FY 2024 – FY 2025 Biennium Economic Report of the Governor

This publication, required by Section 4-74a of the Connecticut General Statutes, is prepared by the Office of Policy and Management.

Office of the Secretary

Jeffrey R. Beckham, Secretary
Paul E. Potamianos, Deputy Secretary

Budget and Financial Management Division

Gregory Messner, Executive Budget Officer

Economics, Capital, and Revenue Forecasting

Thomas J. Fiore, Assistant Executive Budget Officer
Brian Tassinari, Section Director
Daniel Innes, Budget Specialist
Katherine Pasutto, Budget Analyst
Michael Proscino, Budget Analyst
Mary Fattouh, Budget Intern

For information on data or analysis provided in this document or any questions or comments, please contact the Budget and Financial Management Division at (860) 418-6265.

February 8, 2023
Office of Policy and Management
450 Capitol Avenue
Hartford, Connecticut 06106

TABLE OF CONTENTS

ECONOMIC ASSUMPTIONS OF THE GOVERNOR'S BUDGET	<u>Page</u> i-iv i
Economic Assumptions of the Governor's Budget	iii
REVENUE FORECAST	vi-xi
IMPACT OF THE GOVERNOR'S BUDGET ON THE STATE'S ECONOMY	xii-xviii
INTRODUCTION	1
EXECUTIVE SUMMARY	2-4
GENERAL CHARACTERISTICS	5-19
Demographics	5
Housing	13
EMPLOYMENT PROFILE	20-31
Employment Estimates	20
Nonagricultural Employment	21
Manufacturing Employment	24
Nonmanufacturing EmploymentUnemployment Rate	27 31
SECTOR ANALYSIS	32-67
Energy	32
Gasoline Consumption and Automotive Fuel Economy	41
Export Sector	44
Connecticut's Defense Industry	51
Retail Trade in Connecticut	57
Nonfinancial Debt	60
Savings by U.S. Households	65
PERFORMANCE INDICATORS	68-82
Gross Product	68
Productivity	71
Total Personal Income	72
Per Capita Personal Income	75
Inflation and Its Effect On Personal Income	77
Real Personal Income	78
Real Per Capita Personal Income	79
Cost of Living Index	81
MAJOR REVENUE RAISING TAXES	83-100
Personal Income Tax	84
Sales and Use Tax	89
Corporation Business Tax	92
Motor Fuels Tax	94
Other Sources	96
ADDENDIV	A1 A16

APPENDIX

		<u>Page</u>
Conn	ecticut Resident Population Census Counts	A1-A4
Majo	r U.S. and Connecticut Economic Indicators	A5-A16
1.	U.S. Economic Variables	A5
2.	U.S. Personal Income	A6
3.	U.S. Personal Income and its Disposition	A7
4.	U.S. Employment and the Labor Force	A8
5.	U.S. Consumer Price Indices	A9
6.	Connecticut Personal Income	A10
7.	Connecticut Deflated Personal Income	A11
8.	Connecticut Manufacturing Employment	A12
9.	Connecticut Nonmanufacturing Employment	A13
10.	Connecticut Labor Force & Other Economic Indicators	A14
11.	Connecticut Analytics	A15
12.	Major Connecticut Regional Economic Indicators- Personal Income	A16

ECONOMIC ASSUMPTIONS OF THE GOVERNOR'S BUDGET

The United States Economy

For the nation, 2022 was expected to be another strong year of continued recovery from the pandemic and in general it was, with real output rising by 2.1%, payrolls expanding by 4.5 million jobs, and the unemployment rate falling to 3.5%. However, other events served to detract from this mostly positive track record as inflation, war, rising interest rates, and declining financial markets fostered concern about an impending economic slow-down. Somewhat surprisingly, the economy has remained resilient in the face of these issues, albeit the economic pace is moderating.

One of the biggest pressures on the economy in 2022 was unprecedentedly high inflation. Prior to 2022, rising inflation rates were thought to be transitory as the economy began to reopen after COVID-19induced restrictions were lifted and the surfeit of various government stimulus programs wound-down. The costs of goods and services were expected to increase coming out of the pandemic, but not increase as dramatically or for as long as was experienced. The combination of supply chain issues and significant increases in certain sectors of the economy helped fuel high costs and resulted in increasing inflation. The year started off with an inflation rate of approximately 7.5% as recorded by the 12-month change from January 2021 to January 2022. Inflation peaked at 9.1% in June 2022, the largest 12-month increase in more than 40 years since November 1981. Since June 2022, inflation began to recede slowly, falling to 6.5% by December 2022. During this time, all eyes were on the Federal Reserve to see how they were going to respond to this dramatic increase in prices. The interest rate on federal funds was near zero percent from March 2020 to March 2022 as the Federal Reserve aggressively sought to combat the deflationary aspects of the COVID-19 pandemic. However, recognizing the overwhelming inflationary pressures in the economy, the Federal Reserve made its first hike in interest rates in March 2022 with an increase in the target rate by 0.25 percentage points to 0.5%. Two months later, the Federal Reserve increased interest rates by 0.5 percentage points to 1.00% in May 2022, the largest increase since May 2000, and by 0.75 percentage points in June 2022, the largest interest rate increase since 1994. By the end of 2022, the Federal Reserve had increased interest rates a total of seven times during the year, bringing the target interest rate to 4.5%, the highest since 2007. The Federal Reserve has indicated that rates could still go higher and any reductions in the rate are unlikely until at least 2024.

On February 24, 2022, Russia announced a special military operation with the goal of conquering Ukraine. As a result of the still-ongoing war, oil prices began to rise, and the stock market plummeted. By the beginning of March 2022, the price for a barrel of oil had increased to over \$120 from the \$80-\$90 range in the beginning of February 2022. Oil prices remained in the \$100+ dollar range through the end of July 2022, a level not seen since 2014, driving up the cost for gasoline and home heating oil. In response to the war, President Biden announced new and stronger sanctions that would 'impose severe cost on the Russian economy, both immediately and over time.' In addition, the United States has also provided billions of dollars of military assistance to Ukraine since Russian invaded.

In response to inflation levels that have not been experienced in years, President Biden was able to pass and sign the Inflation Reduction Act. Major components of this Act included the creation of a 15% corporate minimum tax rate on firms with at least \$1 billion of income. Also included with this new tax rate was a 1% excise tax on stock buybacks by corporations. The Act also included a subsidy extension through 2025 under the Affordable Care Act which essentially lowers health insurance premiums, without which approximately 3 million Americans could have lost their health insurance by the end of 2022. In addition, the Act made energy security and climate change investments by including tax credits to offset

home energy investments and tax credits to help reduce carbon emissions. Lastly, this Act also invests approximately \$80 billion in the Internal Revenue Service. These additional funds should allow more and in-depth audits, greater tax enforcement, and additional personnel over the next 10 years with the goal of better collections on existing taxes.

The U.S. stock market had a poor year falling by 19.4% as measured by the S&P 500 in calendar 2022. At its low point in October of 2022, the market had been down by 24.9%. The bond market also fared poorly as rising interest rates decreased the value of fixed income portfolios. Other asset classes were also repriced due to the new interest rate realities and some of the previously frothier end of the markets, such as cryptocurrencies, saw dramatic declines in prices and bankruptcies.

In 2022, the housing market cooled off slightly compared to 2021, but still remained relatively hot. The actions of the Federal Reserve did not bode well for mortgage interest rates. Thirty-year mortgage interest rates averaged about 5.34% in 2022 compared to about 2.96% in 2021, an 80.7% increase. In the last week of 2022, 30-year mortgage interest rates were about 6.42% after reaching a peak in October 2022 of 7.08%, a level not seen since April 2002. The median sale price of a home in December 2022 was approximately \$388,100, up 1.2% compared to December 2021. About 1.3 million homes were on the market in December 2022 which was about a 13.8% increase compared to December 2021 due to a slowdown in sales. About 23.0% of homes were sold above the list price which was down from 42.9% in December 2021 and the median number of days that a house would spend on the market was up about 10 days to 67 days in December 2022 compared to 57 days in December 2021.

The Connecticut Economy

The economy in Connecticut proved to be strong in FY 2022. Real Gross State Product increased by 4.0% in FY 2022 after contracting by 3.7% and 0.2% in FY 2020 and FY 2021, respectively. The state's strong and still improving economy did not go unnoticed by credit rating agencies. In 2021, the state received credit rating upgrades from three of its four rating agencies: Fitch Ratings, Kroll Bond Rating Agency, and Moody's Investor Service. In 2022, the state received an upgraded rating from the last credit rating agency—S&P Global Ratings—for both General Obligation (GO) bonds and Special Tax Obligation (STO) bonds.

Continued economic development initiatives in the state appear to be resulting in positive outcomes. After many years of net out-migration decreasing Connecticut's population, the state is starting to see improvement. In the last 10 fiscal years from FY 2013 to FY 2022, the first 8 years experienced net out-migration. Fast forward to more recently, the state experienced net in-migration in FY 2021 and FY 2022. The migration trends moving forward will continue to be monitored. In FY 2022, Connecticut attained a new high for population of approximately 3,627,600 people meaning people are not only staying here, but they are moving here as well which is beneficial to the state's economy.

The real estate market in the state has been similar to the market for the nation as a whole; while it is showing signs of cooling, it is still a strong market. Prices for homes are higher and they are spending significantly less time on the market than they were a few years ago. In 2019, the median sale price of a single-family home in Connecticut was roughly \$270,000. In 2022, that number increased by 38.9% to approximately \$375,000. Comparatively, the median days on market has decreased by 68.5% from 54 days in 2019 to 17 days in 2022. In contrast, listings are down by about 17.9% in 2022 compared to 2021. One reason for this is the increase in mortgage interest rates. Mortgage rates reached a recent low point in January 2021 of 2.65% before rapidly increasing to a recent high of 7.08% in November 2022.

At the peak of the pandemic, Connecticut had lost approximately 17.0% of its workforce, or roughly 289,400 jobs between February and April of 2020. Since April of 2020, the state has regained about 89.3% – or about 258,300 – of the jobs lost as of December 2022 data. This level of employment in the state still remains about 3.1% below the levels experienced prior to the 2008 Great Recession. From February to May of 2020, the state's unemployment rate grew from 3.4 % to 11.4%, but has since fallen to 4.2% as of December 2022 employment data. For comparison, during the 2008 Great Recession, the highest that the unemployment rate reached was about 9.7% in March of 2010. 2022 was a great year for continued employment recovery from the pandemic as jobs were added in 10 of the 12 months, netting to an approximate total 32,100 jobs added for the entire calendar year. Although employment appears to show continued improvement, the labor market is still tight with many job openings and a labor shortage. It is expected that this will continue into 2023.

Despite the onset of the COVID-19 pandemic and the state's recovery so far, 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. FY 2022 ended with a surplus of \$1,261.3 million, the largest surplus experienced in state history. This does not include the volatility cap transfer of \$3,047.5 million which was transferred to the Budget Reserve Fund, bringing the balance to 33.6% of total expenditures in the ensuing fiscal year. Combined, the state surplus for FY 2022 was \$4,308.8 million. For the third time in Connecticut's history—and for the third 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, \$1,618.3 million at the end of FY 2021, and \$4,107.6 million at the end of FY 2022) will be transferred to reduce the state's long-term unfunded liabilities, resulting in hundreds of millions of dollars in annual savings that could be spent in other areas of the budget. The good news continues into FY 2023, as a surplus of \$1,342.7 million and a volatility cap transfer of \$1,847.5 million are projected by fiscal year-end as of January 20, 2023 estimates. The adopted FY 2023 budget assumed a surplus of only \$299.0 million.

Current projections continue to show economic and fiscal improvement in 2023. As state revenues have exceeded targets over the last several years, the Governor is proposing a tax package that includes Personal Income Tax cuts among other things. These cuts come at an opportune time when elevated inflation, rising electricity costs, and thoughts of a recession may impact the nation.

Economic Assumptions of the Governor's Budget

The U.S. economy is projected to grow 1.1% in FY 2023 and 0.9% in FY 2024. Growth in the U.S. economy is expected to increase slightly to the 2.0% range in FY 2025 and FY 2026. Inflation had been increasing significantly in the middle of FY 2022, but over the last few months it has begun to slow. FY 2022 ended with an inflation rate of 7.2% and is projected to slow by one percentage point to 6.2% in FY 2023. In FY 2024, inflation is expected to drop to 2.7% before leveling out in the 1.9% to 2.1% range for FY 2025 and FY 2026. The U.S. unemployment rate is projected to decline to 3.9% in FY 2023 from 4.2% in FY 2022. In FY 2024, the US unemployment rate is expected to increase to 5.0% due to slowing economic growth brought about by rising interest rates and level off in the 4.5% range for FY 2025 and FY 2026. Housing starts are projected to drop-off dramatically in FY 2023 by an estimated 19.8%, after increasing by 6.8% in FY 2022 and 17.8% in FY 2021. In the out-years, housing starts will continue to decline in the nation by 10.8% in FY 2024 before increasing by 13.1% and 4.3% in FY 2025 and FY 2026, respectively. New vehicle sales are projected to increase by 3.9% in FY 2023 and 11.4% in FY 2024 as dealer inventories are rebuilt

in the aftermath of the supply chain disruptions, and slow to a 3.5% increase in FY 2025 and 1.7% in FY 2026.

Connecticut's real gross state product GSP is expected to close FY 2023 with growth of 0.6%, and to grow by 0.4% in FY 2024 before leveling off in the 1.0% range in FY 2025 and FY 2026. Real GSP made a full recovery in calendar year 2022 from the pandemic-induced economic slowdown where real GSP dropped 12.3% between quarter four of calendar year 2019 and quarter two of calendar year 2020. Personal income is projected to increase by 3.6% by the end of FY 2023 before growing by 4.1% in FY 2024 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 calendar year 2020. Wages and salaries in the state are projected to increase by 4.9% in FY 2023 before leveling off in the 4.0% range in the outyears.

Connecticut's employment growth is projected to increase by 2.0% in FY 2023 and decrease by about 0.6% in FY 2024, similar to the nation. Employment growth in the outyears is projected to be relatively flat. Fiscal Year 2026 levels of employment will be 3.3% below the previous peak in FY 2008. The state's unemployment rate is projected to be 4.4% by the end of FY 2023 and increase in tandem with the nation to 5.6% in FY 2024 as economic growth cools in the wake of interest rate increases. The rate is expected to decrease in FY 2025 and FY 2026 at 5.1% and 4.8%, respectively.

Economic Forecast Caveats

Many factors could contribute to a deviation from the above projections, including: the trajectory of inflationary pressures and any additional policy responses from the Federal Reserve, the status of the war in Europe, labor shortages in various parts of the economy, and the political stalemate in Washington over the looming increase to the nation's debt limit.

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

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

		eal GDP of Dollars)		eal GSP of Dollars)		using Starts illions)	CT Hous	ing Starts
	-	-	-	-	•	•		
<u>Fiscal Year</u>	<u>Value</u>	<u>Growth</u>	<u>Value</u>	<u>Growth</u>	<u>Value</u>	<u>Growth</u>	<u>Value</u>	<u>Growth</u>
2022	19,875	4.0%	250.9	4.0%	1.7	6.8%	3,910.8	-21.9%
2023	20,087	1.1%	252.4	0.6%	1.3	-19.8%	4,467.4	14.2%
2024	20,261	0.9%	253.5	0.4%	1.2	-10.8%	3,912.6	-12.4%
2025	20,672	2.0%	256.6	1.2%	1.3	13.1%	4,649.3	18.8%
2026	21,045	1.8%	258.9	0.9%	1.4	4.3%	5,209.3	12.0%
	U.S. Em	ployment	CT Emp	loyment	U.S. Une	mployment	CT Unem	ployment
		oloyment lions)	•	loyment sands)		mployment ate		nployment ate
Fiscal Year		•	•	•				
Fiscal Year 2022	(Mil	lions)	(Thou	sands)	R	ate	R	ate
	(Mil <u>Value</u>	lions) <u>Growth</u>	(Thou <u>Value</u>	sands) <u>Growth</u>	R <u>Value</u>	ate <u>Growth</u>	R: <u>Value</u>	ate <u>Growth</u>
2022	(Mil <u>Value</u> 149.4	lions) Growth 4.5%	(Thou <u>Value</u> 1,637.5	sands) Growth 3.4%	R <u>Value</u> 4.2%	ate Growth -2.7	Ra <u>Value</u> 5.1%	Growth -2.8
2022 2023	(Mill <u>Value</u> 149.4 153.4	lions) <u>Growth</u> 4.5% 2.7%	(Thou <u>Value</u> 1,637.5 1,670.3	sands) Growth 3.4% 2.0%	Value 4.2% 3.9%	Growth -2.7 -0.3	R: <u>Value</u> 5.1% 4.4%	Growth -2.8 -0.7
2022 2023 2024	(Mill <u>Value</u> 149.4 153.4 152.5	lions) <u>Growth</u> 4.5% 2.7% -0.6%	(Thou <u>Value</u> 1,637.5 1,670.3 1,660.2	3.4% 2.0% -0.6%	Value 4.2% 3.9% 5.0%	Growth -2.7 -0.3 1.1	Ray Value 5.1% 4.4% 5.6%	Growth -2.8 -0.7 1.2
2022 2023 2024 2025	(Mill <u>Value</u> 149.4 153.4 152.5 153.2	lions) <u>Growth</u> 4.5% 2.7% -0.6% 0.5%	(Thou <u>Value</u> 1,637.5 1,670.3 1,660.2 1,660.2	sands) <u>Growth</u> 3.4% 2.0% -0.6% 0.0%	Value 4.2% 3.9% 5.0% 4.6%	ate Growth -2.7 -0.3 1.1 -0.4	Ravial Ravia Ravial Ravial Ravial Ravia Ravial Ravial Ravial Ravial Ravial Ravial Ravial Ravial Ravi	Growth -2.8 -0.7 1.2 -0.4

	Consumer Price Index		U.S. New Vehicle Sales		CT Personal Income	
			(Mi	illions)	(Millions of Dollars)	
Fiscal Year	<u>Value</u>	<u>Growth</u>	<u>Value</u>	<u>Growth</u>	<u>Value</u>	<u>Growth</u>
2022	282.0	7.2%	13.4	-17.6%	301,863.4	3.1%
2023	299.4	6.2%	14.0	3.9%	312,814.4	3.6%
2024	307.6	2.7%	15.6	11.3%	325,578.2	4.1%
2025	313.5	1.9%	16.1	3.5%	339,687.7	4.3%
2026	320.1	2.1%	16.4	1.7%	353,540.7	4.1%

REVENUE FORECAST

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

		,	,,,,							
					F	Projected				
						Revenue	Pi	roposed		Net
	Actua	I	Estimated			Current	R	evenue	F	Projected
	Revenu	ie	Revenue			Rates	C	hanges		Revenue
<u>Taxes</u>	FY 202	2	FY 2023			FY 2024	<u> </u>	Y 2024		FY 2024
PIT - Withholding	\$ 7,88	6.2 \$	8,309.4		\$	8,547.5	\$	(179.6)	\$	8,367.9
PIT – Estimates & Finals	4,24	5.6	3,522.7			3,170.4		(41.0)		3,129.4
Sales & Use Tax	4,81	8.1	5,057.6			5,265.3		-		5,265.3
Corporation Tax	1,40	1.2	1,381.7			1,344.3		77.9		1,422.2
Pass-Through Entity Tax	2,30	7.6	1,957.3			1,761.6		-		1,761.6
Public Service Tax	29	5.7	287.0			294.5		-		294.5
Inheritance & Estate Tax	22	0.2	210.2			178.1		(38.0)		140.1
Insurance Companies Tax	24	1.0	243.1			239.0		-		239.0
Cigarettes Tax	32	6.7	293.1			276.4		-		276.4
Real Estate Conveyance Tax	38	4.5	290.4			287.7		-		287.7
Alcoholic Beverages Tax	7	8.9	78.0			76.4		-		76.4
Admissions & Dues Tax	4	1.0	27.2			25.0		-		25.0
Health Provider Tax	95	5.1	955.7			956.4		-		956.4
Miscellaneous Tax	9	6.7	26.5			45.4		-		45.4
Total Taxes	\$ 23,29	8.4 \$	22,639.9	_	\$	22,468.0	\$	(180.7)	\$	22,287.3
Less Refunds of Tax	(1,66	3.8)	(1,827.4)			(1,889.5)		12.5		(1,877.0)
Less Earned Income Tax Credit		7.4)	(143.8)			(147.0)		(44.6)		(191.6)
Less R&D Credit Exchange	. (5.8)	(7.3)			(7.5)		-		(7.5)
Total - Taxes Less Refunds	\$ 21,48	1.4 \$	20,661.4	_	\$	20,424.0	\$	(212.8)	\$	20,211.2
Other Revenue										
Transfers-Special Revenue	\$ 39	5.0 \$	392.2		\$	403.8	\$	2.0	\$	405.8
Indian Gaming Payments		8.7	259.9		•	263.7		_		263.7
Licenses, Permits, Fees		8.6	327.5			357.0		1.1		358.1
Sales of Commodities		2.8	11.9			15.8		-		15.8
Rents, Fines, Escheats		0.7	163.3			164.7		-		164.7
Investment Income		0.6	185.0			198.9		-		198.9
Miscellaneous		2.8	233.4			238.0		(84.8)		153.2
Less Refunds of Payments		4.7)	(63.8)			(65.7)		-		(65.7)
Total - Other Revenue	\$ 1,47			_	\$	1,576.2	\$	(81.7)	\$	1,494.5
Other Sources										
Federal Grants	\$ 1,93	4.9 \$	2,210.1		\$	1,808.4	\$	1.0	Ś	1,809.4
Transfer From Tobacco Settlement	. ,	6.2	110.1		7	108.4	Υ	6.0	7	114.4
Transfers From/(To) Other Funds		1.3	266.1	*		(168.6)		26.6		(142.0)
Transfer to BRF – Volatility Cap	(3,04		(1,847.5)			(1,148.6)		41.0		(1,107.6)
Total - Other Sources		5.1) \$		_	\$	599.6	\$	74.6	\$	674.2
Total - General Fund Revenues	\$ 21,99	0.9 \$	22,909.6		\$	22,599.8	\$	(219.9)	\$	22,379.9
Revenue Cap Deduction	,,,	- Y	-		r	(339.0)	т	3.3	Ŧ	(335.7)
Available Net General Fund Revenues	\$ 21,99	0.9 \$	22,909.6	_	\$	22,260.8	\$	(216.6)	\$	22,044.2
	+,55	Y	,		7	,	Ψ.	(0.0)	~	,- · ··-

^{*}Denotes revenue change impacting fiscal year 2023

Explanation of Changes

Personal Income Tax

Reduce 5% marginal rate to 4.5% and 3% marginal rate to 2%, restore the Pass-through Entity Tax Credit from 87.5% to 93.01%.

Corporation Tax

Maintain 10% Corporation Tax surcharge for income years 2023 through 2025, increase overall Human Capital Investment Tax Credit from 5% to 10% and the childcare component to 25% - child care component may be claimed in an amount up to 70% of tax liability.

Inheritance and Estate

Increase timeline to file estate return from 6 months to 9 months to match federal return timeline.

Refunds of Tax

 $Repeal\ expansion\ of\ Angel\ Investor\ Tax\ Credit\ to\ cannabis-related\ businesses.$

Earned Income Tax Credit

Increase Earned Income Tax Credit from 30.5% to 40%.

Transfers-Special Revenue

Retain iLottery revenue in the General Fund to continue the State's commitment to fund debt-free college via the Pledge to Advance CT (PACT)

License, Permits, and Fees

Dept. of Consumer Protection drug prescription monitoring program.

Miscellaneous Revenue

Restructure higher education fringe benefits, Office of Health Strategy staff to monitor certificate of need compliance.

Federal Grants

Dept. of Social Services quality assurance efforts.

Transfers-Other Funds

Eliminate the use of ARPA for revenue replacement in FY 2023, suspend GAAP deficit payment, reduce Tobacco & Health Trust Fund transfer, transfers to Municipal Revenue Sharing Fund.

FY 2025 FY 2025 FY 2025 8,897.0 (404.2)8,492.8 3,297.2 3,205.6 (91.6)5,395.2 5,395.2 1,386.4 46.5 1,432.9 1,832.1 1,832.1 296.7 296.7 182.2 182.2 242.6 242.6 262.0 262.0 292.6 292.6 76.8 76.8 25.3 25.3 959.7 959.7 67.8 67.8 23,213.6 (449.3)22,764.3 (1,981.3)15.0 (1,966.3)(196.2)(151.6)(44.6)(7.8)(7.8)21,072.9 (478.9)\$ 20,594.0 \$ 408.9 \$ 3.0 411.9 266.0 266.0 331.2 332.3 1.1 17.8 17.8 166.8 166.8 201.7 201.7 (84.8)158.0 242.8 (67.1)(67.1)(80.7)1.568.1 \$ 1,487.4 \$ \$ 1,825.2 1.1 1,826.3 106.7 6.0 112.7 (168.6)37.5 (131.1)(1,096.0) (1,187.6)91.6 136.2 575.7 711.9 23,216.7 \$ (423.4)\$ 22,793.3 (406.3)(398.9)

(416.0)

22,394.4

Proposed

Revenue Changes Net

Projected

Revenue

Projected

Revenue

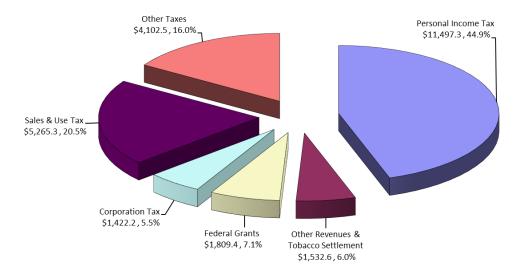
Current

Rates

22,810.4

GENERAL FUND REVENUES FY 2024 (In Millions)

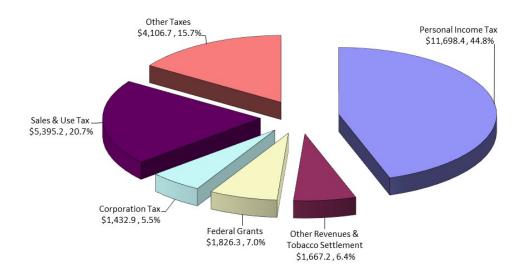
TOTAL \$ 22,379.9 MILLION*



^{*} Refunds are estimated at \$1,877.0 million in, R&D Credit Exchange is estimated at \$7.5 million, Earned Income Tax Credit is estimated at \$191.6 million, Refunds of Payments are estimated at \$65.7 million, and Transfers to the Budget Reserve Fund are estimated to be \$1,107.6 million. This chart does not include the revenue cap deduction of \$335.7 million.

General Fund Revenues FY 2025 (In Millions)

TOTAL \$ 22,793.3 MILLION*



^{*} Refunds are estimated at \$1,966.3 million, R&D Credit Exchange is estimated at \$7.8 million, Earned Income Tax Credit is estimated at \$196.2 million, Refunds of Payments are estimated at \$67.1 million, and Transfers to the Budget Reserve Fund are estimated to be \$1,096.0 million. This chart does not include the revenue cap deduction of \$398.9 million.

This page has been intentionally left blank.

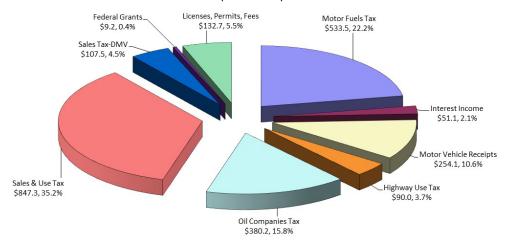
TABLE A-3

STATE OF CONNECTICUT SPECIAL TRANSPORTATION FUND REVENUES (In Millions)

			Projected		
			Revenue	Proposed	Net
	Actual	Estimated	Current	Revenue	Projected
	Revenue	Revenue	Rates	Changes	Revenue
<u>Taxes</u>	FY 2022	FY 2023	FY 2024	FY 2024	FY 2024
Motor Fuels Tax	\$ 389.8	\$ 254.4	\$ 533.5	\$ -	\$ 533.5
Oil Companies Tax	387.1	402.4	380.2	-	380.2
Sales and Use Tax	703.4	820.1	847.3	-	847.3
Sales Tax - DMV	122.1	117.3	107.5	-	107.5
Highway Use Tax		45.0	90.0		90.0
Total Taxes	\$ 1,602.3	\$ 1,639.2	\$ 1,958.5	\$ -	\$ 1,958.5
Less Refunds of Taxes	(16.2)	(16.2)	(16.9)	-	(16.9)
Total - Taxes Less Refunds	\$ 1,586.2	\$ 1,623.0	\$ 1,941.6	\$ -	\$ 1,941.6
Other Sources					
Motor Vehicle Receipts	\$ 281.7	\$ 252.8	\$ 254.1	\$ -	\$ 254.1
Licenses, Permits, Fees	126.0	132.1	132.7	-	132.7
Interest Income	5.0	46.6	51.1	-	51.1
Federal Grants	10.9	10.1	9.2	-	9.2
Transfers From/(To) Other Funds	(2.8)	(5.5)	(5.5)	-	(5.5)
Less Refunds of Payments	(6.1)	(6.6)	(3.6)	-	(3.6)
Total - Other Sources	\$ 414.7	\$ 429.5	\$ 438.0	\$ -	\$ 438.0
Total - STF Revenues	\$ 2,000.9	\$ 2,052.5	\$ 2,379.6	\$ -	\$ 2,379.6
Revenue Cap Deduction	-	-	(35.7)	-	(35.7)
Available Net STF Revenue	\$ 2,000.9	\$ 2,052.5	\$ 2,343.9	\$ -	\$ 2,343.9

FISCAL YEAR 2024 - TOTAL \$2,379.6 MILLION*

(In Millions)



^{*} Refunds are estimated at \$20.5 million and Transfers to Other Funds at \$5.5 million. This chart does not include the revenue cap deduction of \$35.7 million.

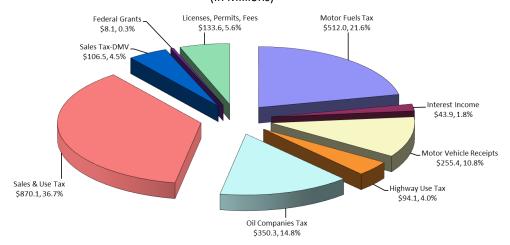
Projected		
Revenue	Proposed	Net
Current	Revenue	Projected
Rates	Changes	Revenue
FY 2025	FY 2025	FY 2025
\$ 512.0	\$ -	\$ 512.0
350.3	-	350.3
870.1	-	870.1
106.5	-	106.5
94.1	-	94.1
\$ 1,933.0	\$ -	\$ 1,933.0
(17.4)	-	(17.4)
\$ 1,915.6	\$ -	\$ 1,915.6
\$ 255.4	\$ -	\$ 255.4
133.6	-	133.6
43.9	-	43.9
8.1	-	8.1
(5.5)	-	(5.5)
(3.7)	-	(3.7)
\$ 431.8	\$ -	\$ 431.8
\$ 2,347.4	\$ -	\$ 2,347.4
(41.1)	,	(41.1)
\$ 2,306.3	\$ -	\$ 2,306.3
2,300.3	- ب	2,300.3

Explanation of Changes

No revenue-related policy changes are being proposed as part of the Governor's FY 2024 - FY 2025 biennial budget.

FISCAL YEAR 2025 - TOTAL \$2,347.4 MILLION*

(In Millions)



^{*} Refunds are estimated at \$21.1 million and Transfer to Other Funds at \$5.5 million. This chart does not include the revenue cap deduction of \$41.1 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 17.5 percent of gross domestic product. The Governor's budget will account for an estimated 6.5 percent of Connecticut's gross state product in FY 2024 and 6.4 percent in FY 2025, and state government's expenditure and revenue actions will inevitably influence the state's economy.

<u>Budgetary Discipline – the Keystone</u>

First and foremost, the Governor's budget proposal maintains budgetary discipline by complying with all Constitutional and statutory caps, creating stability in the state's finances and therefore indirectly in the state's economy. Expenditure growth in all funds remains within the economy's ability to pay as measured by the state's expenditure cap. Indeed, spending in all funds would rise by 3.5 percent in FY 2024 and only 1.8 percent in FY 2025, close to the rate of inflation which is forecast to increase by 2.7 percent in FY 2024 and 1.9 percent in FY 2025.

The Governor's proposal does not rely on one-time revenue, which oftentimes creates balance problems in the outyears. Furthermore, this proposal removes the \$314.9 million in one-time federal ARPA revenue that was used to balance FY 2023 and instead redeploys those dollars to other purposes. The budget also sets aside \$211.7 million of FY 2023 surplus to retire higher-cost debt related to the 2013 GAAP bonds while generating savings in the outyears. For many years, Town Aid Road grants have been bonded, when those funds may at times be used for operating as well as for capital purposes. This budget incorporates that \$60 million program into the operating budget, resulting in outyear debt service savings. As part of the restructuring of municipal aid grants by bringing them on budget, the Governor's proposal would subject those appropriations to the discipline of the state's expenditure cap as are all other appropriated funds. Similarly, cannabis-related expenditures will be brought on budget and appropriated in two distinct funds.

The state's rebuilt Budget Reserve Fund is projected to maintain its fifteen percent level over the biennium to serve as a bulwark against any economic downturn and the havoc it can wreak on the state's finances, and by extension the state's economy. The state's required pension contributions are fully funded under this proposal, and if current revenue projections hold, additional dollars will flow to those funds via the state's volatility cap, resulting in significant budgetary savings in the outyears and a reduction in the state's long-term liabilities.

Over the past four years, Governor Lamont reduced GO bond allocations by 26.8 percent compared to the average of the prior eight years. As a result, lower actual GO bond fund spending has begun bending the cost curve, even as debt service continues to rise due to the actions of prior administrations. According to the Office of Policy and Management's Fiscal Accountability Report released on November 18, 2022, revenue growth is anticipated to exceed fixed cost growth beginning in FY 2025. This is a result of the priorities of the Lamont administration to address long-term liabilities, including debt service.

The recommended budget for the FY 2024-2025 biennium for GO bond debt service continues the Governor's plan to hold annual GO bond issuance to \$1.6 billion, a more than 15 percent reduction in debt issuance compared to the average of the five years prior to his taking office.

An important part of Connecticut's fiscal turnaround has been the fiscal guardrails that were enacted in 2017. The Governor's budget proposal would extend the bond lock that serves as the linchpin for these measures another ten years to better assure budgetary discipline is maintained into the future to the benefit of the state's economy.

Revenue Policy – Tax Cuts

Considering the state's strong financial position, the Governor believes it is time for broad-based tax relief for Connecticut's residents. The magnitude of the tax cuts reflects the Governor's desire to provide meaningful middle class tax relief while maintaining overall budgetary discipline and not jeopardizing the loss of federal stimulus funds. In addition, by targeting relief toward working families and the middle class, these tax cuts should enhance the equity already inherent in Connecticut's progressive tax code; a code which sees those earning \$1 million or more, a mere 0.7 percent of all filers in the state, responsible for approximately 30 percent of our total income tax collections. Finally, these proposed tax cuts build upon an existing track record of more modest tax cuts that have been enacted since the Governor took office.

First, the Governor is proposing to reduce the state's income tax by lowering the 5 percent rate to 4.5 percent and the 3.0 percent rate to 2.0 percent for income year 2024. This is expected to save 1.1 million filers \$440 million annually. The General Fund revenue loss is projected to be \$174.2 million in FY 2024 rising to \$392.2 million in FY 2025. These will be the first income tax rate reductions enacted by the state in almost thirty years.

Second, to assist working families of more modest means, the Governor is proposing to increase the Earned Income Tax Credit (EITC) from 30.5 percent to 40 percent. This is expected to provide approximately 210,000 filers an additional \$44.6 million annually in benefits. This will bring Connecticut's EITC levels to one of the highest in the nation.

Third, to encourage smaller businesses to expand and invest in the state, the Governor is proposing to restore to 93.01 percent the personal income tax credit for pass-through entity taxes (PET) paid to the state. Restoring the credit to its original amount is expected to impact approximately 125,000 business entities, saving owners \$60.0 million annually.

Fourth, to encourage firms to expand their childcare benefits for employees with children, the Governor is proposing to double the existing corporate human capital investment tax credit from 5 percent to 10 percent and for childcare related expenditures to 25 percent. For a modest annual cost of \$3.5 million, both businesses and the state should benefit in reducing the obstacles toward greater workforce participation in the state's labor market.

In sum, the tax relief proposals contained in this budget would total \$543.9 million. These build on a proven track record of previous tax cuts.

Transportation

The federal Infrastructure Investment & Jobs Act (IIJA) presents the opportunity for historic levels of investment in our transportation infrastructure. Governor Lamont has committed to providing necessary resources to ensure Connecticut is in position to support, plan, and administer the many investments offered in the federal infrastructure bill by fully funding 206 IIJA-specific positions within the Department of Transportation.

Transportation continues to make up a significant portion of the state's capital spending, with \$1.3 billion proposed in each of FY 2024 and FY 2025, making up 44.1 percent of the Governor's proposed capital budget for the biennium. Projects like the Northeast Corridor (NEC) Modernization Match Program leverage federal funds to improve and expand the state's transportation infrastructure vital to facilitating economic growth. In total, the state expects to receive over \$4 billion in FY 2024 and FY 2025 in matching federal funds for transportation projects.

The Governor's proposed biennial budget provides significant investments and expansions in public transit. The Governor's investments in bus transit will increase economic opportunity and mobility in some of the most economically distressed parts of the state while also increasing federal transportation formula funding.

In FY 2024 and FY 2025, service enhancements will expand opportunity for transit-dependent and transit-choice riders. Route expansions, informed by the 2022 Department of Transportation Customer Experience Action Plan, will enable riders to rely on bus service for employment seven days a week and provide greater access for second-shift or third-shift jobs.

The Governor's budget also supports rail operations across the state. The proposed budget increases funding on the Hartford and New Haven rail lines, and continues to support workforce and tourism driven demands, meets in-demand schedules, and recognizes declining ridership (New Haven Line at 60 percent of pre-COVID ridership; ShoreLine East at 30 percent of pre-COVID ridership, and Hartford Line ridership of 81 percent of pre-COVID levels).

Housing

According to the National Association of Home Builders, housing's combined contribution, residential investment, and consumption spending on housing services is responsible for between 15-18 percent of U.S. gross domestic product. Additionally, in Connecticut there is a shortage of more than 85,000 rental homes that are both affordable and available for extremely low income renters. The proposed GO capital budget includes \$300.0 million in each year of the biennium for housing projects and programs. This funding will provide an estimated 3,200 additional housing units annually. The Housing Trust Fund and Flexible Housing funding will support the redevelopment of units in the State-Sponsored Housing Portfolio (SSHP). SSHP units typically serve low-income, disabled, or elderly renters. The Governor is also proposing the development of workforce housing. This housing is intended for those earning between 60 percent and 120 percent of the area median income and will ensure our workforce has a place to live in Connecticut. Additionally, of the \$300 million in each year of the biennium, \$50.0 million annually will support approximately 1,250 homebuyers with the purchase of their first home. The Time-To-Own (TTO) program provides first-time homebuyers with forgivable down payment assistance between \$18,750 and \$50,000. This program will retain residents by providing them with the opportunity to own in Connecticut, when they wouldn't have otherwise been able to do so.

Energy and Environment

In addition to investments in public transportation, the Governor's budget works to expand the state's "green economy." It proposes funding nine (9) new positions in the DEEP's Bureau of Energy and Technology Policy to enable the state to compete for federal funding to support significant new investments in transmission to interconnect clean, reliable resources, such as Canadian hydropower and offshore wind, to tap into the billions of dollars of federal tax credits and rebates becoming available for building retrofits and electrification, and to continue to support equitable access to broadband. It also includes \$35 million of capital funds to get the state's vehicle fleet to 50 percent zero-emissions by the start of 2026.

Municipal Aid

This budget proposes to provide transparency and timeliness to the state's municipal aid funding stream using a separate appropriated fund: the Municipal Revenue Sharing Fund (MRSF). This appropriated fund will bring transparency to current off-budget revenue and spending by explicitly providing the public with the estimated fiscal impact of providing this aid. It also authorizes the timely payment of grants by appropriating funds rather than disbursing sales tax revenues when they accrue in the current off-budget Municipal Revenue Sharing Account.

Education

The Governor's budget continues to focus on supporting education and childcare. The budget honors the continued phase in of the Education Cost Sharing grant for K-12 schools. In addition, the budget continues supporting the provision and maintenance of high-quality early care and education in Connecticut by making investments to ensure a sustainable system for families and providers by providing the following investments:

- 1. Funding of \$14.2 million in FY 2024 and \$53.3 million in FY 2025 to support recommended Care4Kids rate increases, which are anticipated to subsidize the care for approximately 17,000 high-need children statewide.
- Approximately \$15.5 million in FY 2025 to increase rates for pre-K slots in the child day care
 contract and School Readiness programs from \$8,924 to \$10,500. These programs will be
 supported with \$15 million in federal funds in FY 2024. These programs are concentrated in
 the neediest communities in the state and the enrolled children must meet certain needs
 driven criteria.
- 3. Funding of \$35 million in ARPA to support enrolling additional children in Care4Kids as the state moves towards a sustainable level of enrollment in the program.

With these investments, state resources available to the Office of Early Childhood to support early education and childcare, a critical component of economic development, will see an increase of approximately \$115 million over the current biennium.

Included in the Governor's capital budget recommendation is \$250.0 million in FY 2025 for school construction projects and \$150.0 million annually for school air quality improvement projects.

In the area of higher education, other important proposals to attract faculty, simplify education funding, and promote a college education include:

- 1. Restructuring fringe benefit charges to make institutions more competitive for research grants and shifting the cost of the state's unfunded legacy costs to the General Fund;
- 2. Combining the University of Connecticut and the University of Connecticut Health Center General Fund block grants into a single grant and agency;
- 3. Stepping down the federal and supplemental funding upon which the state's higher education institutions have relied on in the last few years; and
- 4. Continuing the state's commitment to fund Debt-Free College Pledge to Advance CT (PACT).

Workforce Development

The Governor's budget continues the commitments to develop the state's workforce pipeline by establishing the Office of Workforce Strategy (OWS) as an independently budgeted agency – highlighting the critical role the office plays as the state's dedicated facilitator of strategic planning and operationalizing of workforce focused programs statewide. OWS will continue its work supporting the state's CareerConnect program – including deploying the \$40 million in bond funding provided to the program during the last biennium. OWS will continue to build on its work which focuses on working 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. In addition, the budget provides: (1) \$10 million in ARPA funds for SDE to establish an "Education Workforce Development" grant program to support districts with staffing issues, including addressing the paraprofessional shortage and to provide professional support necessary to address academic recovery, (2) \$10 million in General Fund supports in FY 2024 to the Department of Labor to provide funding for the CT Youth Employment Program, which provides job opportunities and work experiences for economically disadvantaged youth, and (3) \$9 million in General Fund supports in both FY 2024 and FY 2025 to support workforce transportation.

Economic Development

While the Governor's budget continues to invest in the state's manufacturing and bioscience sectors, it also places a renewed emphasis on promoting equitable economic growth. The Community Investment Fund will distribute up to \$175 million of previously authorized capital funds in each year for projects that foster economic development in historically underserved communities across the state and programs like the Small Business Boost Fund will use \$25 million of capital funds in FY 2024 and 2025 to provide subsidized loans of up to \$500,000 to small businesses and nonprofits, focusing on communities that have historically experienced barriers to accessing working capital.

Health and Human Services

Significant investments in Health and Human Services (HHS) primarily target three areas: health care quality, equity, and affordability; gaps in the HHS continuum; and caseload increases.

Health Care Quality, Equity and Affordability

The Governor is recommending \$20 million in ARPA funding to relieve residents struggling with medical debt by partnering with a non-profit organization that buys debt and wipes the slate clean for debtors. This \$20 million could potentially help to eliminate as much as \$2 billion in medical debt for Connecticut's residents. An estimated 20 percent of American households have medical debt, and the burden falls

disproportionately on Black and Latino households. Two-thirds of personal bankruptcies are caused by medical debt.

Pursuant to the Consolidated Appropriations Act, 2023, the enhanced federal Medicaid reimbursement is being phased down through the quarter ending December 31, 2023, in conjunction with the end of the continuous enrollment requirement on March 31, 2023. A number of recommended investments will smooth the unwinding process by minimizing health coverage disruption through no-to-very low-cost options for coverage:

- Covered CT A cost-effective alternative for low-income individuals who earn too much to qualify for Medicaid but not enough to afford coverage through the state's health insurance marketplace, Access Health CT:
- 2. To help minimize coverage disruptions, one-time funding of \$10 million from ARPA will fund a new initiative that pays two months of premiums for individuals with income between 175 percent and 200 percent of the federal poverty level (FPL) who enroll in a benchmark silver plan on Access Health CT (and thus qualify for maximum federal subsidies and out-of-pocket cost-share reduction). This one-time assistance will help smooth the unwinding of the public health emergency by providing coverage on the exchange for individuals with income above the Covered CT income threshold of 175 percent FPL.
- ARPA funding of \$1 million is proposed to target outreach to medically needy individuals at risk
 of losing access to affordable health care because they fail to requalify for Medicaid or enroll in
 other programs;
- 4. \$10 million under ARPA for the community action agency network to administer flexible client support funds that will assist vulnerable and at-risk populations facing immediate economic hardship with basic income assistance and emergency aid; and
- 5. 27 new positions at DSS to strengthen quality assurance efforts. The additional positions will be targeted to maximize return on investments by identifying overpayments, cost avoidance and/or increasing unit efficiencies.

Addressing Gaps in the HHS Continuum

To encourage families to save and help them achieve financial security and economic independence, the Governor's budget includes \$4.0 million over the biennium to double the asset limit under the Temporary Family Assistance (TFA) program from \$3,000 to \$6,000. Funding of \$4.3 million is also added over the biennium to increase the earned income disregard to encourage TFA participants to pursue and continue on career paths that lead to higher-paying jobs. In addition to TFA, the Governor's budget includes funding to double the asset limit under the State Administered General Assistance program from \$250 to \$500 to ensure recipients do not risk exceeding the asset limit due to the issuance of their monthly benefit.

Caseload Increases

The Governor is recommending significant resources to support additional caseload. Over the biennium, funding of \$44 million is recommended for individuals served by the Department of Developmental Services to support day services for over 900 age outs and high school graduates over the biennium and residential placements for over 188 age outs and Money Follows the Person (MFP) transitions over the biennium. Also, \$18.8 million is provided to the Department of Mental Health and Addiction Services (DMHAS) to augment caseload in several programs.

Federal Funds - Maximize

Given our state's relative wealth levels, Connecticut has a long-standing history of being a net-contributor state to the coffers of the United States. The Governor's budget proposes maximize the use of federal dollars to return some of those resources to our state's economy. Oftentimes this requires state matching funds to leverage the most federal funds. On the health and human services side, with the new 1115 Medicaid waiver, the state is able to receive federal reimbursement for the costs of paying premiums and cost-sharing amounts, as well as dental and non-emergency medical transportation services. Additionally, the Governor proposes to use state dollars to further utilize the enhanced Federal Medical Assistance Percentage (FMAP). The enhanced FMAP provided an increased federal match from 50 percent to 56.2 percent during the public health emergency brought on by the COVID pandemic. The enhanced FMAP will be phased out by the end of calendar year 2023, however, the Governor's budget still uses the additional match to receive the most federal support. The Federal Infrastructure Investment & Jobs Act (IIJA) presents the opportunity for historic levels of investment in our transportation infrastructure in the state. The Governor is committed to providing necessary resources to ensure Connecticut is in position to support, plan, and administer the many investments offered in the federal infrastructure bill.

State Workforce – Stability

As one of the largest employers, the Governor's budget proposal assures stability in the state's workforce by fully funding all labor contracts.

<u>Capital</u>

The Governor is prioritizing bond allocations in areas that require the most investment, such as affordable housing, energy efficiency, municipal aid, information technology improvements, economic development, workforce development, and state agency infrastructure improvements. Of the recommended GO capital budget proposal, 69.3 percent of the recommended authorizations are intended for aid to municipalities, aid to private organizations, or aid to non-profits.

The Governor is proposing new GO bond authorizations of \$1,404.3 million in FY 2024, and \$1,656.8 million in FY 2025. Additionally, authorizations approved in prior legislative sessions in the amount of \$371.7 million in FY 2024 and \$344.0 million in FY 2025 will also become effective over the biennium. The Governor is also recommending authorizations of \$1,510.7 million in Special Tax Obligation (STO) bonds in FY 2024 and \$1,493.8 million in FY 2025, to keep our transportation infrastructure in a state of good repair. In addition, the Governor recommends \$25 million in FY 2025 of revenue bonds to fund low interest loans through the Clean Water Fund.

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 2024 – FY 2025 biennial budget reduces the tax burden for many low- and middle-income residents while addressing the fiscal and economic realities facing the state. The proposed FY 2024 – FY 2025 biennial budget maximizes federal aid and stays within the tax-cutting limits outlined by U.S. Treasury. 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.

ECONOMIC REPORT OF THE GOVERNOR

FY 2024 - FY 2025 Biennium



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 2000 and 2010, Connecticut's population grew at a rate of 4.9%, faster than the 3.8% population growth in New England but trailing behind the 9.7% of the U.S. Population growth in the next decade between 2010 and 2020 was 0.9% for Connecticut, 3.8% for New England, and 7.4% for the nation. In FY 2022, Connecticut's population experienced a year over year increase of an estimated 15,300 residents. Connecticut experienced net immigration in the last two fiscal years gaining almost 27,000 residents in FY 2021 and almost 2,000 residents in FY 2022. Net migration occurred between FY 2013 and FY 2020. 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 8.3% higher than the nation, while the proportion of those holding a graduate or professional degree is 38.9% higher than the nation.

Housing

Connecticut's housing starts declined by 21.9% in FY 2022, following a significant increase in FY 2020 when housing starts increased by 12.4% before declining 1.9% in FY 2021. Prior to FY 2020 declines have been driven by the multifamily segment of the housing market. FY 2020 saw a reversal of this trend which saw multi-families outpace single-family housing starts. Since then, FY 2021 and FY 2022 single-family housing starts have outpaced multi-family housing starts. Median existing home prices increased 14.9% in Connecticut in FY 2022, lower than the U.S. as a whole, which saw median home prices increase 15.4%. Thirty year mortgage rates increased to 3.75%, a 29.3% increase over the prior year. Nationally, homeowner equity as a percentage of home values improved to 69.7% in FY 2022, reaching their highest level since the housing collapse in FY 2008.

Employment

Employment in FY 2020 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 2020 Connecticut lost approximately 65,000 non-farm jobs, representing 3.8% decline over the prior year. By the end of FY 2022, Connecticut had only added approximately 4,000 from FY 2020 levels. During the 2008 financial crisis, Connecticut lost approximately 120,000 non-farm jobs between March of 2008 and January of 2010 and still had not reached pre-financial crisis peaks before heading into the COVID-19 pandemic. As of FY 2022, Connecticut remains approximately 76,800 jobs short of employment levels on FY 2008. Employment in the state grew by 3.4% in FY 2022 over FY 2021 levels. Manufacturing remains an important sector of Connecticut's economy, representing 9.6% of all non-farm jobs in FY 2022. Connecticut Manufacturing employment grew by 4,100, or 2.7%, in FY 2022, which was slightly less than New England and the United States which experienced growth of 3.0% and 2.9%, respectively. Nonmanufacturing employment gained approximately 49,800 jobs, or 3.5%, in FY 2022, trailing the U.S.'s growth of 4.6% and New England's growth of 4.7%. The largest growth in nonmanufacturing employment in Connecticut came in the leisure and hospitality industry, which gained 21,400 jobs or a

17.6% increase over the prior year. In FY 2022, Connecticut's unemployment rate averaged 5.1%, worse than the U.S. at 4.2% and New England at 4.4%.

Energy

In calendar year 2019, the United States was the world's largest supplier of oil at 16.6% of the world's total. In 2020 Connecticut consumed 2.83 thousand BTU's per 2012 chained dollar of GDP, making it one of the most energy efficient states relative to output. Overall, Connecticut is 33.9% below the nation's per capita energy consumption and ranks 6th 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 2020 Connecticut's overall energy costs were 42.3% higher than the national average and its electricity prices were 79.8% higher than the national average.

Export Sector

Exports play a crucial role in the economy. The U.S. trade deficit in 2021 was \$846.3 billion, up from \$619.7 billion in 2020. Total trade exports grew 20.0% from 2012 to 2021, while trade imports have grown 29.6% over the same period. Connecticut exports totaled \$14.5 billion and accounted for 5.1% of GSP in 2021. Over the past five years, Connecticut's exports have decreased by an average of 0.4% per year. Transportation equipment, nonelectrical machinery and computer and electronic equipment are Connecticut's largest exporting industries and comprise 58.4% of exports in 2021.

Defense Industry

Prime defense contracts tend to be a leading indicator of Connecticut's economic activity. In federal fiscal year (FFY) 2021, Connecticut contractors were awarded \$17.0 billion in defense related prime contracts, down by 24.1% from the \$22.4 billion awarded in FFY 2020. 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 2021, this average was \$19.2 billion.

Retail Trade

Connecticut's retail trade in FY 2022 totaled \$77.8 billion, a 7.3% increase over FY 2021. Growth in durable sales increased by 1.2% in FY 2022 compared to a growth in non-durable sales of 10.0%. In FY 2022, U.S. e-commerce sales reversed a two-decade trend where retail sales ended up outpacing e-commerce growth. E-commerce increased at an estimated 8.4% compared to 11.8% growth in traditional retail sales. Connecticut retail trade as a percentage of disposable income remained flat at 31.3% in FY 2022 and FY 2021.

Nonfinancial Debt

Total nonfinancial debt grew 240.0% between 2000 and 2021, far outpacing GDP growth of 133.3%. Federal indebtedness grew 518.7%, state and local government debt grew 173.3%, business debts grew 183.1% and household debts grew 146.1%. Connecticut's state government debt outstanding at the end of FY 2021 was \$41.9 billion, up from \$41.4 billion in FY 2020 and \$40.9 billion in FY 2019. Connecticut

per capita state government debt was \$11,637 in FY 2021, far above the fifty state average of \$3,903 in FY 2021.

Gross State Product

In FY 2022, Connecticut's real GSP increased by 4.0% over the prior year to \$250.9 billion in 2012 dollars, similar to the nation which experienced growth of 4.0% but less growth compared to New England which experienced positive growth of 4.5%. Per capita real GSP in Connecticut was 15.7% higher than that of the U.S.

Personal Income

In FY 2022, real personal income in Connecticut decreased 3.8%, compared to a 4.2% decline in the U.S. and a 4.4% decline in New England. In FY 2022, Connecticut possessed the second highest per capita personal income in the nation at \$83,213, 30.2% higher than the national average. Massachusetts took the number one spot with per capita personal income of \$83,276, only \$63 higher than Connecticut.

Economic Forecast

Connecticut's personal income is expected to increase 4.1% in FY 2024 and 4.3% in FY 2025 to \$325.6 billion and \$339.7 billion, respectively. Employment in Connecticut is projected weaken by 0.6% in FY 2024 and have gain or loss of jobs in FY 2025, or a respective -0.6% and 0.0% growth. The unemployment rate is projected to grow from 4.4% in FY 2023 to 5.6% in FY 2024 before improving to 5.1% in FY 2025.

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 744 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 FY 2021 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	l States	New England		Connecticut	
<u>Year</u>	<u>Number</u>	% Growth	<u>Number</u>	% Growth	<u>Number</u>	% 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. Census Bureau

Due to the COVID-19 pandemic, the 2020 Census concluded 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.

In Connecticut, the town with the largest increase in residents between 2010 and 2020 was Stamford. The population increased by 10.5% from 122,643 to 135,470 residents, an increase and of 12,827 people. The town with the next largest increase 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, up 4,425 residents from 2010. In 2020, Stamford became the second most populous town, up from fourth in 2010. 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

	2010	2010	2020	2020	Percent
<u>County</u>	<u>Census</u>	<u>Percent</u>	<u>Census</u>	<u>Percent</u>	<u>Change</u>
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	<u>118,428</u>	<u>3.3</u>	<u>116,418</u>	<u>3.2</u>	<u>(1.7)</u>
TOTAL	3,574,097	100.0	3,605,944	100.0	0.9

Source: U.S. Census Bureau

After three consecutive years of population declines, Connecticut's population increased by about 15,300 people in FY 2022. FY 2022 also marked the second consecutive year that Connecticut's population has grown at a faster rate than New England as a whole. The state's population reached a new high in FY 2022, roughly 14,300 higher than the previous high in 2014/2015 and a 19,000 increase

in population over the past ten fiscal years. The following table shows population for the last ten fiscal years for each of the three geographical areas.

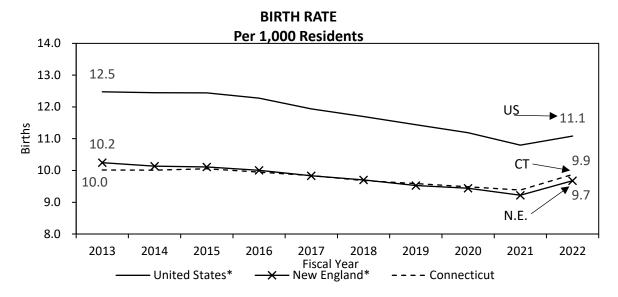
TABLE 3
POPULATION BY FISCAL YEAR
(In Thousands)

United 9	States*	New Er	ngland	Conne	cticut
<u>Population</u>	% Growth	<u>Population</u>	% Growth	<u>Population</u>	% Growth
316,163.3	0.8	14,701.7	0.6	3,608.6	0.2
318,615.9	0.8	14,785.6	0.6	3,613.3	0.1
321,141.6	0.8	14,850.8	0.4	3,613.3	0.0
323,674.4	0.8	14,905.8	0.4	3,609.6	(0.1)
326,050.4	0.7	14,969.2	0.4	3,608.0	(0.0)
328,097.8	0.6	15,031.6	0.4	3,610.3	0.1
329,890.7	0.5	15,076.4	0.3	3,609.1	(0.0)
331,296.7	0.4	15,099.3	0.2	3,604.1	(0.1)
332,004.8	0.2	15,096.6	(0.0)	3,612.3	0.2
332,585.5	0.2	15,133.2	0.2	3,627.6	0.4
	Population 316,163.3 318,615.9 321,141.6 323,674.4 326,050.4 328,097.8 329,890.7 331,296.7 332,004.8	316,163.3 0.8 318,615.9 0.8 321,141.6 0.8 323,674.4 0.8 326,050.4 0.7 328,097.8 0.6 329,890.7 0.5 331,296.7 0.4 332,004.8 0.2	Population% GrowthPopulation316,163.30.814,701.7318,615.90.814,785.6321,141.60.814,850.8323,674.40.814,905.8326,050.40.714,969.2328,097.80.615,031.6329,890.70.515,076.4331,296.70.415,099.3332,004.80.215,096.6	Population % Growth Population % Growth 316,163.3 0.8 14,701.7 0.6 318,615.9 0.8 14,785.6 0.6 321,141.6 0.8 14,850.8 0.4 323,674.4 0.8 14,905.8 0.4 326,050.4 0.7 14,969.2 0.4 328,097.8 0.6 15,031.6 0.4 329,890.7 0.5 15,076.4 0.3 331,296.7 0.4 15,099.3 0.2 332,004.8 0.2 15,096.6 (0.0)	Population % Growth Population % Growth Population 316,163.3 0.8 14,701.7 0.6 3,608.6 318,615.9 0.8 14,785.6 0.6 3,613.3 321,141.6 0.8 14,850.8 0.4 3,613.3 323,674.4 0.8 14,905.8 0.4 3,609.6 326,050.4 0.7 14,969.2 0.4 3,608.0 328,097.8 0.6 15,031.6 0.4 3,610.3 329,890.7 0.5 15,076.4 0.3 3,609.1 331,296.7 0.4 15,099.3 0.2 3,604.1 332,004.8 0.2 15,096.6 (0.0) 3,612.3

^{*}Includes armed forces overseas

Source: U.S. Census Bureau, IHS Markit

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 +0.3 per 1,000 people in FY 2022, down from 1.8 per 1,000 people in FY 2013. This represents a 83.3% decline in the natural change rate over that period. Deaths per 1,000 people in the state was flat in FY 2022 from FY 2021 (9.6 each year), but remained significantly higher than the annual average of 8.5 per 1,000 from FY 2013 – 2019. Births per 1,000 people increased for the first time since FY 2015, going from 9.4 in FY 2021 to 9.9 in FY 2022. Despite this uptick, the Connecticut birth rate is down 14.2% since 2008 and 1.4% over the past 10 fiscal years. The birth rate in Connecticut has been consistent with 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 2013. The following graph shows the rates of birth in the United States, New England, and Connecticut.



*Sum of states' totals Source: U.S. Census Bureau, IHS Markit

DEATH RATE Per 1,000 Residents 10.3 10.5 9.5 Deaths CT 8.4 8.5 8.2 8.3 7.5 2016 2013 2014 2015 2017 2018 2019 2020 2021 2022 Fiscal Year United States* New England* - - - - Connecticut

*Sum of states' totals

Source: U.S. Census Bureau, 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 attributable to the COVID-19 pandemic as people fled densely populated urban locations for more suburban communities. While the influx of new residents slowed significantly in FY 2022, it still marked a second consecutive year of positive net migration. The following graph shows net out-migration for the state in eight of the previous ten fiscal years.

CONNECTICUT NET MIGRATION BY FISCAL YEAR 30,000 26,746 25,000 20,000 15,000 Persons 10,000 5,000 1,934 0 (85)(1,267) (2,060) (5,000)(4,427)(7,263) (8,769) (10,000)(8,601) (10,086) (15,000)2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 Fiscal Year

Source: U.S. Census Bureau, 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 2021 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 2020, the town with the oldest median age was Sharon at 57.8 years and the youngest median age was Mansfield at 21.1 years. Connecticut's major cities have some of the youngest median ages of all the towns in the state. In 2020, New Haven had a median age of 30.7 years, Hartford at 32.9 years, Bridgeport at 34.6 years, and Waterbury and Stamford at 36.4 and 37.9 years, respectively.

TABLE 4
POPULATION BY AGE COHORT
Calendar Year 2021 Population Estimates Program by U.S. Census Bureau

	Conne	cticut	United States		
Age Cohort	<u>Population</u>	% of Total	<u>Population</u>	% of Total	
0-17 Years	727,239	20.2	73,475,278	22.1	
18-24 Years	343,982	9.5	30,225,003	9.1	
25-34 Years	450,863	12.5	45,079,138	13.6	
35-44 Years	451,126	12.5	43,733,561	13.2	
45-54 Years	462,437	12.8	40,673,717	12.3	
55-64 Years	520,778	14.4	42,815,034	12.9	
65+ Years	649,172	<u>18.0</u>	<u>55,892,014</u>	<u>16.8</u>	
Total	3,605,597	100.0	331,893,745	100.0	

Source: U.S. Census Bureau – 2021 American Community Survey

- United States*

(Number of Dependent Population per 100 Provider Population) 36.0 35.5 35.2 35.0 34.5 34.5 34.0 34.3 Persons 33.5 33.3 33.0 32.9 32.5 32.0 32.2 31.5 31.0 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022

DEPENDENCY RATIO

Fiscal Year

--- Connecticut

→ New England*

^{*}Based on sum of states' population data Source: U.S. Census Bureau, IHS Markit

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 2013. The dependency ratio in Connecticut was 34.5 persons per 100 provider population in FY 2022, compared to 35.2 in the United States and 34.3 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 2021

		Connecticut	
		United	as a %
	Connecticut*	States*	of U.S.
Less than high school	8.9%	11.1%	80.2%
High school diploma or equivalent	26.1%	26.5%	98.5%
Some college, no degree	16.6%	20.0%	83.0%
Associate's degree	7.8%	8.7%	89.7%
Bachelor's degree	22.3%	20.6%	108.3%
Graduate or professional degree	18.2%	13.1%	138.9%

^{*}Note, columns may not add to 100.0% due to rounding

Source: U.S. Census Bureau

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 2022 was an estimated 1,444,492 up 1.1% from FY 2021. 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	
<u>Year</u>	<u>Households</u>	% Growth	<u>Households</u>	% Growth	<u>Households</u>	% Growth
2013	118,967.3	0.6	5,729.1	0.1	1,369.4	(0.4)
2014	119,877.2	0.8	5,762.2	0.6	1,376.5	0.5
2015	121,021.2	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	123,176.0	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	127,218.7	0.8	6,038.2	0.4	1,423.3	(0.1)
2021	127,782.5	0.4	6,044.9	0.1	1,428.7	0.4
2022	129,535.4	1.4	6,104.9	1.0	1,444.5	1.1

*Sum of states' data

Source: U.S. Census Bureau, 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 16.5% of national gross domestic product (GDP) in FY 2022. 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 2013 and FY 2022, starts grew at an annual rate of 7.3% in the United States, versus 3.5% in New England and -3.4% in Connecticut. Starts declined in Connecticut in FY 2021 by 1.9% over the prior year and continued to further decline in FY 2022 by 21.9% over FY 2021. By comparison, housing starts in New England declined by 7.1% and the United States increased by 6.8% in FY 2022. 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)

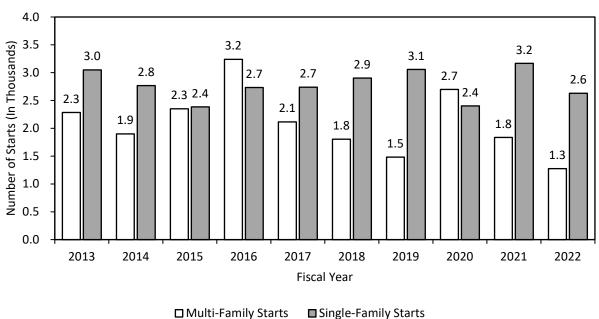
Fiscal	United	l States	New E	ingland	Connecticut	
<u>Year</u>	<u>Number</u>	% Growth	<u>Number</u>	% Growth	<u>Number</u>	% Growth
2013	877.4	28.2	24.5	20.7	5.3	46.8
2014	953.1	8.6	26.4	7.8	4.7	(12.5)
2015	1,053.8	10.6	26.6	1.0	4.7	1.4
2016	1,151.5	9.3	32.7	22.8	6.0	26.2
2017	1,198.8	4.1	32.0	(2.0)	4.9	(18.7)
2018	1,250.0	4.3	32.8	2.3	4.7	(3.0)
2019	1,217.1	(2.6)	30.1	(8.3)	4.5	(3.6)
2020	1,315.0	8.0	30.6	1.8	5.1	12.4
2021	1,548.8	17.8	35.9	17.1	5.0	(1.9)
2022	1,653.8	6.8	33.3	(7.1)	3.9	(21.9)

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

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 typically 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 2021 and FY 2022, the United States saw increases of 0.4% and 1.3%, respectively, whereas Connecticut grew by 0.4% in FY 2021 and 1.1% in FY 2022. Since FY 2013, household formations in Connecticut have grown by approximately 54,000. In comparison to the United States, the annual growth rate from FY 2013 to FY 2021 was 0.6% 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)

	United States	Change in	Connecticut	Change in
Fiscal	Total	Households from	Total	Households from
<u>Year</u>	<u>Households</u>	Previous Year	<u>Households</u>	Previous Year
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	127,096	0.6%	1,423	-0.1%
2021	127,584	0.4%	1,429	0.4%
2022	129,266	1.3%	1,444	1.1%

Source: U.S. Census Bureau, 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 2022, the median sales price for existing homes in the nation was 104.0% above the FY 2013 level, while in Connecticut the median sales price is above the FY 2013 level by 46.9%. 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 2022, the median price of a home in Connecticut was 1.6% higher than the national average compared to FY 2013 when the median price in Connecticut was 41.2% higher. Since the median sales price of housing has been increasing in Connecticut since FY 2014 but since FY 2013 for the nation, 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 128.9 in FY 2022 compared to 162.1 in FY 2021. 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)

	Median	U.S.	Median	CT	CT	U.S.
Fiscal	Price	%	Price	%	as a %	Affordability
<u>Year</u>	<u>U.S.</u>	<u>Change</u>	<u>CT</u>	<u>Change</u>	of U.S.	<u>Index</u>
2013	\$185,758	10.6	\$262,265	(0.2)	141.2	193.8
2014	\$201,750	8.6	\$265,071	1.1	131.4	165.4
2015	\$214,908	6.5	\$265,568	0.2	123.6	167.4
2016	\$227,267	5.8	\$266,979	0.5	117.5	165.7
2017	\$241,058	6.1	\$270,233	1.2	112.1	163.4
2018	\$253,967	5.4	\$277,275	2.6	109.2	154.8
2019	\$264,717	4.2	\$283,705	2.3	107.2	150.9
2020	\$280,158	5.8	\$292,207	3.0	104.3	170.4
2021	\$328,417	17.2	\$335,141	14.7	102.0	162.1
2022	\$379,033	15.4	\$385,174	14.9	101.6	128.9
'13-'22 Change	\$193,275	104.0	\$122,909	46.9		
'13-'22 CAGR*		8.2		4.4		

^{*}Compound annual growth rate

Source: National Association of Realtors, Federal Housing Finance Agency, IHS Markit

Housing Finance

In FY 2022, thirty-year fixed mortgage rates averaged 3.75%, up from 2.90% in FY 2021, 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. A series of interest rate increases by the Federal Reserve starting in March 2022 have resulted in higher mortgage interest rates with a FY 2022 over FY 2021 change of 29.3%.

TABLE 10
30 YEAR FIXED-RATE MORTGAGES

Fiscal	Average	%	Fiscal	Average	%
<u>Year</u>	<u>Rate</u>	<u>Change</u>	<u>Year</u>	<u>Rate</u>	<u>Change</u>
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)
2017	3.86	1.6	*2022	3.75	29.3

Source: Freddie Mac

^{*}Reporting of interest rates by Freddie Mac changed in November 2022 from surveying lenders to applications received by Freddie Mac from lenders.

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 2.2% in FY 2022, which was a slight decrease over the 2.7% delinquency rate registered in FY 2021. FY 2022 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 2022 data shows that the nation only remains about 14.6% below levels that were reached in FY 2005 compared to Connecticut which still remains about 48.7% 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 25.3%, with about 47,200 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 22.4% and 20.4%, 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 thrive from late spring in 2020 well into the summer months of 2021. However, the series of rate increases in CY 2022 by the Federal Reserve to curb inflation have negatively impacted home sales. FY 2022 over FY 2021 showed a decrease of home sales in the United States, New England, and Connecticut by 4.7%, 9.6%, and 10.3%, respectively.

TABLE 11
TOTAL HOME SALES
(In Thousands)

Fiscal	United	l States*	New I	England	Conn	ecticut
<u>Year</u>	<u>Number</u>	% Change	<u>Number</u>	% Change	<u>Number</u>	% Change
2013	4,924.2	11.1	186.4	12.0	39.6	15.3
2014	4,950.8	0.5	188.5	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	5,244.2	(4.2)	201.3	(3.0)	41.8	(0.5)
2020	5,163.3	(1.5)	188.7	(6.3)	37.7	(9.8)
2021	6,218.3	20.4	230.9	22.4	47.2	25.3
2022	5,925.0	(4.7)	208.8	(9.6)	42.4	(10.3)

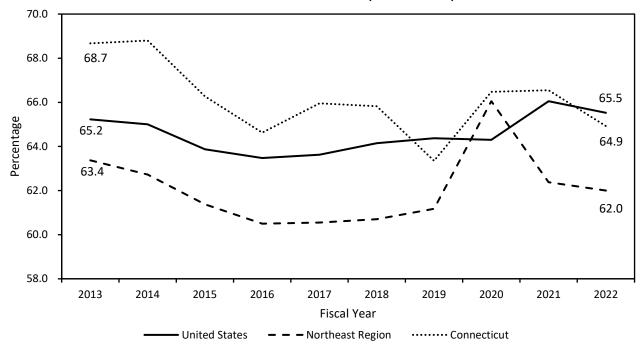
^{*} Sum of States' Home Sales

Source: National Association of Realtors, IHS Markit

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 2013 through FY 2022. 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. FY 2022 has reversed this trend with Connecticut's homeownership rate declining to 64.9% compared to 65.5% for the nation.

HOMEOWNERSHIP RATES IN THE UNITED STATES, NORTHEAST, 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 49.6% in FY 2013 to 69.7% in FY 2022. 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 of Nominal Dollars)

Fiscal	Home	Home	Home
<u>Year</u>	<u>Values</u>	<u>Mortgages</u>	<u>Equity</u>
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	\$28,776.8	\$10,223.7	64.5%
2020	\$30,399.5	\$10,508.4	65.4%
2021	\$33,698.2	\$10,997.8	67.4%
2022	\$38,966.5	\$11,820.8	69.7%

Source: Federal Reserve "Flow of Funds" Table B.101

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 implement a variety of public health measures, including restricting travel and significantly curtailing social interaction (i.e., sporting events, concerts, and other social experiences). This resulted in massive downturns in employment over a short period of time. In FY 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 2023, total jobs and unemployment in Connecticut have not recovered to pre-pandemic levels.

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 increased by 60,000 jobs between FY 2021 and FY 2022. Likewise, the level of establishment employment based on the employer survey response increased by 53,900 jobs in FY 2022. However, both measures remain below their pre-pandemic peak. 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	Residential		Establishment	
<u>Year</u>	Employment	% Growth	Employment	% Growth
2013	1,721.7	(1.54)	1,654.6	0.81
2014	1,747.2	1.48	1,666.2	0.70
2015	1,794.0	2.68	1,681.3	0.91
2016	1,801.5	0.41	1,689.9	0.51
2017	1,833.0	1.75	1,695.2	0.31
2018	1,840.2	0.40	1,696.7	0.09
2019	1,870.7	1.65	1,698.7	0.12
2020	1,838.8	(1.70)	1,633.9	(3.82)
2021	1,715.8	(6.69)	1,583.6	(3.08)
2022	1,775.8	3.50	1,637.5	3.40

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

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)

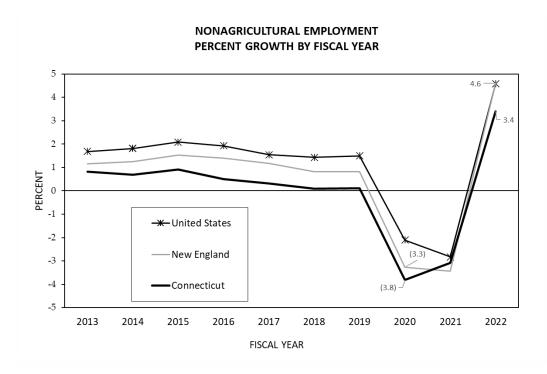
Fiscal	Unite	d States	New I	England	Conn	ecticut
<u>Year</u>	<u>Number</u>	% Growth	<u>Number</u>	% Growth	<u>Number</u>	% Growth
2013	135,451	1.68	7,002	1.16	1,655	0.81
2014	137,899	1.81	7,090	1.26	1,666	0.70
2015	140,780	2.09	7,199	1.53	1,681	0.91
2016	143,500	1.93	7,299	1.40	1,690	0.51
2017	145,723	1.55	7,385	1.17	1,695	0.31
2018	147,810	1.43	7,446	0.82	1,697	0.09
2019	150,019	1.49	7,507	0.83	1,699	0.12
2020	146,855	(2.11)	7,262	(3.26)	1,634	(3.82)
2021	142,708	(2.82)	7,013	(3.44)	1,584	(3.08)
2022	149,240	4.58	7,335	4.60	1,638	3.40

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

In Connecticut, approximately 44.2% 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 64,800 jobs in a single fiscal year. This trend continued in FY 2021 with an additional decrease of 50,300 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 FY 2020. Reversals of shutdowns occurred in FY2021 and, as a result, 53,900 jobs were gained between FY

2021 and FY 2022. Despite these increases, employment has not yet recovered to 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 Department of Labor, IHS Markit

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 2.4% growth between 1990 and 2000, and the negative 4.4% 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 Connecticut. As of 2022, employment growth has increased for both the United States and Connecticut by 1.6% and 0.2%, 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 2022, approximately 90% of the state's workforce was employed in nonmanufacturing jobs, up from roughly 50% in the early 1950.

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

		Growth	Rates	Cumulative G	rowth Rates
<u>Fiscal</u>	<u>Year</u>	United States	Connecticut	United States	Connecticut
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%	123.1%
2020	2022	1.6%	0.2%	241.1%	123.5%

Source: U.S. Bureau of Labor Statistics

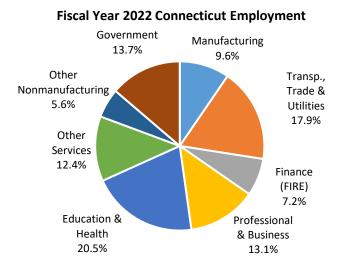
The following table depicts the decrease in the ratio of manufacturing employment to total employment in Connecticut over the last six decades.

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

				Mfg. Employment
Fiscal	Total	Manufacturing	NonMfg.	as a Percentage of
<u>Year</u>	Employment	Employment	Employment	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	1,633.9	158.7	1,475.2	9.7
2021	1,583.6	152.3	1,431.3	9.6
2022	1,637.5	156.4	1,481.1	9.6

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

The chart on the right provides a breakdown of Connecticut employment in FY 2022. As is evident, Connecticut employment is highly concentrated in nonmanufacturing employment sectors with only 9.6% 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 66.9% of those working employed in that classification. Between FY 2021 and FY 2022, the sector which experienced the greatest loss in employment was Finance and Insurance with a 1.1 percentage point decrease.

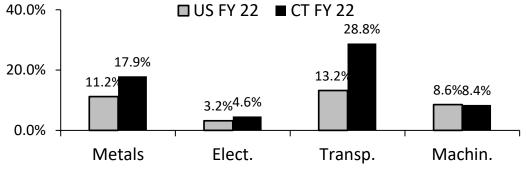


Manufacturing Employment

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 28.8% in FY 2022. Employment in the fabricated metals sector as a percent of total state manufacturing has remained relatively stable over the past decade at approximately 18.4% in FY 2013 and 17.9% in FY 2022. The other major manufacturing sectors, industrial machinery, and electrical equipment and appliances make up approximately 8.4% and 4.6% of the total manufacturing sector respectively in FY 2022. 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)



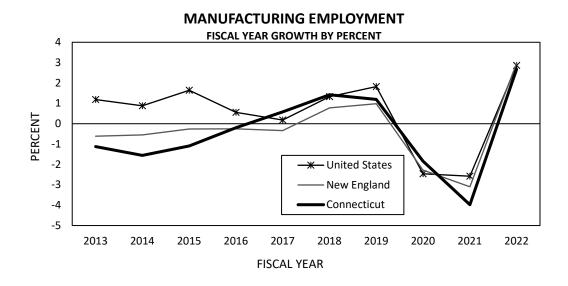
Source: U.S. Bureau of Labor Statistics, Connecticut Department of Labor, IHS Markit

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 2.46% in FY 2020, likely a consequence of the COVID-19 pandemic. The downward trend continued in FY 2021 as the pandemic continued, with a decline of 2.58% in the United States and 3.98% in Connecticut. This trend reversed in FY 2022 with an increase of 2.86% and 2.67% for the United States and Connecticut, respectively.

TABLE 17
MANUFACTURING EMPLOYMENT
(In Thousands)

Fiscal	United	l States	New E	ngland	Conne	ecticut
<u>Year</u>	<u>Number</u>	% Growth	<u>Number</u>	% Growth	<u>Number</u>	% Growth
2013	11,992.5	1.19	597.3	(0.61)	161.1	(1.12)
2014	12,097.7	0.88	594.0	(0.55)	158.6	(1.56)
2015	12,296.8	1.65	592.4	(0.26)	156.9	(1.09)
2016	12,365.1	0.56	590.9	(0.25)	156.6	(0.20)
2017	12,387.5	0.18	588.9	(0.34)	157.5	0.59
2018	12,552.3	1.33	593.5	0.78	159.7	1.42
2019	12,781.6	1.83	599.3	0.98	161.6	1.19
2020	12,467.5	(2.46)	585.6	(2.28)	158.7	(1.84)
2021	12,146.2	(2.58)	567.5	(3.09)	152.3	(3.98)
2022	12,493.8	2.86	584.4	2.98	156.4	2.67

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



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

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 9.6% of all nonfarm payroll jobs, compared with 8.4% in the U.S. and 8.0% in New England through FY 2022. 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 increased in FY 2022 over FY 2021. Connecticut saw an increase of 2.67% compared to the United States' 2.86%, and New England's 2.98% increase. In the past ten years, the only growth to occur within the manufacturing industry in Connecticut occurred in transportation equipment with a 8.2% increase. This gain was offset by reductions in the remaining industry types. The largest decline occurred in electrical equipment and appliances which dropped 27.3%, printing and related support activities which dropped 19.3%, and machinery manufacturing which dropped 10.7%. The percent change from FY 2013 to FY 2022 demonstrates the overall decline in manufacturing employment over the last decade which was exacerbated by the COVID-19 pandemic, and has recovered by 2.7% overall between FY 2021 and FY 2022.

TABLE 18
CONNECTICUT MANUFACTURING EMPLOYMENT BY INDUSTRY
(In Thousands)

	FY	FY	FY	2021-2022	2013-2022
<u>Industry</u>	<u>2013</u>	<u>2021</u>	<u>2022</u>	% Change	% change
Transportation Equipment	41.8	45.2	45.1	(0.2)	8.2
Fabricated Metal Products	29.7	27.3	28.1	2.8	(7.9)
Electrical Equipment and Appliances	9.7	7.1	7.2	2.2	(27.3)
Chemicals	8.0	7.7	8.0	4.2	(4.6)
Printing and Related Support Activities	5.3	4.2	4.6	7.2	(19.3)
Machinery	14.3	12.7	13.2	3.7	(10.7)
All Other	52.4	48.1	50.2	4.5	(8.2)
Total Mfg. Employment	161.1	152.3	156.4	2.7	(5.4)

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

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 gained approximately 49,800 positions and increased by approximately 3.5% from FY 2021 to 2022. This increase was due in large part to a rebound in the services sector which increased by 5.3% (38,000 jobs). The leisure and hospitality sector saw the most significant contraction with a decline of 11.0% in FY 2021, a consequence of COVID-19 pandemic lockdowns and travel restrictions. As COVID-19 restrictions have eased, this sector has rebounded with 17.6% growth between FY 2021 and FY 2022. The transportation and warehousing sector also experienced growth between FY 2021 and FY 2022 with a 5.8% 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 reliably growing employment sector, has declined 12.9% since FY 2013, a loss of 14,700 jobs, and shows no signs of improvement. The state and local government sector also has experienced a significant contraction over the last ten years, losing more than 21,800 jobs over that period. Connecticut state and local employment includes casino employees who work for the state's two tribal governments which 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 21,200 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 2021 to	FY 2013 to
<u>Industry</u>	<u>2013</u>	<u>2021</u>	<u> 2022</u>	FY 2022	FY 2022
Construction & Mining	52.8	58.8	61.4	4.39	16.18
Information	31.8	29.1	30.3	4.27	(4.69)
Transp., Trade & Utilities	291.5	285.8	293.5	2.69	0.67
Transpo & Warehousing	41.3	59.1	62.6	5.81	51.39
Utilities	6.0	5.0	5.0	(0.38)	(16.69)
Wholesale	62.1	56.1	58.6	4.59	(5.57)
Retail	182.1	165.6	167.3	1.03	(8.14)
Finance (FIRE)	132.0	118.8	117.6	(1.00)	(10.96)
Finance & Insurance	113.2	100.3	98.5	(1.77)	(12.94)
Real Estate	18.9	18.5	19.1	3.21	0.97
Services	739.4	715.5	753.5	5.31	1.90
Professional & Business	208.2	208.3	215.2	3.30	3.33
Education & Health	324.9	328.9	335.0	1.88	3.12
Leisure & Hospitality	144.3	122.0	143.4	17.62	(0.59)
All Other Services	62.0	56.4	59.8	6.06	(3.46)
Government	245.9	223.4	224.9	0.69	(8.54)
Federal	17.4	19.1	18.2	(4.45)	4.59
State & Local	228.4	204.3	206.6	1.17	(9.54)
Total Nonmanufacturing	1,493.5	1,431.3	1,481.1	3.48	(0.83)

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

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

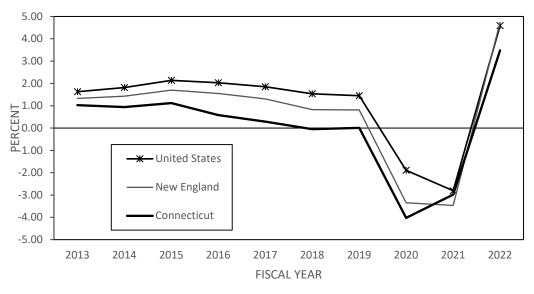
The following table and chart provide a ten fiscal year profile of nonmanufacturing employment in the United States, the New England region, and Connecticut.

TABLE 20
NONMANUFACTURING EMPLOYMENT
(In Thousands)

Fiscal	United	States	New Er	ngland	Conne	cticut
<u>Year</u>	<u>Number</u>	% Change	<u>Number</u>	% Change	<u>Number</u>	% Change
2013	123,215	1.6	6,404.5	1.3	1,493.5	1.0
2014	125,451	1.8	6,495.9	1.4	1,507.6	0.9
2015	128,132	2.1	6,606.1	1.7	1,524.4	1.1
2016	130,736	2.0	6,708.5	1.5	1,533.3	0.6
2017	133,158	1.9	6,796.2	1.3	1,537.7	0.3
2018	135,197	1.5	6,852.2	0.8	1,537.0	(0.0)
2019	137,152	1.4	6,907.8	0.8	1,537.1	0.0
2020	134,560	(1.9)	6,676.7	(3.3)	1,475.2	(4.0)
2021	130,782	(2.8)	6,445.2	(3.5)	1,431.3	(3.0)
2022	136,784	4.6	6,750.7	4.7	1,481.1	3.5

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

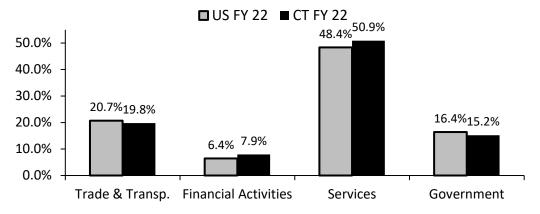
NONMANUFACTING EMPLOYMENT FISCAL YEAR GROWTH BY PERCENT



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

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 Markit

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 2021 to	FY 2013 to
<u>Industry</u>	<u>2013</u>	<u>2021</u>	<u> 2022</u>	FY 2022	FY 2022
Construction	\$60,985	\$78,304	\$80,871	3.3	32.6
Information	86,493	147,027	153,172	4.2	77.1
Transportation, Trade and Utilities	47,894	57,634	61,311	6.4	28.0
Wholesale Trade	88,033	108,071	117,343	8.6	33.3
Retail Trade	55,325	68,203	70,416	3.2	27.3
Financial Activities	142,463	174,399	189,238	8.5	32.8
Professional & Business Svcs	80,934	98,182	105,840	7.8	30.8
Educational & Health Svcs	49,207	61,993	65,431	5.5	33.0
Leisure & Hospitality	22,914	30,347	34,389	13.3	50.1
Government	55,325	68,203	70,416	3.2	27.3
Federal Government	47,894	57,634	61,311	6.4	28.0
State & Local Government	54,103	67,131	69,177	3.0	27.9

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

Unemployment Rate

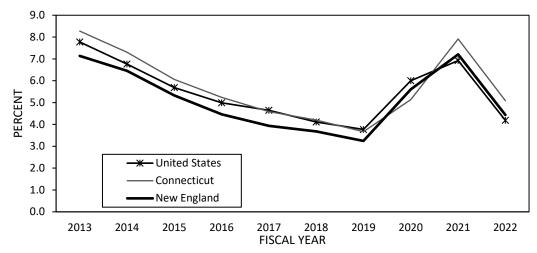
The unemployment rate is the proportion of persons in the civilian labor force who do not have jobs but are actively looking for work. The rate is based upon a monthly survey in which household members are asked a series of questions, one of which is whether a jobless person has looked for work at some 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 and have yet to fully recover. Connecticut's unemployment rate and the national average were 5.1% and 4.2% respectively for FY 2022.

TABLE 22
UNEMPLOYMENT RATES
BY FISCAL YEAR (%)

Fiscal Year	United States	New England	Connecticut
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	4.6	3.9	4.6
2018	4.1	3.7	4.2
2019	3.8	3.2	3.7
2020	6.0	5.6	5.1
2021	6.9	7.2	7.9
2022	4.2	4.4	5.1

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 Markit

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 2021. Unlike in last year where both supply and demand decreased, supply increased and demand increased by 6.0%. 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 10.95 million barrels per day (MBPD) while consuming 3.60 MBPD, generating 7.35 MBPD surplus. The Organization for Economic Cooperation and Development (OECD), on the other hand, consumed more than it supplied. In 2021, the OECD consumed 42.94 MBPD, while supplying only 28.41 MBPD, registering a 14.53 MBPD deficit.

The United States had a 11.2% dependency rate on foreign oil supplies in 2021, up from 4.1% in 2020. This figure was significantly below the ten-year average of 31.6% for the period ending in 2020. The nation accounted for 19.9% of global demand and 18.5% 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, have similar oil consumption trends. Both countries continued an upward trend in consumption compared to last year. The two countries accounted for a combined 21.6% of the worldwide demand total in 2021. 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 2021, China consumed 15.44 MBPD while supplying 3.99 MBPD, registering a 11.45 MBPD deficit. China had a 74.1% dependence rate on foreign oil in 2021, significantly larger than the United States.

TABLE 23
WORLD OIL SUPPLY AND DEMAND
Calendar Year 2021

	Supply			Demand	
	Millions			Millions	
	of Barrels	% of		of Barrels	% of
	Per Day	<u>Total</u>		Per Day	<u>Total</u>
Total OECD (a)	28.41	31.6%	Total OECD	42.94	45.6%
United States	16.59	18.5%	United States	18.68	19.9%
Canada	5.43	6.0%	Canada	2.23	2.4%
Mexico	1.93	2.1%	Mexico	1.35	1.4%
Other OECD	4.46	5.0%	Japan	3.34	3.6%
			Germany	2.05	2.2%
Total OPEC (b)	31.75	35.3%	France	1.42	1.5%
Saudi Arabia	10.95	12.2%	Italy	1.16	1.2%
United Arab Emirates	3.67	4.1%	United Kingdom	1.24	1.3%
Iran	3.62	4.0%	Other OECD	11.48	12.2%
Iraq	4.10	4.6%			
Other OPEC	9.40	10.5%	Total Non-OECD	51.15	54.4%
			Russia	3.41	3.6%
All Other	29.72	33.1%	China	15.44	16.4%
Russia	10.94	12.2%	India	4.88	5.2%
China	3.99	4.4%	Saudi Arabia	3.60	3.8%
Other	14.79	16.5%	Other	23.83	25.3%
Total 2021 Supply	89.88	100.0%	Total 2021 Demand	94.09	100.0%
Total 2020 Supply	88.49		Total 2020 Demand	88.75	94.3%
Change	1.38	1.6%	Change	5.34	6.0%

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: 2022 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 18.5% of world oil, it consumes 19.9% 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. According to the Energy Information Administration's *Monthly Energy Review*, the U.S. consumed 97.4 quadrillion British Thermal Units (QBTU's) of energy in 2021, 79.0% 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 2021 by fuel type and by economic sector. Petroleum products are currently the most important energy source for the U.S. economy. The 35.1 quadrillion petroleum-generated BTU's accounted for 36.0% of U.S. energy consumption, followed by natural gas at 31.3 QBTU's and coal at 10.5 QBTU's.

TABLE 24
U.S. ENERGY CONSUMPTION IN 2021
(Quadrillion BTU's)

	Resi-	Com-	In-	Trans-	Electric		% of
Energy Source	<u>dential</u>	<u>mercial</u>	<u>dustrial</u>	<u>portation</u>	Generation	<u>Total</u>	<u>Total</u>
Fossil Fuels							
Natural Gas	4.8	3.4	10.4	1.1	11.6	31.3	32.2
Petroleum	0.9	0.9	8.8	24.3	0.2	35.1	36.0
Coal	0.0	0.0	1.0	0.0	9.5	10.5	10.8
Nuclear	0.0	0.0	0.0	0.0	8.1	8.1	8.3
Renewables							
Hydroelectric	0.0	0.0	0.0	0.0	2.3	2.3	2.3
Other*	0.8	0.3	2.4	1.5	4.9	9.9	10.1
Electricity	5.0	4.5	3.4	0.0	0.1	13.1	13.4
Electric Losses	9.3	8.3	6.2	0.0	(36.7)	(12.9)	(13.3)
Total Demand	20.9	17.4	32.2	26.9	0.0	97.4	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 6.2% of electric generation to the U.S. in 2021, compared to approximately 59.2% in Canada in 2019. Capital investments in alternative renewable energy from solar, hydroelectric, wind, biofuels, and geothermal energy sources have increased dramatically in the U.S.; nonetheless, their share of power production remains relatively small. As of August 2022, the United States had 92 operable nuclear reactors in service and two reactors that are currently under construction. Nuclear

generation accounted for about 22% of domestic electricity net generation in 2021. 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 32.2 QBTU's in 2021, followed by transportation at 26.9 QBTU's, residential at 20.9 QBTU's, and commercial at 17.4 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 5.0% is lost in transmission and distribution.

Crude Oil Prices

Following the collapse of oil prices during the 2008 Great Recession, the refiner's acquisition cost rebounded, rising to around \$100 per barrel in 2011 and hovering 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. In real terms, annual average refiner's acquisition costs dropped to \$34.98 in 2020, a significant decrease of 33.9% compared to the prior year due to the pandemic induced recession. The decrease did not last long: in 2021 there was a 63.8% increase in cost to \$57.30 a barrel, a \$22.32 difference in one year. Comparing 2021 to the first two quarters of 2022 there was a 41.2% increase bringing the most recent cost of a barrel up to \$80.91 due to the continued economic expansion and Russia's invasion of Ukraine in February of 2022.

TABLE 25
CRUDE OIL PRICES AND U.S. CONSUMPTION

Refiners' Crude Oil Acquisition Costs* Per Barrel

Calendar	In Current	In 2012	Percent
<u>Year</u>	<u>Dollars</u>	<u>Dollars</u>	<u>Change</u>
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	67.83	57.30	63.8%
2022**	101.10	80.91	41.2%

Note: * Adjusted using implicit price deflator for gross domestic product.

** Average for the first two 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
<u>Year</u>	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)
2015	97.4	(0.9)	17,390.3	5,601	(3.5)
2020	93.0	(7.5)	18,384.7	5,057	(4.2)
2021	97.3	4.7	19,427.3	5,010	(0.9)

^{*}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 2021, 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 2021, that number was 5,010 BTU's, a 44.4% 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 was created as an emergency

response tool for the President and federal government to address disruptions in oil sales. 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 2009, the SPR reached a record inventory of 726.6 million barrels. Releases from the reserve can help to temper rapid price increases in oil markets similar to what occurred with Russia and their invasion of Ukraine in 2022. As of December 2021, the reserve held 594.7 million barrels of crude oil.

Connecticut

Connecticut is one of the most energy-efficient states in the nation 44% below the national average of 5.05 thousand BTU's. The state consumed 2.83 thousand BTU's per 2012 chained dollar of Gross State Product in 2020, the latest available data putting Connecticut behind only the District of Columbia, New York, Massachusetts, and California on this measure. When measuring energy consumption in Connecticut and the United States among 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 185.3 million BTU's per capita in 2020. Connecticut ranks 46th among the 50 states plus the District of Columbia, leaving Rhode Island, Hawaii, California, New York, and Massachusetts with per capita end-use energy consumption lower than Connecticut's level. Connecticut was 33.9% below the national figure of approximately 280.1 million BTU's per capita. The state has few local energy sources and 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 2020, Connecticut residents spent \$23.12 per million BTU, compared to \$16.25 for the nation.

TABLE 27
CONSUMER ENERGY PRICES IN THE UNITED STATES AND CONNECTICUT*
Nominal Dollars per Million BTU in 2020

	Natural	Motor	Distillate	All	Retail	Total
	<u>Gas</u>	<u>Gasoline</u>	Fuel Oil*	Petroleum**	Electricity	Energy
Connecticut	\$5.98	\$18.48	\$16.80	\$18.12	\$56.08	\$23.12
United States	\$4.87	\$18.01	\$17.15	\$15.97	\$31.19	\$16.25
CT as a % of the U.S.	123%	103%	98%	113%	180%	142%

Notes:

Source: U.S. Department of Energy, Energy Information Administration, State Energy Data 2020

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 2020, the latest data available. Overall energy costs in Connecticut in 2020 were 42% higher than the national average, with retail electricity prices 80% higher than the national average.

^{*} 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.

TABLE 28
CONNECTICUT ENERGY CONSUMPTION IN 2020
(Trillion BTU's)

	Resi-	Com-	In-	Trans-	Electric	CT	% of CT	% of US
<u>Fuels</u>	dential	mercial	dustrial	portation	Generation	<u>Total</u>	<u>Total</u>	<u>Total</u>
Natural Gas	50.1	54.0	23.7	7.1	162.7	297.6	44.6	24.6
Petroleum	54.3	13.8	18.2	187.9	0.5	274.7	41.2	26.2
Coal	0.0	0.0	0.0	0.0	0.1	0.1	0.0	7.2
Nuclear	0.0	0.0	0.0	0.0	164.1	164.1	24.6	6.4
Hydroelectric	0.0	0.0	0.0	0.0	2.9	2.9	0.4	1.9
Other*	9.8	3.4	4.0	0.0	14.6	31.8	4.8	5.9
Deliv. Elec.	44.3	38.0	9.8	0.4	0.0	92.5	13.9	9.9
Deliv. Losses	70.9	60.8	15.6	0.7	(344.9)	(196.9)	(29.5)	17.9
Total Demand	229.4	170.0	71.3	196.1	0.0	666.8	100.0	100.0
% of Total-CT	34.4	25.5	10.7	29.4	0.0	100.0		
% of Total-U.S.	16.0	13.0	24.4	19.0	27.6	100.0		

Note:

Source: U.S. Department of Energy, Energy Information Administration, State Energy Data 2020

The preceding table displays the amount and percentage share of total energy consumed in Connecticut by fuel source and sector in 2020, the latest available data. Compared to the nation, nuclear and natural gas provide more of Connecticut's energy needs, while coal provides significantly less. Fuel oil provides for a significant source of Connecticut's home heating energy needs. According to the latest data available from 2019, 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 of fuel oil used for heating has been falling as more homes and businesses 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 2021, the latest data available, the state generated 44.1 million net megawatt hours of electricity, primarily from natural gas. Retail sales within the state were at 27.6 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.

^{*} 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.

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 2021, there were 1,691,807 electric consumers in Connecticut. Of these, 90.5% were residential customers, 9.2% were commercial customers, and 0.2% 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 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 2020 data, the latest available, highway vehicles in the U.S. consumed approximately 93.4% of all gasoline, with about 6.6% used for other purposes such as agriculture, aviation, construction, and boating. In 2020, gasoline consumption in the U.S. totaled 127.7 billion gallons, with Connecticut accounting for 1.3 billion gallons, 1.0% of the nation's consumption.

Gasoline consumption plummeted in both Connecticut and the United States as a whole in 2020 due to the coronavirus pandemic. Lockdowns and business closures caused consumption to drop by 12.7% in the United States; Connecticut's drop was even greater, decreasing by 15.9%. The table on the next page shows gasoline consumption for the U.S. and Connecticut since 1995.

In 2020, Connecticut residents consumed 354.3 gallons of gasoline per capita, versus 385.2 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 2020, per capita consumption decreased by 29.9% in Connecticut, versus 23.1% for the nation. This has reduced Connecticut's per capita consumption to 92.0% of the U.S. amount in 2020.

As the state with the second highest per capita personal income in the nation, Connecticut residents tend to own more automobiles. Connecticut residents owned 336 private and commercial automobiles per 1,000 residents in 2020, versus 313 for the nation. Also, Connecticut had 705 driver licenses per 1,000 residents in 2020, compared to 693 licenses per 1,000 for the nation. Connecticut residents trail the nation as a whole in the use of carpooling. The United States Census Bureau estimates that in 2020, of those commuting to work by car, 7.8% of Connecticut residents carpooled, versus 8.9% for the nation as a whole.

TABLE 29
GASOLINE CONSUMPTION IN THE UNITED STATES & CONNECTICUT

	U.S.* Total	Annualized	CT Total	Annualized	Gal	lons Per	Capita
Calendar	Gallons	%	Gallons	%			CT/U.S.
<u>Year</u>	<u>(000's)</u>	Change**	(000's)	Change**	<u>U.S.*</u>	<u>CT</u>	<u>(%)</u>
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%
2020	127,706,815	-12.7%	1,276,186	-15.9%	385.2	354.3	92.0%
Average	2015-2020				433.0	407.6	94.1%

^{*} Fifty states plus Washington, D.C.

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.

^{**} Annual growth calculated using compound annual growth rate formula

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 June of 2022 reached \$5.03 per gallon, compared to \$3.16 in June of 2021, \$2.17 in June of 2020, and \$2.80 in June of 2019. Prior to 2022, the all-time average retail price for all grades high was \$4.11 in July of 2008. That high was exceeded for five consecutive months in 2022, from March through July, peaking at \$5.03 in June before dropping back to \$3.82 by September. 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	Nominal	Real	Calendar	Nominal	Real
<u>Year</u>	<u>Price</u>	Price*	<u>Year</u>	<u>Price</u>	Price*
1950	\$0.27	\$2.06	2011	3.58	3.64
1960	0.31	1.86	2012	3.68	3.68
1970	0.36	1.66	2013	3.58	3.51
1980	1.25	2.96	2014	3.44	3.32
1990	1.16	1.82	2015	2.52	2.41
2000	1.52	1.95	2016	2.25	2.13
2005	2.31	2.64	2017	2.53	2.35
2006	2.62	2.91	2018	2.81	2.55
2007	2.84	3.07	2019	2.69	2.40
2008	3.30	3.50	2020	2.26	1.99
2009	2.41	2.53	2021	3.10	2.61
2010	2.84	2.95			

Note: Prices for 1950 to 1970 are leaded regular; 1980 and after are unleaded regular.

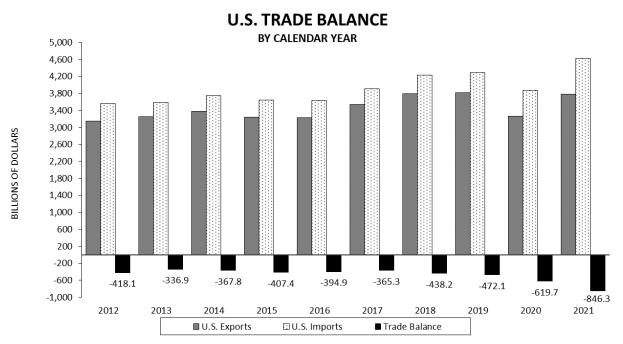
* Adjusted by GDP Price Deflator (2012=100)

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

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 services 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 20.0% from 2012 through 2021, while total trade imports have grown 29.6% over the same time period.

The following graph illustrates the United States' trade balance for the past ten years. In 2021, the trade deficit increased to \$846.3 billion, up from \$616.1 billion in 2020. 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 destabilize 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, from 2009 through 2017 the U.S. trade balance has remained relatively stable with little net change year over year. However, in 2020 as COVID-19 started, the American trade deficit began to change and rise as a result of the pandemic. The prior deficit peak occurred in 2006 with a trade deficit of \$806.7 billion, which is 4.9% less than the current 2021 deficit of \$846.3 billion.

TABLE 31
U.S. TRADE DEFICIT BY CATEGORY

(In Billions of Dollars)

		2020				2021	
	Exports	Imports	Balance		Exports	Imports	Balance
Total Trade	3,260.1	3,879.8	(619.7)		3,780.2	4,626.5	(846.3)
Merchandise	1,432.2	2,346.1	(913.9)		1,761.4	2,851.7	(1,090.3)
Foods/Beverages	139.3	155.4	(16.2)		164.7	183.3	(18.6)
Industrial Supplies & Materials	450.6	429.3	21.3		616.8	641.6	(24.8)
Capital Goods, Excluding Autos	462.9	647.2	(184.3)		520.8	764.8	(244.0)
Autos	128.8	309.9	(181.0)		144.1	347.9	(203.8)
Consumer Goods	174.0	639.9	(465.9)		221.7	767.1	(545.4)
Others	76.6	164.4	(87.8)		93.3	146.9	(53.7)
Services	726.4	466.5	259.9		795.3	550.0	245.2
Travel & Transportation	142.8	113.1	29.7		148.5	170.1	(21.6)
Business Services	422.8	255.7	167.1		471.7	281.6	190.1
Royalties & License fees	115.6	47.7	67.9		124.6	43.3	81.3
Other Services	45.2	50.0	(4.8)		50.4	54.9	(4.5)
Investment Income	1,101.4	1,067.2	34.3		1,223.5	1,224.8	(1.3)
Direct Investment	474.6	178.4	296.2		582.8	303.1	279.7
Portfolio Investment Income	380.2	492.3	(112.1)		403.2	521.8	(118.6)
U.S. Gov't Receipts/Payments	165.2	294.0	(128.8)		171.4	312.2	(140.8)
Other Investment Income	81.4	102.5	(21.0)		66.0	87.7	(21.6)
		Net Change From Previous Year					
Total Trade	(579.6)	(405.9)	(173.7)		520.1	746.7	(226.7)
Merchandise	(222.9)	(166.3)	(56.6)		329.1	505.6	(176.4)
Foods/Beverages	8.3	3.9	4.4		25.5	27.9	(2.4)
Industrial Supplies & Materials	(75.8)	(96.0)	20.1		166.2	212.3	(46.1)
Capital Goods, Excluding Autos	(87.9)	(31.9)	(55.9)		57.9	117.6	(59.7)
Autos	(34.2)	(65.5)	31.2		15.2	38.0	(22.8)
Consumer Goods	(31.0)		(15.6)		47.7	127.2	(79.5)
Others	(2.3)	38.6	(40.9)		16.7	(17.4)	34.1
Services	(164.7)	(127.1)	(37.7)		68.8	83.5	(14.6)
Travel & Transportation	(174.9)	(140.7)	(34.2)		5.7	57.0	(51.3)
Business Services	19.8	4.9	14.9		48.9	26.0	22.9
Royalties & License fees	(7.0)	5.4	(12.4)		9.1	(4.4)	13.4
Other Services	(2.7)	3.3	(6.0)		5.2	4.9	0.3
Investment Income	(192.0)	(112.6)	(79.4)		122.1	157.7	(35.6)
Direct Investment	(108.8)	(52.1)	(56.6)		108.3	124.8	(16.5)
Portfolio Investment Income	(40.9)	(15.7)	(25.2)		23.0	29.5	(6.5)
U.S. Gov't Receipts/Payments	8.6	7.5	1.0		6.2	18.2	(12.0)
Other Investment Income	(50.9)	(52.3)	1.4		(15.4)	(14.8)	(0.6)

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 \$176.4 billion for a total of \$1,090.3 billion in 2021, up from \$913.9 billion in 2020. This increase was partially attributable to both Consumer Goods and Capital Goods, Excluding Autos, which experienced the largest negative change in trade balance compared to 2020.

Of the total trade deficit of \$846.3 billion in 2021, consumer goods accounted for the largest portion, reaching \$545.4 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 2021 by \$79.5 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 2021, the U.S. imported \$764.8 billion worth of these goods compared to the \$520.8 billion that the U.S. exported. The Capital Goods trade deficit at \$244.0 billion represents a \$59.7 billion increase from the deficit of \$184.3 billion in 2020.

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 \$245.2 billion in 2021, from a surplus of \$259.9 billion in 2020 which is an impact from the COVID-19 pandemic. Imports increased 17.9% to \$550.0 billion while exports of services increased 9.5% to \$795.3 billion. Of the \$245.2 billion total surplus in 2021, \$190.1 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 deficit of \$1.3 billion in 2021.

According to the U.S. Bureau of Economic Analysis, in calendar 2021 foreign assets in the U.S., measured at current cost, increased by \$6,440.7 billion, or 13.8%, to \$53,189.7 billion, compared to a increase of \$3,023.8 billion, or 9.4%, to \$35,065.5 billion for U.S. assets abroad. This placed U.S. international

investment at a net negative \$18,124.3 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 \$10,970.6 billion and foreign direct investment in the U.S. was \$14,813.0 billion, registering a net investment decline of \$3,842.4 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 no country has been 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.

Net International Investment Position of the U.S. At Year-End (in Billions) 2006 2012 1992 1994 1998 2002 2004 2008 2010 2014 2016 2020 \$(2,000.0) **NET INTERNATIONAL INVESTMENT POSITION** \$(4,000.0) \$(6,000.0) \$(8,000.0) \$(10,000.0) \$(12,000.0) \$(14,000.0) \$(16.000.0) \$(18,000.0) \$(20,000.0) \$(18,124.3) CALENDAR YEAR

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. By design, tariffs reduce competition, but they can have unintended consequences which can result in less efficient domestic industries that 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, rather than 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 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. As a result of the conflict between Russia and Ukraine, on June 27, 2022 the Biden Administration raised the tariff rate on Russian imports by 35%.

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 \$14,541.8 million in 2021, up 5.2% from 2020 which had been depressed due to the impact of the COVID-19 pandemic.

In 2021, the Connecticut industries that rely most heavily on exports were Transportation Equipment (NAICS 336), Nonelectrical Machinery (NAICS 333) and Chemicals (NAICS 325). These three industries accounted for 59.9% of Connecticut's foreign sales in 2021. The following table shows the breakdown of major products by NAICS code for the past five years. In 2021, transportation equipment, which includes aircraft engines and spare parts, gas turbines, and helicopters and spacecraft accounted for 35.3% of total exports which is unchanged from 2020. In terms of average annual growth from 2017 to 2021, Chemicals posted the strongest growth at 9.0%, followed by Miscellaneous Manufacturing at 12.7%.

Overall growth in exports of commodities for the past five years averaged -0.4%, as 2020 was greatly impacted by the pandemic. Exports of \$14.5 billion are estimated to account for 5.1% of Connecticut Gross State Product (GSP) in 2021, which is lower than the 5.6% level in 2019.

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

							Percent	Average
							of 2021	Growth
<u>NAICS</u>	<u>Industry</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>Total</u>	<u>17-21</u>
322	Paper	152.2	157.6	145.1	124.9	161.1	1.1%	1.4%
325	Chemicals	954.5	1,224.5	1,054.4	1,303.2	1,347.9	9.3%	9.0%
326	Plastics and Rubber	269.9	297.7	346.4	256.8	290.7	2.0%	1.9%
331	Primary Metal	410.8	323.8	295.1	211.7	318.3	2.2%	-6.2%
332	Fabricated Metal	829.5	901.6	938.5	888.5	869.7	6.0%	1.2%
333	Machinery, exc. Elec.	1,945.7	2,259.1	2,180.8	2,134.6	2,221.2	15.3%	3.4%
334	Comp. & Electronic	1,132.4	1,260.4	1,176.9	1,032.3	1,127.6	7.8%	-0.1%
335	Electrical Equipment	983.6	919.6	895.6	946.5	978.6	6.7%	-0.1%
336	Transportation Equip.	6,066.4	7,673.6	6,951.0	4,883.4	5,127.7	35.3%	-4.1%
339	Misc. MFG	312.6	339.1	382.5	426.9	504.1	3.5%	12.7%
	Other	1,734.1	2,046.5	1,864.3	1,618.2	1,594.8	11.0%	-2.1%
Total (Commodity Exports	14,791.6	17,403.5	16,230.6	13,826.9	14,541.8	100.0%	-0.4%
	% Growth	2.8%	17.7%	-6.7%	-14.8%	5.2%		
Gross	State Product (\$M)	266,546.0	275,782.2	284,824.9	280,529.8	286,631.0		1.8%
2.230		1.9%	3.5%	3.3%	-1.5%	2.2%		
Export	ts as a % of GSP	5.5%	6.3%	5.7%	4.9%	5.1%		5.5%
Exports as a % of GSP		3.370	0.570	3.770	7.570	J.170		5.570

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 2021, exports originating from Connecticut totaled \$14.5 billion, with 64.3% of the total being shipped by air, 13.4% being delivered by sea, and the remaining 22.2% 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 2021 at 16.0% of total exports, followed by Canada, China, United Kingdom, and Mexico. These five countries accounted for 50.4% of total state exports in 2021. Exports to China have grown the fastest in the past five years at an average growth rate of 12.1%, surpassing Netherlands average growth rate of 12.0% in 2021.

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

	2021						Percent of 2021	2017-2021 Average Growth
<u>Destination</u>	Rank	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>Total</u>	<u>Rate</u>
Germany	1	1,823.8	2,332.3	2,541.5	2,189.8	2,332.6	16.0%	6.3%
Canada	2	1,907.3	1,964.1	1,952.9	1,670.8	1,732.8	11.9%	-2.4%
China	3	795.0	942.6	1,262.4	1,098.0	1,256.5	8.6%	12.1%
United Kingdom	4	1,300.1	1,484.4	1,451.7	1,160.8	1,021.9	7.0%	-5.8%
Mexico	5	1,036.9	947.7	810.1	753.8	978.7	6.7%	-1.4%
Netherlands	6	619.4	769.5	773.7	840.8	973.7	6.7%	12.0%
France	7	2,114.1	3,177.8	1,859.6	894.3	724.3	5.0%	-23.5%
Korea, Republic Of	8	539.3	422.5	476.0	453.2	455.2	3.1%	-4.1%
Japan	9	546.7	627.5	402.0	397.7	401.5	2.8%	-7.4%
Singapore	10	399.5	623.3	552.6	425.4	374.5	2.6%	-1.6%
Other Areas		3,709.6	4,111.8	4,148.0	3,942.3	4,290.1	<u>29.5%</u>	<u>3.7%</u>
Total		14,791.6	17,403.5	16,230.6	13,826.9	14,541.8	100.0%	-0.4%

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 affected by the volume of defense contracts awarded or subcontracted to Connecticut firms.

In federal fiscal year (FFY) 2021, contractors in the state were awarded \$16.9 billion worth of defense-related prime contracts, with the heaviest concentration in the state's transportation equipment sector. This was down by around 24% from the \$22.4 billion received in awards in FFY 2020. Of the total awarded, the following five companies were the top contractors in the state, primarily for the described areas of work:

General Dynamics Corp.
 Raytheon Technologies
 Sikorsky Aircraft Corp.
 Submarines
 Aerospace
 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 2021
(In Millions)

Connecticut Program	<u>Value</u>	<u>Percent</u>	United States Program	<u>Value</u>	<u>Percent</u>
Combat Ships and Landing Vessels	\$8,396.9	49.5%	Aircraft - Fixed Wing	\$22,264.8	8.0%
Gas Turbines and Jet	\$3,379.2	19.9%	Drugs and Biologicals	\$21,616.2	7.7%
Engines	, -,-		0.1.1.0.10	, ,	
Aircraft - Rotary Wing	\$2,403.7	14.2%	Combat Ships and	\$15,781.1	5.6%
			Landing Vessels		
Maintenance and	\$573.0	3.4%	Engineering and Tech	\$15,523.2	5.5%
Repair of Equipment			Support Services		
Aircraft Research and	\$511.5	3.0%	General Health Care	\$12,457.8	4.5%
Development					
Other	\$1,701.9	10.0%	Other	\$192,269.4	<u>68.7%</u>
Total	\$16,966.2	100.0%	Total	\$279,912.4	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 2017	FFY 2018	FFY 2019	FFY 2020	FFY 2021
Fairfield	30.6%	20.5%	29.5%	17.6%	27.8%
Hartford	21.5%	36.1%	42.5%	23.5%	19.3%
Litchfield	0.3%	0.3%	0.2%	0.1%	0.0%
Middlesex	0.2%	0.1%	0.3%	0.1%	0.1%
New Haven	0.6%	0.5%	0.4%	0.3%	0.2%
New London	46.7%	42.2%	27.1%	58.4%	52.5%
Tolland	0.1%	0.1%	0.1%	0.1%	0.0%
Windham	<u>0.1%</u>	<u>0.1%</u>	<u>0.1%</u>	0.0%	0.0%
State Total	100.0%	100.0%	100.0%	100.0%	100.0%
State Total	\$11,646,592	\$14,695,644	\$18,357,989	\$22,355,563	\$16,966,248

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 0.251 compared with 0.056 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 \$12.7 billion in FFY 2012 to \$16.9 billion in FFY 2021. This represents an annual percentage growth rate of 1.5% per year from FFY 2012 to FFY 2021.

Table 36
CONNECTICUT DEFENSE CONTRACT AWARDS AND RELATED EMPLOYMENT

			Connecticut		Defense	
	Defense		Transportation		Contract	
Federal	Contract		Equipment		Awards in 2011	
Fiscal	Awards	%	Employment	%	Dollars	%
<u>Year</u>	(\$ 000's)	<u>Growth</u>	<u>(\$ 000's)</u>	<u>Growth</u>	<u>(\$ 000's)</u>	<u>Growth</u>
2012	12,745,300	2.0	42.19	0.1	11,923,360	(0.4)
2013	10,028,168	(21.3)	41.59	(1.4)	9,230,068	(22.6)
2014	13,207,270	31.7	40.29	(3.1)	11,961,473	29.6
2015	12,147,134	(8.0)	40.43	0.3	10,967,370	(8.3)
2016	14,132,111	16.3	41.40	2.4	12,643,868	15.3
2017	11,646,592	(17.6)	43.38	4.8	10,210,106	(19.2)
2018	14,695,644	26.2	45.37	4.6	12,579,196	23.2
2019	18,357,989	24.9	46.71	3.0	15,427,660	22.6
2020	22,355,563	21.8	46.38	(0.7)	18,518,346	20.0
2021	16,966,248	(24.1)	44.88	(3.3)	13,605,067	(26.5)
Coefficient						
of Variation	0.251		0.056		0.213	

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

		Conne	cticut		United States			
	Defense		3-Year		Defense		3-Year	
	Contract		Moving		Contract		Moving	
Federal Fiscal	Awards	%	Average	%	Awards	%	Average	%
<u>Year</u>	(\$ Millions)	<u>Growth</u>	(\$ Millions)	<u>Growth</u>	(\$ Millions)	<u>Growth</u>	(\$ Millions)	Growth
2012	12,745	2.0	11,992	2.5	319,271	(3.1)	321,262	(1.2)
2013	10,028	(21.3)	11,387	(5.0)	268,851	(15.8)	294,061	(8.5)
2014	13,207	31.7	11,994	5.3	260,734	(3.0)	282,952	(3.8)
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
2021	16,966	(24.1)	19,227	4.1	279,812	(30.1)	346,734	(5.2)
Coefficient of								
Variation	0.264				0.161			

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 0.264, compared to 0.161 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 5.4% during the nine-year period from 2012 to 2021, compared to a growth rate of 0.9% 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 2021, while Connecticut ranked fourth nationally in total defense contracts awarded, it ranked first in per capita defense dollars awarded with a figure of \$4,708. This figure was more than five times the national average of \$843. In 2020, Connecticut ranked fourth in total defense contracts awarded and first in per capita defense dollars awarded with a figure of \$6,207. This was about five times the national average of \$1,208 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

	Connecticut	U.S.			3-year	
	Defense	Defense		CT GSP	Average	CT
Federal	Contract	Contract		Current	CT	Awards
Fiscal	Awards	Awards	CT as %	Dollars	Awards	as % of
<u>Year</u>	(\$ Millions)	(\$ Millions)	<u>of U.S.</u>	(\$ Millions)	(\$ Millions)	CT GSP
2012	12,745	319,271	4.0%	239,054	11,992	5.3%
2013	10,028	268,851	3.7%	241,373	11,387	4.2%
2014	13,207	260,734	5.1%	244,172	11,994	5.4%
2015	12,147	253,286	4.8%	257,603	11,794	4.7%
2016	14,132	278,780	5.1%	262,359	13,162	5.4%
2017	11,647	300,824	3.9%	269,267	12,642	4.3%
2018	14,696	336,353	4.4%	278,728	13,491	5.3%
2019	18,358	360,145	5.1%	286,312	14,900	6.4%
2020	22,356	400,246	5.6%	278,269	18,470	8.0%
2021	16,966	279,812	6.1%	290,010	19,227	5.9%

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 2021

			\$ Per					\$ Per	
	Prime		Capita			Prime		Capita	
	Contract		Prime			Contract		Prime	
	Awards		Contract			Awards		Contract	
<u>State</u>	(\$ 000's)	<u>Rank</u>	<u>Awards</u>	<u>Rank</u>	<u>State</u>	(\$ 000's)	<u>Rank</u>	<u>Awards</u>	<u>Rank</u>
Connecticut	<u>16,966,248</u>	<u>4</u>	<u>4,708</u>	<u>1</u>	Oklahoma	2,254,370	25	566	26
Virginia	30,703,930	1	3,554	2	Georgia	5,948,693	15	551	27
Massachusetts	15,817,882	5	2,263	3	Utah	1,604,470	30	482	28
Kentucky	9,442,340	10	2,095	4	Iowa	1,480,298	32	464	29
Maryland	11,786,843	7	1,912	5	South Carolina	2,357,567	24	455	30
Alaska	1,172,078	35	1,600	6	Nevada	1,187,776	34	378	31
Maine	2,168,414	26	1,582	7	Illinois	4,576,231	18	361	32
Alabama	6,454,661	14	1,282	8	Kansas	1,052,352	37	359	33
Mississippi	3,685,330	21	1,249	9	Louisiana	1,586,926	31	343	34
Missouri	7,629,952	13	1,238	10	Ohio	3,937,343	20	334	35
Hawaii	1,739,850	28	1,206	11	North Dakota	227,685	43	294	36
Washington	9,299,536	11	1,202	12	Nebraska	545,781	41	278	37
Arizona	8,056,111	12	1,109	13	North Carolina	2,769,335	23	263	38
Colorado	5,476,904	16	943	14	Tennessee	1,609,890	29	231	39
Texas	27,380,788	2	929	15	Michigan	2,147,598	27	214	40
Pennsylvania	9,947,586	9	767	16	Minnesota	1,056,086	36	185	41
New Hampshire	1,006,497	38	726	17	South Dakota	155,154	45	174	42
Florida	15,067,609	6	693	18	Wyoming	89,105	49	154	43
California	26,413,557	3	673	19	Delaware	137,070	47	137	44
Indiana	4,477,034	19	658	20	Arkansas	404,191	42	134	45
Wisconsin	3,643,803	22	618	21	Vermont	85,260	50	132	46
New Jersey	5,447,990	17	588	22	Oregon	555,965	40	131	47
New Mexico	1,242,961	33	587	23	Montana	115,905	48	105	48
Rhode Island	637,997	39	582	24	West Virginia	183,628	44	103	49
New York	11,474,491	8	577	25	Idaho	151,688	46	80	49
U.S. Total	279,812,184		843						

Source: General Services Administration (SAM.gov), U.S. Census Bureau, IHS Markit

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 2022. 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 2022 totaled \$77.8 billion, a 7.3% increase over FY 2021 and the twelfth straight year of increased total trade.

TABLE 40
RETAIL TRADE IN CONNECTICUT
(In Millions)

		FY	% of	FY	% of	%
NAICS	<u>Industry</u>	<u>2021</u>	<u>Total</u>	<u>2022</u>	<u>Total</u>	<u>Change</u>
441	Motor Vehicle and Parts Dealers	\$13,593	18.7	\$13,755	17.7	1.2
442	Furniture and Home Furnishings Stores	2,391	3.3	2,404	3.1	0.5
443	Electronics and Appliance Stores	1,974	2.7	1,688	2.2	(14.5)
444	Building Material and Garden Supply Stores	4,147	5.7	4,520	5.8	9.0
445	Food and Beverage Stores	12,234	16.9	12,706	16.3	3.9
446	Health and Personal Care Stores	4,945	6.8	5,462	7.0	10.5
447	Gasoline Stations	3,306	4.6	4,597	5.9	39.1
448	Clothing and Clothing Accessories Stores	3,211	4.4	3,700	4.8	15.2
451	Sporting Goods, Hobby, Book and Music Stores	1,028	1.4	1,044	1.3	1.6
452	General Merchandise Stores	6,132	8.5	6,651	8.5	8.5
453	Miscellaneous Store Retailers	8,968	12.4	9,295	11.9	3.6
454	Nonstore Retailers	<u>10,614</u>	<u> 14.6</u>	<u>12,027</u>	<u> 15.4</u>	13.3
	Total	\$72,542	100.0	\$77,848	100.0	7.3
Durables	s (NAICS 441,442, 443, 444)	\$22,105	30.5	\$22,367	28.7	1.2
Nondura	bles (All Other NAICS)	\$50,438	69.5	\$55,482	71.3	10.0
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 increased slightly by 1.2% in FY 2022, a reduction after the state experienced significant growth of 21.4% in FY 2021. FY 2021 was impacted by stimulus policies and behavioral changes as a result of the COVID-19 pandemic. 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 10.0% in FY 2022.

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 2022 national retail e-commerce sales are estimated at \$992.7 billion, accounting for 14.5% of total retail sales of \$6,853.4 billion. Estimated e-commerce retail sales rose by only 8.4% in FY 2022 compared to a 11.8% growth in traditional retail sales. This is the first time in over two decades that the growth in e-commerce retail sales did not the exceed the growth in traditional retail sales. This is likely a consequence of a "return to normal" behavioral change due to loosening restrictions from the COVID-19 pandemic.

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 2022 and FY 2021 at 31.3%. The state's per capita disposable income of \$68,681 in FY 2022 was 24.8% above the national average of \$55,047. In FY 2022, Connecticut per capita retail trade was estimated at \$21,464.

TABLE 41
RETAIL SALES IN CONNECTICUT BY EMPLOYEES AND ESTABLISHMENTS

			Per	Per		
		Number	Employee	Number	Employees	Annual
	Sales	of	Sales	of	Per	Payroll
	<u>(\$M)</u>	Employees	(\$ 000's)	Establish.	Establish.	(\$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

					2021 % of	Gro (1990	wth (2000
Private Sector	1990	2000	2010	2021	Total	to 2000)	to 2021)
Households	1330	2000	2010	2021	<u>10tar</u>	<u>10 2000 j</u>	10 2021/
Home Mortgages	\$ 2,489.3	\$ 4,816.8	\$ 9,992.3	\$11,751.1	18.0%	93.5%	144.0%
Consumer Credit	824.4	1,741.3	2,646.8	4,430.8	6.8%	111.2%	154.5%
Other	330.7	729.8	<u>1,227.1</u>	<u>1,755.2</u>	2.7%	120.6%	140.5%
Total -	\$ 3,644.4	\$ 7,287.8	\$13,866.2	\$17,937.1	27.5%	100.0%	146.1%
Households							
Business							
Mortgages	\$ 1,213.0	\$ 1,737.0	\$ 3,526.3	\$ 5,800.2	8.9%	43.2%	233.9%
Corporate Bonds	1,008.2	2,267.7	3,385.4	6,739.4	10.3%	124.9%	197.2%
Other	1,562.2	2,592.0	3,148.4	6,135.8	9.4%	65.9%	136.7%
Total - Business	\$ 3,783.3	\$ 6,596.8	\$10,060.1	\$18,675.4	28.6%	74.4%	183.1%
Total - Private Sector	\$ 7,427.7	\$13,884.6	\$23,926.3	\$34,428.9	56.2%	86.9%	163.7%
Public Sector							
Federal	\$ 2,830.8	\$ 4,090.0	\$10,528.6	\$25,304.5	38.8%	44.5%	518.7%
Government*							
State & Local Gov't	987.4	<u>1,197.9</u>	3,219.3	3,274.2	5.0%	21.3%	173.3%
Total - Public Sector	\$ 3,818.2	\$ 5,287.9	\$13,747.8	\$28,578.7	43.8%	38.5%	440.5%
Total DNFD	\$11,245.9	\$19,172.5	\$37,674.1	\$65,191.2	100.0%	70.5%	240.0%
GDP, 4th Quarter DNFD as a % of GDP	\$ 6,004.7 187.3%	\$10,435.7 183.7%	\$15,309.5 246.1%	\$24,349.1 267.7%		73.8%	133.3%

^{*}Excludes intra-governmental holdings of Treasury securities

Source: Board of Governors of the Federal Reserve System, IHS Markit

The preceding table shows the 31-year history from 1990 to 2021 for total DNFD and each of its four components – households, businesses, federal government, and state and local governments. In 2021, the year-end total domestic nonfinancial debt outstanding was \$65,191.2 billion, almost three times GDP. Total non-financial debt between 2000 and 2021 has grown 240.0%, outpacing the growth in GDP of 133.3%.

By 2021, of the total \$65.2 trillion nonfinancial debt outstanding, the federal government accounted for 38.8%, followed by nonfinancial business at 28.6%, households at 27.5%, and state and local governments at 5.0%. However, debt outstanding in the private sector accounted for 56.2% of the total in 2021, 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 \$65.2 trillion in 2021 because of additional federal deficit spending brought about by the COVID-19 pandemic.

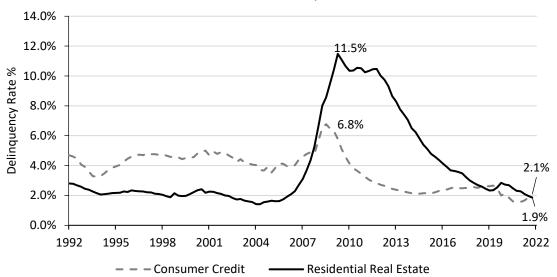
Household Borrowing

Household borrowing, which includes home mortgages, consumer credit, and other miscellaneous items, totaled \$17.9 trillion by the end of 2021. Of this sum, home mortgage loans accounted for \$11.8 trillion, or 65.5% of household borrowing, followed by consumer credit at \$4.4 trillion, or 24.7%, 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 1.9% as of the third quarter of 2022.

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 declined to a 30-year low of 1.6% in the third quarter of 2021. Consumer credit delinquency rates have trended upward to 2.1% in the year since. While this growth represents a 32% year-over-year increase, current consumer credit delinquency rates remain well below their 30-year average of 3.7%.

U.S. Delinquency Rates
As of 2022 Quarter 3



Source: Federal Reserve Bank of St. Louis

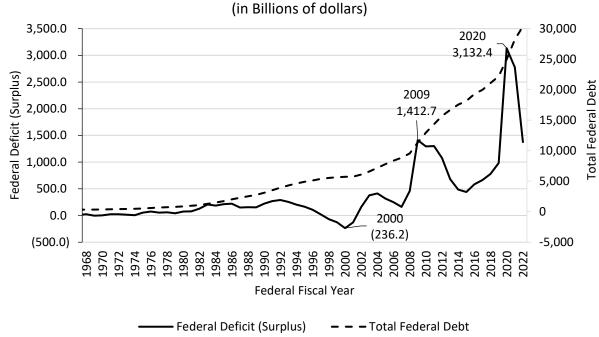
Business Borrowing

Business borrowings include debts owed by corporations, nonfarm corporations, and farms. Total borrowings were \$18.7 trillion at the end of 2021. 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.

Federal Deficit and Outstanding Debt



Note: For the purposes of the above graph, federal deficits are expressed as positive numbers.

Source: Federal Reserve Bank 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 \$1,375.4 billion as of the end of FFY 2022.

As the federal operating budget continued to post a deficit, the national debt also increased. The federal response to the COVID-19 pandemic caused federal debt to grow by double digits in

percentage terms for the first time since FFY 2011, with debt reaching 12.5% and 13.0% in FFY 2020 and FFY 2021, respectively. However, FFY 2022 ended with gross debt outstanding at \$30.3 trillion, an increase of only 7.7% over the previous year. Similarly, the U.S.'s deficit as share of GDP reached 14.9% in FFY 2020 and 11.9% in FFY 2021, with both years surpassing the previous post-war record of 9.8% in FFY 2009; FFY 2022 saw this figure drop back significantly, to 5.4%.

According to the U.S. Census Bureau's "State Government Finances," state government debt outstanding in Connecticut at the end of FY 2021, the latest available year, was \$41.9 billion, compared to \$41.4 billion in 2020, and \$40.9 billion in 2019. Connecticut per capita state government debt has increased over the past three years, from \$11,335 in FY 2019 to \$11,637 in FY 2021. The fifty-state average increased from \$3,816 in FY 2020 to \$3,903 in FY 2021.

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 2023. Over the course of calendar years 2021 and 2022 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.

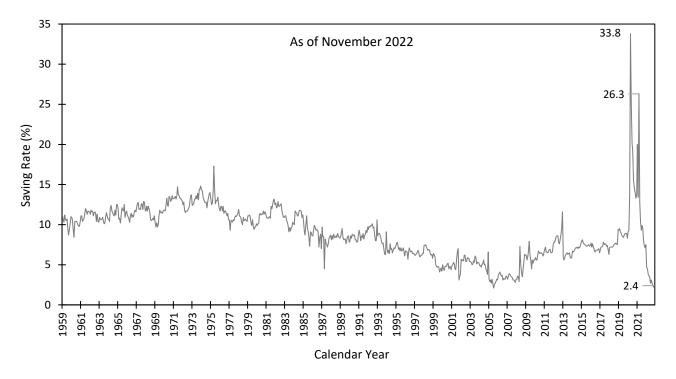
Agency	<u>Rating</u>	<u>Outlook</u>
Moody's Investors Service	Aa3	Stable
Standard & Poor's Corporation	AA-	Stable
Fitch Investors Service	AA-	Stable
Kroll Bond Ratings	AA	Stable

Note: Ratings as of January 2023

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 2022. 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 2.6% in mid-2005. The savings rate then climbed back up to 11.6% by December 2012 before falling to 9.3% 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 26.3% in March of 2021 after two more rounds of stimulus checks were issued. The savings rate as of November 2022 is 2.4% which is lower than the pre-pandemic rate of 9.3% in February 2020. The average savings rate for the past five years is 9.7%.

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 that comprise a balance sheet for 1970, 2007, and 2022, to evaluate the financial position of the nation's households.

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

	1970 <u>In Real \$*</u>	% of Total	2007 <u>In Real \$*</u>	% of Total	2022 Q3	% of <u>Total</u>	Average Growth**
Assets	<u> </u>						
Real Estate	7,733.9	23.5%	36,497.4	30.5%	46,360.6	28.5%	3.6%
Stock related	10,399.2	31.7%	43,412.7	36.3%	63,030.1	38.8%	3.6%
Other	14,716.6	44.8%	39,848.5	33.3%	53,122.1	32.7%	2.5%
Time & Saving Deposits	4,087.3	12.4%	11,461.1	9.6%	18,409.4	11.3%	3.0%
Corporate Bonds	224.8	0.7%	1,640.9	1.4%	223.3	0.1%	0.0%
Gov't Securities***	<u>1,102.4</u>	<u>3.4%</u>	<u>3,241.9</u>	<u>2.7%</u>	<u>4,082.7</u>	<u>2.5%</u>	2.6%
Total	32,849.8	100.0%	119,758.5	100.0%	162,512.8	100.0%	3.2%
Liabilities							
Home Mortgages	2,157.6	59.7%	15,002.1	72.7%	12,354.0	64.2%	3.5%
Consumer Credit	1,008.3	27.9%	3,684.5	17.9%	4,684.5	24.4%	3.1%
Other	<u>445.6</u>	12.3%	<u>1,945.4</u>	9.4%	<u>2,196.0</u>	<u>11.4%</u>	<u>3.2%</u>
Total	3,611.5	100.0%	20,632.0	100.0%	19,234.4	100.0%	3.3%
Net Worth	29,238.2		99,126.5		143,278.4		3.2%
Net Home Equity	5,576.3		21,495.3		34,006.7		3.6%
As a % of Net Worth	19.1%		21.7%		23.7%		
Per Capita Net Worth (\$)	141,688.0		326,793.6		431,490.7		2.2%
As a % of Total Assets							
Home Mortgages	6.6%		12.5%		7.6%		
Liabilities	11.0%		17.2%		11.8%		
Net worth	89.0%		82.8%		88.2%		

Note:

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 2022, household assets totaled \$162.5 trillion with real estate comprising 28.5%

^{*} Real dollar is calculated by using the estimated CPI-U for 2022

^{**} Compound annual growth rate from 1970 through 2022 Q3

^{***} Includes Treasury and Municipal securities

of total assets, stocks 38.8%, and the remaining 32.7% 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 four and a half decades 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 \$119.6 trillion just prior to the onset of the Great Recession. During that recession total real assets declined sharply falling to \$107.0 trillion before recovering to \$162.5 trillion by 2022 Q3.

Liabilities

Household liabilities totaled \$19.2 trillion in the third quarter of 2022. Home mortgages accounted for 64.2% of the total with consumer credit at 24.4% and other liabilities at 11.4%. 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 12%, outpacing growth in consumer credit 5.50% and driving growth in total liabilities 13.0%. Consumer credit primarily includes auto loans, personal loans, and credit card balances. Since the Great Recession annual growth in total liabilities has decreased by 0.5% 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 2022 dollars, real net worth grew from \$29.2 trillion in 1970 to a pre-recession peak of \$99.1 trillion in 2007, before declining to \$83.3 trillion in 2008 and rebounded to \$143.3 trillion in 2022. Per capita real net worth increased from \$141,688 in 1970 to \$431,491 in 2022, with an annual growth rate of 2.2%.

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 they had risen to 17.2% of assets. The primary driver of this change was an increase in home mortgage liability. As of the third quarter of 2022, however, liabilities account for 11.8% 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 7.6% in 2022. 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 9.0% as of second quarter 2022, 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" and 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 2022, the State of Connecticut produced an estimated \$311.3 billion in goods and services - \$250.9 billion in calendar year 2012 dollars. This was an estimated increase of 8.6% in current dollars and an approximate 4.0% increase in real (inflation-adjusted) dollars over FY 2021. The decline seen in FY 2020 in Connecticut was 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 2013 through FY 2022, nominal gross product has increased by 29.1% in Connecticut, compared to 42.2% in New England and 48.2% in the nation. In real terms, Connecticut's GSP was 5.2% above its FY 2013 level in FY 2022. 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 Er	New England* Co		nnecticut	
<u>Year</u>	<u>Dollars</u>	% Growth	<u>Dollars</u>	% Growth	<u>Dollars</u>	% Growth	
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	993,052	3.4	261,458	2.6	
2017	19,049,050	3.4	1,018,793	2.6	266,546	1.9	
2018	20,020,582	5.1	1,061,688	4.2	275,782	3.5	
2019	20,948,020	4.6	1,107,553	4.3	284,825	3.3	
2020	21,103,284	0.7	1,115,844	0.7	280,530	(1.5)	
2021	22,106,980	4.8	1,164,719	4.4	286,631	2.2	
2022	24,472,124	10.7	1,271,236	9.1	311,340	8.6	
% Increase	e ('13 to '22)	48.2		42.2		29.1	

Millions of Constant Dollars**

Fiscal	United S	States*	New E	ngland*	Connecticut		
<u>Year</u>	<u>Dollars</u>	% Growth	<u>Dollars</u>	% Growth	<u>Dollars</u>	% Growth	
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	924,105	1.6	242,889	0.9	
2017	17,851,340	1.9	934,475	1.1	244,358	0.6	
2018	18,360,280	2.9	956,081	2.3	248,216	1.6	
2019	18,807,769	2.4	976,324	2.1	250,967	1.1	
2020	18,678,803	(0.7)	962,143	(1.5)	241,686	(3.7)	
2021	19,107,114	2.3	982,362	2.1	241,223	(0.2)	
2022	19,874,534	4.0	1,026,749	4.5	250,916	4.0	
% Increase	e ('13 to '22)	21.4		16.1		5.2	

^{*} Sum of States' Gross State Products

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 2013 and FY 2022, the contributions to Connecticut's GSP from the information; finance, insurance, and real estate (FIRE); professional and business services; healthcare and education; and leisure and hospitality sectors have increased. Comparatively, contributions to Connecticut's GSP from the agriculture, forest & fisheries; construction and mining; manufacturing; transportation, trade, and utilities; and government sectors have decreased. Meanwhile, contribution to Connecticut's GSP from the other services sector has remained the same over the same time period. The FIRE, manufacturing, and transportation, trade, and utilities sectors have historically played an outsized role in Connecticut's economy. However, in FY

^{**} Reported in calendar year 2012 chained dollars

2022, professional and business services exceeded the manufacturing sector's contribution to Connecticut's GSP. Manufacturing's contribution to national gross domestic product also decreased between FY 2013 and FY 2022. Connecticut GSP as a portion of national GDP decreased between FY 2013 and FY 2022, from 1.5% to 1.3%.

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

		FY 2013				FY 2022				
<u>Industry</u>	<u>U.S.</u>	<u>%</u>	<u>CT</u>	<u>%</u>	<u>U.S.</u>	<u>%</u>	<u>CT</u>	<u>%</u>		
Agriculture, Forest & Fisheries	199.0	1.2	0.4	0.2	249.4	1.0	0.4	0.1		
Construction & Mining	935.0	5.7	6.7	2.8	1,399.4	5.7	8.2	2.6		
Manufacturing	1,958.3	11.9	29.9	12.4	2,653.2	10.8	36.7	11.8		
Transportation, Trade & Utilities	2,716.4	16.4	37.1	15.4	4,135.0	16.9	45.6	14.6		
Information	789.5	4.8	11.0	4.6	1,353.5	5.5	17.4	5.6		
Finance, Insurance & Real Estate	3,319.1	20.1	64.8	26.9	5,026.1	20.5	86.8	27.9		
Professional & Business Services	1,995.9	12.1	29.0	12.0	3,199.7	13.1	37.6	12.1		
Health Care & Education	1,429.1	8.7	25.1	10.4	2,065.3	8.4	32.9	10.6		
Leisure & Hospitality	637.1	3.9	7.9	3.3	1,006.6	4.1	11.2	3.6		
Other Services	352.7	2.1	4.5	1.9	496.3	2.0	5.8	1.9		
Government	<u>2,185.0</u>	<u>13.2</u>	<u>24.7</u>	<u>10.2</u>	<u>2,887.5</u>	<u>11.8</u>	28.8	<u>9.2</u>		
Total	16,517.1	100.0	241.2	100.0	24,472.1	100.0	311.3	100.0		
Broadly Defined Services		51.6		59.0		53.7		61.6		
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 61.6% of Connecticut's total GSP in FY 2022, up from 59.0% in FY 2013. During this period, the contribution to the United State's GDP from services increased to 53.7% of GDP in FY 2022 from 51.6% in FY 2013. Theoretically, Connecticut's 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 2022, Connecticut's productivity as measured by GSP per capita was 15.7% 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 27.6% higher in FY 2013. Connecticut's decline in real GSP per capita from FY 2013 to 2022 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 S	tates	New England		Connecticut		
	Real GSP	%	Real GSP	%	Real GSP	%	As a %
Fiscal Year	Per Capita	<u>Change</u>	Per Capita	<u>Change</u>	Per Capita	<u>Change</u>	of the U.S.
2013	\$51,783.4	1.0%	\$60,156.7	-0.3%	\$66,065.5	-0.8%	127.6%
2014	\$52,437.6	1.3%	\$59,784.8	-0.6%	\$64,897.5	-1.8%	123.8%
2015	\$53,611.4	2.2%	\$61,271.3	2.5%	\$66,617.9	2.7%	124.3%
2016	\$54,131.3	1.0%	\$61,996.4	1.2%	\$67,289.4	1.0%	124.3%
2017	\$54,750.2	1.1%	\$62,426.7	0.7%	\$67,726.9	0.7%	123.7%
2018	\$55,959.8	2.2%	\$63,604.7	1.9%	\$68,752.1	1.5%	122.9%
2019	\$57,012.1	1.9%	\$64,758.3	1.8%	\$69,536.9	1.1%	122.0%
2020	\$56,380.9	-1.1%	\$63,720.9	-1.6%	\$67,058.4	-3.6%	118.9%
2021	\$57,550.7	2.1%	\$65,071.7	2.1%	\$66,778.0	-0.4%	116.0%
2022	\$59,757.7	3.8%	\$67,847.7	4.3%	\$69,168.2	3.6%	115.7%

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 non-manufacturing 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 86.9% of Gross Domestic Product in FY 2022; 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 2022 was \$301.9 billion, a 3.1% increase over FY 2021. Total personal income in Connecticut increased 31.9% from FY 2013 to FY 2022. For the United States, total personal income increased 50.6%, and in the New England region, the increase for the same period was 45.3%.

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

TABLE 47
PERSONAL INCOME
(In Millions of Dollars)

Fiscal	United	States	New E	ngland	Connecticut		
<u>Year</u>	<u>Dollars</u>	% Growth	<u>Dollars</u>	% Growth	<u>Dollars</u>	% Growth	
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	900,362	3.58	246,172	2.20	
2017	16,439,868	3.52	927,313	2.99	248,964	1.13	
2018	17,243,126	4.89	968,102	4.40	257,815	3.56	
2019	18,169,926	5.37	1,018,028	5.16	268,943	4.32	
2020	19,252,704	5.96	1,074,065	5.50	277,191	3.07	
2021	20,707,016	7.55	1,147,622	6.85	292,854	5.65	
2022	21,266,365	2.70	1,176,226	2.49	301,863	3.08	

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 51.9% of total personal income compared to 50.7% for the nation in FY 2022. 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.

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

		Fiscal Year 2013				Fiscal Year 2022			
	U.S.	<u>U.S. % CT %</u>				U.S.	<u>%</u>	CT	<u>%</u>
Manufacturing Salaries & Wages	739.0	5.2	<u></u> 14.7	6.4		998.4	4.7	<u></u> 16.5	<u></u>
Nonmanufacturing Salaries & Wages	6,297.8	44.6	102.3	44.7		9,790.2	46.0	140.2	46.5
Proprietors Income	1,376.5	9.7	28.1	12.3		1,807.3	8.5	31.0	10.3
Property Income	2,668.2	18.9	43.9	19.2		4,014.4	18.9	60.2	19.9
Other Labor Income	1,678.5	11.9	26.1	11.4		2,311.6	10.9	32.8	10.9
Transfer Payments (Less Social									
Insurance)	<u>1,364.5</u>	<u>9.7</u>	<u>13.7</u>	<u>6.0</u>		<u>2,344.6</u>	<u>11.0</u>	<u>21.1</u>	<u>7.0</u>
Total	14,124.5	100.0	228.8	100.0		21,266.4	100.0	301.9	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 31.2% from FY 2013 to FY 2022, compared to a national increase of 42.9% and a New England region increase of 41.2%.

Per capita personal income in Connecticut for the most recent fiscal year was 7.1% 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	Unite	ed States	New	England	Connecticut		
<u>Year</u>	<u>Dollars</u>	% Growth	<u>Dollars</u>	% Growth	<u>Dollars</u>	% Growth	
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	60,404	3.19	68,199	2.30	
2017	50,460	2.77	61,948	2.56	69,004	1.18	
2018	52,595	4.23	64,404	3.96	71,411	3.49	
2019	55,123	4.81	67,524	4.84	74,518	4.35	
2020	58,134	5.46	71,133	5.34	76,909	3.21	
2021	62,410	7.36	76,018	6.87	81,071	5.41	
2022	63,905	2.40	77,725	2.25	83,213	2.64	

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 2022. In FY 2022, Connecticut ranked number two in the nation based on per capita personal income, right behind Massachusetts. Connecticut's figure of \$83,213 for per capita personal income is approximately 30.2% higher than the national average.

TABLE 50
PER CAPITA PERSONAL INCOME BY STATE
(Fiscal Year 2022)

	Per Capita			Per Capita	
<u>State</u>	<u>Income</u>	<u>Rank</u>	<u>State</u>	<u>Income</u>	<u>Rank</u>
Massachusetts	\$83,276	1	Wisconsin	\$59,612	26
Connecticut	<u>83,213</u>	<u>2</u>	Delaware	59,542	27
New Jersey	77,062	3	Kansas	58,644	28
New York	76,565	4	Maine	57,934	29
California	76,316	5	lowa	56,947	30
Washington	73,818	6	Tennessee	56,595	31
New Hampshire	73,575	7	Ohio	56,460	32
Colorado	71,753	8	Indiana	56,354	33
Wyoming	69,704	9	Montana	56,341	34
Maryland	69,258	10	Utah	56,109	35
Illinois	67,270	11	North Carolina	56,045	36
Alaska	66,243	12	Michigan	55,718	37
Virginia	66,233	13	Georgia	55,597	38
Minnesota	66,013	14	Arizona	55,260	39
South Dakota	64,187	15	Missouri	54,875	40
North Dakota	63,975	16	Louisiana	53,715	41
Rhode Island	63,964	17	Oklahoma	53,574	42
Pennsylvania	63,733	18	Idaho	52,342	43
Florida	61,854	19	South Carolina	51,888	44
Vermont	61,540	20	Kentucky	51,014	45
Oregon	61,441	21	Arkansas	50,168	46
Nebraska	61,390	22	New Mexico	49,886	47
Texas	59,983	23	Alabama	49,298	48
Hawaii	59,879	24	West Virginia	48,058	49
Nevada	59,833	25	Mississippi	45,200	50
U.S. Average	\$63,905				

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 (13.8%), apparel (2.4%), housing (32.9%), transportation (18.3%), medical care (8.3%), education (5.3%), and the other goods that people buy for day-to-day living (19.0%). 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 CPIs for two population groups: a CPI for All Urban Consumers (CPI-U) which covers approximately 93 percent of the total population; and a CPI for Urban Wage Earners and Clerical Workers (CPI-W) which covers 29 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)

_		
<u>Fiscal Year</u>	<u>CPI</u>	<u>% Growth</u>
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	2.24
2019	253.3	2.07
2020	257.3	1.58
2021	263.2	2.29
2022	282.0	7.16

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

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 I	England	Connecticut		
<u>Year</u>	<u>Dollars</u>	% Growth	<u>Dollars</u>	% Growth	<u>Dollars</u>	% Growth	
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	377,918	2.89	103,328	1.52	
2017	6,774,434	1.63	382,121	1.11	102,591	(0.71)	
2018	6,949,646	2.59	390,182	2.11	103,909	1.28	
2019	7,174,444	3.23	401,971	3.02	106,193	2.20	
2020	7,483,705	4.31	417,499	3.86	107,747	1.46	
2021	7,868,890	5.15	436,109	4.46	111,288	3.29	
2022	7,541,224	(4.16)	417,099	(4.36)	107,043	(3.81)	

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

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	Unite	ed States	New	v England Co		necticut	
<u>Year</u>	<u>Dollars</u>	% Growth	<u>Dollars</u>	% Growth	<u>Dollars</u>	% Growth	
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	25,354	2.51	28,626	1.63	
2017	20,793	0.89	25,527	0.68	28,435	(0.67)	
2018	21,198	1.95	25,957	1.69	28,781	1.22	
2019	21,765	2.68	26,662	2.72	29,424	2.23	
2020	22,597	3.82	27,650	3.71	29,895	1.60	
2021	23,716	4.95	28,888	4.48	30,808	3.05	
2022	22,661	(4.45)	27,562	(4.59)	29,508	(4.22)	

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

All figures derived by: <u>Total Real Personal Income</u>
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	% Gro	wth	% Cumulative Growth		
<u>Year</u>	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%	151.9%	180.6%	
1990-2000	16.0%	18.7%	192.2%	233.0%	
2000-2010	4.8%	14.4%	206.3%	281.1%	
2010-2020	23.2%	7.0%	277.3%	308.0%	
2020-2022	0.4%	-1.3%	278.6%	302.7%	

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

The prior table highlights the cumulative growth in real per capita personal income over the past 72 years. During this 72-year period, Connecticut's cumulative growth in real per capita personal income exceeded that of the United States by 24.0 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 7.0%. That gap has closed even further when comparing growth between FY 2022 and FY 2020 where Connecticut's real per capita personal income actually contracted by 1.3% compared to 0.4% growth 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 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 Metropolitan District (MTD), Hartford in the Hartford-West Hartford-East Hartford Metropolitan Area (MTA), and New York (Manhattan) in the New York-White Plains-Wayne NY-NJ Metropolitan District (MTD).

TABLE 55
COMPARISON OF COST OF LIVING

2022							
Qtr. 3 Data	Composite	Grocery			Trans-	Health	
MTA / MTD	<u>Index</u>	<u>Items</u>	Housing	<u>Utilities</u>	<u>portation</u>	<u>Care</u>	Misc.*
Hartford, CT	105.0	95.9	95.6	125.9	108.8	102.1	112.3
Boston, MA	149.9	113.0	217.3	121.2	134.0	113.8	120.6
New York**, NY	237.6	126.2	491.2	102.3	110.4	108.8	136.2
Index Weights	100.00%	17.26%	30.90%	10.21%	7.54%	4.42%	29.67%

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, 2022

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 2022, the index for the Hartford area, for example, was 105.0. 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 5.0%. Among the six categories, data for the third quarter of 2022 showed that the cost of utilities in the Hartford area was the most expensive item at 25.9% higher than the national average, followed by miscellaneous items at 12.3%, transportation at 8.8%, and healthcare at 2.1%. Housing and grocery items were less expensive than the national average, registering at 4.4% below the national average for housing and 4.1% below the national average for grocery items. 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 2022, many cities had a relatively higher cost of living than the Hartford area. These include, for example, New York City (Manhattan) at 237.6; San Francisco, California at 182.8; and Washington, D.C. at 153.4. Living costs in most cities in the southern and mountain west states are relatively low; for example, Pueblo, Colorado at 99.2; Meridian, Mississippi at 86.0; and San Antonio, Texas at 93.0. 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 103.1, 122.8, and 111.2, 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 126.3% 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 56% 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 2022, the ACCRA cost of living index was 128.8 in the Stamford area, 105.0 in the Hartford area, and 112.5 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

2022							
Qtr. 3 Data	Composite	Grocery			Trans-	Health	
<u>MSA</u>	<u>Index</u>	<u>Items</u>	Housing	<u>Utilities</u>	<u>portation</u>	<u>Care</u>	Misc.*
Hartford	105.0	95.9	95.6	125.9	108.8	102.1	112.3
New Haven	112.5	96.5	109.4	128.5	112.6	112.3	119.6
Stamford	128.8	105.0	159.5	127.5	115.0	109.9	117.3
Index Weights	100.00%	17.26%	30.90%	10.21%	7.54%	4.42%	29.67%

Source: The Council for Community and Economic Research (C2ER), "ACCRA Cost of Living Index," Data for Quarter 3, 2022

THE MAJOR REVENUE RAISING TAXES IN THE STATE OF CONNECTICUT

In FY 2022, Connecticut's General Fund derived 90 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 FY 2021. The table shows overall state tax collections as a percentage of personal income. In the table, note that Connecticut ranks 8th, signifying that in seven 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
FY 2021

<u>State</u>	<u>Percentage</u>	<u>Rank</u>	<u>State</u>	<u>Percentage</u>	<u>Rank</u>
Vermont	9.93%	1	Montana	5.98%	26
Hawaii	9.15%	2	New Jersey	5.95%	27
Delaware	8.62%	3	Pennsylvania	5.84%	28
California	8.22%	4	Maryland	5.79%	29
Minnesota	8.15%	5	North Carolina	5.66%	30
North Dakota	7.57%	6	Nebraska	5.57%	31
Arkansas	7.51%	7	Washington	5.55%	32
Connecticut	<u>7.16%</u>	<u>8</u>	Alabama	5.54%	33
West Virginia	6.90%	9	Virginia	5.46%	34
Mississippi	6.89%	10	Nevada	5.32%	35
Indiana	6.78%	11	Ohio	5.11%	36
New Mexico	6.75%	12	Oklahoma	5.08%	37
Oregon	6.65%	13	Arizona	4.96%	38
Kansas	6.62%	14	Louisiana	4.89%	39
Maine	6.46%	15	Tennessee	4.86%	40
Utah	6.41%	16	South Carolina	4.71%	41
Illinois	6.40%	17	Wyoming	4.51%	42
Iowa	6.27%	18	Georgia	4.42%	43
Kentucky	6.26%	19	Missouri	4.31%	44
Wisconsin	6.19%	20	Colorado	4.26%	45
Massachusetts	6.12%	21	South Dakota	3.57%	46
Idaho	6.11%	22	Texas	3.50%	47
New York	6.08%	23	Florida	3.48%	48
Rhode Island	6.05%	24	New Hampshire	3.06%	49
Michigan	6.04%	25	Alaska	2.06%	50
U.S. Average	5.83%				

Source: U.S. Census Bureau, "Annual Survey of State Government Tax Collections, 2021"; 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 imposes 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). 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 credit for property taxes paid on their primary residence or on their motor vehicle. The personal income tax generated \$12,131.8 million in FY 2022, and \$10,340.4 million in FY 2021. In FY 2022, this tax accounted for 55.2% 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	<u>Single</u>	<u>Joint</u>	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*

<u>State</u>	<u>Percentage</u>	<u>Rank</u>	<u>State</u>	<u>Percentage</u>	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	<u>3.69%</u>	<u>4</u>	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 Markit, 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 2022

	<u>Single</u>		Married Filing jointly Head of Household		<u>old</u>			
Exemption:	\$15,000		Exemption:	\$24,000		Exemption	: \$19,000	
	51K of exemption m \$30.0K to \$4			\$1K of exempti m \$48K to \$72			\$1K of exemp om \$38K to \$5	
AGI	AGI	% of	AGI	AGI	% of	AGI	AGI	% of
From	To	Tax	From	То	Tax	From	To	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

		Other			Other
	Own	State's		Own	State's
<u>State</u>	<u>Securities</u>	<u>Securities</u>	<u>State</u>	<u>Securities</u>	Securities
Alabama	E	Т	Montana	Е	Т
Alaska (no tax)			Nebraska	E	T
Arizona	Ε	Т	Nevada (no tax)		
Arkansas	Е	T	New Hampshire	E	Т
California	Ε	T	New Jersey	E	T
Colorado	Е	T	New Mexico	E	Т
Connecticut	<u>E</u>	<u>T</u>	New York	E	Т
Delaware	E	T	North Carolina	E	Т
Florida (no tax)			North Dakota	Е	E
Georgia	Е	T	Ohio	E	Т
Hawaii	E	T	Oklahoma	T (3)	T (3)
Idaho	Е	T	Oregon	E	Т
Illinois	T (1)	T (1)	Pennsylvania	E	T
Indiana	E	Е	Rhode Island	E	T
lowa	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	Т
Massachusetts	E	T	Virginia	E	T
Michigan	E	T	Washington (no tax)		
Minnesota	E	Т	West Virginia	Е	Т
Mississippi	Е	T	Wisconsin	T (1)	T (1)
Missouri	Е	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) 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	<u>Bracket</u>	Hig	h Bracket		Low I	<u>Bracket</u>	<u>Hi</u> g	sh Bracket
	%	To Net	%	From Net		%	To Net	%	From Net
<u>State</u>	<u>Rate</u>	Income \$	<u>Rate</u>	Income \$	<u>State</u>	<u>Rate</u>	Income \$	<u>Rate</u>	Income \$
Alabama (3)	2.00	1,000	5.00	6,001	Missouri (1)	1.50	1,088	5.40	8,705
Arizona (1)	2.59	55,615	4.50	333,685	Montana (1)	1.00	3,100	6.75	18,801
Arkansas (3)	2.00	4,300	5.50	8,501	Nebraska (1,b)	2.46	6,860	6.84	66,361
California (1)	1.00	18,650	13.3	1,250,739	New Hampshire	(a)			
Colorado (2)	4.55	All			New Jersey (3)	1.40	20,000	10.75	1,000,001
Connecticut (1)	<u>3.00</u>	<u>20,000</u>	<u>6.99</u>	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)	4.00	17,150	10.90	25,000,001
Georgia (1)	1.00	1,000	5.75	10,001	N. Carolina (1)	4.99	All		
Hawaii (1)	1.40	4,800	11.0	400,001	N. Dakota (2)	1.10	67,700	2.90	445,001
Idaho (2)	1.00	3,176	6.00	15,879	Ohio (1)	2.77	44,250	3.99	110,651
Illinois (1)	4.95	All			Oklahoma (1)	0.25	2,000	4.75	12,201
Indiana (1)	3.23	All			Oregon (2)	4.75	7,300	9.9	250,001
lowa (1,b)	0.33	1,743	8.53	78,436	Pennsylvania (3)	3.07	All		
Kansas (1)	3.10	30,000	5.70	60,001	Rhode Island(1,b)	3.75	68,200	5.99	155,051
Kentucky (1)	5.00	All			S. Carolina (2,b)	0.00	3,200	7.00	16,041
Louisiana (1)	1.85	25,000	4.25	100,001	Utah (1)	4.95	All		
Maine (1,b)	5.80	46,000	7.15	108,901	Vermont (1)	3.35	68,400	8.75	251,951
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	17,010	7.65	374,601
Minnesota (1,b)	5.35	41,050	9.85	284,811	Dist. of Col. (1)	4.00	10,000	10.75	1,000,001
Mississippi (3)	4.00	5,000	5.00	10,001					

The following states do not levy an income tax: Alaska, Florida, Nevada, South Dakota, Tennessee, 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 \$5,962.4 million in FY 2022, \$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 2022, sales and use taxes accounted for 21.91% of the total revenue in the General Fund, compared to 23.3% in FY 2021, 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 2021 data. From FY 1991 to FY 2022, Connecticut's sales tax collections as a percentage of personal income dropped from 3.15% to 1.80%, declining from 9th in the nation to 29th, and compared to the national average of 2.0%. 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 2021*

	Tax Rate				Tax Rate		
<u>State</u>	<u>(%)</u>	<u>Percentage</u>	<u>Rank</u>	<u>State</u>	<u>(%)</u>	<u>Percentage</u>	Rank
Hawaii	4.000**	3.8%	1	North Dakota	5.000**	1.9%	24
Washington	6.500**	3.4%	2	Wisconsin	5.000**	1.8%	25
Nevada	6.850**	3.3%	3	New Jersey	6.625**	1.8%	26
Mississippi	7.000**	3.2%	4	West Virginia	6.000**	1.8%	27
Tennessee	7.000**	2.9%	5	Minnesota	6.875**	1.8%	28
New Mexico	5.125**	2.8%	6	Connecticut	<u>6.350</u>	<u>1.8%</u>	<u>29</u>
Arkansas	6.500**	2.8%	7	North Carolina	4.750**	1.7%	30
Idaho	6.000**	2.6%	8	Pennsylvania	6.000**	1.7%	31
Indiana	7.000	2.5%	9	Louisiana	4.450**	1.6%	32
Maine	5.500	2.4%	10	Illinois	6.250**	1.6%	33
Texas	6.250**	2.3%	11	Alabama	4.000**	1.6%	34
Arizona	5.600**	2.3%	12	South Carolina	6.000**	1.6%	35
Florida	6.000**	2.3%	13	Oklahoma	4.500**	1.5%	36
South Dakota	4.500**	2.2%	14	California	7.250**	1.4%	37
Iowa	6.000**	2.2%	15	Massachusetts	6.250	1.3%	38
Kansas	6.500**	2.2%	16	Maryland	6.000	1.3%	39
Ohio	5.750**	2.2%	17	Vermont	6.000**	1.3%	40
Kentucky	6.000	2.0%	18	Missouri	4.225**	1.2%	41
Nebraska	5.500**	2.0%	19	Georgia	4.000**	1.2%	42
Michigan	6.000	2.0%	20	Virginia	5.300**	1.2%	43
Utah	6.100**	2.0%	21	New York	4.000**	1.0%	44
Rhode Island	7.000	1.9%	22	Colorado	2.900**	0.9%	45
Wyoming	4.000**	1.9%	23				

U.S. Average**

2.00%

Notes:

- * Based on federal fiscal year from October 2020 through September 2021.
- ** 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, 2021"; IHS Markit and Tax Foundation

TABLE 64
MAJOR SALES TAX EXEMPTIONS BY STATE

<u>State</u>	<u>Food</u>	Prescription Drugs	Motor Fuels	Clothing
Alabama	T	Е	E	T
Arizona	E	Е	E	T
Arkansas	T (4)	E	T	T
California	Е	E	T	T
Colorado	E	E	E	T
Connecticut	<u>E</u>	<u>E</u>	<u>E</u>	<u>T</u>
Florida	E	E	T	T
Georgia	T (4)	E	T (6)	T
Hawaii	T	E	T	T
Idaho	T	E	E	T
Illinois	T	T	T	T
Indiana	Е	Е	T	T
Iowa	Е	Е	Е	T
Kansas	T	Е	Е	T
Kentucky	Е	Е	Е	T
Louisiana	T (4)	Е	E	T
Maine	Ē	Е	Е	T
Maryland	E	Е	E	T
Massachusetts	E	E	E	E (7)
Michigan	E	E	T	T
Minnesota	E	E	E	E
Mississippi	T	E	E	T
Missouri	T (4)	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 (8)
North Carolina	T (4)	E	E	T (0)
North Dakota	E 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
South Carolina	E	E	E	T
South Dakota	T	E	E	T
Tennessee	T (4)	E	E	T
Texas	1 (4) E	E	E	T
Utah	T (5)	E	E	T
	1 (3) E	E	E	E
Vermont	E T (2)	E E	E E	E T
Virginia				
Washington	E	E	E	T
West Virginia	E E	E	T	T T
Wisconsin		E	E	
Wyoming	<u>E</u>	<u>E</u>	<u>E</u>	<u>T</u>
Total Taxable	16	1	10	38

Note: These states do not levy a sales tax: Alaska, Delaware, Montana, New Hampshire & Oregon.

Source: Federation of Tax Administrators and Tax Foundation

T = Taxable under the general sales tax, E = Exempt from the sales tax (1) Some state tax food, but allow a rebate or income tax credit to compensate poor households. They are: Hi, ID, KS, OK, and SD. (2) Includes statewide 1.0% tax levied by local governments in Virginia. (3) Tax rate may be adjusted annually according to a formula based on balances in the unappropriated general fund and the school foundation fund. (4) Food sales subject to local taxes. (5) Includes a statewide 1.25% tax levied by local governments in Utah. (6) Motor fuels subject to local taxes. (7) Clothes tax exempt up to a sales price of \$175 per item. (8) Clothes tax exempt up to a sales price of \$110 per item. Tax rates are effective as of January 1, 2022

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 \$1,401.2 million in FY 2022, \$1,153.1 million in FY 2021, \$934.5 million in FY 2020, and \$1,060.9 million in FY 2019. In FY 2022, this tax accounted for 6.37% of the General Fund revenue, compared to 5.6% in FY 2021.

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 2022, 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 2022

	Low E	<u> Bracket</u>	High	<u>Bracket</u>		Low I	<u>Bracket</u>	High	<u>Bracket</u>
	%	To Net	%	From Net		%	To Net	%	From Net
<u>State</u>	Rate (a)	Income \$	Rate (a)	Income \$	<u>State</u>	Rate (a)	Income \$	Rate (a)	Income \$
Alabama	6.50	All			Nebraska	5.58	100,000	7.50	100,001
Alaska	0.00	25,000	9.40	222,001	Nevada				
Arizona	4.90	All			New Hampshire (j)	7.60	All		
Arkansas	1.00	3,000	5.90	100,001	New Jersey (k)	9.00	All		
California	8.84	All			New Mexico	4.80	500,000	5.90	500,001
Colorado	4.55	All			New York (L)	6.50	All		
Connecticut (b)	<u>7.50</u>	All All			North Carolina	2.50	All		
Delaware	8.70	All			North Dakota (m)	1.41	25,000	4.31	50,001
Florida	5.50	All			Ohio (n)				
Georgia	5.75	All			Oklahoma	4.00	All		
Hawaii (c)	4.40	25,000	6.40	100,001	Oregon	6.60	1,000,000	7.60	1,000,001
Idaho	6.5	All			Pennsylvania	9.99	All		
Illinois (d)	9.50	All			Rhode Island	7.00	All		
Indiana	4.90	All			South Carolina	5.00	All		
Iowa	5.50	100,000	9.80	250,001	South Dakota				
Kansas (e)	4.00	All			Tennessee	6.50	All		
Kentucky	5.00	All			Texas (o)				
Louisiana	3.50	50,000	7.50	150,001	Utah	4.95	All		
Maine (f)	3.50	350,000	8.93	3,500,001	Vermont	6.00	10,000	8.50	25,001
Maryland	8.25	All			Virginia	6.00	All		
Massachusetts (g)	8.00	All			Washington				
Michigan	6.00	All			West Virginia	6.50	All		
Minnesota (h)	9.80	All			Wisconsin	7.90	All		
Mississippi	0.00	5,000	5.00	10,001	Wyoming				
Missouri	4.00	All			District of Col.	8.25	All		
Montana (I)	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: NV, SD, 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

- (a) Rates listed are the corporate income tax rate applied to financial institutions or excise taxes based on income. Some states have other taxes based upon the value of deposits or shares.
- (b) CT 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.
- (c) HI taxes capital gains at 4%.
- (d) IL sum of corporation income tax rate of 7.00% and a replacement tax of 2.5%.
- (e) KA in addition to the flat 4% corporate income tax levies a 3.0% surtax on taxable income over \$50,000.
- (f) The state franchise tax on financial institutions is either (1) the sum of 1% of the Maine net income of the financial institution for the taxable year, plus 8¢ per \$1,000 of the institution's Maine assets as of the end of its taxable year, or (2) 39¢ per \$1,000 of the institution's Maine assets as of the end of its taxable year.
- (g) MA 50% of the federal income is deductible.) Business and manufacturing corporations pay an additional tax of \$2.60 per \$1,000 on either taxable Massachusetts tangible property or taxable net worth allocable to the state (for intangible property corporations).
- h) MN levies a 5.8% tentative min. tax on Alternative Minimum Taxable Income; also imposes a surtax ranging up to \$10,480.
- (i) Montana levies a 7% tax on taxpayers using water's edge combination. Taxpayers with gross sales in Montana of \$100,000 or less may pay an alternative tax of 0.5% on such sales, instead of the net income tax.
- (j) 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.) New Hampshire's 7.6% [for tax years ending on or before 12/31/22] Business Profits Tax is imposed on both corporations and unincorporated associations with gross income over \$50,000.
- (k) 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.
- (I) Rate of 0.0% for qualified manufactures. Minimum tax for all ranges from \$25 to \$200,000.
- (m) ND imposes a 3.5% surtax for filers electing to use the water's edge method to apportion income.
- (n) No corporate income tax; Commercial Activity Tax of \$150 for gross receipts sitused to Ohio of between \$150,000 and \$1 million, plus 0.26% of gross receipts over \$1 million.
- (o) 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 2022.

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. After the Russian invasion of Ukraine in February of 2022 gasoline prices rose dramatically in the U.S. To somewhat ameliorate this increase in prices, the state waived the tax on gasoline from April 1, 2022 until December 31, 2022. The Gas tax is then phased back in in 5 cent increments starting on January 1, 2023 until May 1, 2023 when it will return to 25 cents per gallon. Effective July 1, 2022, the Special Fuels and Motor Carrier Taxes increased by 9.1 cents per gallon from 40.1 cents per gallon in FY 22 to 49.2 cents per gallon in FY 23.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

		Other				Other	
	Excise	Taxes/	Total		Excise	Taxes/	Total
<u>State</u>	<u>Tax</u>	Fees (a)	<u>Tax (b)</u>	<u>State</u>	<u>Tax</u>	Fees (a)	<u>Tax (b)</u>
Alabama	28.00¢	3.31¢	31.31¢	Montana	32.50¢	0.75¢	33.25¢
Alaska	8.95	6.18	15.13	Nebraska (d)	24.80	0.90	25.70
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	17.05	68.15	New Jersey	10.50	40.20	50.70
Colorado	22.00	0.00	22.00	New Mexico	17.00	1.88	18.88
Connecticut	<u>25.00</u>	<u> 10.75</u>	<u>35.75</u>	New York	8.05	40.17	48.22
Delaware	23.00	0.00	23.00	North Carolina	38.50	0.25	38.75
Florida	4.00	39.55	43.55	North Dakota	23.00	0.00	23.00
Georgia	28.70	8.85	37.55	Ohio	38.50	0.01	38.51
Hawaii	16.00	35.69	5.69	Oklahoma	19.00	1.00	20.00
Idaho	32.00	1.00	33.00	Oregon	36.00	2.83	38.83
Illinois	39.20	20.40	59.60	Pennsylvania (e)	0.00	58.70	58.70
Indiana	32.00	17.79	49.79	Rhode Island	34.00	1.00	35.00
lowa	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	31.90	0.01	31.91
Maryland (c)	27.10	9.00	36.10	Vermont	12.10	20.04	31.14
Massachusetts	24.00	2.54	26.54	Virginia	26.20	8.20	34.40
Michigan	27.17	18.00	45.17	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	19.50	0.42	19.42	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 1/1/2022

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

<u>State</u>	<u>Rate</u>	<u>State</u>	<u>Rate</u>
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	\$1.94	New Mexico	\$2.00
Connecticut	<u>\$4.35</u>	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	\$3.33
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) (c)	\$0.62
Louisiana	\$1.08	Texas	\$1.41
Maine	\$2.00	Utah	\$1.70
Maryland	\$3.75	Vermont	\$3.08
Massachusetts	\$3.51	Virginia (a)	\$0.60
Michigan	\$2.00	Washington	\$3.025
Minnesota (d)	\$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.

by the Department. The current rate is 63.3¢ through December 31, 2022.

Source: Federation of Tax Administrators, rates as of January 1, 2022.

⁽a) Counties and cities may impose an additional tax on a pack of cigarettes: in Alabama, 1¢ to 25¢; Illinois, 10¢ to \$4.18; 'Missouri, 4¢ to 7¢; New York City, \$1.50; Tennessee, 1¢; 'and Virginia, 2¢ to 15¢.

⁽b) Florida's rate includes a surcharge of \$1 per pack.

⁽c) Dealers pay an additional enforcement and administrative fee of 0.05¢ in Tennessee.

⁽d) In addition, Minnesota imposes an in lieu cigarette sales tax determined annually

TABLE 68
INSURANCE COMPANIES TAX BY STATE

	Domestic	Foreign		Domestic	Foreign
	Tax	Tax		Tax	Tax
<u>State</u>	Rate % (1)	Rate % (1)	<u>State</u>	Rate % (1)	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	<u>1.50-4.00</u>	<u>1.50-4.00</u>	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	2.00	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.

Source: National Association of Insurance Commissioners & The Center for Insurance Policy and Research, Retaliation Guide December 2022

⁽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% in FL, IL (Domestic), GA, SC & VA; 0.3125% in OK; 0.50% in MN, MS, 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), IL (Foreign only), & LA; 2.5% in MO; 2.375% 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.

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

		Wine	Wine				Wine	Wine	
	Distilled	14%	14%			Distilled	14%	14%	
<u>State</u>	<u>Spirits</u>	<u>or Less</u>	to 21%	<u>Beer</u>	<u>State</u>	<u>Spirits</u>		to 21%	<u>Beer</u>
Alabama (2)	(1)	1.70	9.16	0.53	Montana	(1)	1.02	(1a)	0.14
Alaska	12.80	2.50	2.50	1.07	Nebraska	3.75	0.95	0.95	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	5.68	0.41
Connecticut	<u>5.94</u>	<u>0.79</u>	<u>0.79</u>	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	8.55	0.23	Pennsylvania	(1)	(1)	(1a)	0.08
Indiana	2.68	0.47	0.47	0.12	Rhode Island	5.40	1.40	1.40	0.11
lowa	(1)	1.75	1.75	0.19	South Carolina (3)	2.72	0.90	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	(1a)	0.35	Utah	(1)	(1)	(1a)	0.42
Maryland	1.50	0.40	0.40	0.09	Vermont	(1)	0.55	(1a)	0.27
Massachusetts	4.05	0.55	0.55	0.11	Virginia	(1)	1.51	(1a)	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)	(1a)	0.02

(1) In 17 states, the government directly controls the sales of distilled spirits. Revenue in these states is generated from

various taxes, fees, price mark-ups, and net liquor profits.

- (1a) In 6 states, all wine sales are through state stores. Revenue in these states is generated from various taxes, fees, price mark-ups, and net profits.
- (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, 2022.

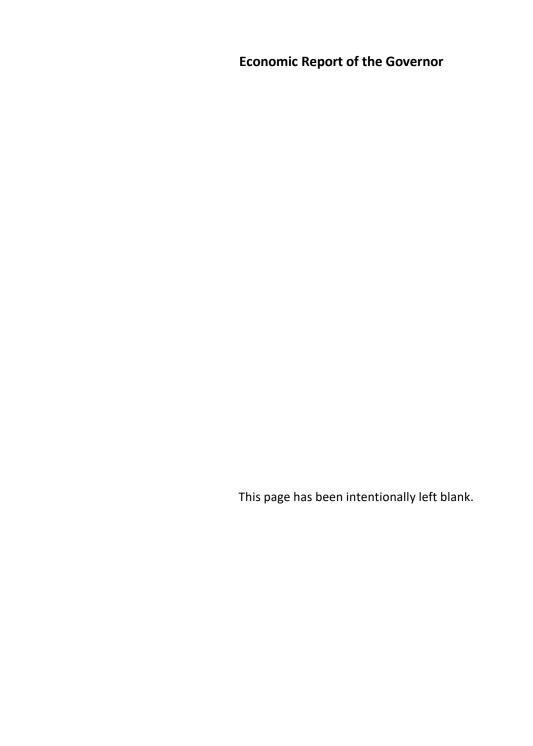
TABLE 70
GENERAL FUND REVENUES

		GENERAL FUND	REVENUES		
TAXES (\$K)	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Personal Income	\$10,770,150	\$9,640,164	\$9,397,779	\$10,340,437	\$12,131,800
Sales and Use	4,202,246	4,338,061	4,317,730	4,792,675	4,818,083
Corporation	920,746	1,060,877	934,499	1,153,079	1,401,153
	320,740	, ,	,	, ,	
Pass-through Entity Tax	250.621	1,172,080	1,241,949	1,549,716	2,307,594
Public Service Corporation	250,631	262,141	254,076	243,671	295,681
Inheritance & Estate	223,839	225,230	159,538	303,339	220,223
Insurance Companies	230,605	193,803	228,350	229,761	240,969
Cigarettes	376,448	357,494	346,300	351,077	326,709
Real Estate Conveyance	202,526	213,224	176,578	385,028	384,454
Alcoholic Beverages	63,211	64,145	73,080	79,111	78,916
Admissions, Dues, Cabaret	40,272	42,834	39,939	36,022	41,011
Miscellaneous	1,059,928	1,100,087	1,023,041	1,052,109	1,051,776
Total - Taxes	\$18,340,602	\$18,670,140	\$18,192,858	\$20,516,024	\$23,298,368
Less Refunds of Taxes	(1,269,667)	(1,465,368)	(1,491,413)	(1,857,512)	(1,811,202)
Less Refunds of R&D Credit	(5,664)	(5,370)	(8,628)	(7,093)	(5,756)
Total - Taxes Less Refunds	\$17,065,271	\$17,199,401	\$16,692,816	\$18,651,419	\$21,481,411
OTHER REVENUE					
Transfer-Special Revenue	\$339,512	\$364,082	\$340,090	\$410,301	\$395,023
Indian Gaming Payments	272,957	255,239	164,141	228,883	248,686
Licenses, Permits & Fees	306,165	291,171	307,524	329,568	368,612
Sales of Commodities &	33,238	27,105	26,136	22,872	22,816
Rents. Fines & Escheats	189.428	165.875	154.288	· ·	220,749
:				183,115	
Investment Income	15,911	48,950	48,690	2,945	20,607
Miscellaneous	177,307	214,700	256,341	257,766	272,825
Less Refunds of Payments	-61,058	-59,139	(69,306)	(37,661)	(74,708)
Total - Other Revenue	\$1,273,461	\$1,307,982	\$1,227,906	\$1,397,789	\$1,474,610
OTHER SOURCES					
Federal Grants	1,143,075	2,083,774	\$1,796,754	\$1,496,315	\$1,934,869
Transfer from Tobacco Fund	109,700	110,200	136,000	114,500	126,200
Transfer From/(To) Other	78,376	(101,814)	(129,620)	112,856	21,300
, (,				•	
Transfers to BRF – Volatility	(1,471,333)	(949,681)	(530,316)	(1,241,460)	(3,047,454)
Total - Other Sources	(\$140,182)	\$1,142,479	\$1,272,819	\$482,211	(\$965,085)
GRAND TOTAL	\$18,198,550	\$19,649,862	\$19,193,540	\$20,531,418	\$21,990,935
TAXES	% of Total	% of Total	% of Total	% of Total	% of Total
TAXES	<u>% of Total</u>	<u>% of Total</u>	<u>% of Total</u>	<u>% of Total</u>	<u>% of Total</u>
Personal Income	59.18	49.06	48.96	50.36	55.17
Personal Income Sales and Use	59.18 23.09	49.06 22.08	48.96 22.50	50.36 23.34	55.17 21.91
Personal Income Sales and Use Corporation	59.18	49.06 22.08 5.40	48.96 22.50 4.87	50.36 23.34 5.62	55.17 21.91 6.37
Personal Income Sales and Use Corporation Pass-through Entity Tax	59.18 23.09 5.06	49.06 22.08 5.40 5.96	48.96 22.50 4.87 6.47	50.36 23.34 5.62 7.55	55.17 21.91 6.37 10.49
Personal Income Sales and Use Corporation Pass-through Entity Tax Public Service Corporation	59.18 23.09 5.06	49.06 22.08 5.40 5.96 1.33	48.96 22.50 4.87 6.47 1.32	50.36 23.34 5.62 7.55 1.19	55.17 21.91 6.37 10.49 1.34
Personal Income Sales and Use Corporation Pass-through Entity Tax	59.18 23.09 5.06	49.06 22.08 5.40 5.96	48.96 22.50 4.87 6.47	50.36 23.34 5.62 7.55	55.17 21.91 6.37 10.49
Personal Income Sales and Use Corporation Pass-through Entity Tax Public Service Corporation	59.18 23.09 5.06	49.06 22.08 5.40 5.96 1.33	48.96 22.50 4.87 6.47 1.32	50.36 23.34 5.62 7.55 1.19	55.17 21.91 6.37 10.49 1.34
Personal Income Sales and Use Corporation Pass-through Entity Tax Public Service Corporation Inheritance & Estate Insurance Companies	59.18 23.09 5.06 1.38 1.23 1.27	49.06 22.08 5.40 5.96 1.33 1.15 0.99	48.96 22.50 4.87 6.47 1.32 0.83 1.19	50.36 23.34 5.62 7.55 1.19 1.48	55.17 21.91 6.37 10.49 1.34 1.00
Personal Income Sales and Use Corporation Pass-through Entity Tax Public Service Corporation Inheritance & Estate Insurance Companies Cigarettes	59.18 23.09 5.06 1.38 1.23 1.27 2.07	49.06 22.08 5.40 5.96 1.33 1.15 0.99 1.82	48.96 22.50 4.87 6.47 1.32 0.83 1.19 1.80	50.36 23.34 5.62 7.55 1.19 1.48 1.12	55.17 21.91 6.37 10.49 1.34 1.00 1.10 1.49
Personal Income Sales and Use Corporation Pass-through Entity Tax Public Service Corporation Inheritance & Estate Insurance Companies Cigarettes Real Estate Conveyance	59.18 23.09 5.06 1.38 1.23 1.27 2.07 1.11	49.06 22.08 5.40 5.96 1.33 1.15 0.99 1.82 1.09	48.96 22.50 4.87 6.47 1.32 0.83 1.19 1.80 0.92	50.36 23.34 5.62 7.55 1.19 1.48 1.12 1.71 1.88	55.17 21.91 6.37 10.49 1.34 1.00 1.10 1.49
Personal Income Sales and Use Corporation Pass-through Entity Tax Public Service Corporation Inheritance & Estate Insurance Companies Cigarettes Real Estate Conveyance Alcoholic Beverages	59.18 23.09 5.06 1.38 1.23 1.27 2.07 1.11 0.35	49.06 22.08 5.40 5.96 1.33 1.15 0.99 1.82 1.09 0.33	48.96 22.50 4.87 6.47 1.32 0.83 1.19 1.80 0.92 0.38	50.36 23.34 5.62 7.55 1.19 1.48 1.12 1.71 1.88 0.39	55.17 21.91 6.37 10.49 1.34 1.00 1.10 1.49 1.75 0.36
Personal Income Sales and Use Corporation Pass-through Entity Tax Public Service Corporation Inheritance & Estate Insurance Companies Cigarettes Real Estate Conveyance Alcoholic Beverages Admissions, Dues, Cabaret	59.18 23.09 5.06 1.38 1.23 1.27 2.07 1.11 0.35 0.22	49.06 22.08 5.40 5.96 1.33 1.15 0.99 1.82 1.09 0.33 0.22	48.96 22.50 4.87 6.47 1.32 0.83 1.19 1.80 0.92 0.38 0.21	50.36 23.34 5.62 7.55 1.19 1.48 1.12 1.71 1.88 0.39 0.18	55.17 21.91 6.37 10.49 1.34 1.00 1.10 1.49 1.75 0.36 0.19
Personal Income Sales and Use Corporation Pass-through Entity Tax Public Service Corporation Inheritance & Estate Insurance Companies Cigarettes Real Estate Conveyance Alcoholic Beverages Admissions, Dues, Cabaret Miscellaneous	59.18 23.09 5.06 1.38 1.23 1.27 2.07 1.11 0.35 0.22 5.82	49.06 22.08 5.40 5.96 1.33 1.15 0.99 1.82 1.09 0.33 0.22 5.60	48.96 22.50 4.87 6.47 1.32 0.83 1.19 1.80 0.92 0.38 0.21 5.33	50.36 23.34 5.62 7.55 1.19 1.48 1.12 1.71 1.88 0.39 0.18 5.12	55.17 21.91 6.37 10.49 1.34 1.00 1.10 1.49 1.75 0.36 0.19 4.78
Personal Income Sales and Use Corporation Pass-through Entity Tax Public Service Corporation Inheritance & Estate Insurance Companies Cigarettes Real Estate Conveyance Alcoholic Beverages Admissions, Dues, Cabaret Miscellaneous Total - Taxes	59.18 23.09 5.06 1.38 1.23 1.27 2.07 1.11 0.35 0.22 5.82	49.06 22.08 5.40 5.96 1.33 1.15 0.99 1.82 1.09 0.33 0.22 5.60	48.96 22.50 4.87 6.47 1.32 0.83 1.19 1.80 0.92 0.38 0.21 5.33	50.36 23.34 5.62 7.55 1.19 1.48 1.12 1.71 1.88 0.39 0.18 5.12	55.17 21.91 6.37 10.49 1.34 1.00 1.10 1.49 1.75 0.36 0.19 4.78
Personal Income Sales and Use Corporation Pass-through Entity Tax Public Service Corporation Inheritance & Estate Insurance Companies Cigarettes Real Estate Conveyance Alcoholic Beverages Admissions, Dues, Cabaret Miscellaneous Total - Taxes Less Refunds of Taxes	59.18 23.09 5.06 1.38 1.23 1.27 2.07 1.11 0.35 0.22 5.82 100.78 -6.98	49.06 22.08 5.40 5.96 1.33 1.15 0.99 1.82 1.09 0.33 0.22 5.60 95.01	48.96 22.50 4.87 6.47 1.32 0.83 1.19 1.80 0.92 0.38 0.21 5.33 94.79 -7.77	50.36 23.34 5.62 7.55 1.19 1.48 1.12 1.71 1.88 0.39 0.18 5.12 99.93	55.17 21.91 6.37 10.49 1.34 1.00 1.10 1.49 1.75 0.36 0.19 4.78
Personal Income Sales and Use Corporation Pass-through Entity Tax Public Service Corporation Inheritance & Estate Insurance Companies Cigarettes Real Estate Conveyance Alcoholic Beverages Admissions, Dues, Cabaret Miscellaneous Total - Taxes	59.18 23.09 5.06 1.38 1.23 1.27 2.07 1.11 0.35 0.22 5.82	49.06 22.08 5.40 5.96 1.33 1.15 0.99 1.82 1.09 0.33 0.22 5.60 95.01 -7.46 -0.03	48.96 22.50 4.87 6.47 1.32 0.83 1.19 1.80 0.92 0.38 0.21 5.33 94.79 -7.77	50.36 23.34 5.62 7.55 1.19 1.48 1.12 1.71 1.88 0.39 0.18 5.12	55.17 21.91 6.37 10.49 1.34 1.00 1.10 1.49 1.75 0.36 0.19 4.78
Personal Income Sales and Use Corporation Pass-through Entity Tax Public Service Corporation Inheritance & Estate Insurance Companies Cigarettes Real Estate Conveyance Alcoholic Beverages Admissions, Dues, Cabaret Miscellaneous Total - Taxes Less Refunds of Taxes	59.18 23.09 5.06 1.38 1.23 1.27 2.07 1.11 0.35 0.22 5.82 100.78 -6.98	49.06 22.08 5.40 5.96 1.33 1.15 0.99 1.82 1.09 0.33 0.22 5.60 95.01	48.96 22.50 4.87 6.47 1.32 0.83 1.19 1.80 0.92 0.38 0.21 5.33 94.79 -7.77	50.36 23.34 5.62 7.55 1.19 1.48 1.12 1.71 1.88 0.39 0.18 5.12 99.93	55.17 21.91 6.37 10.49 1.34 1.00 1.10 1.49 1.75 0.36 0.19 4.78
Personal Income Sales and Use Corporation Pass-through Entity Tax Public Service Corporation Inheritance & Estate Insurance Companies Cigarettes Real Estate Conveyance Alcoholic Beverages Admissions, Dues, Cabaret Miscellaneous Total - Taxes Less Refunds of R&D Credit	59.18 23.09 5.06 1.38 1.23 1.27 2.07 1.11 0.35 0.22 5.82 100.78 -6.98 -0.03	49.06 22.08 5.40 5.96 1.33 1.15 0.99 1.82 1.09 0.33 0.22 5.60 95.01 -7.46 -0.03	48.96 22.50 4.87 6.47 1.32 0.83 1.19 1.80 0.92 0.38 0.21 5.33 94.79 -7.77	50.36 23.34 5.62 7.55 1.19 1.48 1.12 1.71 1.88 0.39 0.18 5.12 99.93 -9.05 -0.03	55.17 21.91 6.37 10.49 1.34 1.00 1.10 1.49 1.75 0.36 0.19 4.78 105.95 -8.24 -0.03
Personal Income Sales and Use Corporation Pass-through Entity Tax Public Service Corporation Inheritance & Estate Insurance Companies Cigarettes Real Estate Conveyance Alcoholic Beverages Admissions, Dues, Cabaret Miscellaneous Total - Taxes Less Refunds of Taxes Less Refunds of R&D Credit Total – Taxes Less Refunds	59.18 23.09 5.06 1.38 1.23 1.27 2.07 1.11 0.35 0.22 5.82 100.78 -6.98 -0.03	49.06 22.08 5.40 5.96 1.33 1.15 0.99 1.82 1.09 0.33 0.22 5.60 95.01 -7.46 -0.03	48.96 22.50 4.87 6.47 1.32 0.83 1.19 1.80 0.92 0.38 0.21 5.33 94.79 -7.77 -0.04	50.36 23.34 5.62 7.55 1.19 1.48 1.12 1.71 1.88 0.39 0.18 5.12 99.93 -9.05 -0.03	55.17 21.91 6.37 10.49 1.34 1.00 1.10 1.49 1.75 0.36 0.19 4.78 105.95 -8.24 -0.03
Personal Income Sales and Use Corporation Pass-through Entity Tax Public Service Corporation Inheritance & Estate Insurance Companies Cigarettes Real Estate Conveyance Alcoholic Beverages Admissions, Dues, Cabaret Miscellaneous Total - Taxes Less Refunds of Taxes Less Refunds of R&D Credit Total - Taxes Less Refunds OTHER REVENUE Transfer-Special Revenue	59.18 23.09 5.06 1.38 1.23 1.27 2.07 1.11 0.35 0.22 5.82 100.78 -6.98 -0.03 93.77	49.06 22.08 5.40 5.96 1.33 1.15 0.99 1.82 1.09 0.33 0.22 5.60 95.01 -7.46 -0.03 87.53	48.96 22.50 4.87 6.47 1.32 0.83 1.19 1.80 0.92 0.38 0.21 5.33 94.79 -7.77 -0.04 86.97	50.36 23.34 5.62 7.55 1.19 1.48 1.12 1.71 1.88 0.39 0.18 5.12 99.93 -9.05 -0.03 90.84	55.17 21.91 6.37 10.49 1.34 1.00 1.10 1.49 1.75 0.36 0.19 4.78 105.95 -8.24 -0.03 97.68
Personal Income Sales and Use Corporation Pass-through Entity Tax Public Service Corporation Inheritance & Estate Insurance Companies Cigarettes Real Estate Conveyance Alcoholic Beverages Admissions, Dues, Cabaret Miscellaneous Total - Taxes Less Refunds of Taxes Less Refunds of R&D Credit Total - Taxes Less Refunds OTHER REVENUE Transfer-Special Revenue Indian Gaming Payments	59.18 23.09 5.06 1.38 1.23 1.27 2.07 1.11 0.35 0.22 5.82 100.78 -6.98 -0.03 93.77 1.87	49.06 22.08 5.40 5.96 1.33 1.15 0.99 1.82 1.09 0.33 0.22 5.60 95.01 -7.46 -0.03 87.53	48.96 22.50 4.87 6.47 1.32 0.83 1.19 1.80 0.92 0.38 0.21 5.33 94.79 -7.77 -0.04 86.97	50.36 23.34 5.62 7.55 1.19 1.48 1.12 1.71 1.88 0.39 0.18 5.12 99.93 -9.05 -0.03 90.84	55.17 21.91 6.37 10.49 1.34 1.00 1.10 1.49 1.75 0.36 0.19 4.78 105.95 -8.24 -0.03 97.68
Personal Income Sales and Use Corporation Pass-through Entity Tax Public Service Corporation Inheritance & Estate Insurance Companies Cigarettes Real Estate Conveyance Alcoholic Beverages Admissions, Dues, Cabaret Miscellaneous Total - Taxes Less Refunds of Taxes Less Refunds of R&D Credit Total – Taxes Less Refunds OTHER REVENUE Transfer-Special Revenue Indian Gaming Payments Licenses, Permits & Fees	59.18 23.09 5.06 1.38 1.23 1.27 2.07 1.11 0.35 0.22 5.82 100.78 -6.98 -0.03 93.77 1.87 1.5 1.68	49.06 22.08 5.40 5.96 1.33 1.15 0.99 1.82 1.09 0.33 0.22 5.60 95.01 -7.46 -0.03 87.53	48.96 22.50 4.87 6.47 1.32 0.83 1.19 1.80 0.92 0.38 0.21 5.33 94.79 -7.77 -0.04 86.97	50.36 23.34 5.62 7.55 1.19 1.48 1.12 1.71 1.88 0.39 0.18 5.12 99.93 -9.05 -0.03 90.84 2.00 1.11 1.61	55.17 21.91 6.37 10.49 1.34 1.00 1.10 1.49 1.75 0.36 0.19 4.78 105.95 -8.24 -0.03 97.68
Personal Income Sales and Use Corporation Pass-through Entity Tax Public Service Corporation Inheritance & Estate Insurance Companies Cigarettes Real Estate Conveyance Alcoholic Beverages Admissions, Dues, Cabaret Miscellaneous Total - Taxes Less Refunds of Taxes Less Refunds of R&D Credit Total – Taxes Less Refunds OTHER REVENUE Transfer-Special Revenue Indian Gaming Payments Licenses, Permits & Fees Sales of Commodities &	59.18 23.09 5.06 1.38 1.23 1.27 2.07 1.11 0.35 0.22 5.82 100.78 -6.98 -0.03 93.77 1.87 1.5 1.68 0.18	49.06 22.08 5.40 5.96 1.33 1.15 0.99 1.82 1.09 0.33 0.22 5.60 95.01 -7.46 -0.03 87.53	48.96 22.50 4.87 6.47 1.32 0.83 1.19 1.80 0.92 0.38 0.21 5.33 94.79 -7.77 -0.04 86.97 1.77 0.86 1.60 0.14	50.36 23.34 5.62 7.55 1.19 1.48 1.12 1.71 1.88 0.39 0.18 5.12 99.93 -9.05 -0.03 90.84 2.00 1.11 1.61 0.11	55.17 21.91 6.37 10.49 1.34 1.00 1.10 1.49 1.75 0.36 0.19 4.78 105.95 -8.24 -0.03 97.68 1.80 1.13 1.68 0.10
Personal Income Sales and Use Corporation Pass-through Entity Tax Public Service Corporation Inheritance & Estate Insurance Companies Cigarettes Real Estate Conveyance Alcoholic Beverages Admissions, Dues, Cabaret Miscellaneous Total - Taxes Less Refunds of Taxes Less Refunds of R&D Credit Total – Taxes Less Refunds OTHER REVENUE Transfer-Special Revenue Indian Gaming Payments Licenses, Permits & Fees Sales of Commodities & Rents, Fines & Escheats	59.18 23.09 5.06 1.38 1.23 1.27 2.07 1.11 0.35 0.22 5.82 100.78 -6.98 -0.03 93.77 1.87 1.5 1.68 0.18	49.06 22.08 5.40 5.96 1.33 1.15 0.99 1.82 1.09 0.33 0.22 5.60 95.01 -7.46 -0.03 87.53 1.85 1.30 1.48 0.14	48.96 22.50 4.87 6.47 1.32 0.83 1.19 1.80 0.92 0.38 0.21 5.33 94.79 -7.77 -0.04 86.97 1.77 0.86 1.60 0.14 0.80	50.36 23.34 5.62 7.55 1.19 1.48 1.12 1.71 1.88 0.39 0.18 5.12 99.93 -9.05 -0.03 90.84 2.00 1.11 1.61 0.11	55.17 21.91 6.37 10.49 1.34 1.00 1.10 1.49 1.75 0.36 0.19 4.78 105.95 -8.24 -0.03 97.68 1.80 1.13 1.68 0.10 1.00
Personal Income Sales and Use Corporation Pass-through Entity Tax Public Service Corporation Inheritance & Estate Insurance Companies Cigarettes Real Estate Conveyance Alcoholic Beverages Admissions, Dues, Cabaret Miscellaneous Total - Taxes Less Refunds of Taxes Less Refunds of R&D Credit Total - Taxes Less Refunds OTHER REVENUE Transfer-Special Revenue Indian Gaming Payments Licenses, Permits & Fees Sales of Commodities & Rents, Fines & Escheats Investment Income	59.18 23.09 5.06 1.38 1.23 1.27 2.07 1.11 0.35 0.22 5.82 100.78 -6.98 -0.03 93.77 1.87 1.5 1.68 0.18 1.04 0.09	49.06 22.08 5.40 5.96 1.33 1.15 0.99 1.82 1.09 0.33 0.22 5.60 95.01 -7.46 -0.03 87.53 1.85 1.30 1.48 0.14 0.84 0.25	48.96 22.50 4.87 6.47 1.32 0.83 1.19 1.80 0.92 0.38 0.21 5.33 94.79 -7.77 -0.04 86.97 1.77 0.86 1.60 0.14 0.80 0.25	50.36 23.34 5.62 7.55 1.19 1.48 1.12 1.71 1.88 0.39 0.18 5.12 99.93 -9.05 -0.03 90.84 2.00 1.11 1.61 0.11 0.89 0.01	55.17 21.91 6.37 10.49 1.34 1.00 1.10 1.49 1.75 0.36 0.19 4.78 105.95 -8.24 -0.03 97.68 1.80 1.13 1.68 0.10 1.00
Personal Income Sales and Use Corporation Pass-through Entity Tax Public Service Corporation Inheritance & Estate Insurance Companies Cigarettes Real Estate Conveyance Alcoholic Beverages Admissions, Dues, Cabaret Miscellaneous Total - Taxes Less Refunds of Taxes Less Refunds of R&D Credit Total – Taxes Less Refunds OTHER REVENUE Transfer-Special Revenue Indian Gaming Payments Licenses, Permits & Fees Sales of Commodities & Rents, Fines & Escheats Investment Income Miscellaneous	59.18 23.09 5.06 1.38 1.23 1.27 2.07 1.11 0.35 0.22 5.82 100.78 -6.98 -0.03 93.77 1.87 1.5 1.68 0.18 1.04 0.09 0.97	49.06 22.08 5.40 5.96 1.33 1.15 0.99 1.82 1.09 0.33 0.22 5.60 95.01 -7.46 -0.03 87.53 1.85 1.30 1.48 0.14	48.96 22.50 4.87 6.47 1.32 0.83 1.19 1.80 0.92 0.38 0.21 5.33 94.79 -7.77 -0.04 86.97 1.77 0.86 1.60 0.14 0.80	50.36 23.34 5.62 7.55 1.19 1.48 1.12 1.71 1.88 0.39 0.18 5.12 99.93 -9.05 -0.03 90.84 2.00 1.11 1.61 0.11	55.17 21.91 6.37 10.49 1.34 1.00 1.10 1.49 1.75 0.36 0.19 4.78 105.95 -8.24 -0.03 97.68 1.80 1.13 1.68 0.10 1.00
Personal Income Sales and Use Corporation Pass-through Entity Tax Public Service Corporation Inheritance & Estate Insurance Companies Cigarettes Real Estate Conveyance Alcoholic Beverages Admissions, Dues, Cabaret Miscellaneous Total - Taxes Less Refunds of Taxes Less Refunds of R&D Credit Total - Taxes Less Refunds OTHER REVENUE Transfer-Special Revenue Indian Gaming Payments Licenses, Permits & Fees Sales of Commodities & Rents, Fines & Escheats Investment Income	59.18 23.09 5.06 1.38 1.23 1.27 2.07 1.11 0.35 0.22 5.82 100.78 -6.98 -0.03 93.77 1.87 1.5 1.68 0.18 1.04 0.09	49.06 22.08 5.40 5.96 1.33 1.15 0.99 1.82 1.09 0.33 0.22 5.60 95.01 -7.46 -0.03 87.53 1.85 1.30 1.48 0.14 0.84 0.25	48.96 22.50 4.87 6.47 1.32 0.83 1.19 1.80 0.92 0.38 0.21 5.33 94.79 -7.77 -0.04 86.97 1.77 0.86 1.60 0.14 0.80 0.25	50.36 23.34 5.62 7.55 1.19 1.48 1.12 1.71 1.88 0.39 0.18 5.12 99.93 -9.05 -0.03 90.84 2.00 1.11 1.61 0.11 0.89 0.01	55.17 21.91 6.37 10.49 1.34 1.00 1.10 1.49 1.75 0.36 0.19 4.78 105.95 -8.24 -0.03 97.68 1.80 1.13 1.68 0.10 1.00
Personal Income Sales and Use Corporation Pass-through Entity Tax Public Service Corporation Inheritance & Estate Insurance Companies Cigarettes Real Estate Conveyance Alcoholic Beverages Admissions, Dues, Cabaret Miscellaneous Total - Taxes Less Refunds of Taxes Less Refunds of R&D Credit Total – Taxes Less Refunds OTHER REVENUE Transfer-Special Revenue Indian Gaming Payments Licenses, Permits & Fees Sales of Commodities & Rents, Fines & Escheats Investment Income Miscellaneous Less Refunds of Payments	59.18 23.09 5.06 1.38 1.23 1.27 2.07 1.11 0.35 0.22 5.82 100.78 -6.98 -0.03 93.77 1.87 1.5 1.68 0.18 1.04 0.09 0.97 -0.34	49.06 22.08 5.40 5.96 1.33 1.15 0.99 1.82 1.09 0.33 0.22 5.60 95.01 -7.46 -0.03 87.53 1.85 1.30 1.48 0.14 0.84 0.25 1.09 -0.30	48.96 22.50 4.87 6.47 1.32 0.83 1.19 1.80 0.92 0.38 0.21 5.33 94.79 -7.77 -0.04 86.97 1.77 0.86 1.60 0.14 0.80 0.25 1.34 -0.36	50.36 23.34 5.62 7.55 1.19 1.48 1.12 1.71 1.88 0.39 0.18 5.12 99.93 -9.05 -0.03 90.84 2.00 1.11 1.61 0.11 0.89 0.01 1.26 -0.18	55.17 21.91 6.37 10.49 1.34 1.00 1.10 1.49 1.75 0.36 0.19 4.78 105.95 -8.24 -0.03 97.68 1.80 1.13 1.68 0.10 1.00 0.09 1.24 -0.34
Personal Income Sales and Use Corporation Pass-through Entity Tax Public Service Corporation Inheritance & Estate Insurance Companies Cigarettes Real Estate Conveyance Alcoholic Beverages Admissions, Dues, Cabaret Miscellaneous Total - Taxes Less Refunds of Taxes Less Refunds of Taxes Less Refunds of R&D Credit Total – Taxes Less Refunds OTHER REVENUE Transfer-Special Revenue Indian Gaming Payments Licenses, Permits & Fees Sales of Commodities & Rents, Fines & Escheats Investment Income Miscellaneous Less Refunds of Payments Total - Other Revenue	59.18 23.09 5.06 1.38 1.23 1.27 2.07 1.11 0.35 0.22 5.82 100.78 -6.98 -0.03 93.77 1.87 1.5 1.68 0.18 1.04 0.09 0.97	49.06 22.08 5.40 5.96 1.33 1.15 0.99 1.82 1.09 0.33 0.22 5.60 95.01 -7.46 -0.03 87.53 1.85 1.30 1.48 0.14 0.84 0.25 1.09	48.96 22.50 4.87 6.47 1.32 0.83 1.19 1.80 0.92 0.38 0.21 5.33 94.79 -7.77 -0.04 86.97 1.77 0.86 1.60 0.14 0.80 0.25 1.34	50.36 23.34 5.62 7.55 1.19 1.48 1.12 1.71 1.88 0.39 0.18 5.12 99.93 -9.05 -0.03 90.84 2.00 1.11 1.61 0.11 0.89 0.01 1.26	55.17 21.91 6.37 10.49 1.34 1.00 1.10 1.49 1.75 0.36 0.19 4.78 105.95 -8.24 -0.03 97.68 1.80 1.13 1.68 0.10 1.00 0.09 1.24
Personal Income Sales and Use Corporation Pass-through Entity Tax Public Service Corporation Inheritance & Estate Insurance Companies Cigarettes Real Estate Conveyance Alcoholic Beverages Admissions, Dues, Cabaret Miscellaneous Total - Taxes Less Refunds of Taxes Less Refunds of R&D Credit Total – Taxes Less Refunds OTHER REVENUE Transfer-Special Revenue Indian Gaming Payments Licenses, Permits & Fees Sales of Commodities & Rents, Fines & Escheats Investment Income Miscellaneous Less Refunds of Payments Total - Other Revenue OTHER SOURCES	59.18 23.09 5.06 1.38 1.23 1.27 2.07 1.11 0.35 0.22 5.82 100.78 -6.98 -0.03 93.77 1.87 1.5 1.68 0.18 1.04 0.09 0.97 -0.34 7.00	49.06 22.08 5.40 5.96 1.33 1.15 0.99 1.82 1.09 0.33 0.22 5.60 95.01 -7.46 -0.03 87.53 1.85 1.30 1.48 0.14 0.84 0.25 1.09 -0.30 6.66	48.96 22.50 4.87 6.47 1.32 0.83 1.19 1.80 0.92 0.38 0.21 5.33 94.79 -7.77 -0.04 86.97 1.77 0.86 1.60 0.14 0.80 0.25 1.34 -0.36 6.40	50.36 23.34 5.62 7.55 1.19 1.48 1.12 1.71 1.88 0.39 0.18 5.12 99.93 -9.05 -0.03 90.84 2.00 1.11 1.61 0.11 0.89 0.01 1.26 -0.18 6.81	55.17 21.91 6.37 10.49 1.34 1.00 1.10 1.49 1.75 0.36 0.19 4.78 105.95 -8.24 -0.03 97.68 1.80 1.13 1.68 0.10 1.00 0.09 1.24 -0.34 6.71
Personal Income Sales and Use Corporation Pass-through Entity Tax Public Service Corporation Inheritance & Estate Insurance Companies Cigarettes Real Estate Conveyance Alcoholic Beverages Admissions, Dues, Cabaret Miscellaneous Total - Taxes Less Refunds of Taxes Less Refunds of R&D Credit Total – Taxes Less Refunds OTHER REVENUE Transfer-Special Revenue Indian Gaming Payments Licenses, Permits & Fees Sales of Commodities & Rents, Fines & Escheats Investment Income Miscellaneous Less Refunds of Payments Total - Other Revenue OTHER SOURCES Federal Grants	59.18 23.09 5.06 1.38 1.23 1.27 2.07 1.11 0.35 0.22 5.82 100.78 -6.98 -0.03 93.77 1.87 1.5 1.68 0.18 1.04 0.09 0.97 -0.34 7.00 6.28	49.06 22.08 5.40 5.96 1.33 1.15 0.99 1.82 1.09 0.33 0.22 5.60 95.01 -7.46 -0.03 87.53 1.85 1.30 1.48 0.14 0.84 0.25 1.09 -0.30 6.66	48.96 22.50 4.87 6.47 1.32 0.83 1.19 1.80 0.92 0.38 0.21 5.33 94.79 -7.77 -0.04 86.97 1.77 0.86 1.60 0.14 0.80 0.25 1.34 -0.36 6.40 9.36	50.36 23.34 5.62 7.55 1.19 1.48 1.12 1.71 1.88 0.39 0.18 5.12 99.93 -9.05 -0.03 90.84 2.00 1.11 1.61 0.11 0.89 0.01 1.26 -0.18 6.81 7.29	55.17 21.91 6.37 10.49 1.34 1.00 1.10 1.49 1.75 0.36 0.19 4.78 105.95 -8.24 -0.03 97.68 1.80 1.13 1.68 0.10 1.00 0.09 1.24 -0.34 6.71
Personal Income Sales and Use Corporation Pass-through Entity Tax Public Service Corporation Inheritance & Estate Insurance Companies Cigarettes Real Estate Conveyance Alcoholic Beverages Admissions, Dues, Cabaret Miscellaneous Total - Taxes Less Refunds of Taxes Less Refunds of R&D Credit Total - Taxes Less Refunds OTHER REVENUE Transfer-Special Revenue Indian Gaming Payments Licenses, Permits & Fees Sales of Commodities & Rents, Fines & Escheats Investment Income Miscellaneous Less Refunds of Payments Total - Other Revenue OTHER SOURCES Federal Grants Transfer from Tobacco Fund	59.18 23.09 5.06 1.38 1.23 1.27 2.07 1.11 0.35 0.22 5.82 100.78 -6.98 -0.03 93.77 1.87 1.5 1.68 0.18 1.04 0.09 0.97 -0.34 7.00 6.28 0.6	49.06 22.08 5.40 5.96 1.33 1.15 0.99 1.82 1.09 0.33 0.22 5.60 95.01 -7.46 -0.03 87.53 1.85 1.30 1.48 0.14 0.84 0.25 1.09 -0.30 6.66	48.96 22.50 4.87 6.47 1.32 0.83 1.19 1.80 0.92 0.38 0.21 5.33 94.79 -7.77 -0.04 86.97 1.77 0.86 1.60 0.14 0.80 0.25 1.34 -0.36 6.40 9.36 0.71	50.36 23.34 5.62 7.55 1.19 1.48 1.12 1.71 1.88 0.39 0.18 5.12 99.93 -9.05 -0.03 90.84 2.00 1.11 1.61 0.11 0.89 0.01 1.26 -0.18 6.81 7.29 0.56	55.17 21.91 6.37 10.49 1.34 1.00 1.10 1.49 1.75 0.36 0.19 4.78 105.95 -8.24 -0.03 97.68 1.80 1.13 1.68 0.10 1.00 0.09 1.24 -0.34 6.71 8.80 0.57
Personal Income Sales and Use Corporation Pass-through Entity Tax Public Service Corporation Inheritance & Estate Insurance Companies Cigarettes Real Estate Conveyance Alcoholic Beverages Admissions, Dues, Cabaret Miscellaneous Total - Taxes Less Refunds of Taxes Less Refunds of R&D Credit Total – Taxes Less Refunds OTHER REVENUE Transfer-Special Revenue Indian Gaming Payments Licenses, Permits & Fees Sales of Commodities & Rents, Fines & Escheats Investment Income Miscellaneous Less Refunds of Payments Total - Other Revenue OTHER SOURCES Federal Grants Transfer from Tobacco Fund Transfer From/(To) Other	59.18 23.09 5.06 1.38 1.23 1.27 2.07 1.11 0.35 0.22 5.82 100.78 -6.98 -0.03 93.77 1.87 1.5 1.68 0.18 1.04 0.09 0.97 -0.34 7.00 6.28 0.6 0.43	49.06 22.08 5.40 5.96 1.33 1.15 0.99 1.82 1.09 0.33 0.22 5.60 95.01 -7.46 -0.03 87.53 1.85 1.30 1.48 0.14 0.84 0.25 1.09 -0.30 6.66	48.96 22.50 4.87 6.47 1.32 0.83 1.19 1.80 0.92 0.38 0.21 5.33 94.79 -7.77 -0.04 86.97 1.77 0.86 1.60 0.14 0.80 0.25 1.34 -0.36 6.40 9.36 0.71 -0.68	50.36 23.34 5.62 7.55 1.19 1.48 1.12 1.71 1.88 0.39 0.18 5.12 99.93 -9.05 -0.03 90.84 2.00 1.11 1.61 0.11 0.89 0.01 1.26 -0.18 6.81 7.29 0.56 0.55	55.17 21.91 6.37 10.49 1.34 1.00 1.10 1.49 1.75 0.36 0.19 4.78 105.95 -8.24 -0.03 97.68 1.80 1.13 1.68 0.10 1.00 0.09 1.24 -0.34 6.71 8.80 0.57 0.10
Personal Income Sales and Use Corporation Pass-through Entity Tax Public Service Corporation Inheritance & Estate Insurance Companies Cigarettes Real Estate Conveyance Alcoholic Beverages Admissions, Dues, Cabaret Miscellaneous Total - Taxes Less Refunds of Taxes Less Refunds of Taxes Less Refunds of R&D Credit Total – Taxes Less Refunds OTHER REVENUE Transfer-Special Revenue Indian Gaming Payments Licenses, Permits & Fees Sales of Commodities & Rents, Fines & Escheats Investment Income Miscellaneous Less Refunds of Payments Total - Other Revenue OTHER SOURCES Federal Grants Transfer from Tobacco Fund Transfer From/(To) Other Transfers to BRF – Volatility	59.18 23.09 5.06 1.38 1.23 1.27 2.07 1.11 0.35 0.22 5.82 100.78 -6.98 -0.03 93.77 1.87 1.5 1.68 0.18 1.04 0.09 0.97 -0.34 7.00 6.28 0.6 0.43 -8.08	49.06 22.08 5.40 5.96 1.33 1.15 0.99 1.82 1.09 0.33 0.22 5.60 95.01 -7.46 -0.03 87.53 1.85 1.30 1.48 0.14 0.84 0.25 1.09 -0.30 6.66 10.60 0.56 -0.52 -4.83	48.96 22.50 4.87 6.47 1.32 0.83 1.19 1.80 0.92 0.38 0.21 5.33 94.79 -7.77 -0.04 86.97 1.77 0.86 1.60 0.14 0.80 0.25 1.34 -0.36 6.40 9.36 0.71 -0.68 -2.76	50.36 23.34 5.62 7.55 1.19 1.48 1.12 1.71 1.88 0.39 0.18 5.12 99.93 -9.05 -0.03 90.84 2.00 1.11 1.61 0.11 0.89 0.01 1.26 -0.18 6.81 7.29 0.56 0.55 -6.05	55.17 21.91 6.37 10.49 1.34 1.00 1.10 1.49 1.75 0.36 0.19 4.78 105.95 -8.24 -0.03 97.68 1.80 1.13 1.68 0.10 1.00 0.09 1.24 -0.34 6.71 8.80 0.57 0.10 -13.86
Personal Income Sales and Use Corporation Pass-through Entity Tax Public Service Corporation Inheritance & Estate Insurance Companies Cigarettes Real Estate Conveyance Alcoholic Beverages Admissions, Dues, Cabaret Miscellaneous Total - Taxes Less Refunds of Taxes Less Refunds of R&D Credit Total – Taxes Less Refunds OTHER REVENUE Transfer-Special Revenue Indian Gaming Payments Licenses, Permits & Fees Sales of Commodities & Rents, Fines & Escheats Investment Income Miscellaneous Less Refunds of Payments Total - Other Revenue OTHER SOURCES Federal Grants Transfer from Tobacco Fund Transfer From/(To) Other	59.18 23.09 5.06 1.38 1.23 1.27 2.07 1.11 0.35 0.22 5.82 100.78 -6.98 -0.03 93.77 1.87 1.5 1.68 0.18 1.04 0.09 0.97 -0.34 7.00 6.28 0.6 0.43	49.06 22.08 5.40 5.96 1.33 1.15 0.99 1.82 1.09 0.33 0.22 5.60 95.01 -7.46 -0.03 87.53 1.85 1.30 1.48 0.14 0.84 0.25 1.09 -0.30 6.66	48.96 22.50 4.87 6.47 1.32 0.83 1.19 1.80 0.92 0.38 0.21 5.33 94.79 -7.77 -0.04 86.97 1.77 0.86 1.60 0.14 0.80 0.25 1.34 -0.36 6.40 9.36 0.71 -0.68	50.36 23.34 5.62 7.55 1.19 1.48 1.12 1.71 1.88 0.39 0.18 5.12 99.93 -9.05 -0.03 90.84 2.00 1.11 1.61 0.11 0.89 0.01 1.26 -0.18 6.81 7.29 0.56 0.55	55.17 21.91 6.37 10.49 1.34 1.00 1.10 1.49 1.75 0.36 0.19 4.78 105.95 -8.24 -0.03 97.68 1.80 1.13 1.68 0.10 1.00 0.09 1.24 -0.34 6.71 8.80 0.57 0.10
Personal Income Sales and Use Corporation Pass-through Entity Tax Public Service Corporation Inheritance & Estate Insurance Companies Cigarettes Real Estate Conveyance Alcoholic Beverages Admissions, Dues, Cabaret Miscellaneous Total - Taxes Less Refunds of Taxes Less Refunds of Taxes Less Refunds of R&D Credit Total – Taxes Less Refunds OTHER REVENUE Transfer-Special Revenue Indian Gaming Payments Licenses, Permits & Fees Sales of Commodities & Rents, Fines & Escheats Investment Income Miscellaneous Less Refunds of Payments Total - Other Revenue OTHER SOURCES Federal Grants Transfer from Tobacco Fund Transfer From/(To) Other Transfers to BRF – Volatility	59.18 23.09 5.06 1.38 1.23 1.27 2.07 1.11 0.35 0.22 5.82 100.78 -6.98 -0.03 93.77 1.87 1.5 1.68 0.18 1.04 0.09 0.97 -0.34 7.00 6.28 0.6 0.43 -8.08	49.06 22.08 5.40 5.96 1.33 1.15 0.99 1.82 1.09 0.33 0.22 5.60 95.01 -7.46 -0.03 87.53 1.85 1.30 1.48 0.14 0.84 0.25 1.09 -0.30 6.66 10.60 0.56 -0.52 -4.83	48.96 22.50 4.87 6.47 1.32 0.83 1.19 1.80 0.92 0.38 0.21 5.33 94.79 -7.77 -0.04 86.97 1.77 0.86 1.60 0.14 0.80 0.25 1.34 -0.36 6.40 9.36 0.71 -0.68 -2.76	50.36 23.34 5.62 7.55 1.19 1.48 1.12 1.71 1.88 0.39 0.18 5.12 99.93 -9.05 -0.03 90.84 2.00 1.11 1.61 0.11 0.89 0.01 1.26 -0.18 6.81 7.29 0.56 0.55 -6.05	55.17 21.91 6.37 10.49 1.34 1.00 1.10 1.49 1.75 0.36 0.19 4.78 105.95 -8.24 -0.03 97.68 1.80 1.13 1.68 0.10 1.00 0.09 1.24 -0.34 6.71 8.80 0.57 0.10 -13.86

TABLE 71
SPECIAL TRANSPORTATION FUND REVENUES

TAXES (\$K)	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Motor Fuels	\$499,833	\$509,701	\$478,193	\$475,157	\$389,806
Oil Companies	312,506	313,050	230,356	229,061	387,063
Sales and Use Tax	327,458	370,580	400,908	482,892	703,391
DMV Sales	85,906	87,263	73,126	117,215	122,074
Less Refunds of Taxes	(10,050)	(32,149)	(30,398)	(11,796)	(16,177)
Total – Taxes Less Refunds	\$1,215,653	\$1,248,446	\$1,152,186	\$1,292,530	\$1,586,157
OTHER REVENUE					
Motor Vehicle Receipts	\$253,074	\$250,361	\$241,643	\$321,420	\$281,667
Licenses, Permits & Fees	141,866	150,144	128,707	130,747	125,991
Interest Income	17,673	37,375	21,754	1,922	5,029
Federal Grants	12,196	12,259	12,315	11,957	10,913
Transfer to Other Funds	(5,500)	(5,500)	(35,500)	24,500	(2,825)
Less Refunds of Payments	(4,891)	(4,941)	(4,520)	(5,359)	(6,078)
Total – Other Revenue	\$414,418	\$439,698	\$364,399	\$485,187	\$414,697
GRAND TOTAL	\$1,630,071	\$1,688,144	\$1,516,585	\$1,777,717	\$2,000,854
<u>TAXES</u>	% of Total	% of Total	% of Total	% of Total	% of Total
TAXES Motor Fuels	% of Total 30.66	% of Total 30.19	% of Total 31.53	<u>% of Total</u> 26.73	% of Total 19.48
Motor Fuels	30.66	30.19	31.53	26.73	19.48
Motor Fuels Oil Companies	30.66 19.17	30.19 18.54	31.53 15.19	26.73 12.89	19.48 19.34
Motor Fuels Oil Companies Sales and Use Tax	30.66 19.17 20.09	30.19 18.54 21.95	31.53 15.19 26.43	26.73 12.89 27.16	19.48 19.34 35.15
Motor Fuels Oil Companies Sales and Use Tax DMV Sales	30.66 19.17 20.09 5.27	30.19 18.54 21.95 5.17	31.53 15.19 26.43 4.82	26.73 12.89 27.16 6.59	19.48 19.34 35.15 6.10
Motor Fuels Oil Companies Sales and Use Tax DMV Sales Less Refunds of Taxes	30.66 19.17 20.09 5.27 -0.62	30.19 18.54 21.95 5.17 -1.9	31.53 15.19 26.43 4.82 -2.00	26.73 12.89 27.16 6.59 -0.66	19.48 19.34 35.15 6.10 -0.81
Motor Fuels Oil Companies Sales and Use Tax DMV Sales Less Refunds of Taxes Total – Taxes Less Refunds	30.66 19.17 20.09 5.27 -0.62 74.57	30.19 18.54 21.95 5.17 -1.9 73.95	31.53 15.19 26.43 4.82 -2.00	26.73 12.89 27.16 6.59 -0.66 72.71	19.48 19.34 35.15 6.10 -0.81 79.27
Motor Fuels Oil Companies Sales and Use Tax DMV Sales Less Refunds of Taxes Total – Taxes Less Refunds OTHER REVENUE	30.66 19.17 20.09 5.27 -0.62 74.57 15.53 8.7	30.19 18.54 21.95 5.17 -1.9 73.95 14.83 8.89	31.53 15.19 26.43 4.82 -2.00 75.97 15.93 8.49	26.73 12.89 27.16 6.59 -0.66 72.71 18.08 7.35	19.48 19.34 35.15 6.10 -0.81 79.27 14.08 6.30
Motor Fuels Oil Companies Sales and Use Tax DMV Sales Less Refunds of Taxes Total – Taxes Less Refunds OTHER REVENUE Motor Vehicle Receipts Licenses, Permits & Fees Interest Income	30.66 19.17 20.09 5.27 -0.62 74.57 15.53 8.7 1.08	30.19 18.54 21.95 5.17 -1.9 73.95 14.83 8.89 2.21	31.53 15.19 26.43 4.82 -2.00 75.97 15.93 8.49 1.43	26.73 12.89 27.16 6.59 -0.66 72.71 18.08 7.35 0.11	19.48 19.34 35.15 6.10 -0.81 79.27 14.08 6.30 0.25
Motor Fuels Oil Companies Sales and Use Tax DMV Sales Less Refunds of Taxes Total – Taxes Less Refunds OTHER REVENUE Motor Vehicle Receipts Licenses, Permits & Fees Interest Income Federal Grants	30.66 19.17 20.09 5.27 -0.62 74.57 15.53 8.7 1.08 0.75	30.19 18.54 21.95 5.17 -1.9 73.95 14.83 8.89 2.21 0.73	31.53 15.19 26.43 4.82 -2.00 75.97 15.93 8.49	26.73 12.89 27.16 6.59 -0.66 72.71 18.08 7.35 0.11 0.67	19.48 19.34 35.15 6.10 -0.81 79.27 14.08 6.30 0.25 0.55
Motor Fuels Oil Companies Sales and Use Tax DMV Sales Less Refunds of Taxes Total – Taxes Less Refunds OTHER REVENUE Motor Vehicle Receipts Licenses, Permits & Fees Interest Income Federal Grants Transfer to Other Funds	30.66 19.17 20.09 5.27 -0.62 74.57 15.53 8.7 1.08 0.75 -0.34	30.19 18.54 21.95 5.17 -1.9 73.95 14.83 8.89 2.21 0.73 -0.33	31.53 15.19 26.43 4.82 -2.00 75.97 15.93 8.49 1.43 0.81 -2.34	26.73 12.89 27.16 6.59 -0.66 72.71 18.08 7.35 0.11 0.67 1.38	19.48 19.34 35.15 6.10 -0.81 79.27 14.08 6.30 0.25 0.55 -0.14
Motor Fuels Oil Companies Sales and Use Tax DMV Sales Less Refunds of Taxes Total – Taxes Less Refunds OTHER REVENUE Motor Vehicle Receipts Licenses, Permits & Fees Interest Income Federal Grants	30.66 19.17 20.09 5.27 -0.62 74.57 15.53 8.7 1.08 0.75 -0.34 -0.3	30.19 18.54 21.95 5.17 -1.9 73.95 14.83 8.89 2.21 0.73 -0.33 -0.29	31.53 15.19 26.43 4.82 -2.00 75.97 15.93 8.49 1.43 0.81 -2.34 -0.30	26.73 12.89 27.16 6.59 -0.66 72.71 18.08 7.35 0.11 0.67 1.38 -0.30	19.48 19.34 35.15 6.10 -0.81 79.27 14.08 6.30 0.25 0.55 -0.14 -0.30
Motor Fuels Oil Companies Sales and Use Tax DMV Sales Less Refunds of Taxes Total – Taxes Less Refunds OTHER REVENUE Motor Vehicle Receipts Licenses, Permits & Fees Interest Income Federal Grants Transfer to Other Funds	30.66 19.17 20.09 5.27 -0.62 74.57 15.53 8.7 1.08 0.75 -0.34	30.19 18.54 21.95 5.17 -1.9 73.95 14.83 8.89 2.21 0.73 -0.33	31.53 15.19 26.43 4.82 -2.00 75.97 15.93 8.49 1.43 0.81 -2.34	26.73 12.89 27.16 6.59 -0.66 72.71 18.08 7.35 0.11 0.67 1.38	19.48 19.34 35.15 6.10 -0.81 79.27 14.08 6.30 0.25 0.55 -0.14





Connecticut Resident Population Census Counts

	Popula	tion	Populat	tion	2010-2020	%	2021
	<u>2010</u>	<u>Rank</u>	<u>2020</u>	<u>Rank</u>	<u>Change</u>	<u>Change</u>	DPH* Est.
Total	3,574,097		3,605,944		31,847	0.9	3,605,597
Andover	3,303	147	3,151	147	-152	-4.6	3,133
Ansonia	19,249	60	18,918	60	-331	-4.0	18,815
Ashford	4,317	136	4,191	139	-126	-2.9	4,186
Avon	18,098	65	18,932	59	834	4.6	18,848
Barkhamsted	3,799	141	3,647	141	-152	-4.0	3,647
Beacon Falls	6,049	123	6,000	123	-49	-0.8	6,033
Berlin	19,866	54	20,175	56	309	1.6	20,113
Bethany	5,563	126	5,297	126	-266	-4.8	5,288
Bethel	18,584	62	20,358	55	1,774	9.5	20,537
Bethlehem	3,607	143	3,385	145	-222	-6.2	3,386
Bloomfield	20,486	52	21,535	51	1,049	5.1	21,480
Bolton	4,980	131	4,858	131	-122	-2.4	4,819
Bozrah	2,627	152	2,429	153	-198	-7.5	2,417
Branford	28,026	37	28,273	35	247	0.9	28,176
Bridgeport	144,229	1	148,654	1	4,425	3.1	148,333
Bridgewater	1,727	162	1,662	161	-65	-3.8	1,658
Bristol	60,477	13	60,833	14	356	0.6	60,661
Brookfield	16,452	71	17,528	68	1,076	6.5	17,482
Brooklyn	8,210	110	8,450	109	240	2.9	8,488
Burlington	9,301	104	9,519	99	218	2.3	9,591
Canaan	1,234	168	1,080	168	-154	-12.5	1,078
Canterbury	5,132	130	5,045	130	-87	-1.7	5,060
Canton	10,292	95	10,124	97	-168	-1.6	10,083
Chaplin	2,305	156	2,151	157	-154	-6.7	2,143
Cheshire	29,261	32	28,733	34	-528	-1.8	28,628
Chester	3,994	139	3,749	140	-245	-6.1	3,752
Clinton	13,260	82	13,185	82	-75	-0.6	13,400
Colchester	16,068	72	15,555	74	-513	-3.2	15,501
Colebrook	1,485	165	1,361	166	-124	-8.4	1,357
Columbia	5,485	127	5,272	127	-213	-3.9	5,246
Cornwall	1,420	167	1,567	165	147	10.4	1,571
Coventry	12,435	87	12,235	87	-200	-1.6	12,205
Cromwell	14,005	79	14,225	79	220	1.6	14,302
Danbury	80,893	7	86,518	7	5,625	7.0	86,759
Darien	20,732	51	21,499	52	767	3.7	21,500
Deep River	4,629	133	4,415	133	-214	-4.6	4,462
Derby	12,902	84	12,325	86 116	-577	-4.5 2.2	12,274
Durham	7,388	116	7,152	116	-236	-3.2	7,231
East Granby	5,148	129	5,214	128	66 251	1.3	5,180
East Haddam	9,126	106	8,875 12.717	106	-251	-2.8 1.0	8,965 12.874
East Hampton	12,959	83	12,717	83 10	-242 207	-1.9 0.4	12,874
East Hayton	51,252	19	51,045	19 27	-207 1 22 <i>4</i>	-0.4	50,731
East Haven	29,257	33	27,923	37	-1,334	-4.6	27,804

Connecticut Resident Population Census Counts

	Popula	ition	Population		2010-2020	%	2021
	2010	<u>Rank</u>	2020	<u>Rank</u>	<u>Change</u>	<u>Change</u>	DPH* Est.
East Lyme	19,159	61	18,693	62	-466	-2.4	18,849
East Windsor	11,162	94	11,190	91	28	0.3	11,161
Eastford	1,749	161	1,649	162	-100	-5.7	1,660
Easton	7,490	115	7,605	113	115	1.5	7,594
Ellington	15,602	74	16,426	71	824	5.3	16,630
Enfield	44,654	22	42,141	23	-2,513	-5.6	42,031
Essex	6,683	120	6,733	119	50	0.7	6,759
Fairfield	59,404	14	61,512	11	2,108	3.5	61,949
Farmington	25,340	44	26,712	43	1,372	5.4	26,645
Franklin	1,922	159	1,863	159	-59	-3.1	1,862
Glastonbury	34,427	29	35,159	29	732	2.1	35,054
Goshen	2,976	150	3,150	148	174	5.8	3,165
Granby	11,282	92	10,903	92	-379	-3.4	10,953
Greenwich	61,171	10	63,518	10	2,347	3.8	63,514
Griswold	11,951	90	11,402	90	-549	-4.6	11,407
Groton	40,115	25	38,411	26	-1,704	-4.2	38,456
Guilford	22,375	50	22,073	50	-302	-1.3	22,031
Haddam	8,346	109	8,452	108	106	1.3	8,529
Hamden	60,960	11	61,169	12	209	0.3	60,923
Hampton	1,863	160	1,728	160	-135	-7.2	1,728
Hartford	124,775	3	121,054	4	-3,721	-3.0	120,576
Hartland	2,114	158	1,901	158	-213	-10.1	1,891
Harwinton	5,642	125	5,484	125	-158	-2.8	5,508
Hebron	9,686	99	9,098	104	-588	-6.1	9,066
Kent	2,979	149	3,019	149	40	1.3	2,984
Killingly	17,370	68	17,752	66	382	2.2	17,742
Killingworth	6,525	121	6,174	121	-351	-5.4	6,268
Lebanon	7,308	117	7,142	117	-166	-2.3	7,108
Ledyard	15,051	77	15,413	75	362	2.4	15,336
Lisbon	4,338	135	4,195	137	-143	-3.3	4,198
Litchfield	8,466	108	8,192	111	-274	-3.2	8,170
Lyme	2,406	154	2,352	154	-54	-2.2	2,344
Madison	18,269	64	17,691	67	-578	-3.2	17,619
Manchester	58,241	15	59,713	15	1,472	2.5	59,426
Mansfield	26,543	41	25,892	44	-651	-2.5	26,357
Marlborough	6,404	122	6,133	122	-271	-4.2	6,093
Meriden	60,868	12	60,850	13	-18	0.0	60,517
Middlebury	7,575	114	7,574	114	-1	0.0	7,684
Middlefield	4,425	134	4,217	135	-208	-4.7	4,274
Middletown	47,648	20	47,717	20	69	0.1	47,108
Milford	52,759	17	52,044	18	-715	-1.4	52,390
Monroe	19,479	59	18,825	61	-654	-3.4	18,764
Montville	19,571	57	18,387	64	-1,184	-6.0	18,478
Morris	2,388	155	2,256	156	-132	-5.5	2,259

Connecticut Resident Population Census Counts

	Popula	Population		tion	2010-2020	%	2021
	<u>2010</u>	Rank	<u>2020</u>	Rank	<u>Change</u>	Change	DPH* Est.
Naugatuck	31,862	30	31,519	30	-343	-1.1	31,433
New Britain	73,206	8	74,135	8	929	1.3	73,841
New Canaan	19,738	55	20,622	54	884	4.5	20,732
New Fairfield	13,881	81	13,579	80	-302	-2.2	13,545
New Hartford	6,970	118	6,658	120	-312	-4.5	6,668
New Haven	129,779	2	134,023	3	4,244	3.3	135,081
New London	27,620	38	27,367	38	-253	-0.9	27,635
New Milford	28,142	36	28,115	36	-27	-0.1	28,182
Newington	30,562	31	30,536	31	-26	-0.1	30,365
Newtown	27,560	39	27,173	40	-387	-1.4	27,522
Norfolk	1,709	164	1,588	163	-121	-7.1	1,587
North Branford	14,407	78	13,544	81	-863	-6.0	13,498
North Canaan	3,315	146	3,211	146	-104	-3.1	3,185
North Haven	24,093	47	24,253	48	160	0.7	24,169
North Stonington	5,297	128	5,149	129	-148	-2.8	5,137
Norwalk	85,603	6	91,184	6	5,581	6.5	91,194
Norwich	40,493	24	40,125	25	-368	-0.9	40,014
Old Lyme	7,603	113	7,628	112	25	0.3	7,577
Old Saybrook	10,242	96	10,481	93	239	2.3	10,563
Orange	13,956	80	14,280	78	324	2.3	14,246
Oxford	12,683	85	12,706	84	23	0.2	12,768
Plainfield	15,405	75	14,973	76	-432	-2.8	14,959
Plainville	17,716	67	17,525	69	-191	-1.1	17,445
Plymouth	12,243	88	11,671	88	-572	-4.7	11,659
Pomfret	4,247	137	4,266	134	19	0.4	4,271
Portland	9,508	101	9,384	101	-124	-1.3	9,462
Preston	4,726	132	4,788	132	62	1.3	4,802
Prospect	9,405	103	9,401	100	-4	0.0	9,344
Putnam	9,584	100	9,224	102	-360	-3.8	9,227
Redding	9,158	105	8,765	107	-393	-4.3	8,735
Ridgefield	24,638	46	25,033	45	395	1.6	25,011
Rocky Hill	19,709	56	20,845	53	1,136	5.8	20,746
Roxbury	2,262	157	2,260	155	-2	-0.1	2,269
Salem	4,151	138	4,213	136	62	1.5	4,200
Salisbury	3,741	142	4,194	138	453	12.1	4,112
Scotland	1,726	163	1,576	164	-150	-8.7	1,568
Seymour	16,540	70	16,748	70	208	1.3	16,679
Sharon	2,782	151	2,680	151	-102	-3.7	2,675
Shelton	39,559	26	40,869	24	1,310	3.3	41,474
Sherman	3,581	144	3,527	144	-54	-1.5	3,521
Simsbury	23,511	48	24,517	46	1,006	4.3	24,807
Somers	11,444	91	10,255	95	-1,189	-10.4	10,279
South Windsor	25,709	43	26,918	42	1,209	4.7	26,767
Southbury	19,904	53	19,879	57	-25	-0.1	19,796

Connecticut Resident Population Census Counts

	Popula	tion	Populat	ion	2010-2020	%	2021
	<u>2010</u>	<u>Rank</u>	<u>2020</u>	<u>Rank</u>	<u>Change</u>	<u>Change</u>	DPH* Est.
Southington	43,069	23	43,501	22	432	1.0	43,500
Sprague	2,984	148	2,967	150	-17	-0.6	2,950
Stafford	12,087	89	11,472	89	-615	-5.1	11,412
Stamford	122,643	4	135,470	2	12,827	10.5	136,309
Sterling	3,830	140	3,578	143	-252	-6.6	3,577
Stonington	18,545	63	18,335	65	-210	-1.1	18,427
Stratford	51,384	18	52,355	17	971	1.9	52,268
Suffield	15,735	73	15,752	73	17	0.1	15,862
Thomaston	7,887	112	7,442	115	-445	-5.6	7,453
Thompson	9,458	102	9,189	103	-269	-2.8	9,226
Tolland	15,052	76	14,563	77	-489	-3.2	14,511
Torrington	36,383	27	35,515	28	-868	-2.4	35,357
Trumbull	36,018	28	36,827	27	809	2.2	36,950
Union	854	169	785	169	-69	-8.1	781
Vernon	29,179	34	30,215	32	1,036	3.6	30,326
Voluntown	2,603	153	2,570	152	-33	-1.3	2,554
Wallingford	45,135	21	44,396	21	-739	-1.6	44,194
Warren	1,461	166	1,351	167	-110	-7.5	1,349
Washington	3,578	145	3,646	142	68	1.9	3,633
Waterbury	110,366	5	114,403	5	4,037	3.7	113,811
Waterford	19,517	58	19,571	58	54	0.3	19,553
Watertown	22,514	49	22,105	49	-409	-1.8	22,110
West Hartford	63,268	9	64,083	9	815	1.3	63,973
West Haven	55,564	16	55,584	16	20	0.0	55,294
Westbrook	6,938	119	6,769	118	-169	-2.4	6,810
Weston	10,179	97	10,354	94	175	1.7	10,336
Westport	26,391	42	27,141	41	750	2.8	27,279
Wethersfield	26,668	40	27,298	39	630	2.4	27,124
Willington	6,041	124	5,566	124	-475	-7.9	5,528
Wilton	18,062	66	18,503	63	441	2.4	18,460
Winchester	11,242	93	10,224	96	-1,018	-9.1	10,217
Windham	25,268	45	24,425	47	-843	-3.3	24,362
Windsor	29,044	35	29,492	33	448	1.5	29,376
Windsor Locks	12,498	86	12,613	85	115	0.9	12,531
Wolcott	16,680	69	16,142	72	-538	-3.2	16,160
Woodbridge	8,990	107	9,087	105	97	1.1	9,045
Woodbury	9,975	98	9,723	98	-252	-2.5	9,761
Woodstock	7,964	111	8,221	110	257	3.2	8,221

^{*} Connecticut Department of Public Health

Source:

U.S. Census Bureau, April 1, 2010 & 2020 Department of Public Health, "Est. Population in Connecticut as of July 1, 2021"

TABLE 1
U.S. ECONOMIC VARIABLES

C D I'.	2013	2014	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
Gross Domestic Product (\$B)	16,517.1	17,162.8	17,945.2	18,419.0	19,049.1	20,020.6	20,948.0	21,103.3	22,107.0	24,472.1
Percent Change	3.6%	3.9%	4.6%	2.6%	3.4%	5.1%	4.6%	0.7%	4.8%	10.7%
	46 272 0	46 707 5	47.046.0	47.500.0	47.054.0	40.050.0	10.007.0	40.670.0	40 407 4	10.074.5
Real GDP (2012=100) Percent Change	16,372.0 1.8%	16,707.5 2.0%	17,216.8 3.0%	17,520.9 1.8%	17,851.3 1.9%	18,360.3 2.9%	18,807.8 2.4%	18,678.8 -0.7%	19,107.1 2.3%	19,874.5 4.0%
rercent change	1.070	2.070	3.070	1.070	1.570	2.570	2.470	0.770	2.370	4.070
GDP Deflator (2012=100)	100.9	102.7	104.2	105.1	106.7	109.0	111.4	113.0	115.7	123.1
Percent Change	1.8%	1.8%	1.5%	0.9%	1.5%	2.2%	2.1%	1.4%	2.4%	6.4%
Housing Starts (K)	877.4	953.1	1,053.8	1,151.5	1,198.8	1,250.0	1,217.1	1,315.0	1,548.8	1,653.8
Percent Change	28.2%	8.6%	10.6%	9.3%	4.1%	4.3%	-2.6%	8.0%	17.8%	6.8%
G										
Unemployment Rate	7.8%	6.8%	5.7%	5.0%	4.6%	4.1%	3.8%	6.0%	6.9%	4.2%
New Vehicle Sales (M)	15.1	15.9	16.9	17.5	17.3	17.2	17.1	15.1	16.3	13.4
Percent Change	10.6%	5.5%	6.0%	3.9%	-1.5%	-0.1%	-0.9%	-11.9%	8.2%	-17.6%
0										
Consumer Price Index										
('82-'84=100)	231.4	235.0	236.7	238.2	242.7	248.1	253.3	257.3	263.2	282.0
Percent Change	1.7%	1.6%	0.7%	0.7%	1.9%	2.2%	2.1%	1.6%	2.3%	7.2%
Industrial Production										
Index ('07=100)	98.3	100.7	102.3	99.4	99.1	101.5	103.4	98.1	97.7	102.3
Percent Change	2.1%	2.4%	1.7%	-2.9%	-0.3%	2.4%	1.8%	-5.1%	-0.4%	4.7%
Personal Income (\$B)	14,124.4	14,525.5	15,386.1	15,881.0	16,439.9	17,243.1	18,169.9	19,252.7	20,707.0	21,266.4
Percent Change	3.4%	2.8%	5.9%	3.2%	3.5%	4.9%	5.4%	6.0%	7.6%	2.7%
Real Personal										
Income (\$B in 2012=100)	14,028.3	14,217.1	14,936.5	15,343.4	15,637.2	16,087.5	16,647.6	17,420.2	18,359.3	17,822.8
Percent Change	1.9%	1.3%	5.1%	2.7%	1.9%	2.9%	3.5%	4.6%	5.4%	-2.9%
Disposable Personal										
Income (\$B)		12,806.4				15,165.9	16,032.2	17,062.9	18,270.6	18,308.1
Percent Change	2.8%	2.3%	5.5%	3.1%	3.7%	5.0%	5.7%	6.4%	7.1%	0.2%
Disposable Personal										
Income (\$B in 2012=100)	12,436.0	12,534.8	13,120.8	13,464.5	13,739.8	14,149.8	14,689.4	15,440.2	16,203.5	15,350.4
Percent Change	1.2%	0.8%	4.7%	2.6%	2.0%	3.0%	3.8%	5.1%	4.9%	-5.3%

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

	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
Personal Income	14,124.5	14,525.5	15,386.1	15,881.0	16,439.9	17,243.1	18,170.0	19,252.7	20,707.0	21,266.4
Percent Change	3.4%	2.8%	5.9%	3.2%	3.5%	4.9%	5.4%	6.0%	7.6%	2.7%
Wages & Salaries	7,036.8	7,269.3	7,678.6	7,973.2	8,261.5	8,697.6	9,122.3	9,356.0	9,799.7	10,788.6
Percent Change	4.1%	3.3%	5.6%	3.8%	3.6%	5.3%	4.9%	2.6%	4.7%	10.1%
Manufacturing Income	739.0	761.5	796.1	809.9	827.1	866.2	899.7	904.0	928.9	998.4
Percent Change	2.7%	3.0%	4.5%	1.7%	2.1%	4.7%	3.9%	0.5%	2.8%	7.5%
Nonmanufacturing Inc.	6,297.8	6,507.8	6,882.5	7,163.4	7,434.5	7,831.4	8,222.6	8,452.1	8,870.8	9,790.2
Percent Change	4.3%	3.3%	5.8%	4.1%	3.8%	5.3%	5.0%	2.8%	5.0%	10.4%
Other Labor Income	1,678.5	1,749.4	1,807.5	1,857.9	1,905.4	2,005.3	2,096.8	2,121.2	2,191.3	701.8
Percent Change	4.0%	4.2%	3.3%	2.8%	2.6%	5.2%	4.6%	1.2%	3.3%	-68.0%
Proprietor's Income	1,376.5	1,418.3	1,441.7	1,414.2	1,465.0	1,534.9	1,581.5	1,591.5	1,721.4	1,807.3
Percent Change	5.9%	3.0%	1.7%	-1.9%	3.6%	4.8%	3.0%	0.6%	8.2%	5.0%
Farm Income	77.2	76.0	59.2	45.8	36.7	31.7	25.2	34.9	53.7	69.5
Percent Change	25.5%	-1.6%	-22.2%	-22.7%	-19.8%	-13.6%	-20.4%	38.3%	54.0%	29.3%
Nonfarm Income	1,299.3	1,342.2	1,382.5	1,368.5	1,428.3	1,503.2	1,556.3	1,556.6	1,667.7	1,737.9
Percent Change	5.0%	3.3%	3.0%	-1.0%	4.4%	5.2%	3.5%	0.0%	7.1%	4.2%
Rental Income	553.2	594.1	604.4	619.3	636.6	664.8	690.6	711.9	718.0	745.8
Percent Change	5.6%	7.4%	1.7%	2.5%	2.8%	4.4%	3.9%	3.1%	0.8%	3.9%
Personal Dividend Inc.	834.0	863.8	1,015.6	1,045.7	1,116.9	1,184.1	1,369.2	1,476.8	1,469.5	1,595.5
Percent Change	12.3%	3.6%	17.6%	3.0%	6.8%	6.0%	15.6%	7.9%	-0.5%	8.6%
Personal Interest Income	1,281.0	1,288.0	1,395.4	1,460.2	1,504.7	1,573.8	1,641.9	1,655.0	1,652.9	1,673.2
Percent Change	-1.3%	0.5%	8.3%	4.6%	3.0%	4.6%	4.3%	0.8%	-0.1%	1.2%
Transfer Payments	2,392.2	2,469.7	2,622.9	2,732.1	2,816.2	2,914.3	3,062.1	3,775.5	4,640.0	3,954.3
Percent Change	1.6%	3.2%	6.2%	4.2%	3.1%	3.5%	5.1%	23.3%	22.9%	-14.8%

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

	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
Less:										
Contributions to	1 027 7	1 127 0	1 170 0	1 221 5	1 200 4	1 221 6	1 204 4	1 425 2	1 405 6	1 (00 7
Social Insurance Percent Change	1,027.7 10.3%	1,127.0 9.7%	1,179.9 4.7%	1,221.5 3.5%	1,266.4 3.7%	1,331.6 5.1%	1,394.4 4.7%	1,435.2 2.9%	1,485.6 3.5%	1,609.7 8.4%
reitent Change	10.570	5.770	4.770	3.570	3.770	3.170	4.770	2.570	3.570	0.470
Equals:										
Personal Income	14,124.5	14,525.5	15,386.1	15,881.0	16,439.9	17,243.1	18,170.0	19,252.7	20,707.0	21,266.4
Percent Change	3.4%	2.8%	5.9%	3.2%	3.5%	4.9%	5.4%	6.0%	7.6%	2.7%
Less:										
Personal Taxes	1,603.6	1,719.1	1,870.7	1,945.1	1,995.3	2,077.2	2,137.7	2,189.8	2,436.4	2,958.3
Percent Change	8.8%	7.2%	8.8%	4.0%	2.6%	4.1%	2.9%	2.4%	11.3%	21.4%
Equals:	10 -00 0						46.000.0		40.070.6	40.000.0
Disposable Income (\$B)	12,520.8	12,806.4	13,515.4	13,936.0	14,444.6	15,165.9	16,032.2	17,063.0	18,270.6	18,308.0
Percent Change	2.8%	2.3%	5.5%	3.1%	3.6%	5.0%	5.7%	6.4%	7.1%	0.2%
Less:										
Personal Outlays	11,581.1	11,971.9	12,504.9	12,922.8	13,424.6	14,072.9	14,678.3	14,681.9	15,449.8	17,212.6
Percent Change	2.8%	3.4%	4.5%	3.3%	3.9%	4.8%	4.3%	0.0%	5.2%	11.4%
- 1										
Equals: Personal Savings	939.7	834.5	1,010.5	1,013.2	1,020.0	1,093.0	1,354.0	2,381.0	2,820.8	1,095.5
Percent Change	2.3%	-11.2%	21.1%	0.3%	0.7%	7.2%	23.9%	75.9%	18.5%	-61.2%
i crociic change	2.370	11.2/0	21.1/0	0.570	0.770	7.270	23.570	, 3.370	10.570	01.270
Personal Savings Rate	7.5%	6.5%	7.5%	7.3%	7.1%	7.2%	8.4%	14.0%	15.4%	6.0%

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

	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	2022
Establishment Employ.	135.2	137.5	140.4	143.1	145.5	147.7	149.9	147.1	143.0	149.4
Percent Change	1.6%	1.7%	2.1%	1.9%	1.7%	1.5%	1.5%	-1.9%	-2.8%	4.5%
Manufacturing Percent Change	12.0	12.1	12.3	12.4	12.4	12.6	12.8	12.5	12.2	12.6
	1.2%	0.9%	1.6%	0.6%	0.2%	1.4%	1.9%	-2.1%	-2.7%	3.3%
Nonmanufacturing	123.2	125.5	128.1	130.7	133.2	135.2	137.2	134.6	130.8	136.8
Percent Change	1.6%	1.8%	2.1%	2.0%	1.9%	1.5%	1.4%	-1.9%	-2.8%	4.6%
Construction & Mining	6.6	6.9	7.2	7.3	7.5	7.8	8.1	8.1	7.9	8.1
Percent Change	2.4%	4.1%	4.7%	2.1%	2.2%	4.3%	4.2%	-1.0%	-2.3%	3.2%
Information Percent Change	2.7	2.7	2.7	2.8	2.8	2.8	2.8	2.8	2.7	2.9
	0.4%	1.2%	0.7%	1.1%	1.6%	0.4%	1.0%	-1.0%	-3.2%	6.9%
Public Utility, Trade & Transportation Percent Change	25.6 1.3%	26.0 1.9%	26.6 2.1%	27.0 1.6%	27.3 1.2%	27.5 0.7%	27.7 0.6%	27.1 -1.9%	27.2 0.1%	28.3 4.1%
Finance, Insurance & Real Estate Percent Change	7.8 1.3%	7.9 1.1%	8.0 1.6%	8.2 1.9%	8.4 2.1%	8.5 1.6%	8.7 1.9%	8.8 1.0%	8.7 -0.6%	8.9 1.8%
Services	58.7	60.1	61.6	63.3	64.8	66.2	67.3	65.3	62.5	66.5
Percent Change	2.5%	2.4%	2.6%	2.7%	2.4%	2.0%	1.7%	-2.9%	-4.4%	6.4%
Professional & Business	18.3	18.8	19.4	19.9	20.3	20.7	21.1	20.9	20.6	21.8
Percent Change	3.3%	3.1%	3.0%	2.6%	1.9%	2.1%	1.9%	-1.3%	-1.2%	5.8%
Education & Health Percent Change	20.9	21.2	21.7	22.3	22.9	23.4	23.9	23.8	23.4	24.0
	1.8%	1.4%	2.3%	2.8%	2.7%	2.1%	1.9%	-0.2%	-2.0%	2.6%
Leisure & Hospitality Percent Change	14.0	14.5	14.9	15.4	15.9	16.2	16.4	15.0	13.2	15.1
	3.2%	3.4%	2.9%	3.4%	3.0%	2.1%	1.4%	-8.5%	-12.5%	14.6%
Other Services Percent Change	5.5	5.5	5.6	5.7	5.7	5.8	5.9	5.6	5.3	5.6
	1.0%	1.4%	1.2%	1.0%	1.4%	1.3%	0.9%	-3.9%	-5.1%	4.9%
Government Percent Change	21.9	21.8	21.9	22.1	22.3	22.4	22.5	22.4	21.8	22.1
	-0.4%	-0.2%	0.5%	0.8%	0.9%	0.3%	0.6%	-0.4%	-2.7%	1.4%
Civilian Labor Force	155.3	155.5	156.6	158.0	159.8	161.2	162.7	162.6	160.6	162.9
Percent Change	0.7%	0.1%	0.7%	0.9%	1.1%	0.9%	0.9%	-0.1%	-1.2%	1.4%
Unemployment Rate	7.8%	6.8%	5.7%	5.0%	4.6%	4.1%	3.8%	6.0%	6.9%	4.2%

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

	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	2022
All Items	231.4	235.0	236.7	238.2	242.7	248.1	253.3	257.3	263.2	282.0
Percent Change	1.7%	1.6%	0.7%	0.7%	1.9%	2.2%	2.1%	1.6%	2.3%	7.2%
Food & Beverages Percent Change	235.4	239.1	245.1	247.7	248.3	251.6	255.7	261.7	270.4	288.5
	1.7%	1.6%	2.5%	1.1%	0.2%	1.3%	1.6%	2.3%	3.4%	6.7%
Housing	224.9	230.2	235.6	240.7	247.8	254.8	262.2	269.1	275.0	289.7
Percent Change	1.8%	2.4%	2.3%	2.1%	3.0%	2.9%	2.9%	2.6%	2.2%	5.3%
Energy	246.0	246.7	221.2	192.5	197.8	213.3	217.6	206.9	211.0	274.3
Percent Change	0.1%	0.3%	-10.3%	-12.9%	2.7%	7.9%	2.0%	-4.9%	2.0%	30.0%
Commodities	187.9	188.1	184.5	180.2	180.3	183.0	184.8	184.7	189.7	212.0
Percent Change	0.8%	0.1%	-1.9%	-2.4%	0.0%	1.5%	1.0%	-0.1%	2.7%	11.8%
Apparel	127.0	127.6	126.8	125.9	126.1	125.9	124.6	121.5	118.4	124.4
Percent Change	1.7%	0.5%	-0.6%	-0.7%	0.2%	-0.2%	-1.1%	-2.5%	-2.6%	5.1%
Transportation Percent Change	217.9	217.9	206.2	196.0	198.4	206.2	210.5	205.4	211.3	253.2
	1.2%	0.0%	-5.4%	-4.9%	1.2%	3.9%	2.1%	-2.4%	2.9%	19.8%
Services	274.6	281.5	288.3	295.6	304.2	312.3	320.7	329.0	335.7	350.4
Percent Change	2.3%	2.5%	2.4%	2.5%	2.9%	2.7%	2.7%	2.6%	2.0%	4.4%
Medical Care	420.6	430.2	441.0	454.0	471.0	480.4	489.3	510.2	522.5	533.7
Percent Change	3.3%	2.3%	2.5%	2.9%	3.8%	2.0%	1.9%	4.3%	2.4%	2.1%
Other Goods & Services Percent Change	397.8 1.8%	404.7 1.7%	411.2 1.6%	418.9 1.9%	427.7 2.1%	437.8 2.3%	446.2 1.9%	457.4 2.5%	468.0 2.3%	490.5 4.8%

MAJOR CONNECTICUT ECONOMIC INDICATORS - STATE FISCAL YEAR BASIS

TABLE 6
PERSONAL INCOME
(BILLIONS OF DOLLARS)

	2013	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	2019	<u>2020</u>	<u>2021</u>	2022
Personal Income	228.8	230.3	240.9	246.2	249.0	257.8	268.9	277.2	292.9	301.9
Percent Change	0.0%	0.6%	4.6%	2.2%	1.1%	3.6%	4.3%	3.1%	5.7%	3.1%
Disposable										
Personal Income	193.9	193.2	201.9	207.3	210.5	218.0	228.8	236.9	248.5	249.0
Percent Change	-1.4%	-0.3%	4.5%	2.7%	1.6%	3.6%	5.0%	3.5%	4.9%	0.2%
Total Wages	117.0	118.8	123.0	125.2	126.3	130.8	136.3	138.2	143.2	156.8
Percent Change	3.3%	1.6%	3.5%	1.8%	0.8%	3.6%	4.2%	1.4%	3.6%	9.5%
Manufacturing Wages	14.7	14.7	14.4	13.9	14.1	14.9	15.5	15.9	15.7	16.5
Percent Change	2.7%	-0.1%	-2.2%	-3.2%	1.3%	5.8%	4.2%	2.4%	-1.1%	5.3%
Nonmanufacturing										
Wages	102.3	104.2	108.7	111.3	112.2	115.9	120.8	122.3	127.5	140.2
Percent Change	3.4%	1.8%	4.3%	2.5%	0.8%	3.3%	4.2%	1.3%	4.2%	10.0%
Other Labor Income	26.1	26.5	27.3	28.2	28.3	29.5	30.2	30.0	31.1	32.8
Percent Change	2.3%	1.8%	3.0%	3.2%	0.4%	4.1%	2.6%	-0.8%	3.9%	5.4%
Proprietor's Income	28.1	26.6	27.1	27.2	28.3	28.9	28.5	28.0	29.9	31.0
Percent Change	-14.4%	-5.3%	1.9%	0.5%	4.0%	2.0%	-1.3%	-1.8%	6.8%	3.6%
Property Income	43.9	45.7	50.1	51.6	52.0	54.1	58.2	59.1	58.4	60.2
Percent Change	3.3%	4.0%	9.6%	3.1%	0.8%	4.0%	7.7%	1.4%	-1.1%	3.0%
Transfer Payments										
Less Social Insurance	13.7	12.7	13.4	13.9	14.1	14.6	15.7	21.9	30.2	21.1
Percent Change	-7.2%	-7.6%	5.6%	4.0%	1.1%	3.6%	7.5%	39.9%	37.8%	-30.1%
Transfer Payments	29.7	30.1	31.3	32.3	32.8	34.2	36.2	42.8	51.6	44.2
Percent Change	1.7%	1.1%	4.1%	3.1%	1.7%	4.2%	5.8%	18.4%	20.5%	-14.4%
Social Insurance	16.0	17.4	17.9	18.4	18.8	19.6	20.5	20.9	21.4	23.1
Percent Change	10.8%	8.6%	3.1%	2.4%	2.1%	4.6%	4.6%	1.9%	2.4%	7.7%
Residence Adjustment	12.9	12.7	13.1	13.0	13.7	16.1	18.5	20.0	21.4	24.7
Percent Change	6.1%	-1.5%	3.2%	-0.9%	5.7%	16.8%	15.4%	7.7%	7.2%	15.2%

MAJOR CONNECTICUT ECONOMIC INDICATORS - STATE FISCAL YEAR BASIS

TABLE 7
DEFLATED PERSONAL INCOME
(BILLIONS OF DOLLARS)

	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
Personal Income	227.3	225.4	233.8	237.8	236.8	240.5	246.4	250.8	259.7	252.9
Percent Change	-1.5%	-0.8%	3.7%	1.7%	-0.4%	1.6%	2.4%	1.8%	3.5%	-2.6%
Disposable										
Personal Income	192.6	189.1	196.0	200.3	200.2	203.4	209.7	214.4	220.4	208.7
Percent Change	-2.9%	-1.8%	3.6%	2.2%	0.0%	1.6%	3.1%	2.2%	2.8%	-5.3%
Total Wages	116.2	116.3	119.4	121.0	120.1	122.0	124.9	125.1	127.0	131.3
Percent Change	1.8%	0.1%	2.7%	1.3%	-0.7%	1.6%	2.3%	0.2%	1.5%	3.5%
Manufacturing Wages	14.6	14.4	13.9	13.4	13.4	13.9	14.2	14.4	13.9	13.9
Percent Change	1.1%	-1.6%	-3.0%	-3.6%	-0.3%	3.8%	2.3%	1.1%	-3.1%	-0.5%
Nonmanufacturing										
Wages	101.6	102.0	105.5	107.6	106.7	108.1	110.7	110.7	113.0	117.5
Percent Change	1.9%	0.3%	3.5%	2.0%	-0.8%	1.3%	2.3%	0.0%	2.1%	3.9%
Other Labor Income	25.9	25.9	26.5	27.2	26.9	27.5	27.7	27.1	27.6	27.5
Percent Change	0.8%	0.3%	2.1%	2.7%	-1.1%	2.1%	0.8%	-2.1%	1.8%	-0.4%
Proprietor's Income	27.9	26.0	26.3	26.3	26.9	26.9	26.1	25.3	26.5	25.9
Percent Change	-15.7%	-6.7%	1.1%	0.0%	2.4%	0.0%	-3.0%	-3.1%	4.7%	-2.1%
Property Income	43.6	44.7	48.6	49.9	49.5	50.5	53.4	53.5	51.8	50.4
Percent Change	1.7%	2.5%	8.7%	2.6%	-0.8%	2.0%	5.7%	0.2%	-3.0%	-2.7%
Transfer Payments										
Less Social Insurance	13.6	12.4	13.0	13.4	13.4	13.6	14.4	19.8	26.8	17.7
Percent Change	-8.6%	-8.9%	4.7%	3.5%	-0.4%	1.6%	5.5%	38.1%	35.0%	-33.9%
Transfer Payments	29.5	29.4	30.4	31.2	31.2	31.9	33.2	38.8	45.8	37.0
Percent Change	0.2%	-0.3%	3.3%	2.6%	0.1%	2.2%	3.9%	16.9%	18.1%	-19.1%
Social Insurance	15.9	17.0	17.4	17.8	17.8	18.3	18.8	18.9	19.0	19.3
Percent Change	9.1%	7.0%	2.2%	1.9%	0.5%	2.6%	2.7%	0.7%	0.4%	1.7%
Residence Adjustment	12.8	12.4	12.7	12.6	13.1	15.0	17.0	18.1	19.0	20.7
Percent Change	4.5%	-3.0%	2.4%	-1.4%	4.1%	14.6%	13.4%	6.4%	5.1%	8.8%

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)

	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
Manufacturing	161.1	158.6	156.9	156.6	157.5	159.7	161.6	158.7	152.3	156.4
Percent Change	-1.1%	-1.6%	-1.1%	-0.2%	0.6%	1.4%	1.2%	-1.8%	-4.0%	2.7%
Transportation Equip.	41.8	40.6	40.2	41.1	42.8	45.0	46.4	46.8	45.2	45.1
Percent Change	-1.3%	-2.7%	-1.1%	2.4%	4.0%	5.3%	3.0%	0.9%	-3.3%	-0.2%
Fabricated Metals	29.7	30.1	29.4	29.2	29.3	29.5	29.9	29.0	27.3	28.1
Percent Change	3.0%	1.3%	-2.2%	-0.8%	0.6%	0.5%	1.4%	-2.8%	-5.9%	2.8%
Electrical Equip. & Appl.	9.7	9.3	8.8	8.4	8.1	8.1	8.0	7.5	7.1	7.2
Percent Change	-1.3%	-4.4%	-5.4%	-4.4%	-4.0%	0.5%	-1.5%	-6.6%	-5.2%	2.2%
Chemicals	8.0	7.9	7.8	7.7	7.7	7.9	7.9	7.7	7.7	8.0
Percent Change	-8.2%	-1.3%	-1.5%	-2.1%	0.1%	2.7%	0.2%	-1.8%	-0.9%	4.1%
Printing & Support	5.3	5.1	5.1	5.2	5.4	5.3	5.2	4.9	4.2	4.6
Percent Change	-5.7%	-3.0%	0.3%	1.9%	3.3%	-1.4%	-3.0%	-4.6%	-13.6%	7.2%
Industrial Machinery	14.3	14.0	14.1	13.8	13.5	13.1	13.1	13.1	12.7	13.2
Percent Change	-2.9%	-2.0%	1.0%	-2.1%	-2.8%	-2.5%	0.2%	-0.1%	-2.9%	3.7%
All Other	52.4	51.6	51.4	51.1	50.8	50.8	51.2	49.6	48.1	50.2
Percent Change	-1.0%	-1.5%	-0.3%	-0.6%	-0.7%	0.0%	0.8%	-3.2%	-3.1%	4.5%

MAJOR CONNECTICUT ECONOMIC INDICATORS - STATE FISCAL YEAR BASIS

TABLE 9
NONMANUFACTURING EMPLOYMENT
(THOUSANDS -Seasonally Adjusted)

	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	2022
Nonmanufacturing	1,493.5	1,507.6	1,524.4	1,533.3	1,537.7	1,537.0	1,537.1	1,475.2	1,431.3	1,481.1
Percent Change	1.0%	0.9%	1.1%	0.6%	0.3%	0.0%	0.0%	-4.0%	-3.0%	3.5%
Construction & Mining	52.8	54.7	57.5	59.5	59.2	58.7	60.2	58.4	58.8	61.4
Percent Change	1.1%	3.5%	5.2%	3.5%	-0.6%	-0.7%	2.6%	-3.0%	0.7%	4.4%
Information Percent Change	31.8	32.1	32.3	32.5	32.1	31.6	31.5	30.8	29.1	30.3
	1.7%	1.0%	0.6%	0.5%	-1.1%	-1.6%	-0.3%	-2.3%	-5.6%	4.3%
Utilities	6.0	6.0	5.7	5.6	5.5	5.3	5.2	5.1	5.0	5.0
Percent Change	-0.3%	0.3%	-5.0%	-1.3%	-2.4%	-4.5%	-1.5%	-0.8%	-2.3%	-0.4%
Transportation Percent Change	41.3	42.3	43.5	45.2	45.7	48.1	50.1	53.7	59.1	62.6
	3.4%	2.3%	2.9%	3.8%	1.3%	5.2%	4.2%	7.0%	10.2%	5.8%
Wholesale Trade	62.1	62.0	61.8	61.4	61.6	61.5	60.5	57.9	56.1	58.6
Percent Change	-0.2%	-0.1%	-0.4%	-0.6%	0.3%	-0.1%	-1.6%	-4.4%	-3.1%	4.6%
Retail Trade	182.1	184.0	184.4	185.0	184.3	182.1	178.2	166.3	165.6	167.3
Percent Change	0.6%	1.0%	0.2%	0.3%	-0.4%	-1.1%	-2.2%	-6.7%	-0.4%	1.0%
Finance & Insurance Percent Change	113.2	110.1	110.0	110.1	108.8	106.8	104.4	102.6	100.3	98.5
	-1.8%	-2.7%	-0.1%	0.2%	-1.2%	-1.8%	-2.3%	-1.7%	-2.3%	-1.8%
Real Estate	18.9	19.0	19.5	20.0	19.8	19.9	20.0	19.6	18.5	19.1
Percent Change	1.1%	0.8%	2.8%	2.1%	-0.6%	0.1%	0.8%	-1.9%	-6.0%	3.2%
Professional & Business	208.2	213.0	217.6	219.1	219.1	220.3	220.3	213.3	208.3	215.2
Percent Change	1.9%	2.3%	2.2%	0.7%	0.0%	0.5%	0.0%	-3.2%	-2.4%	3.3%
Education & Health Percent Change	324.9	328.7	333.5	335.7	341.7	343.4	346.4	339.3	328.9	335.0
	1.4%	1.2%	1.5%	0.6%	1.8%	0.5%	0.9%	-2.1%	-3.1%	1.9%
Leisure & Hospitality Percent Change	144.3	148.8	150.7	152.2	155.5	157.0	158.4	137.1	122.0	143.4
	3.0%	3.1%	1.3%	1.0%	2.2%	1.0%	0.9%	-13.5%	-11.0%	17.6%
Other Services Percent Change	62.0	62.2	63.5	64.3	64.9	65.3	65.6	60.6	56.4	59.8
	2.3%	0.4%	2.0%	1.3%	0.9%	0.7%	0.4%	-7.6%	-7.0%	6.1%
Federal Government	17.4	17.3	17.6	17.7	18.0	18.0	18.1	18.4	19.1	18.2
Percent Change	-2.2%	-0.8%	1.9%	0.4%	1.5%	0.4%	0.1%	1.9%	3.7%	-4.5%
State & Local Gov't. Percent Change	228.4	227.3	226.7	225.0	221.6	219.0	218.2	212.1	204.3	206.6
	0.1%	-0.5%	-0.3%	-0.7%	-1.5%	-1.2%	-0.4%	-2.8%	-3.7%	1.2%

MAJOR CONNECTICUT ECONOMIC INDICATORS - STATE FISCAL YEAR BASIS

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

	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
Labor Force	1,877.0	1,884.9	1,909.8	1,901.1	1,921.1	1,920.9	1,941.9	1,937.6	1,863.4	1,870.9
Percent Change	-1.9%	0.4%	1.3%	-0.5%	1.1%	0.0%	1.1%	-0.2%	-3.8%	0.4%
Nonfarm Employment	1,654.6	1,666.2	1,681.3	1,689.9	1,695.2	1,696.7	1,698.7	1,633.9	1,583.6	1,637.5
Percent Change	0.8%	0.7%	0.9%	0.5%	0.3%	0.1%	0.1%	-3.8%	-3.1%	3.4%
Residential Employment Percent Change	1,721.7 -1.5%	1,747.2 1.5%	1,794.0 2.7%	1,801.5 0.4%	1,833.0 1.7%	1,840.2 0.4%	1,870.7 1.7%	1,838.8 -1.7%	1,715.8 -6.7%	1,775.8 3.5%
Unemployed	155.3	137.7	115.8	99.6	88.1	80.7	71.2	98.8	147.7	95.1
Percent Change	-5.2%	-11.3%	-16.0%	-14.0%	-11.5%	-8.5%	-11.7%	38.7%	49.4%	-35.6%
Unemployment Rate	8.3%	7.3%	6.1%	5.2%	4.6%	4.2%	3.7%	5.1%	7.9%	5.1%
Households	1,369.4	1,376.5	1,378.8	1,386.7	1,395.4	1,412.8	1,424.3	1,423.3	1,428.7	1,444.5
Percent Change	-0.4%	0.5%	0.2%	0.6%	0.6%	1.2%	0.8%	-0.1%	0.4%	1.1%
Housing Starts Percent Change	5,335.7	4,668.4	4,733.6	5,974.4	4,855.0	4,707.7	4,538.6	5,099.8	5,004.2	3,910.8
	46.8%	-12.5%	1.4%	26.2%	-18.7%	-3.0%	-3.6%	12.4%	-1.9%	-21.9%
Single Family	3,049.9	2,768.5	2,384.4	2,733.9	2,739.1	2,902.7	3,057.5	2,403.4	3,167.6	2,631.1
Percent Change	27.8%	-9.2%	-13.9%	14.7%	0.2%	6.0%	5.3%	-21.4%	31.8%	-16.9%
Multi Family	2,285.8	1,899.9	2,349.2	3,240.6	2,115.8	1,805.1	1,481.1	2,696.4	1,836.6	1,279.6
Percent Change	83.3%	-16.9%	23.6%	37.9%	-34.7%	-14.7%	-17.9%	82.1%	-31.9%	-30.3%
New Car Registrations	161.7	175.0	176.3	182.3	179.0	173.1	168.6	147.6	170.0	137.5
Percent Change	6.4%	8.2%	0.7%	3.4%	-1.8%	-3.3%	-2.6%	-12.5%	15.2%	-19.1%

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

MAJOR CONNECTICUT ECONOMIC INDICATORS - STATE FISCAL YEAR BASIS

TABLE 11 ANALYTICS

	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	2022
Wages/Total Income	51.1%	51.6%	51.1%	50.9%	50.7%	50.7%	50.7%	49.9%	48.9%	51.9%
Other Labor Income /Total Income	11.4%	11.5%	11.3%	11.4%	11.4%	11.4%	11.2%	10.8%	10.6%	10.9%
Social Insurance /Total Income	7.0%	7.6%	7.4%	7.5%	7.5%	7.6%	7.6%	7.5%	7.3%	7.6%
Transfer Payments /Total Income	13.0%	13.1%	13.0%	13.1%	13.2%	13.3%	13.5%	15.5%	17.6%	14.6%
Proprietor's Income /Total Income	12.3%	11.6%	11.3%	11.1%	11.4%	11.2%	10.6%	10.1%	10.2%	10.3%
Property Income /Total Income	19.2%	19.8%	20.8%	21.0%	20.9%	21.0%	21.7%	21.3%	20.0%	19.9%
Average Wages (Thousands of Dollars)	70.20	70.82	72.71	73.63	73.98	76.63	79.80	84.39	89.88	95.17
Average Mfg. Wages (Thousands of Dollars)	91.2	92.5	91.5	88.8	89.4	93.3	96.0	100.2	103.1	105.7
Manufacturing Share of Nonfarm Employment	9.7%	9.5%	9.3%	9.3%	9.3%	9.4%	9.5%	9.7%	9.6%	9.6%
Residential Employment /Total Nonfarm Employment	1.041	1.049	1.067	1.066	1.081	1.085	1.101	1.125	1.083	1.084

MAJOR CONNECTICUT REGIONAL ECONOMIC INDICATORS - CALENDAR YEAR BASIS

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

BRIDGEPORT-STAMFORD-NORWALK

	2012	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	2017	2018	<u>2019</u>	<u>2020</u>	<u>2021</u>		
Personal Income	96,701.4	91,251.3	96,787.2	98,843.9	101,338.6	103,908.8	109,767.2	111,975.5	114,096.0	122,265.5		
Percent Change	0.4%	-5.6%	6.1%	2.1%	2.5%	2.5%	5.6%	2.0%	1.9%	7.2%		
Total Wages	36,230.9	36,293.0	37,405.7	38,602.1	38,735.9	38,318.5	38,728.0	39,651.9	39,332.9	42,664.9		
Percent Change	2.0%	0.2%	3.1%	3.2%	0.3%	-1.1%	1.1%	2.4%	-0.8%	8.5%		
HARTFORD-WEST HARTFORD-EAST HARTFORD												
	<u>2012</u>	2013	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>		
Personal Income	65,324.4	65,696.9	68,492.5	70,602.6	71,625.8	72,748.2	75,209.4	77,823.4	81,192.7	84,777.8		
Percent Change	3.0%	0.6%	4.3%	3.1%	1.4%	1.6%	3.4%	3.5%	4.3%	4.4%		
Total Wages	37,426.9	38,180.5	39,789.4	41,119.4	41,307.8	42,328.5	43,484.0	44,896.1	44,671.2	46,251.7		
Percent Change	3.4%	2.0%	4.2%	3.3%	0.5%	2.5%	2.7%	3.2%	-0.5%	3.5%		
NEW HAVEN-MILFORD												
	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>		
Personal Income	40,903.6	41,158.4	42,652.3	43,849.7	44,431.6	45,012.2	46,848.8	49,193.7	51,915.5	55,829.6		
Percent Change	2.8%	0.6%	3.6%	2.8%	1.3%	1.3%	4.1%	5.0%	5.5%	7.5%		
Total Wages	19,491.9	19,857.4	20,420.5	21,049.5	21,422.7	21,924.5	22,330.9	23,064.0	23,490.0	25,278.6		
Percent Change	3.3%	1.9%	2.8%	3.1%	1.8%	2.3%	1.9%	3.3%	1.8%	7.6%		
NEW LONDON-NORWICH, CT-RI												
	2012	2013	2014	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>		
Personal Income	13,351.8	13,284.7	13,681.3	14,299.3	14,584.4	14,859.8	15,081.4	15,692.4	16,425.2	17,170.8		
Percent Change	2.3%	-0.5%	3.0%	4.5%	2.0%	1.9%	1.5%	4.1%	4.7%	4.5%		
Total Wages	6,793.2	6,755.4	6,882.1	6,968.8	7,232.2	7,480.7	7,528.7	7,624.1	7,466.9	8,039.1		
Percent Change	0.8%	-0.6%	1.9%	1.3%	3.8%	3.4%	0.6%	1.3%	-2.1%	7.7%		