# FY 2015 Midterm Economic Report of the Governor

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## TABLE OF CONTENTS

INITEONICTION	<u>Page</u> 2
INTRODUCTION	2
EXECUTIVE SUMMARY	3
GENERAL CHARACTERISTICS	6-22
Census Information	6
Population Projections	12
Housing	15
EMPLOYMENT PROFILE	23-34
Employment Estimates	23
Nonagricultural Employment	24
Manufacturing Employment	27
Nonmanufacturing Employment	31
Unemployment Rate	34
SECTOR ANALYSIS	35-83
Energy	35
Gasoline Consumption and Automotive Fuel Economy	46
Export Sector	51
Connecticut's Defense Industry	60
Retail Trade in Connecticut	66
Small Business in Connecticut.	70
Nonfinancial Debt	73
Savings by U.S. Households	78
PERFORMANCE INDICATORS	84-103
Gross Product	84
Productivity and Unit Labor Cost	87
Value Added	88
Capital Expenditures	90
Total Personal Income	90
Per Capita Personal Income	94
Per Capita Disposable Personal Income	97
Inflation and Its Effect On Personal Income	98
Real Personal Income	99
Real Per Capita Personal Income	100
Cost of Living Index	102
MAJOR REVENUE RAISING TAXES	104-121
Personal Income Tax	105
Sales and Use Tax	110
Corporation Business Tax	113
Motor Fuels Tax	115
Other Sources	117
ECONOMIC ASSUMPTIONS OF THE GOVERNOR'S BUDGET	122-126
Economic Outlook	122
Economic Assumptions of the Governor's Budget	124
REVENUE FORECAST	128-133
IMPACT OF THE GOVERNOR'S BUDGET ON THE STATE'S ECONOMY	134-140
APPENDIX	A1-A16

## APPENDIX

	<u>Page</u>
Connecticut Resident Population Census Counts	A1-A4
Major 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 Indexes	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 REPORT OF THE GOVERNOR

FY 2015 Midterm

#### **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 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, including narratives on the foreign sector, the U.S. economy and the Connecticut economy, 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. Connecticut continues to see net out migration, with a net decline in population of 60,917 residents from 2005 to 2010. Presently the relative size of Connecticut's elderly population (age 65+) cohort exceeds that of New England and the U.S., while its younger age cohorts (under 45) trail that of New England and that nation. More significantly, population projections indicate that by 2030 the age 65 and over cohort will grow by 56.8% while the working age population will decline 8.0%, resulting in Connecticut's aged dependency ratio nearly doubling in the next 20 years.

#### Housing

Connecticut's recent housing market indicators are mixed. For the second year in a row since the start of the financial crisis, housing starts in Connecticut grew, increasing 34.6% in FY 2013, exceeding the U.S. growth rate of 27.7% during the same period. Median home prices decreased 2.6% in Connecticut in 2012, significantly worse than the U.S. as a whole, which saw median home prices increase 4.8%. Overall, median housing prices in Connecticut have fallen by 21.7% below their 2007 peak, compared to the U.S. falling 20.7% below its 2006 peak. Thirty year mortgage rates remain extremely low, averaging 4.4%, and foreclosure rates have declined to 2.54% from a high of 4.19% in the first quarter of 2010. Homeowner equity as a percentage of home values improved slightly from the post World War II low registered in 2009.

#### **Employment**

In FY 2013 Connecticut gained 9,450 non-farm jobs, representing a 0.6% growth in jobs. During the recent financial crisis, Connecticut lost 121,200 jobs, and as of November 2013 has regained 63,500 jobs, or 52.4%. Manufacturing remains an important sector of Connecticut's economy, representing 9.9% of all non-farm jobs, compared to 8.9% in the U.S. and 8.7% in New England. Connecticut continues to see a decline in manufacturing employment, decreasing 1.6% in FY 2013, while the U.S. experienced growth in manufacturing employment. Nonmanufacturing employment gained 12,170 jobs, or 0.8%, in FY 2013, trailing the U.S.'s growth of 1.7% and New England's growth of 1.2%. Within Connecticut's nonmanufacturing sector, services gained 13,500 jobs or 1.9%; transportation, trade and utilities gained 1,390 jobs or 0.5%; and government lost 670 jobs or 0.3%. In FY 2013, Connecticut's unemployment rate was 8.2%, close to the U.S.'s 7.8%, but significantly exceeding that of New England's 7.1%. This is 1.0% below Connecticut's 2011 peak of 9.2%.

#### **Energy**

Though the development of hydraulic fracturing promises a North American energy boom in the next decade, energy prices, particularly crude oil and gasoline, remained high through 2013. In 2011 Connecticut consumed 3.7 thousand BTU's per 2005 chained dollar of GDP, making it one of the most energy efficient states relative to output. Overall, Connecticut is 49.3% below the nation's average energy consumption and ranks 2<sup>nd</sup> in energy efficiency per capita. In 2012, Connecticut residents consumed 403.7 gallons of gasoline per capita, lower than the national average of 430.1. Connecticut's energy efficiency is likely due in part to the high relative price of energy in the state. In 2010 Connecticut's overall energy costs were 28% higher than the national average and its electricity prices were 65% higher than the national average.

#### **Export Sector**

Exports play a crucial role in the economy. The U.S. trade deficit in 2012 was \$310.8 billion, as U.S. exports increased 3.9% to \$2,986.9 billion. Connecticut exports totaled \$16.0 billion and accounted for 7.0% of GSP in 2012. Over the past five years, Connecticut's exports have grown by an average of 0.9%. Transportation equipment, nonelectrical machinery and computer and electronic equipment are Connecticut's largest exporting industries and comprise 65.6% of exports.

#### **Defense Industry**

Prime defense contracts tend to be a leading indicator of Connecticut's economic activity. In federal fiscal year (FFY) 2012, Connecticut contractors were awarded \$12.7 billion in defense related prime contracts, up 2.9% from the \$12.3 billion awarded in FFY 2011. The three year moving average of defense industry contracts accounted for 5.2% of Connecticut's gross state product.

#### **Retail Trade**

Connecticut's retail trade in FY 2013 totaled \$53.4 billion, a 0.3% increase over FY 2012. Growth in durable sales outpaced growth in non-durable sales in FY 2013, at 2.1% and -0.4% respectively. U.S. E-commerce sales continued their rapid growth, increasing an estimated 16.9% compared to a 4.5% increase in traditional retail sales. Connecticut retail trade as a percentage of disposable income decreased to 27.9% in FY 2013 from 30.0% in FY 2012.

#### **Nonfinancial Debt**

Total nonfinancial debt between 2000 and 2012 has grown 121.7%, far outpacing GDP growth of 53.4%. Federal indebtedness grew 242.5%, local government debt grew 148.8%, business debts grew 92.9% and household debts grew 85.8%. Connecticut's state government debt outstanding at the end of FY 2011 was \$30.5 billion, up from \$30.2 billion in FY 2010 and \$28.4 billion in FY 2009. Connecticut per capita state government debt was \$8,510 in FY 2011, compared to \$8,440 in FY 2010 and far above the fifty state average of \$3,636 in FY 2011.

#### **Gross State Product**

In 2012, Connecticut's real GSP declined 0.1% to \$197.2 billion, falling behind the U.S. and New England which saw increases of 2.5% and 1.2% respectively. Per capita real GSP in Connecticut was 28% higher than that of the U.S.

#### **Personal Income**

Real personal income in Connecticut increased 1.4%, compared to 1.8% growth in the U.S. and 1.5% growth in New England. Connecticut's real personal income growth in 2013 was faster than the 0.3% growth in 2012, but exceeded the -1.6% and -3.3% declines experienced in 2009 and 2008 respectively. In FY 2013, Connecticut possessed the highest per capita personal income in the nation at \$60,229, a growth of 1.2% over FY 2012.

#### **Economic Forecast**

Connecticut's personal income is expected to increase 3.4% in FY 2014 and 6.8% in FY 2015 to \$223,821 million and \$239,057 million respectively. Connecticut is projected to add 13,800 jobs in FY 2014 and 21,100 jobs in FY 2015, or a respective 0.8% and 1.3% growth. The unemployment rate is projected to decline 0.6% to 7.6% in FY 2014 and further decline to 6.9% in FY 2015.

#### GENERAL CHARACTERISTICS OF THE STATE OF CONNECTICUT

Connecticut, settled in 1633, became the fifth state to ratify the United States Constitution in 1788. The state is the most southern of the New England states, located on the northeast coast and bordered by Long Island Sound, New York, Massachusetts and Rhode Island. Connecticut enjoys a favorable location within New England and the rest of the Eastern seaboard, as rail, truck, air transport and ports in the region provide easy access to local and regional markets in this country, Canada, and even Europe and South America. Over 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 738 persons for each of its 4,845.4 square miles of land, compared with 87 persons per square mile of land for the United States (3,536,338 square miles), based on 2010 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.

Connecticut is a mature and highly developed state, whose primary resources are the energies and skills of its citizens, who have benefited from the state's rich historical heritage and have continued its tradition of economic, social and cultural growth.

#### **Census Information**

The census is taken on April 1 of each census year. The 2010 Census of Population and Housing was the 23rd in a series that began in 1790 (with a count of four million residents in 18 states).

TABLE 1
CENSUS POPULATION COUNTS
(In Thousands)

	United States		New I	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	

Source: U.S. Bureau of the Census

In 2010, the population in the 50 states and the District of Columbia totaled 308.7 million people. Since 1930, the population has risen in all three data series for all decades. However,

since 1970, the rate of population growth in Connecticut and New England has been significantly lower than the prior three decades and lower than the nation for recent periods.

In the United States, the resident population, which excludes armed forces overseas, increased from 281,421,906 in 2000 to 308,745,538 in 2010, an increase of 9.7%, and the lowest increase since the 1930s. New England's population increased 3.8% from 2000 to 2010, also experiencing its slowest growth since the 1930s. Within New England, only Connecticut and New Hampshire experienced growth significantly higher than the regional average.

During the last few decades, the heavily populated states experienced a slowdown in the growth of their populations. This phenomenon was common in New England, the Middle Atlantic, the East North Central and the West North Central regions. The fastest growing states were those in the West, the South, the Pacific and the southern portion of the Mountain regions. The overall apportionment of seats in the U.S. House of Representatives generally changes as a result of each decennial census. Also, Connecticut's federal aid levels for certain grants will continue to fall as the state's estimated population size, relative to the nation's, decreases each year.

Resident population in Connecticut, according to figures from the 2010 census, was 3,574,097, an increase of 168,532 from the 3,405,565 figure of 2000. This represented growth of 4.9% for the decade, slower growth than was experienced by the nation as a whole for the fourth consecutive decade, but faster growth than New England for the first time since the 1960s. Between 2000 and 2010, the state's growth rate was the sixteenth lowest in the nation.

Connecticut's population growth weakened in 2004, as much of the rest of the country was recovering economically. The state's recovery was lagging as a result of a weak economy, a high relative cost of living, and a softened job market which collectively made the state less attractive. Just as Connecticut began to experience healthy growth in 2006 and 2007, a new recession began in December of 2007. As the economy weakened across the nation and the world in 2008 and 2009, there was no place that was economically prosperous, most people could no longer easily sell their homes, and cash was no longer plentiful. Migration throughout most of the country diminished. Changes in the state's population have generally, however, been the result of net out-migration. This net out-migration is not to be confused with overall population declines, because a surplus of births and foreign in-migration have offset domestic out-migration in most years. The migration of population to and from Connecticut over the last few decades generally parallels the performance of the state's economy, rising during expansion, and declining during recession. Connecticut counties experiencing faster growth during the 1990s generally were those not dominated by large urban areas.

The national population is estimated monthly by the United States Bureau of the Census for total population which includes armed forces overseas, resident population and civilian population. Population growth is a primary long-run determinant of the potential expansion path of the economy from both the supply and demand sides of the economy. The growth of the population and its composition have profound impacts on the labor force, education, housing, and the demand for consumer goods and services.

TABLE 2
COUNTY POPULATION IN CONNECTICUT

	2000	2000	2010	2010	Percent
<u>County</u>	<u>Census</u>	<u>Percent</u>	<u>Census</u>	<u>Percent</u>	<u>Change</u>
Fairfield	882,567	25.9	916,829	25.7	3.9
Hartford	857,183	25.2	894,014	25.0	4.3
Litchfield	182,193	5.3	189,927	5.3	4.2
Middlesex	155,071	4.6	165,676	4.6	6.8
New Haven	824,008	24.2	862,477	24.1	4.7
New London	259,088	7.6	274,055	7.7	5.8
Tolland	136,364	4.0	152,691	4.3	12.0
Windham	<u>109,091</u>	<u>3.2</u>	118,428	<u>3.3</u>	<u>8.6</u>
TOTAL	3,405,565	100.0	3,574,097	100.0	$\overline{4.9}$

Source: U.S. Bureau of the Census

Annual estimates of population as of mid-calendar year for each state are vital for comparing standards of living through per capita income, productivity through per capita Gross State Product, or a state's private activity bond limitation which, under federal law, is capped at a level dependent upon the size of the population. Estimates are prepared by the U.S. Bureau of the Census based on the number of births and deaths as well as a variety of factors to approximate net migration changes. These factors can include Medicare enrollees, motor vehicle registrations, building permits, licensed drivers, school enrollments, etc. To comply with the Connecticut General Statutes concerning state aid to municipalities, the Department of Public Health also prepares an annual mid-year estimate of population based on the number of births, deaths and school age population.

TABLE 3
MID-YEAR POPULATION
(In Thousands)

Mid	United	d States New		England	Conne	Connecticut	
<u>Year</u>	<u>Number</u>	% Growth	<u>Number</u>	% Growth	<u>Number</u>	% Growth	
2004	292,805	0.9	14,207	0.2	3,496	0.3	
2005	295,517	0.9	14,217	0.1	3,507	0.3	
2006	298,380	1.0	14,246	0.2	3,517	0.3	
2007	301,231	1.0	14,279	0.2	3,527	0.3	
2008	304,094	1.0	14,340	0.4	3,546	0.5	
2009	306,772	0.9	14,404	0.4	3,562	0.5	
2010	309,326	0.8	14,465	0.4	3,579	0.5	
2011	311,583	0.7	14,518	0.4	3,589	0.3	
2012	313,874	0.7	14,563	0.3	3,592	0.1	
2013	316,129	0.7	14,619	0.4	3,596	0.1	

Source: U.S. Bureau of the Census

In addition to naturally occurring births and deaths, the size of the total population is also a product of migration, the number of households and individuals moving into and out of the state. The Internal Revenue Service (IRS) publishes data on changes in filing addresses used by federal income tax filers in successive years to determine migration between states. This data shows that between 2005 and 2010 Connecticut experienced a net decline in population of 60,917 residents due to migration alone that, when combined with births and deaths, results in a modest increase in population. This same data also shows migration into Connecticut as well as out of Connecticut has generally been declining. Net migration out of Connecticut increased from 2005 to 2007 but fell through 2010, likely due to the recession.

TABLE 4
SIGNIFICANT MIGRATION PATTERNS IN STATE POPULATION

Changes in Connecticut's Population Due to Migration Between 2005 and 2010

Major Source	Major Sources of In Major Destination		ons of Out	States with Greate	States with Greatest Impact	
Migration to Co	<u>nnecticut</u>	Migration from C	Migration from Connecticut		On Connecticut Migration	
New York	103,037	Florida	(66,845)	New York	36,192	
Massachusetts	39,207	New York	(63,687)	Florida	(32,583)	
Florida	31,101	Massachusetts	(42,127)	North Carolina	(13,379)	
New Jersey	20,083	California	(22,535)	Georgia	(7,049)	
California	18,216	North Carolina	(22,454)	South Carolina	(6,022)	
Other States	154,687	Other States	(216,239)	Other States	(41,394)	
Outside US	19,177	Outside US	(15,859)	Outside US	3,318	
Total In	385,511	Total Out	(449,746)	Total Net	(60,917)	

Source: Internal Revenue Service

The 2000 and 2010 census counts are available for each of the 169 cities and towns in Connecticut. Using that information, it is possible to identify those growing at the fastest rates as well as the slowest growing municipalities in the state as seen in the table below.

TABLE 5
FASTEST AND SLOWEST GROWING MUNICIPALITIES IN CONNECTICUT

Fastest Growing Municipalities				Slowest Growing Municipalities				
	<u>Popul</u>	<u>ation</u>			<u>Popula</u>	<u>ation</u>		
City/Town	<u>2000</u>	<u>2010</u>	<u>% Change</u>	<u>City/Town</u>	<u>2000</u>	<u>2010</u>	% Change	
Oxford	9,821	12,683	29.1%	Cornwall	1,434	1,420	-1.0%	
Mansfield	20,720	26,543	28.1%	North Canaan	3,350	3,315	-1.0%	
Sterling	3,099	3,830	23.6%	Old Saybrook	10,367	10,242	-1.2%	
Union	693	854	23.2%	Enfield	45,212	44,654	-1.2%	
Ellington	12,921	15,602	20.7%	Branford	28,683	28,026	-2.3%	
Lyme	2,016	2,406	19.3%	East Hampton	13,352	12,959	-2.9%	
Middlebury	6,451	7,575	17.4%	Bridgewater	1,824	1,727	-5.3%	
Haddam	7,157	8,346	16.6%	Salisbury	3 <i>,</i> 977	3,741	-5.9%	
Warren	1,254	1,461	16.5%	Sharon	2,968	2,782	-6.3%	
Canton	8,840	10,292	16.4%	Sherman	3,827	3,581	-6.4%	
State Average Growth 4.		4.9%						

Source: U.S. Bureau of the Census

#### Households

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

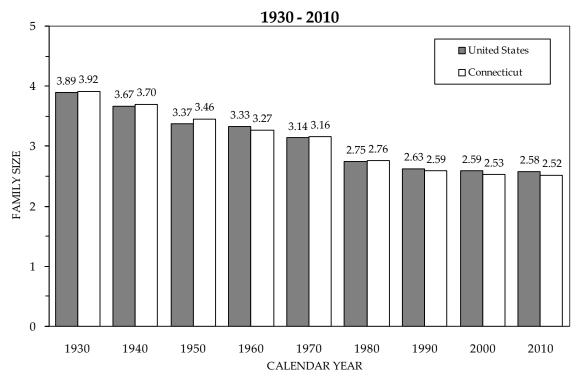
The number of households in Connecticut in 2010 was 1,371,087, up 5.3% from the 2000 Census estimate, and up 3.6% from the 2005 count. This is not unexpected in that it reflects the slow growth of Connecticut's population over the last several years. Family households include a householder and one or 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)

	<u>Hou</u>	<u>seholds</u>	<u>%</u>	<u>Change</u>	
Calendar Year	<u>U.S.</u>	Connecticut	<b>During Period</b>	<u>U.S.</u>	Connecticut
2000	105,480	1,302	2000-2005	5.3%	1.7%
2005	111,091	1,324	2005-2010	5.1%	3.6%
2010	116,716	1,371	2000-2010	10.7%	5.3%

Source: U.S. Bureau of the Census

#### PERSONS PER HOUSEHOLD



Source: U.S. Bureau of the Census

Between 1990 and 2010, the relatively stable population, the increasing number of households, and the changing mix in the types of households in Connecticut resulted in a decrease in average population per household in the state.

The decline in household size can be considered an indicator of social change. Society is adjusting its mores to fit the demands of new generations including: delaying marriage, both delaying and having fewer children, and the establishment of one or two person households by career minded men and women. Other social changes that result in smaller households are the increase in the elderly population and the increasing number of one parent families that are the consequence of the general rise in the number of divorces.

#### **Age Cohorts**

According to the latest data available, the distribution of Connecticut's population between age cohorts is somewhat different from that of the U.S. average. The state has a lower concentration of persons aged 18 to 44 years than either New England or the nation as a whole, and a higher concentration of persons aged 65 and over (especially 85 and over) than the nation as a whole. Growth in this older age cohort in Connecticut will accelerate as baby boomers age. The aging population will put pressure on state spending requirements, which could be exacerbated by state revenues that are not growing at the same rate as during the late 1990s. The National Center for Health Statistics estimated average life expectancy at birth to be 77.9 years in 2007,

up from 73.7 years in 1980, 75.4 years in 1990, and 77.0 years in 2000. As life spans continue to increase nationally, this trend will impact retirement, social security, pension systems, health care, and other similar requirements.

TABLE 7
POPULATION DISTRIBUTION BY AGE IN 2010
(In Thousands)

	<u>0 to 17</u>	18 to 24	25 to 44	45 to 64	<u>65 +</u>	<u>85 +</u>	<u>Total</u>
<b>United States</b>	74,181	30,672	82,135	81,489	40,268	5,493	308,746
% of Total	24.0	9.9	26.6	26.4	13.0	1.8	100
New England	3,151	1,429	3,689	4,135	2,042	324	14,445
% of Total	21.8	9.9	25.5	28.6	14.1	2.2	100
Connecticut	817	327	905	1,019	507	85	3,574
% of Total	22.9	9.1	25.3	28.5	14.2	2.4	100

Source: U.S. Bureau of the Census

#### **Population Projections**

The U.S. Department of Commerce, Bureau of the Census, publishes population projections for the United States and the 50 states. Based on these projections, the elderly population (defined as those 65 years and over) continues to grow substantially. For every person over the age of 65, the number of workers aged 18 to 64 is expected to decrease 41.5 percent, from 4.5 workers in 2000 to 2.6 workers in 2030. The size of this cohort is not only growing rapidly, the average age is also increasing. The most senior subset, those aged 85 and older, is increasing at a faster rate than the total elderly population in Connecticut. This significant growth will impact both the size and complexity of the demand for services required by this segment of Connecticut's population. There will be increased demand for health care facilities, public transportation, elderly housing, and other services. The cost of caring for the elderly may become much greater as the baby boom generation began to reach the age of sixty-five in 2011.

TABLE 8
PROJECTIONS OF THE POPULATION IN CONNECTICUT
(Mid-Year Resident Population In Thousands)

	1990	2000	2010	Proje	Projections	
Age Group	<u>Census</u>	<u>Census</u>	<u>Census</u>	<u>2020</u>	<u>2030</u>	2010-2030
Total	3,287.1	3,405.6	3,574.1	3,675.7	3,688.6	3.2%
0-17	737.6	841.7	817.0	816.3	823.4	0.8%
18-44	1,452.3	1,304.3	1,231.5	1,258.5	1,217.9	(1.1%)
45-64	651.3	789.4	1,019.1	958.2	852.9	(16.3%)
65 & Over	445.9	470.2	506.6	642.5	794.4	56.8%
85 & Over	47.1	64.3	84.9	105.6	132.4	55.9%
Ratio 18-64/65+	4.7	4.5	4.4	3.5	2.6	(40.9%)
Median Age	34.4	37.4	40.0	39.7	41.1	2.8%

Source: U.S. Bureau of the Census, April 2005

More specifically, the following three tables call attention to some significant trends with particular implications to be considered as resource allocation decisions are made for the future. First, as shown in the following table, Connecticut is and will remain a very densely populated state in a very densely populated region of the country. This has implications for housing, transportation, law enforcement and natural resources, as well as other services.

TABLE 9
POPULATION DENSITY BY YEAR
(Persons per Square Mile)

	1990	2000	2010	2020	2030
	<u>Census</u>	Census	Census	<b>Projection</b>	<b>Projection</b>
<b>United States</b>	70.3	79.6	87.4	95.0	102.8
Northeast	313.1	330.3	343.8	352.1	355.4
Connecticut	678.4	702.8	738.3	758.6	761.3

Source: U.S. Bureau of the Census

In addition, a change is occurring in the age distribution of the population. As shown below, not only are the elderly increasing in number, but the non-elderly, on a relative scale, are decreasing, with the young and very young remaining a relatively stable portion of the total. This means that increasing pressure will be brought upon those between the ages of 18 and 65 to provide social and support services for the young and most particularly, the elderly.

TABLE 10 DEPENDENCY RATIOS\*

(Number of Dependent Population per 100 Provider Population)

Dependency Ratio	<u>1980</u>	<u>1990</u>	<u>2000</u>	<u>2010</u>	<u>2020</u>	<u>2030</u>
United States	65.1	61.5	61.6	59.0	67.2	76.1
Connecticut	61.9	57.0	62.7	58.4	65.8	78.1
Youth Dependency						
United States	46.5	41.3	41.5	38.2	40.0	41.5
Connecticut	42.9	35.8	40.2	36.2	36.8	39.8
Aged Dependency						
United States	18.6	20.2	20.1	20.7	27.2	34.6
Connecticut	19.0	21.2	22.5	22.5	29.0	38.4
Aged Female Dependency F	<u>Ratio</u>					
United States	11.1	12.1	11.8	11.8	15.4	19.4
Connecticut	11.5	12.8	13.4	13.1	17.0	22.5

<sup>\*</sup> The dependency ratio is the number of the target dependent population (i.e., the aged or youth or the two groups combined) divided by the segment of the population which has traditionally provided for the dependent population, through taxes for health and social programs, volunteer activities, etc. The provider group is generally considered to be those older than 17 and less than 65 years of age.

Source: U.S. Bureau of the Census, Population Distribution Branch

TABLE 11
POPULATION DISTRIBUTION BY RACE AND YEAR
(Percent of Total Population Based On Each Census)

	United States		Northeast Region			Connecticut				
	<u>1990</u>	<u>2000</u>	<u>2010</u>	<u>1990</u>	<u>2000</u>	<u>2010</u>	<u>1990</u>	<u>2000</u>	<u>2010</u>	
White	83.9	75.1	72.4	85.6	77.5	74.4	89.6	81.6	77.6	
African-American	12.3	12.3	12.6	11.4	11.4	11.8	8.6	9.1	10.1	
Asian	3.0	3.6	4.7	2.7	4.0	5.5	1.6	2.4	3.8	
American Indian	0.8	0.9	0.9	0.3	0.3	0.4	0.2	0.3	0.3	
Two Or More	-	2.4	2.9	-	2.3	2.6	-	2.2	2.6	
Other	_	5.6	6.4		4.6	5.3		4.4	5.6	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Hispanic Origin	9.0	12.5	17.3	7.6	9.8	12.6	6.5	9.4	13.4	

Note: The method of counting by race changed in 2000. Definitions of various race categories were changed and, for the first time, a respondent could indicate more than one race.

Source: U.S. Bureau of the Census

Finally, the racial and ethnic distribution of the state's population is changing. The white population is decreasing as a percentage of the total, as both the African-American and

Hispanic groups increase as a percentage of the total population, with the Hispanic growth rate outpacing the African-American growth rate. Although Asians make up a very small percentage of the total population, Asians comprise the fastest growing group, while the American Indian population remains fairly stable. These same trends are occurring in the nation and the region.

#### **Housing**

The United States' financial systems have undergone significant turmoil in recent years. The housing sector, which prior to the Great Recession was one of the strongest pillars of the economy, played a pivotal role in precipitating the financial crisis and economic downturn. Record foreclosures due to the resetting of variable rate and subprime mortgages shocked the housing market and mortgage lenders, leading to the demise of some of the nation's largest financial institutions.

During the following years, homeowners watched the equity in their homes decline or disappear. Homes have not sold quickly, and they are still selling for less than they would have prior to the recession. Some homeowners responded to declining home values by cutting back on their spending. The weakness in the housing market has been a serious drag on overall economic activity across the nation during both the recession and the lackluster recovery.

TABLE 12 HOUSING STARTS (In Thousands)

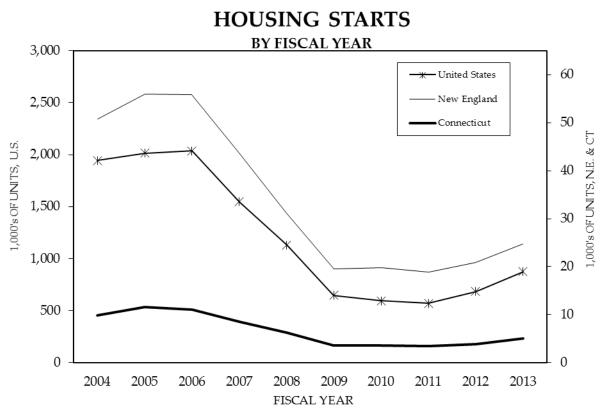
Fiscal	Unite	<b>United States</b>		England	Connecticut		
<u>Year</u>	<u>Number</u>	% Growth	<u>Number</u>	% Growth	<u>Number</u>	% Growth	
2004	1,945.3	12.5	50.8	16.0	9.8	15.3	
2005	2,016.3	3.6	56.0	10.2	11.6	18.4	
2006	2,036.0	1.0	55.9	(0.2)	11.1	(4.3)	
2007	1,546.2	(24.1)	43.7	(21.8)	8.5	(23.4)	
2008	1,132.4	(26.8)	31.1	(28.8)	6.3	(25.9)	
2009	646.3	(42.9)	19.5	(37.3)	3.6	(42.9)	
2010	594.0	(8.1)	19.8	1.5	3.6	0.0	
2011	569.5	(4.1)	18.8	(5.1)	3.4	(5.6)	
2012	685.7	20.4	20.8	10.6	3.8	11.8	
2013	875.9	27.7	24.7	18.6	5.1	34.6	

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

Recent indicators are mixed regarding the housing market. In 2013, housing starts for both single and multi-family units increased. However, after reaching a high in the first quarter of 2013, housing starts having been trending down. In Connecticut, housing permits in 2012 increased by 47.1% from the previous year. On the other hand, after stabilizing in 2010, the

median price on a single family home continued its decrease from 2011 into 2012. There is some cause for cautious optimism about the housing market, but any recovery will likely remain slow and modest

Housing starts have started to climb after they fell to record lows in FY 2011. In calendar 2009 fewer homes were started in the United States than in any year since the end of World War II, even though the current United States population is more than 2 times greater than the population at the end of World War II. The dramatic decline in housing starts over the last five years negatively impacted homebuilders, among others in the construction sector, and has undoubtedly contributed to the high unemployment rate nationwide. During FY 2013, housing starts in the U.S. rose 27.7% with approximately 875,917 starts being recorded nationally. In Connecticut, starts for new dwelling units increased 34.6% in FY 2013 to an annual rate of approximately 5,113 units.



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

Given that housing starts were low through the recent recession, it is no surprise that household formation has also been depressed. New households may be formed when couples separate, children move out of their family's home and when individuals live singly after previously sharing a residence. Conversely, households are reduced when young people move back home with their parents, and households combine to lower expenses. Economic conditions have promoted the latter behavior in recent years.

Census data from calendar years 2003 to 2007 indicates Americans built over 9.0 million units during these years. Over the same five-year period, the number of American households grew by only 6.7 million. Assuming a million of those units replaced older homes that were destroyed or abandoned, it could be estimated that the United States entered the last recession with an excess of approximately 1.3 million housing units from the prior five years.

Demand for these excess units will increase when households form at a faster rate than houses are built. However, as depicted in the following table, housing formations have been low in the last years of the decade and have only recently started to improve.

TABLE 13 U.S. HOUSEHOLD FORMATIONS (In Thousands)

	Total	Change in
Cal.	Number of	Households from
<u>Year</u>	<b>Households</b>	Previous Year
2001	108,209	3,504
2002	109,297	1,088
2003	111,278	1,981
2004	112,000	722
2005	113,343	1,343
2006	114,384	1,041
2007	116,011	1,627
2008	116,783	772
2009	117,181	398
2010	117,538	357
2011	118,682	1,144

Source: U.S. Bureau of the Census

A major indicator of housing activity is the number of building permits issued by local authorities authorizing construction. The following table shows the Connecticut counties in which privately owned housing permits were issued in calendar 2012, indicating the geographic distribution of housing construction activity.

TABLE 14
CONNECTICUT HOUSING PERMIT ACTIVITY
Calendar Year 2012

	<b>Total Units</b>		% Growth
<u>County</u>	<u>Authorized</u>	% of Total	Over CY 2011
Fairfield	2,138	45.8	128.2
Hartford	838	17.9	39.7
Litchfield	154	3.3	38.7
Middlesex	249	5.3	31.1
New Haven	669	14.3	(2.9)
New London	291	6.2	39.2
Tolland	236	5.1	(29.1)
Windham	<u>94</u>	<u>2.0</u>	<u>(9.6)</u>
State Total	4,669	100.0	47.1

Source: Connecticut Department of Economic and Community Development

It should be noted that construction is ultimately undertaken for all but a very small percentage of housing units authorized by permits. A major portion typically gets under way during the month of permit issuance and most of the remainder begins within the three following months. Because of this lag, the number of housing permits issued does not represent the number of units actually put into construction for the period shown and should, therefore, not be interpreted as housing starts.

According to the report, calendar 2012 registered a 47.1% increase in housing permit activity compared to calendar 2011. Five of Connecticut's eight counties experienced an increase in housing permit activity over 2011. Fairfield County experienced a significant increase of 128.2%, with the other four counties experiencing between a 30% to 40% increase. Tolland County experienced the largest decrease in housing permit activity, with a 29.1% reduction over 2011.

Residential demolition permits issued during calendar 2012 totaled 955, a decrease of 16.8% over calendar 2011. Fairfield County issued the most demolition permits with 386, followed by New Haven (236) and Hartford (192). At the end of 2012, an estimated 1,481,396 housing units existed in Connecticut. The following table shows changes in Connecticut's housing unit inventory on a calendar basis from 2011 to 2012.

TABLE 15 CONNECTICUT HOUSING INVENTORY

	Inventory	% of	Inventory	% of	Net	Growth
Structure Type	<u>2011</u>	<u>Total</u>	<u>2012</u>	<u>Total</u>	<b>Change</b>	<u>Rate</u>
One-Unit	951,992	64.4	953,861	64.4	1,869	0.20%
Two-Units	119,775	8.1	119,763	8.1	(12)	-0.01%
Three & Four Units	133,043	9.0	133,047	9.0	4	0.00%
Five Or More Units	259,680	17.6	261,536	17.7	1,856	0.71%
Other	<u>13,192</u>	<u>0.9</u>	13,189	<u>0.9</u>	<u>(3)</u>	<u>-0.02%</u>
Total Inventory	1,477,682	100.0	1,481,396	100.0	3,714	0.25%

Source: Connecticut Department of Economic and Community Development

#### **Median Sales Price of Housing**

Median sales price is the sales price at which half of the sales are above and half below the price. The median sales price data is for the sale of existing single-family homes. As shown in the following table, the median sales price in Connecticut in 2012 was \$251,101. The United States experienced an increase of 4.8% in the median sales price in 2012 over 2011, compared to Connecticut which saw a reduction of 2.6%. However, Connecticut fared slightly better than the United States in the last eight years with a negative 18.2% change versus the United States at a negative 20.0% change.

TABLE 16
SALES PRICE OF EXISTING HOMES IN CONNECTICUT AND THE UNITED STATES
(By Calendar Year)

_	Median Price						Affordabi	lity Index	
					CT				
Calendar		%		%	as a %		%		%
<u>Year</u>	<u>U.S.</u>	<u>Change</u>	<u>CT</u>	<u>Change</u>	of U.S.	<u>U.S.</u>	<u>Change</u>	<u>CT</u>	<u>Change</u>
2005	\$216,318	11.7	\$307,129	9.8	142.0	131.07	(7.5)	109.57	(6.3)
2006	\$218,299	0.9	\$313,717	2.1	143.7	126.12	(3.8)	103.31	(5.7)
2007	\$211,814	(3.0)	\$320,803	2.3	151.5	136.70	8.4	107.20	3.8
2008	\$189,700	(10.4)	\$291,202	(9.2)	153.5	160.37	17.3	126.31	17.8
2009	\$170,581	(10.1)	\$257,377	(11.6)	150.9	185.95	16.0	160.11	26.8
2010	\$173,748	1.9	\$269,017	4.5	154.8	188.63	1.4	154.16	(3.7)
2011	\$165,136	(5.0)	\$257,812	(4.2)	156.1	207.22	9.9	169.34	9.8
2012	\$173,001	4.8	\$251,101	(2.6)	145.1	222.31	7.3	197.64	16.7
05-12									
Change	(\$43,317)	(20.0)	(\$56,028)	(18.2)		91.23	69.6	88.06	80.4
CAGR*		(3.1)		(2.8)			7.8		8.8

\*Compound Annual Growth Rate for period of 2005-2012

Source: Moody's Economy.com

Though the median sales price rose in the U.S. and fell in Connecticut, housing affordability continues to increase for both. 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. 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, assuming a 20% down payment. The previous table shows overall housing affordability has increased in the U.S. and Connecticut over the past eight years, indicating that housing prices are no longer outpacing income increases. Although the affordability index continues to rise, the housing market is still far from a full recovery.

#### Age of Buyer or Renter

As Table 8 demonstrates, current population projections anticipate a decline in the 18-44 year old age group of 1.1% between 2010 and 2030, and an overall decline of 6.6% between the years 2000 and 2030. This is significant in the housing market for two reasons. First, this age group is the prime source of household formation. Consequently, a declining population of this age group, similar to what occurred in Connecticut during the 1990s, will slow the formation of new households, thus reducing the demand for starter homes. Moreover, weak demand for

starter homes makes it harder for maturing families who already own starter homes to move up, thus reducing demand and appreciation throughout the housing market.

The age group of citizens 65 and older grew during the 1990s at a healthy rate of 5.6%. This age group is projected to grow rapidly during the next twenty years. Projected growth rates of the 65 and older age group are 56.8% from 2010 to 2030, and 68.9% between the years 2000 and 2030. With the growth in this demographic, the housing market will see a shift in the type of housing units that are desirable. As more baby-boomers turn into empty-nesters, they will trade-down their large homes for smaller, easier to maintain condos and second homes. Demand for easier to maintain rental or condo units, particularly those targeted toward the elderly, will accelerate and boost the state's housing market, but at a cost. As the elderly population expands, additional benefits and services to care for this group will be required. How society will pay for these growing needs has yet to be determined.

#### Government Responses to the Housing Market

The federal government has taken several steps to mitigate the effects of the decline in the housing market. The Making Home Affordable (MHA) program offers services intended to stabilize the housing market and assist current homeowners facing financial duress. The Home Affordable Modification Program (HAMP) is available for homeowners facing imminent default. HAMP provided more than 1.5 million mortgage modifications through early October 2013, of which 12,864 were in Connecticut. In May 2013, the HAMP deadline was extended through December 31, 2015. The Home Affordable Refinancing Program (HARP) is available for mortgages owned or guaranteed by Fannie Mae or Freddie Mac which are underwater. As of March 2013, HARP provided more than 2.4 million refinancings.

#### **Changes in the Housing Market**

By December 2012, thirty-year fixed mortgage rates reached a low of 3.50%, 0.61 percentage points lower than the previous December. Interest rates started to rise during 2013. By November 2013, thirty-year fixed rates increased to 4.44%, an 8.6% increase since the start of 2012.

Most recent reports on foreclosure rates indicate positive change. The Mortgage Bankers Association reported that mortgages 90 days or more past due declined to 2.54% of all mortgages in Connecticut in the third quarter of 2013, down from a high of 4.19% in the first quarter of 2010. It has been suggested that these figures indicate banks are stepping up efforts to move home loans through the foreclosure process.

#### **Home Equity**

A home's equity is calculated by taking the current market value of the home and subtracting the outstanding mortgage balance. This measure shows the amount of ownership homeowners have in their home. A decrease in home equity occurs if there is an increase in the amount of debt homeowners are taking on to pay for their homes or if housing values decline. According

to the Federal Reserve, owners' equity as a percentage of household real estate has declined to its lowest levels since World War II. Since 2000 average home equity dropped 35%, from 60.5% in 2000 to 39.2% in 2011. Home equity increased for the first time in several years in 2012, to 45.6%. The overall decline during the 2000's is likely due to a combination of increasing home mortgage debt and sharp declines in home values due to the 2008 recession.

TABLE 17 OWNERS' EQUITY AS A PERCENTAGE OF HOUSEHOLD REAL ESTATE (In Billions)

Calendar	Home	Home	Home
<u>Year</u>	<u>Values*</u>	Mortgages*	<u>Equity</u>
1945	116.0	18.7	83.9%
1950	243.3	45.3	81.4%
1955	367.4	87.9	76.1%
1960	486.9	141.3	71.0%
1965	605.6	219.4	63.8%
1970	874.5	285.9	67.3%
1975	1,413.7	459.0	67.5%
1980	2,943.2	926.5	68.5%
1985	4,698.8	1,449.6	69.2%
1990	6,806.7	2,488.8	63.4%
1995	8,055.3	3,318.9	58.8%
2000	12,197.7	4,813.3	60.5%
2005	22,012.4	8,911.7	59.5%
2006	22,607.9	9,909.0	56.2%
2007	20,683.1	10,610.3	48.7%
2008	17,409.6	10,576.0	39.3%
2009	16,896.9	10,416.0	38.4%
2010	16,329.8	9,906.7	39.3%
2011	15,912.4	9,677.8	39.2%
2012	17,356.1	9,436.9	45.6%

Source: Federal Reserve "Flow of Funds" Table B.100 and L.100

<sup>\*</sup> In Nominal Dollars

#### **EMPLOYMENT PROFILE**

#### **Employment Estimates**

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

In an effort 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 in fiscal year 2013 decreased by 19,080 jobs. Likewise, the level of establishment employment based on the survey response increased by 9,450 jobs in fiscal year 2013.

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

TABLE 18
CONNECTICUT SURVEY EMPLOYMENT COMPARISONS
(In Thousands)

Fiscal	Residential		Establishment	
<u>Year</u>	<b>Employment</b>	% Growth	<b>Employment</b>	% Growth
2004	1,697.49	0.07	1,643.68	(0.53)
2005	1,708.15	0.63	1,656.96	0.81
2006	1,731.59	1.37	1,670.73	0.83
2007	1,756.61	1.45	1,689.72	1.14
2008	1,766.64	0.57	1,706.30	0.98
2009	1,757.69	(0.51)	1,664.61	(2.44)
2010	1,734.79	(1.30)	1,605.66	(3.54)
2011	1,734.59	(0.01)	1,618.48	0.80
2012	1,729.85	(0.27)	1,633.63	0.94
2013	1,710.77	(1.10)	1,643.08	0.58

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

#### **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 19 NONAGRICULTURAL EMPLOYMENT (In Thousands)

Fiscal	<b>United States</b>		New 1	New England		Connecticut	
<u>Year</u>	<u>Number</u>	% Growth	<u>Number</u>	% Growth	<u>Number</u>	% Growth	
2004	130,564	0.26	6,853	(0.42)	1,644	(0.53)	
2005	132,524	1.50	6,897	0.64	1,657	0.81	
2006	135,049	1.91	6,951	0.79	1,671	0.83	
2007	137,013	1.45	7,019	0.98	1,690	1.14	
2008	137,780	0.56	7,067	0.68	1,706	0.98	
2009	133,957	(2.78)	6,922	(2.05)	1,665	(2.44)	
2010	129,732	(3.15)	6,750	(2.48)	1,606	(3.54)	
2011	130,558	0.64	6,801	0.76	1,618	0.80	
2012	132,647	1.60	6,880	1.16	1,634	0.94	
2013	134,794	1.62	6,949	1.00	1,643	0.58	

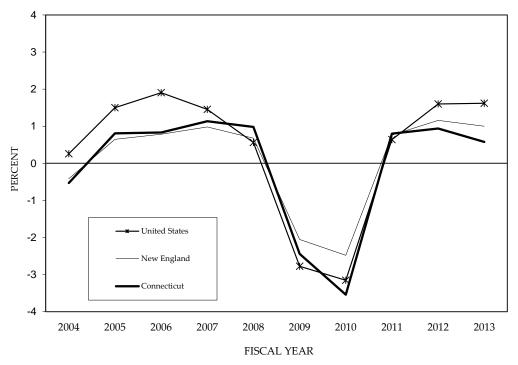
Source: U.S. Bureau of Labor Statistics, Connecticut Labor Department

In Connecticut, approximately 49% 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. These factors make nonagricultural employment figures a valuable indicator of economic activity.

Connecticut experienced positive growth in nonagricultural employment from fiscal year 2004 through fiscal year 2008. After reaching a peak in fiscal year 2008, Connecticut lost approximately 100,000 nonagricultural jobs due to the Great Recession. As of fiscal year 2013 Connecticut had regained approximately 37,000 nonagricultural jobs. 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.

#### NONAGRICULTURAL EMPLOYMENT

FISCAL YEAR GROWTH BY PERCENT



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

The following table shows employment growth rates for the United States and the State of Connecticut over six decades beginning in state fiscal year 1950. This table highlights the robust growth in nonagricultural employment for Connecticut prior to 1990 juxtaposed by the modest 2.2% growth between 1990 and 2000 and the negative 4.5% growth during the 2000-2010 time period which was significantly impacted by the Great Recession. U.S. growth was negative in the 2000-2010 period for the first time in five decades with a 0.7% decline. Since 2010, employment growth has increased for both the United States and Connecticut by 3.9% and 2.3% respectively.

TABLE 20 NONAGRICULTURAL EMPLOYMENT LONG-TERM GROWTH RATES

	Growth	Rates	Cumulative Growth Rates			
Fiscal Year	<b>United States</b>	Connecticut	<b>United States</b>	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%	16.1%	148.8%	124.8%		
1990-2000	19.8%	2.2%	198.2%	129.7%		
2000-2010	(0.7%)	(4.5%)	196.0%	119.2%		
2010-2013	3.9%	2.3%	207.7%	124.3%		

Source: U.S. Bureau of Labor Statistics

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 increased 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 fiscal year 2013, approximately 90% of the state's workforce was employed in nonmanufacturing jobs, up from roughly 50% in the early 1950s.

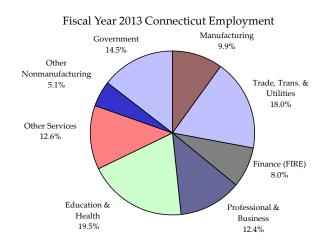
The following table depicts the decrease in the ratio of manufacturing employment to total employment in Connecticut over the last six decades.

TABLE 21
CONNECTICUT RATIO OF MANUFACTURING EMPLOYMENT
TO TOTAL EMPLOYMENT
(In Thousands)

		,	· · )	
				Ratio of Mfg.
Fiscal	Total	Manufacturing	NonMfg.	Employment to
<u>Year</u>	<b>Employment</b>	<b>Employment</b>	<b>Employment</b>	Total Employment
1950	766.1	379.9	386.2	49.6
1955	874.7	423.2	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	1,556.2	251.8	1,304.3	16.2
2000	1,682.1	236.8	1,445.4	14.1
2005	1,656.9	196.7	1,460.3	11.9
2010	1,605.7	166.2	1,439.4	10.4
2013	1,643.1	163.4	1,479.7	9.9

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

The graph on the right provides a breakdown of Connecticut employment in fiscal year 2013. As is evident, Connecticut employment is highly concentrated in nonmanufacturing employment sectors with only 9.9% of Connecticut laborers employed in the manufacturing sector. The services sector, which includes the professional and business, education and health, and leisure and hospitality segments (included in Other Services), is clearly the leading sector with 44.5% of those working employed in that classification.

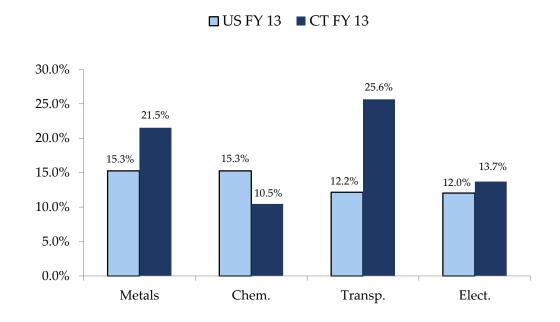


#### **Manufacturing Employment**

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. Based on the level of personal income derived from this sector, Connecticut ranks twentieth in the nation for its dependency on manufacturing. Within this broad definition, the manufacturing sector can be further broken down into the major components of the sector. The largest employer in this industry is United Technologies Corporation. Two of its largest divisions are Sikorsky, based in Stratford, and Pratt & Whitney, based in East Hartford; both are in the aerospace industry.

Over the last decade the state's distribution of manufacturing employment has remained relatively stable. Defense expenditures have stabilized the transportation equipment sector as evidenced by the percentage of total state manufacturing employment in that sector at 21.6% in fiscal year 2003 and 25.6% in fiscal year 2013. The metals manufacturing sector employment figures as a percent of total state manufacturing have remained stable over the past decade at approximately 20.4% in fiscal 2003 and 21.5% in fiscal 2013. The other major manufacturing sectors, electronic and electrical manufacturing and chemical, plastics, and rubber, make up approximately 13.7% and 10.5% of the total manufacturing sector respectively in fiscal 2013. The distribution of employment figures within the manufacturing sector highlights that Connecticut manufacturing is diversified, but has a greater reliance on the metals and transportation equipment sectors.

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



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

In fiscal year 2013, manufacturing employment in the state and New England declined by 1.64% and 0.74% respectively. In contrast, the United States continued an upward trend with a growth rate of 1.06%.

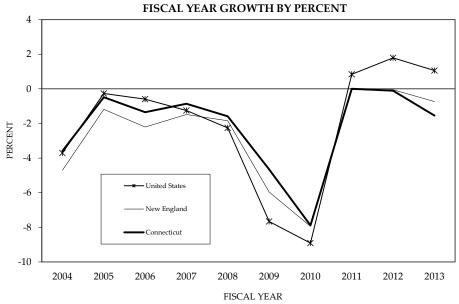
TABLE 22 MANUFACTURING EMPLOYMENT (In Thousands)

Fiscal	United States		New E	ngland	Connecticut		
<u>Year</u>	<u>Number</u>	% Growth	<u>Number</u>	% Growth	<u>Number</u>	% Growth	
2004	14,327.50	(3.71)	751.23	(4.70)	197.56	(3.57)	
2005	14,288.75	(0.27)	742.36	(1.18)	196.68	(0.45)	
2006	14,203.00	(0.60)	725.96	(2.21)	194.11	(1.31)	
2007	14,024.75	(1.26)	715.20	(1.48)	192.40	(0.88)	
2008	13,708.08	(2.26)	702.02	(1.84)	189.22	(1.65)	
2009	12,657.83	(7.66)	660.17	(5.96)	180.44	(4.64)	
2010	11,530.25	(8.91)	607.75	(7.94)	166.22	(7.88)	
2011	11,626.75	0.84	607.42	(0.05)	166.32	0.06	
2012	11,834.42	1.79	607.08	(0.06)	166.10	(0.13)	
2013	11,959.67	1.06	602.60	(0.74)	163.38	(1.64)	

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

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

### MANUFACTURING EMPLOYMENT



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

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 9.9% of all nonfarm payroll jobs, compared with 8.9% in the U.S. and 8.7% in New England through fiscal year 2013. The following table provides a breakdown of the state's manufacturing employment by industry and indicates percentage changes for the year and since the start of the decade for each of the manufacturing sectors.

Manufacturing employment showed little signs of improvement in fiscal year 2013 over fiscal year 2012. Metal manufacturing was the only industry with significant employment growth of 1.1% over fiscal year 2012. The largest reductions in employment were seen in printing, publishing and textiles which dropped 5.6%, and chemical, plastics and rubber which dropped 4.0% over the same period. The percent change from fiscal year 2003 to 2013 demonstrates the overall decline in manufacturing employment over the last decade.

TABLE 23
CONNECTICUT MANUFACTURING EMPLOYMENT BY INDUSTRY
(In Thousands)

(	,			
			Percent	Change
FY	FY	FY	FY 2012 to	FY 2003 to
<u>2003</u>	<u>2012</u>	<u>2013</u>	FY 2013	FY 2013
44.18	42.32	41.89	(1.02)	(5.18)
41.86	34.74	35.13	1.14	(16.07)
27.71	23.10	22.36	(3.17)	(19.30)
26.50	17.85	17.13	(4.01)	(35.35)
19.91	12.56	11.86	(5.60)	(40.43)
19.51	14.71	14.48	(1.57)	(25.74)
8.74	8.00	7.78	(2.78)	(10.99)
16.48	12.82	12.74	(0.66)	(22.69)
204.88	166.10	163.38	(1.64)	(20.26)
	2003 44.18 41.86 27.71 26.50 19.91 19.51 8.74 16.48	2003     2012       44.18     42.32       41.86     34.74       27.71     23.10       26.50     17.85       19.91     12.56       19.51     14.71       8.74     8.00       16.48     12.82	2003         2012         2013           44.18         42.32         41.89           41.86         34.74         35.13           27.71         23.10         22.36           26.50         17.85         17.13           19.91         12.56         11.86           19.51         14.71         14.48           8.74         8.00         7.78           16.48         12.82         12.74	FY         FY         FY         FY 2012 to           2003         2012         2013         FY 2013           44.18         42.32         41.89         (1.02)           41.86         34.74         35.13         1.14           27.71         23.10         22.36         (3.17)           26.50         17.85         17.13         (4.01)           19.91         12.56         11.86         (5.60)           19.51         14.71         14.48         (1.57)           8.74         8.00         7.78         (2.78)           16.48         12.82         12.74         (0.66)

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

The following table ranks the 50 states in terms of their relative dependence on manufacturing wages as a percentage of total personal income.

TABLE 24
MANUFACTURING WAGES AS A PERCENT OF PERSONAL INCOME BY STATE
Fiscal Year 2013
(In Millions)

		Personal	Mf	g.				Personal	Mfg.	
Rank	<u>State</u>	<u>Income</u>	Wag	<u>es</u>	<u>%</u>	<u>Rank</u>	<u>State</u>	<u>Income</u>	<u>Wages</u>	<u>%</u>
1	Indiana	\$ 252,962	\$ 29,	242	11.56%	26	Texas	\$1,129,419	\$59,517	5.27%
2	Wisconsin	244,451	25,	708	10.52%	27	Georgia	377,069	19,702	5.22%
3	Michigan	383,483	34,	751	9.06%	28	Massachusetts	376,329	19,386	5.15%
4	Iowa	137,505	11,	369	8.27%	29	Maine	53,900	2,768	5.14%
5	Ohio	468,204	37,	558	8.02%	30	Nebraska	84,776	4,300	5.07%
6	South Carolina	167,123	12,	522	7.49%	31	Louisiana	186,230	9,383	5.04%
7	Kentucky	157,597	11,	792	7.48%	32	Rhode Island	48,854	2,306	4.72%
8	New Hampshire	65,732	4,	887	7.44%	33	Oklahoma	157,684	7,380	4.68%
9	Alabama	174,822	12,	742	7.29%	34	Arizona	240,762	10,901	4.53%
10	Kansas	125,506	8,	995	7.17%	35	South Dakota	38,423	1,739	4.53%
11	Minnesota	256,106	17,	981	7.02%	36	New Jersey	493,390	21,648	4.39%
12	Oregon	154,946	10,	578	6.83%	37	West Virginia	65,586	2,664	4.06%
13	Tennessee	252,970	16,	999	6.72%	38	Colorado	241,384	8,557	3.55%
14	Mississippi	101,660	6,	642	6.53%	39	Virginia	400,287	13,646	3.41%
15	North Carolina	374,366	24,	399	6.52%	40	Delaware	41,190	1,322	3.21%
16	Vermont	28,281	1,	797	6.35%	41	North Dakota	40,101	1,134	2.83%
17	Washington	322,832	20,	492	6.35%	42	Maryland	319,530	8,897	2.78%
18	Arkansas	105,746	6,	692	6.33%	43	New York	1,053,135	25,749	2.44%
19	Illinois	596,604	37,	713	6.32%	44	New Mexico	74,889	1,702	2.27%
20	Connecticut	216,469	13,	632	6.30%	45	Florida	804,181	17,929	2.23%
21	Utah	103,125	6,	236	6.05%	46	Montana	39,309	788	2.00%
22	Idaho	55,976	3,	149	5.63%	47	Nevada	106,957	2,094	1.96%
23	Pennsylvania	581,072	32,	584	5.61%	48	Wyoming	29,378	546	1.86%
24	California	1,794,312	98,	868	5.51%	49	Alaska	36,448	547	1.50%
25	Missouri	238,426	13,	119	5.50%	50	Hawaii	63,261	541	0.86%
	United States	\$ 13,910,489	\$740,	550	5.32%					

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

#### **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, it is produced and consumed concurrently, and it 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 12,170 positions and increased by approximately 0.8% from fiscal year 2012 to 2013. This growth was due in large part to an increase in the services sector which grew by 1.9% (13,500 additional employed). The education and health sector also experienced the largest percentage growth from fiscal year 2003 to 2013 with a 22.1% gain during that period.

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 25
CONNECTICUT NONMANUFACTURING EMPLOYMENT BY INDUSTRY
(In Thousands)

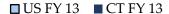
			Percent Change		
	FY	FY	FY	FY 2012 to	FY 2003 to
<u>Industry</u>	<u>2003</u>	<u>2012</u>	<u>2013</u>	FY 2013	FY 2013
Construction & Mining	62.42	52.39	52.55	0.30	(15.81)
Information	40.02	31.22	30.97	(0.83)	(22.63)
Transp., Trade & Utilities	306.97	294.45	295.84	0.47	(3.63)
Transp., & Warehousing	39.83	42.26	42.64	0.90	7.05
Utilities	8.91	7.65	7.52	(1.71)	(15.63)
Wholesale	65.77	63.18	62.72	(0.73)	(4.65)
Retail	192.46	181.37	182.97	0.88	(4.93)
Finance (FIRE)	140.79	133.15	131.21	(1.46)	(6.81)
Finance & Insurance	120.48	114.41	112.47	(1.70)	(6.65)
Real Estate	20.31	18.74	18.74	0.00	(7.71)
Services	649.18	717.23	730.73	1.88	12.56
Professional & Business	201.10	200.76	203.68	1.46	1.28
Education & Health	262.14	315.22	320.04	1.53	22.09
Leisure & Hospitality	123.56	140.53	145.30	3.39	17.60
All Other Services	62.38	60.72	61.70	1.61	(1.08)
Government	248.17	239.08	238.41	(0.28)	(3.93)
Federal	21.15	17.83	17.39	(2.43)	(17.77)
State	68.37	66.43	67.79	2.04	(0.84)
Local	158.65	154.83	153.22	(1.03)	(3.42)
Total Nonmanufacturing					
Employment	1,447.55	1,467.53	1,479.70	0.83	2.22

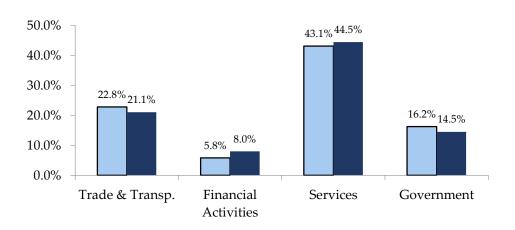
Note: Totals may not agree with detail due to rounding.

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

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, Connecticut Labor Department

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

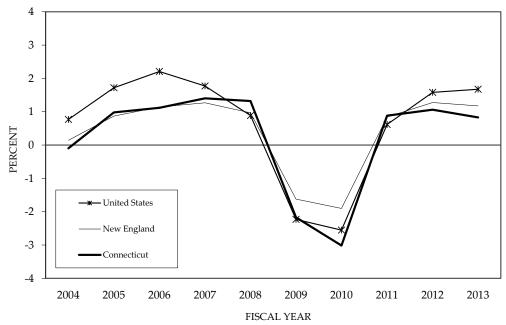
TABLE 26 NONMANUFACTURING EMPLOYMENT (In Thousands)

Fiscal	United	d States	New E	ingland	Connecticut		
<u>Year</u>	<u>Number</u>	% Growth	<u>Number</u>	% Growth	<u>Number</u>	% Growth	
2004	116,237	0.8	6,101	0.1	1,446	(0.1)	
2005	118,235	1.7	6,155	0.9	1,460	1.0	
2006	120,845	2.2	6,225	1.1	1,477	1.1	
2007	122,983	1.8	6,304	1.3	1,497	1.4	
2008	124,070	0.9	6,365	1.0	1,517	1.3	
2009	121,301	(2.2)	6,261	(1.6)	1,484	(2.2)	
2010	118,204	(2.6)	6,142	(1.9)	1,439	(3.0)	
2011	118,933	0.6	6,194	0.8	1,452	0.9	
2012	120,813	1.6	6,273	1.3	1,468	1.1	
2013	122,836	1.7	6,347	1.2	1,480	0.8	

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

#### NONMANUFACTURING EMPLOYMENT

FISCAL YEAR GROWTH BY PERCENT



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

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. Salaries for each of these industries grew year over year and since fiscal year 2003.

TABLE 27
AVERAGE CONNECTICUT NONMANUFACTURING ANNUAL SALARIES

				Percent	Change
	FY	FY	FY	FY 2012 to	FY 2003 to
<u>Industry</u>	<u>2003</u>	<u>2012</u>	<u>2013</u>	FY 2013	FY 2013
Construction	\$49,568	\$60,907	\$61,578	1.1	24.2
Information	56,752	83,019	85,781	3.3	51.1
Transp., Trade & Utilities	38,209	46,390	47,388	2.2	24.0
Wholesale Trade	64,446	82,869	86,530	4.4	34.3
Retail Trade	27,690	31,866	32,071	0.6	15.8
Finance, Ins. & Real Estate	94,463	140,425	142,777	1.7	51.1
Professional & Business Services	57,694	80,712	88,002	9.0	52.5
Education & Health Services	39,237	48,589	48,822	0.5	24.4
Leisure & Hospitality Services	19,377	22,902	23,914	4.4	23.4
Government	45,901	59,815	60,163	0.6	31.1
Federal	71,404	105,286	107,165	1.8	50.1
State and Local	43,525	56,127	56,428	0.5	29.6

Source: U.S. Bureau of Economic Analysis

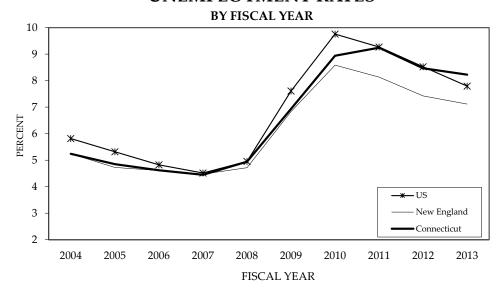
# **Unemployment Rate**

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 in the labor force but unemployed. The following table shows the unemployment rate for the U.S., the New England region, and Connecticut over a ten year period. Although the recession ended many years ago, unemployment rates have remained high in the U.S., the New England region and Connecticut from fiscal year 2009 through fiscal year 2013.

TABLE 28
UNEMPLOYMENT RATES (%)

Fiscal Year	<b>United States</b>	New England	Connecticut
2004	5.8	5.2	5.2
2005	5.3	4.7	4.9
2006	4.8	4.6	4.6
2007	4.5	4.5	4.5
2008	5.0	4.7	4.9
2009	7.6	6.8	6.9
2010	9.8	8.6	8.9
2011	9.3	8.1	9.2
2012	8.5	7.4	8.5
2013	7.8	7.1	8.2

#### **UNEMPLOYMENT RATES**



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

#### **SECTOR ANALYSIS**

## **Energy**

Over the past two hundred years, energy supplies and the mode of energy use in the United States have reflected the country's industrialization, economic development, and social transformation. Because the U.S. is dependent on imported energy, economic activity hinges more upon the availability and stability of its supply in the world market. In the past 37 years, all of the nation's five recessions were concurrent with the energy disruptions that occurred worldwide: in 1991 (Iraq invaded Kuwait), in 1981 (Iran/Iraq war), in 1979 (Iranian Revolution), and in 1973 (Arab Oil Embargo). The March 2001 recession followed an energy supply disturbance that occurred in late 2000 when petroleum inventories remained relatively low and the price reached a then-record high of \$37.80 per barrel, the highest since the Gulf War of 1991. The last recession, which began in December 2007, was also preceded by a hike in oil prices and was accompanied by the joint crises in the housing and financial markets. West Texas Intermediate (WTI) crude oil crept up to a monthly average high of \$94.62 a barrel in November 2007, up nearly 60% from a year earlier. The price continued to rise to an all-time monthly record high of \$133.93 a barrel in June 2008, but, within less than a year, dropped 71% to a low of \$39.16 a barrel in February of 2009 as the global economy slowed down. Crude oil prices hovered around \$70 a barrel in late 2010 as the economy recovered but surpassed \$100 a barrel again at the end of 2011. During 2012, the average price of WTI was \$94.17 per barrel. The high for 2013, as of November 1, was \$110.53 in early September. The average for 2013, through October, was \$98.48

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 increased while demand increased only slightly in 2012 from 2011 levels. Demand from emerging economies in Asia such as India, China, and South Korea continued to rise. World oil supply and demand among countries or regions continued to be significantly imbalanced. 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) supplied 36.64 million barrels per day (MBPD) in 2012 and consumed 8.36 MBPD, generating a 28.28 MBPD surplus. The Organization for Economic Cooperation and Development (OECD), on the other hand, consumed more than it supplied. In 2012, the OECD consumed 45.99 MBPD, while supplying only 22.55 MBPD, registering a 23.44 MBPD deficit.

The United States consumed 18.55 MBPD in 2012, down slightly from 18.95 MBPD consumed in 2011. The country supplied 11.11 MBPD in 2012, up from 10.13 MPBD supplied in 2011. The country had a 40.1% dependency rate on foreign oil supplies, the lowest rate since 1993. The U.S. accounted for 20.8% of global demand and 12.4% of global supply. Deficits between supply and demand also exist in larger economies such as China, Japan, France, and Germany. However, the International Energy Agency (IEA) now forecasts that the United States will become a net oil exporter around 2030. This change is attributable to the development of new oil production technologies as well as increasing fuel efficiency.

TABLE 29 WORLD OIL SUPPLY AND DEMAND Calendar 2012

	Supp	oly		Demand	
	Millions		•	Millions	
	of Barrels	% of		of Barrels	% of
	Per Day	<u>Total</u>		<u>Per Day</u>	<u>Total</u>
Total OECD (a)	22.55	25.2%	Total OECD	45.99	53.0%
<b>United States</b>	11.11	12.4%	<b>United States</b>	18.55	21.8%
Canada	3.86	4.3%	Canada	2.29	2.6%
Mexico	2.94	3.3%	Mexico	2.14	2.4%
North Sea (b)	3.07	3.4%	Japan	4.71	5.1%
Other OECD	1.57	1.8%	Germany	2.39	2.8%
			France	1.74	2.1%
Total OPEC (c)	36.64	41.0%	Italy	1.35	1.7%
Saudi Arabia	11.73	13.1%	<b>United Kingdom</b>	1.50	1.8%
Iran	3.59	4.0%	Other OECD	11.32	12.7%
Iraq	2.99	3.3%			
Other OPEC	18.33	20.5%	Total Non-OECD	43.29	47.6%
			Former USSR	4.28	4.9%
Total Non-OECD	30.18	33.8%	China	10.28	10.2%
Former USSR (d)	13.42	15.0%	India	3.62	3.9%
China	4.42	4.9%	OPEC	8.36	10.5%
Other	<u>12.34</u>	13.8%	Other	<u>16.75</u>	18.0%
Total 2012 Supply	89.35	100.0%	Total 2012 Demand	89.27	100.0%
Total 2011 Supply	87.48		Total 2011 Demand	88.66	
Change	1.87	2.1%	Change	0.61	0.7%

#### Note:

- (a) The OECD includes the United States, Western European countries, Australia, Canada, Japan, and New Zealand.
- (b) North Sea includes the United Kingdom Offshore, Norway, Denmark, Netherlands Offshore, and Germany Offshore.
- (c) The OPEC includes Algeria, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, and Venezuela.
- (d) The Former USSR includes Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan

Totals may not add due to rounding.

Source: U.S. Dept. of Energy, Energy Information Administration (EIA)

Demand in China and India, Asia's two most populous and fastest growing economies, continued its upward trend, accounting for 15.6% of the worldwide demand total in 2012, up from 5.5% in 1991. China, the world's second largest consumer, switched from a net exporter of oil in 1995, and began running an increasing oil deficit as its economy continued to grow at a brisk pace. In 2012 China consumed 10.28 MBPD while supplying 4.42 MBPD, leaving a 5.86 MBPD deficit. China has a 57% dependence rate on foreign oil, surpassing the U.S. In light of energy security concerns as well as soaring world demand and fierce competition for resources, China has augmented crude and oil product stockpiles, encouraged businesses to invest in oil and gas fields, and secured long term supply contracts abroad.

TABLE 30 WORLD OIL & NATURAL GAS RESERVES December 30, 2012

	Oi	1	Gas
	Billions of	% of	Trillions of % of
	<u>Barrels</u>	<u>Total</u>	<u>Cubic Feet</u> <u>Total</u>
North America	220.2	13.2%	382.7 5.8%
United States	35.0	2.1%	300.0 4.5%
Mexico	11.4	0.7%	12.7 0.2%
Canada	173.9	10.4%	70.0 1.1%
Central & South America	328.4	19.7%	268.3 4.1%
Venezuela	297.6	17.8%	196.4 3.0%
Europe and Eurasia*	140.8	8.4%	2,062.5 31.2%
European Union	6.8	0.4%	61.7 0.9%
Russia	87.2	5.2%	1,162.5 17.6%
Middle East	807.7	48.4%	2,842.9 43.0%
Saudi Arabia	265.9	15.9%	290.8 4.4%
Iran	157.0	9.4%	1,187.3 18.0%
Iraq	150.0	9.0%	126.7 1.9%
Kuwait	101.5	6.1%	63.0 1.0%
Other Mid. East	133.3	8.0%	1,175.1 17.8%
Africa	130.3	7.8%	512.0 7.7%
Libya	48.0	2.9%	54.6 0.8%
Nigeria	37.2	2.2%	182.0 2.8%
Asia Pacific	<u>41.5</u>	2.5%	545.6 8.2%
Total 2012 estimate	1,668.9	100.0%	6,614.1 100.0%
Total 2011 estimate	1,652.6		7,360.9
Change	16.3	1.0%	(746.8) $(10.1%)$

Note: \* Comprises the continents of Europe and Asia Totals may not add due to rounding.

Source: BP Statistical Review of World Energy, June 2013.

The previous table shows world oil and natural gas reserves by country. Oil or natural gas reserves are the estimated quantities that are recoverable in the future from known reservoirs under the existing technological, operating, and economic conditions. Resources that currently are not technologically recoverable but could become recoverable in the future as technologies advance may also be added to the reserve. Energy companies whose equities are traded on the U.S. stock market are required to report their holdings of proved reserves.

Total world oil reserves increased 16.3 billion barrels (BBs) to 1,668.9 BBs in 2012. This increase was driven largely by the Middle East, where reserves increased by 12.7 BBs. Venezuela has also driven recent increases in world oil reserves; during a six year period from 2006-2012 proved reserves increased 240.4%, to 297.6 BBs. Venezuela's proven oil reserves are now larger than those of Saudi Arabia. Canada also shares a major portion of the world's oil reserves, due to the tar sands in Alberta, Canada. Recent increases in Canada's resources could potentially help the U.S. shift its dependency on Middle Eastern oil. U.S. oil reserves increased to 35.0 BBs in 2012, up from 30.9 BBs the previous year.

Total world natural gas reserves decreased 10.1% in 2012. By the year's end, proven reserves stood at 6,614.1 trillion cubic feet (TCFs). Russia, a significant exporter of natural gas to Europe, held 17.6% of these reserves. Middle Eastern countries held 43.0% of world reserves. Natural gas reserves in the United States have increased in recent years due to the development of horizontal drilling and hydraulic fracturing ("fracking") technologies used to extract shale gas. During a five year period from 2006-2012 proven reserves in the U.S. increased 88.9 TCFs, or 42.0%.

World energy reserves continue to mirror the pattern of disparity found in the oil supply market. The share of world oil reserves held by all OPEC countries is 72.6%. The Middle East controls 48.4% of world oil reserves with Saudi Arabia controlling approximately 15.9% of the total, followed by Iran's 9.4% and Iraq's 9.0%. The Middle East countries controlled 43.0% of natural gas reserves.

#### **United States**

The U.S. has the largest demand for world oil. While the country contains 4.4% of the world population and produces 10.3% of world oil, it consumes 20.7% of world oil. The nation has long been a net energy importer, although America's energy dependence has decreased in recent years. According to the Energy Information Administration's *Monthly Energy Review*, the U.S. consumed 94.92 quadrillion British Thermal Units (QBTU's) of energy in 2012. While this was 2.1 times the 1960 level, energy use has decreased from its peak of 101.32 QBTU's in 2007.

Whereas the U.S. produced 79.22 QBTU's and exported 11.36 QBTU's in 2012, it required net imports of 15.72 QBTU's, which represented 16.7% of total national energy consumption, compared to 22.1% in 2010, 25.3% in 2000, 16.7% in 1990, and 6.0% in 1960. In 2012, 78.7% of energy produced in the U.S. was from fossil fuels (coal, 26.1%; natural gas, 31.0%; and crude oil, 17.4%). Coal and crude, both domestic and imported, have historically been the leading energy sources in the U.S. However, natural gas has been increasingly prominent since the 1980s. The International Energy Agency (IEA) forecasts that the share of energy consumed in the United States which was produced by natural gas will increase from 27.6% in 2012 to 30.4% in 2040.

National energy consumption increased at a compound annual growth rate of 0.5% from 1990 to 2012. Growth in energy consumption has trended along with economic conditions, up during periods of healthy economic growth and down during periods of sluggish growth or contraction. Growth in energy consumption also reflects the movement of prices, higher during periods of relatively low or stable prices and down during periods of price increases. The following table illustrates the breakdown of energy usage in the U.S. in 2012 by fuel type and by economic sector. As can be seen, petroleum products are currently the most important energy source for the U.S. economy. The 34.58 quadrillion petroleum-generated BTU's accounted for 37.9% of U.S. fuel consumption, followed by natural gas at 25.97 QBTU's and coal at 20.81 QBTU's. These three fuel sources together accounted for approximately 58.5% of U.S. fuel consumption. Nuclear power and hydroelectric power were distant followers.

TABLE 31 U.S. ENERGY CONSUMPTION IN 2012 (Quadrillion BTU's)

	Resi -	Com-	In-	Trans-	Electric		% of
	<u>dential</u>	<u>mercial</u>	<u>dustrial</u>	portation	Generation	<u>Total</u>	<u>Total</u>
Fuels							
Natural Gas	4.26	2.96	8.70	0.76	9.29	25.97	27.4
Petroleum	1.02	0.63	8.00	24.71	0.22	34.58	36.4
Coal	-	0.04	1.47	-	15.83	17.34	18.3
Nuclear	-	-	-	-	8.06	8.06	8.5
Renewables							
Hydroelectric	-	-	0.02	-	2.61	2.63	2.8
Other*	0.65	0.13	2.25	1.16	2.14	6.33	6.7
Electricity	4.69	4.53	3.36	0.03	-	12.61	13.3
Electric Losses	9.50	9.17	6.81	0.05	(38.15)	(12.61)	(13.3)
Total Demand	20.12	17.47	30.61	26.71	-	94.92	100.0

Note: \* 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 6.8% of electric generation in the U.S., versus approximately 60% in Canada. Capital investments in alternative renewable energy from solar, hydroelectric, wind, biofuels, and geothermal have increased dramatically in the U.S.; nonetheless, their share of power production is still small. Green energy in total in the U.S. is expected to play an increasingly important role and therefore grow faster than non-green energy sources as awareness of the environmental consequence of greenhouse gas emissions and energy efficiency rises. Operable nuclear reactors declined to 104 units through 2012, down from a peak of 112 units in 1990. Nonetheless, nuclear generation of electricity accounted for 21% of domestic total electricity output in 2012. The U.S. is the world's largest nuclear power producer, accounting for approximately 30% of worldwide nuclear electricity production. Issues of plant and public safety, radioactive waste disposal, and high capital investment and maintenance risks have slowed the expansion of nuclear power plants. However, with concerns over rising fossil fuel prices and the greenhouse gas effect, plans for new nuclear generation capacity have

increased. Prior to the Fukushima Daiichi nuclear facility disaster in 2011, it was expected that 4 to 6 new units may come on line by 2018. There is currently one new nuclear reactor under construction at the Watts Bar Nuclear Generating Station in Tennessee, two new reactors under construction at the Vogtle Electric Generating Plant in Georgia, and two new reactors under construction at the V.C. Summer Nuclear Generating Station in South Carolina.

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 the intermediate-user that consists of all utility and non-utility facilities and equipment used in the electricity industry. Of the four end-users, the industrial sector was the most prevalent, using 30.61 QBTU's in 2012, followed by transportation at 26.71 QBTU's, residential at 20.12 QBTU's, and commercial at 17.47 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 slowdown. 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. Energy losses are approximately two-thirds of total energy input during the conversion process of heat energy into mechanical energy for turning electric generators. Of the electricity generated, it is estimated that about 7% is lost in transmission and distribution.

#### **Crude Oil Prices**

Crude oil prices have a long history of large fluctuations that affect the world and U.S. economies as well as inflation levels. In 1973, the year of the Arab Oil Embargo, crude oil prices in the U.S. measured by the composite Refiners' Acquisition Cost averaged \$4.15 per barrel. After two consecutive supply disturbances brought on by the Iranian Revolution in 1979 and the Iran-Iraq war in 1980, oil prices reached \$35.28 per barrel in 1981. Long-term prices then trended down to a low of \$12.54 per barrel by 1998 and then stayed in the \$20 range until mid-2003. Crude oil prices started to creep up above \$30 per barrel in late 2003, soared to the mid \$90s in 2008 and near \$134 per barrel in mid-2008. It then plummeted 70% to close in the low \$40s per barrel range in late 2008 and returned to hover around the mid \$70s in late 2009 and in the low \$80s in late 2010. By mid-2011 prices rose above \$100 and then returned to the high \$90s late in the year. Prices hovered between \$91 and \$110 per barrel throughout 2012. The average for the first eight months of 2013 has been \$102. The world oil market becomes more vulnerable as inventory levels tighten, consumption from rapidly growing emerging markets expands, and the U.S. dollar depreciates. In real terms as adjusted for inflation, 2011's \$98.75 per barrel price as measured in 2010 dollars is the new high, surpassing the last annual peak of \$95.95 per barrel registered in 2008.

Long term oil prices are expected to trend up as world demand grows faster than the rate of discovery of new supplies. The following factors are driving prices higher: new oil fields are harder to find, crude oil is more costly to extract, underinvestment had been occurring for years in this industry, and mounting demand for oil from the emerging economies, the Middle East, some industrialized countries, and elsewhere. It is estimated that 70% of the existing oil fields are more than 30 years old. Oil reserves in the Middle East and Persian Gulf region may be nearing maturity or depletion. As the world economy continues to grow, the increasing

demand will more than offset any savings gained from efficiency and conservation. Although new discoveries such as Tiber Prospect and Jack Field in the Gulf of Mexico and the Tupi Field in Brazil may add hundreds of billions of barrels of crude oil reserves, meaningful production due to technical limitations and environmental concerns may not happen for years to come.

TABLE 32
CRUDE OIL PRICES AND U.S. CONSUMPTION
Refiners' Crude Oil Acquisition Costs\* Per Barrel

		In			In
<u>Year</u>	Current \$	2010 \$*	<u>Year</u>	Current \$	2010 \$*
1973	4.15	20.38	2003	28.53	28.56
1975	10.38	42.07	2004	36.98	42.69
1980	28.07	74.28	2005	50.24	56.09
1981	35.24	84.54	2006	60.24	65.16
1985	26.75	54.21	2007	67.94	71.45
1990	22.22	37.70	2008	94.74	95.95
1995	17.23	24.65	2009	59.29	60.26
2000	28.26	35.79	2010	76.69	76.69
2001	22.95	28.26	2011	101.87	98.75
2002	24.10	29.21	2012	100.93	95.86
			2013**	101.88	95.37

Note: \* Adjusted by 2010 CPI-U, where 1982-1984 = 100.00 and 2010 = 218.06.

\*\* Average for the first eight months.

Source: U.S. Department of Energy, Energy Information Administration

### **Shale Energy**

Oil producers in the United States are increasingly able to extract natural gas and petroleum from shale formations across the country. Increased production of these resources 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 following chart shows the amount of proven natural gas reserves in the United States in trillion cubic feet (TCF) from 1991 to 2011. The dashed line represents the first commercially successful use of fracking in 1998. As the graph shows, the amount of proven natural gas reserves has grown dramatically since the introduction of this technology.

Energy observers predict that natural gas and petroleum from shale formations will continue to improve the United States' energy production. The U.S. Energy Information Administration (EIA) forecasts that natural gas production will increase 56% between 2012 and 2040, from 24.6 QBTU to 38.7 QBTU. The International Energy Agency (IEA) forecasts that the U.S. will surpass Saudi Arabia as the world's largest oil producer by 2020 and that North America will become a net oil exporter by 2030. They attribute these gains to shale oil and other non-traditional petroleum resources. Connecticut's energy market may benefit from development of shale

resources. The state is located in close proximity to one of the nation's largest shale formation, the Marcellus shale gas field in New York and Pennsylvania.

350 300 250 150 100 1991 1996 2001 2006 2011

U.S. Proven Natural Gas Reserves, 1991-2012

Dashed line represents first commercial use of horizontal fracturing ("fracking"), in 1998.

Calendar Year

Source: BP Statistical Review of World Energy 2013

# **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. Energy Star products use less energy and help protect the environment. The Energy Star label now covers product categories from small battery chargers to central air conditioners. It 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, increases in productivity also play a vital role in 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 33
U.S. PRIMARY ENERGY CONSUMPTION & ENERGY EFFICIENCY

	U.S. Energy Cons	umption	GDP	BTU	
Calendar	Total	%	Billion	Per \$1 GDP	%
<u>Year</u>	Quadrillion BTU's	<u>Change</u>	(In 2009\$)	<u>(In 2009\$)</u>	<u>Change</u>
1975	71.97	-	5,379.5	13,378	-
1980	78.07	8.4	6,443.4	12,116	(18.0)
1985	76.39	(2.2)	7,585.7	10,071	(24.8)
1990	84.49	10.5	8,945.4	9,444	(15.5)
1995	91.03	7.5	10,163.7	8,956	(15.1)
2000	98.81	8.4	12,565.2	7,864	(21.6)
2005	100.28	1.3	14,235.6	7,044	(20.2)
2006	99.63	(0.9)	14,615.2	6,817	(14.4)
2007	101.32	1.5	14,876.8	6,810	(11.6)
2008	99.29	(2.2)	14,833.6	6,694	(12.9)
2009	94.60	(4.7)	14,417.9	6,561	(13.0)
2010	98.02	3.6	14,779.4	6,632	(10.5)
2011	97.37	(0.6)	15,052.4	6,468	(13.8)
2012	94.92	(2.5)	15,470.7	6,135	(16.1)

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

Between 1975 and 2012, energy consumption per dollar of real GDP decreased at a compound annual rate of 2.08% per year. In 1975, 13,378 BTU's of energy were required to produce \$1 of GDP measured in 2009 dollars; by 2012, that number had decreased to 6,135 BTU's, a 54.1% reduction. The 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 began to create a Strategic Petroleum Reserve (SPR) under the Energy Policy and Conservation Act of 1975 (EPCA). The SPR program was established as a 750 million barrel capacity crude oil reserve with the objective of achieving a maximum draw-down rate within 15 days of the notice to proceed. To maximize long-term protection against oil supply disruptions, President George W. Bush in late 2001 directed the Secretary of Energy to fill the SPR up to its 700 million barrel capacity. As of November 2013, the reserve held 695.9 million barrels of crude oil, accounting for 65% of crude oil stocks.

In early 2000, a shortage of home heating oil sent prices to a high of \$2.45 per gallon from \$1.00 per gallon a year earlier. To reduce such risk in the future, the U.S. Department of Energy established the Northeast Home Heating Oil Reserve under the SPR program. The maximum inventory of heating oil in the reserve is 2 million barrels, which will provide relief for approximately 10 days. This reserve program was permanently established in March of 2001 as a part of America's energy readiness effort, separating it from the Strategic Petroleum Reserve. According to 2011 data from Energy Information Administration, heating oil is the dominant fuel used for home heating in Connecticut with 46.3% of all homes in Connecticut using heating oil as the primary heating fuel.

#### Connecticut

Connecticut is one of the most energy efficient states in the nation. The state consumed 3.7 thousand BTU's per 2005 chained dollar of Gross State Product in 2011, the latest available data. Connecticut was one of the most efficient states based on this measure, behind only the District of Columbia and New York. Connecticut was 49.3% below the national average of 7.3 thousand BTU's. When compared to the national per person consumption, Connecticut residents are moderate energy users. Connecticut consumed 206.8 million BTU's per capita in 2011, ranking 49th among the 50 states plus the District of Columbia. Only Rhode Island and New York consumed less. Connecticut was 33.8% below than the national figure of 312.6 million BTU's per capita. The state has few indigenous energy sources, and it must import nearly all the energy that it consumes. This situation affects Connecticut consumers' energy choices and results in prices that are higher than the national average. In 2011, Connecticut residents spent \$27.81 per million BTU, compared to \$21.71 for the nation.

TABLE 34
CONSUMER ENERGY PRICES IN THE UNITED STATES AND CONNECTICUT\*
Nominal Dollars per Million BTU in 2011

	Natural	Motor	Residential	All *	Retail	Total
	<u>Gas</u>	<u>Gasoline</u>	<u>Heating Fuel</u>	<u>Petroleum</u>	<b>Electricity</b>	<b>Energy</b>
Connecticut	\$10.42	\$26.69	\$15.83	\$28.10	\$47.91	\$27.81
United States	\$8.23	\$26.80	\$15.37	\$26.19	\$29.12	\$21.71
CT as a % of the U.S.	127%	100%	103%	107%	165%	128%

Note: \* Includes motor gasoline, residential and distillate fuel oil, liquefied petroleum gases, and jet fuel, etc.

Source: U.S. Department of Energy, Energy Information Administration, State Data 2011

The above table compares various prices to the national average for natural gas, motor gasoline, residential heating oil, residential electricity, and total average energy paid by consumers in 2011, the latest data available. Overall energy costs in Connecticut in 2011 were 28% higher than the national average. Retail electricity prices were 65% higher than the national average. Although the electric industry has been deregulated since the late 1990s, Connecticut's retail electric rates were among the highest in the 48 continental states. To maintain utility rate stability, utility providers have entered into long-term fixed contracts and paid a hefty premium. Many power plants in Connecticut are old and less efficient. In addition,

Connecticut's capacity need in the southwestern region of the state combined with an older transmission system requires long distance delivery and incurs large transmission losses, increasing operational costs.

The following table breaks down the amount and percentage share of total energy consumed in Connecticut by fuel source in 2011, the latest available data. When compared to the national average, petroleum has supplied more of Connecticut's energy needs relative to coal and natural gas. This is because petroleum is more easily transported than other types of fuel and fuel oil has been the major source to heat homes. In 2011, 46.3% of Connecticut households used fuel oil for home heating, followed by natural gas at 32.4%, electricity at 15.3%, and liquefied petroleum gases at 3.2%, and others at 2.8%. The state's petroleum products are received at the ports in New Haven, New London, and Bridgeport, and shipped by barge on the Connecticut River to central Connecticut.

TABLE 35 CONNECTICUT ENERGY CONSUMPTION IN 2011 (Trillion BTU's)

	Resi-	Com-	In-	Trans-	Electric	CT	% of CT	% of US
<u>Fuels</u>	<u>dential</u>	<u>mercial</u>	<u>dustrial</u>	portation	Generation	<u>Total</u>	<u>Total</u>	<u>Total</u>
Natural Gas	46.0	46.1	26.6	6.5	110.5	235.7	31.8	27.4
Petroleum	66.2	16.2	16.3	229.2	1.8	329.7	44.5	36.4
Coal	0.0	0.0	0.0	0.0	6.1	6.1	0.8	18.3
Nuclear	0.0	0.0	0.0	0.0	166.7	166.7	22.5	8.5
Hydroelectric	0.0	0.0	0.0	0.0	5.5	5.5	0.7	2.8
Other	7.6	0.8	3.5	0.0	20.5	32.4	3.3	6.7
Deliv. Elec.	44.1	44.7	12.5	0.6	0.0	101.9	13.7	13.3
Deliv. Losses	<u>75.7</u>	<u>76.6</u>	<u>21.5</u>	<u>1.1</u>	(311.1)	(136.2)	(18.3)	(13.3)
Total Demand	239.4	184.4	80.4	237.4	-	741.6	100.0	100.0
% of Total-CT	32.3	24.9	10.8	32.0	-	100.0		
% of Total-U.S.	21.2	18.4	32.2	28.1	-	100.0		

Note: Other includes power generated from wood, biofuels, wind, waste, geothermal, tide, and solar/photovoltaic, as well as imported electricity.

Totals may not add due to rounding.

Source: U.S. Department of Energy, Energy Information Administration, State Energy Data 2011

A comparison of the U.S. and Connecticut's electric generation sectors shows additional differences in energy mixes. The United States is much more dependent on coal and less reliant on nuclear energy than is Connecticut. In 2012, the state generated 36,117,544 net megawatt hours of electricity, mostly using nuclear power and natural gas. Retail sales were at 29,492,338 megawatt hours of electricity. This implies that the state was more than 100% electricity self-sufficient, unlike 2000, when the state generated only 56.8% of its demand, relying heavily on imports from other states and Canada for the balance of its need, when certain nuclear reactors were shut down for servicing. In 2011, Connecticut had net electricity exports of 34.3 Trillion BTU.

The power grid that supplies electricity to the entire state is owned and operated by both private and municipal electric companies. Transmission lines connect Connecticut with New York, other New England states and Canada. These interconnections allow the companies serving Connecticut to meet large or unexpected electric load requirements from resources located outside of Connecticut's borders.

All electric utilities in the state are members of the New England Power Pool and operate as part of the regional bulk power system. An independent system operator, ISO New England Inc., operates this regional system. In 2012, there were 1,609,735 electric consumers in Connecticut. Of these, 90.4% were residential customers, 9.3% were commercial customers, and 0.3% were industrial and transportation customers. Approximately 90% of the electricity was sold by two investor-owned companies: Connecticut Light & Power and United Illuminating.

Natural gas is delivered to Connecticut through pipelines that traverse the state. Natural gas pipeline supplies are generally shipped to Connecticut from Canada and the Gulf of Mexico area, although development of the Marcellus Shale Formation in New York and Pennsylvania could provide additional supply to the region. Connecticut also receives liquefied natural gas (LNG) through the 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 private gas distribution companies. Since 1996, the state's Public Utilities Regulatory Authority (formerly DPUC) has allowed some competitive market forces to enter the natural gas industry in the state. Commercial and industrial gas consumers can choose non-regulated suppliers for their natural gas requirements. Natural gas is delivered to consumers using the local distribution company's mains and pipelines. Located at or near the end of pipelines, Connecticut's distribution companies have to pay higher transportation costs and outbid other buyers in order to gain access rights to the gas wellhead.

#### Gasoline Consumption and Automotive Fuel Economy

In the U.S., highway vehicles consume approximately 98% of all gasoline, with about 2% used for other purposes such as agriculture, aviation, construction and boating. During 2012 gasoline consumption in the U.S. totaled 135.0 billion gallons, the equivalent of 8.82 million barrels per day. Gasoline consumption in Connecticut totaled 1.45 billion gallons, accounting for 1.07% of the nation's consumption. In 2010, Connecticut had approximately 1,500 gasoline stations, accounting for some 1.0% of the U.S. total. The table below shows gasoline consumption for the U.S. and Connecticut since 1990.

In 2012, Connecticut residents consumed 403.7 gallons of gasoline per capita, versus 430.1 gallons per capita for the nation. Per capita consumption is attributable to several factors such as 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. However, since per capita consumption reached a peak in 2005, it has fallen faster in Connecticut than in the U.S. This has reduced Connecticut's per capita consumption to 93.9% of the U.S. amount. During the decade between 2001 and 2010, per capita gasoline consumption in Connecticut averaged 96.0% of nation's level, increasing from 91.5% for the decade between 1991 and 2000.

As the highest per capita personal income state in the nation, Connecticut residents tend to own more automobiles. Connecticut residents owned 0.47 private and commercial automobiles per capita in 2011, versus 0.40 units for the nation. Also, Connecticut had 834 driver licenses per 1,000 residents in 2011, compared to 677 licenses for the nation. A survey conducted by Sterling's shows that Connecticut residents trail the nation in the use of carpooling. In June of 2010, the average one-way commute in Connecticut took 26.4 minutes with 80.1% of commuters driving their own car alone and 9.4% carpooling with others, compared to 27.8 minutes, 76.3%, and 12.3%, respectively, for the nation.

TABLE 36
GASOLINE CONSUMPTION IN THE UNITED STATES & CONNECTICUT

	U.S. Total	Annual*	CT Total	Annual*	<u>Gal</u>	llons Per	<u>Capita</u>
Calendar	Gallons	%	Gallons	%			CT/U.S.
<u>Year</u>	<u>(000's)</u>	<u>Change</u>	<u>(000's)</u>	<u>Change</u>	<u>U.S.</u>	<u>CT</u>	<u>(%)</u>
1990	110,184,150		1,301,715		441.4	395.4	89.6%
1995	120,875,789	1.9%	1,302,750	0.0%	453.9	388.7	85.6%
2000	132,279,950	1.8%	1,476,340	2.5%	468.8	432.7	92.3%
2005	140,338,710	1.2%	1,614,697	1.8%	474.5	464.3	97.9%
2006	140,320,089	0.0%	1,566,875	(3.0)%	469.9	449.6	95.7%
2007	140,436,133	0.1%	1,567,360	0.0%	465.7	449.3	96.5%
2008	136,499,418	(2.8)%	1,494,164	(4.7)%	448.5	426.5	95.1%
2009	136,877,949	0.3%	1,512,081	1.2%	446.4	424.4	95.1%
2010	137,742,351	0.6%	1,514,622	0.2%	445.2	423.1	95.0%
2011	135,204,475	(1.8)%	1,467,953	(3.1)%	433.9	409.9	94.5%
2012	134,998,800	(0.2)%	1,449,384	(1.3)%	430.1	403.7	93.9%
Average							
2005-12					451.8	431.4	95.5%

<sup>\*</sup> Annualized using compound annual growth rate formula

Source: U. S. Dept. of Transp., Office of Highway Information Management, Highway Statistics

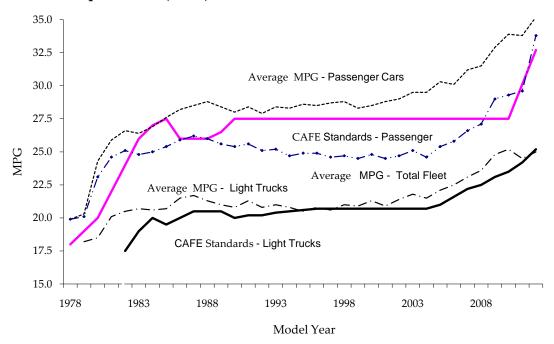
# **Corporate Average Fuel Economy (CAFE)**

Emissions of carbon dioxide from motor vehicles represent over 30% of the total greenhouse gas emissions in the U.S. In 1973, requirements for Corporate Average Fuel Economy (CAFE) in motor vehicles were first proposed in the wake of Arab oil embargo. In 1975, the Energy Policy and Conservation Act established the CAFE system and authorized the Department of Transportation to set automobile fuel efficiency standards, starting in model year (MY) 1978 for passenger cars and MY 1979 for light trucks. The measurement of CAFE is performed by the U.S. Environmental Protection Agency. The chart below illustrates the automotive fuel economy history for the CAFE standards for passenger cars and light trucks and their average miles per gallon (MPG) that had been produced. While CAFE standards for light trucks have continued to increase from 17.5 MPG in MY 1982 to 23.5 MPG in MY 2010, standards for passenger cars remained the same at 27.5 MPG from 1990 to 2010.

Increases in fuel efficiency varied over the past three and a half decades, accelerating during the 1970s and 1980s while remaining relatively constant during the 1990s. Fuel efficiency

accelerated again during the 2000s and 2010s. MY 2012 was a banner year that raised MPG to an historic high of 35.2 MPG for passenger cars and 25.0 MPG for light trucks. During the 1970s and 1980s, more efficient engines and smaller cars were produced. However, light trucks gained market share in the 1990s and continued into the early 2000s while sales for high-powered, four-wheel drive cars, and larger, heavier, less fuel-efficient models increased, reducing the average MPG rating for new vehicles. In 1987, the total fleet fuel economy peaked at 26.2 MPG when light trucks made up 28.1% of the market. Total fleet fuel economy finally returned to 1987 levels in 2007. Light truck sales have remained relatively constant over the past decade. In 2004 light trucks sales peaked with at 55.3% and then began trending downward to a low of 47.5% in 2009. By 2010 light trucks rebounded taking 50.4% of market sales.

### Miles per Gallon (MPG) for CAFE Standards and Produced Vehicles



Source: U.S. Dept. of Transportation, National Highway Traffic Safety Administration

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. To further improve air quality and fuel efficiency, the U.S. Congress in 2007 passed the Energy Independence and Security Act that required the fuel efficiency standard to increase to 35 MPG by MY 2020. In the spring of 2009, the federal government accelerated those requirements and moved up the deadline to MY 2016. The National Highway Traffic Safety Administration (NHSTA) issued two new rules to increase CAFE standards under legal authority granted by the 2007 Act. The first ruling, adopted in April of 2010, raised the average MPG for MY 2016 to 34.1 MPG. The second rule, adopted in August of 2012, raised it to 54.5 MPG by MY 2025. As a result, the average MPG for passenger cars was 35.2 MPG in MY 2012, while the average for light trucks was 25.0 MPG.

#### **Fluctuations in Gasoline Prices**

The price of gasoline is one of the most closely watched items by consumers. As of September 2013, The U.S. Bureau of Labor Statistics assigned a relative weight of 5.528% to this single component to calculate the CPI-U index, the consumer price index for all urban consumers.

Short-term gasoline prices have long been known for their drastic volatility, often rising and dropping markedly during short periods of time. The average retail gasoline price for all grades in the U.S. in October of 2013 was \$3.42 per gallon, compared to \$3.81 in October of 2012 and \$3.51 in October of 2011. The average retail price for all grades hit an all-time high of \$4.14 in July of 2008, before plummeting to \$1.74 in December that same year. During the first eleven months of 2013, average monthly prices fluctuated 12%, from \$3.32 to \$3.78 per gallon. In 2012, prices fluctuated 15%, from \$3.38 to \$3.96. In 2011, prices fluctuated 21%, from \$3.14 to \$3.98. Calendar year 2010 was an unusually stable period; prices fluctuated 11%, from \$2.17 and \$3.03. In 2009, they fluctuated 32%, from \$1.84 to \$2.71 per gallon. In 2008, they fluctuated an extraordinary 58%.

Changes in gasoline price are determined by the cost of crude oil, the fundamental law of supply and demand of fuel, any disruption of refinery operations, inventory levels, seasonality and weather conditions, the regulation of environmental standards and geopolitical conditions. California's November 2010 retail price of all grades branded gasoline of \$3.79 per gallon, for example, can be broken down into four categories as follows: crude oil (\$2.69, 71.0%), federal & state taxes (\$0.64, 17.0%), refining costs and profits (\$0.14, 3.7%), and distribution and marketing (\$0.32, 8.4%) when domestic West Texas Intermediate crude oil averaged \$91.82 per barrel. Since the tax portion is relatively stable, the three other categories were the major driving forces in gasoline prices. In July 2008, when average crude prices reached an all-time high at \$133.40 per barrel, crude oil cost accounted for 72% of gasoline prices.

TABLE 37
RETAIL MOTOR GASOLINE PRICES

(Dollars per Gallon, Regular Gasoline)

Calendar			Average Real Price
<u>Year</u>	Nominal Price	Real Price*	(for the Decade of)
1950	\$0.27	\$1.62	1.54
1960	0.31	1.48	1.40
1970	0.36	1.30	1.40
1980	1.25	2.61	1.70
1990	1.16	1.61	1.27
2000	1.51	1.70	2.34
2005	2.30	2.57	-
2006	2.59	2.80	-
2007	2.80	2.94	-
2008	3.27	3.31	-
2009	2.35	2.39	-
2010	2.79	2.79	-
2011	3.58	3.47	-
2012	3.68	3.50	-
2013**	3.65	3.42	-

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

Source: U.S. Dept. of Energy, Energy Information Administration

The long run nominal price shows a relatively stable upward trend except for sharp upticks in the early 1980s and the most recent years. The table above 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 to \$3.27 per gallon in 2008, but declined to an average of \$2.79 per gallon in 2010. The real prices listed are adjusted for inflation in 2010 dollars. In 2008, the average real price reached a high of \$3.31 per gallon in 2010 dollars. The real price of gasoline dipped in 2009 and 2010, but rose again in 2011 and was up to \$3.42 per gallon in the first three quarters of 2013.

### **Gasoline Prices in Developed Countries**

Gasoline prices in the U.S. may rank among the lowest in the world for oil-importing countries, and even lower than some oil-exporting countries. Average gasoline prices in the European countries are more than double that of the U.S.

According to the International Energy Agency, the average after-tax retail fuel price in the U.S. was \$3.34 per gallon In October 2013, compared to an average of \$7.99 in France, Germany, Italy, Spain, and the United Kingdom.

<sup>\*</sup> Real prices are in chained 2010 dollars

<sup>\*\*</sup> First three quarters of 2013

TABLE 38
END-USER GASOLINE PRICES AMONG DEVELOPED COUNTRIES
Dollars per Gallon, October 2013

				Tax	U.S. End-User
	Before		End-User	As a % of	Price as a % of
<u>Country</u>	<u>Tax (\$)</u>	<u>Tax (\$)</u>	<u> Price (\$)</u>	<u>Price</u>	Other Country
France	3.25	4.43	7.68	57.7%	21.8%
Germany	3.40	4.67	8.08	57.9%	21.7%
Italy	3.55	5.37	8.91	60.2%	20.9%
Spain	3.60	3.66	7.26	50.4%	25.0%
United Kingdom	3.15	4.87	8.02	60.7%	20.7%
Average of Above	3.39	4.60	7.99	<b>57.4</b> %	22.0%
Japan	3.72	2.46	6.18	39.7%	31.6%
Canada	3.10	1.45	4.55	31.8%	39.6%
USA	2.92	0.42	3.34	12.6%	

Note: Unleaded premium for France, Germany, Italy, Spain, UK; regular unleaded for Canada, Japan and the United States

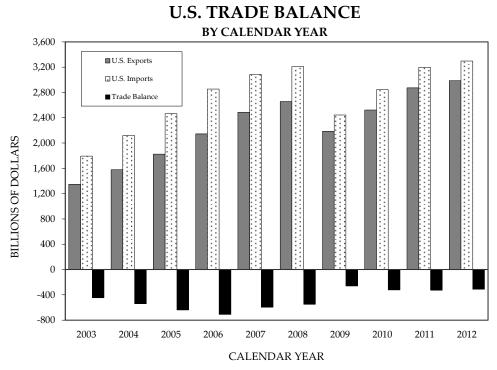
Source: International Energy Agency, End-use oil product prices and average crude oil import costs, October 2013

Due to heavy subsidies, fuel prices in most Middle Eastern countries are below the price for crude oil on the world market. Taxes on transportation fuels, in addition to steep taxes on car purchases and ownership, have been used as a way to reduce traffic and prevent environmental damage, as well as to conserve energy. Many European countries such as the United Kingdom, France, and Germany have used a high tax policy on fuel to discourage car use and hence gasoline consumption. The above table shows the retail price of gasoline among selected countries in 2013. The tax portion of the price of gasoline in the U.S. accounted for only 12.6% of the retail price, compared to 60.7% in the U.K. and 57.9% in Germany. Of the \$0.42 per gallon excise tax in the U.S., 18.4 cents per gallon was the federal fuel tax with the remainder attributable to state taxes. While fuel taxes in most European OECD countries continued to increase, the U.S. federal fuels tax has remained at 18.4 cents per gallon since August of 1993.

# **Export Sector**

Trade has played an important role in the U.S. economy. U.S. real exports and imports of goods and services accounted for 28.2% of Gross Domestic Product (GDP) in 2012, up from the previous peak of 27.8% in 2011. The increase over the past decade is attributed to the growth in the U.S. and worldwide economies which accelerated export and import activities. Exports and a favorable balance of payments have traditionally been important to the growth of the U.S. affecting employment, production, and income. Real exports of goods and services have been significantly boosting economic growth over the past decades. Total trade exports have grown 121.9% from 2003 through 2012, while total trade imports have grown 83.9% over the same time period.

The following graph illustrates the United States' trade balance for the past ten years. In 2012, the deficit declined to \$310.8 billion, down from \$324.1 billion in 2011. The recent improvement in the trade deficit is primarily attributable to the depth of the domestic recession in the U.S. that caused a sharp decline in demand for imported goods as well as increased surpluses in the investment income and service transaction categories.



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

Consistent with recent history, the United States trade balances in the past decade generally improved during recession years and deteriorated during recovery and expansionary periods. Trade deficits narrowed in 1991, 2001 and 2009 when the U.S. experienced an economic slowdown, whereas deficits widened during the boom years that were experienced during most of the 1990s and 2000s until 2007 when the last recession began. The U.S. price elasticity of demand for foreign goods and services is greater than our major trade partners' elasticity of demand for U.S. goods and services resulting in unfavorable trade balances during U.S. economic recoveries.

TABLE 39 U.S. TRADE DEFICIT BY CATEGORY

(In Billions of Dollars)

		2011	,		2012	
	Exports	<u>Imports</u>	Balance	Exports	Imports	Balance
Total Trade	2,873.7	3,197.8	(324.1)	2,986.9	3,297.7	(310.8)
Merchandise	1,495.9	2,240.0	(744.1)	1,561.2	2,302.7	(741.5)
Foods/Beverages	126.2	108.3	17.9	132.8	111.1	21.7
Industrial Supplies & Materials	518.8	782.0	(263.2)	518.9	752.3	(233.4)
Capital Goods, Excluding Autos	493.3	513.5	(20.2)	527.7	551.7	(24.0)
Autos	132.8	255.2	(122.4)	146.1	298.5	(152.4)
Consumer Goods	175.0	517.5	(342.5)	181.7	519.6	(337.9)
Others	49.8	63.6	(13.8)	54.0	69.5	(15.5)
Services	617.0	429.7	187.3	649.3	442.5	206.8
Travel & Transportation	195.4	163.9	31.4	209.4	173.6	35.9
Royalties, License fees, etc.	400.4	234.4	165.9	418.7	241.1	177.6
Other Services	21.2	31.3	(10.1)	21.2	27.9	(6.7)
Investment Income	760.8	528.2	232.6	776.4	552.4	223.9
Direct Investment	478.8	168.2	310.6	470.2	176.7	293.5
Other Private Investment	274.0	213.4	60.6	297.9	233.3	64.6
U.S. Gov't Receipts/Payments	1.9	132.4	(130.5)	2.0	127.7	(125.8)
Compensation of Employees	6.1	14.2	(8.1)	6.3	14.6	(8.3)
		<u>Percer</u>	nt Change Fi	com Previou	ıs Year	
Total Trade	13.9	12.4	0.7	3.9	3.1	(4.1)
Merchandise	16.1	15.5	14.5	4.4	2.8	(0.4)
Foods/Beverages	17.2	17.0	17.9	5.2	2.6	20.9
Industrial Supplies & Materials	27.7	25.4	21.2	0.0	(3.8)	(11.3)
Capital Goods, Excluding Autos	10.1	14.0	688.1	7.0	7.4	18.8
Autos	18.6	13.1	7.7	10.0	17.0	24.5
Consumer Goods	5.9	6.4	6.6	3.9	0.4	(1.3)
Others	(0.1)	5.0	29.3	8.4	9.3	12.5
Services	11.0	6.1	24.2	5.2	3.0	10.4
Travel & Transportation	11.6	6.5	48.6	7.2	5.9	14.1
Royalties, License fees, etc.	10.1	7.1	14.8	4.6	2.8	7.0
Other Services	24.5	(2.1)	(32.5)	(0.1)	(11.0)	(33.9)
Investment Income	12.2	5.6	31.0	2.0	4.6	(3.7)
Direct Investment	8.6	10.0	7.8	(1.8)	5.1	(5.5)
Other Private Investment	19.3	8.6	82.0	8.7	9.4	6.4
U.S. Gov't Receipts/Payments	28.7	(3.5)	(3.8)	1.6	(3.5)	(3.6)
Compensation of Employees	2.9	1.6	0.6	3.0	3.1	3.2

Note: Percent 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 including: foods and beverages; industrial supplies and materials; capital goods excluding autos; autos; consumer goods and others. The deficit in merchandise trade declined slightly by 0.4% and registered \$741.5 billion in 2012, down from \$744.1 billion in 2011.

United States merchandise imports have been concentrated among four categories: industrial supplies and materials, capital goods excluding autos, autos, and consumer goods. These four categories accounted for 92.5% of total merchandise imports in 2012. In contrast, U.S. exports have been concentrated in two categories: capital goods and industrial supplies and materials. These two categories accounted for approximately 67.0% of the country's merchandise exports in 2012. Capital goods excluding autos were the largest export for the United States at \$527.7 billion in 2012. Within this category machinery and equipment, except consumer-type, was the largest contributor at \$427.1 billion.

Of the total trade deficit of \$310.8 billion, consumer goods and industrial supplies and materials accounted for the largest portions of the deficit, reaching \$337.9 billion and \$233.4 billion, respectively in 2012. 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 declined in 2012 by 1.3%.

The second largest portion of the deficit occurred in industrial supplies and materials. This category includes energy products, iron and steel, metal products, lumber and paper and chemicals excluding medicinals. In 2012, the U.S. imported \$752.3 billion worth of these goods compared to the \$518.9 billion that the U.S. exported. The industrial supplies and materials trade deficit at \$233.4 billion represents an 11.3% decline from 2011's deficit of \$263.2 billion.

The third largest portion of the merchandise trade deficit occurred in the auto category at \$152.4 billion, an increase of 24.5% from 2011's deficit of \$122.4 billion.

### **Service Transactions**

The United States is highly competitive in the delivery of services. The surplus in service transactions increased to \$206.8 billion in 2012, from a surplus of \$187.3 billion in 2011. Imports increased 3.0% to \$442.5 billion while exports of services increased 5.2% to \$649.3 billion. Of the \$206.8 billion total surplus in 2012, \$177.6 billion was attributable to royalty and license fees, which more than offset the deficit in other services.

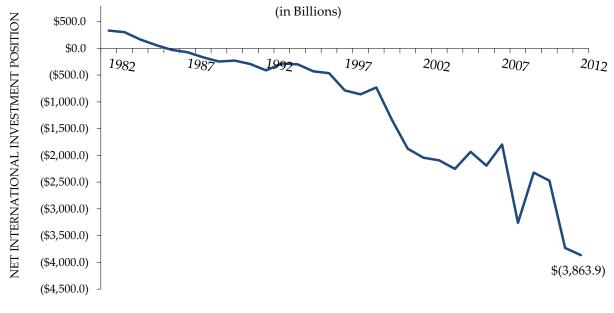
#### **Investment Income**

The balance in investment income registered a surplus of \$223.9 billion, a 3.7% decline from 2011. 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 as well as 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.

According to the U.S. Bureau of Economic Analysis, in calendar 2012 foreign assets in the U.S., measured at current cost, increased by \$134.8 billion, or 0.5%, to \$25,501.5 billion, compared to a slight increase of \$1.5 billion to \$21,637.6 billion for U.S. assets abroad. This placed U.S. international investment at a net negative of \$3,863.9 billion. U.S. direct investment in assets abroad continues to exceed foreign direct investment in the U.S. In 2012, the U.S.'s direct investment abroad was \$5,077.8 billion and foreign direct investment in the U.S. was \$3,057.3 billion, registering \$2,020.4 billion in net investment. Foreign assets in the United States are mostly in securities such as bonds and stocks issued by the U.S. Treasury and corporations.





Source: U.S. Bureau of Economic Analysis

The following table shows U.S. trade transactions by area for 2012. The goods, services and income payments trade deficit in 2012 was \$310.8 billion, a decline of \$13.3 billion. In 2012 the United States imported more from the Asia and Pacific area, Africa, and the Middle East than it exported to those regions but exported more than imported in the same year to Canada, Latin America and Europe. Exports to Canada outpaced imports continued at record levels in 2012.

CALENDAR YEAR

TABLE 40
U.S. INTERNATIONAL TRANSACTIONS
(By Area, In Billions of Dollars)

		2011				2012		
	<b>Exports</b>	<u>Imports</u>	<u>Balance</u>		<b>Exports</b>	<u>Imports</u>	<u>Balance</u>	
<b>Total Trade</b>	2,873.7	3,197.8	(324.1)		2,986.9	3,297.7	(310.8)	
Europe	900.5	901.3	(0.8)		919.9	915.7	4.1	
Canada	401.8	374.9	26.9		415.9	389.0	26.9	
Latin America (1)	639.2	597.9	41.3		677.3	621.7	55.6	
Asia and Pacific (2)	714.1	1,069.3	(355.2)		741.2	1,130.2	(389.1)	
Africa	57.2	103.9	(46.6)		57.7	77.1	(19.5)	
Middle East	100.0	133.9	(33.8)		111.6	145.0	(33.4)	
Others (3)	60.8	16.7	44.1	44.1 63.4			44.5	
European Union (4)	751.8	753.9	(2.1)		765.4	771.0	(5.6)	
Australia	66.3	24.8	41.5		72.1	25.6	46.6	
Japan	135.6	216.2	(80.7)		143.0	238.1	(95.1)	
China	144.7	456.0	(311.3)		151.8	477.8	(326.0)	
		P <sub>e</sub>	ercent Chang	e Fron	n Previous	Year		
Total Trade	13.9	12.4	0.7	CITOI	3.9	3.1	(4.1)	
Europe	10.9	12.9	(106.1)		2.2	1.6	(598.3)	
Canada	15.3	13.3	52.9		3.5	3.8	0.1	
Latin America (1)	17.0	15.5	45.8		6.0	4.0	34.7	
Asia and Pacific (2)	13.4	8.9	0.9		3.8	5.7	9.5	
Africa	16.7	9.6	2.1		0.8	(25.7)	(58.3)	
Middle East	23.4	29.5	51.5		11.5	8.3	(1.1)	
Others (3)	8.4	(3.4)	13.7		4.4	13.4	0.9	
European Union (4)	9.9	11.5	(125.5)		1.8	2.3	168.7	
Australia	21.2	8.3	30.5		8.8	3.2	12.1	
Japan	7.0	5.9	4.1		5.5	10.1	17.9	
China	15.2	7.6	4.4		4.9	4.8	4.7	

- (1) Includes Argentina, Brazil, Mexico, Venezuela, and other western hemisphere countries
- (2) Includes Australia, China, Hong Kong, India, Japan, Republic of Korea, Singapore, Taiwan, and other Asia and Pacific countries
- (3) Includes figures for International Organizations and unallocated areas
- (4) Includes 27 member states: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Netherlands, & United Kingdom

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

In 2012, the United States imported \$477.8 billion worth of goods, services and income payments from China while exporting only \$151.8 billion to that country. The resulting trade deficit with China was \$326.0 billion in 2012, 4.7% higher than the 2011 deficit of \$311.3 billion. The top five U.S. imports from China in 2012 were electrical machinery and equipment at \$110.7 billion, power generation equipment at \$99.1 billion, furniture at \$22.4 billion, toys and games at \$22.0 billion, and footwear at \$17.1 billion. To further illustrate the disparity in trade between the two countries: while the amount of electrical machinery and equipment imported into the U.S. from China was \$110.7 billion in 2012, that same commodity was the top U.S. export to China at only \$15.2 billion.

### **Connecticut Exports**

In Connecticut, the export sector has assumed an important role in overall economic growth. State exports of goods for the past five years averaged 7.0% of Gross State Product (GSP).

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 percent of indirect exports, Connecticut exports of commodities totaled \$15,961.5 million in 2012. 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.

Connecticut industries that rely most heavily on exports are Transportation Equipment (NAICS 336), Nonelectrical Machinery (NAICS 333) and Computer & Electronic Equipment (NAICS 334). NAICS refers to the North American Industry Classification System, which replaced the Standard Industrial Classification (SIC) system and was implemented in 1997. The top three industries accounted for 65.6% of Connecticut's foreign sales in 2012. The following table shows the breakdown of major products by NAICS code for the past five years. In 2012, transportation equipment, which includes aircraft engines and spare parts, gas turbines, and helicopters, spacecraft, etc. accounted for 45.2% of total exports up from 42.4% of exports in 2011. In terms of average annual growth from 2008 to 2012, Primary Metal posted the strongest growth at 8.4%, followed by Electrical Equipment at 5.7%.

Overall growth in exports of commodities for the past five years averaged 0.9%. Exports of \$16.0 billion are estimated to account for 7.0% of Connecticut Gross State Product (GSP) in 2012, which is slightly lower than the 7.2% in 2011.

TABLE 41
COMMODITY EXPORTS ORIGINATING IN CONNECTICUT BY PRODUCT
(In Millions)

							Percent	Average
							of 2012	Growth
<u>NAICS</u>	<u>Industry</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>Total</u>	<u>08-12</u>
322	Paper	147.2	169.3	181.7	176.5	148.5	0.9%	0.2%
325	Chemicals	1,575.7	833.4	922.1	913.0	1,026.2	6.4%	-10.2%
326	Plastics and Rubber	251.1	228.7	254.7	310.3	265.6	1.7%	1.4%
331	Primary Metal	509.0	316.6	534.6	568.3	703.9	4.4%	8.4%
332	Fabricated Metal	622.3	547.3	615.5	672.9	680.6	4.3%	2.3%
333	Machinery, exc. Elec.	1,555.8	1,439.0	1,545.0	1,851.8	1,845.1	11.6%	4.4%
334	Comp. & Electronic	1,294.2	1,037.6	1,307.6	1,438.8	1,409.1	8.8%	2.1%
335	Electrical Equipment	603.4	489.8	604.2	739.5	752.6	4.7%	5.7%
336	Transportation	6,500.2	6,428.2	6,989.3	6,866.4	7,220.4	45.2%	2.7%
339	Misc. MFG	272.4	291.3	252.7	240.0	271.2	1.7%	-0.1%
	Other	2,052.8	2,197.6	2,821.2	2,431.2	1,638.2	10.3%	-5.5%
Total C	Commodity Exports	15,384.1	13,978.9	16,028.8	16,209.0	15,961.5		0.9%
	% Growth	11.5%	<b>-</b> 9.1%	14.7%	1.1%	-1.5%		
Gross S	State Product (\$M)	219,450	217,102	221,767	225,412	229,316		
	% Growth	-0.8%	<i>-</i> 1.1%	2.1%	1.6%	1.7%		1.1%
Exports	s as a % of GSP	7.0%	6.4%	7.2%	7.2%	7.0%		7.0%

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 2012, exports originating from Connecticut totaled \$16.0 billion, with 62.3% of the total being shipped by air, 19.2% being delivered by sea, and the remaining 18.6% 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, as the majority of goods produced are transported by air as it provides more frequent departures and faster transit times.

The following table shows the ten major foreign countries to which state firms export their products. Canada unseated France as the largest destination country in 2012 at 12.0%, followed by France, Germany, Mexico, and United Arab Emirates. These five countries accounted for 47.2% of total state exports in 2012. Exports to United Arab Emirates (U.A.E) have grown the fastest in the past five years at an average growth rate of 66.2%. Exports to China have grown from 2008-2012 at a rate of 10.6%, followed by the Netherlands with 6.3% growth over the same period.

TABLE 42 COMMODITY EXPORTS ORIGINATING IN CONNECTICUT BY COUNTRY (In Millions of Dollars)

			•		,			2008-2012
							Percent	Average
	2012						of 2012	Growth
<u>Destination</u>	<u>Rank</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>Total</u>	<u>Rate</u>
Canada	1	1,912.2	1,444.9	1,611.6	1,716.8	1,916.1	12.0%	0.1%
France	2	1,733.5	2,216.5	2,225.7	1,971.0	1,906.5	11.9%	2.4%
Germany	3	1,454.4	1,306.3	1,268.0	1,383.8	1,496.7	9.4%	0.7%
Mexico	4	1,045.7	757.0	982.3	1,098.4	1,141.0	7.1%	2.2%
U.A.E.	5	142.8	104.8	103.0	541.8	1,088.9	6.8%	66.2%
China	6	676.1	752.8	1,024.1	981.5	1,010.9	6.3%	10.6%
United Kingdom	7	874.6	648.4	652.9	686.5	636.3	4.0%	-7.6%
Japan	8	671.5	484.3	477.2	579.7	573.6	3.6%	-3.9%
South Korea	9	489.1	518.4	475.2	486.0	550.9	3.5%	3.0%
Netherlands	10	404.2	233.7	567.7	551.4	516.8	3.2%	6.3%
Other Areas		5,980.0	5,511.8	6,641.2	6,212.0	5,123.8	32.1%	-3.8%
Total		15,384.1	13,978.9	16,028.8	16,209.0	15,961.5	100.0%	0.9%

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 7.3% of the state's total private industry employment in 2010 was a result of foreign investment. In 2010, 101,200 Connecticut workers were employed by foreign-controlled companies. Major sources of foreign investment in Connecticut in 2010 included the Netherlands, the United Kingdom, Germany, and France.

The Connecticut Department of Economic and Community Development continues to promote international trade to increase Connecticut's global competitiveness. The methods employed to promote international trade include providing export assistance to Connecticut companies as well as providing assistance to foreign companies interested in expanding or relocating in Connecticut.

Further information regarding assistance, services, or publications is available through:

State of Connecticut
Department of Economic and Community Development
505 Hudson Street
Hartford, Connecticut 06106
(860) 270-8166, 270-8067, or 270-8068
http://www.state.ct.us/ecd

### **Connecticut's Defense Industry**

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

In federal fiscal year (FFY) 2012, contractors in the state were awarded \$12.7 billion worth of defense-related prime contracts, with the heaviest concentration in the state's transportation equipment sector. This was up 2.9% from the \$12.3 billion received in awards in FFY 2011. Of the total awarded, the following five companies were the top contractors in the state, primarily for the described areas of work:

1. United Technologies Corp. Aircraft, Engines & Turbines

General Dynamics Corp.
 Eurpac Service Inc.
 Thomas J. Lipton Inc.
 Colt Defense LLC.
 Submarines

 Food Products

 Firearms

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 and rotary wing aircraft, which is very different from the national distribution of all contracts awarded. It is this concentration in large weapon programs which plays a role in the volatility of state awards.

TABLE 43
VALUE OF PRIME CONTRACT AWARDS BY PROGRAM IN FFY 2012
(In Millions)

<u>Value</u>	<u>Percent</u>	<u>United States Program</u>	<u>Value</u>	<u>Percent</u>
\$3,657	28.8%	Aircraft, Fixed Wing	\$22,489	7.1%
3,261	25.7%	Engineering & Tech Services	13,365	4.2%
1,745	13.7%	General Healthcare Services	11,150	3.5%
966	7.6%	Petroleum Base Fuels	10,814	3.4%
295	2.3%	Aircraft, Rotary Wing	9,873	3.1%
2,774	21.9%	Other	250,055	78.7%
\$12,697	100.0%	Total	\$317,745	100.0%
	\$3,657 3,261 1,745 966 295 2,774	\$3,657	\$3,657 28.8% Aircraft, Fixed Wing 3,261 25.7% Engineering & Tech Services 1,745 13.7% General Healthcare Services  966 7.6% Petroleum Base Fuels  295 2.3% Aircraft, Rotary Wing  2,774 21.9% Other	\$3,657         28.8%         Aircraft, Fixed Wing         \$22,489           3,261         25.7%         Engineering & Tech Services         13,365           1,745         13.7%         General Healthcare Services         11,150           966         7.6%         Petroleum Base Fuels         10,814           295         2.3%         Aircraft, Rotary Wing         9,873           2,774         21.9%         Other         250,055

Source: Federal Procurement Data System (FPDS.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 44
GEOGRAPHIC DISTRIBUTION OF CONNECTICUT PRIME CONTRACT AWARDS
(And Total Awards in Thousands of Dollars)

County of				
Contractor	FFY 2009	FFY 2010	FFY 2011	FFY 2012
Fairfield	34.9%	36.4%	35.9%	42.2%
Hartford	28.3%	29.6%	26.2%	23.2%
Litchfield	2.0%	0.3%	0.4%	0.3%
Middlesex	0.7%	1.1%	0.4%	0.5%
New Haven	0.7%	0.7%	0.8%	0.7%
New London	33.2%	31.7%	36.1%	33.0%
Tolland	0.1%	0.1%	0.1%	0.1%
Windham	0.1%	0.1%	0.1%	0.1%
State Total	100.0%	100.0%	100.0%	100.0%
State Total	\$11,833,669	\$11,118,093	\$12,316,713	\$12,679,098

Source: Federal Procurement Data System

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. Although employment is affected by the defense budget, the state's economic activity is not immediately impacted by fluctuations in defense contracts.

To compare the relative volatility of contract awards with 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 0.193 compared with 0.016 for transportation equipment employment. This implies that the fluctuations in 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.

From \$8.6 billion in FFY 2003, real defense contract awards, the value of contracts after accounting for inflation, increased to \$10.8 billion in FFY 2012. This represents an annual percentage growth rate of 2.6% per year from FFY 2003 to FFY 2012, with virtually all of the growth spurred by the wars on terrorism and in Iraq and Afghanistan.

TABLE 45 CONNECTICUT DEFENSE CONTRACT AWARDS AND RELATED EMPLOYMENT

			Connecticut		Defense			
	Defense		Transportation		Contract	Contract		
Federal	Contract		Equipment		Awards in			
Fiscal	Awards	%	<b>Employment</b>	%	2005 Dollars	%		
<u>Year</u>	(\$ 000's)	<u>Growth</u>	(\$ 000's)	<u>Growth</u>	<u>(\$ 000's)</u>	<u>Growth</u>		
2003	8,065,771	43.7	43.72	(4.8)	8,562,389	40.5		
2004	8,834,618	9.5	43.09	(1.4)	9,136,065	6.7		
2005	8,963,788	1.5	43.38	0.7	8,963,788	(1.9)		
2006	7,664,577	(14.5)	43.68	0.7	7,426,916	(17.1)		
2007	8,598,585	12.2	43.51	(0.4)	8,096,596	9.0		
2008	12,226,104	42.2	44.14	1.5	11,094,468	37.0		
2009	11,833,669	(3.2)	43.49	(1.5)	10,777,476	(2.9)		
2010	11,118,093	(6.0)	42.30	(2.7)	9,953,530	(7.6)		
2011	12,316,713	10.8	42.16	(0.3)	10,691,591	7.4		
2012	12,679,098	2.9	42.23	0.2	10,781,546	0.8		
Coefficien	t of							
Variati	on 0.193		0.016		0.135			

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

TABLE 46 COMPARISON OF U.S. AND CONNECTICUT DEFENSE CONTRACT AWARDS

	Connecticut				U.S.			
	Defense		3-year		Defense		3-year	
Federal	Contract		Moving		Contract		Moving	
Fiscal	Awards	%	Average	%	Awards	%	Average	%
<u>Year</u>	(\$ Millions)	<u>Growth</u>	(\$ Millions)	<b>Growth</b>	(\$ Millions)	<b>Growth</b>	(\$ Millions)	<u>Growth</u>
2003	8,066	43.7	5,983	48.8	195,865	21.4	164,983	10.3
2004	8,835	9.5	7,505	25.4	205,844	5.1	187,713	13.8
2005	8,964	1.5	8,621	14.9	239,280	16.2	213,674	13.8
2006	7,665	(14.5)	8,488	(1.6)	262,098	9.5	235,741	10.3
2007	8,599	12.2	8,409	(0.9)	298,980	14.1	266,786	13.2
2008	12,226	42.2	9,496	12.9	354,818	18.7	305,299	14.4
2009	11,834	(3.2)	10,886	14.6	330,660	(6.8)	328,153	7.5
2010	11,118	(6.0)	11,726	7.7	322,813	(2.4)	336,097	2.4
2011	12,317	10.8	11,756	0.3	329,384	2.0	327,619	(2.5)
2012	12,679	2.9	12,038	2.4	317,745	(3.5)	323,314	(1.3)

Coefficient of

Variation 0.193 0.197

Source: U.S. Department of Defense, Federal Procurement Data System

The coefficient of variation for Connecticut's defense contract awards over the past decade was 0.193, compared to 0.197 for the U.S., reflecting a pattern of fluctuations in the state's annual levels of defense contract awards which is not inconsistent with that of awards nationally. This is a break from most analyses in the past that have demonstrated greater volatility at the state level.

As defense contract awards normally take several years to complete, the 3-year moving average is better reflection of actual production activities. Overall defense changes in Connecticut have historically been more severe and more volatile than the national average. Both of these factors have negative implications for the state's economy. Volatility imposes difficulties for the industry in terms of long term planning, making future capital investment less likely 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 percentage growth rate of 8.7% during the nine-year period from 2003 to 2012, compared to a percentage growth rate of 7.8% for the nation. Most of this growth came between 2003 and 2005 and in the most recent fiscal years because Connecticut has been much more dependent on contracts that include procurement of aircraft, engines and ships than is the nation as a whole, and these contracts declined through most of the 1990s. During the 1990s, defense policy strategies shifted from a focus on the threat of global conflict to regional contingencies. Procurement practices shifted from an emphasis on full production of new systems to the development of prototypes; therefore, defense procurement had been falling at a faster rate than overall defense spending, although the war on terrorism resulted in another shift in procurement strategy.

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), hovered around 2.0% and below in the late 1990s, rose to 4.0% in FFY 2004 and has generally hovered around 4.0% to 5% 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 2012, while Connecticut ranked seventh in total defense contracts awarded, it ranked second in per capita defense dollars awarded with a figure of \$3,532. This figure was 3.5 times the national average of \$1,016. In 2011, Connecticut ranked eighth in total defense contracts awarded and third in per capita defense dollars awarded with a figure of \$3,437. This was 3.3 times the national average of \$1,055 for that year.

The wars in Afghanistan and Iraq and the war on terrorism created a need for replacements for lost equipment and systems, spare parts, and new features on existing systems as new needs were identified in the ever-changing environment. The winding down of those wars, combined with sequester defense spending reductions, will likely result in lower growth for this sector in the future.

TABLE 47
CONNECTICUT DEFENSE CONTRACT AWARDS AND GSP

	Connecticut Defense	U.S. Defense		Cal. Year CT GSP	3-year Average	СТ
Federal	Contract	Contract		Current	CT	Awards
Fiscal	Awards	Awards	CT as %	Dollars	Awards	as % of
<u>Year</u>	(\$ Millions)	(\$ Millions)	of U.S.	(\$ Millions)	(\$ Millions)	CT GSP
2003	8,066	195,899	4.1	173,915	5,983	3.4
2004	8,835	205,844	4.3	187,545	7,505	4.0
2005	8,964	239,280	3.7	196,307	8,621	4.4
2006	7,665	262,098	2.9	209,487	8,488	4.1
2007	8,599	298,980	2.9	221,133	8,409	3.8
2008	12,226	354,818	3.4	219,449	9,496	4.3
2009	11,834	330,660	3.6	217,103	10,886	5.0
2010	11,118	322,813	3.4	221,767	11,726	5.3
2011	12,317	329,384	3.7	225,409	11,756	5.2
2012	12,679	317,745	4.0	229,317	12,038	5.2

Coefficient of

Variation 0.193 0.197

Source: U.S. Department of Defense, Department of Commerce, Federal Procurement Data System

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

- 1. The CH-53K Heavy Lift Helicopter
- 2. The UH-60 Utility Helicopter (Blackhawk)
- 3. The S-70i Black Hawk Helicopter
- 4. The MH-60R Helicopter (Seahawk)
- 5. The MH-60S Helicopter (Seahawk)
- 6. The C-17 Globemaster Aircraft
- 7. The F-15 Aircraft
- 8. The F-16 Aircraft
- 9. The F-22 RaptorAircraft
- 10. The F-35 Joint Strike Fighter (JSF) Aircraft
- 11. The H-92 Superhawk
- 12. The S-70B Seahawk
- 13. The SA-38B Surveillance Aircraft
- 14. The SA2-37B Reconnaissance Aircraft
- 15. The Virginia Class Submarine

TABLE 48 COMPARISON OF STATE PRIME CONTRACT AWARDS Federal Fiscal Year 2012

			\$ 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>
Virginia	37,858,566	2	4,638	1	Florida	11,795,926	9	612	26
Connecticut	12,679,098	<u>7</u>	<u>3,532</u>	<u>2</u>	Oklahoma	2,305,729	29	606	27
Alaska	2,022,585	30	2,773	3	Illinois	7,668,426	13	596	28
Maryland	13,334,299	4	2,270	4	Rhode Island	617,753	42	588	29
Missouri	13,044,672	5	2,168	5	Kansas	1,630,047	34	566	30
Arizona	12,943,208	6	1,984	6	Georgia	5,585,688	18	565	31
Mississippi	5,748,966	17	1,927	7	South Dakota	427,118	44	514	32
Alabama	9,092,679	11	1,888	8	Ohio	5,520,656	20	478	33
Hawaii	2,548,689	26	1,836	9	Indiana	2,860,035	24	438	34
Massachusetts	11,298,599	10	1,702	10	Vermont	271,791	47	434	35
Kentucky	5,960,033	16	1,362	11	Wisconsin	2,408,650	28	421	36
Colorado	6,800,526	15	1,316	12	Nebraska	755,517	41	408	37
Washington	8,989,986	12	1,307	13	Michigan	3,970,535	21	402	38
New Hampshire	1,658,656	32	1,257	14	Iowa	1,188,334	38	387	39
Texas	32,421,858	3	1,250	15	New York	7,483,220	14	383	40
Maine	1,631,476	33	1,227	16	North Carolina	3,393,452	23	349	41
California	40,039,069	1	1,055	17	Minnesota	1,627,718	35	303	42
Pennsylvania	12,153,642	8	952	18	Delaware	274,215	46	300	43
Utah	2,454,300	27	863	19	Wyoming	165,370	50	288	44
South Carolina	3,404,838	22	723	20	Montana	268,648	48	268	45
New Mexico	1,483,040	37	712	21	Arkansas	780,364	40	265	46
Nevada	1,885,961	31	687	22	Tennessee	1,539,055	36	239	47
North Dakota	450,938	43	649	23	Oregon	907,585	39	233	48
New Jersey	5,520,859	19	623	24	West Virginia	350,743	45	189	49
Louisiana	2,841,970	25	619	25	Idaho	172,388	49	108	50
U.S. Total	6317,745,468		1,016						

Source: Federal Procurement Data System (FPDS.gov), Bureau of the Census

### **Retail Trade in Connecticut**

Consumer spending on goods and services, ranging from pencils to refrigerators to haircuts to electricity, accounted for approximately 70% of the gross domestic product (GDP) in fiscal 2013. 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 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 North American Industry Classification System (NAICS) codes for retail trade are from NAICS 44 to NAICS 45. In general, retail establishments are classified in these codes according to the principal lines of commodities sold (apparel, groceries, etc.) or the usual trade designation (liquor store, drug store, etc.).

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 whereas they perform poorly during a recession. Connecticut retail trade in fiscal 2013 totaled \$53.4 billion, a 0.3% increase over fiscal year 2012 and the third straight year of increased total trade.

TABLE 49
RETAIL TRADE IN CONNECTICUT
(In Millions)

		FY	% of	FY	% of	%
<b>NAICS</b>	<u>Industry</u>	<u>2012</u>	<u>Total</u>	<u>2013</u>	<u>Total</u>	<u>Change</u>
441	Motor Vehicle and Parts Dealers	\$7,996	15.0%	\$8,393	15.7%	5.0%
442	Furniture and Home Furnishings	1,182	2.2%	1,205	2.3%	1.9%
	Stores					
443	Electronics and Appliance Stores	1,748	3.3%	1,620	3.0%	(7.3)%
444	Building Material and Garden	3,023	5.7%	3,028	5.7%	0.2%
445	Food and Beverage Stores	10,799	20.3%	11,102	20.8%	2.8%
446	Health and Personal Care Stores	4,667	8.8%	4,413	8.3%	(5.4)%
447	Gasoline Stations	3,788	7.1%	3,790	7.1%	0.1%
448	Clothing and Clothing Accessories	2,827	5.3%	2,920	5.5%	3.3%
	Stores					
451	Sporting Goods, Hobby, Book and	979	1.8%	1,071	2.0%	9.4%
	Music Stores					
452	General Merchandise Stores	5,376	10.1%	5,439	10.2%	1.2%
453	Miscellaneous Store Retailers	5,016	9.4%	5,163	9.7%	2.9%
454	Nonstore Retailers	<u>5,809</u>	<u>10.9%</u>	5,213	9.8%	(10.3)%
	Total	\$53,209	100.0%	\$53,355	100.0%	0.3%
Durables	s (NAICS 441,442, 443, 444)	\$13,948	26.2%	\$14,244	26.7%	2.1%
	ables (All Other NAICS)	\$39,260	73.8%	\$39,111	73.3%	(0.4)%
	,	-		-		` /

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 presumably last three years or more and include items such as automobiles, furniture, and appliances. Nondurable goods have a shorter life span and include items such as food, gas, apparel, and other miscellaneous products. Durable goods are normally big-ticket items that are sensitive to interest rates and the overall economic climate. Purchases of durable goods increase when interest rates decrease or consumers' income grows and consumer confidence increases. This was the case in fiscal 2013 when durable goods sales grew by 2.1%.

Sales of durable goods experience greater fluctuations during changing economic conditions. Growth in sales at retail stores that concentrate on durable goods tends to increase faster than the growth in gross state product during expansionary years and experience greater declines during recessionary years. Sales of nondurable goods are typically less volatile as most items are deemed "necessities" and relatively inelastic regardless of price variations. Necessities include such items as food, footwear, clothing, gasoline, and drugs. The previous table shows that Connecticut sales of nondurable goods fell by 0.4% in fiscal 2013.

In addition to the traditional transactions occurring in Connecticut-based "bricks and mortar" establishments, a significant amount of retail activity is also taking place within and beyond the state's borders through mail and on-line order sales.

U.S. Supreme Court rulings forbid states from forcing retailers to collect sales tax unless the seller has a physical presence in the state where the purchase is made (nexus). As retail sales via the internet grew rapidly, the U.S. Department of Commerce started estimating e-commerce quarterly transactions in late 1999. In fiscal 2013, national retail e-commerce sales are estimated at \$243.0 billion, accounting for 5.5% of total retail sales of \$4,437.6 billion. Retail transactions through the internet in general have increased much faster than traditional brick and mortar sales. Estimated e-commerce retail sales rose by 16.9% in fiscal 2013 compared to a 4.5% increase for traditional retail sales. The estimate of e-commerce sales does not include travel agencies, financial services, manufacturers, and wholesalers.

Connecticut has seen an erosion of its tax base due to the internet sales trend. In a study conducted by the University of Tennessee's Center for Business and Economic Research in April 2009, it was estimated that in 2012, Connecticut would lose approximately \$67.3 million in state revenue due to e-commerce. Although the Office of Policy and Management believes that the revenue loss is significant, the exact amount is difficult to determine as more traditional "bricks and mortar" retailers with nexus in Connecticut establish internet sales channels and collect the state sales tax. The issue is compounded by the fact that in those instances where an internet retailer does not collect the tax, voluntary compliance by most residents to pay the use tax on such transactions has been low.

Currently, state and local governments as well as the private sector have undertaken a joint effort referred to as the Streamlined Sales Tax Project (SSTP). The project's aim is to fundamentally restructure the national sales tax system by creating a uniform taxable base, thereby simplifying tax administration among the states. The Streamlined Sales and Use Tax Agreement went into effect in October of 2005. As of December 2013, 24 of the 44 states who have authorized participation in SSTP have enacted legislation to fully comply with the agreement to become full-member states, including New Jersey, Rhode Island, and Vermont.

Connecticut is currently one of the 44 states referred to as a participant state, as it has not enacted legislation to modify its sales tax.

For years, the world's largest internet retailer, Amazon, has resisted state efforts to require the collection of sales taxes on its sales. As more and more states pass legislation that indirectly circumvents current restrictions, Amazon has now joined the effort to work toward a national standard on taxing online sales. In addition, Amazon's desire to shorten delivery time has necessitated additional warehouse facilities in closer proximity to customers, thereby creating nexus in more jurisdictions. On November 1, 2013, Amazon began collecting sales tax in Connecticut, after it reached an agreement with the state that involved constructing a fifty million dollar distribution center in Windsor.

Retail trade as a percentage of disposable income in Connecticut decreased to 27.9% in fiscal 2013, from 30.0% in FY 2012. The decrease reflects lower growth in the demand for goods, and to a lesser extent for services than disposable income. The state's per capita disposable income of \$49,551 in FY 2013 was 26.5% above the national average of \$39,169. In FY 2013, Connecticut per capita retail trade was estimated at \$14,862. With the highest per capita disposable income in the nation, continued long-term growth in retail sales is expected. In general, wealthier people tend to purchase more expensive cars and replace them more frequently. The same may be applicable for other durable goods such as computer equipment, appliances and furniture. Additional factors that affect the level of expenditures include tax burden, consumer confidence, economic climate as well as the condition of a household's balance sheet.

According to the 2007 economic census on retail sales, a survey that is done once every five years by the U.S. Department of Commerce, Connecticut had \$52.2 billion of retail sales, up from \$42.0 billion in 2002. Retail sales varied among the state's eight counties with most sales concentrated in Fairfield, Hartford, and New Haven. These three counties accounted for 79.2% of total sales, with the remaining 20.8% spread among the other five counties. The following two tables provide detail on retail sales activity by county. Growth in sales also varied among counties. Between 2002 and 2007, Hartford increased the fastest at 35.2%, followed by Tolland at 34.9%, compared to a less than 20% growth for Fairfield and Litchfield.

Although the retail trade sector is one of the major sources of jobs in the Connecticut economy, the number of establishments has declined. In 2007, the sector had 13,807 establishments down from 13,861 in 2002.

TABLE 50
RETAIL SALES IN CONNECTICUT BY COUNTY

				Per						
		%	Number	Employee	Employees	Number	Annual	%		
	Sales	Of	of	Sales	Per	of	Payroll	of		
	<u>(\$M)</u>	<u>Total</u>	<u>Employees</u>	(\$ 000's)	Establish.	Establish.	<u>(\$M)</u>	<u>Total</u>		
A. <u>2002 Econo</u>	omic Cens	<u>us</u>								
Fairfield	13,931.1	33.2%	54,834	254.1	14.1	3,876	1,524.3	33.6%		
Hartford	10,220.4	24.4%	50,872	200.9	15.2	3,347	1,101.7	24.3%		
Litchfield	2,090.3	5.0%	8,830	236.7	11.3	784	212.8	4.7%		
Middlesex	1,607.9	3.8%	8,346	192.7	11.2	743	187.2	4.1%		
New Haven	9,268.4	22.1%	44,627	207.7	13.9	3,218	985.8	21.8%		
New London	3,011.9	7.2%	14,752	204.2	13.2	1,119	319.4	7.0%		
Tolland	894.3	2.1%	4,522	197.8	11.7	387	98.1	2.2%		
Windham	<u>928.4</u>	2.2%	<u>5,024</u>	<u>184.8</u>	<u>13.0</u>	<u>387</u>	<u>101.8</u>	2.2%		
Total	41,952.7	100.0%	191,807	218.7	13.8	13,861	4,531.1	100.0%		
B. <u>2007 Econo</u>	B. <u>2007 Economic Census</u>									
Fairfield	15,702.2	30.1%	53,738	292.2	14.3	3,770	1,648.8	32.0%		
Hartford	13,820.7	26.5%	53,241	259.6	15.6	3,423	1,310.7	25.4%		
Litchfield	2,458.2	4.7%	9,059	271.4	11.5	788	239.8	4.6%		
Middlesex	2,129.2	4.1%	8,300	256.5	11.1	749	209.9	4.1%		
New Haven	11,785.3	22.6%	46,058	255.9	14.5	3,172	1,112.5	21.6%		
New London	3,883.0	7.4%	15,660	248.0	13.9	1,123	390.4	7.6%		
Tolland	1,206.3	2.3%	5,207	231.7	12.8	406	126.3	2.4%		
Windham	<u>1,180.6</u>	2.3%	<u>4,870</u>	<u>242.4</u>	<u>13.0</u>	<u>376</u>	<u>122.0</u>	2.3%		
Total	52,165.5	100.0%	196,133	266.0	14.2	13,807	5,160.4	100.0%		
C. Growth (%	) from 200	)2 to 200	) <u>7</u>							
Fairfield	12.7		(2.0)	15.0	1.4	(2.7)	8.2			
Hartford	35.2		4.7	29.2	2.6	2.3	19.0			
Litchfield	17.6		2.6	14.7	1.8	0.5	12.7			
Middlesex	32.4		(0.6)	33.1	(0.9)	0.8	12.7			
New Haven	27.2		3.2	23.2	4.3	(1.4)	12.1			
New London	28.9		6.2	21.4	5.3	0.4	22.2			
Tolland	34.9		15.1	17.1	9.4	4.9	28.7			
Windham	27.2		(3.1)	31.2	0.0	(2.8)	19.8			
Total	24.3		2.3	21.6	2.9	(0.4)	13.9			

Source: U.S. Department of Commerce, 2007 Economic Census

The following table compares retail sales with personal income growth and changes in population. Slower sales growth in Fairfield reflected negative growth in population and number of establishments while the healthy sales growth in Tolland reflected the 4.9% increase in the number of establishments as well as an above average increase in personal income and population.

TABLE 51
RETAIL SALES, INCOME AND POPULATION BY COUNTY

	Retail Sales	Pers	Personal Income (\$B)		Pop	Population (000's)		
	% Change			% Change	_	% Ch		
	'02 to '07	<u>2002</u>	<u>2007</u>	'02 to '07	<u>2002</u>	<u>2007</u>	'02 to '07	
Fairfield	12.7%	53.43	70.75	32.4%	890.6	889.1	(0.2%)	
Hartford	35.2%	34.15	44.25	29.6%	864.5	874.1	1.1%	
Litchfield	17.6%	7.29	9.41	29.1%	185.7	188.5	1.5%	
Middlesex	32.4%	6.32	8.43	33.3%	159.2	164.0	3.0%	
New Haven	27.2%	30.56	38.55	26.2%	832.4	843.6	1.4%	
New London	28.9%	9.52	12.06	26.7%	263.1	264.5	0.5%	
Tolland	34.9%	4.93	6.52	32.3%	142.0	148.2	4.4%	
Windham	27.2%	3.27	4.10	25.2%	111.0	116.7	5.1%	
Connecticut	24.3%	149.47	194.07	29.8%	3,448.4	3,488.6	1.2%	

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

#### **Small Business in Connecticut**

Small businesses in the nation, as well as in Connecticut, play an important role in overall economic activity. Small businesses are often cited as major labor generators, important job providers, and the primary technological innovators. Studies have shown that small businesses contributed the majority of the scientific and technological advances and developments in the twentieth century. They tend to be externally efficient which leads to the creation of new products, new jobs, and new processes. On the other hand, large business firms tend to be internally efficient, which leads to substituting capital for labor and focusing on cutting operational costs. In addition, small businesses help develop the free enterprise system, deterring monopoly formation by providing competition. With greater innovation and product differentiation occurring within small businesses, large firms are forced to improve productivity in order to respond to marketplace competition, thereby increasing society's social well-being and standard of living.

Structurally, small businesses tend mostly to be sole proprietorships and partnerships, and, to a lesser extent, corporations. These organizations range from "mom and pop" stores to high-tech instrument laboratories. The definition of a small business, however, varies, and may even change over time.

Theoretically, a small business firm is one that does not benefit from an economy of scale available to large firms. The U.S. Small Business Administration (SBA), in determining eligibility for loans and assistance, takes into account whether the entity concerned is dominant in its market. Other criteria include the amount of annual receipts and number of employees, which may vary by industry. The definition of small business varies from state to state based on comparative size in the regional economy, industrial structure, and policy emphasis.

According to Connecticut General Statutes, Chapter 588r, a small business is a firm with an employee size of 500 or less. It includes employees in any subsidiary or affiliate of a

corporation, partnership, or sole proprietorship, operating for profit. For entities focused on special innovative research programs, the size of a small business is based upon federal guidelines.

According to the classification of the U.S. Department of Commerce, businesses can be broken down into several groups by employment size. Since the definition for small business is not generally agreed upon, the Department of Commerce, simply lists all employment classes for comparison rather than identifying them by specific size.

In 2010, the latest year for which complete, consistent and comparable data is available, among the total 89,234 establishments employing 1,436,992 persons in Connecticut, small businesses with fewer than 100 employees accounted for 79.5% of total establishments and 35.1% of the total labor force.

The table on the following page shows the breakdown of employment for manufacturing and non-manufacturing sectors and the distribution statistics for establishments and employment by business size in Connecticut. This table demonstrates that while small businesses constitute a major part of the state's employment, they have been decreasing in size as a part of the total economy, especially between 2005 and 2010.

The table also shows that, similarly to 2005, small business firms play as important of a role in the manufacturing sector as the nonmanufacturing sector. In 2010, manufacturing businesses with less than 500 employees accounted for 50.3% of manufacturing employment, compared to 50.6% in 2005. In the nonmanufacturing sector, small business firms accounted for 49.6% of all employment in that sector, down slightly from 50.5% in 2005. Cumulatively, small businesses accounted for 49.7% of total employment in 2010, though 84.3% of business establishments were firms of less than 500 employees.

Between 2000 and 2010, the two recessions that occurred during the decade had a very noticeable impact on both small businesses and total employment in Connecticut. In 2010, total employment in the state was down 7.1% from 2000, but small businesses were hit especially hard, particularly in the manufacturing sector. From 2000-2010, the number of firms with less than 500 employees in the manufacturing sector decreased by 28.3%, compared to a decrease of 4.8% in the nonmanufacturing sector. Overall, small business employment decreased 8% from 2000 to 2010.

**TABLE 52** SMALL BUSINESS EMPLOYMENT IN CONNECTICUT (Size of Employment in Thousands)

Calendar Year	1 to 4	5 to 9	10 to 19	20 to 99	100 to 499	<u>500&amp;up</u>	<u>Total</u>	
A. Employment			Manu	facturing E	<u>mployment</u>			
2000	3.5	6.1	12.1	44.3	40.8	125.9	232.8	
2005	3.3	5.9	10.5	39.5	34.6	91.5	185.3	
2010	3.1	5.1	8.8	31.5	28.2	75.9	152.6	
(# Change, 00-10)	-0.4	-1.0	-3.3	-12.8	-12.6	-50.0	-80.2	
(% Growth, 00-10)	<i>-</i> 11.4%	-16.4%	-27.3%	-28.9%	-30.9%	-39.7%	-34.5%	
(% Growth, 00-05)	-5.7%	-3.3%	-13.2%	-10.8%	-15.2%	-27.3%	-20.4%	
(% Growth, 05-10)	-6.1%	-13.6%	-16.2%	-20.3%	-18.5%	-17.0%	-17.6%	
			Nonmar	nufacturing	<b>Employment</b>			
2000	72.9	85.5	101.0	227.2	181.2	644.8	1,313.5	
2005	72.6	85.2	101.9	230.6	189.2	665.1	1,344.6	
2010	68.7	78.1	97.9	210.8	181.4	647.5	1,284.4	
(# Change, 00-10)	-4.2	-7.4	-3.1	-16.4	0.2	2.7	-29.1	
(% Growth, 00-10)	-5.8%	-8.7%	-3.1%	<i>-</i> 7.2%	0.1%	0.4%	-2.2%	
(% Growth, 00-05)	-0.4%	-0.4%	0.9%	1.5%	4.4%	3.1%	2.4%	
(% Growth, 05-10)	-5.4%	-8.3%	-3.9%	-8.6%	-4.1%	-2.6%	<i>-</i> 4.5%	
	<u>Total Employment</u>							
2000	76.4	91.6	114.1	271.4	222.0	770.6	1,546.3	
2005	75.9	91.1	112.4	270.1	223.9	756.6	1,529.8	
2010	71.9	83.2	106.8	242.3	209.5	723.4	1,437.0	
(# Change, 00-10)	-4.5	-8.4	-7.3	-29.1	-12.5	-47.2	-109.3	
(% Growth, 00-10)	-5.9%	-9.2%	-6.4%	-10.7%	-5.6%	-6.1%	<i>-</i> 7.1%	
(% Growth, 00-05)	-0.7%	-0.5%	<i>-</i> 1.5%	-0.5%	0.9%	-1.8%	<i>-</i> 1.1%	
(% Growth, 05-10)	-5.3%	-8.7%	-5.0%	-10.3%	-6.4%	-4.4%	-6.1%	
B. Total Establishmer	nts							
2010	41.6	12.8	8.4	8.1	4.3	14	89.2	
C. Distribution of Est	ablishmen	ıts & Emp	loyment, 2	010				
Establishments	46.6%	14.3%	9.4%	9.1%	4.8%	15.7%	100.0%	
Cumulative	46.6%	61.0%	70.4%	79.5%	84.3%	100.0%		
<b>Total Employment</b>	5.0%	5.8%	7.4%	16.9%	14.6%	50.3%	100.0%	
Cumulative	5.0%	10.8%	18.2%	35.1%	49.7%	100.0%		
Nonmfg Employ.	5.3%	6.1%	7.6%	16.4%	14.1%	50.4%	100.0%	
Cumulative	5.3%	11.4%	19.1%	35.5%	49.6%	100.0%		
Note: Totals may not a				22.0,0				
-	the Comme							

Source: U.S. Bureau of the Census

Small businesses are constantly facing operational difficulties and at the same time confronting competition from larger firms. To ensure constant growth for the economy, it is imperative that policy makers pay special attention to small businesses. Recognizing that small business is an important engine of economic growth, the State has aggressively created and provided a wide range of programs and services aimed to help expand or set-up new businesses. The Connecticut Department of Economic and Community Development (DECD) has partnered with the Connecticut Economic Resource Center, Inc. to provide programs such as counseling, training, financing, technical assistance, and trade information to assist this important sector.

For more information, please write or contact the following:

Connecticut Economic Resource Center, Inc. 805 Brook Street, Building 4
Rocky Hill, CT 06067
<a href="http://cerc.com/">http://cerc.com/</a>
1-860-571-7136
1-800-392-2122
Fax: 1-860-571-7150

Connecticut Department of Economic and Community Development
Research Division
505 Hudson Street
Hartford, CT 06106
<a href="http://www.ct.gov/ecd/">http://www.ct.gov/ecd/</a>
1-860-270-8000

#### **Nonfinancial Debt**

For many years, national attention has been centered 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. As required by the Full Employment and Balanced Growth Act of 1978, DNFD is compiled quarterly by the Federal Reserve System.

The following table shows the 23-year history from 1990 to 2012 for total DNFD and each of its components. In 2012, the year-end total domestic nonfinancial debt outstanding was \$40,279.9 billion, approximately 2.5 times GDP.

Hovering at a 9% growth rate from 2003 through 2007, total non-financial debt slowed to a growth of 3.1% in 2009, 4.1% in 2010, and 3.6% in 2011 due to the financial crisis that hit the U.S. economy in mid 2008. Total non-financial debt between 2000 and 2012 has grown 121.7%, outpacing the growth in GDP of 53.4%. Among the four components listed on the table below, federal indebtedness grew the fastest at 242.5% while household debts grew the slowest at 85.8%. Business debts continued to grow steadily at 92.9% and local government increased significantly by 148.8%. Prior to 1990, household borrowing trailed that of businesses; however, faster growth since 1991 in home mortgages and consumer credit

coupled with a steady increase in income helped catapult household borrowing to the top. Nonetheless, a number of large federal fiscal stimulus programs starting in 2008 including tax rebate checks, the American Recovery & Reinvestment Act (ARRA), and job creation resulted in three consecutive years of more than \$1.2 trillion a year of federal borrowing. This represented more than 20% of the annual growth, yielding a public sector increase of 218.0% over the past twelve years versus 89.3% for the private sector. Of the total \$40.28 trillion nonfinancial debt outstanding, households accounted for 32.2%, followed by nonfinancial business at 31.6%, the federal government at 28.8%, and state and local governments at 7.4%. Debt outstanding in the private sector accounted for 63.8% of the total in 2012, down from 74.8% in 2000.

TABLE 53
DOMESTIC NON-FINANCIAL DEBT (DNFD) OUTSTANDING BY SECTOR IN THE U.S.
In Billions of Dollars at Yearend

				2012	Gro	owth
				% of	(1990	(2000
	<u>1990</u>	<u>2000</u>	<u>2012</u>	<u>Total</u>	to 2000)	to 2012)
1. Private Sector						
a. Households						
Home Mortgages	\$2,488.8	\$4,798.4	\$9,436.3	23.4%	92.8%	96.7%
Consumer Credit	824.4	1,741.3	2,924.3	7.3%	111.2%	67.9%
Other	<u>267.7</u>	<u>447.6</u>	<u>619.1</u>	1.5%	67.2%	38.3%
Sub-Total	\$3,580.9	\$6,987.3	\$12,979.7	32.2%	95.1%	85.8%
b. Business						
Mortgages	\$1,205.5	\$1,586.8	\$3,391.3	8.4%	31.6%	113.7%
Corporate Bonds	1,250.0	2,107.1	5,795.2	14.4%	68.6%	175.0%
Other	1,554.8	<u>2,901.9</u>	<u>3,540.0</u>	8.8%	86.6%	22.0%
Sub-Total	\$3,768.5	\$6,595.8	\$12,726.5	31.6%	75.0%	92.9%
Sub-Total - Private Sector	\$7,349.4	\$13,583.1	\$25,706.2	63.8%	84.8%	89.3%
2. Public Sector						
c. Federal Government	\$2,498.1	\$3,385.1	\$11,593.7	28.8%	35.5%	242.5%
d. State & Local Gov't	9,487.4	1,197.9	2,980.0	7.4%	21.3%	148.8%
Sub-Total - Public Sector	\$3,485.6	\$4,583.0	\$14,573.7	36.2%	31.5%	218.0%
Total DNFD	\$10,834.9	\$18,166.1	\$40,279.9	100.0%	67.7%	121.7%
GDP, 4th Quarter DNFD as a % of GDP	\$ 5,846.0 185.3	\$10,129.8 179.3	\$15,539.6 259.2		73.3%	53.4%

Source: Board of Governors of the Federal Reserve System

U.S. Department of Commerce

The DNFD-to-GDP ratio stood at 259.2% in 2012, up from 179.3% in 2000, implying a faster growth in nonfinancial debt than GDP in the past decade. The DNFD-to-GDP ratio gained speed in the late 1980s as a result of a combination of nearly double-digit increases in federal

borrowings and the deregulation of the financial markets. During the 1980s, non-bank financial institutions funneled funds more freely between the suppliers of capital and consumers, creating a more competitive and efficient market. The ratio declined in the 1990s as federal debt fell and the growth in borrowings by state and local governments slowed, which was also accompanied by more robust GDP growth. However, during the 2000s the ratio rebounded rapidly, resulting from an accommodative fiscal and monetary policy, less stringent financing standards on mortgages, and an economic recovery that stimulated borrowing and higher spending levels in both the household and business sectors.

## **Household Borrowing**

Household borrowing, which includes home mortgages, consumer credit, and other miscellaneous items, totaled \$12.98 trillion by the end of 2012. Long run growth in household borrowing experienced a faster upward trend than the other three categories, accelerating at a double digit pace for five consecutive years during the housing boom between 2002 and 2006. Total household borrowing has declined in the past four consecutive years. Starting in 2009 household borrowing declined to a -1.7% growth rate and continued to decline to -2.2% in 2010, -1.6% in 2011, and -1.0% in 2012 when housing, as well as the consumer credit market, experienced one of the worst financial environments since the end of WWII. This decline has been fueled by the impact of the Great Recession, which has encouraged consumers to refrain from spending, pay off debt and increase savings to strengthen their balance sheets. The ratio of consumer borrowing to GDP rose to 83.5% in late 2012, up from 69.0% in 2001.

Faster growth in household borrowing was due fundamentally to the low personal savings rate, leaving borrowing as the only available avenue for households. In the first half of the 1990s, growth in household borrowings averaged only 6.3% per year as sluggish income growth, the depressed value of real estate, and increased health insurance and educational costs made consumers more cautious. In the second half of the 1990s, average household borrowings climbed to 7.5% per year as a result of the continued healthy growth in income from wages, capital gains, and an appreciation in home values. During the last economic recovery between 2002 and 2006, growth in borrowing averaged 11.0% per year as a buildup of wealth generated by increases in income, an appreciation in real estate, favorably low interest rates, and loosened credit standards fueled a borrowing and spending surge. The U.S. savings rate, defined as personal saving as a percentage of disposable income, averaged only 2.7% between 2000 and 2007, dropping from an average of 5.4% in the 1990s, 8.5% in the 1980s, and 9.6% in the 1970s. The U.S. savings rate deteriorated to a low of 1.8% in mid 2007, before rising to 6.2% in mid-2009, and has since stayed near 4.0%. Concerned about job losses and beaten-down home equity, households are saving more while paying down debt, boosting the savings rate. These measures have led to slow growth in personal consumption and economic growth. A 1% increase in the savings rate is equivalent to a spending decrease of approximately \$115 billion for the nation's economy, which equates to 0.9% of GDP. In Connecticut, a 1% increase in the savings rate would decrease spending by \$2.0 billion.

Net household asset levels, which include home and financial equities, also affected household borrowing. Net home equity (value of homes less mortgage liabilities) grew in importance to the economy, increasing 77% from its low in 1999 to its peak in early 2006. From 2006 to the end of 2010, net home equity decreased by 53%. As of the third quarter of 2013, this figure had rebounded by 36%. The share of net home equity of total family net

assets has played an important role on borrowing. Research shows that rising home prices have a bigger influence on credit creation and spending than that of rising equity prices. Home value appreciation is perceived as more permanent and consistent with a higher propensity to consume by the public relative to gains in the stock market that are volatile and ephemeral in nature. Unlike capital gains on stocks, benefits realized through mortgage refinancing due to the appreciation of homes or lower mortgage rates can be cashed out without tax liability. Refinancing frees up more money for spending, paying off old debts or investments in a second home. The Tax Payer Relief Act of 1997 also allows a tax exemption of up to \$500,000 of gain for joint filers or \$250,000 for single filers.

Among total household borrowing of \$12.98 trillion in 2012, home mortgage loans accounted for \$9.44 trillion, or 72.7% of household borrowing, followed by consumer credit at \$2.92 trillion, or 22.8%, with the remainder in other miscellaneous items. After six consecutive years of double-digit expansion, growth in home mortgages slowed in 2007 and started to decline in late 2008 as a correction related to sub-prime and Alt-A mortgages engulfed consumers. As plunging housing prices were coupled with reset provisions on certain mortgages and a slowdown in the economy, delinquency rates on all residential real estate loans increased, from 6.63% in 2008 to 10.42% in 2009, again to 10.14% by 2010, and stagnating at 10.21% as of 2011. In 2012, this figure fell to 10.04%. Although the volume of resets on exotic mortgages peaked between mid-2007 and mid-2008, a backlog of unsold units and rising foreclosures continued to build up the inventory pipeline. Responding to rising risks, lenders tightened their already restrictive lending policies. A series of financial crises such as the collapse of Lehman Brothers Financial Co., the nationalization of Fannie Mae and Freddie Mac along with trouble at other financial companies nearly froze the credit market. At the same time, the economy began bearing the brunt of significant job losses. Even the federal government's Troubled Asset Relief Program (TARP) and other stabilizing plans were not quick enough to stem the financial disaster. The number of failed banks increased and the FDIC's Deposit Insurance Fund was battered.

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). It totaled \$2.9 trillion in late 2012, with non-revolving credit accounting for approximately 71.0% of the total consumer credit. 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 or by telephone. Total consumer credit outstanding in late 2012 increased by 6.1%, with revolving credit increasing by 0.4%. Delinquency rates on credit card loans have improved to 2.7% in late 2012 from 3.3% in late 2011. Research shows that the age group being hit harder during this past recession, when available home equity was slim and unemployment was high, was debtors who are age 55 or older. More than two-thirds of the individuals in this group who filed bankruptcy blamed excessive credit card debts.

#### **Business Borrowing**

Business borrowings include debts owed by corporations, nonfarm corporations and farms. Total borrowings were \$12.73 trillion at the end of 2012. 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. Business

borrowings rose in 2012, with corporate bonds increasing by 14.2%, mortgages 1.9%, and other categories 5.2%. The Federal Reserve's near-zero interest rates and quantitative easing policy pushed the cost of debt to a favorably low level. Taking advantage of this opportunity of low interest rates, businesses replaced short term debt by extending debt maturities, bought back equity, and hoarded cash. Cash balances as a percentage of total assets on non-financial corporate balance sheets accounted for 6.2% in late 2011, a drop from 7.4% in 2010. Earnings and profit conditions continued to improve both in the financial and non-financial sectors in late 2010, and the recession ended in December 2009, as businesses began to invest once again. Investment in equipment and software improved for the first time since 2006 increasing by 14.0% from the prior year. Inventories to sales ratios continued their downward trend in nearly all sectors, including wholesalers and retailers. The inventories to sales ratio for manufacturing decreased from a ratio of 1.28 in 2012 to 1.26 in 2013, though the total inventories to sales ratio increased slightly from 1.28 in 2012 to 1.29 in 2013. Declines in inventory to sale ratios signal cost cutting measures which can lead to reductions in employment.

## **Government Borrowing**

The U.S. federal budget has long been operating under deficits. The federal deficit 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.

After registering deficits in most of the 1990s the federal budget on unified basis, which includes all operating and trust funds such as Social Security and Medicare programs, turned to a surplus in 1998 and reached a high of \$254.8 billion in federal fiscal year (FFY) 2000. According to the Congressional Budget Office, federal operations turned red again in FFY 2002 and continued to deteriorate with a deficit of \$1,294.2 in FFY 2010 and \$1,296.8 in FFY 2011. The deficit decreased slightly to \$1,148.9 in FFY 2012. The deficit dropped dramatically in FFY 2013 to an estimated \$680 billion. The \$700 billion financial bailout known as the Troubled Asset Relief Program (TARP), and the \$787 billion economic stimulus program, per the American Recovery and Reinvestment Act (ARRA), along with increases in Medicare, Medicaid, unemployment insurance, Social Security, and defense, boosted federal spending for FFY 2009, FFY 2010 and FFY 2011. At the same time, tax receipts declined due to the effects of the recession and tax cuts from the ARRA program. The federal government in FFY 2012 spent an estimated \$1.44 for every dollar it took in, a decrease from \$1.64 in FFY 2011. As the federal operating budget continued to post a deficit, the national debt also increased. Interest payments were the fourth largest single budgeted disbursement category, after defense, Social Security, and Medicare. By the end of FFY 2012, gross debt outstanding registered \$16.1 trillion, up 8.6% from FFY 2011, following increases of 9.0% and 13.9% in the previous two years. The federal budget deficit in the U.S. in 2013 is estimated at -4.0% of its GDP, according to *The Economist*, compared to -8.3% in Japan, -7.2% in Great Britain, -2.7% in Canada, -4.1% in France, and 0.1% in Germany. The U.S.'s deficit of 11.9% of GDP in FFY 2009 was a record high since WWII, declining to -8.0% in FFY2010. Research shows that a continued deficit of 4% of GDP and higher may hinder economic growth as it may create a risk of inflation, higher interest rates, dissaving, a crowding out of private investments and a devaluation of the dollar.

Of the 2012 total federal gross debt of \$16.1 trillion, \$11.3 trillion, or 70%, was held by the public and \$4.8 billion, or 30%, by intra-governmental agencies. Public holders include individuals, corporations, state or local governments, foreign governments, and other entities outside of the United States while intra-governmental agencies hold federal securities in trust funds, revolving funds, and other special funds. The federal statutes authorize federal agencies such as the Federal Reserve Bank and various trust funds to invest in U.S. Treasury securities. The national debt of \$16.1 trillion in FFY 2012 stood at 102% of GDP.

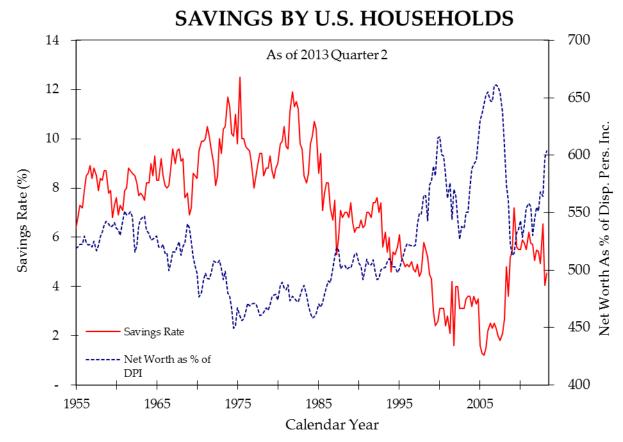
Debt outstanding by state and local government, which includes states, counties, municipalities and other local entities, continued to increase at a faster rate in 2012 due to growing operating budget gaps brought about by a faster increase in expenditures than receipts. Weakness in wage growth, consumer spending, and corporate profits depressed state revenues. Interest payments grew by 4.4% in 2012 to \$120.4 billion, accounting for 5.4% of total current expenditures. Interest and principal payments in the next few years are expected to increase as federal stimulus grants wane and weak economic conditions persist, which have forced state and local governments to borrow in order to bridge the budget gap. The requirement of the balanced budget by all states, except Vermont, may delay the recovery of the national economy.

According to the U.S. Census Bureau's "State Government Finances," state government debt outstanding in Connecticut at the end of fiscal 2011, the latest available year, was \$30.5 billion, compared to \$30.2 billion in 2010 and \$28.4 billion in 2009. Connecticut per capita state government debt was \$8,510 in fiscal 2011, compared to \$8,440 in fiscal 2010 and \$7,970 in fiscal 2009. The fifty state average registered at \$3,636 in fiscal 2011, compared to \$3,727 and \$3,606 in 2010 and 2009, respectively.

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. As of the end of November 2013, Connecticut's General Obligation bonds are rated Aa3 by Moody's with a "stable" credit outlook and AA by Standard & Poor's Corporation and Kroll Bond Ratings with a "stable" credit outlook. Connecticut is rated AA by Fitch Investors Service with a negative outlook. The rating process provides information for investors about risk. High ratings will generally result in lower borrowing costs.

## Savings by U.S. Households

A low personal savings rate has been a concern for some time as it will negatively impact our economy and society. Consumers' imprudent financing of consumption has created an unsustainable level of consumer debt, lowering potential economic growth, and may result in social problems. We have been witnessing a reversal of consumer-financing behavior that has caused a sudden drop in consumption and resulted in economic instability. The lower national savings rate has not generated sufficient funds domestically to support the investment necessary to sustain long-run economic growth. This has created a situation requiring excessive reliance on foreign capital and an unfavorable current account balance.



Source: U.S. Department of Commerce, Bureau of Economic Analysis (BEA), Board of Governors of the Federal Reserve System

The solid line on the above chart shows the national savings rate for U.S. consumers from 1955 through the fourth quarter of 2010. After remaining at an average of 8.7% between 1955 and 1980, the U.S. savings rate had been trending down from a high of 11.9% in late 1981 to a low of 1.2% in mid 2005, before bouncing back to 4.5% in the second quarter of 2013. The average savings rate for the past 5 decades is 6.9%. The savings rate is defined as personal savings divided by disposable personal income. Disposable personal income is defined as total personal income less "personal current taxes," which includes personal tax and certain nontax payments to governments, but excludes sales tax and property tax payments. Personal savings is defined as disposable personal income less consumption expenditures (including consumer durables), interest payments, and net transfer payments to the rest of the world.

The savings rate is often criticized because, by definition, personal income does not include the sale of existing assets. Realization of capital gains or losses from the appreciation or depreciation of assets such as stocks, bonds and antique collections, etc. are excluded in personal income, leading to under-/overvaluation of the income level. The definition of personal consumption outlay includes expenditures that might arguably be considered investments. For example, the purchase of a computer, a consumer durable, for education or training is treated as consumption. Mortgage interest payments also could be considered part of an investment. These expenditures are essentially "hidden savings". In today's economy, education and training, rather than physical capital, are the major inputs for economic growth.

Education expenditures at all levels in the U.S. in 2008 accounted for approximately 5.5% of GDP, compared to 7.7% in Denmark, the highest among major industrialized nations, and 3.4% in Japan, according to data compiled by The World Bank. Critics therefore conclude that our lower national savings rate may be due to an understated personal income with overstated consumption.

The chart also shows how the savings rate is affected by economic conditions by depicting the net worth of consumers as a percentage of disposable personal income. After the mid 1970s, the "wealth effect" took hold as people began to spend more because they had more assets to leverage and finance their consumption. This relative net worth has generally moved inversely with the savings rate. Before 1980, the savings rate was trending upward, with the relative net worth generally decreasing. During this period, before various innovative and creative financing mechanisms were available to the middle class, people generally lived on cash. During hard times, they may have saved less, left existing savings untouched to grow as long as possible, and eventually lived on what they had saved. After the 1970s, when credit cards and home equity loans became available to more households, savings rates decreased but net worth as a percentage of disposable personal income generally increased due to the acceleration in capital gains. During generally good economic times, people believe they are wealthier and spend more, driving the savings rate down. People had been spending more because they had greater assets and the ability to obtain financing secured by these assets. The recent increase in households' saving rates reflects both a reduction in indebtedness and a continuing improvement in their balance sheet.

#### **Household Balance Sheet**

The Federal Reserve Bank's "Flow of Funds Accounts" contains 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 1955, 2000, and 2013, to evaluate the financial position of the nation's households.

#### **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 second quarter of 2013, household assets totaled \$85.6 trillion with real estate comprising 24.7% of total assets; stocks, 42.1%; and the remaining 33.2% in other assets, compared to 26.2%, 19.5%, and 54.2%, respectively, in 1955. This reflects that real estate assets and stock related assets rose in importance over the past 5 decades. Nonetheless, holdings of other assets remain an important share of household assets with corporate bonds continuing to grow at an average rate of 7.8%, compared to an overall growth rate of 3.4%.

TABLE 54
BALANCE SHEET OF HOUSEHOLDS AND NON-PROFIT ORGANIZATIONS
In Billions of Dollars

		1955	% of	2000	% of		% of	Average
	<u>1955</u>	In Real \$*	<u>Total</u>	<u>In Real \$*</u>	<u>Total</u>	<u>2013</u>	<u>Total</u>	Growth**
A. Assets								
1. Real Estate	414.7	3,601.1	25.0%	18,148.3	27.2%	21,123.5	24.7%	3.3%
2. Stock related	308.5	3,732.6	25.9%	27,746.4	41.6%	36,063.0	42.1%	4.3%
3. Other	857.4	7,057.0	49.0%	20,763.9	31.1%	28,459.7	33.2%	2.6%
3a. Time & Saving								
Deposits	105.1			4,084.3	6.1%	7,203.4		3.9%
3b. Corporate Bonds	5.0	43.2	0.3%	889.3	1.3%	2,472.0	2.9%	7.8%
3c. Gov't Securities***	<u>88.0</u>	<u>764.3</u>	<u>5.3%</u>	<u>1,488.4</u>	<u>2.2%</u>	<u>2,839.9</u>	<u>3.3%</u>	<u>2.5%</u>
Total	1,580.6	14,390.7	100.0%	66,658.6	100.0%	85,646.3	100.0%	3.4%
				-		-		
				· ·		· ·		
			-	<u>1,069.3</u>				
Total	143.9	1,252.6	100.0%	9,856.0	100.0%	13,548.4	100.0%	4.5%
C Not Mouth	1 426 7	12 505 6		58 0 <b>22</b> 0		74.820.0		2 20/
	,	•		•		•		
1 2		•		•		•		2.7 /0
								2.0%
3. Tel Capita Net Worth	(Ψ)	01,405.0		200,015.0		230,37 4.0		2.0 /0
D. As a % of Total Assets								
1. Home Mortgages	5.6%			9.7%		10.9%		
2. Liabilities	9.1%			14.8%		15.8%		
3. Net worth	90.9%			88.4%		87.4%		
Deposits 3b. Corporate Bonds 3c. Gov't Securities*** Total  B. Liabilities 1. Home Mortgages 2. Consumer Credit 3. Other Total  C. Net Worth 1. Net Home Equity 2. As a % of Net Worth 3. Per Capita Net Worth Total Assets 1. Home Mortgages 2. Liabilities	88.0 1,580.6 87.8 43.0 13.1 143.9 1,436.7 326.9 22.8% (\$)	<u>764.3</u>	<u>5.3%</u>	1,488.4 66,658.6 6,452.4 2,334.2 1,069.3 9,856.0 58,922.0 11,965.8 19.8% 208,015.0	2.2%	2,839.9 85,646.3 9,344.8 2,966.2 1,237.4 13,548.4 74,820.9 11,778.7 15.7% 236,574.0	<u>3.3%</u>	<u>2.5%</u>

Note:

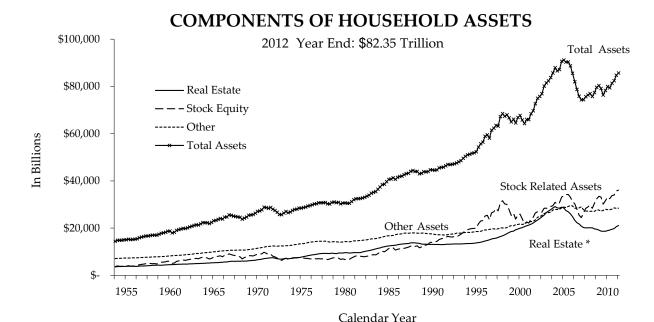
Source: Board of Governors of the Federal Reserve System

The chart below demonstrates that total assets began picking up steam in 1970 as financial vehicles such as home equity loans, credit cards, and before-tax retirement programs became popular. Total real assets reached a peak of \$91.15 trillion in first quarter of 2007 and then declined sharply, reflecting the onset of the Great Recession.

<sup>\*</sup> Real dollar is calculated by using the CPI-U in second quarter of 2013

<sup>\*\*</sup> Compound annual growth rate

<sup>\*\*\*</sup> Includes Treasury and Municipal securities



<sup>\*</sup> Includes non-profit real estate that accounts for 10% of household real estate assets

Stock Related Assets = Corporate equity assets + Mutual Fund Shares + Pension Fund Reserves assets

Other Assets = Bank deposits + Bonds + Money Market Accounts

Source: Board of Governors of the Federal Reserve System

After trailing the other two asset groups, stock related assets overtook them in the early 1990s, then started declining in 1999, and by 2002 had converged with the other two categories. Of the three assets categories, real estate assets and other assets have been generally moving upward, while stock related assets fluctuated wildly. The growth in real estate assets slowed in 2007 and reversed course in 2008 as the housing sector retrenched and equity markets retreated from their recent highs. The massive use of home mortgages and the over-application of mortgage derivatives in the financial markets began to unwind with the rise in home foreclosures and created a world financial debacle in 2007 that worsened into 2008 and 2009.

#### Liabilities

Household liabilities totaled \$13.5 trillion in mid 2013. Home mortgages accounted for 69.0% of the total with consumer credit at 21.9% and other liabilities at 9.1%. This compared to 60.9%, 29.8%, and 9.3%, respectively, in 1955, reflecting a much faster growth in home mortgage borrowings. Since 2002, growth in home mortgages has accelerated and outpaced the other two categories. Supported by extraordinarily favorable mortgage rates and an aggressive mortgage lending strategy, demand for homes and refinancings soared during the middle of the last decade. Consumer credit primarily includes auto loans, personal loans, and credit card balances.

#### **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. Net worth totaled \$74.82 trillion in the middle of 2013. When measured in 2013 dollars, real net worth grew from \$13.60 trillion in 1955 to an all-time high of \$78.4 trillion in the first quarter of 2007 and then declined to \$63.6 trillion in 2009. Per capita real net worth increased from \$81,403 in 1955 to \$236,574 in 2013, with annual growth averaging 2.0%. Per capita real net worth reached its peak of \$261,334 in first quarter of 2007 as value of real estate and stock related equities appreciated. Per capita net worth then declined as recession and deep depreciation in the housing market took its toll. Over the period between 2000 and 2013, per capita real net worth increased 13.7%, from \$208,015 in 2000 to \$236,574 in 2013.

Along with the increase in net worth has come the additional burden of greater liabilities. In 1955 liabilities accounted for 9.1% of total assets, yet by 2013 they had risen to 15.8% of assets. The primary driver of this change was an increase in home mortgage liability. Indeed, the ratio of home mortgages to total assets grew from 5.6% in 1955, to 9.7% in 2000, and further up to 10.9% in 2013. 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 10.98% in 1980, the earliest available data, to 13.06% in 2009. Debt service then declined sharply to 9.89% in 2013 as interest rates fell dramatically due to the onset of the Great Recession and the expansionary monetary policy implemented by the Federal Reserve.

#### PERFORMANCE INDICATORS

This section is devoted to performance trends of various economic indicators for three entities; the United States, the New England region and Connecticut. Statistics are provided indicating the relative economic performance of these entities and showing their strengths and weaknesses.

#### **Gross Product**

Gross National Product (GNP) is defined as the aggregate current market value of final goods and services produced by a nation's citizens and capital, regardless of location, in a given period of time. GNP was generally used as a measure of a nation's economic performance to track the cyclical ups and downs of the economy, but GNP reflects more than domestic activity; products produced by citizens outside territorial borders are included, while products produced by foreign workers and capital located in the nation are excluded. As a result, Gross Domestic Product (GDP) which measures all economic activity within a territory, and is consistent with other economic indicators such as employment and shipments of manufactured goods, has been adopted as a better measure of economic activity within a territory.

Because prices of goods and services change over time, both GNP and GDP may also change, even if there has been no change in physical output. Therefore, to measure changes in real output, they are adjusted by an index of the general price level and expressed in constant dollars. Other things being equal, when real gross product rises, the economy is experiencing an expansion; when real gross product falls the economy is experiencing a contraction. In the past, a fixed-weighted inflation index, the GDP deflator, had been used to measure real output, but with the rapid change in technology, price movements for certain commodities actually grew less than the price for all goods on average. As such, the traditional measurement of real product had misstated the growth in output as it moved away from the base year, creating what is known as substitution bias. To correct for this bias, the U.S. Department of Commerce, Bureau of Economic Analysis, uses a chained-type inflation index based on calendar year 2000.

One measure of a state's economic performance is Gross State Product (GSP). Like GDP, GSP is the current market value of all final goods and services produced by labor and property located in a state. In 2012, the State of Connecticut produced \$229.3 billion worth of goods and services and \$197.2 billion worth of goods and services in 2005 chained type dollars. This was an increase between 2011 and 2012 of 1.7% in current dollars and a slight decrease of -0.1% in real dollars.

Between 2007 and 2012, the contribution to Connecticut's GSP from FIRE (Finance, Insurance and Real Estate), health care, and education increased, while manufacturing and construction fell. Broadly defined services in the private sector, which includes information, professional and technical services, health care and education, FIRE, and other services, has increased to 63.2% of total GSP in 2012 from 60.2% in 2007. During this period, the shift toward services also continued for the nation as a whole, rising to 52.4% of GDP in 2012 from 51.4% in 2007. Typically, an increasing share of service production should help smooth the business cycle, reducing the span and depth of recessions and prolonging the length of expansions. Activities

in service sectors relative to manufacturing 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. Connecticut began moving toward services sooner than the nation as a whole.

TABLE 55 GROSS PRODUCT

#### A. Millions of Current Dollars

Calendar	United	ed States * New England *		ngland *	Connecticut	
<u>Year</u>	<u>Dollars</u>	% Growth	<u>Dollars</u>	% Growth	<u>Dollars</u>	% Growth
2007	13,936,199	4.9	751,779	4.3	221,133	5.6
2008	14,193,120	1.8	760,815	1.2	219,449	(0.8)
2009	13,869,678	(2.3)	758,615	(0.3)	217,103	(1.1)
2010	14,388,813	3.7	785,547	3.6	221,767	2.1
2011	14,959,778	4.0	805,773	2.6	225,409	1.6
2012	15,566,077	4.1	829,745	3.0	229,317	1.7
% Increas	e ('07 to '12)	11.7		10.4		3.7

#### **B.** Millions of Constant Dollars\*\*

Calendar	United S	States *	s * New Englar		Connecticut		
<u>Year</u>	<u>Dollars</u>	% Growth	<u>Dollars</u>	% Growth	<u>Dollars</u>	% Growth	
2007	13,103,341	1.8	710,413	1.5	208,854	2.7	
2008	13,016,791	(0.7)	704,478	(0.8)	202,473	(3.1)	
2009	12,592,668	(3.3)	686,034	(2.6)	195,237	(3.6)	
2010	12,897,088	2.4	704,983	2.8	197,613	1.2	
2011	13,108,318	1.6	712,290	1.0	197,452	(0.1)	
2012	13,430,576	2.5	721,137	1.2	197,202	(0.1)	
% Increase	e ('07 to '12)	2.5		1.5		(5.6)	

<sup>\*</sup> Sum of States' Gross State Products.

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

Connecticut's production is concentrated in two areas: finance, insurance and real estate (FIRE) and manufacturing (ignoring the broad category of services). In 2012, production in these two industries accounted for 41.2% of total production in Connecticut, compared to 32.3% for the nation and down slightly from 42.7% in 2007. This demonstrates that Connecticut's economy is more heavily concentrated in a few industries than the nation as a whole and this concentration has changed little in recent years. Connecticut's portion of U.S. total GSP has decreased from 1.59% in 2007 to 1.47% in 2012.

<sup>\*\* 2005</sup> chained dollar series are calculated as the product of the chain-type quantity index and the 2005 current-dollar value of the corresponding series, divided by 100. The system for these calculations was converted from SIC Codes to the NAICS system starting in 1998.

TABLE 56
GROSS PRODUCT BY SOURCE
(In Billions of Current Dollars)

	Calendar 2007				(	Calendar 2012			
<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	144.5	1.0	0.394	0.2	168.6	1.1	0.314	0.1	
Construction & Mining	908.3	6.5	7.668	3.5	843.9	5.4	6.236	2.7	
Manufacturing	1,698.0	12.2	27.397	12.4	1,866.7	12.0	24.079	10.5	
Wholesale Trade	816.7	5.9	12.013	5.4	897.9	5.8	12.771	5.6	
Retail Trade	887.9	6.4	11.891	5.4	949.1	6.1	12.141	5.3	
Transportation & Utilities	653.5	4.7	7.685	3.5	773.5	5.0	7.798	3.4	
Information	635.5	4.6	8.484	3.8	690.6	4.4	9.614	4.2	
Finance, Insurance, Real Estate	2,857.0	20.5	66.924	30.3	3,168.6	20.4	70.378	30.7	
Professional, Technical Services	1,024.7	7.4	16.153	7.3	1,192.3	7.7	16.547	7.2	
Health Care & Education	1,076.9	7.7	19.104	8.6	1,344.7	8.6	23.520	10.3	
Other Services	1,565.6	11.2	22.508	10.2	1,761.7	11.3	24.896	10.9	
Government	<u>1,667.4</u>	<u>12.0</u>	20.912	<u>9.5</u>	<u>1,908.5</u>	<u>12.3</u>	21.023	<u>9.2</u>	
Total	13,936.2	100.0	221.133	100.0	15,566.1	100.0	229.317	100.0	
Broadly Defined Services*		51.4		60.2		52.4		63.2	
CT as a % of U.S. Total GSP			1.59				1.47		

<sup>\*</sup>Note: Broadly Defined Services includes Information, FIRE, Professional/Tech Services, Health Care/Education and Other Services

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

#### Per Capita Gross Product

Growth in gross product may not sufficiently reflect the overall improvement in the well-being of an economy. Gross product may rise significantly, but population may increase even more rapidly, signifying no real improvement in the well-being of the economy. Therefore, real per capita gross product, which takes into account increases in population and inflation provides a better measure of the standard of living among differing economies.

Growth in Connecticut slowed during and following the recession of 2001, reflecting a struggle to recover from a deeper recession compared with the impact on the United States. The ratio of Connecticut's real per-capita output relative to the United States was generally increasing between 2004 and 2008, suggesting that Connecticut did eventually pull out of that recession with strength. The latest data shows that the most recent recession hit Connecticut hard in 2009, with real per-capita output dropping 4.0%. While nominal per-capita gross product in Connecticut has grown in Connecticut, real per-capita output declined slightly in 2011 and 2012. Both per-capita output and real per-capita output for the state relative to the nation dipped slightly between 2007 and 2012 from 136% of the U.S. level to 129%.

TABLE 57 PER CAPITA GROSS PRODUCT

#### A. Millions of Current Dollars

Calendar	Unite	d States*	New England*		Conr	Connecticut	
<u>Year</u>	<u>Dollars</u>	% Growth	<u>Dollars</u>	% Growth	<u>Dollars</u>	% Growth	% of U.S.
2007	46,264	3.9	52,649	4.1	62,692	5.3	136
2008	46,673	0.9	53,055	0.8	61,894	(1.3)	133
2009	45,212	-3.1	52,669	(0.7)	60,953	(1.5)	135
2010	46,517	2.9	54,314	3.1	62,005	1.7	133
2011	48,011	3.2	55,504	2.2	62,845	1.4	131
2012	49,587	3.3	56,977	2.7	63,870	1.6	129
% Increase (	('07 to '12)	7.2		8.2		1.9	

#### **B. In Constant Dollars\*\***

Calendar	Unite	d States*	New England*		Conr	Connecticut	
<u>Year</u>	<u>Dollars</u>	% Growth	<u>Dollars</u>	% Growth	<u>Dollars</u>	% Growth	% of U.S.
2007	43,499	0.8	49,752	1.3	59,211	2.4	136
2008	42,805	(1.6)	49,126	(1.3)	57,106	(3.6)	133
2009	41,049	(4.1)	47,629	(3.0)	54,814	(4.0)	134
2010	41,694	1.6	48,744	2.3	55,251	0.8	133
2011	42,069	0.9	49,065	0.7	55,051	(0.4)	131
2012	42,784	1.7	49,519	0.9	54,926	(0.2)	128
% Increase	('07 to '12)	(1.6)		(0.5)		(7.2)	

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

#### **Productivity and Unit Labor Cost**

Gross State Product provides the information to gauge Connecticut's efficiency in the use of labor, i.e., labor productivity. Rising productivity leads to an improved standard of living and curbs inflationary pressures. In the table on the following page, the column entitled Hourly Production shows labor productivity as the ratio of total output to total workhours in Connecticut's manufacturing sector. On an hourly basis, nominal output in the manufacturing sector increased from \$84.1 in 2001 to \$117.9 in 2011, a 40.1% increase in output per hour over the period compared to only a 25.1% increase in the Consumer Price Index over the same period.

Another approach allows for the assessment of the labor cost for each \$1 of product produced the unit labor cost. Labor cost is one of the major input costs and is often cited as a critical indicator of competitiveness. The column labeled Unit Labor Cost shows the monetary cost which is equal to the average hourly wages of each worker divided by productivity. Connecticut continues to enjoy a downward trend in labor costs when the productivity factor is included. Per \$1 of output costs, the unit labor cost has declined from 21.4 cents in 2002 to 20.7

<sup>\*</sup> Sum of States' Gross State Products.

<sup>\*\* 2005</sup> chained dollar series are calculated as the product of the chain-type quantity index and the 2005 current-dollar value of the corresponding series, divided by 100. The system for these calculations was converted from SIC Codes to the NAICS system starting in 1998.

cents in 2011, a 3.5% reduction over the period, even while production workers have enjoyed a 35.2% increase in average hourly wages.

Overall, productivity depends upon a broad range of factors. Other than wages, the quality of management as well as the size of and quantity of capital stock invested in the form of plant, machinery and equipment, and the employment of new technologies impact productivity. Any increase in labor productivity is the combined result of all these factors.

TABLE 58 CONNECTICUT'S MANUFACTURING LABOR PRODUCTIVITY

	Manufact.	Production	Hourly	Total	Average	
Cal.	GSP	Workhours	Production	Wages	Hourly	<b>Unit Labor Cost</b>
<u>Year</u>	(Million)	(Million)	(Output Per Hour)	(Million)	<u>Wages</u>	<u>(¢ Per \$1 Output)</u>
2002	\$21,109	\$250.9	\$84.1	\$4,525.6	\$18.0	21.4¢
2003	\$21,144	\$243.7	\$86.8	\$4,478.2	\$18.4	21.2¢
2004	\$24,216	\$231.2	\$104.8	\$4,509.9	\$19.5	18.6¢
2005	\$23,729	\$223.5	\$106.2	\$4,500.0	\$20.1	19.0¢
2006	\$26,836	\$219.6	\$122.2	\$4,549.1	\$20.7	17.0¢
2007	\$27,035	\$235.8	\$114.6	\$5,019.7	\$21.3	18.6¢
2008	\$24,952	\$218.0	\$114.5	\$4,841.6	\$22.2	19.4¢
2009	\$20,507	\$194.6	\$105.4	\$4,529.5	\$23.3	22.1¢
2010	\$20,727	\$187.0	\$110.9	\$4,496.8	\$24.0	21.7¢
2011	\$21,798	\$184.9	\$117.9	\$4,510.2	\$24.4	20.7¢
% Inc	rease ('02-'11	1)	40.1		35.2	(3.5)

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

U.S. Department of Commerce, Bureau of the Census, "Annual Survey of Manufactures"

U.S. Department of Labor, Bureau of Labor Statistics

## Value Added

In order to more accurately assess the performance of the manufacturing sector, one must look beyond employment figures. Employment figures provide only a one dimensional view of what is actually occurring in the manufacturing sector of the Connecticut economy. Although Connecticut lost 212,000 manufacturing jobs (58.0%) between calendar year 1977 and 2011, this is partially mitigated by a long-term increase in productivity per worker.

Value added is the market value of a firm's output less the value of inputs which it purchased from other firms. Changes in productivity over time can be measured by dividing the value that is added to a product by the total number of production workers involved in producing that good.

The following table lists value added per production worker for Connecticut and the U.S.

TABLE 59
VALUE ADDED PER PRODUCTION WORKER
(In Current Dollars)

			% Cha	% Change		lative %	Ratio of	
Cal.		United	From 1	From Prior		From 1972	Conn. Value	
<u>Year</u>	Conn.	<u>States</u>	Conn.	<u>U.S.</u>	Conn.	<u>U.S.</u>	Added to U.S.	
1982	\$66,830	\$66,458	56.0	55.5	152.7	154.0	1.006	
1987	103,228	94,927	54.5	42.8	290.3	262.7	1.087	
1992	143,074	122,387	38.6	28.9	441.0	367.7	1.169	
1997	179,595	151,317	25.5	23.6	579.1	478.2	1.187	
2002	219,805	182,512	22.4	20.6	731.1	597.4	1.204	
2007	299,483	253,867	36.2	39.1	1,032.4	870.1	1.180	
2008	313,512	255,682	4.7	0.7	1,085.5	877.0	1.226	
2009	276,511	263,426	(11.8)	3.0	945.6	906.6	1.050	
2010	313,652	296,423	13.4	12.5	1,086.0	1,032.7	1.058	
2011	315,483	308,140	0.6	4.0	1,092.9	1,077.5	1.024	

Note: Value Added Per Production Worker = <u>Total Value Added by Manufacture</u>

Number of Production Workers

Source: U.S. Department of Commerce, "Annual Survey of Manufactures"

TABLE 60
VALUE ADDED PER PRODUCTION WORKER IN CONNECTICUT BY INDUSTRY
(In Current Dollars)

<u>Industry</u>	<u>2010</u>	<u>2011</u>	% Change
Manufacturing	\$313,652	\$314,483	0.3
Food	365,074	387,994	6.3
Paper	221,096	309,570	40.0
Printing	167,239	167,377	0.1
Chemical	487,815	369,554	(24.2)
Plastics & Rubber	171,195	170,645	(0.3)
Primary Metals	293,680	297,707	1.4
Fabricated Metals	184,279	194,734	5.7
Machinery	220,825	220,617	(0.1)
Computer & Electronic	352,672	361,862	2.6
Electrical Equipment	281,885	309,978	10.0
Transportation Equipment	552,725	528,469	(4.4)

Note: Value Added Per Production Worker = <u>Total Value Added by Manufacture</u> Number of Production Workers

Source: U.S. Department of Commerce, "Annual Survey of Manufactures"

Value added per production worker can vary greatly among manufacturing sectors. Factors which may contribute to this variance include the mix between labor and capital, the overall cost structure of an industry, the volume of production, and the prevailing markup or profit on

a product. The previous table segments value added per production worker by industry in Connecticut for calendar year 2010 and 2011.

## **Capital Expenditures**

Connecticut's manufacturers have also been making substantial investments in capital equipment. Total capital expenditures are defined as outlays for permanent additions and major alterations to manufacturing establishments and investments in new machinery and equipment used for replacement and additions to plant capacity. Organizations undertake capital projects for various reasons including to reduce costs, improve efficiencies, upgrade product quality, develop new products, and implement environmental and safety technology. According to the Annual Survey of Manufactures, for the past ten years, the level of capital expenditures within Connecticut has remained above one billion dollars. The following table details capital expenditures in Connecticut.

TABLE 61
TOTAL CAPITAL EXPENDITURES IN CONNECTICUT
(In Millions of Dollars)

Calendar	Connecticut	Percent
<u>Year</u>	Capital Expenditures	<u>Change</u>
2002	\$1,448.50	(18.8)
2003	1,242.70	(14.2)
2004	1,236.20	(0.5)
2005	1,201.60	(2.8)
2006	1,260.50	4.9
2007	1,638.30	30.0
2008	1,166.10	(28.8)
2009	1,036.70	(11.1)
2010	1,106.32	6.7
2011	1,265.24	14.4

Source: U.S. Department of Commerce, "Annual Survey of Manufactures"

#### **Total Personal Income**

Total personal income, defined as current income received by persons from all sources including public and private transfer payments but excluding transfers among persons, is a reliable measure of economic performance. Total personal income captures the manufacturing sector through manufacturing wages; the nonmanufacturing sector through wages in government, wholesale/retail trade, utilities, transportation, mining, personal services, etc.; the private sector through proprietors' income, etc.; and a part of agricultural activity via farm properties' income. Personal income is approximately 85% of Gross Domestic Product; 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 excess of income received by financial intermediaries from funds entrusted to them by persons, over income disbursed by these intermediaries 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; one example is 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).

The correlation between Gross Domestic Product and personal income provides another basis of comparison among individual states. A comparison of growth rates in personal income is a good indicator of a state's present and potential future performance.

According to figures provided by the U.S. Bureau of Economic Analysis, personal income of Connecticut residents during fiscal year 2013 was \$216.5 billion, a 3.06% increase over fiscal 2012. Total personal income in Connecticut increased 37.4% from fiscal 2004 to 2013. For the United States, total personal income increased 42.8%, and in the New England region, the increase for the identical period was 38.3%.

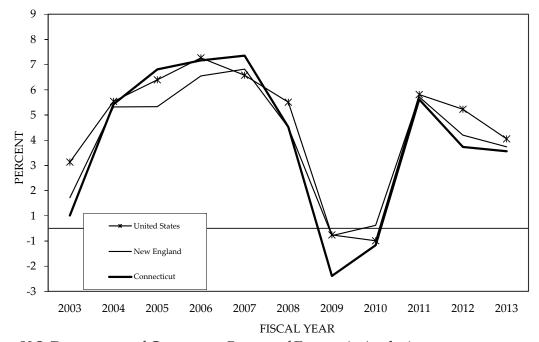
The following table and chart show personal income for the United States, the New England region, and Connecticut.

TABLE 62
PERSONAL INCOME
(In Millions)

Fiscal	United 9	States	New	England	Connecticut	
<u>Year</u>	<u>Dollars</u>	% Growth	<u>Dollars</u>	% Growth	<u>Dollars</u>	% Growth
2004	9,743,843	5.04	571,088	4.82	157,579	4.93
2005	10,318,712	5.90	598,647	4.83	167,519	6.31
2006	11,017,222	6.77	634,888	6.05	178,693	6.67
2007	11,686,752	6.08	675,031	6.32	190,945	6.86
2008	12,271,884	5.01	702,091	4.01	198,612	4.02
2009	12,240,149	(0.26)	700,032	(0.29)	194,860	(1.89)
2010	12,180,150	(0.49)	700,881	0.12	193,563	(0.67)
2011	12,826,939	5.31	737,496	5.22	203,467	5.12
2012	13,434,054	4.73	764,785	3.70	210,042	3.23
2013	13,910,489	3.55	789,564	3.24	216,469	3.06

# PERSONAL INCOME GROWTH

FISCAL YEAR GROWTH BY PERCENT



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

Connecticut's sources of personal income vary slightly from those of the United States, with wages and employee salaries accounting for approximately 55.4% of total personal income compared to 50.5% for the nation in fiscal 2013. The following table shows a comparative study of the sources of personal income for the United States and Connecticut over a ten fiscal year period. The table clearly shows a significant shift from manufacturing wages to other sources of income including property income and transfer payments.

TABLE 63 SOURCES OF PERSONAL INCOME (In Billions of Dollars)

	<u>]</u>	Fiscal Ye	ear 2004			Fiscal Year 2013			
	<u>U.S.</u>	<u>%</u>	<u>CT</u>	<u>%</u>	<u>U.S.</u>	<u>%</u>	<u>CT</u>	<u>%</u>	
Manufacturing									
Salaries & Wages	681.1	7.0	12.5	7.9	740.2	5.3	13.6	6.3	
Nonmanufacturing									
Salaries & Wages	4,585.5	47.1	74.9	47.5	6,287.6	45.2	95.4	44.1	
Proprietors									
Income	933.8	9.6	15.7	9.9	1,285.9	9.2	20.8	9.6	
Property									
Income	1,696.9	17.4	28.9	18.4	2,546.1	18.3	46.2	21.3	
Other Labor									
Income	1,266.6	13.0	20.4	12.9	1,696.4	12.2	25.1	11.6	
Transfer Payments									
Less Payments to									
Social Insurance	<u>579.9</u>	<u>6.0</u>	<u>5.3</u>	<u>3.4</u>	<u>1,354.3</u>	<u>9.7</u>	<u>15.4</u>	<u>7.1</u>	
Total	9,743.8	100.0	157.6	100.0	13,910.5	100.0	216.5	100.0	

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

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

Connecticut's distribution of wages and salaries by industry varies more significantly from those of the United States, with the Finance, Insurance, and Real Estate industry accounting for approximately 17.9% of total wages compared to 9.3% for the nation in fiscal 2013. The following table shows a comparative study of the wages and salaries distribution for the United States and Connecticut over a ten fiscal year period. The table also clearly shows a significant shift from manufacturing and construction to education and health care.

TABLE 64
WAGES AND SALARIES DISTRIBUTION BY INDUSTRY
(as a % of Total)

	<u>Fiscal</u>	Year 2004	<u>Fiscal</u>	Year 2013
	<u>U.S. %</u>	<u>CT %</u>	<u>U.S.%</u>	<u>CT %</u>
Manufacturing	12.9	14.3	10.5	12.5
Finance, Insurance & Real Estate	9.2	17.4	9.3	17.9
Construction & Mining	6.1	3.9	5.6	3.1
Public Utility, Trade & Transp.	16.7	14.5	15.8	13.3
Information	3.6	2.8	3.3	2.6
Education & Health	11.3	12.9	13.2	15.2
Leisure & Hospitality	4.4	3.0	4.6	3.1
Other Professional & Business	14.5	14.4	17.3	16.2
Other Services	3.2	2.7	3.1	2.5
Government	17.5	13.9	16.8	13.4
Fishing, Forestry, & Farming	<u>0.6</u>	<u>0.2</u>	0.5	<u>0.1</u>
Total	100.0	100.0	100.0	100.0

Note: U.S. Total Wages & Salaries in FY 2004: \$5,266,551.0 million and \$7,027,815.0 million in FY 2013 CT Total Wages & Salaries in FY 2004: \$87,320.0 million and \$105,070.0 million in FY 2013

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

## Per Capita Personal Income

One of the more important single indicators of a state's performance is the growth in per capita personal income. This is total personal income divided by the population. On a per capita basis, personal income growth in Connecticut increased 33.5% from fiscal 2004 to 2013, compared to a national increase of 32.1% and a New England region increase of 34.5%.

Per capita personal income in Connecticut, for the most recent fiscal year, was 11.4% higher than for the New England region and 36.5% higher than for the United States. Connecticut's per capita personal income continues to be at a higher level than that of the nation and New England due to the concentration of manufacturing in relatively high paying manufacturing industries, major corporate headquarters within the state, 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. The chart provides a graphic representation of the growth rates in per capita personal income for the three entities over a ten fiscal year period.

TABLE 65 PER CAPITA PERSONAL INCOME

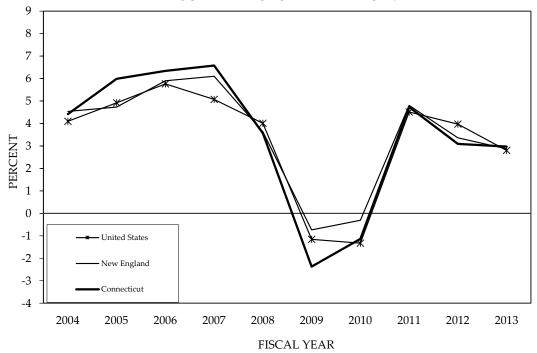
Fiscal	United	d States	tes New England (		Conn	ecticut
<u>Year</u>	<u>Dollars</u>	% Growth	<u>Dollars</u>	% Growth	<u>Dollars</u>	% Growth
2004	33,394	4.10	40,217	4.54	45,121	4.42
2005	35,039	4.92	42,119	4.73	47,822	5.99
2006	37,058	5.76	44,603	5.90	50,854	6.34
2007	38,935	5.07	47,323	6.10	54,201	6.58
2008	40,498	4.01	49,042	3.63	56,129	3.56
2009	40,029	(1.16)	48,680	(0.74)	54,798	(2.37)
2010	39,496	(1.33)	48,530	(0.31)	54,176	(1.14)
2011	41,278	4.51	50,866	4.81	56,738	4.73
2012	42,918	3.97	52,577	3.36	58,493	3.09
2013	44,122	2.80	54,088	2.87	60,229	2.97

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

All figures derived by: <u>Total Personal Income</u> Population

# PER CAPITA PERSONAL INCOME GROWTH

FISCAL YEAR GROWTH BY PERCENT



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

The following table shows per capita income for each of the fifty states with their corresponding ranking for fiscal year 2013. In 2013, Connecticut ranked number 1 in the nation based on per capita personal income. Connecticut's figure of \$60,229 for per capita personal income remained approximately 36.5% higher than the national average.

TABLE 66
PER CAPITA PERSONAL INCOME BY STATE (Fiscal 2013)

	Per Capita			Per Capita	
<u>State</u>	<u>Income</u>	<u>Rank</u>	<u>State</u>	<u>Income</u>	<u>Rank</u>
Connecticut	<u>\$60,229</u>	<u>1</u> 2	Wisconsin	\$42,622	26
Massachusetts	56,370	2	Florida	41,326	27
North Dakota	56,002	3	Oklahoma	41,079	28
New Jersey	55,518	4	Maine	40,582	29
Maryland	54,050	5	Ohio	40,487	30
New York	53,660	6	Louisiana	40,330	31
Wyoming	50,575	7	Oregon	39,545	32
New Hampshire	49,708	8	Missouri	39,498	33
Alaska	49,705	9	Tennessee	39,032	34
Virginia	48,622	10	Montana	38,855	35
Minnesota	47,388	11	Michigan	38,775	36
California	46,965	12	Indiana	38,570	37
Washington	46,502	13	Nevada	38,538	38
Rhode Island	46,486	14	North Carolina	38,165	39
Illinois	46,334	15	Georgia	37,848	40
Colorado	46,064	16	Arizona	36,507	41
South Dakota	45,672	17	Alabama	36,210	42
Pennsylvania	45,501	18	New Mexico	35,930	43
Nebraska	45,477	19	Kentucky	35,904	44
Hawaii	45,215	20	Arkansas	35,780	45
Vermont	45,165	21	Utah	35,761	46
Delaware	44,648	22	West Virginia	35,348	47
Iowa	44,570	23	South Carolina	35,137	48
Kansas	43,408	24	Idaho	34,867	49
Texas	42,935	25	Mississippi	34,005	50

U.S. Average \$44,122

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

All figures derived by: Personal Income

Population

## Per Capita Disposable Personal Income

The following table shows per capita disposable income for each of the fifty states with their corresponding ranking for fiscal year 2013. Per capita disposable income is defined as the income available to an individual for spending or saving. It is per capita personal income less personal tax and nontax payments. Personal taxes are composed of federal, state and local income taxes, as well as, personal property taxes and estate and gift taxes. Nontax payments are made up of fines and fees.

TABLE 67
PER CAPITA DISPOSABLE PERSONAL INCOME BY STATE (Fiscal 2013)

	Per Capita Disposable			Per Capita Disposable	
State	Income	Rank	State	Income	Rank
Connecticut	\$49,543		Delaware	\$36,707	26
North Dakota	47,139	<u>1</u> 2	Wisconsin	36,343	27
New Jersey	46,907	3	Maine	36,165	28
Massachusetts	46,767	4	Louisiana	36,145	29
Maryland	45,365	5	Oklahoma	35,566	30
New York	44,355	6	Ohio	35,493	31
Wyoming	43,662	7	Missouri	35,378	32
New Hampshire	42,661	8	Tennessee	34,962	33
Alaska	42,567	9	Oregon	34,742	34
Washington	41,510	10	Michigan	33,981	35
Virginia	41,355	11	Nevada	33,932	36
Minnesota	40,963	12	Montana	33,928	37
South Dakota	40,852	13	North Carolina	33,525	38
Rhode Island	40,512	14	Indiana	33,456	39
Hawaii	40,248	15	Georgia	33,316	40
Colorado	39,945	16	Arizona	32,848	41
Vermont	39,423	17	New Mexico	32,620	42
Illinois	39,208	18	Alabama	32,547	43
California	39,183	19	Arkansas	31,918	44
Nebraska	39,150	20	Kentucky	31,899	45
Pennsylvania	38,958	21	South Carolina	31,443	46
Iowa	38,801	22	Utah	31,416	47
Kansas	37,894	23	West Virginia	31,404	48
Texas	37,876	24	Idaho	31,275	49
Florida	36,757	25	Mississippi	30,638	50
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U.S. Average \$39,203

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

All figures derived by: <u>Disposable Personal Income</u>
Population

#### 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 income 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 Bureau of Labor Statistics publishes CPI's for two population groups: a CPI for All Urban Consumers (CPI-U) which covers approximately 80 percent of the total population; and a CPI for Urban Wage Earners and Clerical Workers (CPI-W) which covers 32 percent of the total population and is a subset of the CPI-U population. The CPI-U includes, in addition to wage earners and clerical workers, groups such as professional, managerial and technical workers, the self employed, short-term workers, the unemployed, retirees and others not in the labor force.

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

TABLE 68 THE U.S. CONSUMER PRICE INDEX (1982-84=100)

<u>Fiscal Year</u>	<u>CPI</u>	<u>% Growth</u>
2004	186.1	2.21
2005	191.7	3.00
2006	198.9	3.78
2007	204.1	2.60
2008	211.7	3.71
2009	214.7	1.40
2010	216.8	0.98
2011	221.1	1.99
2012	227.6	2.94
2013	231.4	1.67

Source: U.S. Bureau of Labor Statistics

The CPI is a weighted index that is based on prices of food (15.1%), apparel (2.9%), housing (41.2%), transportation (16.7%), medical care (7.2%), education (6.8%), and the other goods that people buy for day-to-day living (10.1%). 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 85 urban areas across the country are averaged together with weights which represent 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.

#### **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 since the base period of 1982-84. The following table shows real personal income growth for the United States, the New England region and Connecticut. These figures, because they take into account the effects of inflation, provide a better perspective of overall gains in personal income.

TABLE 69
REAL PERSONAL INCOME
(In Millions)

Fiscal	United	l States	New E	ngland	Conn	ecticut
<u>Year</u>	<u>Dollars</u>	% Growth	<u>Dollars</u>	% Growth	<u>Dollars</u>	% Growth
2004	5,235,575	2.77	306,858	2.56	84,670	2.67
2005	5,382,739	2.81	312,283	1.77	87,386	3.21
2006	5,537,915	2.88	319,133	2.19	89,822	2.79
2007	5,725,656	3.39	330,716	3.63	93,549	4.15
2008	5,797,265	1.25	331,669	0.29	93,825	0.29
2009	5,702,213	(1.64)	326,118	(1.67)	90,778	(3.25)
2010	5,619,213	(1.46)	323,346	(0.85)	89,299	(1.63)
2011	5,802,424	3.26	333,615	3.18	92,041	3.07
2012	5,903,395	1.74	336,073	0.74	92,300	0.28
2013	6,012,122	1.84	341,250	1.54	93,558	1.36

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

All figures derived by: <u>Total Personal Income</u>

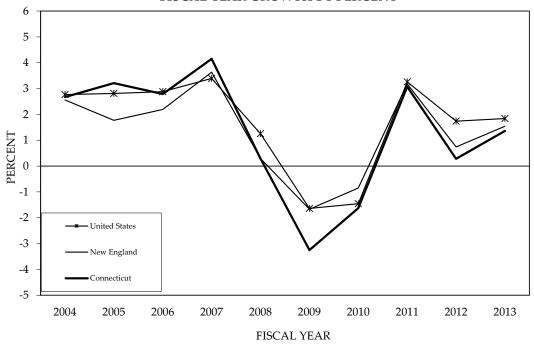
CP1

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. Therefore, 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 comparison among the United States, the New England region and Connecticut.

The following chart provides a graphic presentation of the growth in real personal income for the three entities over a ten fiscal year period.

# REAL PERSONAL INCOME GROWTH

FISCAL YEAR GROWTH BY PERCENT



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

## 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 comprising 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 70 REAL PER CAPITA PERSONAL INCOME

Fiscal	Unite	d States	New E	ngland	Conn	ecticut
<u>Year</u>	<u>Dollars</u>	% Growth	<u>Dollars</u>	% Growth	<u>Dollars</u>	% Growth
2004	17,943	1.85	21,610	2.28	24,362	1.87
2005	18,278	1.86	21,971	1.67	25,022	2.71
2006	18,627	1.91	22,420	2.04	25,642	2.48
2007	19,075	2.40	23,185	3.41	26,623	3.83
2008	19,131	0.29	23,168	(0.07)	26,633	0.04
2009	18,648	(2.52)	22,678	(2.11)	25,655	(3.67)
2010	18,221	(2.29)	22,389	(1.28)	25,112	(2.11)
2011	18,672	2.48	23,010	2.77	25,761	2.58
2012	18,860	1.00	23,104	0.41	25,739	(0.09)
2013	19,069	1.11	23,377	1.18	26,054	1.23

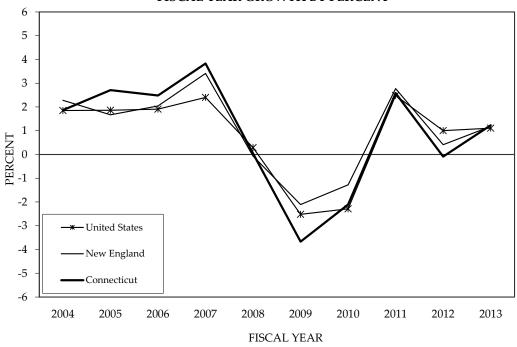
Source: U.S. Department of Commerce, Bureau of Economic Analysis

All figures derived by: <u>Total Personal Income</u> CPI X Population

The previous table shows the growth in real per capita personal income for the United States, the New England region, and Connecticut. The chart below provides a graphic presentation of the growth in real per capita personal income for the three entities over a ten fiscal year period.

# REAL PER CAPITA INCOME GROWTH

FISCAL YEAR GROWTH BY PERCENT



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

TABLE 71 GROWTH IN REAL PER CAPITA PERSONAL INCOME (Base Year: 2012)

Fiscal	% Gr	owth	% Cumulative Growth		
<u>Year</u>	<u>United States</u>	Connecticut	<u>United States</u>	Connecticut	
1950-1960	27.7%	28.4%	27.7%	28.4%	
1960-1970	37.3%	40.3%	75.3%	80.2%	
1970-1980	17.7%	12.8%	106.3%	103.3%	
1980-1990	20.9%	37.4%	149.5%	179.3%	
1990-2000	15.8%	16.0%	188.8%	223.9%	
2000-2010	7.2%	6.8%	209.6%	246.0%	
2010-2012	2.1%	1.1%	218.1%	253.4%	

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

The above table highlights the cumulative growth in real per capita personal income over the past sixty-two years. Overall, Connecticut has enjoyed higher cumulative growth in real per capita personal income, exceeding the United States by 35.3 percentage points. In one decade alone, 1980 to 1990, Connecticut's growth in real personal income was 16.5 percentage points higher than the United States' growth. On the other hand, during the most recent decade, Connecticut's personal income growth has been alarmingly weak at only 6.8%, a likely result of

two economic bubbles bursting (technology and housing) and the Great Recession of the last two years of the decade. Even though job growth in the state has lagged that of the nation, Connecticut residents' income growth has out-performed that of the nation's over the longterm.

## **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 *ACCRA Cost of Living Index*, which is produced by The Council for Community and Economic Research (C2ER). This report includes indices for approximately 320 Metropolitan Statistical Areas (MTAs), Metropolitan Statistical Divisions (MTDs), and Micropolitan Statistical Areas (MCAs) as defined by the U.S. Office of Management and Budget (OMB). In Connecticut, the C2ER survey includes the three urban areas from the following MTAs: Stamford in the Bridgeport-Stamford-Norwalk MTA, Hartford in the Hartford-West Hartford-East Hartford MTA, and New Haven in the New Haven-Milford MTA.

The following table shows the cost of living comparison for three neighboring cities: Boston in the Boston-Quincy MTD, Hartford in the Hartford-West Hartford-East Hartford MTA, and New York (Manhattan) in the New York-White Plains-Wayne NY-NJ MTD for the 2013 first quarter average.

TABLE 72 COMPARISON OF COST OF LIVING

2013 First Quarter <u>MTA/MTD</u>	Composite <u>Index</u>	Grocery <u>Items</u>	Housing	<u>Utilities</u>	Trans- portation	Health <u>Care</u>	Misc.*
Hartford, CT	123.9	128.2	131.4	117.5	117.3	120.1	121.0
Boston, MA	140.5	125.2	176.7	147.2	108.6	125.0	129.0
New York**, NY	227.1	146.4	461.7	131.6	131.8	105.1	148.6
Index Weights	100%	13.56%	27.02%	10.30%	12.35%	4.60%	32.17%

Note: \* denotes miscellaneous goods and services

\*\* Manhattan

Source: The Council for Community and Economic Research (C2ER), "ACCRA Cost of Living Index", May 2013 First Quarter Data

The Cost of Living Composite Index is weighted by a "market basket" of approximately 60 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. The index for the Hartford area, for example, in the first quarter of 2013 was 123.9 compared to the national average of 100. This index demonstrates that the overall living cost in the Hartford area was higher than the national average by 23.9% in the first quarter of 2013. Among the six categories, the cost of housing in the Hartford area was the most expensive item, a full 31.4% higher than the national average, followed by grocery items at 28.2%, miscellaneous items at 21.0%, healthcare at 20.1%, utilities at 17.5%, and transportation at 17.3% higher than the national average. The index, updated quarterly with an annual report published in January of the succeeding year, does not measure tax differentials.

In the first quarter of 2013, numerous cities had a relatively higher cost of living than the Hartford area. These include, for example, New York City (Manhattan) at 227.1; San Francisco, California at 168.6; and Washington, D.C. at 141.7. Living costs in most cities in the southern and mountain west states are relatively low; for example, Fayetteville, Arkansas at 85.9; Pueblo, Colorado at 83.4; and Idaho Falls, Idaho at 82.4. The cost of living in the Hartford area was comparable to other cities in the northeast such as Manchester, New Hampshire; Philadelphia, Pennsylvania; and Providence, Rhode Island, which registered at 120.5, 121.9, and 126.6, respectively. The cost of living index can provide useful information for relocation decisions. If someone is contemplating a job offer in a certain area, she or he may use this index as a guide to evaluate the financial merits of the move. For example, if a Hartford resident is considering a move to New York City (Manhattan) and wants to maintain his or her current lifestyle, other things being equal, his or her after-tax income level has to increase by 83.3%, (227.1-123.9)/123.9, in order to compensate for the higher cost of living. On the contrary, if a New York City resident is contemplating a move to Hartford, his or her after-tax income level can be reduced by 45.4%, (123.9-227.1)/227.1, in order to sustain the same current life style.

The cost of living for metropolitan statistical areas within Connecticut also varies. In the first quarter of 2013, the ACCRA cost of living Index for the Stamford area was at 145.6, and New Haven at 129.4 compared to 123.9 for Hartford. These three statistical areas accounted for nearly 84% of the state's total population. The following table demonstrates the relative index of the components for these three Connecticut regions.

TABLE 73
COMPARISON OF COST OF LIVING IN CONNECTICUT
Hartford, New Haven, and Stamford MTAs

2013 Q1	Composite	Grocery			Trans-	Health	
<u>MTA</u>	<u>Index</u>	<u>Items</u>	<b>Housing</b>	<u>Utilities</u>	<u>portation</u>	Care	Misc.
Hartford	123.9	128.2	131.4	117.5	117.3	120.1	121.0
New Haven	129.4	125.6	148.0	114.2	121.9	122.2	124.2
Stamford	145.6	121.4	208.1	129.4	122.7	107.3	122.7

Source: The Council for Community and Economic Research (C2ER), "ACCRA Cost of Living Index", May 2013, First Quarter Data

## THE MAJOR REVENUE RAISING TAXES IN THE STATE OF CONNECTICUT

In fiscal year 2012, Connecticut's General Fund derived 77 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 fiscal 2012. The table shows overall state tax collections as a percentage of personal income. In the table, note that Connecticut ranks 10th, signifying that in nine other states a greater percentage of an individual's income is collected in state taxes than in Connecticut.

TABLE 74
STATE TAX COLLECTIONS AS A PERCENTAGE OF PERSONAL INCOME
Fiscal 2012

<u>State</u>	<u>Percentage</u>	Rank	<u>State</u>	<u>Percentage</u>	Rank
Alaska	19.80%	1	Kansas	6.03%	26
North Dakota	15.93%	2	Rhode Island	5.97%	27
Vermont	10.05%	3	Utah	5.89%	28
Hawaii	9.01%	4	Iowa	5.89%	29
Wyoming	8.92%	5	Oregon	5.83%	30
Delaware	8.43%	6	Oklahoma	5.82%	31
Minnesota	8.34%	7	Pennsylvania	5.82%	32
West Virginia	8.24%	8	New Jersey	5.73%	33
Arkansas	8.09%	9	Ohio	5.70%	34
Connecticut	<u>7.33%</u>	<u>10</u>	Washington	5.68%	35
Maine	7.21%	11	Arizona	5.56%	36
Mississippi	7.08%	12	Maryland	5.46%	37
New York	7.01%	13	Alabama	5.30%	38
New Mexico	6.91%	14	Nebraska	5.28%	39
Kentucky	6.83%	15	Louisiana	4.99%	40
Wisconsin	6.75%	16	South Carolina	4.94%	41
California	6.71%	17	Tennessee	4.91%	42
Nevada	6.56%	18	Virginia	4.67%	43
Montana	6.51%	19	Missouri	4.65%	44
Indiana	6.47%	20	Georgia	4.56%	45
Michigan	6.43%	21	Texas	4.48%	46
North Carolina	6.30%	22	Colorado	4.43%	47
Illinois	6.27%	23	Florida	4.26%	48
Massachusetts	6.27%	24	South Dakota	4.04%	49
Idaho	6.26%	25	New Hampshire	3.47%	50

U.S. Average 6.66%

Source: Bureau of Economic Analysis, U.S. Census Bureau, "Annual Survey of State Government Tax Collections, 2012"

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 was 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 remains 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. 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 \$14,500 to \$24,000 are available to taxpayers, with such exemptions phased out at certain higher income levels. Legislation enacted in 1999 increases 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 77 for more details). Neither the personal exemption nor the tax credit is available to a trust or an estate. Also commencing in income year 1996, personal income taxpayers were eligible for up to a \$100 credit for property taxes paid on their primary residence or on their motor vehicle. This credit has been modified over the years and since income year 2011 has remained at \$300.

The personal income tax generated \$8,719.2 million in fiscal year 2013, \$8,310.8 million in fiscal year 2012, and \$7,246.4 million in fiscal year 2011. In fiscal year 2013, this tax accounted for 44.9% of total revenue, nearly unchanged from fiscal year 2012, when it accounted for 44.8% of total revenue.

TABLE 75
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	<u>High Rate</u>	<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-Present	3.0%	5.0%-6.7%	\$10,000	\$20,000	\$16,000

The following table compares the personal income tax collections as a percentage of personal income for the fifty states for fiscal 2012.

TABLE 76
STATE INCOME TAX COLLECTIONS AS A PERCENTAGE OF PERSONAL INCOME Fiscal 2012

<u>State</u>	<u>Percentage</u>	<u>Rank</u>	<u>State</u>	<u>Percentage</u>	<u>Rank</u>
Oregon	3.90%	1	Iowa	2.28%	23
New York	3.80%	2	Idaho	2.25%	24
<b>Connecticut</b>	<u>3.51%</u>	<u>3</u>	Nebraska	2.24%	25
Massachusetts	3.28%	4	Georgia	2.24%	26
Minnesota	3.24%	5	Missouri	2.21%	27
California	3.21%	6	Vermont	2.18%	28
Delaware	3.01%	7	Colorado	2.11%	29
North Carolina	2.88%	8	Ohio	1.98%	30
Wisconsin	2.85%	9	Indiana	1.96%	31
Maine	2.75%	10	South Carolina	1.90%	32
West Virginia	2.74%	11	Michigan	1.86%	33
Illinois	2.68%	12	Oklahoma	1.83%	34
Virginia	2.63%	13	Pennsylvania	1.78%	35
Hawaii	2.52%	14	Alabama	1.77%	36
Utah	2.50%	15	New Mexico	1.56%	37
Montana	2.38%	16	Mississippi	1.53%	38
Kansas	2.35%	17	Louisiana	1.37%	39
Arkansas	2.35%	18	Arizona	1.33%	40
New Jersey	2.32%	19	North Dakota	1.23%	41
Kentucky	2.28%	20	New Hampshire	0.13%	42
Maryland	2.28%	21	Tennessee	0.07%	43
Rhode Island	2.28%	22			
U.S. Average	2.27%				

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

Source: Bureau of Economic Analysis, U.S. Department of Commerce, "State Government Finances, 2012"

The following table shows Connecticut personal income tax exemptions ranging from \$14,500 to \$24,000 including the phase out as income levels rise depending on adjusted gross income for each income tax filing status.

TABLE 77
CONNECTICUT PERSONAL INCOME TAX CREDITS & EXEMPTIONS
Income Year 2014

	<u>Single</u>	Marrie	ed Filing Joir	<u>ntly</u>	Head of Household			
Exemption	n: \$14,500		Exemption	: \$24,000		Exemption	n: \$19,000	
	\$1K of exemp om \$29.0K to			\$1K of exempom \$48K to \$7			\$1K of exem om \$38K to	1
AGI	AGI	% of	AGI	AGI	% of	AGI	AGI	% of
From	То	Tax	From	То	Tax	From	То	Tax
\$14,500	\$18,100	75%	\$24,000	\$30,000	75%	\$19,000	\$24,000	75%
\$18,100	\$18,600	70%	\$30,000	\$30,500	70%	\$24,000	\$24,500	70%
\$18,600	\$19,100	65%	\$30,500	\$31,000	65%	\$24,500	\$25,000	65%
\$19,100	\$19,600	60%	\$31,000	\$31,500	60%	\$25,000	\$25,500	60%
\$19,600	\$20,100	55%	\$31,500	\$32,000	55%	\$25,500	\$26,000	55%
\$20,100	\$20,600	50%	\$32,000	\$32,500	50%	\$26,000	\$26,500	50%
\$20,600	\$21,100	45%	\$32,500	\$33,000	45%	\$26,500	\$27,000	45%
\$21,100	\$21,600	40%	\$33,000	\$33,500	40%	\$27,000	\$27,500	40%
\$21,600	\$24,200	35%	\$33,500	\$40,000	35%	\$27,500	\$34,000	35%
\$24,200	\$24,700	30%	\$40,000	\$40,500	30%	\$34,000	\$34,500	30%
\$24,700	\$25,200	25%	\$40,500	\$41,000	25%	\$34,500	\$35,000	25%
\$25,200	\$25,700	20%	\$41,000	\$41,500	20%	\$35,000	\$35,500	20%
\$25,700	\$30,200	15%	\$41,500	\$50,000	15%	\$35,500	\$44,000	15%
\$30,200	\$30,700	14%	\$50,000	\$50,500	14%	\$44,000	\$44,500	14%
\$30,700	\$31,200	13%	\$50,500	\$51,000	13%	\$44,500	\$45,000	13%
\$31,200	\$31,700	12%	\$51,000	\$51,500	12%	\$45,000	\$45,500	12%
\$31,700	\$32,200	11%	\$51,500	\$52,000	11%	\$45,500	\$46,000	11%
\$32,200	\$58,000	10%	\$52,000	\$96,000	10%	\$46,000	\$74,000	10%
\$58,000	\$58,500	9%	\$96,000	\$96,500	9%	\$74,000	\$74,500	9%
\$58,500	\$59,000	8%	\$96,500	\$97,000	8%	\$74,500	\$75,000	8%
\$59,000	\$59,500	7%	\$97,000	\$97,500	7%	\$75,000	\$75,500	7%
\$59,500	\$60,000	6%	\$97,500	\$98,000	6%	\$75,500	\$76,000	6%
\$60,000	\$60,500	5%	\$98,000	\$98,500	5%	\$76,000	\$76,500	5%
\$60,500	\$61,000	4%	\$98,500	\$99,000	4%	\$76,500	\$77,000	4%
\$61,000	\$61,500	3%	\$99,000	\$99,500	3%	\$77,000	\$77,500	3%
\$61,500	\$62,000	2%	\$99,500	\$100,000	2%	\$77,500	\$78,000	2%
\$62,000	\$62,500	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 78
STATE AND LOCAL GOVERNMENT OBLIGATIONS EXEMPTIONS
FOR DETERMINING INDIVIDUAL'S STATE INCOME

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

T = Taxable / E = Exempt

- (1) Interest earned from some qualified obligations is exempt from the tax.
- (2) Taxable for bonds acquired after 2011, bonds acquired before 2012 are exempt.
- (3) Taxable for bonds acquired after 2002 if the other state or locality imposes an income-based tax on Utah bonds.

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

TABLE 79 PERSONAL INCOME TAX BY STATE

		<u>Bracket</u>		h Bracket			<u>Bracket</u>		<u>Bracket</u>
	%	To Net	%	From Net		%	To Net	%	From Net
<u>State</u>	Rate	Income \$	<u>Rate</u>	<u>Income \$</u>	<u>State</u>	<u>Rate</u>	Income \$	<u>Rate</u>	Income \$
Alabama (3)	2.00	1,000	5.00	6,001	Missouri (1)	1.5	1,000	6.0	9,001
Arizona (1)	2.59	20,000	4.54	300,001	Montana (1,c)	1.0	2,800	6.9	16,701
Arkansas (3,c)	1.00	4,199	7.00	34,600	Nebraska (1)	2.46	4,800	6.84	54,001
California (1,c)	1.00	15,164	12.30	1,107,001	New Hampshire	(b)			
Colorado (2)	4.63	All			New Jersey (3)	1.4	20,000	8.97	500,001
Connecticut (1)	<u>3.00</u>	20,000	<u>6.70</u>	<u>500,001</u>	New Mexico (1)	1.7	8,000	4.9	24,001
Delaware (1)	2.20	5,000	6.75	60,001	New York (1,c)	4.0	16,450	8.82	2,058,551
Georgia (1)	1.00	1,000	6.00	10,001	N. Carolina (2)	6.0	21,250	7.75	100,001
Hawaii (1)	1.40	4,800	11.00	400,001	N. Dakota (2,c)	1.22	60,650	3.22	398,351
Idaho (1,c)	1.60	2,817	7.40	21,136	Ohio (1)	0.537	5,200	5.421	208,501
Illinois (1)	5.00	All			Oklahoma (1)	0.5	2,000	5.25	15,001
Indiana (1)	3.40	All			Oregon (2,c)	5.0	6,500	9.9	250,001
Iowa (1,c)	0.36	1,494	8.98	67,231	Pennsylvania (3)	3.07	All		
Kansas (1)	3.50	30,000	4.90	30,001	Rhode Island(1,c)	3.75	58,600	5.99	133,251
Kentucky (1)	2.00	3,000	6.00	75,001	S. Carolina (2,c)	3.0	5,700	7.0	14,251
Louisiana (1)	2.00	25,000	6.00	100,001	Tennessee	(b)			
Maine (1,c)	2.00	10,449	7.95	41,850	Utah (1)	5.0	All		
Maryland (1)	2.00	1,000	5.75	300,000	Vermont (2,c)	3.55	60,550	8.95	398,351
Massachusetts	5.25	All	(a)		Virginia (1)	2.0	3,000	5.75	17,001
Michigan (1)	4.25	All			W. Virginia (1)	3.0	10,000	6.5	60,001
Minnesota (2,c)	5.35	35,480	9.85	137,431	Wisconsin (1,c)	4.4	14,330	7.65	315,461
Mississippi (3)	3.00	5,000	5.00	10,001	Dist. of Col. (2)	4.0	10,000	8.95	350,001

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

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

Base: (1) - Modified Federal Adjusted Gross Income

- (2) Modified Federal Taxable Income
- (3) State's Individual Definition of Taxable Income
- (a) The rate is 12% for short-term capital gains and 5.25% for interests and dividends.
- (b) Income taxes are limited to interest and dividends: 5.0% in New Hampshire and 6.0% in Tennessee.
- (c) Brackets are indexed for inflation annually. Oregon brackets \$125,000 and over are not indexed for inflation.

#### 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. The tax generated \$3,897.0 million in fiscal 2013, \$3,830.1 million in fiscal 2012, and \$3,353.2 million in fiscal 2011. In fiscal 2013, sales and use taxes accounted for 20.1% of total revenue, compared to 20.6% in fiscal 2012 and 18.9% in fiscal 2011.

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 included 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 fiscal year 2012 data. From fiscal 1991 to fiscal 2012, Connecticut's sales tax collections as a percentage of personal income dropped from 3.15% with a rank of ninth to 1.79% with a rank of 29th, and compared to the national average of 2.08%. 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. The second table shows the comparison for major sales tax exemptions.

TABLE 80
SALES TAX COLLECTIONS AS A PERCENTAGE OF PERSONAL INCOME Fiscal 2012

	Tax Rate				Tax Rate		
<u>State</u>	<u>(%)</u>	<u>%</u>	<u>Rank</u>	<u>State</u>	<u>(%)</u>	<u>%</u>	<u>Rank</u>
Hawaii	4.000*	4.41	1	California	7.500	1.82	24
Wyoming	4.000*	3.47	2	Iowa	6.000*	1.82	25
Washington	6.500*	3.42	3	Ohio	5.750*	1.82	26
Nevada	6.850*	3.33	4	Wisconsin	5.000	1.81	27
North Dakota	5.000*	3.18	5	South Carolina	6.000*	1.80	28
Mississippi	7.000	3.13	6	<b>Connecticut</b>	<u>6.350</u>	<u>1.79</u>	<u>29</u>
Arkansas	6.500*	2.74	7	Rhode Island	7.000	1.78	30
Indiana	7.000	2.73	8	New Jersey	7.000	1.69	31
New Mexico	5.125	2.70	9	Pennsylvania	6.000*	1.62	32
Tennessee	7.000*	2.67	10	Oklahoma	4.500*	1.59	33
Arizona	5.600*	2.66	11	Louisiana	4.000	1.56	34
Florida	6.000*	2.51	12	North Carolina	4.750*	1.55	35
Michigan	6.000	2.40	13	Georgia	4.000	1.46	36
Kansas	6.150*	2.30	14	Massachusetts	6.250	1.40	37
Idaho	6.000	2.27	15	Illinois	6.250*	1.39	38
Texas	6.250*	2.26	16	Missouri	4.225*	1.34	39
South Dakota	4.000*	2.22	17	Alabama	4.000*	1.33	40
Maine	5.500	2.03	18	Maryland	6.000	1.31	41
Minnesota	6.875*	2.00	19	Vermont	6.000	1.25	42
West Virginia	6.000	1.99	20	New York	4.000*	1.17	43
Kentucky	6.000	1.98	21	Colorado	2.900*	0.99	44
Nebraska	5.500*	1.91	22	Virginia	4.300*	0.90	45
Utah	4.700*	1.88	23	_			

U.S. Average

#### Notes:

- \* Local tax rates are additional
- Tax rates are as of December 31, 2013

2.08

- Alaska, Delaware, Montana, New Hampshire, and Oregon do not levy a sales tax.
- The state of Delaware imposes a merchants' and manufacturers' license tax and a use tax on leases.

Source: Bureau of Economic Analysis, Commerce Clearing House, Inc., U.S. Department of Commerce, "State Government Finances, 2012"

TABLE 81
MAJOR SALES TAX EXEMPTIONS BY STATE

<u>State</u>	Food	Prescription Drugs	Motor Fuels	Clothes	<u>Cigarettes</u>
Alabama	T	E	E	T	T
Arizona	E	E	E	T	T
Arkansas	T (1)	E	E	T	T
California	E	E	T	T	T
Colorado	E	E	E	T	T
Connecticut	E	E	E	T (7)	T
Florida	E	E	E	T	T
Georgia	E	E	T (1)	T	T
Hawaii	T	E	T	T	T
Idaho	T	E	E	T	T
Illinois	T (1)	T (1)	T (6)	T	T
Indiana	E	E	T	T	Ť
Iowa	E	E	E	T	T
Kansas	T (5)	E	E	T	T
	E (5)	E	E	T	T
Kentucky	E E	E E	E E	T	T
Louisiana					
Maine	E	E	E	T	T
Maryland	E	E	E	T	T
Massachusetts	E	E	E	E (2)	T
Michigan	E	E	T	T	T
Minnesota	E	E	E	E	T
Mississippi	T	E	E	T	T
Missouri	T (1)	E	E	T	T
Nebraska	E	E	E	T	T
Nevada	E	E	E	T	T
New Jersey	E	E	E	E	T
New Mexico	E	E	E	T	T
New York	E	E	T	E (3)	T
North Carolina	E	E	Ē	T	Ť
North Dakota	E	E	E	T	T
Ohio	E	E	E	T	Ť
Oklahoma	T	E	E	T	T
Pennsylvania	E	E	E	E	T
Rhode Island	E	E	E		T
South Carolina		E	E	E (4) T	T
	E				
South Dakota	T (1)	E	E	T	T
Tennessee	T (1)	E	E	T	T
Texas	E	E	E	T	T
Utah	T	E	E	T	T
Vermont	E	E	E	E	T
Virginia	T (1)	E	E	T	T
Washington	E	E	E	T	T
West Virginia	E	E	T	T	T
Wisconsin	E	E	E	T	T
Wyoming	<u>E</u>	<u>E</u>	<u>E</u>	<u>T</u>	<u>T</u>
Total Taxable	<u>-</u> 13	<u>E</u> 1	8	<del>-</del> 38	<u>T</u> 45

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

T = Taxable under the sales tax, E = Exempt from the sales tax (1) Taxed at a reduced rate. (2) Up to a sales price of \$175 per item. (3) Up to a sales price of \$110 per item. (4) Up to a sales price of \$250 per item. (5) Refund available for disabled, elderly and low-income households. (6) Sales of majority blended ethanol fuel are exempt. (7) On and after June 1, 2015, sales of clothing and footwear that cost less than \$50 are exempt.

#### **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. The Corporation Business Tax consists of three components, and the taxpayer's liability is the greatest amount computed under any of the three components. The first is a tax measured by the net income of a taxpayer (the "Income-Base Tax"). 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. The corporation business tax generated \$742.5 million in fiscal year 2013 and \$716.5 million in fiscal year 2012. In fiscal 2013, this tax accounted for 3.8% of total revenue, nearly unchanged from fiscal 2012, when it accounted for 3.9% of total revenue.

If a taxpayer is taxable solely within the state, the Income-Base Tax is measured by, and based upon, its entire net income. If a taxpayer is taxable in another state in which it conducts business, the base against which the Income-Base Tax is measured is the portion of the taxpayer's entire net income assigned to the state, pursuant to a statutory formula designed to identify the proportion of the taxpayer's trade or business conducted within the state. Currently, the Income-Base Tax is levied at the rate of 7.5%. Public Act 09-3 of the June Special Session imposed a 10% surcharge for income years 2009, 2010, and 2011. Public Act 11-6 Sec. 76 & 79 impose a 20% surcharge for income years 2012 and 2013. Public Act 13-184 Sec. 73 & 74 maintained the 20% surcharge for income years 2014 and 2015. 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.

The second part of the Corporation Business Tax is an additional tax on capital (the "Additional Tax"). The additional tax base is determined either as a specific maximum dollar amount or at a flat rate on a defined base, usually related in whole or part to its capital stock and balance sheet surplus, profit and deficit. If a taxpayer is also taxable in another state in which it conducts business, the defined base is apportioned most often to the value of certain assets having tax status within the state. The third component of the Corporation Business Tax is the Minimum Tax, which is \$250. Corporations must compute their tax under all three bases and then pay the tax under the highest computation.

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 82 CORPORATION TAX BY STATE

	Low	<u>Bracket</u>	High	n Bracket		Low	<u>Bracket</u>	]	<u>High</u>
								<u>B</u>	<u>racket</u>
	%	To Net	% I	From Net		%	To Net	%	From Net
<u>State</u>	<u>Rate</u>	Income \$	Rate	Income \$	<u>State</u>	<u>Rate</u>	<u>Income</u>	<u>Rate</u>	Income \$
Alabama	6.5	All			Missouri	6.25	All		
Alaska	2.0	48,999	9.4	222,000	Montana	6.75	All		
Arizona	6.968	All			Nebraska	5.58	100,000	7.81	100,001
Arkansas	1.0	3,000	6.5	100,001	New Hampshire	8.5	All		
California (1)	8.84	All			New Jersey	6.5	50,000	9.0	100,001
Colorado	4.63	All			New Mexico	4.8	500,000	7.6	1.0M+
Connecticut (2)	<u>7.5</u>	<u>A11</u>			New York	7.1	All		
Delaware	8.7	All			N. Carolina	6.9	All		
Florida (3)	5.5	All			N. Dakota	1.48	25,000	4.53	50,001
Georgia	6.0	All			Ohio (7)				
Hawaii	4.4	25,000	6.4	100,001	Oklahoma	6.0	All		
Idaho	7.4	All			Oregon	6.6	1.0M	7.6	1.0M+
Illinois (4)	7.0	All			Pennsylvania	9.99	All		
Indiana	7.5	All			Rhode Island	9.0	All		
Iowa	6.0	25,000	12.0	250,000	S. Carolina	5.0	All		
Kansas (5)	4.0	All			Tennessee	6.5	All		
Kentucky	4.0	50,000	6.0	100,001	Texas (71				
Louisiana	4.0	25,000	8.0	200,001	Utah	5.0	All		
Maine	3.5	25,000	8.93	250,001	Vermont	6.0	10,000	8.5	25,001
Maryland	8.25	All			Virginia	6.0	All		
Massachusetts	8.0	All			West Virginia	7.0	All		
Michigan (6)	6.0	All			Wisconsin	7.9	All		
Minnesota	9.8	All			District of Col.	9.975	All		
Mississippi	3.0	5,000	5.0	10,001					

Note: The table does not include corporate income taxes levied at the local level. These states do not levy a corporate income tax: Nevada, South Dakota, Washington & Wyoming. 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 \$500; UT \$100; VT \$250; District of Columbia \$250

- (1) Banks and financial corporations (except financial S-corporations) are subject to a 10.84% tax.
- (2) A 20% surcharge is imposed for tax years 2012 2015 on companies with more than \$100 million in annual gross revenue.
- (3) An alternative minimum tax imposed 3.3%, an exemption of \$50,000 is allowed.
- (4) Additional personal property replacement tax is imposed at the rate of 2.5%.
- (5) A surtax of 3.0% is imposed on income over \$50,000.
- (6) Taxpayers with certificated credits may elect to pay the MBT at 4.95% subject to a surcharge of 21.99% of tax liability before application of credits. For all other taxpayers, the MBT was repealed Jan. 1, 2012.
- (7) OH: The Commercial Activity Tax-based on gross receipts over \$1 million was instituted in 2005 at 0.26%, TX: a franchise tax of 1.0% is imposed on entities with more than \$1,000,000 of total revenues.

#### **Motor Fuels Tax**

The state imposes a tax, subject to certain limitations, (1) on 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) on all combustible gases and liquids which are suitable and used for generation of power to propel motor vehicles ("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 or its municipalities.

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

The Gasoline Tax is 25 cents per gallon. Effective July 1, 2013, the Special Fuels and Motor Carrier Taxes were increased from 51.2 cents per gallon to 54.9 cents per gallon. 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, or a total of \$14.2 million, 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 83 MOTOR FUEL TAXES BY STATE

		Sales				Sales	
	Excise	Tax	Total		Excise	Tax	Total
<u>State</u>	<u>Tax</u>	Rate %	Tax*	<u>State</u>	<u>Tax</u>	Rate %	Tax*
Alabama	16.0¢	-	16.0¢	Montana	27.0¢	-	27.0¢
Alaska	8.0	-	8.0	Nebraska	26.4	-	26.4
Arizona	18.0	-	18.0	Nevada	24.0	-	24.0
Arkansas	21.5	-	21.5	New Hampshire	18.0	-	18.0
California	39.5	7.25	61.3	New Jersey	10.5	-	10.5
Colorado	22.0	-	22.0	New Mexico	17.0	-	17.0
Connecticut (a)	<u>25.0</u>	<u>-</u>	<u>25.0</u>	New York	8.0	4	20.0
Delaware	23.0	-	23.0	North Carolina (f)	37.5	-	37.5
Florida	17.1	-	17.1	North Dakota	23.0	-	23.0
Georgia (b)	7.5	-	19.3	Ohio	28.0	-	28.0
Hawaii (c)	17.0	4	41.7	Oklahoma	16.0	-	16.0
Idaho	25.0	-	25.0	Oregon	30.0	-	30.0
Illinois	19.0	6.3	37.9	Pennsylvania	40.7	-	40.7
Indiana (d)	18.0	7	50.0	Rhode Island	32.0	-	32.0
Iowa	21.0	-	21.0	South Carolina	16.0	-	16.0
Kansas	24.0	-	24.0	South Dakota	22.0	-	22.0
Kentucky (e)	30.9	-	30.9	Tennessee	20.0	-	20.0
Louisiana	20.0	-	20.0	Texas	20.0	-	20.0
Maine	30.0	-	30.0	Utah	24.5	-	24.5
Maryland	27.0	-	27.0	Vermont	18.2	-	18.2
Massachusetts	21.0	-	21.0	Virginia	11.1	-	11.1
Michigan	19.0	6	37.0	Washington	37.5	-	37.5
Minnesota	28.5	-	28.5	West Virginia (g)	20.5	-	35.7
Mississippi	18.0	-	18.0	Wisconsin	30.9	-	30.9
Missouri	17.0	-	17.0	Wyoming	24.0	-	24.0

- \* The total column in the above table is the sum of per gallon state tax and sales taxes or additional taxes where applicable. The price used to estimate the effect of the sales tax, which excludes state taxes, was \$3.00 per gallon.
- (a) Plus a petroleum gross receipts tax of 8.1%
- (b) Includes a pre-paid sales tax converted to a cents per gallon rate of 11.8¢
- (c) County taxes between 8.8¢ and 16.5¢ per gallon are levied in addition to the state tax of 17¢ per gallon. An average of 12.7¢ was used in calculating the total tax.
- (d) Plus an 11¢ surcharge tax effective January 1, 2014.
- (e) KY: Rate is variable, adjusted quarterly. MA: Rate is variable, adjusted annually
- (f) Includes an additional tax based on the average wholesale price of motor fuel.
- (g) Plus additional variable wholesale tax rate of 15.2¢ per gallon effective January 1, 2014.

# **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 84 CIGARETTE TAXES BY STATE

<u>State</u>	<u>Rate</u>	<u>State</u>	<u>Rate</u>
Alabama	\$0.425	Montana	\$1.70
Alaska	\$2.00	Nebraska	\$0.64
Arizona	\$2.00	Nevada	\$0.80
Arkansas	\$1.15	New Hampshire	\$1.78
California	\$0.87	New Jersey	\$2.70
Colorado	\$0.84	New Mexico	\$1.66
<b>Connecticut</b>	<u>\$3.40</u>	New York	\$4.35
Delaware	\$1.60	North Carolina	\$0.45
Florida (1)	\$0.339	North Dakota	\$0.44
Georgia	\$0.37	Ohio	\$1.25
Hawaii	\$3.20	Oklahoma	\$1.03
Idaho	\$0.57	Oregon	\$1.18
Illinois	\$1.98	Pennsylvania	\$1.60
Indiana	\$1.00	Rhode Island	\$3.50
Iowa	\$1.36	South Carolina	\$0.57
Kansas	\$0.79	South Dakota	\$1.53
Kentucky	\$0.60	Tennessee	\$0.62
Louisiana	\$0.36	Texas	\$1.41
Maine	\$2.00	Utah	\$1.70
Maryland	\$2.00	Vermont	\$2.62
Massachusetts	\$3.51	Virginia	\$0.30
Michigan	\$2.00	Washington	\$3.025
Minnesota	\$3.323	West Virginia	\$0.55
Mississippi	\$0.68	Wisconsin	\$2.52
Missouri	\$0.17	Wyoming	\$0.60

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

(1) Plus a \$1 surcharge per pack of 20 cigarettes.

TABLE 85
INSURANCE COMPANIES TAX BY STATE

	Domestic	Foreign		Domestic	Foreign
	Tax	Tax		Tax	Tax
<u>State</u>	<u>Rate % (1)</u>	Rate % (1)	<u>State</u>	Rate % (1)	Rate % (1)
Alabama	0.50-3.60	0.50-3.60	Montana	0.75-2.75	0.75-2.75
Alaska	0.75-6.00	0.75-6.00	Nebraska (4)	0.375-5.00	0.50-5.00
Arizona (3)	2.00-3.00	2.00-3.00	Nevada	2.00-3.50	2.00-3.50
Arkansas	0.75-3.00	0.75-3.00	New Hampshire (7)	1.25-4.00	3.00
California	0.50-5.00	0.50-5.00	New Jersey	1.05-5.00	1.05-5.00
Colorado (2)	0.50-2.25	0.50-2.25	New Mexico	3.003-4.003	3.003-4.003
Connecticut	<u>1.75-4.00</u>	<u>1.75-4.00</u>	New York (7)	1.00-7.10	1.00-7.10
Delaware (3)	1.75-5.00	1.75-5.00	North Carolina	1.90-2.50	1.90-2.50
Florida (4)	0.75-1.75	0.75-1.75	North Dakota (7)	1.75-2.00	1.75-2.00
Georgia (2,4)	0.50-4.00	0.50-4.00	Ohio (4,7)	1.00-5.00	1.00-5.00
Hawaii	0.88 - 4.27	0.88 - 4.27	Oklahoma (4)	2.25-6.00	2.25-6.00
Idaho	1.50	1.50	Oregon	(8)	(8)
Illinois (4)	0.40-0.50	0.40-0.50	Pennsylvania	1.25-5.00	1.25-5.00
Indiana (4)	1.30	1.30	Rhode Island	2.00	2.00
Iowa	1.00	1.00	South Carolina	0.75-2.35	0.75-2.35
Kansas (4)	2.00-6.00	2.00-6.00	South Dakota (4)	1.25-2.50	1.25-2.50
Kentucky (4,5)	2.00	2.00	Tennessee (2,4,7)	1.75-5.50	1.75-5.50
Louisiana (4)	(6)	(6)	Texas	1.35-1.75	1.35-1.75
Maine	1.00-2.55	1.00-2.55	Utah	0.45-4.25	0.45 - 4.25
Maryland	2.00-3.00	2.00-3.00	Vermont	2.00	2.00
Massachusetts (3)	2.00	2.00	Virginia	1.00-2.50	1.00-2.50
Michigan	1.25	1.25	Washington	0.95-2.00	0.95-2.00
Minnesota (4)	1.00-2.00	1.00-2.00	W. Virginia (1,4,7)	2.00	2.00
Mississippi (4)	3.00	3.00	Wisconsin	0.50-3.50	0.50-2.375
Missouri (1)	1.00-2.00	1.00-2.00	Wyoming	0.75-1.00	0.75-1.00

Note: The tax is based on the net premiums of authorized insurers, excludes surplus line rates.

- (1) Depending upon the type of insurance issued or the type of organization formed.
- (2) Rate is reduced depending upon the percentage of premiums or assets invested in the State or the State's securities.
- (3) Plus a surtax of 0.4312% on vehicles in Arizona, 0.25% in Delaware, and 14% of the tax imposed in Massachusetts.
- (4) Plus a fire marshal's tax not to exceed 1%; 0.3125% in Oklahoma; 0.5% in Indiana and South Dakota; 0.55% in West Virginia; 0.65% in Minnesota; 0.75% in Kentucky, Nebraska, Ohio, Tennessee and Kansas; 1.25% in Louisiana; 1.4% in Maine.
- (5) Plus a surcharge or \$1.50 per \$100 of premiums on Kentucky risks other than health & life.
- (6) Life and health related premiums of \$7,000 or less, \$140; over \$7,000, \$140 plus \$225 per \$10,000; other premiums of \$6,000 or less, \$185; over \$6,000, \$185 plus \$300 per \$10,000.
- (7) With minimum tax of \$200 in New Hampshire, North Dakota, & West Virginia, \$150 in Tennessee and \$250 in New York and Ohio.
- (8) After 2001, foreign and alien insurers are no longer subject to gross premium tax, but are subject to the corporate excise tax.

TABLE 86 ALCOHOLIC BEVERAGE EXCISE TAXES BY STATE (Dollars per Gallon)

		Wines	Wines				Wines	Wines	
	Distilled	14%	14%			Distilled	14%	14%	
<u>State</u>	<u>Spirits</u>	<u>or Less</u>	to 21%	<u>Beer</u>	<u>State</u>	<b>Spirits</b>	<u>or Less</u>	to 21%	<u>Beer</u>
Alabama (2)	(1)	1.70	9.16	.53	Montana	(1)	1.06	1.06	.14
Alaska	12.80	2.50	2.50	1.07	Nebraska	3.75	.95	1.35	.31
Arizona	3.00	.84	.84	.16	Nevada	3.60	.70	1.30	.16
Arkansas	2.50	.75	.75	.23	New Hampshire	(1)	(1)	(1)	.30
California	3.30	.20	.20	.20	New Jersey	5.50	.88	.88	.12
Colorado	2.28	.28	.28	.08	New Mexico	6.06	1.70	1.70	.41
Connecticut	<u>5.40</u>	<u>.72</u>	<u>.72</u>	<u>.24</u>	New York	6.44	.30	.30	.14
Delaware	3.75	.97	.97	.16	N. Carolina	30%	1.00	1.11	.62
Florida	6.50	2.25	3.00	.48	N. Dakota	2.50	.50	.60	.16
Georgia (2)	3.79	1.51	2.54	.32	Ohio	(1)	.30	.98	.18
Hawaii	5.98	1.38	1.38	.93	Oklahoma	5.56	.72	.72	.40
Idaho	(1)	.45	.45	.15	Oregon	(1)	.30	.98	.08
Illinois (2)	8.55	1.39	1.39	.23	Pennsylvania	(1)	(1)	(1)	.08
Indiana	2.68	.47	.47	.12	Rhode Island	3.75	.60	.60	.11
Iowa	(1)	1.75	1.75	.19	S. Carolina (3)	2.72	.90	.90	.77
Kansas	2.50	.30	.75	.18	S. Dakota	3.93	.93	1.45	.27
Kentucky	1.92	.50	.50	.08	Tennessee (4)	4.40	1.21	1.21	.14
Louisiana	2.50	.11	.23	.32	Texas	2.40	.20	.41	.20
Maine	(1)	.60	1.25	.35	Utah	(1)	(1)	(1)	.41
Maryland (2)	1.50	.40	.40	.09	Vermont	(1)	.55	.55	.27
Massachusetts	4.05	.55	.55	.11	Virginia	(1)	1.51	1.51	.26
Michigan	(1)	.51	.76	.20	Washington	(1)	.87	1.72	.76
Minnesota	5.03	.30	.95	.15	W. Virginia	(1)	1.00	1.00	.18
Mississippi	(1)	.35	.35	.43	Wisconsin (5)	3.25	.25	.45	.06
Missouri	2.00	.30	.30	.06	Wyoming	(1)	(1)	(1)	.02

- (1) Government directly controls sale, revenue generated through markup, store profits, and additional taxes and fees.
- (2) Additional excise taxes on beer at the local level.
- (3) Additional surtaxes of 9% on alcoholic beverages and 18¢ per gallon for wine are applied.
- (4) Tennessee levies a 17% surcharge on the wholesale price of malt beverages.
- (5) An administration fee of 11¢ per gallon is imposed on intoxicating liquors.

Source: Commerce Clearing House, Inc., Federation of Tax Administrators. Rates as of January 1, 2013.

The tables on the next two pages list individual General Fund Revenue sources and Special Transportation Fund sources as a percentage of total collections for a five fiscal year period.

# TABLE 87 GENERAL FUND REVENUES

	GENER	AL FUND KE	VENUES		
TAXES (\$K)	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Personal Income	\$6,385,856	\$6,586,099	\$7,246,431	\$8,310,820	\$8,719,245
Sales and Use	3,318,752	3,203,988	3,353,230	3,830,117	3,896,998
Corporation	615,921	667,132	794,473	716,522	742,515
Public Service Corporation	268,495	267,945	269,806	250,397	266,647
Insurance Companies	202,217	226,550	220,626	237,609	260,858
Inheritance & Estate	238,337	177,601	237,573	191,699	439,519
Cigarettes	317,775	387,435	404,111	421,005	399,822
Oil Companies	104,413	123,018	169,163	146,067	175,526
Electric Generation	-	-	-	69,532	66,823
Real Estate Conveyance	90,802	100,267	94,822	107,531	113,830
Alcoholic Beverages	47,064	48,196	48,923	60,595	60,406
Admissions, Dues, Cabaret	36,040	34,379	34,456	34,398	36,544
Miscellaneous	143,305	141,892	140,506	536,810	523,028
Total - Taxes	11,768,977	11,964,502	13,014,119	14,913,103	15,701,763
Less Refunds of Taxes	(1,052,286)	(1,061,433)	(956,054)	(1,105,171)	(1,144,993)
Less Refunds of R&D Credit	(8,428)	(8,937)	(8,599)	(3,563)	(4.086)
Total - Taxes Less Refunds	10,708,263	10,894,132	12,049,467	13,804,369	14,552,684
OTHER REVENUE	207.105	200.214	202 100	212 555	
Transfer-Special Revenue	287,195	289,314	293,108	313,757	315,452
Indian Gaming Payments	377,805	384,248	359,582	344,645	296,396
Licenses, Permits & Fees	162,474 32,558	257,569 33,678	250,442	283,414 35,007	262,068
Sales of Commodities & Services Investment Income	32,538 18,806	33,678 4,062	35,506 29	35,007 964	36,298
Rents, Fines & Escheats	64,018	252,792	157,771	123,424	(792)
Miscellaneous	163,023	142,910	178,728	191,965	144,141 163,818
Less Refunds of Payments	(662)	(1,189)	(1,875)	(85,377)	(74.016)
Total - Other Revenue	1,105,217	1,363,384	1,273,291	1,207,780	1,143,366
OTHER SOURCES	1,105,217	1,303,304	1,273,291	1,207,700	1,143,300
Federal Grants	3,619,490	4,066,314	4,235,178	3,607,163	3.733.910
Transfer from Tobacco Fund	115,800	102,898	95,304	96,100	103,100
Transfer From/(To) Other Funds	152,031	1,261,800	54,215	(153,799)	(128,028)
Total - Other Sources	3,887,321	5,431,012	4,384,697	3,549,464	3.708.982
GRAND TOTAL	\$15,700,801	\$17,688,529	\$17,707,454	\$18,561,633	19,405,031
TAXES	% of Total	· · ·			, ,
TAXES Personal Income	% of Total	% of Total	% of Total	% of Total	% of Total
Personal Income	40.67	% of Total 37.23	% of Total 40.92	<u>% of Total</u> 44.77	% of Total 44.93
Personal Income Sales and Use	40.67 21.14	% of Total 37.23 18.11	% of Total 40.92 18.94	% of Total 44.77 20.63	% of Total 44.93 20.08
Personal Income Sales and Use Corporation	40.67 21.14 3.92	% of Total 37.23 18.11 3.77	% of Total 40.92 18.94 4.49	% of Total 44.77 20.63 3.86	% of Total 44.93 20.08 3.83
Personal Income Sales and Use Corporation Public Service Corporation	40.67 21.14 3.92 1.71	% of Total 37.23 18.11 3.77 1.51	% of Total 40.92 18.94 4.49 1.52	% of Total 44.77 20.63 3.86 1.35	% of Total 44.93 20.08 3.83 1.37
Personal Income Sales and Use Corporation Public Service Corporation Insurance Companies	40.67 21.14 3.92 1.71 1.29	% of Total 37.23 18.11 3.77	% of Total 40.92 18.94 4.49 1.52 1.25	% of Total 44.77 20.63 3.86 1.35 1.28	% of Total 44.93 20.08 3.83 1.37 1.34
Personal Income Sales and Use Corporation Public Service Corporation	40.67 21.14 3.92 1.71	% of Total 37.23 18.11 3.77 1.51 1.28	% of Total 40.92 18.94 4.49 1.52	% of Total 44.77 20.63 3.86 1.35	% of Total 44.93 20.08 3.83 1.37 1.34 2.26
Personal Income Sales and Use Corporation Public Service Corporation Insurance Companies Inheritance & Estate	40.67 21.14 3.92 1.71 1.29 1.52	% of Total 37.23 18.11 3.77 1.51 1.28 0.96	% of Total 40.92 18.94 4.49 1.52 1.25 1.34	% of Total 44.77 20.63 3.86 1.35 1.28 1.03	% of Total 44.93 20.08 3.83 1.37 1.34
Personal Income Sales and Use Corporation Public Service Corporation Insurance Companies Inheritance & Estate Cigarettes	40.67 21.14 3.92 1.71 1.29 1.52 2.02	% of Total 37.23 18.11 3.77 1.51 1.28 0.96 2.19	% of Total 40.92 18.94 4.49 1.52 1.25 1.34 2.28	% of Total 44.77 20.63 3.86 1.35 1.28 1.03 2.27	% of Total 44.93 20.08 3.83 1.37 1.34 2.26 2.06
Personal Income Sales and Use Corporation Public Service Corporation Insurance Companies Inheritance & Estate Cigarettes Oil Companies	40.67 21.14 3.92 1.71 1.29 1.52 2.02	% of Total 37.23 18.11 3.77 1.51 1.28 0.96 2.19 0.70	% of Total 40.92 18.94 4.49 1.52 1.25 1.34 2.28	% of Total 44.77 20.63 3.86 1.35 1.28 1.03 2.27 0.79	% of Total 44.93 20.08 3.83 1.37 1.34 2.26 2.06 0.90
Personal Income Sales and Use Corporation Public Service Corporation Insurance Companies Inheritance & Estate Cigarettes Oil Companies Electric Generation	40.67 21.14 3.92 1.71 1.29 1.52 2.02 0.66	% of Total 37.23 18.11 3.77 1.51 1.28 0.96 2.19 0.70	% of Total 40.92 18.94 4.49 1.52 1.25 1.34 2.28 0.96	% of Total 44.77 20.63 3.86 1.35 1.28 1.03 2.27 0.79 0.37	% of Total       44.93       20.08       3.83       1.37       1.34       2.26       2.06       0.90       0.34
Personal Income Sales and Use Corporation Public Service Corporation Insurance Companies Inheritance & Estate Cigarettes Oil Companies Electric Generation Real Estate Conveyance Alcoholic Beverages Admissions, Dues, Cabaret	40.67 21.14 3.92 1.71 1.29 1.52 2.02 0.66	<u>% of Total</u> 37.23 18.11 3.77 1.51 1.28 0.96 2.19 0.70 - 0.57 0.27 0.19	9% of Total 40.92 18.94 4.49 1.52 1.25 1.34 2.28 0.96	% of Total 44.77 20.63 3.86 1.35 1.28 1.03 2.27 0.79 0.37 0.58 0.33 0.19	% of Total       44.93       20.08       3.83       1.37       1.34       2.26       2.06       0.90       0.34       0.59
Personal Income Sales and Use Corporation Public Service Corporation Insurance Companies Inheritance & Estate Cigarettes Oil Companies Electric Generation Real Estate Conveyance Alcoholic Beverages	40.67 21.14 3.92 1.71 1.29 1.52 2.02 0.66 - 0.58 0.30 0.23 0.91	% of Total       37.23       18.11       3.77       1.51       1.28       0.96       2.19       0.70       -       0.57       0.27       0.19       0.80	% of Total 40.92 18.94 4.49 1.52 1.25 1.34 2.28 0.96 - 0.54 0.28 0.19 0.79	% of Total       44.77       20.63       3.86       1.35       1.28       1.03       2.27       0.79       0.37       0.58       0.33       0.19       2.89	% of Total       44.93       20.08       3.83       1.37       1.34       2.26       2.06       0.90       0.34       0.59       0.31
Personal Income Sales and Use Corporation Public Service Corporation Insurance Companies Inheritance & Estate Cigarettes Oil Companies Electric Generation Real Estate Conveyance Alcoholic Beverages Admissions, Dues, Cabaret Miscellaneous Total - Taxes	40.67 21.14 3.92 1.71 1.29 1.52 2.02 0.66 - 0.58 0.30 0.23 0.91 74.95	% of Total       37.23       18.11       3.77       1.51       1.28       0.96       2.19       0.70       -       0.57       0.27       0.19       0.80       67.64	% of Total 40.92 18.94 4.49 1.52 1.25 1.34 2.28 0.96 - 0.54 0.28 0.19 0.79 73.50	% of Total       44.77       20.63       3.86       1.35       1.28       1.03       2.27       0.79       0.37       0.58       0.33       0.19       2.89       80.34	% of Total       44.93       20.08       3.83       1.37       1.34       2.26       2.06       0.90       0.34       0.59       0.31       0.19
Personal Income Sales and Use Corporation Public Service Corporation Insurance Companies Inheritance & Estate Cigarettes Oil Companies Electric Generation Real Estate Conveyance Alcoholic Beverages Admissions, Dues, Cabaret Miscellaneous Total - Taxes Less Refunds of Taxes	40.67 21.14 3.92 1.71 1.29 1.52 2.02 0.66 - 0.58 0.30 0.23 0.91 74.95 (6.70)	% of Total       37.23       18.11       3.77       1.51       1.28       0.96       2.19       0.70       -       0.57       0.27       0.19       0.80	% of Total 40.92 18.94 4.49 1.52 1.25 1.34 2.28 0.96 - 0.54 0.28 0.19 0.79	% of Total       44.77       20.63       3.86       1.35       1.28       1.03       2.27       0.79       0.37       0.58       0.33       0.19       2.89	% of Total       44.93       20.08       3.83       1.37       1.34       2.26       2.06       0.90       0.34       0.59       0.31       0.19       2.70
Personal Income Sales and Use Corporation Public Service Corporation Insurance Companies Inheritance & Estate Cigarettes Oil Companies Electric Generation Real Estate Conveyance Alcoholic Beverages Admissions, Dues, Cabaret Miscellaneous Total - Taxes Less Refunds of Taxes Less Refunds of R&D Credit	40.67 21.14 3.92 1.71 1.29 1.52 2.02 0.66 - 0.58 0.30 0.23 0.91 74.95 (6.70) (0.05)	% of Total           37.23           18.11           3.77           1.51           1.28           0.96           2.19           0.70           -           0.57           0.27           0.19           0.80           67.64           (6.00)           (0.05)	9% of Total 40.92 18.94 4.49 1.52 1.25 1.34 2.28 0.96 - 0.54 0.28 0.19 0.79 73.50 (5.40) (0.05)	% of Total       44.77       20.63       3.86       1.35       1.28       1.03       2.27       0.79       0.37       0.58       0.33       0.19       2.89       80.34       (5.95)       (0.02)	% of Total       44.93       20.08       3.83       1.37       1.34       2.26       2.06       0.90       0.34       0.59       0.31       0.19       2.70       80.92
Personal Income Sales and Use Corporation Public Service Corporation Insurance Companies Inheritance & Estate Cigarettes Oil Companies Electric Generation 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	40.67 21.14 3.92 1.71 1.29 1.52 2.02 0.66 - 0.58 0.30 0.23 0.91 74.95 (6.70)	% of Total           37.23           18.11           3.77           1.51           1.28           0.96           2.19           0.70           -           0.57           0.27           0.19           0.80           67.64           (6.00)	9% of Total 40.92 18.94 4.49 1.52 1.25 1.34 2.28 0.96 - 0.54 0.28 0.19 0.79 - 73.50 (5.40)	% of Total       44.77       20.63       3.86       1.35       1.28       1.03       2.27       0.79       0.37       0.58       0.33       0.19       2.89       80.34       (5.95)	% of Total       44.93       20.08       3.83       1.37       1.34       2.26       2.06       0.90       0.34       0.59       0.31       0.19       2.70       80.92       (5.90)
Personal Income Sales and Use Corporation Public Service Corporation Insurance Companies Inheritance & Estate Cigarettes Oil Companies Electric Generation 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	40.67 21.14 3.92 1.71 1.29 1.52 2.02 0.66 - 0.58 0.30 0.23 0.91 74.95 (6.70) (0.05)	% of Total           37.23           18.11           3.77           1.51           1.28           0.96           2.19           0.70           -           0.57           0.27           0.19           0.80           67.64           (6.00)           (0.05)           61.59	9% of Total 40.92 18.94 4.49 1.52 1.25 1.34 2.28 0.96 - 0.54 0.28 0.19 0.79 73.50 (5.40) (0.05) 68.05	% of Total       44.77       20.63       3.86       1.35       1.28       1.03       2.27       0.79       0.37       0.58       0.33       0.19       2.89       80.34       (5.95)       (0.02)       74.37	% of Total       44.93       20.08       3.83       1.37       1.34       2.26       2.06       0.90       0.34       0.59       0.31       0.19       2.70       80.92       (5.90)       (0.02)
Personal Income Sales and Use Corporation Public Service Corporation Insurance Companies Inheritance & Estate Cigarettes Oil Companies Electric Generation 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	40.67 21.14 3.92 1.71 1.29 1.52 2.02 0.66 - 0.58 0.30 0.23 0.91 74.95 (6.70) (0.05) 68.20	% of Total           37.23           18.11           3.77           1.51           1.28           0.96           2.19           0.70           -           0.57           0.27           0.19           0.80           67.64           (6.00)           (0.05)           61.59           1.64	% of Total       40.92       18.94       4.49       1.52       1.25       1.34       2.28       0.96       -       0.54       0.28       0.19       0.79       73.50       (5.40)       (0.05)       68.05       1.66	% of Total       44.77       20.63       3.86       1.35       1.28       1.03       2.27       0.79       0.37       0.58       0.33       0.19       2.89       80.34       (5.95)       (0.02)       74.37       1.69	% of Total       44.93       20.08       3.83       1.37       1.34       2.26       2.06       0.90       0.34       0.59       0.31       0.19       2.70       80.92       (5.90)       (0.02)
Personal Income Sales and Use Corporation Public Service Corporation Insurance Companies Inheritance & Estate Cigarettes Oil Companies Electric Generation 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	40.67 21.14 3.92 1.71 1.29 1.52 2.02 0.66 - 0.58 0.30 0.23 0.91 74.95 (6.70) (0.05) 68.20 1.83 2.40	% of Total       37.23       18.11       3.77       1.51       1.28       0.96       2.19       0.70       -       0.57       0.27       0.19       0.80       67.64       (6.00)       (0.05)       61.59       1.64       2.17	% of Total       40.92       18.94       4.49       1.52       1.25       1.34       2.28       0.96       -       0.54       0.28       0.19       0.79       73.50       (5.40)       (0.05)       68.05       1.66       2.03	% of Total       44.77       20.63       3.86       1.35       1.28       1.03       2.27       0.79       0.37       0.58       0.33       0.19       2.89       80.34       (5.95)       (0.02)       74.37       1.69       1.86	% of Total           44.93           20.08           3.83           1.37           1.34           2.26           2.06           0.90           0.34           0.59           0.31           0.19           2.70           80.92           (5.90)           (0.02)           74.99           1.63           1.53
Personal Income Sales and Use Corporation Public Service Corporation Insurance Companies Inheritance & Estate Cigarettes Oil Companies Electric Generation 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	40.67 21.14 3.92 1.71 1.29 1.52 2.02 0.66 - 0.58 0.30 0.23 0.91 - 74.95 (6.70) (0.05) 68.20  1.83 2.40 1.03	% of Total       37.23       18.11       3.77       1.51       1.28       0.96       2.19       0.70       -       0.57       0.27       0.19       0.80       67.64       (6.00)       (0.05)       61.59       1.64       2.17       1.46	% of Total       40.92       18.94       4.49       1.52       1.25       1.34       2.28       0.96       0.54       0.28       0.19       0.79       73.50       (5.40)       (0.05)       68.05       1.66       2.03       1.41	% of Total       44.77       20.63       3.86       1.35       1.28       1.03       2.27       0.79       0.37       0.58       0.33       0.19       2.89       80.34       (5.95)       (0.02)       74.37       1.69       1.86       1.53	% of Total       44.93       20.08       3.83       1.37       1.34       2.26       2.06       0.90       0.34       0.59       0.31       0.19       2.70       80.92       (5.90)       (0.02)       74.99       1.63       1.53       1.35
Personal Income Sales and Use Corporation Public Service Corporation Insurance Companies Inheritance & Estate Cigarettes Oil Companies Electric Generation 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 & Services	40.67 21.14 3.92 1.71 1.29 1.52 2.02 0.66 - 0.58 0.30 0.23 0.91 74.95 (6.70) (0.05) 68.20  1.83 2.40 1.03 0.21	% of Total           37.23           18.11           3.77           1.51           1.28           0.96           2.19           0.70           -           0.57           0.27           0.19           0.80           67.64           (6.00)           (0.05)           61.59           1.64           2.17           1.46           0.19	% of Total       40.92       18.94       4.49       1.52       1.25       1.34       2.28       0.96       -       0.54       0.28       0.19       0.79       73.50       (5.40)       (0.05)       68.05       1.66       2.03	% of Total       44.77       20.63       3.86       1.35       1.28       1.03       2.27       0.79       0.37       0.58       0.33       0.19       2.89       80.34       (5.95)       (0.02)       74.37       1.69       1.86       1.53       0.19	% of Total       44.93       20.08       3.83       1.37       1.34       2.26       2.06       0.90       0.34       0.59       0.31       0.19       2.70       80.92       (5.90)       (0.02)       74.99       1.63       1.53       1.35       0.19
Personal Income Sales and Use Corporation Public Service Corporation Insurance Companies Inheritance & Estate Cigarettes Oil Companies Electric Generation 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 & Services Investment Income	40.67 21.14 3.92 1.71 1.29 1.52 2.02 0.66 - 0.58 0.30 0.23 0.91 74.95 (6.70) (0.05) 68.20  1.83 2.40 1.03 0.21 0.12	% of Total           37.23           18.11           3.77           1.51           1.28           0.96           2.19           0.70           -           0.57           0.27           0.19           0.80           67.64           (6.00)           (0.05)           61.59           1.64           2.17           1.46           0.19           0.02	9% of Total 40.92 18.94 4.49 1.52 1.25 1.34 2.28 0.96 - 0.54 0.28 0.19 0.79 73.50 (5.40) (0.05) 68.05  1.66 2.03 1.41 0.20	% of Total       44.77       20.63       3.86       1.35       1.28       1.03       2.27       0.79       0.37       0.58       0.33       0.19       2.89       80.34       (5.95)       (0.02)       74.37       1.69       1.86       1.53       0.19       0.01	% of Total           44.93           20.08           3.83           1.37           1.34           2.26           2.06           0.90           0.34           0.59           0.31           0.19           2.70           80.92           (5.90)           (0.02)           74.99           1.63           1.53           1.35           0.19           (0.00)
Personal Income Sales and Use Corporation Public Service Corporation Insurance Companies Inheritance & Estate Cigarettes Oil Companies Electric Generation 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 & Services Investment Income Rents, Fines & Escheats	40.67 21.14 3.92 1.71 1.29 1.52 2.02 0.66 - 0.58 0.30 0.23 0.91 74.95 (6.70) (0.05) 68.20  1.83 2.40 1.03 0.21 0.12 0.41	% of Total           37.23           18.11           3.77           1.51           1.28           0.96           2.19           0.70           -           0.57           0.27           0.19           0.80           67.64           (6.00)           (0.05)           61.59           1.64           2.17           1.46           0.19           0.02           1.43	% of Total       40.92       18.94       4.49       1.52       1.34       2.28       0.96       -       0.54       0.28       0.19       0.79       73.50       (5.40)       (0.05)       68.05       1.66       2.03       1.41       0.20       -       0.89	% of Total           44.77           20.63           3.86           1.35           1.28           1.03           2.27           0.79           0.37           0.58           0.33           0.19           2.89           80.34           (5.95)           (0.02)           74.37           1.69           1.86           1.53           0.19           0.01           0.67	% of Total           44.93           20.08           3.83           1.37           1.34           2.26           2.06           0.90           0.34           0.59           0.31           0.19           2.70           80.92           (5.90)           (0.02)           74.99           1.63           1.53           1.35           0.19           (0.00)           0.74
Personal Income Sales and Use Corporation Public Service Corporation Insurance Companies Inheritance & Estate Cigarettes Oil Companies Electric Generation 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 & Services Investment Income Rents, Fines & Escheats Miscellaneous	40.67 21.14 3.92 1.71 1.29 1.52 2.02 0.66 - 0.58 0.30 0.23 0.91 74.95 (6.70) (0.05) 68.20  1.83 2.40 1.03 0.21 0.12	% of Total           37.23           18.11           3.77           1.51           1.28           0.96           2.19           0.70           -           0.57           0.27           0.19           0.80           67.64           (6.00)           (0.05)           61.59           1.64           2.17           1.46           0.19           0.02           1.43           0.81	% of Total       40.92       18.94       4.49       1.52       1.34       2.28       0.96       -       0.54       0.28       0.19       0.79       73.50       (5.40)       (0.05)       68.05       1.66       2.03       1.41       0.20       0.89       1.01	% of Total           44.77           20.63           3.86           1.35           1.28           1.03           2.27           0.79           0.37           0.58           0.33           0.19           2.89           80.34           (5.95)           (0.02)           74.37           1.69           1.86           1.53           0.19           0.01           0.67           1.01	% of Total           44.93           20.08           3.83           1.37           1.34           2.26           2.06           0.90           0.34           0.59           0.31           0.19           2.70           80.92           (5.90)           (0.02)           74.99           1.63           1.53           1.35           0.19           (0.00)           0.74           0.84
Personal Income Sales and Use Corporation Public Service Corporation Insurance Companies Inheritance & Estate Cigarettes Oil Companies Electric Generation 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 & Services Investment Income Rents, Fines & Escheats Miscellaneous Less Refunds of Payments	40.67 21.14 3.92 1.71 1.29 1.52 2.02 0.66 - 0.58 0.30 0.23 0.91 74.95 (6.70) (0.05) 68.20  1.83 2.40 1.03 0.21 0.12 0.41 1.04	% of Total           37.23           18.11           3.77           1.51           1.28           0.96           2.19           0.70           -           0.57           0.27           0.19           0.80           67.64           (6.00)           (0.05)           61.59           1.64           2.17           1.46           0.19           0.02           1.43           0.81           (0.01)	% of Total           40.92           18.94           4.49           1.52           1.25           1.34           2.28           0.96           -           0.54           0.28           0.19           0.79           73.50           (5.40)           (0.05)           68.05           1.66           2.03           1.41           0.20           -           0.89           1.01           (0.01)	% of Total           44.77           20.63           3.86           1.35           1.28           1.03           2.27           0.79           0.37           0.58           0.33           0.19           2.89           80.34           (5.95)           (0.02)           74.37           1.69           1.86           1.53           0.19           0.01           0.67           1.01           (0.01)	% of Total           44.93           20.08           3.83           1.37           1.34           2.26           2.06           0.90           0.34           0.59           0.31           0.19           2.70           80.92           (5.90)           (0.02)           74.99           1.63           1.53           1.35           0.19           (0.00)           0.74           0.84           (0.38)
Personal Income Sales and Use Corporation Public Service Corporation Insurance Companies Inheritance & Estate Cigarettes Oil Companies Electric Generation 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 & Services Investment Income Rents, Fines & Escheats Miscellaneous Less Refunds of Payments Total - Other Revenue	40.67 21.14 3.92 1.71 1.29 1.52 2.02 0.66 - 0.58 0.30 0.23 0.91 74.95 (6.70) (0.05) 68.20  1.83 2.40 1.03 0.21 0.12 0.41	% of Total           37.23           18.11           3.77           1.51           1.28           0.96           2.19           0.70           -           0.57           0.27           0.19           0.80           67.64           (6.00)           (0.05)           61.59           1.64           2.17           1.46           0.19           0.02           1.43           0.81	% of Total       40.92       18.94       4.49       1.52       1.34       2.28       0.96       -       0.54       0.28       0.19       0.79       73.50       (5.40)       (0.05)       68.05       1.66       2.03       1.41       0.20       0.89       1.01	% of Total           44.77           20.63           3.86           1.35           1.28           1.03           2.27           0.79           0.37           0.58           0.33           0.19           2.89           80.34           (5.95)           (0.02)           74.37           1.69           1.86           1.53           0.19           0.01           0.67           1.01	% of Total           44.93           20.08           3.83           1.37           1.34           2.26           2.06           0.90           0.34           0.59           0.31           0.19           2.70           80.92           (5.90)           (0.02)           74.99           1.63           1.53           1.35           0.19           (0.00)           0.74           0.84
Personal Income Sales and Use Corporation Public Service Corporation Insurance Companies Inheritance & Estate Cigarettes Oil Companies Electric Generation 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 & Services Investment Income Rents, Fines & Escheats Miscellaneous Less Refunds of Payments Total - Other Revenue OTHER SOURCES	40.67 21.14 3.92 1.71 1.29 1.52 2.02 0.66 - 0.58 0.30 0.23 0.91 74.95 (6.70) (0.05) 68.20  1.83 2.40 1.03 0.21 0.12 0.41 1.04 - 7.04	% of Total           37.23           18.11           3.77           1.51           1.28           0.96           2.19           0.70           -           0.57           0.27           0.19           0.80           67.64           (6.00)           (0.05)           61.59           1.64           2.17           1.46           0.19           0.02           1.43           0.81           (0.01)           7.71	% of Total       40.92       18.94       4.49       1.52       1.25       1.34       2.28       0.96       -       0.54       0.28       0.19       0.79       73.50       (5.40)       (0.05)       68.05       1.66       2.03       1.41       0.20       -       0.89       1.01       (0.01)       7.19	% of Total           44.77           20.63           3.86           1.35           1.28           1.03           2.27           0.79           0.37           0.58           0.33           0.19           2.89           80.34           (5.95)           (0.02)           74.37           1.69           1.86           1.53           0.19           0.01           0.67           1.01           (0.01)           6.51	% of Total           44.93           20.08           3.83           1.37           1.34           2.26           2.06           0.90           0.34           0.59           0.31           0.19           2.70           80.92           (5.90)           (0.02)           74.99           1.63           1.53           1.35           0.19           (0.00)           0.74           0.84           (0.38)           5.89
Personal Income Sales and Use Corporation Public Service Corporation Insurance Companies Inheritance & Estate Cigarettes Oil Companies Electric Generation 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 & Services Investment Income Rents, Fines & Escheats Miscellaneous Less Refunds of Payments Total - Other Revenue OTHER SOURCES Federal Grants	40.67 21.14 3.92 1.71 1.29 1.52 2.02 0.66 - 0.58 0.30 0.23 0.91 74.95 (6.70) (0.05) 68.20  1.83 2.40 1.03 0.21 0.12 0.41 1.04 - 7.04 23.05	% of Total           37.23           18.11           3.77           1.51           1.28           0.96           2.19           0.70           -           0.57           0.27           0.19           0.80           67.64           (6.00)           (0.05)           61.59           1.64           2.17           1.46           0.19           0.02           1.43           0.81           (0.01)           7.71           22.99	% of Total       40.92       18.94       4.49       1.52       1.34       2.28       0.96       -       0.54       0.28       0.19       0.79       73.50       (5.40)       (0.05)       68.05       1.66       2.03       1.41       0.20       -       0.89       1.01       (0.01)       7.19       23.92	% of Total           44.77           20.63           3.86           1.35           1.28           1.03           2.27           0.79           0.37           0.58           0.33           0.19           2.89           80.34           (5.95)           (0.02)           74.37           1.69           1.86           1.53           0.19           0.01           0.67           1.01           (0.01)           6.51           19.43	% of Total           44.93           20.08           3.83           1.37           1.34           2.26           2.06           0.90           0.34           0.59           0.31           0.19           2.70           80.92           (5.90)           (0.02)           74.99           1.63           1.53           1.35           0.19           (0.00)           0.74           0.84           (0.38)           5.89           19.24
Personal Income Sales and Use Corporation Public Service Corporation Insurance Companies Inheritance & Estate Cigarettes Oil Companies Electric Generation 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 & Services Investment Income Rents, Fines & Escheats Miscellaneous Less Refunds of Payments Total - Other Revenue OTHER SOURCES Federal Grants Transfer from Tobacco Fund	40.67 21.14 3.92 1.71 1.29 1.52 2.02 0.66 - 0.58 0.30 0.23 0.91 74.95 (6.70) (0.05) 68.20  1.83 2.40 1.03 0.21 0.12 0.41 1.04 - 7.04 23.05 0.74	% of Total           37.23           18.11           3.77           1.51           1.28           0.96           2.19           0.70           -           0.57           0.27           0.19           0.80           67.64           (6.00)           (0.05)           61.59           1.64           2.17           1.46           0.19           0.02           1.43           0.81           (0.01)           7.71           22.99           0.58	% of Total       40.92       18.94       4.49       1.52       1.34       2.28       0.96       -       0.54       0.28       0.19       0.79       73.50       (5.40)       (0.05)       68.05       1.66       2.03       1.41       0.20       -       0.89       1.01       (0.01)       7.19       23.92       0.54	% of Total           44.77           20.63           3.86           1.35           1.28           1.03           2.27           0.79           0.37           0.58           0.33           0.19           2.89           80.34           (5.95)           (0.02)           74.37           1.69           1.86           1.53           0.19           0.01           0.67           1.01           (0.01)           6.51           19.43           0.52	% of Total           44.93           20.08           3.83           1.37           1.34           2.26           2.06           0.90           0.34           0.59           0.31           0.19           2.70           80.92           (5.90)           (0.02)           74.99           1.63           1.53           1.35           0.19           (0.00)           0.74           0.84           (0.38)           5.89           19.24           0.53
Personal Income Sales and Use Corporation Public Service Corporation Insurance Companies Inheritance & Estate Cigarettes Oil Companies Electric Generation 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 & Services Investment Income Rents, Fines & Escheats Miscellaneous Less Refunds of Payments Total - Other Revenue OTHER SOURCES Federal Grants Transfer from Tobacco Fund Transfer From/(To) Other Funds	40.67 21.14 3.92 1.71 1.29 1.52 2.02 0.66 - 0.58 0.30 0.23 0.91 74.95 (6.70) (0.05) 68.20  1.83 2.40 1.03 0.21 0.12 0.41 1.04 - 7.04  23.05 0.74 0.97	% of Total           37.23           18.11           3.77           1.51           1.28           0.96           2.19           0.70           -           0.57           0.27           0.19           0.80           67.64           (6.00)           (0.05)           61.59           1.64           2.17           1.46           0.19           0.02           1.43           0.81           (0.01)           7.71           22.99           0.58           7.13	% of Total           40.92           18.94           4.49           1.52           1.34           2.28           0.96           -           0.54           0.28           0.19           0.79           73.50           (5.40)           (0.05)           68.05           1.66           2.03           1.41           0.20           -           0.89           1.01           (0.01)           7.19           23.92           0.54           0.31	% of Total           44.77           20.63           3.86           1.35           1.28           1.03           2.27           0.79           0.37           0.58           0.33           0.19           2.89           80.34           (5.95)           (0.02)           74.37           1.69           1.86           1.53           0.19           0.01           0.67           1.01           (0.01)           6.51           19.43           0.52           (0.82)	% of Total           44.93           20.08           3.83           1.37           1.34           2.26           2.06           0.90           0.34           0.59           0.31           0.19           2.70           80.92           (5.90)           (0.02)           74.99           1.63           1.53           1.35           0.19           (0.00)           0.74           0.84           (0.38)           5.89           19.24           0.53           (0.66)
Personal Income Sales and Use Corporation Public Service Corporation Insurance Companies Inheritance & Estate Cigarettes Oil Companies Electric Generation 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 & Services Investment Income Rents, Fines & Escheats Miscellaneous Less Refunds of Payments Total - Other Revenue OTHER SOURCES Federal Grants Transfer from Tobacco Fund	40.67 21.14 3.92 1.71 1.29 1.52 2.02 0.66 - 0.58 0.30 0.23 0.91 74.95 (6.70) (0.05) 68.20  1.83 2.40 1.03 0.21 0.12 0.41 1.04 - 7.04 23.05 0.74	% of Total           37.23           18.11           3.77           1.51           1.28           0.96           2.19           0.70           -           0.57           0.27           0.19           0.80           67.64           (6.00)           (0.05)           61.59           1.64           2.17           1.46           0.19           0.02           1.43           0.81           (0.01)           7.71           22.99           0.58	% of Total       40.92       18.94       4.49       1.52       1.34       2.28       0.96       -       0.54       0.28       0.19       0.79       73.50       (5.40)       (0.05)       68.05       1.66       2.03       1.41       0.20       -       0.89       1.01       (0.01)       7.19       23.92       0.54	% of Total           44.77           20.63           3.86           1.35           1.28           1.03           2.27           0.79           0.37           0.58           0.33           0.19           2.89           80.34           (5.95)           (0.02)           74.37           1.69           1.86           1.53           0.19           0.01           0.67           1.01           (0.01)           6.51           19.43           0.52	% of Total           44.93           20.08           3.83           1.37           1.34           2.26           2.06           0.90           0.34           0.59           0.31           0.19           2.70           80.92           (5.90)           (0.02)           74.99           1.63           1.53           1.35           0.19           (0.00)           0.74           0.84           (0.38)           5.89           19.24           0.53

TABLE 88
SPECIAL TRANSPORTATION FUND REVENUES

TAXES (\$K) Motor Fuels Oil Companies DMV Sales Less Refunds of Taxes Total - Taxes Less Refunds	FY 2009 \$495,025 141,900 57,134 (6,085) 687,974	FY 2010 \$503,635 141,900 67,784 (7,315) 706,004	FY 2011 \$438,526 165,300 71,943 (6,769) 713,999	FY 2012 \$492,795 226,900 76,618 (7,006) 789,306	FY 2013 \$501.269 199,400 79,000 (6,094) 773,576
OTHER REVENUE Motor Vehicle Receipts Licenses, Permits & Fees Interest Income Federal Grants Transfer from Other Funds Transfer to Other Funds Transfer to TSB Less Refunds of Payments Total – Other Revenue	220,780 142,431 15,583 - 9,400 (15,992) (15,300) (2,772) 344,730	220,703 135,004 6,681 3,002 71,200 (6,500) (15,300) (2,906) 411,884	220,144 135,453 5,506 9,360 107,550 (6,500) (15,300) (3,005) 453,208	235,446 135,974 2,208 12,915 81,550 (6,500) (15,000) (2,979) 443,614	234,484 137,284 4,138 12,416 95,245 (6,500) (15,000) (3,154) 458,912
GRAND TOTAL	\$1,042,104	\$1,117,888	\$1,167,208	\$1,232,921	\$1,232,487
<u>TAXES</u>	% of Total	% of Total	% of Total	% of Total	% of Total
TAXES  Motor Fuels Oil Companies DMV Sales Less Refunds of Taxes Total – Taxes Less Refunds	% of Total 47.93 13.74 5.53 (0.59) 66.62	% of Total 45.05 12.69 6.06 (0.65) 63.15	% of Total 37.57 14.16 6.16 (0.58) 61.17	% of Total 39.97 18.40 6.21 (0.57) 64.02	% of Total 40.67 16.18 6.41 (0.49) 62.77
Motor Fuels Oil Companies DMV Sales Less Refunds of Taxes	47.93 13.74 5.53 (0.59)	45.05 12.69 6.06 (0.65)	37.57 14.16 6.16 (0.58)	39.97 18.40 6.21 (0.57)	40.67 16.18 6.41 (0.49)

#### The Economic Outlook

Over four years since the end of the Great Recession, the U.S. and Connecticut economies continue their recovery. A range of intangible factors affect the economic outlook with impacts that are difficult to quantify. Notable factors exerting influence on the economy include federal budget sequestration, the government shut-down, a record high stock market, and the European financial crisis. Upcoming events in 2014 include winding down of quantitative easing, approaching the debt ceiling in February, and potential minimum wage hikes.

Fiscal uncertainty in the U.S., brought about by political brinksmanship, has proven to be a drag on U.S. economic recovery. The "fiscal cliff", a combination of tax increases and spending cuts, was narrowly avoided at the start of 2013. The Joint Select Committee on Deficit Reduction (the "Supercommittee") was unable to reach a compromise to cut \$1.5 trillion over a decade, causing budget sequestration to take effect in March 2013. Though Connecticut did not take a large hit from the \$80 billion in sequestration cuts nationally, defense cuts have cost Connecticut firms the loss of repair and maintenance contracts for at least one submarine, and the furlough of as many as 3,000 federal employees with direct or indirect military involvement.

Similarly, the state managed to avoid major economic disruption from the 16-day federal government shut-down in October. More than direct impacts, the shut-down demonstrated potential negative effects in reduced business spending during periods of uncertainty. In total, however, years of political disagreements at the national level have cost Connecticut a year's worth of employment recovery (about 20,000 jobs) and half a point on the unemployment rate, according to a recent report from the University of Connecticut's quarterly economic journal.

In an unusual display of bipartisanship, Congress passed a \$1.1 trillion budget deal that was signed by President Obama on January 17, 2014. The wide-reaching bill eases sequester spending cuts and touches nearly every corner of government including foreign aid, health research, special education, and cost-of-living adjustments for federal employees. The budget deal also prevents the potential of another government shut-down for two years, but does nothing to address the debt limit which is expected to be reached in February or March 2014.

The broad U.S. stock market surged to all-time highs in 2013, posting its biggest percentage gain since 1997. The Dow Jones industrial average finished the year up 26.5% and the S&P soared nearly 30%. In other signs of recovery from the Great Recession, U.S. Federal Reserve members stated their intention to proceed with winding down the asset purchases program. "Quantitative easing", or the buying of assets to inject additional currency into circulation, is currently on its fourth round since November 2008. In a sign of reduced demand, by May 2009 the U.S. trade deficit had declined to its lowest level in a decade. Since then, imports have equalized and exports have surpassed their pre-recession levels – driven by a weakening dollar.

After five and a half years of Unemployment Insurance (UI) extensions beyond the regular 26 weeks of benefits, the extended program came to an end on January 1, 2014. According to a report from the White House, without further extensions 85,100 individuals in Connecticut will lose out on extended benefits in 2014, at an estimated indirect cost of 5,788 jobs through the end of the year. As of this writing, Congress is still debating UI extensions and when and how to pay for them. In other labor news, President Obama is considering an executive action to raise the minimum wage for employees of federal contractors, an action that could boost the momentum for a minimum

wage hike for all Americans in 2014. The federal minimum wage is \$7.25 compared to \$8.25 in Connecticut.

Hurricane Sandy made landfall on October 29, 2012, with impacts felt across more than a dozen states. Although Connecticut has recovered from the storm, resources that could have been put to better use were consumed. State estimates include \$360 million in property damage, output loss of \$700 million and income losses of \$360 million.

The Eurozone, though improved, continues to face headwinds. The European Central Bank's commitment to the euro and creation of the European Stability Mechanism fund, combined with austerity programs and debt write-offs, have led to relative stability in the region albeit with almost non-existent economic growth. However, high debt levels and political backlash from austerity programs remain a real threat. Connecticut is comparatively more susceptible to events in Europe; 40% of the state's exports go to the region compared with 22% for the U.S.

#### Connecticut

As of November 2013, Connecticut has recovered 52.2% of jobs lost to the Great Recession, with a full recovery not expected until FY 2017. Education and Health Care grew 2.7% during the recession, and continues to deliver on job growth with an 8.5% increase since the recession. Construction has turned around with 39.5% of lost jobs recovered. Manufacturing declined 12.5% and 3.4% during and since the recession, respectively. Reduced military commitments in the Mideast will further dampen demand from Connecticut's aerospace manufacturing in the short-term, with the commercial aerospace market expected to counteract defense cutbacks over the long-term.

Banking, insurance, and financial activities, Connecticut's high-paying industries which help push it to the top of the country in per capita income, continue to post employment declines (-3.7%) since the recession. According to Moody's Analytics, "uncertainty over financial market exposure to European banks, continued restructuring caused by merger activity, and continued relocation to jobs abroad and to other parts of the U.S." has put a damper on hiring by financial firms. Conversely, lower wage industries such as Retail Trade, Accommodation and Food Services, and Administration and Support are driving Connecticut's recovery, accounting for 57.5% of job growth since the end of the recession. Though Connecticut's job growth is projected to trail the U.S. in the long-term, household income growth should keep pace and state gross product is projected to be slightly higher than the U.S. average.

Connecticut ranks as a state with one of the highest business costs in the country, primarily as a result of high energy costs. At 15.8¢/kWh, energy costs in Connecticut rank just behind Hawaii and Alaska. On a positive note, Connecticut will be able to anticipate lower energy costs in the future. The Energy Reform Act of June 2011 consolidated operations, increased government oversight of the utilities industry, and encouraged competition and more efficient energy purchases. Northeast Utilities, the major utility provider for New England, has started a project to lay down high-voltage transmission lines in Connecticut and other states in the region. The power line upgrades will improve reliability, increase capacity, and offer greater access to competitively priced generation. In addition, the Public Utilities Regulatory Authority approved a plan in November 2013 to convert 280,000 homes and businesses to the more cost-efficient option of natural gas over the next decade.

Connecticut boasts over 45 colleges and universities, ranging from Ivy League to community colleges. A number of new initiatives will help Connecticut's institutions of higher learning realize increased payrolls as well as strong enrollment growth over the next decade. Bioscience Connecticut includes the construction and renovation of UConn Health Center facilities, as well as expansion of incubator space to foster new business start-ups. Next Generation Connecticut further expands UConn's educational and research opportunities in science, technology, engineering, and math (STEM) disciplines with additional faculty hires, student enrollment, and facility construction and upgrades.

At the primary and secondary education level, the Educational Competitiveness Act of 2012 increases funding and resources to help close the achievement gap between the state's schools. Connecticut already ranks third for adult population with advanced degrees. In combination, these investments will expand educational and research opportunities, attract out-of-state students, and create an innovative workforce with high potential to generate research and skill-intensive businesses.

Signals from the housing market are mixed. Annualized Connecticut home sales in 2013 rose to 40,000 for the first time since the home buyer tax credits in 2009 to 2010 artificially boasted them, but they remain far below the pre-recession rate. Home prices are on a bumpy but generally upwards trajectory. However, the judicial system is stepping up the clearing of foreclosure properties, which will have a depressing effect on home prices until 2015 when most of the inventory is sold off. On a positive front, building permits authorizing construction have increased, driven primarily by multi-family units. Moreover, for the third quarter in a row, New Haven had led the lowest apartment vacancy rate amongst 79 metro areas in the U.S. Hartford was also at the top at sixth place.

Connecticut's somewhat stagnant home values combined with slower than average growth of median income will have budgetary implications. Short-term estimates for Connecticut's Sales and Use tax and Personal Income tax have been revised downwards through fiscal year 2015. Furthermore, revenue from slot machines has been declining steadily. Casinos planned in Massachusetts and New York, in addition to expansion proposals in Rhode Island, will only contribute to increased declines in the future. Connecticut's long-term demographic trends, including an aging population, increased out-migration, and declining birth rates, will also mute long-term growth.

#### **Economic Assumptions of the Governor's Budget**

The U.S. economy continued its slow recovery through much of FY 2013. This growth is projected to increase slightly in FY 2014 before accelerating significantly in FY 2015. U.S. real GDP is projected to accelerate by 3.6% in FY 2015 and remain high through FY 2016 before slowing in the out years. Inflation is expected to increase but remain relatively stable between 2.3% and 2.5% annually from FY 2015-2018. The U.S. unemployment rate is projected to continue falling, reaching 5.4% by the end of the forecast period in FY 2018. Housing starts are expected to rapidly pick up in FY 2015 by almost 70% then decelerate through FY 2018. New vehicle sales are projected to continue growing through FY 2015, surpassing their pre-recession levels, then stabilize at about 15.5 million sales in FY's 2017 and 2018.

Connecticut's economy is expected to grow 3.2% in FY 2014, then accelerate to a high of 4.0% in FY 2016 before turning down. Personal income growth in Connecticut is projected to reach 6.8% in FY 2015 and 6.5% in FY 2016. Nonagricultural employment is expected to finish off the current fiscal year with 0.8% growth, before accelerating to 1.3% in FY 2015 and 1.4% in FY 2016. Connecticut's unemployment rate is projected to drop below 7% by FY 2015 and drop down to 6.0% by the end of the forecast period in FY 2018. From FY 2014–2018, Connecticut's unemployment rate is projected to remain, on average, about 0.7 percentage points above the U.S. Housing starts in Connecticut are expected to show momentum in FY 2015 with 61.9% growth (off a very lose base) continuing to FY 2016 with 24.7% growth, before slowing in the out years.

TABLE 89
U.S. AND CONNECTICUT ECONOMIC INDICATORS

		S. Real G			l GSP (Million f Dollars)	us U.S. Housing Starts (Millions)		CT Hou	sing Starts
<u>Fiscal Year</u>	<u>Value</u>	e <u>Gr</u>	owth	<u>Value</u>	Growth	<u>Value</u>	Growth	<u>Value</u>	Growth
2012	15,278	3 2	4%	196.3	-1.4%	0.7	20.5%	3,746	10.3%
2013	15,584	1 2	0%	198.5	1.1%	0.9	27.6%	5,115	36.6%
2014	16,013	3 2	8%	204.8	3.2%	1.1	21.6%	5,182	1.3%
2015	16,582	2 3	6%	211.7 3.3% 1.8 69.8%		8,389	61.9%		
2016	17,145	5 3	4%	220.2	4.0%	2.1	15.7%	10,458	24.7%
2017	17,600	) 2	7%	226.6	2.9%	2.0	-4.7%	10,241	-2.1%
2018	17,966	5 2	1%	231.8	2.3%	1.9	-7.0%	9,712	-5.2%
		Employn Millions)			nployment ousands)		employment Rate		nployment ate
Fiscal Year	<u>Value</u>	Gro	<u>wth</u>	<u>Value</u>	Growth	<u>Value</u>	Growth	<u>Value</u>	Growth
2012	132.6	1.	6%	1,633.6	0.9%	8.5	-0.8	8.5	-0.8
2013	134.8	1.	6%	1,643.1	0.6%	7.8	-0.7	8.2	-0.2
2014	137.1	1.	7%	1,656.9	0.8%	6.8	-0.9	7.6	-0.6
2015	139.9	2.	1%	1,678.0	1.3%	6.2	-0.7	6.9	-0.7
2016	143.1	2.	3%	1,701.0	1.4%	5.8	-0.4	6.5	-0.4
2017	145.5	1.	7%	1,718.5	1.0%	5.6	-0.2	6.2	-0.3
2018	146.7	0.	8%	1,729.0	0.6%	5.4	-0.1	6.0	-0.2
			mer Price	e I	J.S. New Vehio (Million			onal Incom s of Dollars	
<u>Fiscal</u>	<u>Year</u>	<u>Value</u>	Growt	<u>1</u>	<u>Value</u>	<u>Growth</u>	<u>Value</u>	Grow	<u>th</u>
201		227.6	2.9%		13.6	11.1%	210,042	3.29	
201		231.4	1.7%		15.0	10.5%	216,469	3.19	
201		235.2	1.6%		16.1	6.9%	223,821	3.4%	
201		240.5	2.3%		17.0	5.8%	239,057	6.8%	
201		246.3	2.4%	)	16.1	-5.2%	254,613	6.5%	
201	7	252.4	2.5%	)	15.5	-3.7%	268,292	5.4%	6
201	8	258.6	2.5%	)	15.5	0.0%	279,852	4.3%	6

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# **REVENUE FORECAST**

The following Table shows actual General Fund Revenue collections for fiscal 2013, estimated revenue collections for fiscal 2014, and projected revenue collections for fiscal 2015 by major sources.

TABLE 90 STATE OF CONNECTICUT - GENERAL FUND REVENUES (In Millions of Dollars)

			Projected			
			Revenue		Proposed	Net
	Actual		At		Revenue	Projected
	Revenue		Rates		Changes	Revenue
Taxes	FY 2013		FY 2014		FY 2014	FY 2014
Personal Income Tax	\$ 8,719.2	\$	9,021.9	\$	-	\$ 9,021.9
Sales & Use Tax	3,897.0		4,132.2		-	4,132.2
Corporation Tax	742.5		815.4		-	815.4
Public Service Tax	266.7		279.6		-	279.6
Inheritance & Estate Tax	439.5		185.1		-	185.1
Insurance Companies Tax	260.9		271.2		-	271.2
Cigarette Tax	399.8		383.4		-	383.4
Real Estate Conveyance Tax	113.8		159.4		-	159.4
Oil Companies Tax	175.5		36.8		-	36.8
Electric Generation Tax	66.8		15.5		-	15.5
Alcoholic Beverages	60.4		59.8		-	59.8
Admissions and Dues	36.5		38.0		-	38.0
Health Provider Tax	501.9		507.0		-	507.0
Miscellaneous	21.2		19.9		-	19.9
Total Taxes	\$ 15,701.7	\$	15,925.2	\$	-	\$ 15,925.2
Less Refunds of Taxes	(1,039.1)		(1,043.5)		(155.0)	(1,198.5)
Less Earned Income Tax Credit	(105.9)		(104.5)			(104.5)
Less R&D Credit Exchange	(4.1)		(5.5)		-	(5.5)
TOTAL - Taxes Less Refunds	\$ 14,552.6	\$	14,771.7	\$	(155.0)	\$ 14,616.7
Other Revenues						
Transfers Special Revenue	\$ 315.5	\$	310.1	\$	-	\$ 310.1
Indian Gaming Payments	296.4		285.3		-	285.3
License, Permits, Fees	262.1		315.2		-	315.2
Sales of Commodities & Services	36.3		41.2		-	41.2
Rents, Fines & Escheats	144.1		114.6		-	114.6
Investment Income	(0.8)		0.1		-	0.1
Miscellaneous	163.8		158.1		-	158.1
Less Refunds of Payments	(74.0)		(74.8)		-	(74.8)
TOTAL - Other Revenues	\$ 1,143.4	\$	1,149.8	\$	-	\$ 1,149.8
Other Sources						
Federal Grants	\$ 3,733.9	\$	1,305.5	\$	-	\$ 1,305.5
Transfer From Tobacco Settlement	103.1		107.0		-	107.0
Transfers From/(To) Other Funds	(128.0)	_	280.3	_		 280.3
TOTAL - Other Sources	\$ 3,709.0	\$	1,692.8	\$	-	1,692.8
TOTAL - General Fund	\$ 19,405.9	\$	17,614.3	\$	(155.0)	\$ 17,459.3

Projected				
Revenue		Proposed		Net
At Current		Revenue		Projected
Rates		Changes		Revenue
FY 2015		FY 2015		FY 2015
\$ 9,513.9	\$	(26.1)	\$	9,487.8
4,193.5		(16.5)		4,177.0
755.4		-		755.4
284.7		-		284.7
186.8		-		186.8
278.0		(8.7)		269.3
370.0		-		370.0
167.5		-		167.5
36.6		-		36.6
-		-		-
60.2		-		60.2
38.4		-		38.4
509.5		-		509.5
20.2	_		_	20.2
\$ 16,414.7	\$	(51.3)	\$	16,363.4
(1,084.7)		-		(1,084.7)
(120.7)		-		(120.7)
 (6.2)		-		(6.2)
\$ 15,203.1	\$	(51.3)	\$	15,151.8
\$ 324.9	\$	-	\$	324.9
280.4		-		280.4
285.9		(32.3)		253.6
42.4		-		42.4
116.6		-		116.6
0.6		-		0.6
159.8		-		159.8
 (76.4)		-		(76.4)
\$ 1,134.2	\$	(32.3)	\$	1,101.9
\$ 1,242.6	\$	6.7	\$	1,249.3
106.0		-		106.0
(0.5)		(90.0)	_	(90.5)
\$ 1,348.1	\$	(83.3)	\$	1,264.8
\$ 17,685.4	\$	(166.9)	\$	17,518.5

## **Explanation of Changes**

#### **Personal Income Tax**

Phase-in exemption of Teachers' pensions at 25% in income year 2014 and 50% in income year 2015. Extend the Angel Investor Tax Credit for two years.

#### Sales Tax

Exempt Non-Prescription Drugs.

## **Insurance Companies Tax**

Exempt Municipalities' Employee Health Care Coverage.

## Refunds of Taxes

Tax Refund Program.

#### License, Permits, and Fees

Divert additional Newborn Screening Fees. Deposit immunization revenue to the Insurance Fund. Free weekend at State parks.

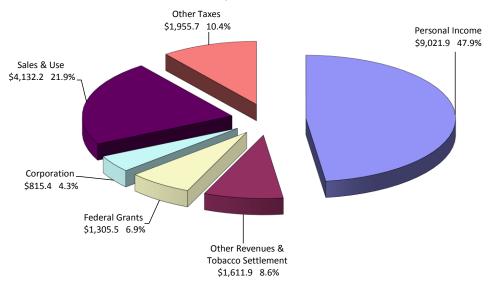
#### **Federal Grants**

Maximize reimbursement of court ordered stays at Soinit South. Primary Care physician rate increases. Funding increase for new autism waiver.

#### Transfers From/(To) Other Funds

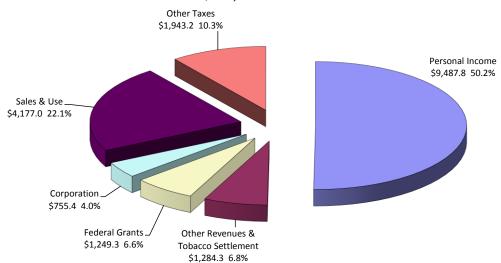
Reserve revenue for use by the Board of Regents. Redirect Fiscal Year 2013 surplus to the Budget Reserve Fund.

# GENERAL FUND REVENUES FY 2014 TOTAL \$ 17,459.3 MILLION\*



<sup>\*</sup> Refunds are estimated at \$1,198.5 million in FY 2014, R&D Credit Exchange is estimated at \$5.5 million, Refunds of Payments are estimated at \$74.8 million, and the Earned Income Tax Credit is estimated at \$104.5 million in FY 2014.

# GENERAL FUND REVENUES FY 2015 TOTAL \$ 17,518.5 MILLION\*



<sup>\*</sup> Refunds are estimated at \$1,084.7 million in FY 2015, R&D Credit Exchange is estimated at \$6.2 million, Earned Income Tax Credit is estimated at \$120.7 million, Refunds of Payments are estimated at \$76.4 million, and Transfers to Other Funds are estimated at \$90.5 million in FY 2015.

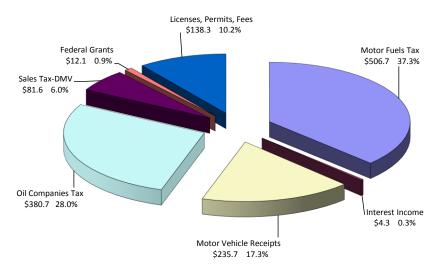
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TABLE 91 STATE OF CONNECTICUT SPECIAL TRANSPORTATION FUND REVENUES (In Millions)

	Projected						
				Revenue		Proposed	Net
		Actual		Current		Revenue	Projected
	F	Revenue		Rates		Changes	Revenue
Taxes	]	FY 2013		FY 2014		FY 2014	FY 2014
Motor Fuels Tax	\$	501.3	\$	506.7	\$	-	506.7
Oil Companies Tax		199.4		380.7		-	380.7
Sales Tax DMV		79.0		81.6		-	81.6
Less Refunds of Taxes		(6.1)		(6.5)		-	(6.5)
TOTAL - Taxes Less Refunds	\$	773.6	\$	962.5	\$	-	962.5
Other Sources							
Motor Vehicle Receipts	\$	234.5	\$	235.7	\$	-	235.7
Licenses, Permits & Fees		137.3		138.3		-	138.3
Interest Income		4.1		4.3		-	4.3
Federal Grants		12.4		12.1		-	12.1
Transfers From (To) Other Funds		88.7		(83.0)		-	(83.0)
Transfer To TSB		(15.0)		(15.0)		-	(15.0)
Less Refunds of Payments		(3.2)		(3.2)		-	(3.2)
TOTAL - Other Sources	\$	458.9	\$	289.2	\$	-	289.2
TOTAL - S.T.F.	\$	1,232.7	\$	1,251.7	\$	-	1,251.7

# FISCAL YEAR 2014

#### TOTAL \$ 1,251.7 MILLION\*

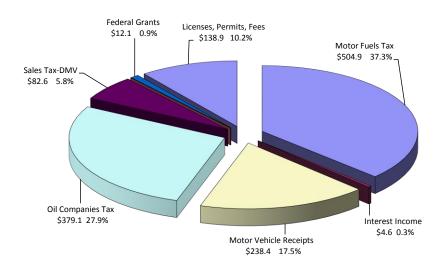


<sup>\*</sup> Refunds are estimated at \$9.7 million in FY 2014. Transfers to Other Funds are estimated at \$98.0 million in FY 2014.

Projected		
Revenue	Proposed	Net
Current	Revenue	Projected
Rates	Changes	Revenue
FY 2015	FY 2015	FY 2015
\$ 504.9	\$ -	\$ 504.9
379.1	-	379.1
82.6	-	82.6
(6.6)	-	(6.6)
\$ 960.0	\$ -	\$ 960.0
\$ 238.4	\$ -	\$ 238.4
138.9	-	138.9
4.6	-	4.6
12.1	-	12.1
(4.4)	-	(4.4)
(15.0)	-	(15.0)
(3.2)	-	(3.2)
\$ 371.4	\$ -	\$ 371.4
\$ 1,331.4	\$ -	\$ 1,331.4

# FISCAL YEAR 2015

TOTAL \$ 1,331.4 MILLION\*



\* Refunds are estimated at \$9.8 million in FY 2015. Transfers to Other Funds are estimated at \$19.4 million in FY 2015.

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

The traditional purpose of a governmental budget is threefold: 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 governmental budgets are significant. Government expenditures and investment, including federal, state and local governments, are an important dimension of the national economy, accounting for about 20% of the Gross Domestic Product. The spending and tax policies of government profoundly influence the performance of the economy. Because the Governor's budget accounts for 9% of the Gross State Product, it is inevitable that state government's expenditure and revenue actions influence the state's economy.

#### **Expenditure Actions**

#### Jobs, the Economy, and Education

Various studies indicate that there is a strong positive correlation between the levels of educational attainment and economic well-being. In recent decades we have witnessed increasing economic disparity between the haves and have-nots in regard to educational attainment. With these factors in mind, the Governor's proposals focus on providing all of Connecticut's children with equal opportunity to early childhood education, as well as seed funding for higher education. Workforce investments include wage subsidies and training for the unemployed, along with encouraging re-matriculation and degree completion at Connecticut's institutions of higher education.

#### Universal Pre-Kindergarten

Governor Malloy recognizes the importance of early childhood education in improving the potential for the individual child, society and the state's economy. Many of those who can, do take advantage of early childhood education because they know that it provides a strong foundation for the next stages of development. The Governor believes that this advantage should not be limited to those who can afford it, so he is proposing to phase-in a universal pre-kindergarten (pre-k) program by FY 2019, with access phased in for the state's low income children first.

The estimated unmet need for low income 3 and 4 year olds in priority school, alliance districts and competitive school districts totals 4,010. In FY 2013, the Governor increased the number of pre-k slots by 1,000 for the needlest districts. In an effort to continue to reach the state's most vulnerable children, the Governor is recommending:

- Additional funding to provide 1,020 new pre-k slots in FY 2015 costing nearly \$14 million;
- Funding to increase slot subsidy rates by 3% in an effort to recognize the increasing cost of quality early childhood education; and
- Start-up grants of approximately \$22,500 per classroom in recognition that, in order to serve additional children, many centers will need to build out a classroom, which will require funding for classroom equipment and books.

#### CHET Baby Scholars Program

Governor Malloy proposes to build on the success of the state's 529 college savings plan, Connecticut Higher Education Trust (CHET), because he believes all of Connecticut's children should be able to attend college, and wants to make it easier for families to start planning early. The Governor's budget establishes the CHET Baby Scholars program, which will provide a one-time incentive of \$100 to families of Connecticut children who open a CHET 529 savings account by the child's first birthday, or within the first year after adoption. Families who make a contribution of \$150 by the child's fourth birthday will receive a one-time match of \$150. By investing this \$400 total contribution in an interest-bearing CHET account in the child's first year of life, it could grow to \$1,350 by the time the child is age 18 and ready to pursue higher education.

#### Board of Regents Initiatives

At the other end of the education continuum, the Governor's priorities for Higher Education include investments in the Board of Regents (BOR) institutions (Community-Technical Colleges, Connecticut State Universities and the Charter Oak State College) in a new strategic direction to maintain low tuition and fee growth, to encourage degree completion for those who had started degrees and wish to return, while restoring financial stability. Also, \$60 million in capital funds is being recommended (under a new BOR capital investment program, Transform CSCU 2020, augmenting the current CSUS 2020 program) to upgrade and consolidate student and financial information systems, develop a system wide master plan, add smart classroom technology, resume deferred maintenance projects across the system's campuses, and to construct a new Advanced Manufacturing Center at Asnuntuck Community College in Enfield.

The Governor wants to encourage students to return to college and complete their degrees. In coordination with the Governor's "Go Back to Get Ahead" initiative, the Governor proposes establishing a Tuition Incentive Program for newly matriculating students returning to school, who are pursuing a first time associate or bachelor degree. Students would receive up to three free classes at BOR colleges and universities for up to three class they enroll in and pay for. This will increase enrollment throughout the BOR system, reversing the trend of declining enrollments and stabilizing their fiscal situation, as well as encouraging degree completion and preparing the workforce with the knowledge and skills they need to succeed in the twenty-first century.

The Governor proposes funding of \$3.4 million to support the "Go Back to Get Ahead" initiative, as well as enhanced support services for veterans pursuing higher education and expansion of the Early College Experience program that offers community college courses to high school students.

#### Sheff Settlement

In 1996, the Connecticut Supreme court ruled that Hartford children's constitutional rights had not been upheld because they attended racially and economically isolated schools. Programs run out of the Regional School Choice Office have provided 37% of Hartford-resident minority children with a reduced isolation setting. To reach another 1,800 students, Governor Malloy has recommended \$4 million to continue the commitment funded in FY 2014 plus \$3.6 million in FY 2015 to expand opportunities and programming at existing Magnet Schools, to establish new non-Magnet School programs with a Lighthouse School and a gifted and talented school, and to

continue the summer immersion program at the Montessori Academy. An additional \$9.9 million in capital funds are included in order to expand and implement these programs.

#### Technology and Health/Safety Support

Funding of \$10 million is provided to support the purchase of computers and other electronic devices in support of unmet needs centered on Common Core State Standards testing readiness. In an effort to bolster the health and safety conditions at the Technical High Schools, the Governor is adding \$1.7 million for 56 full-time positions.

#### *Initiatives for the Unemployed*

To address the needs of the long term unemployed, the Governor's budget provides \$3.6 million in the Department of Labor for a state-wide pilot program designed to provide training and subsidized employment opportunities as a gateway to workforce re-entry. The program is anticipated to support 500 individuals statewide who have exhausted their unemployment benefits. An additional \$10 million is proposed to continue the state's "Step Up" program, which provides wage subsidies and manufacturing training grants for the unemployed. Lastly, to assist veterans in their transition back into the civilian workforce, the Governor's budget provides \$600,000 in support of a Veterans' Opportunity Pilot that will provide grants to area housing agencies for the purpose of hiring employment specialists and job developers to actively seek opportunities for veterans to reenter the workforce.

#### Health and Human Services

Many of the investments in the health and human services area for FY 2015 further ongoing initiatives that are expected to result in better health outcomes, improved quality and experience at a lower cost.

#### Reducing Health Care Costs

One of the most prominent initiatives in the budget is the State Innovation Model (SIM), a federal Center for Medicare and Medicaid Innovation (CMMI) initiative through which Connecticut received a planning grant in March 2013. Although Connecticut residents are among the healthiest in the nation, we face a number of challenges. Connecticut ranks third highest among all states for health care spending per capita (\$10,470) and, over the past several years, health care spending has outpaced the growth of the economy, leaving fewer resources available to support education, housing, paying down debt, and saving for the future.

Chief in accomplishing these goals is to align all payers (Medicaid, state employees' plan, commercial plans, self-funded plans and Medicare) around a common approach to value-based payment. Rather than simply paying for volume of services provided, the proposed value-based payment approach will reward providers who offer higher quality care and a better care experience, while lowering the total cost of care. This spring, Connecticut will apply to CMMI for a five-year implementation grant of \$40-\$60 million to implement SIM, but the Governor's budget includes the resources necessary to move forward with the initiative regardless of receipt of federal funding. If the federal grant is received, it will allow Connecticut to proceed more rapidly toward the triple aim of better health while eliminating health disparities, improved health care quality and experience, and reduction of growth in health care costs.

The budget also includes almost \$3.3 million in operating funds to support activities in the Office of the Healthcare Advocate and the Office of the State Comptroller and \$1.9 million in capital funding for health information technology.

#### The Affordable Care Act

Several other initiatives in the FY 2015 budget support opportunities available under the Affordable Care Act (ACA). The ACA required states to increase Medicaid reimbursement for primary care providers to Medicare levels for calendar years 2013 and 2014. To ensure adequate access to services, the Governor is providing the funding necessary to maintain the higher reimbursement levels for primary care services after federal funding ends on December 31, 2014 – \$30.2 million (\$15.1 million after federal reimbursement) in FY 2015, and \$72.4 million (\$36.2 million after federal reimbursement) when fully annualized.

The ACA provides opportunities to access Medicaid reimbursement for individuals involved in the criminal justice system that did not exist before. Acute care services received by inmates are being reimbursed under Medicaid and a concerted effort has been ongoing to assist individuals leaving corrections or the courts in obtaining benefits under the Medicaid program so they have immediate access to medications and community-based treatment that will assist them in making a better transition to the community and thereby reduce recidivism. In the spring of 2014, this population will be transitioning to the administrative services organization (ASO) that manages the health benefits for the entire Medicaid population. This will allow management of each Medicaid recipient's health care by one entity whether they are receiving medical services in the community or in prison, thereby reducing duplication in testing and service provision and resulting in better care for these individuals. While funding of \$4.3 million is provided in DSS to support this initiative, it is expected that costs for this population will decrease over time as their care becomes better managed.

Lastly, the Governor is proposing that the state take advantage of the Community First Choice Option, which is authorized under the Affordable Care Act and offers states a 6% increase in the federal match rate on personal care assistance services if the benefit design meets certain criteria. The Governor is also expanding two programs that serve individuals with disabilities at a FY 2015 cost of \$2.7 million (\$1.35 million after federal reimbursement).

#### Mental Health Initiative

Since the tragedy at Sandy Hook in 2012, the Governor continues to focus significant attention and resources toward improving the mental health system for all of Connecticut's residents. This budget invests substantial additional resources into areas not addressed in initiatives related to last year's gun bill.

Governor Malloy has repeatedly identified the stigma associated with mental health issues as a significant barrier to individuals and families seeking help. The budget includes \$250,000 in the Department of Mental Health and Addiction Services (DMHAS) for an anti-stigma campaign. The Governor is also dedicating new funding to DMHAS of \$5 million, when fully annualized, to improve mental health services for underserved populations. Among other things, this funding will support residential and transitional services for high risk populations, including young adults. The budget also provides \$2.2 million in new funding for 110 dedicated Rental Assistance Program vouchers (RAPs) to support housing and services for individuals served by

DMHAS. By expanding access to housing, these vouchers will provide individuals, who are homeless or at risk of homelessness, the stability they need to succeed in their recovery.

Expansion of the False Claims Act

The adopted FY 2015 budget assumes \$104 million in savings through enhanced efforts to curtail fraud directed against state programs. Because the \$104 million savings target is a challenging goal, the Governor is seeking to enhance relevant state resources and laws to deter fraud and maximize savings and recovery targets. One such strategy is the expansion of the False Claims Act (FCA) to make it consistent with the fraud prevention initiative. The FCA amendment would extend the application of the FCA to all health and human services agencies and programs, as well as state payments made for state employee and retiree health and state-paid Workers' Compensation medical claims.

#### **General Government**

Governor Malloy continues to show his commitment to improving the state infrastructure through a number of funding initiatives included in his recommended budget. In order for the Department of Transportation (DOT) to be able to develop an on-going list of "shovel-ready" projects, seventy-five positions are being added to the agency to expand the agency's current capacity to initiate and implement those projects. An additional seven staff are funded for the design and administration of Transit Oriented Development projects. Although the efforts in this area will be coordinated by the Office of Policy and Management, the DOT will provide the direct program services necessary to ensure the progress of the initiative.

Since the May 17, 2013 train derailment on the New Haven Line in Bridgeport, Governor Malloy has taken steps to prevent similar events in the future and to ensure the safety of Connecticut's citizens is given utmost priority. To that end, Governor Malloy is recommending \$1,500,000 in new funding for the Department of Transportation. This will support a comprehensive right-of-way infrastructure improvement program for the state's rail system as well as planning efforts to determine the steps necessary to reinforce the integrity of railways.

In an effort to encourage Connecticut residents to utilize the resources the state has to offer, Governor Malloy is proposing to allow residents to be admitted to our state parks for free for one weekend this summer to commemorate the 100th anniversary of the first meeting of the State Park Commission. That meeting lead to the creation of the first Connecticut state park. Today, there are over 100 state parks that offer a myriad of activities for the public to enjoy. A state resident park-goer will save from \$6 to \$13 per day as a result of the free admission. The complimentary weekend will be announced in conjunction with other activities being planned for the state park centennial.

#### **Capital Proposals**

Governor Malloy is proposing a total of \$445.5 million in net adjustments to the FY 2015 capital program focusing on funding projects and programs that create and retain jobs in the state. These adjustments emphasize capital investments that improve the performance of state operated and state funded programs and transportation infrastructure.

Notable proposed bond authorizations include:

- An additional \$60 million for capital investments by the Board of Regents for Higher Education;
- An additional \$30 million for capital improvements for nonprofit human service providers to address unmet demand;
- An additional \$25 million for capital investments in information technology to continue enhancing the efficiency and effectiveness of state agencies and programs;
- An additional \$10 million to continue the successful STEP UP job creation subsidy and training program;
- New funding of \$10 million for additional school security infrastructure grants to include charter schools, Regional Education Service Centers and the technical high school system;
- An additional \$100 million to continue business expansion and retention programs;
- New funding of \$25 million for an Advanced Manufacturing Fund to encourage new
  companies to be created in, and existing companies to relocate to Connecticut, while
  continuing to support existing Connecticut companies as they seek to deploy
  advanced, precision, and additive manufacturing technology and develop a trained
  technical workforce to deploy it;
- New funding of \$25 million for the Shoreline Resiliency Fund to provide low-interest loans for state residents who are subject to coastal flooding and are required to elevate their homes and flood-proof their businesses;
- An additional \$20 million for port improvements and dredging projects;
- An additional \$49.75 million in special tax obligation bonds to increase funding for improvements to rail stations on the New Haven Line, complete the design of stations for upcoming New Haven to Springfield commuter rail service and to increase funding for the local bridge grant program; and
- Extension of funding for the Regenerative Medicine Research Fund in FY 2016 and FY 2017 at \$10 million annually.

#### **Revenue Proposals**

Since Governor Malloy took decisive action in restoring the finances of the state, Connecticut has begun to rebuild budget reserves, reduce overall liabilities, and generate modest budgetary surpluses. Against that backdrop and building upon the tax relief enacted last year, Governor Malloy is proposing several tax reductions. Projections for the current fiscal year indicate that the state will end with a surplus in excess of \$500 million. The Governor is proposing that a portion of this surplus be returned immediately to the taxpayers of Connecticut in the form of a sales and motor fuels tax refund. The proposal would designate up to \$155.0 million of the FY 2014 surplus toward refunds to eligible taxpayers. The amount of tax relief will be \$55 in the case of eligible individuals with an adjusted gross income (AGI) below \$200,000, and \$110 in the case of eligible joint filers with AGI below \$400,000. It is estimated that more than 2.7 million individuals will benefit from this proposal.

Teachers in the state provide an invaluable contribution toward the education of our young, yet teachers are not covered by the safety net of the Social Security system. Many years ago, Connecticut enacted changes in the way it taxes Social Security benefits that served to reduced tax levels on such income. However, since teachers in our state do not participate in the Social

Security system, they did not receive any benefit from these tax changes. The Governor is proposing to correct this oversight by proposing to exempt a portion of teachers' pensions from the state's income tax retroactive to January 1, 2014. For income year 2014, the proposal calls for a 25% exemption, rising to a 50% exemption the following year. This will reduce revenue by \$23.1 million in FY 2015 and by \$23.7 million in FY 2016. More importantly, it will restore fairness in the treatment of certain retirement income and reflect the state's appreciation toward the contributions of our teachers.

The Governor is also proposing to exempt non-prescription drugs from the state's sales tax. This change will save consumers \$16.5 million in FY 2015 and \$17.2 million in FY 2016. A broad cross-section of our society utilizes these products for everyday health needs and this will go a long way in improving the fairness of the state's sales tax code by exempting these basic necessities.

In order to reduce municipal costs, the Governor is proposing to exempt health care policies from the insurance premiums tax. This change alone should save municipalities \$8.7 million in FY 2015 and \$9.0 million in FY 2016. These savings will better allow Connecticut's towns and cities to provide their employees with plans that benefit their long-term wellness. It will also alleviate budget pressure for municipalities and provide relief to property taxpayers.

Finally, the Governor is proposing to extend for two years the angel investor tax credit at the \$3 million dollar level. This program provides financial incentives for cash investments in qualified Connecticut small businesses engaged in emerging technologies. Angel investors provide essential early stage investments to Connecticut based entrepreneurs in high technology, innovation sectors. The angel investor tax credit is part of the Governor's comprehensive program to create and retain jobs in the state by leveraging private investment in bioscience, clean energy, information technology and other emerging, innovative businesses in Connecticut.

#### **Conclusion**

Governor Malloy remains committed to a fiscally responsible state government which will address the areas that require attention and reform. With these proposals, Governor Malloy has attempted to build upon the fiscal stability established during the last biennium while expanding economic growth and opportunity for our citizens. The proposed revisions to the enacted FY 2015 budget total an increase of \$37 million on an all-funds basis, with the General Fund and Special Transportation Fund virtually unchanged from the enacted levels. The Governor's proposal is \$8.1 million below the spending cap.

# APPENDIX

# **Connecticut Resident Population Census Counts**

	Popula <u>2000</u>	ition Rank	Popul 2010	ation <u>Rank</u>	2000-2010 <u>Change</u>	% <u>Chg.</u>	2012 DPH* Est
Total	3,405,565	11011111	3,577,845	1101111	172,280	5.1	3,580,709
Andover	3,036	147	3,305	147	269	8.9	3,272
Ansonia	18,554	57	19,283	60	729	3.9	19,158
Ashford	4,098	135	4,319	136	221	5.4	4,284
Avon	15,832	68	18,145	65	2,313	14.6	18,283
Barkhamsted	3,494	143	3,807	141	313	9.0	3,759
Beacon Falls	5,246	125	6,062	123	816	15.6	6,065
Berlin	18,215	59	19,901	54	1,686	9.3	20,463
Bethany	5,040	126	5,578	126	538	10.7	5,550
Bethel	18,067	61	18,600	62	533	3.0	19,161
Bethlehem	3,422	144	3,616	143	194	5.7	3,566
Bloomfield	19,587	52	20,525	52	938	4.8	20,602
Bolton	5,017	127	4,977	131	-40	-0.8	4,960
Bozrah	2,357	153	2,631	152	274	11.6	2,638
Branford	28,683	32	28,000	37	-683	-2.4	28,024
Bridgeport	139,529	1	144,355	1	4,826	3.5	146,425
Bridgewater	1,824	160	1,725	163	-99	-5.4	1,702
Bristol	60,062	11	60,510	13	448	0.7	60,603
Brookfield	15,664	69	16,470	71	806	5.1	16,783
Brooklyn	7,173	113	8,228	110	1,055	14.7	8,203
Burlington	8,190	108	9,329	104	1,139	13.9	9,434
Canaan	1,081	168	1,238	168	157	14.5	1,218
Canterbury	4,692	130	5,144	130	452	9.6	5,106
Canton	8,840	101	10,337	95	1,497	16.9	10,351
Chaplin	2,250	156	2,311	156	61	2.7	2,286
Cheshire	28,543	33	29,260	33	717	2.5	29,300
Chester	3,743	141	3,991	139	248	6.6	4,245
Clinton	13,094	81	13,254	82	160	1.2	13,196
Colchester	14,551	74	16,092	72	1,541	10.6	16,187
Colebrook	1,471	165	1,486	165	15	1.0	1,461
Columbia	4,971	129	5,495	127	524	10.5	5,461
Cornwall	1,434	166	1,419	167	<i>-</i> 15	-1.0	1,399
Coventry	11,504	87	12,453	87	949	8.2	12,425
Cromwell	12,871	83	14,038	79	1,167	9.1	14,217
Danbury	74,848	7	81,056	7	6,208	8.3	82,807
Darien	19,607	51	20,750	51	1,143	5.8	21,114
Deep River	4,610	133	4,625	133	15	0.3	4,603
Derby	12,391	84	12,909	84	518	4.2	12,830
Durham	6,627	116	7,406	116	779	11.8	7,368
East Granby	4,745	132	5,155	129	410	8.6	5,184
East Haddam	8,333	105	9,141	106	808	9.7	9,158
East Hampton	13,352	78	12,999	83	-353	-2.6	12,940
East Hartford	49,575	19	51,318	19	1,743	3.5	51,272
East Haven	28,189	35	29,267	32	1,078	3.8	29,190

# **Connecticut Resident Population Census Counts**

	Popula		Popula		2000-2010	% Cla ~	2012
	<u>2000</u>	<u>Rank</u>	<u>2010</u>	<u>Rank</u>	<u>Change</u>	Chg.	DPH* Est
East Lyme	18,118	60	19,184	61	1,066	5.9	18,892
East Windsor	9,818	94	11,201	94	1,383	14.1	11,387
Eastford	1,618	163	1 <i>,</i> 751	161	133	8.2	1,730
Easton	7,272	111	7,484	115	212	2.9	7,603
Ellington	12,921	82	15,679	74	2,758	21.3	15,779
Enfield	45,212	20	44,635	22	-577	-1.3	44,660
Essex	6,505	117	6,684	120	179	2.8	6,648
Fairfield	57,340	13	59,413	14	2,073	3.6	60,450
Farmington	23,641	45	25,368	44	1,727	7.3	25,529
Franklin	1,835	159	1,922	159	87	4.7	1,991
Glastonbury	31,876	29	34,467	29	2,591	8.1	34,698
Goshen	2,697	151	2,982	148	285	10.6	2,952
Granby	10,347	93	11,292	92	945	9.1	11,316
Greenwich	61,101	9	61,119	10	18	0.0	62,256
Griswold	10,807	89	11,977	90	1,170	10.8	11,986
Groton	39,907	23	40,125	25	218	0.5	39,896
Guilford	21,398	49	22,411	50	1,013	4.7	22,403
Haddam	7,157	114	8,376	109	1,219	17.0	8,358
Hamden	56,913	14	61,054	11	4,141	7.3	60,863
Hampton	1,758	161	1,864	160	106	6.0	1,869
Hartford	124,121	2	124,744	3	623	0.5	124,893
Hartland	2,012	158	2,114	158	102	5.1	2,132
Harwinton	5,283	124	5,651	125	368	7.0	5,600
Hebron	8,610	104	9,704	99	1,094	12.7	9,624
Kent	2,858	150	2,979	149	121	4.2	2,951
Killingly	16,472	67	17,411	68	939	5.7	17,269
Killingworth	6,018	121	6,531	121	513	8.5	6,504
Lebanon	6,907	115	7,316	117	409	5.9	7,326
Ledyard	14,687	72	15,055	77	368	2.5	15,077
Lisbon	4,069	136	4,345	135	276	6.8	4,355
Litchfield	8,316	106	8,462	108	146	1.8	8,353
Lyme	2,016	157	2,409	154	393	19.5	2,403
Madison	17,858	64	18,266	64	408	2.3	18,291
Manchester	54,740	15	58,354	15	3,614	6.6	58,289
Mansfield	20,720	50	26,685	41	5,965	28.8	25,648
Marlborough	5,709	123	6,406	122	697	12.2	6,433
Meriden	58,244	12	60,936	12	2,692	4.6	60,638
Middlebury	6,451	118	7,606	113	1,155	17.9	7,572
Middlefield	4,203	134	4,430	134	227	5.4	4,416
Middletown	43,167	21	47,697	20	4,530	10.5	47,325
Milford	52,305	17	52,759	17	454	0.9	52,981
Monroe	19,247	54	19,466	59	219	1.1	19,794
Montville	18,546	58	19,594	57	1,048	5.7	19,686
Morris	2,301	155	2,390	155	89	3.9	2,356

# **Connecticut Resident Population Census Counts**

	Popul 2000	lation <u>Rank</u>	Popula 2010	ation Rank	2000-2010 <u>Change</u>	% <u>Chg.</u>	2012 DPH* Est.
	<u>2000</u>	<u>IXAIIK</u>	<u>2010</u>	<u>IXAIIK</u>	Change	Clig.	<u>D111 E5t.</u>
Naugatuck	30,989	30	31,880	30	891	2.9	31,774
New Britain	71,538	8	73,253	8	1,715	2.4	73,153
New Canaan	19,395	53	19,732	56	337	1.7	20,110
New Fairfield	13,953	75	13,871	81	-82	-0.6	14,112
New Hartford	6,088	120	6,994	118	906	14.9	6,903
New Haven	123,626	3	129,946	2	6,320	5.1	130,741
New London	25,671	41	27,643	38	1,972	7.7	27,707
New Milford	27,121	37	28,145	36	1,024	3.8	27,835
Newington	29,306	31	30,599	31	1,293	4.4	30,602
Newtown	25,031	42	27,605	39	2,574	10.3	28,042
Norfolk	1,660	162	1,711	164	51	3.1	1,685
North Branford	13,906	76	14,399	78	493 -30	3.5 -0.9	14,379
North Canaan North Haven	3,350	145	3,320	146	-30 1,071	-0.9 4.6	3,259
North Stonington	23,035 4,991	39 128	24,106 5,298	47 128	307	6.2	24,033 5,303
Norwalk	82,951	6	85,653	6	2,702	3.3	87,190
Norwich	36,117	26	40,605	24	4,488	12.4	40,502
Old Lyme	7,406	110	7,605	114	199	2.7	7,592
Old Saybrook	10,367	92	10,224	96	<b>-14</b> 3	-1.4	10,238
Orange	13,233	79	13,968	80	735	5.6	13,935
Oxford	9,821	96	12,749	85	2,928	29.8	12,819
Plainfield	14,619	73	15,428	75	809	5.5	15,267
Plainville	17,328	66	17,724	67	396	2.3	17,819
Plymouth	11,634	86	12,246	88	612	5.3	12,089
Pomfret	3,798	140	4,265	137	467	12.3	4,217
Portland	8,732	102	9,522	101	790	9.0	9,472
Preston	4,688	131	4,725	132	37	0.8	4,753
Prospect	8,707	103	9,415	103	708	8.1	9,642
Putnam	9,002	98	9,602	100	600	6.7	9,491
Redding	8,270	107	9,174	105	904	10.9	9,299
Ridgefield	23,643	44	24,652	46	1,009	4.3	25,045
Rocky Hill	17,966	62	19,754	55	1,788	10.0	19,729
Roxbury	2,136	154	2,265	157	129	6.0	2,237
Salem	3,858	138	4,153	138	295	7.6	4,188
Salisbury	3,977	137	3,735	142	-242	-6.1	3,701
Scotland	1,556	164	1,732	162	176	11.3	1,710
Seymour	15,454	70	16,556	70	1,102	7.1	16,561
Sharon	2,968	149	2,774	151	-194	-6.5	2,747
Shelton	38,101	25	39,580	26	1,479	3.9	40,261
Sherman	3,827	139	3,574	145	<b>-25</b> 3	-6.6 1.2	3,648
Simsbury Somers	23,234	47	23,507	48	273 1.052	1.2	23,620
South Windsor	10,417	91 43	11,469 25.751	91 43	1,052 1 330	10.1	11,451 25,835
Southbury	24,412 18 567	43 56	25,751 10 043	43 53	1,339 1,376	5.5 7.4	25,835 10,877
Southbury	18,567	36	19,943	53	1,376	7.4	19,877

## **Connecticut Resident Population Census Counts**

	Population 2000 Rank		Popula <u>2010</u>	Population <u>2010</u> <u>Rank</u>		2000-2010 % Change Chg.		
Southington	39,728	24	43,130	23	3,402	8.6	43,434	
Sprague	2,971	148	2,979	150	8	0.3	2,988	
Stafford	11,307	88	12,097	89	790	7.0	11,987	
Stamford	117,083	4	122,867	4	5,784	4.9	125,109	
Sterling	3,099	146	3,848	140	749	24.2	3,799	
Stonington	17,906	63	18,559	63	653	3.6	18,556	
Stratford	49,976	18	51,437	18	1,461	2.9	52,077	
Suffield	13,552	77	15,789	73	2,237	16.5	15,868	
Thomaston	7,503	109	7,892	112	389	5.2	7,788	
Thompson	8,878	100	9,474	102	596	6.7	9,373	
Tolland	13,146	80	15,086	76	1,940	14.8	14,964	
Torrington	35,202	27	36,438	27	1,236	3.5	35,808	
Trumbull	34,243	28	36,062	28	1,819	5.3	36,514	
Union	693	169	855	169	162	23.4	852	
Vernon	28,063	36	29,205	34	1,142	4.1	29,122	
Voluntown	2,528	152	2,608	153	80	3.2	2,611	
Wallingford	43,026	22	45,182	21	2,156	5.0	45,179	
Warren	1,254	167	1,469	166	215	17.1	1,447	
Washington	3,596	142	3,586	144	-10	-0.3	3,534	
Waterbury	107,271	5	110,429	5	3,158	2.9	109,915	
Waterford	19,152	55	19,540	58	388	2.0	19,533	
Watertown	21,661	48	22,526	49	865	4.0	22,261	
West Hartford	61,046	10	63,362	9	2,316	3.8	63,274	
West Haven	52,360	16	55,662	16	3,302	6.3	55,404	
Westbrook	6,292	119	6,949	119	657	10.4	6,914	
Weston	10,037	95	10,179	97	142	1.4	10,350	
Westport	25,749	40	26,393	42	644	2.5	27,068	
Wethersfield	26,271	38	26,695	40	424	1.6	26,710	
Willington	5,959	122	6,035	124	76	1.3	5,994	
Wilton	17,633	65	18,053	66	420	2.4	18,617	
Winchester	10,664	90	11,254	93	590	5.5	11,071	
Windham	22,857	46	25,321	45	2,464	10.8	25,091	
Windsor	28,237	34	29,060	35	823	2.9	29,140	
Windsor Locks	12,043	85	12,502	86	459	3.8	12,546	
Wolcott	15,215	71	16,692	69	1,477	9.7	16,724	
Woodbridge	8,983	99	8,989	107	6	0.1	8,965	
Woodbury	9,198	97	9,995	98	797	8.7	9,848	
Woodstock	7,221	112	7,986	111	765	10.6	7,904	

<sup>\*</sup> DPH stands for the Connecticut Department of Public Health

U.S. Bureau of the Census, April 1, 2000 & 2010 Department of Public Health, "Est. Population in Conneticut as of July 1, 2012" Source:

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

#### TABLE 1 U.S. ECONOMIC VARIABLES

Gross Domestic	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>
Product (\$B)	11,905.5	12,681.3	13,510.6	14,159.6	14,688.0	14,528.6	14,625.1	15,246.6	15,908.1	16,493.2
Percent Change	6.4%	6.5%	6.5%	4.8%	3.7%	-1.1%	0.7%	4.2%	4.3%	3.7%
Real GDP	13,554.3	14,014.0	14,450.7	14,723.1	14,950.6	14,549.7	14,569.6	14,921.8	15,278.4	15,584.3
Percent Change	4.1%	3.4%	3.1%	1.9%	1.5%	-2.7%	0.1%	2.4%	2.4%	2.0%
GDP Deflator (2009=100)	87.8	90.5	93.5	96.2	98.2	99.9	100.4	102.2	104.1	105.8
Percent Change	2.3%	3.0%	3.3%	2.9%	2.2%	1.6%	0.5%	1.8%	1.9%	1.6%
r ereem emmige	2.570	3.070	3.370	2.770	2.270	1.070	0.570	1.070	1.570	1.070
Housing Starts (K)	1,945.3	2,016.3	2,036.0	1,546.2	1,132.4	646.3	594.0	569.7	686.5	875.9
Percent Change	12.5%	3.7%	1.0%	-24.1%	-26.8%	-42.9%	-8.1%	-4.1%	20.5%	27.6%
Unemployment Rate	5.8%	5.3%	4.8%	4.5%	5.0%	7.6%	9.8%	9.3%	8.5%	7.8%
New Vehicle Sales (M)	16.8	17.0	16.8	16.3	15.3	10.6	11.2	12.2	13.6	15.0
Percent Change	1.1%	1.3%	-1.7%	-2.6%	-6.3%	-30.5%	5.3%	9.3%	11.1%	10.5%
r creent change	1.170	1.570	-1.770	-2.070	-0.570	-30.370	3.370	9.370	11.170	10.5%
Consumer Price Index										
('82-'84=100)	186.1	191.7	198.9	204.1	211.7	214.7	216.8	221.1	227.6	231.4
Percent Change	2.2%	3.0%	3.8%	2.6%	3.7%	1.4%	1.0%	2.0%	2.9%	1.7%
Industrial Production					400.0	20.4				
Index ('07=100)	91.2	94.3	96.4	98.7	100.0	89.6	87.6	92.3	95.6	98.1
Percent Change	1.3%	3.4%	2.3%	2.4%	1.3%	-10.4%	-2.2%	5.3%	3.6%	2.6%
Personal Income (\$B)	9,743.8	10,318.7	11,017.2	11,686.8	12,271.9	12,240.1	12,180.2	12,826.9	13,434.1	13,910.5
Percent Change	5.0%	5.9%	6.8%	6.1%	5.0%	-0.2%	-0.5%	5.3%	4.8%	3.6%
C										
Real Personal										
Income (\$B in 82-84=100)	5,235.6	5,382.7	5,537.9	5,725.7	5,797.3	5,702.2	5,619.2	5,802.4	5,903.4	6,012.1
Percent Change	2.8%	2.8%	2.9%	3.4%	1.3%	-1.6%	-1.5%	3.3%	1.7%	1.8%
Diagonal Danier										
Disposable Personal Income (\$B)	8,750.4	9,195.6	9,742.6	10,274.7	10,804.7	10,947.5	11,046.8	11,530.5	12,001.1	12,360.0
Percent Change	6.1%	5.1%	5.9%	5.5%	5.2%	1.3%	0.9%	4.4%	4.1%	3.0%
1 Creent Change	0.170	J.170	3.9%	3.3%	3.270	1.5%	U.7%	4.470	4.170	3.0%
Disposable Personal										
Income (\$B in 2009\$)	9,884.3	10,121.1	10,400.3	10,725.1	10,942.6	10,954.5	10,941.0	11,225.3	11,412.5	11,589.4
Percent Change	4.0%	2.4%	2.8%	3.1%	2.0%	0.1%	-0.1%	2.6%	1.7%	1.5%

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

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

	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>
Personal Income	9,743.8	10,318.7	11,017.2	11,686.8	12,271.9	12,240.1	12,180.2	12,826.9	13,434.1	13,910.5
Percent Change	5.0%	5.9%	6.8%	6.1%	5.0%	-0.3%	-0.5%	5.3%	4.7%	3.5%
Wages & Salaries	5,266.6	5,556.9	5,880.4	6,234.2	6,480.2	6,380.8	6,272.5	6,516.2	6,758.0	7,027.8
Percent Change	4.5%	5.5%	5.8%	6.0%	3.9%	-1.5%	-1.7%	3.9%	3.7%	4.0%
Manufacturing Income	681.1	705.6	726.2	745.7	749.0	699.7	658.4	696.2	721.7	740.2
Percent Change	1.3%	3.6%	2.9%	2.7%	0.4%	-6.6%	-5.9%	5.7%	3.7%	2.6%
Nonmanufacturing Inc.	4,585.5	4,851.3	5,154.2	5,488.5	5,731.2	5,681.1	5,614.1	5,820.0	6,036.3	6,287.6
Percent Change	5.0%	5.8%	6.2%	6.5%	4.4%	-0.9%	-1.2%	3.7%	3.7%	4.2%
Other Labor Income	1,266.6	1,355.1	1,416.9	1,467.9	1,524.3	1,536.4	1,551.1	1,611.3	1,654.6	1,696.4
Percent Change	7.4%	7.0%	4.6%	3.6%	3.8%	0.8%	1.0%	3.9%	2.7%	2.5%
Proprietor's Income	933.8	963.3	1,030.8	1,014.8	1,003.9	982.8	1,011.4	1,086.4	1,198.9	1,285.9
Percent Change	5.7%	3.2%	7.0%	-1.5%	-1.1%	-2.1%	2.9%	7.4%	10.3%	7.3%
Farm Income	47.6	47.0	41.0	36.2	46.2	36.1	40.6	60.2	75.7	104.0
Percent Change	60.1%	-1.3%	-12.8%	-11.8%	27.7%	-21.7%	12.2%	48.5%	25.7%	37.4%
Nonfarm Income	886.1	916.3	989.8	978.6	957.7	946.7	970.9	1,026.2	1,123.2	1,182.0
Percent Change	3.8%	3.4%	8.0%	-1.1%	-2.1%	-1.2%	2.6%	5.7%	9.4%	5.2%
Rental Income	251.1	249.4	225.0	190.6	216.3	302.2	369.2	441.8	516.5	566.2
Percent Change	11.9%	-0.7%	-9.8%	-15.3%	13.5%	39.7%	22.2%	19.7%	16.9%	9.6%
Personal Dividend Inc.	490.9	579.2	647.7	773.4	839.6	683.6	503.9	617.5	705.5	764.0
Percent Change	20.3%	18.0%	11.8%	19.4%	8.6%	-18.6%	-26.3%	22.5%	14.3%	8.3%
Personal Interest Income	954.9	999.4	1,155.2	1,283.3	1,371.0	1,325.9	1,220.5	1,197.3	1,206.7	1,215.9
Percent Change	-3.7%	4.7%	15.6%	11.1%	6.8%	-3.3%	-7.9%	-1.9%	0.8%	0.8%
Transfer Payments	1,380.5	1,463.5	1,559.8	1,664.8	1,806.1	2,000.2	2,218.0	2,303.0	2,322.4	2,402.3
Percent Change	5.3%	6.0%	6.6%	6.7%	8.5%	10.7%	10.9%	3.8%	0.8%	3.4%

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

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

	2004	2005	2006	2007	2008	2009	<u>2010</u>	2011	<u>2012</u>	<u>2013</u>
Less:										
Contributions to										
Social Insurance	803.2	852.3	900.1	943.0	975.9	976.7	971.5	952.4	932.8	1,028.1
Percent Change	5.4%	6.1%	5.6%	4.8%	3.5%	0.1%	-0.5%	-2.0%	-2.0%	10.2%
T 1										
Equals:	0.742.0	10.010.5	11.015.0	11.606.0	10.051.0	100404	12 100 2	10.004.0	10 101 1	12010 #
Personal Income	9,743.8	10,318.7	11,017.2	11,686.8	12,271.9	12,240.1	12,180.2	12,826.9	13,434.1	13,910.5
Percent Change	5.0%	5.9%	6.8%	6.1%	5.0%	-0.3%	-0.5%	5.3%	4.7%	3.5%
Less:										
Personal Taxes	1.000.6	1,128.3	1,283.3	1,422.1	1,469.5	1,298.8	1,143.1	1,307.1	1,445.7	1,586.8
Percent Change	-2.9%	12.8%	13.7%	10.8%	3.3%	-11.6%	-12.0%	14.3%	10.6%	9.8%
reicent Change	-2.970	12.070	13.770	10.070	3.370	-11.070	-12.070	14.570	10.0%	9.670
Equals:										
Disposable Personal Inc.	8,750.4	9,195.6	9,742.6	10,274.7	10,804.7	10,947.5	11,046.8	11,530.5	12,001.1	12,360.0
Percent Change	6.1%	5.1%	5.9%	5.5%	5.2%	1.3%	0.9%	4.4%	4.1%	3.0%
Less:										
Personal Outlays	8,329.6	8,868.9	9,442.6	9,950.4	10,388.8	10,300.5	10,423.7	10,860.4	11,351.8	11,732.3
Percent Change	5.9%	6.5%	6.5%	5.4%	4.4%	-0.9%	1.2%	4.2%	4.5%	3.4%
Equals:										
Personal Savings	420.8	326.7	300.0	324.3	415.8	647.1	623.1	670.2	649.3	627.6
Percent Change	8.7%	-22.4%	-8.2%	8.1%	28.2%	55.6%	-3.7%	7.6%	-3.1%	-3.3%
Personal Savings Rate	4.8%	3.6%	3.1%	3.1%	3.9%	5.9%	5.6%	5.8%	5.4%	5.1%

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

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

	2004	<u>2005</u>	<u>2006</u>	2007	2008	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>
Establishment Employ. Percent Change	130.6	132.5	135.0	137.0	137.8	134.0	129.7	130.6	132.6	134.8
	0.3%	1.5%	1.9%	1.5%	0.6%	-2.8%	-3.2%	0.6%	1.6%	1.6%
Manufacturing Percent Change	14.3	14.3	14.2	14.0	13.7	12.7	11.5	11.6	11.8	12.0
	-3.7%	-0.3%	-0.6%	-1.2%	-2.3%	-7.7%	-8.9%	0.8%	1.8%	1.0%
Nonmanufacturing	116.2	118.2	120.8	123.0	124.1	121.3	118.2	118.9	120.8	122.8
Percent Change	0.8%	1.7%	2.2%	1.8%	0.9%	-2.2%	-2.6%	0.6%	1.6%	1.7%
Construction & Mining Percent Change	7.4	7.7	8.2	8.4	8.2	7.4	6.3	6.2	6.4	6.6
	2.0%	4.4%	6.2%	2.2%	-2.3%	-10.3%	-14.0%	-1.5%	3.2%	2.2%
Information Percent Change	3.1	3.1	3.1	3.0	3.0	2.9	2.7	2.7	2.7	2.7
	-4.0%	-2.2%	-0.9%	-0.7%	-0.3%	-4.1%	-5.4%	-2.0%	-0.5%	0.4%
Public Utility, Trade & Transportation Percent Change	25.4 -0.1%	25.7 1.5%	26.1 1.6%	26.5 1.2%	26.6 0.6%	25.6 -3.9%	24.6 -3.8%	24.8 0.8%	25.3 1.9%	25.7 1.7%
Finance, Insurance & Real Estate Percent Change	8.1 0.9%	8.1 0.5%	8.3 2.0%	8.4 1.0%	8.3 -1.1%	8.0 -3.1%	7.7 -3.6%	7.7 -0.7%	7.7 0.7%	7.8 1.3%
Services	50.7	51.8	53.3	54.6	55.6	54.9	54.2	55.2	56.7	58.1
Percent Change	1.7%	2.4%	2.7%	2.5%	1.8%	-1.3%	-1.2%	1.9%	2.7%	2.5%
Professional & Business	16.2	16.6	17.3	17.8	18.0	17.1	16.5	17.0	17.6	18.2
Percent Change	1.4%	3.0%	3.9%	3.0%	0.9%	-4.6%	-3.6%	3.1%	3.6%	3.3%
Education & Health	16.8	17.1	17.6	18.1	18.6	19.0	19.4	19.7	20.1	20.5
Percent Change	2.0%	2.3%	2.7%	2.6%	2.9%	2.4%	1.7%	1.7%	2.1%	2.0%
Leisure & Hospitality	12.3	12.7	12.9	13.3	13.5	13.2	13.0	13.2	13.6	13.9
Percent Change	2.1%	2.6%	2.3%	2.6%	1.6%	-1.9%	-1.9%	1.4%	2.9%	2.8%
Other Services Percent Change	5.4	5.4	5.4	5.5	5.5	5.4	5.3	5.3	5.4	5.5
	0.3%	-0.2%	0.3%	1.0%	0.9%	-1.3%	-2.0%	0.1%	1.2%	1.2%
Government	21.6	21.7	21.9	22.1	22.4	22.6	22.6	22.3	22.0	21.9
Percent Change	-0.1%	0.6%	0.8%	1.0%	1.2%	1.0%	0.0%	-1.3%	-1.4%	-0.4%
Civilian Labor Force	146.8	148.2	150.4	152.4	153.7	154.6	153.9	153.6	154.3	155.3
Percent Change	0.7%	1.0%	1.4%	1.4%	0.8%	0.6%	-0.4%	-0.2%	0.4%	0.7%
Unemployment Rate	5.8%	5.3%	4.8%	4.5%	5.0%	7.6%	9.8%	9.3%	8.5%	7.8%

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

# TABLE 5 CONSUMER PRICE INDEXES (1982-1984 = 100)

	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	2009	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>
All Items – Urban										
Consumers	186.1	191.7	198.9	204.1	211.7	214.7	216.8	221.1	227.6	231.4
Percent Change	2.2%	3.0%	3.8%	2.6%	3.7%	1.4%	1.0%	2.0%	2.9%	1.7%
Food & Beverages	183.6	189.1	193.4	198.9	208.1	218.2	218.6	223.1	231.5	235.4
Percent Change	3.1%	3.0%	2.3%	2.9%	4.6%	4.8%	0.2%	2.0%	3.8%	1.7%
Housing	186.9	192.4	199.6	206.5	212.8	217.6	216.5	217.2	221.0	224.9
Percent Change	2.3%	3.0%	3.7%	3.5%	3.1%	2.2%	-0.5%	0.3%	1.7%	1.8%
Energy	142.0	159.7	194.2	198.6	226.6	208.3	206.4	227.8	245.9	245.8
Percent Change	8.9%	12.5%	21.6%	2.3%	14.1%	-8.1%	-0.9%	10.3%	7.9%	0.0%
Commodities	152.4	156.9	163.1	165.0	172.0	170.9	173.2	178.7	186.3	187.8
Percent Change	1.1%	3.0%	3.9%	1.2%	4.2%	-0.6%	1.3%	3.2%	4.3%	0.8%
Apparel	120.7	120.2	119.1	119.6	118.6	119.4	120.1	119.7	124.8	126.9
Percent Change	-1.2%	-0.4%	-0.8%	0.4%	-0.8%	0.6%	0.5%	-0.3%	4.3%	1.7%
Transportation	159.3	167.0	179.8	181.2	192.8	182.6	189.0	202.9	215.4	217.8
Percent Change	2.0%	4.9%	7.7%	0.7%	6.4%	-5.3%	3.5%	7.3%	6.2%	1.1%
Services	219.5	226.2	234.6	242.9	251.0	258.1	260.1	263.2	268.6	274.6
Percent Change	3.0%	3.0%	3.7%	3.6%	3.3%	2.8%	0.8%	1.2%	2.0%	2.3%
Medical Care	303.5	316.7	329.7	343.0	358.6	369.4	382.3	394.0	407.4	420.5
Percent Change	4.1%	4.3%	4.1%	4.0%	4.6%	3.0%	3.5%	3.1%	3.4%	3.2%
Other Goods										
& Services	301.4	308.9	317.6	327.5	338.9	355.3	377.0	384.6	390.7	397.8
Percent Change	1.6%	2.5%	2.8%	3.1%	3.5%	4.8%	6.1%	2.0%	1.6%	1.8%

## MAJOR CONNECTICUT ECONOMIC INDICATORS - FISCAL YEAR BASIS

# TABLE 6 PERSONAL INCOME (BILLIONS OF DOLLARS)

	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>
Personal Income	157.58	167.52	178.69	190.95	198.61	194.86	193.56	203.47	210.04	216.47
Percent Change	4.9%	6.3%	6.7%	6.9%	4.0%	-1.9%	-0.7%	5.1%	3.2%	3.1%
Disposable										
Personal Income	133.46	139.89	147.64	158.42	167.24	165.99	165.53	173.98	175.66	178.06
Percent Change	4.7%	4.8%	5.5%	7.3%	5.6%	-0.7%	-0.3%	5.1%	1.0%	1.4%
Total Wages	87.32	92.08	96.63	102.26	105.65	101.85	99.72	104.18	105.93	109.07
Percent Change	4.1%	5.4%	4.9%	5.8%	3.3%	-3.6%	-2.1%	4.5%	1.7%	3.0%
Manufacturing Wages	12.47	12.87	13.07	13.55	13.90	13.05	12.28	13.17	13.34	13.63
Percent Change	1.9%	3.2%	1.6%	3.7%	2.6%	-6.1%	-5.9%	7.2%	1.3%	2.2%
Nonmanufacturing										
Wages	74.85	79.21	83.56	88.71	91.75	88.81	87.44	91.01	92.58	95.44
Percent Change	4.4%	5.8%	5.5%	6.2%	3.4%	-3.2%	-1.5%	4.1%	1.7%	3.1%
Other Labor Income	20.38	21.98	22.27	22.63	23.70	23.57	23.66	24.56	24.58	25.07
Percent Change	8.5%	7.9%	1.3%	1.6%	4.7%	-0.5%	0.4%	3.8%	0.1%	2.0%
Proprietor's Income	15.65	16.07	17.23	17.12	16.16	16.37	18.47	18.56	19.66	20.75
Percent Change	1.2%	2.7%	7.2%	-0.6%	-5.6%	1.3%	12.8%	0.5%	6.0%	5.5%
Property Income	28.94	32.01	36.69	42.33	45.39	41.96	38.50	41.67	44.08	46.19
Percent Change	6.7%	10.6%	14.6%	15.4%	7.2%	-7.6%	-8.2%	8.2%	5.8%	4.8%
Transfer Payments										
Less Social Insurance	5.28	5.38	5.88	6.60	7.70	11.10	13.21	14.51	15.80	15.40
Percent Change	7.7%	1.9%	9.2%	12.2%	16.7%	44.1%	19.1%	9.8%	8.9%	-2.5%
Transfer Payments	17.87	18.57	19.53	20.75	22.36	25.69	27.65	28.57	29.35	30.29
Percent Change	4.7%	3.9%	5.2%	6.2%	7.8%	14.9%	7.6%	3.3%	2.7%	3.2%
Social Insurance	12.59	13.18	13.65	14.15	14.66	14.60	14.43	14.06	13.55	14.90
Percent Change	3.5%	4.7%	3.6%	3.6%	3.6%	-0.4%	-1.1%	-2.6%	-3.7%	9.9%

#### MAJOR CONNECTICUT ECONOMIC INDICATORS - FISCAL YEAR BASIS

TABLE 7
DEFLATED PERSONAL INCOME
(BILLIONS OF DOLLARS)

	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>
Personal Income	179.42	185.14	191.14	198.55	202.16	195.14	192.84	199.14	201.73	204.54
Percent Change	2.6%	3.2%	3.2%	3.9%	1.8%	-3.5%	-1.2%	3.3%	1.3%	1.4%
Disposable										
Personal Income	151.95	154.61	157.92	164.73	170.23	166.23	164.91	170.27	168.71	168.25
Percent Change	2.4%	1.7%	2.1%	4.3%	3.3%	-2.3%	-0.8%	3.3%	-0.9%	-0.3%
Total Wages	99.43	101.76	103.36	106.34	107.54	102.00	99.35	101.96	101.74	103.06
Percent Change	1.8%	2.4%	1.6%	2.9%	1.1%	-5.2%	-2.6%	2.6%	-0.2%	1.3%
Manufacturing Wages	14.20	14.22	13.98	14.09	14.15	13.07	12.23	12.89	12.82	12.88
Percent Change	-0.3%	0.1%	-1.7%	0.8%	0.4%	-7.7%	-6.4%	5.3%	-0.6%	0.5%
Nonmanufacturing	85.22	87.54	89.38	92.25	93.39	88.93	87.11	89.08	88.92	90.18
Wages	2.1%	2.7%	2.1%	3.2%	1.2%	-4.8%	-2.0%	2.3%	-0.2%	1.4%
Percent Change										
Other Labor Income	23.20	24.29	23.82	23.53	24.12	23.61	23.57	24.03	23.60	23.68
Percent Change	6.1%	4.7%	-2.0%	-1.2%	2.5%	-2.1%	-0.2%	2.0%	-1.8%	0.3%
Proprietor's Income	17.82	17.76	18.43	17.81	16.45	16.40	18.40	18.16	18.88	19.61
Percent Change	-1.1%	-0.3%	3.8%	-3.4%	-7.6%	-0.3%	12.2%	-1.3%	4.0%	3.8%
Property Income	32.95	35.37	39.24	44.01	46.21	42.02	38.35	40.78	42.34	43.64
Percent Change	4.4%	7.4%	10.9%	12.2%	5.0%	-9.1%	-8.7%	6.3%	3.8%	3.1%
Transfer Payments										
Less Social Insurance	6.02	5.95	6.29	6.86	7.84	11.12	13.16	14.20	15.17	14.55
Percent Change	5.3%	-1.1%	5.7%	9.1%	14.3%	41.7%	18.4%	7.8%	6.9%	-4.1%
Transfer Payments	20.35	20.52	20.89	21.58	22.76	25.73	27.55	27.96	28.19	28.62
Percent Change	2.4%	0.8%	1.8%	3.3%	5.5%	13.1%	7.1%	1.5%	0.8%	1.6%
Social Insurance	14.33	14.57	14.60	14.71	14.92	14.62	14.38	13.76	13.01	14.07
Percent Change	1.2%	1.7%	0.2%	0.8%	1.4%	-2.0%	-1.6%	-4.3%	-5.5%	8.2%

Note: All categories are deflated by GDP Price Index (2009 = 100).

#### MAJOR CONNECTICUT ECONOMIC INDICATORS - FISCAL YEAR BASIS

# TABLE 8 MANUFACTURING EMPLOYMENT (THOUSANDS -Seasonally Adjusted)

	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>
Manufacturing	197.60	196.64	193.99	192.32	189.26	180.45	166.22	166.23	166.04	163.48
Percent Change	-3.6%	-0.5%	-1.3%	-0.9%	-1.6%	-4.7%	-7.9%	0.0%	-0.1%	-1.5%
Electronic & Electrical	25.94	25.75	25.06	25.04	25.25	24.60	22.85	23.26	23.10	22.36
Percent Change	-6.4%	-0.7%	-2.7%	-0.1%	0.8%	-2.6%	-7.1%	1.8%	-0.7%	-3.2%
Metals Manufacturing	40.70	41.27	41.03	40.79	40.37	37.98	33.69	34.02	34.74	35.13
Percent Change	-2.8%	1.4%	-0.6%	-0.6%	-1.0%	-5.9%	-11.3%	1.0%	2.1%	1.1%
Industrial Machinery	18.65	18.35	17.99	18.15	18.00	17.03	15.35	14.88	14.71	14.48
Percent Change	-4.4%	-1.7%	-1.9%	0.9%	-0.8%	-5.4%	-9.9%	-3.0%	-1.1%	-1.6%
Transportation Equip.	43.06	43.31	43.60	43.51	43.93	43.94	42.42	42.13	42.32	41.89
Percent Change	-2.5%	0.6%	0.7%	-0.2%	1.0%	0.0%	-3.5%	-0.7%	0.5%	-1.0%
Chemical, Plast. & Rub.	25.49	25.19	24.56	23.58	22.12	20.30	18.54	18.57	17.85	17.13
Percent Change	-3.8%	-1.2%	-2.5%	-4.0%	-6.2%	-8.2%	-8.7%	0.1%	-3.9%	-4.0%
Printing, Publ. & Textile	19.26	18.53	17.63	17.28	16.65	14.89	12.79	12.58	12.56	11.86
Percent Change	-3.3%	-3.8%	-4.9%	-2.0%	-3.6%	-10.6%	-14.2%	-1.6%	-0.2%	-5.6%
Food, Bev. & Tobacco	8.40	8.40	8.56	8.48	8.01	7.76	7.98	8.07	8.00	7.78
Percent Change	-4.0%	0.0%	1.9%	-0.9%	-5.5%	-3.2%	2.9%	1.1%	-0.8%	-2.8%
Miscellaneous	16.07	15.88	15.68	15.57	14.88	13.93	12.59	12.80	12.82	12.74
Percent Change	-2.5%	-1.1%	-1.3%	-0.7%	-4.5%	-6.4%	-9.6%	1.6%	0.2%	-0.7%

#### MAJOR CONNECTICUT ECONOMIC INDICATORS - FISCAL YEAR BASIS

TABLE 9
NONMANUFACTURING EMPLOYMENT
(THOUSANDS -Seasonally Adjusted)

	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>
Nonmanufacturing	1,446.1	1,460.3	1,476.6	1,497.3	1,517.1	1,484.2	1,439.4	1,452.2	1,467.5	1,479.7
Percent Change	-0.1%	1.0%	1.1%	1.4%	1.3%	-2.2%	-3.0%	0.9%	1.1%	0.8%
Construction & Mining	64.44	67.23	67.16	68.52	69.19	60.30	51.65	51.37	52.39	52.55
Percent Change	3.2%	4.3%	-0.1%	2.0%	1.0%	-12.9%	-14.3%	-0.5%	2.0%	0.3%
Information	39.20	38.68	37.84	38.06	38.49	36.33	32.44	31.63	31.22	30.97
Percent Change	-2.1%	-1.3%	-2.2%	0.6%	1.1%	-5.6%	-10.7%	-2.5%	-1.3%	-0.8%
_										
Utilities	8.71	8.66	8.31	8.14	8.34	8.68	8.12	7.84	7.65	7.52
Percent Change	-2.3%	-0.5%	-4.1%	-2.0%	2.5%	4.1%	-6.6%	-3.4%	-2.4%	-1.7%
Transportation	40.44	42.82	43.98	44.08	44.15	42.93	40.77	41.59	42.26	42.64
Percent Change	1.5%	5.9%	2.7%	0.2%	0.1%	-2.8%	-5.0%	2.0%	1.6%	0.9%
Wholesale Trade	65.60	65.91	67.17	67.69	69.11	67.33	63.13	62.93	63.18	62.72
Percent Change	-0.3%	0.5%	1.9%	0.8%	2.1%	-2.6%	-6.2%	-0.3%	0.4%	-0.7%
1 creent change	-0.570	0.570	1.7/0	0.070	2.1 /0	-2.070	-0.270	-0.570	0.470	-0.770
Retail Trade	191.19	192.72	191.41	191.08	190.87	182.49	177.33	179.53	181.37	182.97
Percent Change	-0.7%	0.8%	-0.7%	-0.2%	-0.1%	-4.4%	-2.8%	1.2%	1.0%	0.9%
Finance & Insurance	119.49	119.46	121.07	122.50	121.91	119.69	115.51	115.76	114.41	112.47
Percent Change	-0.8%	0.0%	1.3%	1.2%	-0.5%	-1.8%	-3.5%	0.2%	-1.2%	-1.7%
Real Estate	20.22	20.50	21.02	21.17	20.85	10.00	10.02	10.02	10.74	18.74
	-0.4%	20.50 1.4%	21.02	21.17 0.7%	20.85 -1.5%	19.88 -4.7%	18.93 -4.7%	18.83 -0.5%	18.74 -0.5%	0.0%
Percent Change	-0.4%	1.4%	2.0%	0.7%	-1.5%	-4.7%	-4.7%	-0.5%	-0.5%	0.0%
Professional & Business	198.08	199.13	203.78	206.77	208.96	197.98	188.46	194.13	200.76	203.68
Percent Change	-1.5%	0.5%	2.3%	1.5%	1.1%	-5.3%	-4.8%	3.0%	3.4%	1.5%
Education & Health	266.23	271.03	276.08	283.82	292.21	299.87	304.12	310.77	315.22	320.04
Percent Change	1.6%	1.8%	1.9%	2.8%	3.0%	2.6%	1.4%	2.2%	1.4%	1.5%
	10444	120 (7	120.00	124.00	105.41	107.16	100.74	127.20	1.40.50	1.45.00
Leisure & Hospitality	126.66	128.67	130.80	134.00	137.41	135.16	132.76	135.38	140.53	145.30
Percent Change	2.5%	1.6%	1.7%	2.4%	2.5%	-1.6%	-1.8%	2.0%	3.8%	3.4%
Other Services	62.27	62.65	63.08	64.27	63.84	62.09	60.57	60.59	60.72	61.70
Percent Change	-0.2%	0.6%	0.7%	1.9%	-0.7%	-2.7%	-2.5%	0.0%	0.2%	1.6%
Federal Government	20.39	19.96	19.77	19.63	19.61	19.50	19.77	18.40	17.83	17.39
Percent Change	-3.6%	-2.1%	-1.0%	-0.7%	-0.1%	-0.6%	1.4%	-7.0%	-3.1%	-2.4%
	5.070	2.170	2.070	3.7,0	3.1 /0	3.070	2.170		5.170	2.170
State & Local Gov't.	223.19	222.89	225.18	227.61	232.15	231.93	225.87	223.42	221.26	221.02
Percent Change	-1.7%	-0.1%	1.0%	1.1%	2.0%	-0.1%	-2.6%	-1.1%	-1.0%	-0.1%

#### MAJOR CONNECTICUT ECONOMIC INDICATORS - FISCAL YEAR BASIS

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

	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>
Labor Force Percent Change	1,791.3 0.1%	1,795.3 0.2%	1,815.7 1.1%	1,838.2 1.2%	1,858.7 1.1%	1,888.4 1.6%	1,905.1 0.9%	1,911.6 0.3%	1,890.2 -1.1%	1,864.4 -1.4%
Nonagricultural										
Employment Percent Change	1,643.7 -0.5%	1,657.0 0.8%	1,670.7 0.8%	1,689.7 1.1%	1,706.3 1.0%	1,664.6 -2.4%	1,605.7 -3.5%	1,618.5 0.8%	1,633.6 0.9%	1,643.1 0.6%
Residential										
Employment	1,697.5	1,708.2	1,731.6	1,756.6	1,766.6	1,757.7	1,734.8	1,734.6	1,729.8	1,710.8
Percent Change	0.1%	0.6%	1.4%	1.4%	0.6%	-0.5%	-1.3%	0.0%	-0.3%	-1.1%
Unemployed	93.8	87.1	84.1	81.6	92.0	130.7	170.3	177.0	160.3	153.6
Percent Change	1.5%	-7.2%	-3.4%	-3.0%	12.8%	42.0%	30.3%	3.9%	-9.4%	-4.2%
Unemployment Rate	5.2%	4.9%	4.6%	4.5%	4.9%	6.9%	8.9%	9.2%	8.5%	8.2%
Households	1,336.7	1,340.3	1,345.1	1,349.3	1,355.9	1,363.7	1,370.6	1,375.7	1,378.7	1,383.6
Percent Change	0.5%	0.3%	0.4%	0.3%	0.5%	0.6%	0.5%	0.4%	0.2%	0.4%
Housing Starts	9,800.6	11,597.4	11,127.5	8,508.3	6,436.0	3,648.8	3,686.2	3,395.0	3,745.9	5,112.9
Percent Change	14.7%	18.3%	-4.1%	-23.5%	-24.4%	-43.3%	1.0%	-7.9%	10.3%	36.5%
Single Family	7,880.1	9,634.0	9,186.3	6,891.1	4,649.7	2,420.3	2,721.8	2,435.0	2,516.8	2,916.0
Percent Change	7.6%	22.3%	-4.6%	-25.0%	-32.5%	-47.9%	12.5%	-10.5%	3.4%	15.9%
Multi Family	1,920.5	1,963.4	1,941.2	1,617.2	1,786.3	1,228.5	964.4	960.1	1,229.1	2,196.9
Percent Change	57.2%	2.2%	-1.1%	-16.7%	10.5%	-31.2%	-21.5%	-0.4%	28.0%	78.7%
New Car Registrations	254.8	228.1	230.5	212.8	212.4	155.5	148.6	183.5	175.1	187.5
Percent Change	12.0%	-10.5%	1.1%	-7.7%	-0.2%	-26.8%	-4.4%	23.5%	-4.6%	7.1%

Note: Connecticut housing starts are already in thousands.

### MAJOR CONNECTICUT ECONOMIC INDICATORS - FISCAL YEAR BASIS

#### TABLE 11 ANALYTICS

	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>
Wages/Total Income	55.5%	55.0%	54.1%	53.6%	53.2%	52.2%	51.4%	51.1%	50.4%	50.2%
Other Labor Income /Total Income	11.9%	11.6%	11.4%	11.4%	11.7%	13.6%	14.7%	14.5%	14.4%	14.5%
Social Insurance /Total Income	8.0%	7.9%	7.6%	7.4%	7.4%	7.5%	7.4%	6.9%	6.4%	6.9%
Transfer Payments /Total Income	11.3%	11.1%	10.9%	10.9%	11.3%	13.2%	14.3%	14.0%	14.0%	14.0%
Proprietor's Income /Total Income	9.9%	9.6%	9.6%	9.0%	8.1%	8.4%	9.5%	9.1%	9.4%	9.6%
Property Income /Total Income	18.4%	19.1%	20.5%	22.2%	22.9%	21.5%	19.9%	20.5%	21.0%	21.4%
Average Wages (Thousands in 2000 \$)	27.49	27.11	28.94	32.01	36.69	42.33	45.39	41.96	38.50	41.67
Average Mfg. Wages (Thousands in 2000 \$)	12.11	11.69	11.93	12.32	12.51	12.96	13.32	12.63	11.88	12.73
Average Nonmfg. Wages (Thousands in 2000 \$)	4.51	4.03	4.17	4.33	4.51	4.86	4.77	3.51	3.53	3.84
Manufacturing Share of Non-Agricultural Employment	12.4%	12.1%	11.8%	11.4%	11.0%	11.0%	10.7%	10.1%	10.0%	9.7%
Residential Employment /Total Nonagricultural	1.069	1.049	1.051	1.038	1.023	1.067	1.116	1.058	1.044	1.020

#### MAJOR CONNECTICUT REGIONAL ECONOMIC INDICATORS - CALENDAR YEAR BASIS

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

#### BRIDGEPORT-STAMFORD-NORWALK

	2003	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	
Personal Income	52,875.3	57,741.8	61,519.9	67,576.2	70,739.4	70,092.8	64,099.6	68,152.3	73,361.4	75,701.7	
Percent Change	-0.2%	9.2%	6.5%	9.8%	4.7%	-0.9%	-8.6%	6.3%	7.6%	3.2%	
Total Wages	27,651.1	29,403.9	31,120.7	33,280.8	36,054.4	35,750.1	32,768.0	33,932.5	35,535.1	36,364.9	
Percent Change	2.6%	6.3%	5.8%	6.9%	8.3%	-0.8%	-8.3%	3.6%	4.7%	2.3%	
	HARTFORD-WEST HARTFORD-EAST HARTFORD										
	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	2008	2009	<u>2010</u>	<u>2011</u>	<u>2012</u>	
Personal Income	47,043.5	49,835.6	52,213.3	55,933.1	60,040.1	61,414.9	60,559.9	61,691.7	63,592.1	65,906.5	
Percent Change	3.2%	5.9%	4.8%	7.1%	7.3%	2.3%	-1.4%	1.9%	3.1%	3.6%	
Total Wages	28,526.0	30,288.1	31,707.9	33,154.2	35,342.6	35,716.8	34,429.7	34,806.7	36,294.0	37,481.6	
Percent Change	1.3%	6.2%	4.7%	4.6%	6.6%	1.1%	-3.6%	1.1%	4.3%	3.3%	
	NEW LONDON-NORWICH, CT-RI										
	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	2008	2009	<u>2010</u>	<u>2011</u>	<u>2012</u>	
Personal Income	10,175.0	10,724.7	11,015.9	11,622.1	12,400.8	12,789.9	12,623.0	12,831.0	13,203.6	13,562.3	
Percent Change	4.9%	5.4%	2.7%	5.5%	6.7%	3.1%	-1.3%	1.6%	2.9%	2.7%	
Total Wages	5,630.3	5,863.7	6,054.3	6,294.3	6,604.4	6,855.5	6,710.9	6,659.0	6,747.2	6,802.1	
Percent Change	3.0%	4.1%	3.3%	4.0%	4.9%	3.8%	-2.1%	-0.8%	1.3%	0.8%	