8	23.3
Percent Change	2.1%	1.8%	1.4%	2.3%	2.8%	2.7%	2.1%	1.9%	-0.2%	-2.3%
Leisure & Hospitality	13.6	14.0	14.5	14.9	15.4	15.9	16.2	16.4	15.1	13.6
Percent Change	2.9%	3.2%	3.4%	2.9%	3.4%	2.9%	2.0%	1.5%	-8.2%	-9.8%
Other Services	5.4	5.5	5.5	5.6	5.7	5.7	5.8	5.9	5.6	5.5
Percent Change	1.2%	1.0%	1.4%	1.2%	1.0%	1.4%	1.3%	0.9%	-3.8%	-2.5%
Government	22.0	21.9	21.8	21.9	22.1	22.3	22.4	22.5	22.4	21.6
Percent Change	-1.4%	-0.4%	-0.2%	0.5%	0.8%	0.9%	0.4%	0.5%	-0.4%	-3.5%
Civilian Labor Force	154.3	155.3	155.5	156.6	158.0	159.8	161.2	162.7	162.6	160.6
Percent Change	0.4%	0.7%	0.1%	0.7%	0.9%	1.1%	0.9%	0.9%	-0.1%	-1.2%
Unemployment Rate	8.5%	7.8%	6.8%	5.7%	5.0%	4.7%	4.1%	3.8%	6.0%	6.9%

MAJOR U.S. ECONOMIC INDICATORS - STATE FISCAL YEAR BASIS

TABLE 5
PRICE INDICES FOR URBAN CONSUMERS
(1982-1984 = 100)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
All Items	227.6	231.4	235.0	236.7	238.2	242.7	248.1	253.3	257.3	263.1
Percent Change	2.9%	1.7%	1.6%	0.7%	0.7%	1.9%	2.2%	2.1%	1.6%	2.3%
Food & Beverages	231.5	235.4	239.1	245.1	247.7	248.2	251.6	255.7	261.7	270.4
Percent Change	3.8%	1.7%	1.6%	2.5%	1.1%	0.2%	1.3%	1.6%	2.3%	3.4%
Housing	221.0	224.9	230.2	235.6	240.7	247.7	254.8	262.2	269.1	275.0
Percent Change	1.8%	1.8%	2.4%	2.3%	2.1%	2.9%	2.9%	2.9%	2.6%	2.2%
Energy	245.8	246.0	246.7	221.2	192.5	197.8	213.3	217.6	206.9	211.0
Percent Change	7.9%	0.1%	0.3%	-10.3%	-12.9%	2.7%	7.9%	2.0%	-4.9%	2.0%
Commodities	186.3	187.9	188.1	184.5	180.2	180.3	183.0	184.8	184.7	189.7
Percent Change	4.3%	0.8%	0.1%	-1.9%	-2.4%	0.0%	1.5%	1.0%	-0.1%	2.7%
Apparel	124.9	127.0	127.6	126.8	125.9	126.1	125.9	124.6	121.5	118.4
Percent Change	4.3%	1.7%	0.5%	-0.6%	-0.7%	0.2%	-0.2%	-1.1%	-2.5%	-2.6%
Transportation	215.4	217.9	217.9	206.2	196.0	198.4	206.3	210.5	205.4	211.3
Percent Change	6.2%	1.2%	0.0%	-5.4%	-4.9%	1.2%	4.0%	2.0%	-2.4%	2.9%
Services	268.5	274.6	281.5	288.3	295.6	304.2	312.3	320.7	328.9	335.7
Percent Change	2.0%	2.3%	2.5%	2.4%	2.5%	2.9%	2.7%	2.7%	2.6%	2.0%
Medical Care	407.4	420.6	430.2	441.0	454.0	471.0	480.4	489.3	510.2	522.5
Percent Change	3.4%	3.3%	2.3%	2.5%	2.9%	3.8%	2.0%	1.9%	4.3%	2.4%
Other Goods & Services	390.7	397.8	404.7	411.2	418.9	427.7	437.8	446.2	457.4	468.0
Percent Change	1.6%	1.8%	1.7%	1.6%	1.9%	2.1%	2.3%	1.9%	2.5%	2.3%

MAJOR CONNECTICUT ECONOMIC INDICATORS - STATE FISCAL YEAR BASIS

TABLE 6
PERSONAL INCOME
(BILLIONS OF DOLLARS)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Personal Income	228.88	228.81	230.30	240.88	245.44	249.77	258.61	268.25	274.97	289.26
Percent Change	2.0%	0.0%	0.6%	4.6%	1.9%	1.8%	3.5%	3.7%	2.5%	5.2%
Disposable Personal Income	196.66	193.91	193.23	201.92	206.68	211.21	218.81	227.70	233.98	245.77
Percent Change	1.2%	-1.4%	-0.3%	4.5%	2.4%	2.2%	3.6%	4.1%	2.8%	5.0%
Total Wages	113.25	117.01	118.83	123.01	124.58	126.57	131.04	135.51	137.18	142.10
Percent Change	2.3%	3.3%	1.6%	3.5%	1.3%	1.6%	3.5%	3.4%	1.2%	3.6%
Manufacturing Wages	14.31	14.69	14.67	14.35	13.92	14.11	14.84	15.47	15.57	16.04
Percent Change	2.1%	2.7%	-0.1%	-2.2%	-3.0%	1.4%	5.2%	4.3%	0.6%	3.1%
Nonmanufacturing Wages	98.95	102.32	104.16	108.66	110.66	112.46	116.20	120.04	121.61	126.05
Percent Change	2.3%	3.4%	1.8%	4.3%	1.8%	1.6%	3.3%	3.3%	1.3%	3.7%
Other Labor Income	25.47	26.05	26.51	27.30	28.05	28.36	29.44	30.31	30.28	31.14
Percent Change	0.1%	2.3%	1.8%	3.0%	2.7%	1.1%	3.8%	3.0%	-0.1%	2.8%
Proprietor's Income	32.84	28.10	26.60	27.12	27.18	28.40	29.00	28.48	27.51	29.22
Percent Change	-5.8%	-14.4%	-5.3%	1.9%	0.2%	4.5%	2.1%	-1.8%	-3.4%	6.2%
Property Income	42.55	43.94	45.68	50.07	51.62	52.38	54.58	58.16	57.63	56.78
Percent Change	8.9%	3.3%	4.0%	9.6%	3.1%	1.5%	4.2%	6.6%	-0.9%	-1.5%
Transfer Payments Less Social Insurance	14.77	13.71	12.67	13.38	14.00	14.06	14.55	15.79	22.36	30.02
Percent Change	3.3%	-7.2%	-7.6%	5.6%	4.7%	0.4%	3.5%	8.5%	41.6%	34.2%
Transfer Payments	29.24	29.74	30.08	31.32	32.28	32.85	34.20	36.17	43.08	51.56
Percent Change	0.0%	1.7%	1.1%	4.1%	3.1%	1.7%	4.1%	5.8%	19.1%	19.7%
Social Insurance	14.47	16.03	17.41	17.94	18.28	18.79	19.65	20.37	20.72	21.54
Percent Change	-3.1%	10.8%	8.6%	3.1%	1.9%	2.8%	4.6%	3.7%	1.7%	4.0%
Residence Adjustment	12.17	12.90	12.70	13.12	12.98	13.82	15.99	17.99	18.74	19.32
Percent Change	9.7%	6.1%	-1.5%	3.2%	-1.0%	6.5%	15.7%	12.5%	4.2%	3.1%

MAJOR CONNECTICUT ECONOMIC INDICATORS - STATE FISCAL YEAR BASIS

TABLE 7
DEFLATED PERSONAL INCOME
(BILLIONS OF DOLLARS)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Personal Income	230.76	227.26	225.42	233.84	237.13	237.61	241.27	245.84	248.72	256.44
Percent Change	-0.4%	-1.5%	-0.8%	3.7%	1.4%	0.2%	1.5%	1.9%	1.2%	3.1%
Disposable Personal Income	198.28	192.59	189.14	196.01	199.68	200.94	204.15	208.67	211.64	217.88
Percent Change	-1.2%	-2.9%	-1.8%	3.6%	1.9%	0.6%	1.6%	2.2%	1.4%	2.9%
Total Wages	114.18	116.21	116.32	119.42	120.36	120.41	122.25	124.18	124.08	125.98
Percent Change	-0.1%	1.8%	0.1%	2.7%	0.8%	0.0%	1.5%	1.6%	-0.1%	1.5%
Manufacturing Wages	14.42	14.59	14.36	13.93	13.45	13.43	13.84	14.18	14.08	14.22
Percent Change	-0.3%	1.1%	-1.6%	-3.0%	-3.5%	-0.2%	3.1%	2.4%	-0.7%	1.0%
Nonmanufacturing Wages	99.76	101.63	101.96	105.48	106.92	106.99	108.41	110.01	110.00	111.75
Percent Change	-0.1%	1.9%	0.3%	3.5%	1.4%	0.1%	1.3%	1.5%	0.0%	1.6%
Other Labor Income	25.68	25.88	25.95	26.50	27.10	26.98	27.46	27.78	27.39	27.61
Percent Change	-2.3%	0.8%	0.3%	2.1%	2.2%	-0.5%	1.8%	1.1%	-1.4%	0.8%
Proprietor's Income	33.11	27.91	26.04	26.32	26.26	27.01	27.05	26.10	24.89	25.91
Percent Change	-8.0%	-15.7%	-6.7%	1.1%	-0.2%	2.9%	0.1%	-3.5%	-4.7%	4.1%
Property Income	42.90	43.64	44.71	48.60	49.88	49.83	50.92	53.30	52.13	50.34
Percent Change	6.3%	1.7%	2.5%	8.7%	2.6%	-0.1%	2.2%	4.7%	-2.2%	-3.4%
Transfer Payments Less Social Insurance	14.89	13.62	12.40	12.99	13.53	13.38	13.58	14.47	20.23	26.61
Percent Change	0.8%	-8.6%	-8.9%	4.7%	4.2%	-1.1%	1.5%	6.6%	39.8%	31.5%
Transfer Payments	29.48	29.54	29.44	30.40	31.19	31.25	31.91	33.15	38.97	45.71
Percent Change	-2.4%	0.2%	-0.3%	3.3%	2.6%	0.2%	2.1%	3.9%	17.6%	17.3%
Social Insurance	14.59	15.92	17.04	17.41	17.66	17.87	18.33	18.67	18.74	19.10
Percent Change	-5.4%	9.1%	7.0%	2.2%	1.4%	1.2%	2.6%	1.9%	0.4%	1.9%
Residence Adjustment	12.27	12.81	12.44	12.73	12.55	13.15	14.92	16.49	16.95	17.13
Percent Change	7.1%	4.5%	-3.0%	2.4%	-1.5%	4.8%	13.5%	10.5%	2.8%	1.1%

Note: All categories are deflated by consumer price index, 2012=100

MAJOR CONNECTICUT ECONOMIC INDICATORS - STATE FISCAL YEAR BASIS

TABLE 8
MANUFACTURING EMPLOYMENT
(THOUSANDS -Seasonally Adjusted)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Manufacturing	162.93	161.11	158.60	156.87	156.56	157.46	159.68	161.66	158.58	151.86
Percent Change	-0.3%	-1.1%	-1.6%	-1.1%	-0.2%	0.6%	1.4%	1.2%	-1.9%	-4.2%
Transportation Equip.	42.32	41.76	40.62	40.18	41.13	42.77	45.02	46.37	46.76	45.47
Percent Change	0.5%	-1.3%	-2.7%	-1.1%	2.4%	4.0%	5.3%	3.0%	0.8%	-2.8%
Fabricated Metals	28.80	29.66	30.06	29.38	29.16	29.33	29.48	29.88	29.00	26.87
Percent Change	1.4%	3.0%	1.3%	-2.2%	-0.8%	0.6%	0.5%	1.4%	-2.9%	-7.4%
Electrical Equip. & Appl.	9.85	9.72	9.30	8.79	8.41	8.07	8.11	7.98	7.46	7.13
Percent Change	-0.4%	-1.3%	-4.4%	-5.4%	-4.4%	-4.0%	0.5%	-1.5%	-6.6%	-4.4%
Chemicals	8.77	8.05	7.94	7.83	7.66	7.67	7.87	7.89	7.71	7.22
Percent Change	-9.0%	-8.2%	-1.3%	-1.5%	-2.1%	0.1%	2.7%	0.2%	-2.3%	-6.3%
Printing & Support	5.58	5.26	5.10	5.12	5.22	5.39	5.32	5.15	4.92	4.27
Percent Change	-1.5%	-5.7%	-3.0%	0.3%	1.9%	3.3%	-1.4%	-3.0%	-4.5%	-13.2%
Industrial Machinery	14.71	14.27	13.99	14.13	13.84	13.45	13.11	13.13	13.12	12.79
Percent Change	-1.1%	-2.9%	-2.0%	1.0%	-2.1%	-2.8%	-2.5%	0.2%	-0.1%	-2.5%
All Other	52.91	52.38	51.59	51.43	51.15	50.78	50.78	51.26	49.61	48.11
Percent Change	0.2%	-1.0%	-1.5%	-0.3%	-0.6%	-0.7%	0.0%	0.9%	-3.2%	-3.0%

MAJOR CONNECTICUT ECONOMIC INDICATORS - STATE FISCAL YEAR BASIS

TABLE 9
NONMANUFACTURING EMPLOYMENT
(THOUSANDS -Seasonally Adjusted)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Nonmanufacturing	1,478.3	1,493.5	1,507.6	1,524.4	1,533.3	1,537.8	1,537.0	1,536.9	1,473.8	1,419.5
Percent Change	0.9%	1.0%	0.9%	1.1%	0.6%	0.3%	0.0%	0.0%	-4.1%	-3.7%
Construction & Mining	52.3	52.8	54.7	57.5	59.5	59.2	58.8	60.3	58.3	57.2
Percent Change	1.8%	1.1%	3.5%	5.2%	3.5%	-0.6%	-0.7%	2.6%	-3.2%	-2.0%
Information	31.3	31.8	32.1	32.3	32.5	32.1	31.6	31.5	30.7	28.2
Percent Change	-1.3%	1.7%	1.0%	0.6%	0.5%	-1.2%	-1.7%	-0.2%	-2.5%	-8.2%
Utilities	6.0	6.0	6.0	5.7	5.6	5.5	5.3	5.2	5.1	5.1
Percent Change	-4.0%	-0.3%	0.3%	-5.0%	-1.3%	-2.4%	-4.5%	-1.3%	-1.0%	-1.2%
Transportation	40.0	41.3	42.3	43.5	45.2	45.7	48.1	50.2	53.4	61.1
Percent Change	1.6%	3.4%	2.3%	2.9%	3.8%	1.2%	5.2%	4.4%	6.3%	14.5%
Wholesale Trade	62.2	62.1	62.0	61.8	61.4	61.5	61.5	60.5	57.8	55.0
Percent Change	0.2%	-0.2%	-0.1%	-0.4%	-0.6%	0.2%	-0.1%	-1.6%	-4.4%	-5.0%
Retail Trade	181.0	182.1	184.0	184.4	185.0	184.3	182.1	178.2	166.1	164.5
Percent Change	0.8%	0.6%	1.0%	0.2%	0.3%	-0.4%	-1.2%	-2.2%	-6.8%	-1.0%
Finance & Insurance	115.3	113.2	110.1	110.0	110.1	108.8	106.8	104.4	102.6	100.6
Percent Change	-1.2%	-1.8%	-2.7%	-0.1%	0.2%	-1.2%	-1.8%	-2.3%	-1.7%	-1.9%
Real Estate	18.7	18.9	19.0	19.5	20.0	19.8	19.9	20.0	19.7	18.3
Percent Change	-0.8%	1.1%	0.8%	2.8%	2.1%	-0.6%	0.1%	0.8%	-1.7%	-7.1%
Professional & Business	204.4	208.2	213.0	217.6	219.1	219.1	220.2	220.3	213.2	204.3
Percent Change	3.1%	1.9%	2.3%	2.2%	0.7%	0.0%	0.5%	0.0%	-3.2%	-4.2%
Education & Health	320.5	324.9	328.7	333.5	335.7	341.6	343.3	346.2	339.0	324.5
Percent Change	1.4%	1.4%	1.2%	1.5%	0.6%	1.8%	0.5%	0.8%	-2.1%	-4.3%
Leisure & Hospitality	140.1	144.3	148.8	150.7	152.2	155.6	157.1	158.5	136.9	120.6
Percent Change	3.5%	3.0%	3.1%	1.3%	1.0%	2.2%	1.0%	0.9%	-13.6%	-11.9%
Other Services	60.6	62.0	62.2	63.5	64.3	64.9	65.3	65.6	60.7	57.8
Percent Change	0.0%	2.3%	0.4%	2.0%	1.3%	0.8%	0.7%	0.5%	-7.5%	-4.8%
Federal Government	17.8	17.4	17.3	17.6	17.7	17.9	18.0	18.1	18.4	19.1
Percent Change	-2.8%	-2.2%	-0.8%	1.9%	0.4%	1.3%	0.6%	0.1%	1.9%	3.4%
State & Local Gov't.	228.2	228.4	227.3	226.7	225.0	221.7	219.1	218.1	211.8	203.4
Percent Change	-0.8%	0.1%	-0.5%	-0.3%	-0.7%	-1.5%	-1.2%	-0.5%	-2.9%	-3.9%

MAJOR CONNECTICUT ECONOMIC INDICATORS - STATE FISCAL YEAR BASIS

TABLE 10
LABOR FORCE & OTHER ECONOMIC INDICATORS
(THOUSANDS -Seasonally Adjusted)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Labor Force	1,908.0	1,870.3	1,875.7	1,898.1	1,887.1	1,903.6	1,897.7	1,912.5	1,907.2	1,809.1
Percent Change	-0.4%	-2.0%	0.3%	1.2%	-0.6%	0.9%	-0.3%	0.8%	-0.3%	-5.1%
Nonfarm Employment	1,641.3	1,654.6	1,666.2	1,681.3	1,689.9	1,695.2	1,696.7	1,698.6	1,632.4	1,571.3
Percent Change	0.8%	0.8%	0.7%	0.9%	0.5%	0.3%	0.1%	0.1%	-3.9%	-3.7%
Residential Employment	1,744.5	1,715.5	1,738.7	1,783.1	1,788.2	1,816.2	1,818.2	1,842.1	1,806.0	1,656.0
Percent Change	0.5%	-1.7%	1.4%	2.6%	0.3%	1.6%	0.1%	1.3%	-2.0%	-8.3%
Unemployed	163.5	154.8	137.1	115.1	98.9	87.3	79.6	70.4	101.2	153.0
Percent Change	-9.2%	-5.4%	-11.4%	-16.1%	-14.1%	-11.6%	-8.9%	-11.5%	43.7%	51.2%
Unemployment Rate	8.6%	8.3%	7.3%	6.1%	5.2%	4.6%	4.2%	3.7%	5.3%	8.4%
Households	1,374.5	1,369.4	1,376.5	1,378.8	1,386.7	1,395.4	1,412.8	1,424.3	1,419.1	1,421.6
Percent Change	0.4%	-0.4%	0.5%	0.2%	0.6%	0.6%	1.2%	0.8%	-0.4%	0.2%
Housing Starts	3,633.6	5,336.8	4,670.7	4,735.2	5,977.0	4,866.8	4,718.1	4,526.3	5,126.4	5,026.7
Percent Change	2.7%	46.9%	-12.5%	1.4%	26.2%	-18.6%	-3.1%	-4.1%	13.3%	-1.9%
Single Family	2,386.7	3,051.0	2,770.0	2,385.5	2,734.4	2,752.2	2,915.2	3,055.1	2,437.8	3,214.7
Percent Change	-3.4%	27.8%	-9.2%	-13.9%	14.6%	0.6%	5.9%	4.8%	-20.2%	31.9%
Multi Family	1,246.8	2,285.8	1,900.7	2,349.8	3,242.6	2,114.6	1,802.9	1,471.2	2,688.6	1,811.9
Percent Change	16.6%	83.3%	-16.8%	23.6%	38.0%	-34.8%	-14.7%	-18.4%	82.7%	-32.6%
New Car Registrations	152.0	161.7	175.0	176.3	182.4	179.1	173.4	169.0	147.9	171.1
Percent Change	2.7%	6.4%	8.2%	0.7%	3.4%	-1.8%	-3.2%	-2.5%	-12.5%	15.7%

Note: Housing starts are expressed in whole numbers, not thousands

MAJOR CONNECTICUT ECONOMIC INDICATORS - STATE FISCAL YEAR BASIS

TABLE 11
ANALYTICS

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Wages/Total Income	49.5%	51.1%	51.6%	51.1%	50.8%	50.7%	50.7%	50.5%	49.9%	49.1%
Other Labor Income /Total Income	11.1%	11.4%	11.5%	11.3%	11.4%	11.4%	11.4%	11.3%	11.0%	10.8%
Social Insurance /Total Income	6.3%	7.0%	7.6%	7.4%	7.4%	7.5%	7.6%	7.6%	7.5%	7.4%
Transfer Payments /Total Income	12.8%	13.0%	13.1%	13.0%	13.2%	13.2%	13.2%	13.5%	15.7%	17.8%
Proprietor's Income /Total Income	14.3%	12.3%	11.6%	11.3%	11.1%	11.4%	11.2%	10.6%	10.0%	10.1%
Property Income /Total Income	18.6%	19.2%	19.8%	20.8%	21.0%	21.0%	21.1%	21.7%	21.0%	19.6%
Average Wages (Thousands of Dollars)	68.51	70.20	70.82	72.71	73.25	74.16	76.77	79.35	83.84	89.91
Average Mfg. Wages (Thousands of Dollars)	87.81	91.16	92.50	91.49	88.90	89.62	92.93	95.70	98.18	105.65
Manufacturing Share of Nonfarm Employment	9.9%	9.7%	9.5%	9.3%	9.3%	9.3%	9.4%	9.5%	9.7%	9.7%
Residential Employment /Total Nonfarm Employment	1.063	1.037	1.044	1.061	1.058	1.071	1.072	1.084	1.106	1.054

MAJOR CONNECTICUT REGIONAL ECONOMIC INDICATORS - CALENDAR YEAR BASIS

TABLE 12
PERSONAL INCOME (MILLIONS-Seasonally Adjusted Annual Rate)

BRIDGEPORT-STAMFORD-NORWALK

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Personal Income	96,326.4	96,701.4	91,251.3	96,772.1	98,824.3	101,316.1	104,278.6	110,388.8	111,924.6	113,318.8
Percent Change	1.0%	0.4%	-5.6%	6.1%	2.1%	2.5%	2.9%	5.9%	1.4%	1.2%
Total Wages	35,507.9	36,230.9	36,293.0	37,405.7	38,602.1	38,734.4	38,316.2	38,728.2	39,645.5	39,481.7
Percent Change	4.6%	2.0%	0.2%	3.1%	3.2%	0.3%	-1.1%	1.1%	2.4%	-0.4%

HARTFORD-WEST HARTFORD-EAST HARTFORD

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Personal Income	63,393.4	65,324.4	65,696.9	68,501.9	70,620.4	71,647.1	72,848.8	75,358.4	77,225.8	80,913.1
Percent Change	4.1%	3.0%	0.6%	4.3%	3.1%	1.5%	1.7%	3.4%	2.5%	4.8%
Total Wages	35,302.7	35,672.5	34,358.5	34,739.7	36,201.6	37,426.9	38,180.5	39,789.4	41,119.4	41,308.9
Percent Change	0.0%	1.0%	-3.7%	1.1%	4.2%	3.4%	2.0%	4.2%	3.3%	0.5%

NEW HAVEN-MILFORD

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Personal Income	39,788.1	40,903.6	41,158.4	42,655.8	43,850.4	44,435.5	45,062.7	46,934.5	48,418.4	51,194.9
Percent Change	3.8%	2.8%	0.6%	3.6%	2.8%	1.3%	1.4%	4.2%	3.2%	5.7%
Total Wages	18,868.8	19,491.9	19,857.4	20,420.5	21,049.5	21,423.0	21,924.4	22,331.8	23,060.0	23,492.0
Percent Change	2.6%	3.3%	1.9%	2.8%	3.1%	1.8%	2.3%	1.9%	3.3%	1.9%

NEW LONDON-NORWICH, CT-RI

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Personal Income	13,052.1	13,351.8	13,284.7	13,684.3	14,302.7	14,586.4	14,875.2	15,108.2	15,448.5	16,216.3
Percent Change	3.6%	2.3%	-0.5%	3.0%	4.5%	2.0%	2.0%	1.6%	2.3%	5.0%
Total Wages	6,736.9	6,793.2	6,755.4	6,882.1	6,968.8	7,232.3	7,481.8	7,530.3	7,624.1	7,455.2
Percent Change	1.3%	0.8%	-0.6%	1.9%	1.3%	3.8%	3.4%	0.6%	1.2%	-2.2%