

## ECONOMIC INFORMATION - Quarter 3, FY 2008

The information in this section was prepared by the Massachusetts State Data Center (MassSDC) at the University of Massachusetts Donahue Institute and may be relevant in evaluating the economic and financial condition and prospects of the Commonwealth of Massachusetts. The State Data Center archives much of the data about Massachusetts. The demographic information and statistical data, which have been obtained by the MassSDC from the sources indicated, do not necessarily present all factors that may have a bearing on the Commonwealth's fiscal and economic affairs.

All information is presented on a calendar-year basis unless otherwise indicated. **The section was prepared for release on April 22, 2008. Information in the text, tables, charts, and graphs was current as of March 31, 2008.** Sources of information are indicated in the text or immediately following the charts and tables, and also on the *Sources List* on the last page of the Exhibit A section. Although the Commonwealth considers the sources to be reliable, the Commonwealth has made no independent verification of the information presented herein and does not warrant its accuracy.

### Statistical Overview

<u>Population</u> (p. A-2)	<u>Massachusetts</u>	<u>United States</u>
Estimated Percent Change in Population, April 1, 2000–July 1, 2007	1.6%	7.2%
<u>Personal Income, Consumer Prices, and Poverty</u> (p. A-7)		
Per Capita Personal Income, 2007	\$49,082	\$38,611
Average Annual Pay, All Industries, 2006	\$52,435	\$42,535
Percent Change in CPI-U*, 2006-2007	1.9%	2.8%
Percent Change in CPI-U*, January 2007-January 2008	3.4%	4.3%
Poverty Rate, 2004-2006 Average	10.5%	12.5%
Average Weekly Earnings, Manufacturing Production Workers: 2007	\$783.88	\$711.36
Percent Change from previous year	5.5%	2.9%
<u>Employment</u> (p. A-15)		
Percent Change in Nonfarm Payroll Employment, February 2007-February 2008(p)	0.8%	0.6%
Unemployment Rate, 2007	4.5%	4.6%
Unemployment Rate, February, 2008 (seasonally adjusted)	4.5%	4.8%
<u>Economic Base and Performance</u> (p. A-20)		
Percent Change in Gross Domestic Product, 2005-2006	2.9%	3.4%
Percent Change in International Exports, 2006-2007	5.1%	12.1%
Percent Change in Housing Permits Authorized, 2005-2006	-20.2%	-14.7%
<u>Human Resources</u> (p. A-38)		
Expenditure Per Pupil, 2006	\$11,981	\$9,138
Percent of Adults with a Bachelor's Degree or higher, 2006	37.0%	27.0%

\*NOTE: Percent changes in the Consumer Price Index for All Urban Consumers (CPI-U) are for the Boston-Worcester-Lawrence, MA-NH-ME-CT CMSA & the United States.

Massachusetts is a densely populated state with a well-educated population, comparatively high income levels, and a relatively diversified economy. While the total population of Massachusetts has remained fairly stable in the last twenty-five years, significant changes have occurred in the age distribution of the population: dramatic growth in residents between the ages of 20 and 44 since 1980 is expected to lead to a population distributed more heavily in the 65 and over age group in the next twenty-five years. Just as the working-age population has increased, income levels in Massachusetts since 1980 have grown significantly more than the national average, and a variety of measures of income show that Massachusetts residents have significantly higher amounts of annual income than the national average. These higher levels of income have been accompanied by a consistently lower poverty rate and, except during the recession of the early 1990s and the recent period of slow recovery from the recession of 2001, considerably lower unemployment rates in Massachusetts than in the United States since 1980. The state has had a somewhat lower unemployment rate than the nation for the last ten months, but is still lagging behind the nation in many indicators, particularly employment levels.

The following five sections provide detailed information on population characteristics, personal income, employment, economic base and performance, and human resources and infrastructure.

## **POPULATION CHARACTERISTICS**

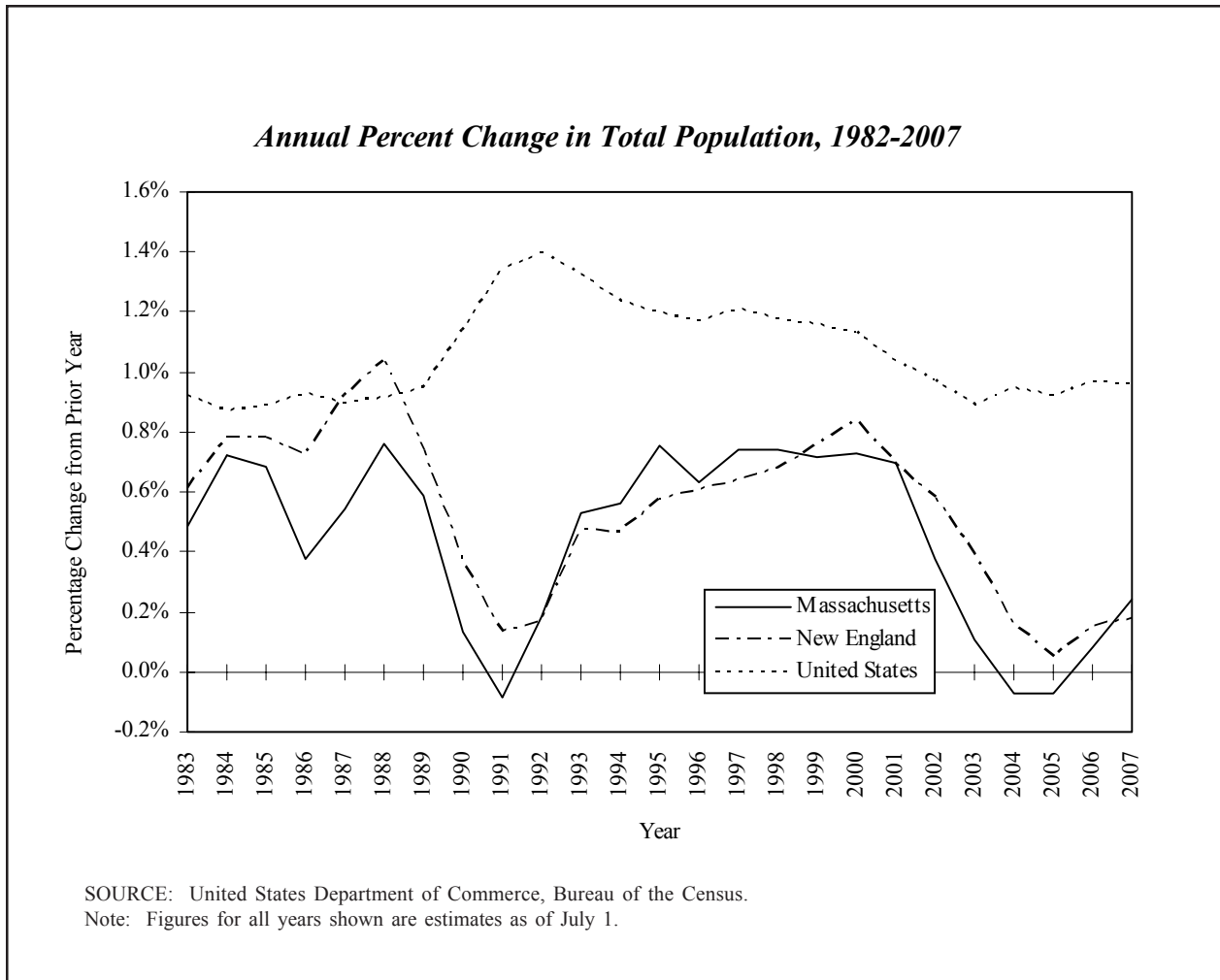
Massachusetts is a relatively slow growing but densely populated state with a comparatively large percentage of its residents living in metropolitan areas. The population density of Massachusetts was estimated as of July 1, 2007 to be 822.7 persons per square mile, as compared to 85.3 for the United States as a whole. Among the 50 states, only Rhode Island and New Jersey have a greater population density. Massachusetts also ranked just behind the same two states in percentage of residents living in metropolitan areas according to the metropolitan definitions released in 2003 which are based on whole counties. According to this definition, the entire state is considered metropolitan except for the two island counties (99.6 percent of state residents in 2007) while Rhode Island, New Jersey and D.C. are wholly metropolitan.

The State's population is concentrated in its eastern portion. The city of Boston is the largest city in New England, with a 2006 population estimated at 590,763, or 9.2 percent of the state's population. Boston is the hub of the seven-county Boston-Cambridge-Quincy, MA-NH Metropolitan Statistical Area (MSA), which includes the two southeastern New Hampshire counties, and which had a total population in 2007 estimated at 4,482,857 or 31.4 percent of the total New England population. The three-county Boston-Quincy, MA Metropolitan Division is the largest component of that MSA, with a total population in 2007 estimated at 1,858,216.

The second largest MSA in the state is the Worcester, MA MSA, with a 2007 population estimated at 781,352. The city of Worcester, situated approximately 40 miles west of Boston with a 2006 population estimated at 175,454, is the second largest city in New England as well as the second largest in the state. As a major medical and educational center, the Worcester area is home to 18 patient care facilities, including the University of Massachusetts Medical School, and thirteen other colleges and universities.

The third largest MSA in Massachusetts is the three-county Springfield MSA, with a 2007 population estimated at 682,657. Springfield, the third largest city in the Commonwealth with a 2006 population estimated at 151,176, is located in the Connecticut River Valley in Western Massachusetts and enjoys a diverse body of corporate employers, the largest of which are Baystate Health System, Big Y Supermarkets, MassMutual Financial Group, and Hasbro Games (Milton Bradley). In addition, Springfield is home to three independent colleges.

As the following chart and table indicate, the population in Massachusetts generally grows more slowly than the population of New England and much more slowly than the nation as a whole. According to the Census Bureau's latest revised estimates released in December, 2007, Massachusetts population has grown by 1.6% since Census 2000, and only seven states have grown more slowly. Most of that growth occurred between 2000 and 2003; since then only about 11,000 people have been added to the state's population according to these estimates.



The following table compares the population level and percentage change in the population level of Massachusetts with those of the New England states and the United States.

### ***Population, 1972-2007***

*(in thousands)*

<i>Year</i>	<i>Massachusetts</i>		<i>New England</i>		<i>United States</i>	
	<i>Total</i>	<i>Percent Change</i>	<i>Total</i>	<i>Percent Change</i>	<i>Total</i>	<i>Percent Change</i>
<b>1972</b>	5,760	0.4%	12,082	0.7%	209,284	1.2%
<b>1973</b>	5,781	0.4%	12,140	0.5%	211,357	1.0%
<b>1974</b>	5,774	-0.1%	12,146	0.0%	213,342	0.9%
<b>1975</b>	5,758	-0.3%	12,163	0.1%	215,465	1.0%
<b>1976</b>	5,744	-0.2%	12,192	0.2%	217,563	1.0%
<b>1977</b>	5,738	-0.1%	12,239	0.4%	219,760	1.0%
<b>1978</b>	5,736	0.0%	12,283	0.4%	222,095	1.1%
<b>1979</b>	5,738	0.0%	12,322	0.3%	224,567	1.1%
<b>1980</b>	5,737	0.0%	12,348	0.2%	226,546	0.9%
<b>1981</b>	5,769	0.6%	12,436	0.7%	229,466	1.3%
<b>1982</b>	5,771	0.0%	12,468	0.3%	231,664	1.0%
<b>1983</b>	5,799	0.5%	12,544	0.6%	233,792	0.9%
<b>1984</b>	5,841	0.7%	12,642	0.8%	235,825	0.9%
<b>1985</b>	5,881	0.7%	12,741	0.8%	237,924	0.9%
<b>1986</b>	5,903	0.4%	12,833	0.7%	240,133	0.9%
<b>1987</b>	5,935	0.5%	12,951	0.9%	242,289	0.9%
<b>1988</b>	5,980	0.8%	13,085	1.0%	244,499	0.9%
<b>1989</b>	6,015	0.6%	13,182	0.7%	246,819	0.9%
<b>1990</b>	6,023	0.1%	13,230	0.4%	249,623	1.1%
<b>1991</b>	6,018	-0.1%	13,248	0.1%	252,981	1.3%
<b>1992</b>	6,029	0.2%	13,271	0.2%	256,514	1.4%
<b>1993</b>	6,061	0.5%	13,334	0.5%	259,919	1.3%
<b>1994</b>	6,095	0.6%	13,396	0.5%	263,126	1.2%
<b>1995</b>	6,141	0.8%	13,473	0.6%	266,278	1.2%
<b>1996</b>	6,180	0.6%	13,555	0.6%	269,394	1.2%
<b>1997</b>	6,226	0.7%	13,642	0.6%	272,647	1.2%
<b>1998</b>	6,272	0.7%	13,734	0.7%	275,854	1.2%
<b>1999</b>	6,317	0.7%	13,838	0.8%	279,040	1.2%
<b>2000</b>	6,363	0.7%	13,954	0.8%	282,194	1.1%
<b>2001</b>	6,408	0.7%	14,050	0.7%	285,112	1.0%
<b>2002</b>	6,432	0.4%	14,132	0.6%	287,888	1.0%
<b>2003</b>	6,439	0.1%	14,187	0.4%	290,448	0.9%
<b>2004</b>	6,434	-0.1%	14,210	0.2%	293,192	0.9%
<b>2005</b>	6,429	-0.1%	14,217	0.0%	295,896	0.9%
<b>2006</b>	6,434	0.1%	14,239	0.2%	298,755	1.0%
<b>2007</b>	6,450	0.2%	14,264	0.2%	301,621	1.0%

SOURCE: United States Department of Commerce, Bureau of the Census. 1980 figures are census counts as of April 1, 1980; figures for all other years shown are estimates as of July 1.

The next twenty-five years are expected to bring about a continued change in the age distribution of the Massachusetts population. As the following table and chart show, the share of the 65 and over age group and especially the 85 and over age group will continue to grow. The chart, table and population pyramids (below, and on the following page) show the projected population by age for Massachusetts for 2000 through 2030.

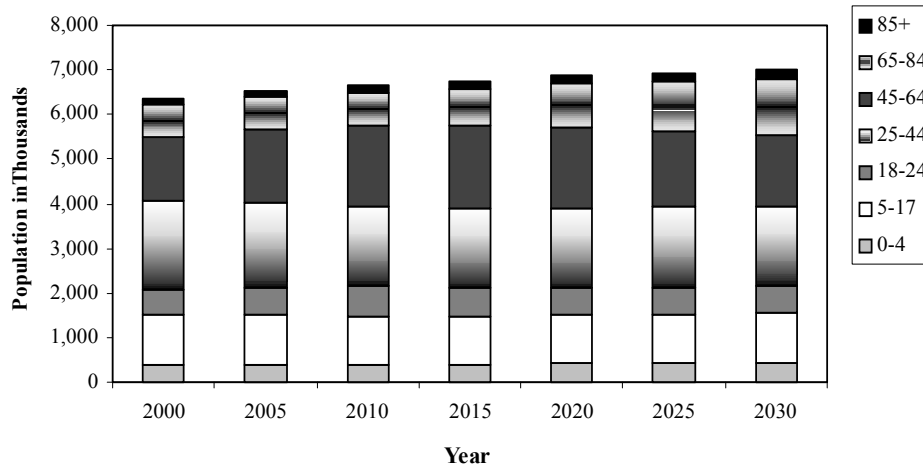
**Projected Massachusetts Population by Age Group, 2000-2030**

(in thousands)

Year	0-4	5-17	18-24	25-44	45-64	65-84	85+	All Ages	Median Age
2000	397.3	1,102.8	579.3	1,989.8	1,419.8	743.5	116.7	6,349.1	36.5
2005	406.3	1,119.2	611.8	1,874.6	1,649.0	720.7	137.4	6,518.9	37.8
2010	400.7	1,083.1	670.2	1,769.7	1,817.1	750.6	158.0	6,649.4	38.8
2015	409.7	1,064.2	656.0	1,746.1	1,857.1	856.5	168.9	6,758.6	39.2
2020	422.3	1,070.9	617.5	1,775.8	1,809.3	987.8	172.0	6,855.5	39.5
2025	431.0	1,087.7	616.2	1,782.5	1,703.3	1,137.8	180.1	6,938.6	39.7
2030	430.6	1,115.0	610.7	1,783.9	1,608.7	1,251.2	211.9	7,012.0	40.2

Actual Census 2000 counts as of April 1; all other figures are projections as of July 1 of the indicated year. Interim Population Projections through 2030 released April 21, 2005 by the Population Division, Bureau of the Census, United States Department of Commerce. More recent estimates of the 2005 population are somewhat lower.

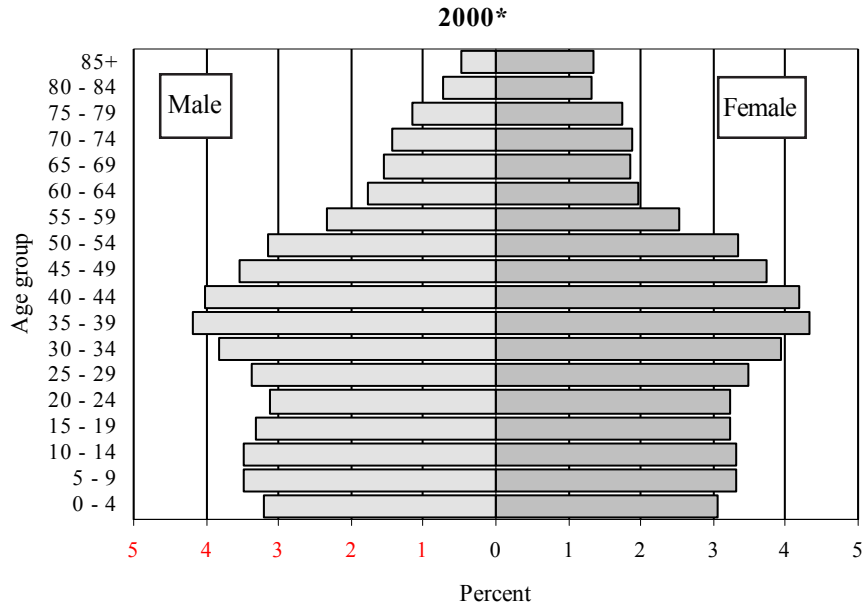
**Projected Massachusetts Population by Age Group  
2000-2030**



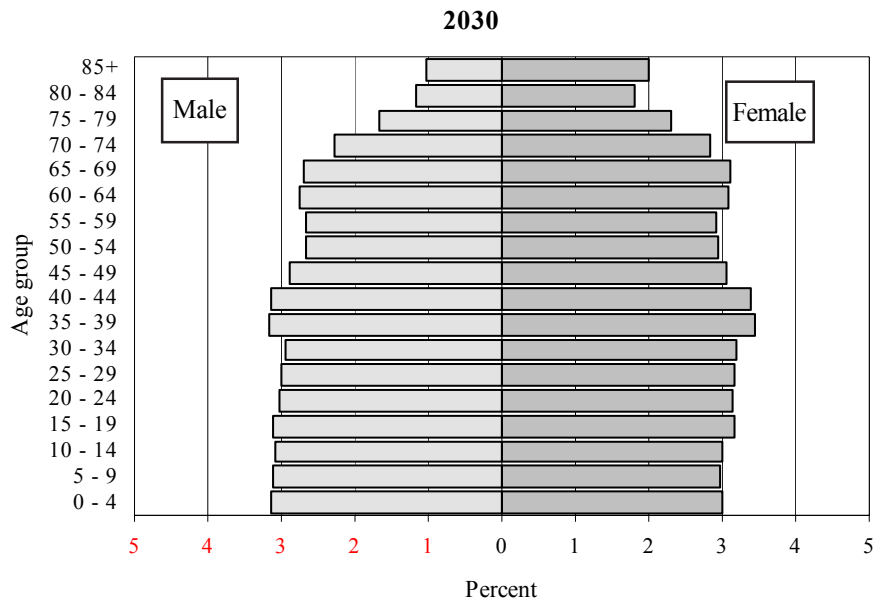
Actual Census 2000 counts as of April 1; all other figures are projections as of July 1 of the indicated year. Interim Population Projections through 2030 released April 21, 2005 by the Population Division, Bureau of the Census, United States Department of Commerce. More recent estimates of the 2005 population are somewhat lower.

## Population Pyramids of Massachusetts

(percent of total population)



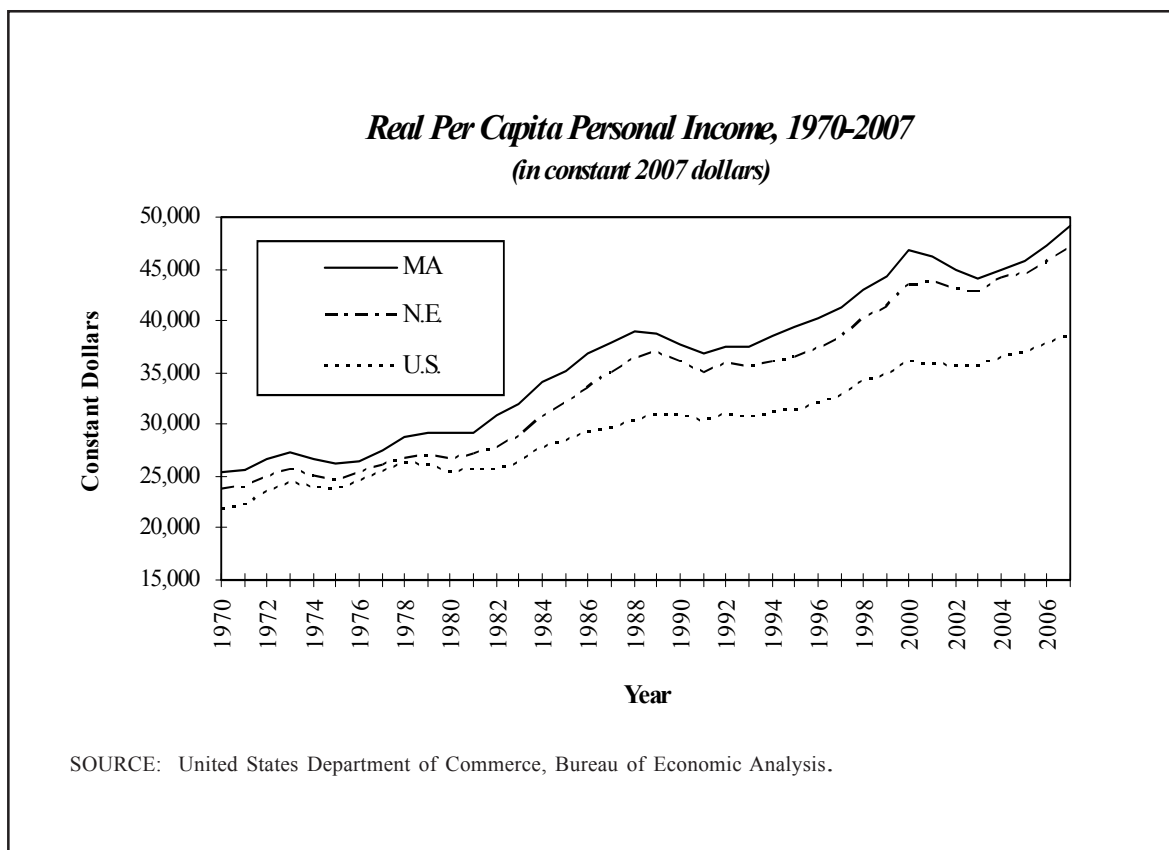
\*Note: Actual Census 2000 counts as of April 1.



SOURCE: U.S. Census Bureau, Population Division, Interim State Population Projections, 2005  
 Internet Release Date: April 21, 2005

## PERSONAL INCOME, CONSUMER PRICES, AND POVERTY

**Personal Income.** Since at least 1929, real and nominal per capita income levels have been consistently higher in Massachusetts than in the United States. After growing at an annual rate higher than that for the United States between 1982 and 1988, real income levels in Massachusetts declined between 1989 and 1991. Real per capita income levels in Massachusetts increased faster than the national average between 1994 and 1997. In 2000 Massachusetts had its highest per capita income growth in 16 years, exceeding the national growth rate by 2.4 percentage points. From 2001 to 2003 real income in both Massachusetts and the United States declined, with a steeper decline in Massachusetts. However, real income levels in Massachusetts remained well above the national average. In 2005, 2006, and 2007, income in the state grew faster than in the nation. For the last fifteen years only the District of Columbia, Connecticut and New Jersey have had higher levels of per capita personal income. The following graph illustrates these changes in real per capita personal income in Massachusetts, New England, and the United States since 1970.



The following table compares per capita personal income in Massachusetts, New England, and the United States for the period 1970-2007.

*Per Capita Personal Income, 1970-2007*

Year	Nominal Income (in current dollars)			Real Income (in 2007 dollars)			Percent Change in Real Income		
	MA	N.E.	U.S.	MA	N.E.	U.S.	MA	N.E.	U.S.
1970	4,483	4,445	4,085	25,360	23,753	21,830	5.4%	6.7%	6.9%
1971	4,752	4,680	4,342	25,608	23,960	22,229	1.0%	0.9%	1.8%
1972	5,109	5,029	4,717	26,587	24,946	23,398	3.8%	4.1%	5.3%
1973	5,547	5,481	5,231	27,245	25,596	24,428	2.5%	2.6%	4.4%
1974	6,016	5,958	5,707	26,721	25,058	24,002	-1.9%	-2.1%	-1.7%
1975	6,459	6,381	6,172	26,323	24,592	23,787	-1.5%	-1.9%	-0.9%
1976	6,998	6,959	6,754	26,523	25,358	24,611	0.8%	3.1%	3.5%
1977	7,620	7,593	7,405	27,462	25,979	25,336	3.5%	2.4%	2.9%
1978	8,430	8,413	8,245	28,871	26,754	26,220	5.1%	3.0%	3.5%
1979	9,385	9,392	9,146	29,156	26,823	26,121	1.0%	0.3%	-0.4%
1980	10,602	10,629	10,114	29,189	26,746	25,450	0.1%	-0.3%	-2.6%
1981	11,798	11,846	11,246	29,226	27,021	25,652	0.1%	1.0%	0.8%
1982	12,941	12,871	11,935	30,816	27,655	25,644	5.4%	2.3%	0.0%
1983	14,009	13,829	12,618	31,922	28,788	26,267	3.6%	4.1%	2.4%
1984	15,723	15,422	13,891	34,150	30,776	27,721	7.0%	6.9%	5.5%
1985	16,910	16,546	14,758	35,151	31,884	28,438	2.9%	3.6%	2.6%
1986	18,148	17,722	15,442	36,783	33,527	29,213	4.6%	5.2%	2.7%
1987	19,575	19,119	16,240	38,015	34,896	29,641	3.3%	4.1%	1.5%
1988	21,341	20,811	17,331	39,075	36,475	30,376	2.8%	4.5%	2.5%
1989	22,342	22,083	18,520	38,696	36,925	30,968	-1.0%	1.2%	1.9%
1990	23,043	22,712	19,477	37,726	36,030	30,898	-2.5%	-2.4%	-0.2%
1991	23,432	22,969	19,892	36,749	34,967	30,282	-2.6%	-3.0%	-2.0%
1992	24,538	24,172	20,854	37,552	35,723	30,819	2.2%	2.2%	1.8%
1993	25,176	24,752	21,346	37,444	35,516	30,629	-0.3%	-0.6%	-0.6%
1994	26,303	25,687	22,172	38,615	35,938	31,020	3.1%	1.2%	1.3%
1995	27,457	26,832	23,076	39,369	36,505	31,395	2.0%	1.6%	1.2%
1996	28,933	28,194	24,175	40,292	37,258	31,947	2.3%	2.1%	1.8%
1997	30,498	29,687	25,334	41,307	38,351	32,728	2.5%	2.9%	2.4%
1998	32,524	31,677	26,883	43,077	40,294	34,196	4.3%	5.1%	4.5%
1999	34,227	33,126	27,939	44,225	41,227	34,771	2.7%	2.3%	1.7%
2000	37,750	36,117	29,845	46,758	43,488	35,936	5.7%	5.5%	3.3%
2001	38,875	37,323	30,574	46,165	43,696	35,795	-1.3%	0.5%	-0.4%
2002	38,862	37,364	30,821	44,975	43,064	35,522	-2.6%	-1.4%	-0.8%
2003	39,449	37,950	31,504	43,997	42,764	35,501	-2.2%	-0.7%	-0.1%
2004	41,444	40,058	33,123	44,987	43,969	36,357	2.2%	2.8%	2.4%
2005	43,612	41,909	34,757	45,831	44,493	36,900	1.9%	1.2%	1.5%
2006	46,299	44,327	36,714	47,193	45,590	37,760	3.0%	2.5%	2.3%
2007	49,082	46,948	38,611	49,082	46,948	38,611	4.0%	3.0%	2.3%

SOURCE: United States Department of Commerce, Bureau of Economic Analysis.

Notes: Using midyear population estimates from the Census Bureau and two CPI-U series from the U.S. Bureau of Labor Statistics for price inflation.



**Annual Pay in Nominal Dollars** has grown steadily in Massachusetts over the past decade. Average annual pay is computed by dividing the total annual payroll of employees covered by Unemployment Insurance programs by the average monthly number of employees. Data are reported by employers covered under the Unemployment Insurance programs. While levels of annual pay were nearly equal in Massachusetts and the United States in 1984, average annual pay levels in Massachusetts have grown more rapidly than the national average since that time. The level of annual pay in Massachusetts in 2006 was 23 percent higher than the national average: \$52,435 compared to \$42,535.

**Wage and Salary Disbursements.** Wage and Salary Disbursements by Place of Work is a component of personal income and measures monetary disbursements to employees. This includes compensation of corporate officers, commissions, tips, bonuses, and receipts in-kind. Although the data is recorded on a place-of-work basis, it is then adjusted to a place-of-residence basis so that the personal income of the recipients whose place of residence differs from their place of work will be correctly assigned to their state of residence. The table below details Wage and Salary Disbursements since 1990. Between 1991 and 2000, Massachusetts shares of the New England and overall US totals increased, but in the subsequent years the Massachusetts share of the New England total has remained essentially constant at 50% while the Massachusetts share of the US total has dropped back slightly from 3.1% to 2.9%.

**Annual Wage and Salary Disbursements, 1990-2007**  
(in millions of dollars)

Year	U.S.	N.E.	<i>MA as a pct. of N.E.</i>	
1990	\$ 2,743,016	\$171,448	\$83,129	48.5%
1991	\$ 2,811,076	\$170,333	\$82,311	48.3%
1992	\$ 2,972,287	\$177,810	\$86,014	48.4%
1993	\$ 3,076,276	\$183,236	\$89,047	48.6%
1994	\$ 3,227,483	\$190,661	\$93,164	48.9%
1995	\$ 3,415,368	\$201,946	\$99,194	49.1%
1996	\$ 3,615,699	\$213,667	\$105,573	49.4%
1997	\$ 3,874,011	\$230,032	\$113,579	49.4%
1998	\$ 4,179,922	\$247,851	\$123,054	49.6%
1999	\$ 4,463,650	\$266,554	\$134,045	50.3%
2000	\$ 4,825,906	\$293,889	\$150,842	51.3%
2001	\$ 4,939,944	\$300,698	\$153,131	50.9%
2002	\$ 4,976,522	\$298,534	\$150,107	50.3%
2003	\$ 5,107,298	\$304,756	\$151,955	49.9%
2004	\$ 5,388,680	\$321,473	\$160,189	49.8%
2005	\$ 5,661,026	\$332,680	\$165,051	49.6%
2006	\$ 6,015,158	\$350,407	\$174,363	49.8%
2007p	\$ 6,358,737	\$371,566	\$185,264	49.9%

SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis.  
p = preliminary.

**Consumer Prices.** Higher income levels in Massachusetts relative to the rest of the United States are offset to some extent by the higher cost of living in Massachusetts. The following table presents consumer price trends for the Boston metropolitan area and the United States for the period between 1970 and 2007. The table shows the annual average of the Consumer Price Index for All Urban Consumers (CPI-U) and the percentage change in that average from the previous year. In 2007, the CPI-U for Boston increased by 1.9 percent over the average for 2006, while the index for the United States as a whole increased by 2.8 percent. The latest available data for January 2008 show that the CPI-U for the Boston metropolitan area grew at a rate of 3.4 percent from January 2007, compared with 4.3 percent for the U.S.

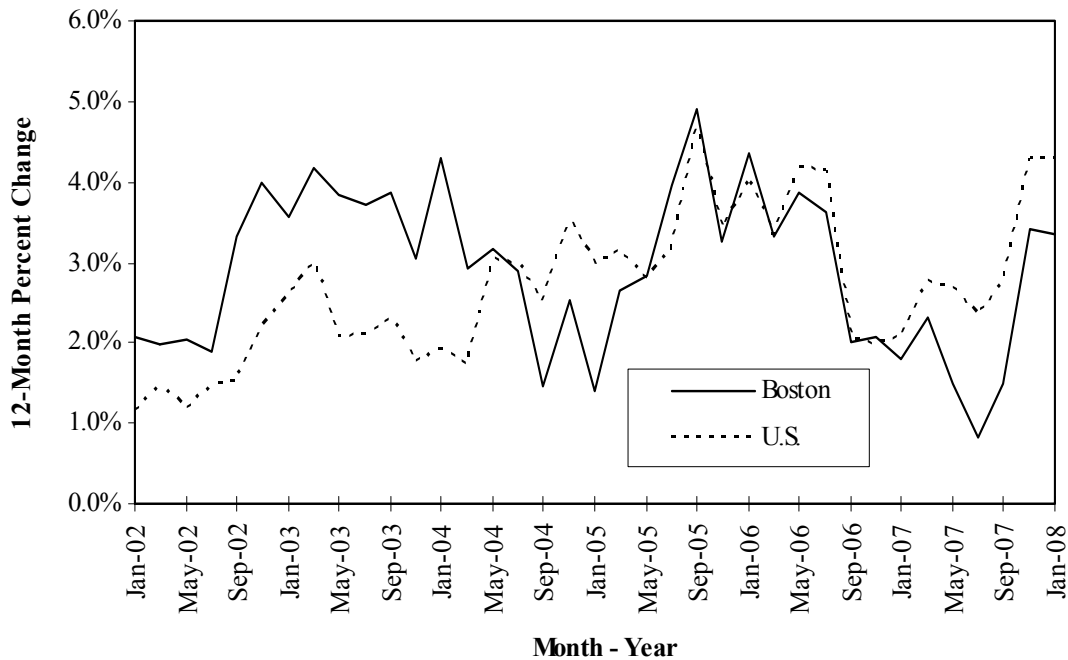
### **Consumer Price Index for All Urban Consumers (CPI-U), 1970-2007**

*(not seasonally adjusted; 1982-1984 base period average=100)*

<i>Year</i>	<i>Boston Metro Area</i>		<i>United States</i>	
	<i>CPI-U</i>	<i>Pct. Change</i>	<i>CPI-U</i>	<i>Pct. Change</i>
<b>1970</b>	40.2		38.8	
<b>1971</b>	42.2	5.0%	40.5	4.4%
<b>1972</b>	43.7	3.6%	41.8	3.2%
<b>1973</b>	46.3	5.9%	44.4	6.2%
<b>1974</b>	51.2	10.6%	49.3	11.0%
<b>1975</b>	55.8	9.0%	53.8	9.1%
<b>1976</b>	60.0	7.5%	56.9	5.8%
<b>1977</b>	63.1	5.2%	60.6	6.5%
<b>1978</b>	66.4	5.2%	65.2	7.6%
<b>1979</b>	73.2	10.2%	72.6	11.3%
<b>1980</b>	82.6	12.8%	82.4	13.5%
<b>1981</b>	91.8	11.1%	90.9	10.3%
<b>1982</b>	95.5	4.0%	96.5	6.2%
<b>1983</b>	99.8	4.5%	99.6	3.2%
<b>1984</b>	104.7	4.9%	103.9	4.3%
<b>1985</b>	109.4	4.5%	107.6	3.6%
<b>1986</b>	112.2	2.6%	109.6	1.9%
<b>1987</b>	117.1	4.4%	113.6	3.6%
<b>1988</b>	124.2	6.1%	118.3	4.1%
<b>1989</b>	131.3	5.7%	124.0	4.8%
<b>1990</b>	138.9	5.8%	130.7	5.4%
<b>1991</b>	145.0	4.4%	136.2	4.2%
<b>1992</b>	148.6	2.5%	140.3	3.0%
<b>1993</b>	152.9	2.9%	144.5	3.0%
<b>1994</b>	154.9	1.3%	148.2	2.6%
<b>1995</b>	158.6	2.4%	152.4	2.8%
<b>1996</b>	163.3	3.0%	156.9	3.0%
<b>1997</b>	167.9	2.8%	160.5	2.3%
<b>1998</b>	171.7	2.3%	163.0	1.6%
<b>1999</b>	176.0	2.5%	166.6	2.2%
<b>2000</b>	183.6	4.3%	172.2	3.4%
<b>2001</b>	191.5	4.3%	177.1	2.8%
<b>2002</b>	196.5	2.6%	179.9	1.6%
<b>2003</b>	203.9	3.8%	184.0	2.3%
<b>2004</b>	209.5	2.7%	188.9	2.7%
<b>2005</b>	216.4	3.3%	195.3	3.4%
<b>2006</b>	223.1	3.1%	201.6	3.2%
<b>2007</b>	227.4	1.9%	207.3	2.8%
<b>Jan-07</b>	224.4		202.4	
<b>Jan-08</b>	232.0	3.4%	211.1	4.3%

SOURCE: United States Department of Labor, Bureau of Labor Statistics

***12-Month Percent Change in the Consumer Price Index  
for All Urban Consumers, January 2002 - January 2008***



SOURCE: United States Department of Labor, Bureau of Labor Statistics.

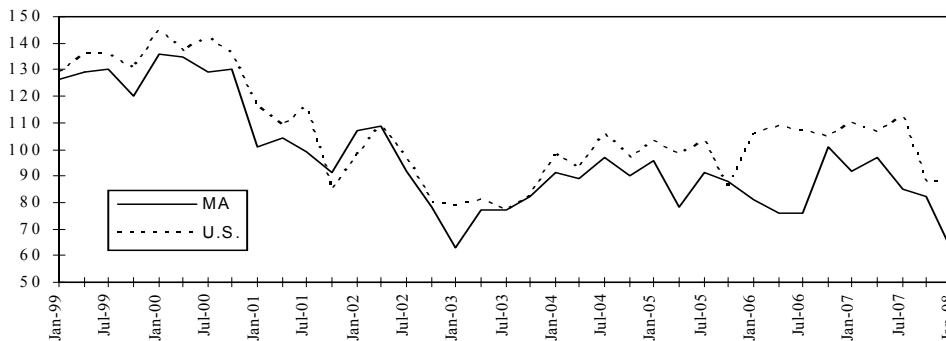
***Consumer Confidence, Present Situation, and Future Expectations.*** These three measures offer multiple insights into consumer attitudes. The U.S. measures are compiled from a national monthly survey of 5,000 households and are published by The Conference Board, Inc. The survey for Massachusetts is conducted in a similar manner and the results are published by the Mass Insight Corporation, based on quarterly polling of 500 adult residents of Massachusetts. The "Present Situation" index measures consumers' appraisal of business and employment conditions at the time of the survey. The "Future Expectations" index focuses on consumers' expectations six months hence regarding business and employment conditions, as well as expected family income. The overall "Consumer Confidence" index is a weighted average of the two sub-indices. Although the U.S. measures are compiled by a different source than the Massachusetts measures, according to the Federal Reserve Bank of Boston the numbers are generally comparable. A score of 100 is considered neutral. According to the Conference Board, consumer confidence nationally reached a six year high point of 111.9 in July 2007, but it has declined 57 points by March, 2008. The Mass Insight Corporation reports that after drawing nearly even with the U.S. index in October, 2006, the Massachusetts index has declined 39 points over the next five quarters, trailing the national number in January (the most recent survey month for the quarterly Massachusetts index) by 25 points. The following table and chart detail the recent record of these measures.

**Consumer Confidence, Present Situation, and Future Expectations for Massachusetts and the U.S.,  
January 2001 - January 2008 (1985=100)**

	Consumer Confidence		Present Situation		Future Expectations	
	MA	U.S.	MA	U.S.	MA	U.S.
Jan-01	101.0	115.7	139.0	170.4	76.0	79.3
Apr-01	104.0	109.9	124.0	156.0	91.0	79.1
Jul-01	99.0	116.3	108.0	151.3	93.0	92.9
Oct-01	91.0	85.3	94.0	107.2	90.0	70.7
Jan-02	97.8	107.0	98.1	72.0	97.6	130.0
Apr-02	109.0	108.5	84.0	106.8	125.0	109.6
Jul-02	92.0	97.4	68.0	99.4	108.0	96.1
Oct-02	78.0	79.6	48.0	77.2	97.0	81.1
Jan-03	63.0	78.8	75.3	28.0	81.1	86.0
Apr-03	77.0	81.0	31.0	75.2	108.0	84.8
Jul-03	77.0	77.0	41.0	63.0	101.0	86.3
Oct-03	82.0	81.7	36.0	67.0	112.0	91.5
Jan-04	91.0	97.7	48.0	86.1	119.0	105.3
Apr-04	89.0	93.0	53.0	90.4	113.0	94.8
Jul-04	97.0	105.7	66.0	106.4	119.0	105.3
Oct-04	90.0	92.9	64.0	94.0	108.0	92.2
Jan-05	96.0	105.1	70.0	112.1	114.0	100.4
Apr-05	78.0	97.5	63.0	113.8	88.0	86.7
Jul-05	91.0	103.6	80.0	119.3	99.0	93.2
Oct-05	88.0	85.2	80.0	107.8	95.0	70.1
Jan-06	81.0	106.8	71.0	128.8	87.0	92.1
Apr-06	76.0	109.8	77.0	136.2	76.0	92.3
Jul-06	76.0	107.0	68.0	134.2	81.0	88.9
Oct-06	101.0	105.1	86.0	125.1	111.0	91.9
Jan-07	92.0	110.2	74.0	133.9	104.0	94.4
Apr-07	97.0	106.3	89.0	133.5	102.0	88.2
Jul-07	85.0	111.9	80.0	138.3	90.0	94.4
Oct-07	82.0	87.8	76.0	115.7	86.0	69.1
Jan-08	62.0	87.3	49.0	114.3	71.0	69.3

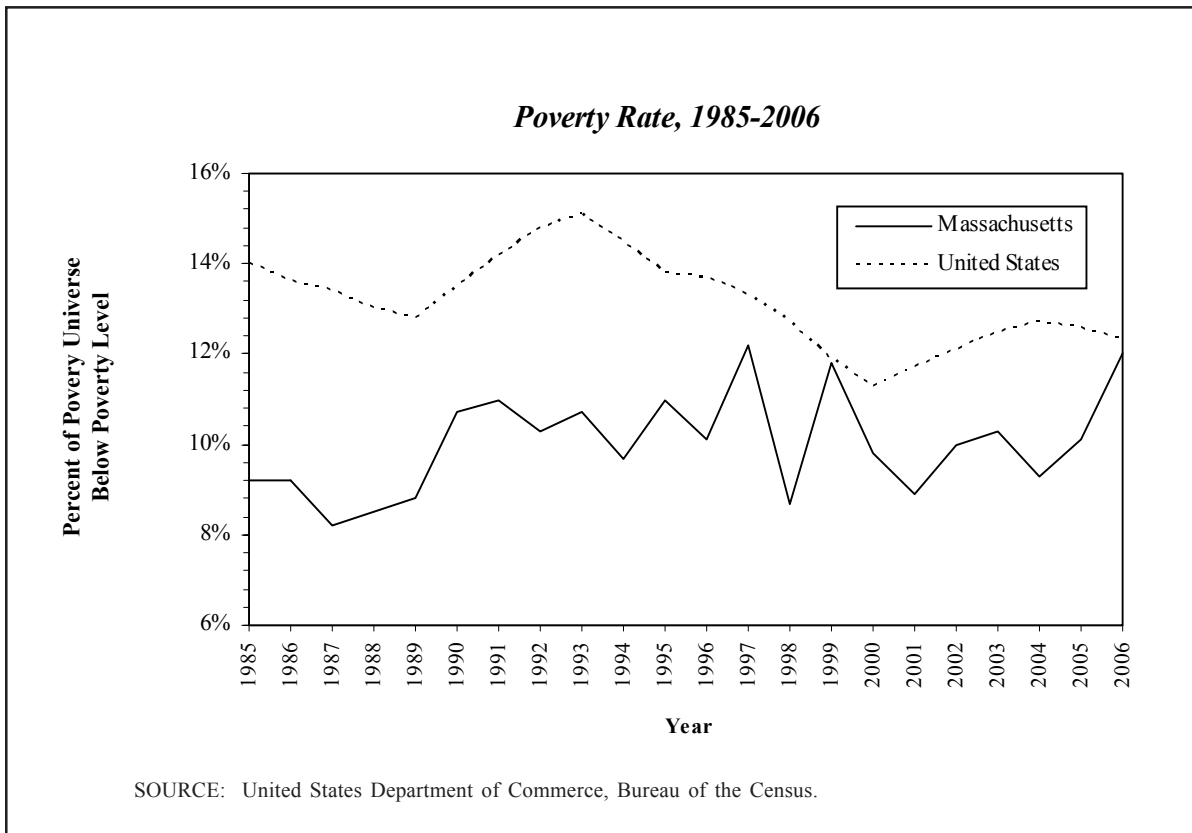
SOURCES: The Conference Board, Inc. (for U.S. measures, seasonally adjusted);  
Mass Insight Corporation (for MA measures, not seasonally adjusted).

**Consumer Confidence: Massachusetts  
and the U.S., January 1999 – January 2008**  
(Massachusetts index not seasonally adjusted; 1985 = 100)



SOURCES: The Conference Board, Inc. (for U.S. index), Mass Insight Corporation (for MA index).

**Poverty.** The Massachusetts poverty rate remains well below the national average. Since 1980, the percentage of the Massachusetts poverty universe below the poverty line has varied between 7.7 percent and 12.2 percent. During the same time, the national poverty rate varied between 11.3 percent and 15.1 percent. In 2006, the estimated poverty rate in Massachusetts increased to 12.0 percent (a statistically significant increase) while the poverty rate in the United States dropped to 12.3 percent. These official poverty estimates are based on a sample of households and are not adjusted for regional differences in the cost of living. The following chart illustrates the lower poverty rates in Massachusetts (1985 - 2006) compared with the national average during similar periods. Poverty estimates for states are not as reliable as national estimates. One should use caution when comparing poverty rate estimates across states, or poverty rates for the same state across years, because their variability is high. In particular, the estimated rates for Massachusetts are based on a sample of fewer than two thousand households. Not everyone has a poverty status determined; the poverty universe excludes foster children, college students in dormitories, military personnel in barracks, nursing home residents, and other groups of people in institutionalized settings.

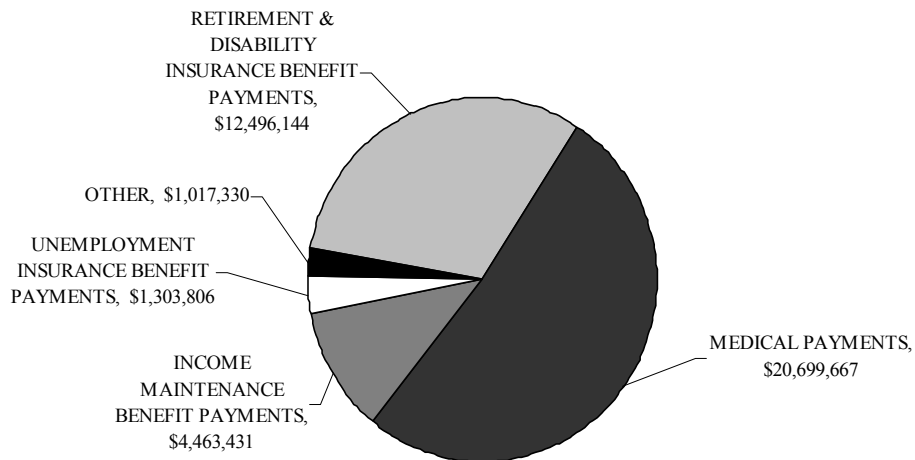


**Transfer Payments.** Transfer payment income is payment to individuals from all levels of government and from businesses, for which no current services are performed, including payments to nonprofit institutions serving individuals. These payments accounted for 13.8 percent of total personal income in Massachusetts in 2006. The chart below does not include transfer payments from business or payments to non-profit organizations. Total transfer payments to individuals in Massachusetts from governments & businesses totaled 41.2 billion dollars for 2006. Almost 52 percent of government transfer payments to individuals were medical payments.

***Transfer Payments from Governments to Individuals in  
Massachusetts in 2006***

***(From Annual State Personal Income Estimates)***

*(in thousands of current dollars)*



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

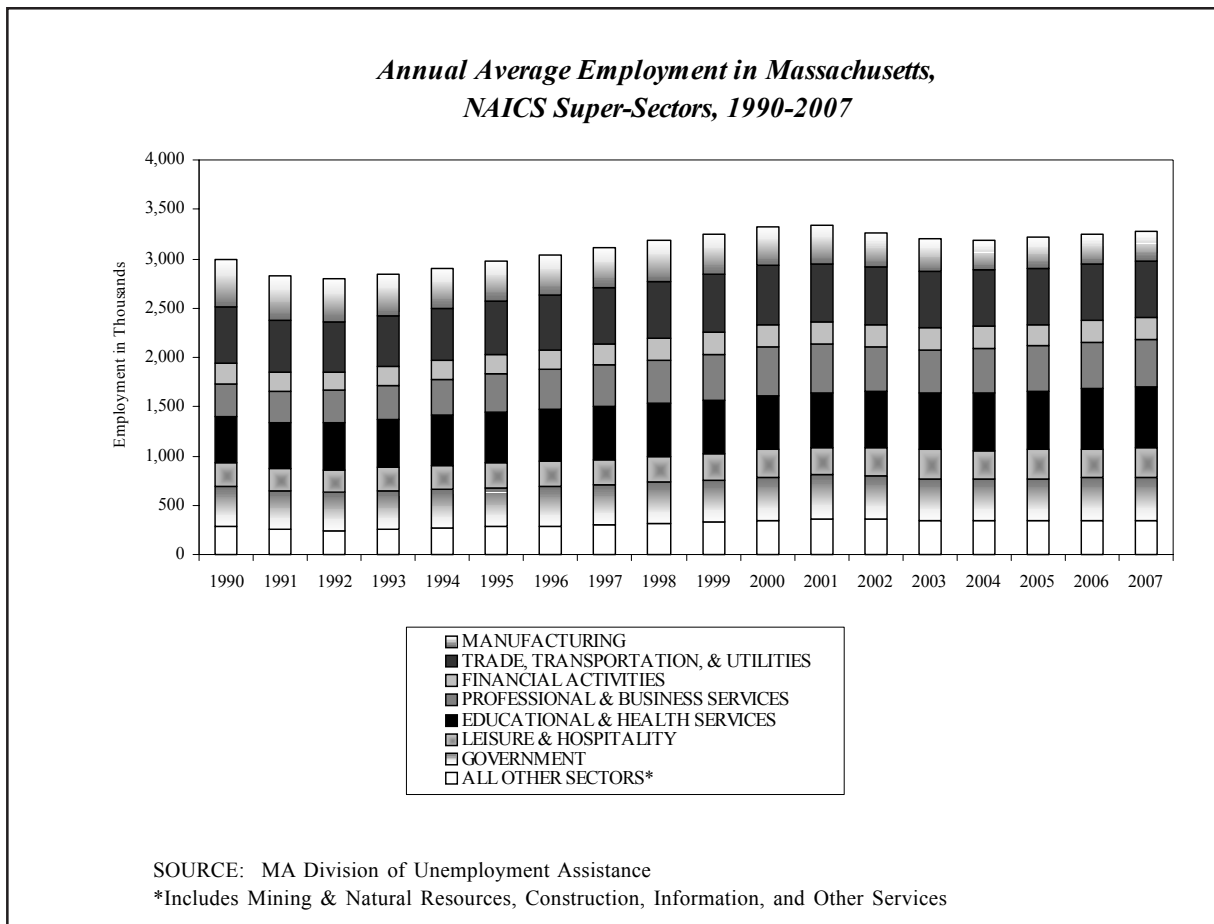
NOTE: The category "other" includes veterans' benefit payments, federal education and training assistance payments, and a small residual of miscellaneous other payments to individuals.

## EMPLOYMENT

**Employment by Industry** The chart on this page shows the annual level of non-agricultural payroll employment in Massachusetts on the North American Industry Classification System (NAICS) basis for the seven largest NAICS supersectors starting with 1990, the earliest year for which NAICS data are available. The chart on the following page compares the super-sector shares for the 2006-2007 period with the corresponding shares for the 1990-1991 period. Like many industrial states, Massachusetts has seen a steady decline of its manufacturing jobs base over the last two decades, not only as a share of total employment, but in absolute numbers of jobs as well. Several NAICS service sectors and the Financial Activities sector have grown to take the place of manufacturing in driving the Massachusetts economy and now account for more than half of total payroll employment, while Government, Information, Trade, Transportation & Utilities have remained level or declined in share.

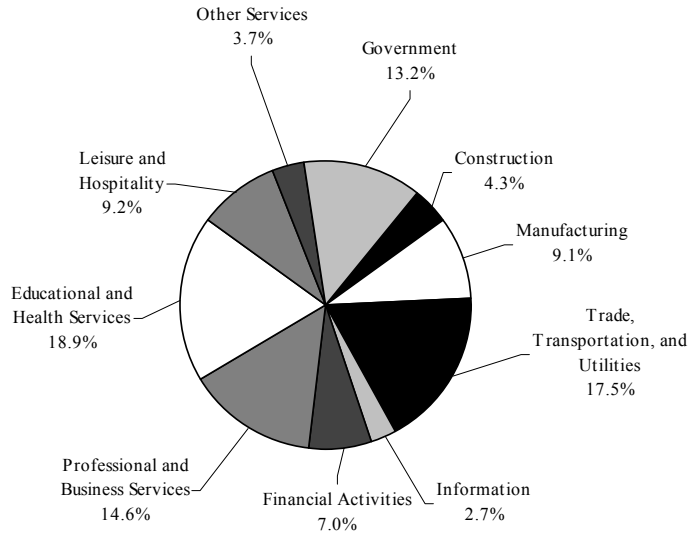
After significant declines in 2002 and 2003, total non-agricultural employment in Massachusetts declined only 0.1 percent in 2004 and increased 0.5 percent in 2005 and 1.1 percent in 2006. In 2007 employment grew another 1.0 percent, but the state still had 62,000 (1.9 percent) fewer jobs than in the peak year of 2001. The comparable growth rate for the nation in 2007 was 1.1 percent. The latest seasonally adjusted estimate (3288.3 for February, 2008) is about 51,000 below the 2001 annual average and 96 thousand below the peak month (3384.0 in February, 2001.)

In 2004, manufacturing employment declined 3.5 percent from the year before; a smaller decline than the steep annual declines in the previous three years. The declines for 2005 and 2006 were 2.4 percent and 1.8 percent respectively, which are better than the long-term average rate of decline since 1990 (3.0 percent per year). The average for 2007 was only 1.5 percent below the comparable 2006 level, the best year for manufacturing in Massachusetts since 2000. The seasonally adjusted estimates for the first two months of 2008 average 1.8 percent below the comparable estimates for early 2007.

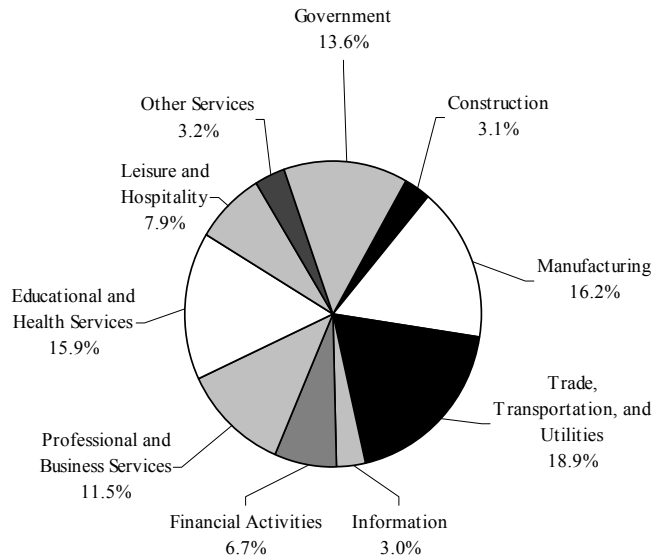


**Massachusetts Non-Farm Payroll Employment  
(NAICS Industry basis)**

**NAICS Super-Sectors: 2006-2007 Average Share**



**NAICS Super-Sectors: 1990-1991 Average Share**



SOURCE: MA Division of Unemployment Assistance.



**Largest Employers in Massachusetts.** The following table lists the twenty-five largest private employers in Massachusetts based upon employment covered by the Unemployment Insurance system for June, 2007. The CVS Pharmacy and the Target Corporation replace Big Y Foods and the Federated Retail department store chain from the June 2006 list. As noted, the list may not include some employers who do business in the state under multiple legal names or register each facility as a separate employer.

***Twenty-five Largest Private Employers in Massachusetts in June, 2007***

*(listed alphabetically)*

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Bank of America, NA	Massachusetts Institute of Technology
Baystate Medical Center, Inc.	Raytheon Company
Beth Israel Deaconess Medical Center	S & S Credit Company, Inc.
Boston Medical Center Corporation	Shaw's Supermarkets, Inc.
Boston University	Southcoast Hospitals Group, Inc.
Brigham & Women's Hospital, Inc.	State Street Bank & Trust Company
Demoulas Super Markets, Inc.	Target Corp.
E.M.C. Corporation	The Children's Hospital Corporation
Friendly Ice Cream Corporation	UMass Memorial Medical Center, Inc.
General Hospital Corporation	United Parcel Service, Inc.
Harvard University	Verizon New England, Inc.
Home Depot U.S.A., Inc.	Wal-Mart Associates, Inc.
Massachusetts CVS Pharmacy, LLC	

SOURCE: MA Division of Unemployment Assistance.

**Unemployment.** The economic recession of the early 1990s caused unemployment rates in Massachusetts to rise significantly above the national average, as much as 2.1 points above in 1991. Then from 1995 through 2005 the unemployment rate in Massachusetts was consistently below the national average. The revised 2006 annual rate for the state was 0.2 percentage points above the national rate, while the rate for 2007 was slightly below the national one. The following table compares the annual civilian labor force, the number unemployed, and the unemployment rates of Massachusetts, New England, and the United States from 1969 to 2007.

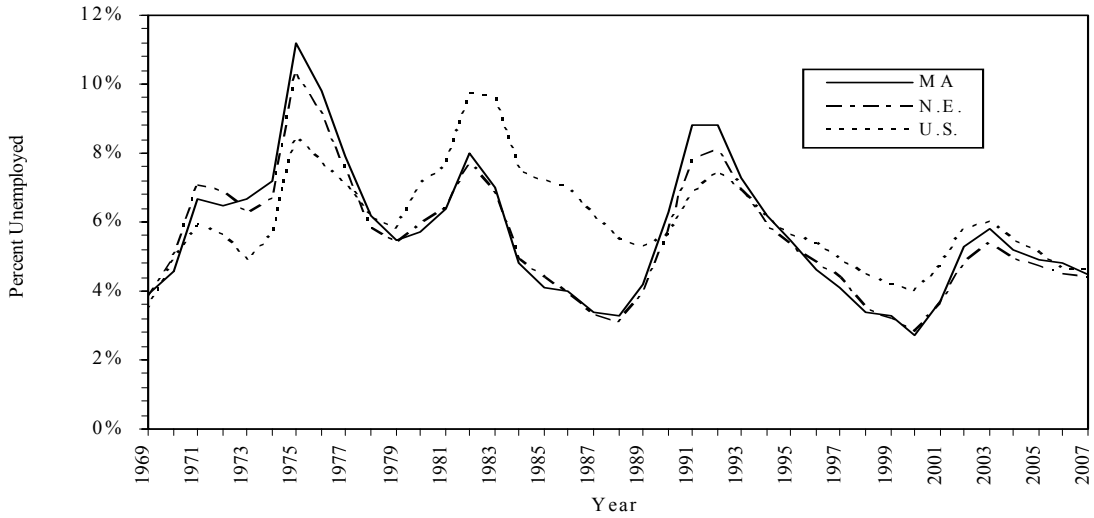
### *Annual Average Civilian Labor Force and Unemployment, 1969-2007*

(in thousands)

Year	Civilian Labor Force			Unemployed			Unemployment Rate			MA Rate as
	MA	N.E.	U.S.	MA	N.E.	U.S.	MA	N.E.	U.S.	Pct. of U.S.
1969	2,581	5,201	80,734	100	198	2,832	3.9%	3.8%	3.5%	111.2%
1970	2,465	5,128	82,771	113	253	4,093	4.6%	4.9%	4.9%	93.7%
1971	2,459	5,157	84,382	163	364	5,016	6.6%	7.1%	5.9%	112.7%
1972	2,487	5,260	87,034	161	363	4,882	6.5%	6.9%	5.6%	115.6%
1973	2,557	5,387	89,429	171	336	4,365	6.7%	6.2%	4.9%	136.1%
1974	2,637	5,514	91,949	190	368	5,156	7.2%	6.7%	5.6%	128.5%
1975	2,725	5,633	93,775	305	578	7,929	11.2%	10.3%	8.5%	131.5%
1976	2,726	5,714	96,158	268	521	7,406	9.8%	9.1%	7.7%	127.3%
1977	2,760	5,820	99,009	218	437	6,991	7.9%	7.5%	7.1%	111.3%
1978	2,809	5,936	102,251	173	343	6,202	6.2%	5.8%	6.1%	101.6%
1979	2,863	6,080	104,962	156	326	6,137	5.5%	5.4%	5.8%	94.8%
1980	2,886	6,154	106,940	164	365	7,637	5.7%	5.9%	7.1%	80.3%
1981	2,938	6,268	108,670	189	400	8,273	6.4%	6.4%	7.6%	84.2%
1982	2,966	6,345	110,204	236	489	10,678	8.0%	7.7%	9.7%	82.5%
1983	2,972	6,386	111,550	209	434	10,717	7.0%	6.8%	9.6%	72.9%
1984	3,032	6,540	113,544	146	318	8,539	4.8%	4.9%	7.5%	64.0%
1985	3,049	6,630	115,461	125	290	8,312	4.1%	4.4%	7.2%	56.9%
1986	3,080	6,724	117,834	123	264	8,237	4.0%	3.9%	7.0%	57.1%
1987	3,114	6,827	119,865	105	228	7,425	3.4%	3.3%	6.2%	54.8%
1988	3,156	6,907	121,669	104	215	6,701	3.3%	3.1%	5.5%	60.0%
1989	3,189	7,004	123,869	132	274	6,528	4.2%	3.9%	5.3%	79.2%
1990	3,226	7,128	125,840	204	409	7,047	6.3%	5.7%	5.6%	112.5%
1991	3,199	7,112	126,346	283	558	8,628	8.8%	7.8%	6.8%	129.4%
1992	3,181	7,105	128,105	281	573	9,613	8.8%	8.1%	7.5%	117.3%
1993	3,173	7,062	129,200	232	486	8,940	7.3%	6.9%	6.9%	105.8%
1994	3,188	7,041	131,056	199	415	7,996	6.2%	5.9%	6.1%	101.6%
1995	3,205	7,053	132,304	176	375	7,404	5.5%	5.3%	5.6%	98.2%
1996	3,231	7,118	133,943	148	340	7,236	4.6%	4.8%	5.4%	85.2%
1997	3,293	7,228	136,297	135	315	6,739	4.1%	4.4%	4.9%	83.7%
1998	3,322	7,257	137,673	113	253	6,210	3.4%	3.5%	4.5%	75.6%
1999	3,355	7,327	139,368	110	234	5,880	3.3%	3.2%	4.2%	78.6%
2000	3,366	7,348	142,583	92	204	5,692	2.7%	2.8%	4.0%	67.5%
2001	3,401	7,424	143,734	126	266	6,801	3.7%	3.6%	4.7%	78.7%
2002	3,424	7,496	144,863	181	363	8,378	5.3%	4.8%	5.8%	91.4%
2003	3,407	7,508	146,510	198	407	8,774	5.8%	5.4%	6.0%	96.7%
2004	3,380	7,481	147,401	177	366	8,149	5.2%	4.9%	5.5%	94.5%
2005	3,375	7,520	149,320	164	353	7,591	4.9%	4.7%	5.1%	96.1%
2006	3,405	7,607	151,428	164	345	7,001	4.8%	4.5%	4.6%	104.3%
2007	3,408	7,648	153,124	153	340	7,078	4.5%	4.4%	4.6%	97.8%

SOURCE: United States Department of Labor, Bureau of Labor Statistics.

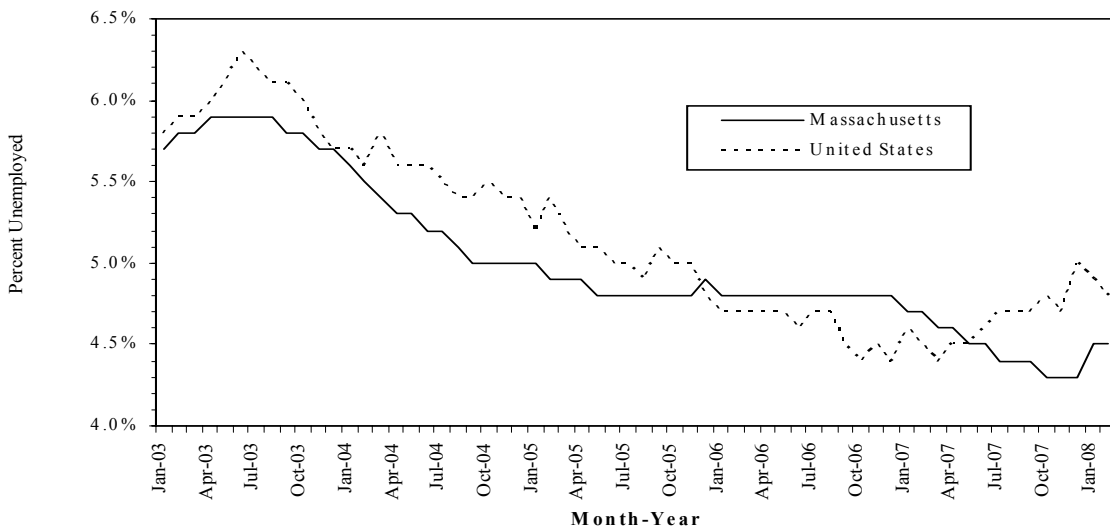
**Annual Average Unemployment Rate, 1969-2007,  
Massachusetts, New England, and United States**



SOURCE: United States Department of Labor, Bureau of Labor Statistics.

The unemployment rate in Massachusetts was consistently below the national average from mid-1995 through November, 2005, with similar patterns of gradual improvement after the mid-2003 peak. The Massachusetts rate exceeded the U.S. rate for seventeen months starting in December, 2005, but only four of those differences exceeded 0.2 percent, according to the newly adjusted data. Since April, 2007 the state rate has been below the comparable U.S. rate, seasonally adjusted. The following graph illustrates the movement of the state and national unemployment rates over the past sixty-two months.

**Monthly Unemployment Rate, January 2003-February 2008  
Massachusetts and United States  
(seasonally adjusted)**



SOURCE: MA Division of Unemployment Assistance.

**Unemployment Insurance Trust Fund.** The unemployment insurance system is a federal-state cooperative program established by the Social Security Act and the Federal Unemployment Tax Act to provide for the payment of benefits to eligible individuals when they become unemployed through no fault of their own. Benefits are paid from the Commonwealth's Unemployment Insurance Trust Fund, financed through employer contributions. The assets and liabilities of the Commonwealth Unemployment Insurance Trust Fund are not assets and liabilities of the Commonwealth.

As of February 29, 2008, the Massachusetts Unemployment Trust Fund had a balance of \$1.095 billion, of which the private contributory account portion was \$981 million. The Division of Unemployment Assistance's March 2008 Unemployment Insurance Trust Fund report indicates that under the current economic outlook, private contributory account reserves are estimated to be \$1.657 billion at the end of 2012.

## ECONOMIC BASE AND PERFORMANCE

According to the Bureau of Economic Analysis, Gross Domestic Product by State (GDP) is the value added in production by the labor and property located in a state. GDP for a State is derived as the sum of the gross state product originating in all industries in a State. In concept, an industry's GDP, referred to as its "value added", is equivalent to its gross output (sales or receipts and other operating income, commodity taxes, and inventory change) minus its intermediate inputs (consumption of goods and services purchased from other U.S. industries or imported).

Real GDP is an inflation-adjusted measure of each state's gross product that is based on national prices for the goods and services produced within that state. The estimates of real GDP and of quantity indexes with a base year of 2000 are derived by applying national implicit price deflators to the current-dollar GDP estimates for the 63 SIC industries for years 1977-1997, and for the 81 NAICS industries for years 1997 forward. Then, the chain-type index formula that is used in the national accounts is used to calculate the estimates of total real GDP and of real GDP at more aggregated industry levels.

Between 1997 and 2006 gross domestic product in Massachusetts, New England and the sum of all states GDP grew approximately 52.2, 51.9 and 59.6 percent respectively in current dollars. Between 1997 and 2006 gross domestic product in Massachusetts, New England and the sum of all states GDP grew approximately 28.9, 25.7 and 27.5 percent respectively in chained 2000 dollars. The Massachusetts economy is the largest in New England, contributing 47.2 percent to New England's total GDP, and thirteenth largest in the U.S., contributing 2.6 percent to the nation's total GDP. Massachusetts had the third highest GDP per capita in 2006, \$46,721.

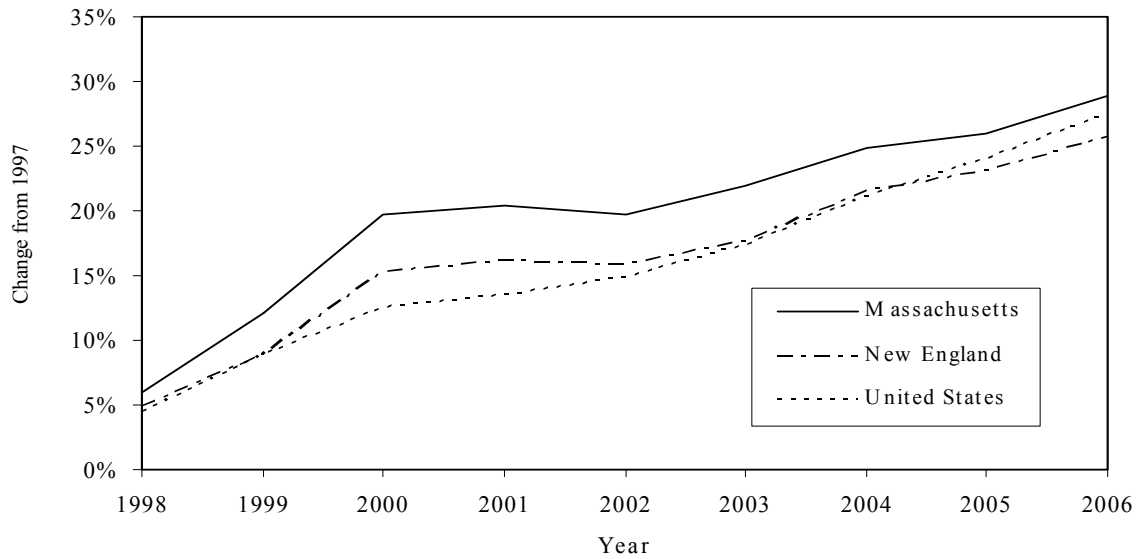
### Gross Domestic Product - Cumulative Change, 1997-2006

(millions of chained 2000 dollars)

Year	Massachusetts		New England		United States	
	GDP	Change from 1997	GDP	Change from 1997	GDP	Change from 1997
1997	\$227,074		\$487,671		\$8,620,955	
1998	\$240,617	6.0%	\$511,374	4.9%	\$9,004,670	4.5%
1999	\$255,189	12.0%	\$531,902	8.9%	\$9,404,251	8.9%
2000	\$274,949	19.8%	\$565,835	15.3%	\$9,749,103	12.6%
2001	\$276,634	20.4%	\$570,313	16.0%	\$9,836,576	13.5%
2002	\$274,997	19.8%	\$568,750	15.8%	\$9,981,850	14.9%
2003	\$280,881	21.9%	\$579,651	17.7%	\$10,225,679	17.4%
2004	\$289,295	24.9%	\$602,292	21.6%	\$10,608,934	21.1%
2005	\$292,225	25.9%	\$611,440	23.1%	\$10,923,951	24.1%
2006	\$300,753	28.9%	\$627,027	25.7%	\$11,291,375	27.5%

Source: Bureau of Economic Analysis, U.S. Department of Commerce. Last revised: June 2007

**Gross Domestic Product - Cumulative Percent Change  
1997-2006**  
(chained 2000 dollars)



Source: Bureau of Economic Analysis, U.S. Department of Commerce. Last revised: June 2007

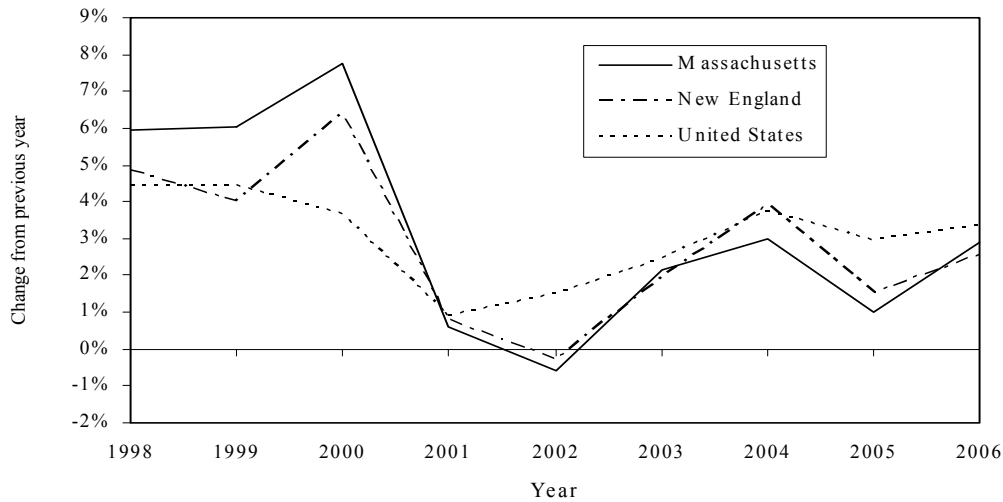
The table below indicates the Gross Domestic Product for Massachusetts, the New England states, and the United States. The United States figure is the sum of the fifty states.

**Gross Domestic Product - Annual Change, 1997-2006**  
(millions of chained 2000 dollars)

Year	Massachusetts		New England		United States	
	GDP	Annual change	GDP	Annual change	GDP	Annual change
1997	\$227,074		\$487,671		\$8,620,955	
1998	\$240,617	6.0%	\$511,374	4.9%	\$9,004,670	4.5%
1999	\$255,189	6.1%	\$531,902	4.0%	\$9,404,251	4.4%
2000	\$274,949	7.7%	\$565,835	6.4%	\$9,749,103	3.7%
2001	\$276,634	0.6%	\$570,313	0.8%	\$9,836,576	0.9%
2002	\$274,997	-0.6%	\$568,750	-0.3%	\$9,981,850	1.5%
2003	\$280,881	2.1%	\$579,651	1.9%	\$10,225,679	2.4%
2004	\$289,295	3.0%	\$602,292	3.9%	\$10,608,934	3.7%
2005	\$292,225	1.0%	\$611,440	1.5%	\$10,923,951	3.0%
2006	\$300,753	2.9%	\$627,027	2.5%	\$11,291,375	3.4%

Source: Bureau of Economic Analysis, U.S. Department of Commerce. Last revised: June 2007

**Gross Domestic Product - Annual Percent Change, 1997-2006**  
(chained 2000 dollars)



SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis. Revised June 2007.

The commercial base of Massachusetts is anchored by the twenty 2007 Fortune 1000 companies (ten of which are Fortune 500) headquartered in Massachusetts. Exiting the Massachusetts 2006 Fortune 1000 list were PerkinElmer (897th) and Boston Properties (990th). Global Partners, an energy company, joined the Fortune 500 (491st). When comparing the 2007 Fortune 1000 to 2006's, seventeen Massachusetts companies gained and only three lost rank. Perini, the Framingham based construction services firm and Fortune 1000 member, climbed 236 places on the list (from 884th to 648th); the largest leap for a Massachusetts company.

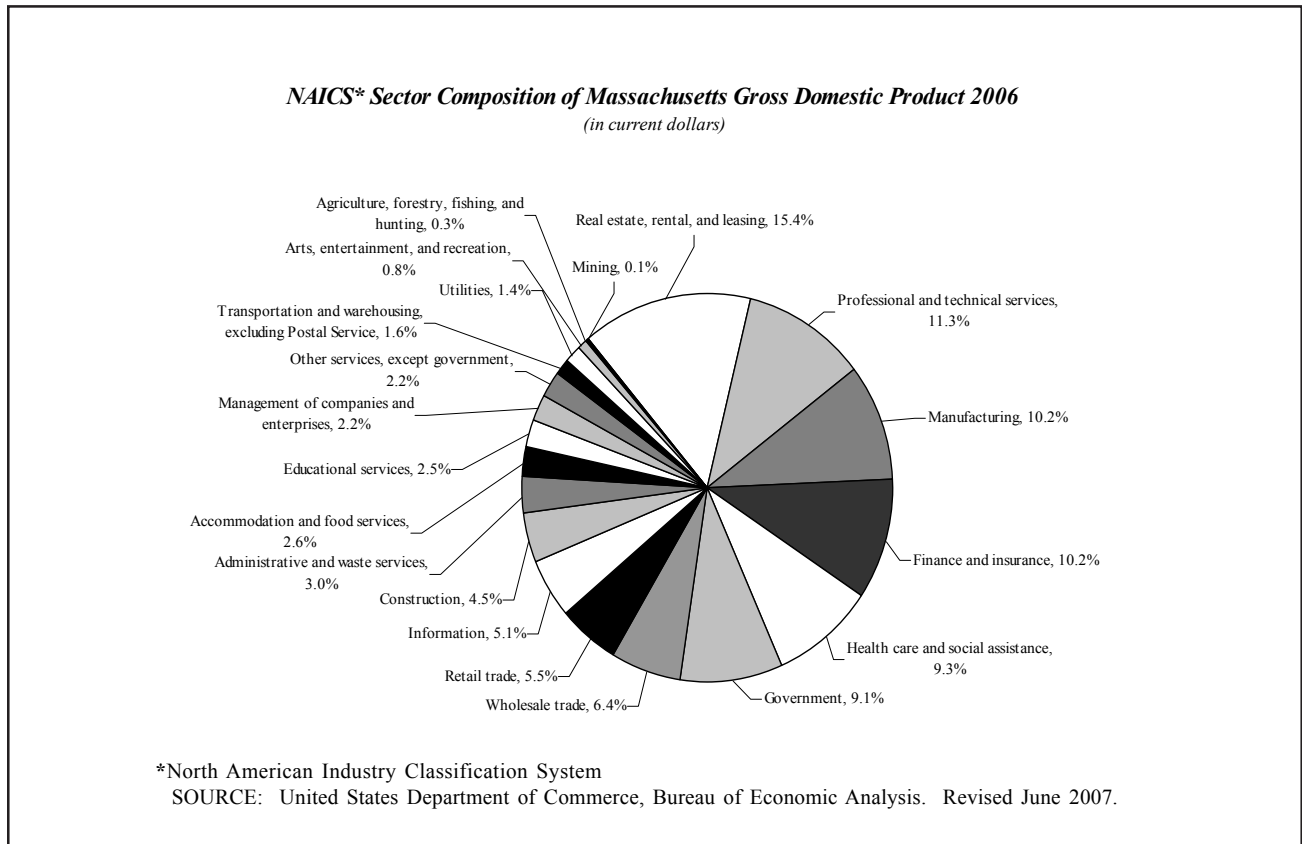
**Massachusetts Companies in the 2007 Fortune 500 and 1000 Lists**

Rank		Company	Industry	2006 revenues (millions)
2007	2006			
90	92	Mass. Mutual Life Ins. (Springfield)	Insurance: Life, Health (mutual)	\$24,863
95	102	Liberty Mutual Ins. Group (Boston)	Insurance: P & C (stock)	\$23,520
96	97	Raytheon (Waltham)	Aerospace and Defense	\$23,274
126	137	Staples (Framingham)	Specialty Retailers	\$18,161
133	138	TJX (Framingham)	Specialty Retailers	\$17,516
224	249	EMC (Hopkinton)	Computer Peripherals	\$11,155
263	307	State St. Corp. (Boston)	Commercial Banks	\$9,525
287	288	BJ's Wholesale Club (Natick)	Specialty Retailers	\$8,524
308	346	Boston Scientific (Natick)	Medical Products & Equipment	\$7,821
491		Global Partners (Waltham)	Energy	\$4,472
549	658	Thermo Fisher Scientific (Waltham)	Scientific, Photo, Control Equipment	\$3,792
569	574	NSTAR (Boston)	Utilities: Gas & Electric	\$3,578
620	643	Genzyme (Cambridge)	Pharmaceuticals	\$3,187
648	884	Perini (Framingham)	Engineering, Construction	\$3,043
698	706	Biogen Idec (Cambridge)	Pharmaceuticals	\$2,683
710	622	Hanover Insurance Group (Worcester)	Insurance: P & C (stock)	\$2,644
728	712	Analog Devices (Norwood)	Semiconductors and Other Electronic Components	\$2,573
732	772	Cabot (Boston)	Chemicals	\$2,543
780	783	Iron Mountain (Boston)	Diversified Outsourcing	\$2,350
873	837	Commerce Group (Webster)	Insurance: P & C (stock)	\$1,950

SOURCE: *Fortune*, April 30, 2007

## ECONOMIC BASE AND PERFORMANCE - SECTOR DETAIL (NAICS BASIS)

The Massachusetts economy remains diversified among several industrial and non-industrial sectors. The four largest sectors of the economy (real estate and rental and leasing, professional and technical services, manufacturing, and finance and insurance, on the 2002 NAICS basis) contributed 47.2 percent of the GDP in 2006. The following pie chart displays the latest sector contributions to the Massachusetts GDP.



**GDP subsectors.** When measured in chained 2000 dollars, the cumulative change in Massachusetts total GDP was 5.6 percent between 2001 and 2005. Between 2001 and 2005 (the latest data available for subsector data), several industries grew much faster than the state average. Industry subsectors that experienced substantial cumulative growth or reduction are listed in the following chart.

**Industry Subsectors with a Substantial Growth or Reduction**  
(chained 2000 dollars)

NAICS* Industry Subsector	Cumulative percent change 2001-2005
Motor vehicle, body, trailer, and parts manufacturing	103.4%
Computer and electronic product manufacturing	54.9%
Chemical manufacturing	22.1%
Wood product manufacturing	20.1%
Apparel manufacturing	-19.6%
Textile and textile product mills	-19.7%
Miscellaneous manufacturing	-23.1%
Primary metal manufacturing	-25.6%

\*North American Industry Classification System.  
SOURCE: United States Department of Commerce, Bureau of Economic Analysis. Revised June 2007.

**Gross Domestic Product by Industry in Massachusetts, 1999-2006**  
(millions of chained 2000 dollars)

NAICS* Industry Sector	1999	2000	2001	2002	2003	2004	2005	2006
Total Gross Domestic Product by State	\$255,189	\$274,949	\$276,634	\$274,997	\$280,881	\$289,295	\$292,225	\$300,753
Private industries	231,945	251,645	253,140	251,272	257,997	266,675	269,593	278,071
Agriculture, forestry, fishing, and hunting	469	540	587	668	701	744	793	807
Mining	109	124	141	139	142	145	126	112
Utilities	3,218	3,453	3,162	3,137	3,486	3,594	3,607	3,663
Construction	10,995	11,159	11,850	11,412	10,544	10,611	10,548	10,193
Manufacturing	30,126	37,204	35,011	35,376	38,071	37,103	37,761	39,957
Wholesale trade	17,749	16,173	17,819	17,214	17,959	17,769	16,851	17,901
Retail trade	13,650	14,519	15,713	15,997	16,644	16,998	17,467	17,423
Transportation and warehousing, excluding Postal Service	4,766	5,172	5,063	4,915	4,835	4,907	4,975	4,946
Information	12,083	13,017	13,710	13,676	13,936	15,429	17,238	18,357
Finance and insurance	26,693	29,915	29,890	29,781	30,529	32,482	29,900	30,432
Real estate, rental, and leasing	34,129	35,587	37,683	37,379	37,952	39,671	40,170	42,027
Professional and technical services	24,648	28,560	28,572	27,397	27,486	30,504	32,421	33,876
Management of companies and enterprises	6,870	7,506	6,152	5,673	5,778	5,846	6,160	6,041
Administrative and waste services	8,252	8,382	7,400	7,042	7,459	7,502	7,802	8,108
Educational services	5,591	5,915	5,851	5,978	6,003	6,087	6,017	5,993
Health care and social assistance	19,496	20,363	20,484	21,179	22,241	22,722	23,608	24,569
Arts, entertainment, and recreation	1,906	1,911	2,023	2,152	2,244	2,245	2,221	2,159
Accommodation and food services	6,251	6,594	6,510	6,556	6,734	6,931	6,898	6,995
Other services, except government	5,307	5,549	5,477	5,570	5,596	5,511	5,438	5,454
Government	23,272	23,304	23,493	23,710	22,960	22,791	22,830	22,966

\* North American Industry Classification System

SOURCE: United States Department of Commerce, Bureau of Economic Analysis. 2003-05 Revised June 2007

**Cumulative Percent Change in GDP by Industry in Massachusetts, 1999-2006**  
(millions of chained 2000 dollars)

NAICS* Industry Sector	1999 to	2000	2001	2002	2003	2004	2005	2006
Total Gross Domestic Product by State		7.7%	8.4%	7.8%	9.9%	12.9%	13.9%	16.8%
Private industries		8.5%	9.1%	8.3%	11.0%	14.4%	15.5%	18.6%
Agriculture, forestry, fishing, and hunting		15.1%	23.8%	37.6%	42.6%	48.7%	55.3%	57.1%
Mining		13.8%	27.5%	26.1%	28.2%	30.3%	17.2%	6.1%
Utilities		7.3%	-1.1%	-1.9%	9.2%	12.3%	12.7%	14.2%
Construction		1.5%	7.7%	4.0%	-3.6%	-3.0%	-3.6%	-6.9%
Manufacturing		23.5%	17.6%	18.6%	26.3%	23.7%	25.5%	31.3%
Wholesale trade		-8.9%	1.3%	-2.1%	2.2%	1.2%	-4.0%	2.2%
Retail trade		6.4%	14.6%	16.4%	20.4%	22.6%	25.3%	25.1%
Transportation and warehousing, excluding Postal Service		8.5%	6.4%	3.5%	1.9%	3.3%	4.7%	4.2%
Information		7.7%	13.1%	12.8%	14.7%	25.4%	37.1%	43.6%
Finance and insurance		12.1%	12.0%	11.6%	14.1%	20.5%	12.6%	14.4%
Real estate, rental, and leasing		4.3%	10.2%	9.4%	10.9%	15.4%	16.7%	21.3%
Professional and technical services		15.9%	15.9%	11.8%	12.1%	23.1%	29.4%	33.9%
Management of companies and enterprises		9.3%	-8.8%	-16.6%	-14.7%	-13.5%	-8.2%	-10.1%
Administrative and waste services		1.6%	-10.1%	-15.0%	-9.1%	-8.5%	-4.5%	-0.6%
Educational services		5.8%	4.7%	6.9%	7.3%	8.7%	7.6%	7.2%
Health care and social assistance		4.4%	5.0%	8.4%	13.4%	15.6%	19.5%	23.6%
Arts, entertainment, and recreation		0.3%	6.1%	12.5%	16.8%	16.8%	15.8%	13.0%
Accommodation and food services		5.5%	4.2%	4.9%	7.6%	10.6%	10.1%	11.5%
Other services, except government		4.6%	3.3%	5.0%	5.4%	3.9%	2.6%	2.9%
Government		0.1%	0.9%	1.9%	-1.3%	-2.0%	-1.9%	-1.3%

\* North American Industry Classification System

SOURCE: United States Department of Commerce, Bureau of Economic Analysis. 2003-05 Revised June 2007



**Gross Domestic Product by Industry in Massachusetts, 1999-2006**  
(as a percent of total GDP chained 2000 dollars)

NAICS* Industry Sector	1999	2000	2001	2002	2003	2004	2005	2006
Total Gross Domestic Product by State	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Private industries	90.9%	91.5%	91.5%	91.4%	91.9%	92.2%	92.3%	92.5%
Agriculture, forestry, fishing, and hunting	0.2%	0.2%	0.2%	0.2%	0.2%	0.3%	0.3%	0.3%
Mining	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%	0.0%	0.0%
Utilities	1.3%	1.3%	1.1%	1.1%	1.2%	1.2%	1.2%	1.2%
Construction	4.3%	4.1%	4.3%	4.1%	3.8%	3.7%	3.6%	3.4%
Manufacturing	11.8%	13.5%	12.7%	12.9%	13.6%	12.8%	12.9%	13.3%
Wholesale trade	7.0%	5.9%	6.4%	6.3%	6.4%	6.1%	5.8%	6.0%
Retail trade	5.3%	5.3%	5.7%	5.8%	5.9%	5.9%	6.0%	5.8%
Transportation and warehousing, excluding Postal Service	1.9%	1.9%	1.8%	1.8%	1.7%	1.7%	1.7%	1.6%
Information	4.7%	4.7%	5.0%	5.0%	5.0%	5.3%	5.9%	6.1%
Finance and insurance	10.5%	10.9%	10.8%	10.8%	10.9%	11.2%	10.2%	10.1%
Real estate, rental, and leasing	13.4%	12.9%	13.6%	13.6%	13.5%	13.7%	13.7%	14.0%
Professional and technical services	9.7%	10.4%	10.3%	10.0%	9.8%	10.5%	11.1%	11.3%
Management of companies and enterprises	2.7%	2.7%	2.2%	2.1%	2.1%	2.0%	2.1%	2.0%
Administrative and waste services	3.2%	3.0%	2.7%	2.6%	2.7%	2.6%	2.7%	2.7%
Educational services	2.2%	2.2%	2.1%	2.2%	2.1%	2.1%	2.1%	2.0%
Health care and social assistance	7.6%	7.4%	7.4%	7.7%	7.9%	7.9%	8.1%	8.2%
Arts, entertainment, and recreation	0.7%	0.7%	0.7%	0.8%	0.8%	0.8%	0.8%	0.7%
Accommodation and food services	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.3%
Other services, except government	2.1%	2.0%	2.0%	2.0%	2.0%	1.9%	1.9%	1.8%
Government	9.1%	8.5%	8.5%	8.6%	8.2%	7.9%	7.8%	7.6%

\* North American Industry Classification System

SOURCE: United States Department of Commerce, Bureau of Economic Analysis. 2003-05 Revised June 2007

**Rank of Industry Contribution to GDP in Massachusetts, 1999-2006**  
(millions of chained 2000 dollars)

NAICS* Industry Sector	1999	2000	2001	2002	2003	2004	2005	2006
Total Gross Domestic Product by State								
Private industries								
Agriculture, forestry, fishing, and hunting	19	19	19	19	19	19	19	19
Mining	20	20	20	20	20	20	20	20
Utilities	17	17	17	17	17	17	17	17
Construction	10	10	10	10	10	10	10	10
Manufacturing	2	1	2	2	1	2	2	2
Wholesale trade	7	7	7	7	7	7	9	8
Retail trade	8	8	8	8	8	8	7	9
Transportation and warehousing, excluding Postal Service	16	16	16	16	16	16	16	16
Information	9	9	9	9	9	9	8	7
Finance and insurance	3	3	3	3	3	3	4	4
Real estate, rental, and leasing	1	2	1	1	2	1	1	1
Professional and technical services	4	4	4	4	4	4	3	3
Management of companies and enterprises	12	12	13	14	14	14	13	13
Administrative and waste services	11	11	11	11	11	11	11	11
Educational services	14	14	14	13	13	13	14	14
Health care and social assistance	6	6	6	6	6	6	5	5
Arts, entertainment, and recreation	18	18	18	18	18	18	18	18
Accommodation and food services	13	13	12	12	12	12	12	12
Other services, except government	15	15	15	15	15	15	15	15
Government	5	5	5	5	5	5	6	6

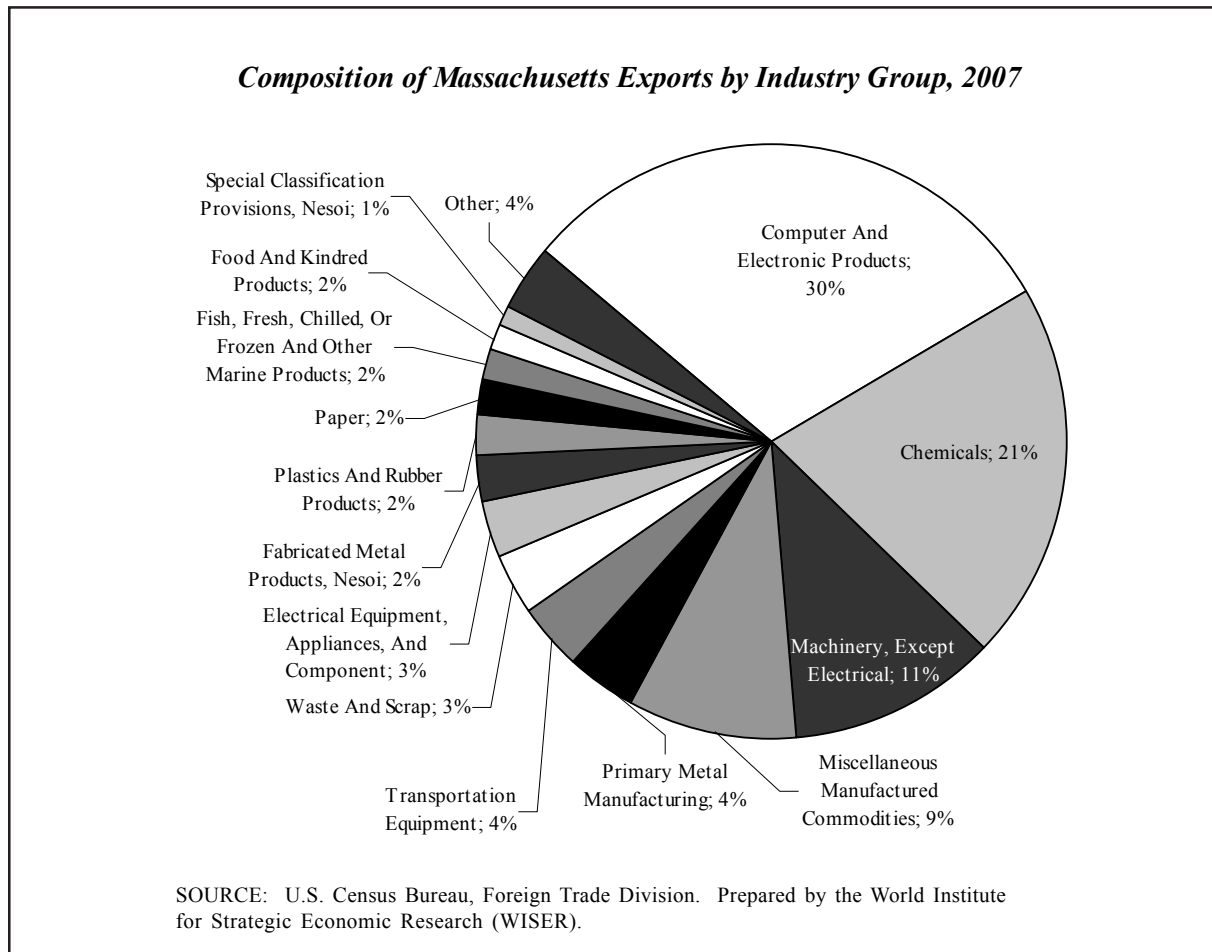
\* North American Industry Classification System

SOURCE: United States Department of Commerce, Bureau of Economic Analysis. 2003-05 Revised June 2007

**GDP Overview.** Between 1999 and 2006, the portion of the total GDP in chained 2000 dollars, from the private industry sector increased 1.6 percent and it decreased 1.5 percent in the government sector. Contributions by each industry to total GDP have remained steady for most sectors. The exceptions were professional and technical services, up 1.6 percent, manufacturing, up 1.5 percent and information, up 1.4 percent. When the 1999 to 2006 industry contributions to total annual GDP are ranked according to their dollar value, the top five have remained fairly constant. In 2006 they were real estate, rental and leasing, manufacturing, professional and technical services, finance and insurance, and health care and social assistance.

**Trade and International Trade.** Massachusetts ranked 14th in the United States, and first in New England, with \$25.2 billion in international exports in 2007. This represents a 5.2 percent increase from the previous year's exports from the Commonwealth, while national exports increased by 12.1 percent in the same period. In January 2008, Massachusetts's exports totaled \$2.3 billion, an increase of 16.0 percent compared with exports in the first month of 2007. National exports were up 15.8 percent and New England, 16.2 percent during the same period. It is not possible to provide balance of trade comparisons for Massachusetts because import data are not compiled on a state-by-state basis.

Massachusetts' five most important trading partners for 2007 were: Canada, with \$3.4 billion in purchases of Massachusetts exports; Germany with \$2.4 billion; United Kingdom, with \$2.3 billion; the Netherlands, with \$2.2 billion; and Japan, with \$2.2 billion in purchases. Between 2006 and 2007, the most significant growth in Massachusetts's exports among its top ten trading partners was in exports to Taiwan, 35.8 percent, and France, 24.2 percent.



**Value of International Shipments from Massachusetts, 1998-2007**

*(top ten industry groups ranked by value of 2007 exports, in millions)*

<b>Major Industry Group</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
Computer And Electronic Products	\$7,458	\$8,056	\$10,215	\$8,122	\$7,024	\$7,688	\$7,475	\$7,004	\$7,520	\$7,711
Chemicals	\$1,223	\$1,357	\$1,600	\$1,534	\$2,267	\$3,216	\$4,907	\$5,284	\$5,188	\$5,247
Machinery, Except Electrical	\$1,694	\$1,705	\$2,545	\$2,044	\$1,786	\$1,668	\$2,456	\$2,315	\$2,736	\$2,877
Miscellaneous Manufactured Commodities	\$835	\$925	\$1,053	\$1,213	\$1,210	\$1,571	\$1,927	\$2,111	\$2,240	\$2,317
Primary Metal Manufacturing	\$335	\$283	\$358	\$272	\$248	\$425	\$423	\$405	\$647	\$982
Transportation Equipment	\$637	\$698	\$659	\$449	\$346	\$383	\$453	\$481	\$547	\$887
Waste And Scrap	\$104	\$75	\$106	\$146	\$183	\$190	\$322	\$328	\$597	\$847
Electrical Equipment, Appliances, And Component	\$596	\$720	\$834	\$691	\$649	\$592	\$752	\$815	\$872	\$769
Fabricated Metal Products, Nesoi	\$597	\$601	\$649	\$569	\$692	\$539	\$621	\$664	\$679	\$614
Plastics And Rubber Products	\$357	\$389	\$374	\$400	\$406	\$375	\$404	\$469	\$530	\$582
<b>Total Exports, Top Massachusetts Industries</b>	<b>\$13,836</b>	<b>\$14,809</b>	<b>\$18,393</b>	<b>\$15,438</b>	<b>\$14,812</b>	<b>\$16,648</b>	<b>\$19,739</b>	<b>\$19,877</b>	<b>\$21,556</b>	<b>\$22,834</b>
<b>Total Massachusetts Exports</b>	<b>\$15,878</b>	<b>\$16,805</b>	<b>\$20,514</b>	<b>\$17,490</b>	<b>\$16,708</b>	<b>\$18,663</b>	<b>\$21,837</b>	<b>\$22,043</b>	<b>\$24,047</b>	<b>\$25,285</b>
<b>Percent Change from Prior Year</b>	<b>-3.9%</b>	<b>5.8%</b>	<b>22.1%</b>	<b>-14.7%</b>	<b>-4.5%</b>	<b>11.7%</b>	<b>17.0%</b>	<b>0.9%</b>	<b>9.1%</b>	<b>5.1%</b>

SOURCE: World Institute for Strategic Economic Research (WISER). These figures reflect the changover in export statistics reporting to the NAICS system from the SIC system. Categories and state totals are not comparable between systems; pre-1997 data is not available.

**Transportation and Warehousing, and Utilities.** Between 1999 and 2006, the combined real gross domestic product of the transportation and warehousing and utilities sector increased 7.8 percent when measured with year 2000 chained dollars. These combined sectors contributed 2.8 percent to the total Massachusetts Real Domestic Product in 2006; 0.4 percent less than it did in 1999.

Massachusetts's major air and seaports are managed by the Massachusetts Port Authority (Massport), an independent public authority. Massport reported fiscal 2007 operating income of \$39.8 million, down 9.1 percent from fiscal 2006, operating revenues up 5.9 percent, \$526.8 million in 2007 versus \$497.6 million in 2006, and operating expenses up 7.3 percent, \$487.0 million in 2007 versus \$453.8 million in 2006.

According to Massport, Boston Logan International Airport is currently served by 56 scheduled and non scheduled air carriers, of which 45 are scheduled airlines, including 16 foreign flag carriers. Boston Logan International Airport has domestic service to 76 destinations and international service to 33 destinations. Based on total passenger volume in calendar year 2006 data, Logan Airport was the most active airport in New England and remained the 19th most active in the U.S. according to the Federal Aviation Authority. Massport reported that as of December, year-to-date 2007, total airport flight operations were down 1.6 percent and total airport passengers were up 1.4 percent from the same period in 2006.

As of June 30, 2006, Logan was served by 11 all-cargo and small package/express carriers. According to the FAA, Logan Airport ranked 26th in the nation in total air cargo volume in calendar year 2006. In 2006, the airport handled 1.1 billion pounds of cargo, a 4.2 percent decrease from 2005. Massport reported that as of December, year-to-date 2007, the combined cargo and mail volume was down 6.9 percent from the same period in 2006. Please refer to the Aviation Activity charts on the following page.

At Massport's Port of Boston properties, 2006 total cargo throughput was 15.3 million metric tons, a 6 percent decrease from 2005. Automobile processing increased 11 percent to 12,149 units, and cruise passenger trips decreased 11 percent to 208,883. Total containerized cargo increased 7 percent to 1.6 million short tons. Massport reported that between January 2007 and December 2007, total containerized cargo was up 10.3 percent compared to the same period the previous year. The Army Corps of Engineers reported Massachusetts total waterborne cargo shipped or received in 2006, decreased 4.9 percent to 27.4 million short tons, from 2005. Waterborne cargo in New England decreased 6.5 percent and the U.S increased 2.4 percent. Please refer to the Waterborne Tonnage by State charts on the following page.

**Aviation Activity for Massachusetts Primary Airports**

<b>Passenger Boardings</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>
General Edward Lawrence Logan International	13,613,507	11,739,553	11,077,238	11,087,799	12,758,020	13,214,923	13,544,552
Nantucket Memorial	296,451	272,460	253,422	229,300	243,313	252,757	276,866
Barnstable Municipal-Boardman/Polando Field	205,906	197,106	180,807	158,360	167,522	177,761	206,980
Worcester Regional	52,916	79,653	37,298	2,234	1,274	2,036	14,823
Laurence GHanscomField	82,204	71,381	40,419	19,375	17,049	13,887	14,560
Marthas Vineyard	71,150	65,374	59,500	53,011	49,480	48,977	45,881
New Bedford Regional	22,882	21,786	21,667	21,097	19,686	17,960	15,211
Provincetown Municipal	15,694	12,986	10,533	11,801	11,424	10,236	11,375
<b>Total</b>	<b>14,360,710</b>	<b>12,460,299</b>	<b>11,680,884</b>	<b>11,582,977</b>	<b>13,267,768</b>	<b>13,738,537</b>	<b>14,130,248</b>

<b>Cargo - Gross Landed Weight (lbs.)</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>
General Edward Lawrence Logan International	1,405,482,600	1,301,842,100	1,272,185,900	1,199,383,800	1,172,103,700	1,148,881,400	1,100,485,850

**Change in Aviation Activity at Massachusetts Primary Airports**

<b>Passenger Boardings</b>	<b>2000-2001</b>	<b>2001-2002</b>	<b>2002-2003</b>	<b>2003-2004</b>	<b>2004-2005</b>	<b>2005-2006</b>
General Edward Lawrence Logan International	-13.8%	-5.6%	0.1%	15.1%	3.6%	2.5%
Nantucket Memorial	-8.1%	-7.0%	-9.5%	6.1%	3.9%	9.5%
Barnstable Municipal-Boardman/Polando Field	-4.3%	-8.3%	-12.4%	5.8%	6.1%	16.4%
Worcester Regional	50.5%	-53.2%	-94.0%	-43.0%	59.8%	628.0%
Laurence GHanscom Field	-13.2%	-43.4%	-52.1%	-12.0%	-18.5%	4.8%
Martha's Vineyard	-8.1%	-9.0%	-10.9%	-6.7%	-1.0%	-6.3%
New Bedford Regional	-4.8%	-0.5%	-2.6%	-6.7%	-8.8%	-15.3%
Provincetown Municipal	-17.3%	-18.9%	12.0%	-3.2%	-10.4%	11.1%
<b>Total</b>	<b>-13.2%</b>	<b>-6.3%</b>	<b>-0.8%</b>	<b>14.5%</b>	<b>3.5%</b>	<b>2.9%</b>

<b>Cargo</b>	<b>2000-2001</b>	<b>2001-2002</b>	<b>2002-2003</b>	<b>2003-2004</b>	<b>2004-2005</b>	<b>2005-2006</b>
General Edward Lawrence Logan International	-7.4%	-2.3%	-5.7%	-2.3%	-2.0%	-4.2%

SOURCE: Federal Aviation Administration Oct 2007.

**Waterborne Tonnage by State (In Units of 1000 Tons)**

<b>State</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>
U.S. total	2,424,596	2,386,558	2,340,292	2,394,199	2,551,939	2,527,622	2,588,440
Maine	31,769	30,586	29,140	31,698	32,447	32,353	28,103
Massachusetts	26,973	26,446	26,117	30,655	31,787	28,812	27,411
Connecticut	18,959	18,267	17,610	18,579	20,075	19,617	19,340
Rhode Island	9,089	9,170	8,437	9,417	9,764	10,972	11,016
New Hampshire	4,462	4,447	4,108	4,971	4,795	5,254	4,823
Vermont	0	0	0	0	0	0	0
New England	91,252	88,916	85,412	95,320	98,868	97,008	90,693

**Waterborne Tonnage by State - Percent Change from Previous Year**

<b>State</b>	<b>2000-2001</b>	<b>2001-2002</b>	<b>2002-2003</b>	<b>2003-2004</b>	<b>2004-2005</b>	<b>2005-2006</b>
U.S. total	-1.6%	-1.9%	2.3%	6.6%	-1.0%	2.4%
Maine	-3.7%	-4.7%	8.8%	2.4%	-0.3%	-13.1%
Massachusetts	-2.0%	-1.2%	17.4%	3.7%	-9.4%	-4.9%
Connecticut	-3.6%	-3.6%	5.5%	8.1%	-2.3%	-1.4%
Rhode Island	0.9%	-8.0%	11.6%	3.7%	12.4%	0.4%
New Hampshire	-0.3%	-7.6%	21.0%	-3.5%	9.6%	-8.2%
Vermont	-	-	-	-	-	-
New England	-2.6%	-3.9%	11.6%	3.7%	-1.9%	-6.5%

SOURCE: Army Corps of Engineers, Waterborne Commerce Statistics Center (WCSC).

**Construction and Housing.** In 2006, construction activity contributed 3.4 percent to the total Massachusetts Gross Domestic Product (GDP) when measured in 2000 chained dollars. The construction sector contributed 4.3 percent to state GDP in 1999. Overall loss between 1999 and 2006 was 6.9 percent in real dollars.

### *Housing Permits Authorized, 1969-2006*

<i>Year</i>	<i>Massachusetts</i>		<i>New England</i>		<i>United States</i>	
	<i>Total Permits</i>	<i>Percent Change</i>	<i>Total Permits</i>	<i>Percent Change</i>	<i>Total Permits</i>	<i>Percent Change</i>
1969	33,572		70,539		1,330,161	
1970	38,330	14.2%	74,068	5.0%	1,354,746	1.8%
1975	17,697	-27.5%	41,645	-21.0%	934,511	-12.4%
1980	16,055	-20.4%	40,195	-25.1%	1,171,763	-23.6%
1981	15,599	-2.8%	38,067	-5.3%	985,600	-15.9%
1982	15,958	2.3%	39,470	3.7%	1,000,500	1.5%
1983	22,950	43.8%	57,567	45.9%	1,605,221	60.4%
1984	28,471	24.1%	72,356	25.7%	1,689,667	5.3%
1985	39,360	38.2%	96,832	33.8%	1,732,335	2.5%
1986	43,877	11.5%	108,272	11.8%	1,771,832	2.3%
1987	40,018	-8.8%	101,222	-6.5%	1,542,499	-12.9%
1988	31,766	-20.6%	82,123	-18.9%	1,450,583	-6.0%
1989	21,634	-31.9%	53,543	-34.8%	1,345,084	-7.3%
1990	15,276	-29.4%	36,811	-31.2%	1,125,583	-16.3%
1991	12,624	-17.4%	31,111	-15.5%	953,834	-15.3%
1992	16,346	29.5%	36,876	18.5%	1,105,083	15.9%
1993	17,715	8.4%	39,225	6.4%	1,210,000	9.5%
1994	18,302	3.3%	40,459	3.1%	1,366,916	13.0%
1995	15,946	-12.9%	37,357	-7.7%	1,335,835	-2.3%
1996	17,360	8.9%	40,425	8.2%	1,419,083	6.2%
1997	17,554	1.1%	42,047	4.0%	1,442,251	1.6%
1998	18,958	8.0%	47,342	12.6%	1,619,500	12.3%
1999	18,967	0.0%	47,632	0.6%	1,663,533	2.7%
2000	18,000	-5.1%	45,335	-4.8%	1,592,267	-4.3%
2001	17,034	-5.4%	44,594	-1.6%	1,636,676	2.8%
2002	17,465	2.5%	49,031	9.9%	1,747,678	6.8%
2003	20,257	16.0%	52,395	6.9%	1,889,214	8.1%
2004	22,477	11.0%	57,858	10.4%	2,070,077	9.6%
2005	24,549	9.2%	58,742	1.5%	2,155,316	4.1%
2006	19,580	-20.2%	46,782	-20.4%	1,838,903	-14.7%

SOURCES: Federal Reserve Bank of Boston; United States Department of Commerce.

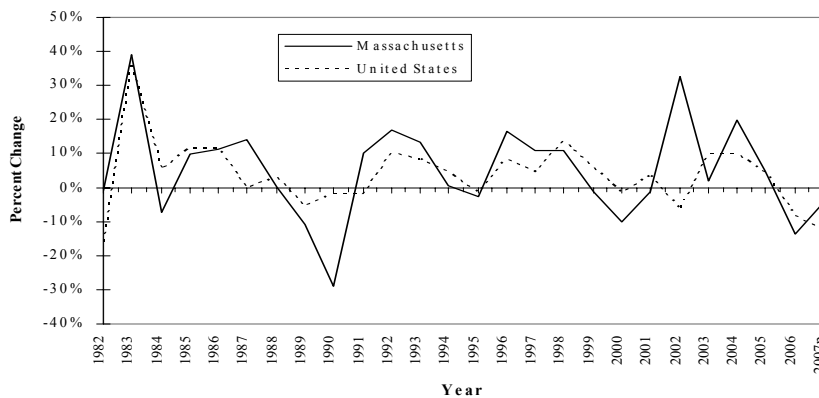
**Home Sales.** Sales of existing single-family homes for the Boston metropolitan area and the United States are presented in the following chart and graph. Seasonally adjusted rates are used in reporting quarterly data to factor out seasonal variations in resale activity.

**Existing Home Sales, 1981-2007**  
*(Quarterly rates are seasonally adjusted, rates in thousands)*

Year	Massachusetts		United States	
	Sales	% Change	Sales	% Change
1981	43.0		2,575.0	
1982	42.6	-0.8%	2,117.5	-17.8%
1983	59.2	39.0%	2,875.0	35.8%
1984	54.9	-7.3%	3,027.5	5.3%
1985	60.2	9.7%	3,382.5	11.7%
1986	67.0	11.3%	3,772.5	11.5%
1987	76.4	14.1%	3,767.5	-0.1%
1988	76.6	0.2%	3,882.5	3.1%
1989	68.2	-10.9%	3,672.0	-5.4%
1990	48.6	-28.8%	3,603.5	-1.9%
1991	53.4	10.0%	3,533.3	-1.9%
1992	62.5	17.0%	3,889.5	10.1%
1993	70.9	13.4%	4,220.3	8.5%
1994	71.4	0.7%	4,409.8	4.5%
1995	69.6	-2.6%	4,342.3	-1.5%
1996	81.2	16.6%	4,705.3	8.4%
1997	90.1	11.0%	4,908.8	4.3%
1998	99.9	10.8%	5,585.3	13.8%
1999	98.5	-1.3%	5,922.8	6.0%
2000	88.7	-10.0%	5,831.8	-1.5%
2001	87.5	-1.4%	6,026.3	3.3%
2002	115.9	32.5%	5,631.0	-6.6%
2003	118.3	2.1%	6,175.0	9.7%
2004	141.7	19.8%	6,778.0	9.8%
2005	148.6	4.9%	7,076.0	4.4%
2006	128.1	-13.8%	6,478.0	-8.5%
2007p	122.4	-4.4%	5,652.0	-12.8%

SOURCES: National Association of Realtors. Federal Reserve Bank of Boston.  
 p= preliminary.

**Percentage Change in Existing Home Sales**  
*(Massachusetts and the United States 1981-2007)*



SOURCES: National Association of Realtors. Federal Reserve Bank of Boston.

**Median Home Prices.** Median sales price of existing single-family homes for the Boston metropolitan area and the United States are presented in the following chart and graph.

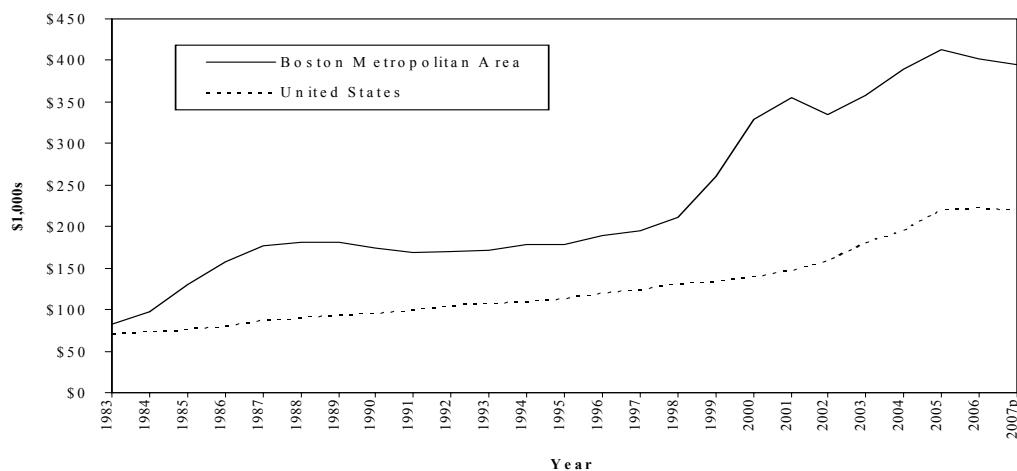
**Median Sales Price for Existing Single-Family Homes, 1983-2007**

*(Quarterly price not seasonally adjusted, price in thousands)*

<i>Year</i>	<i>Boston Metropolitan Area</i>	<i>United States</i>	<i>Boston Prices as a Percent of the U.S.</i>	<i>Boston Annual Percent Change</i>
1983	\$82	\$70	118.1%	
1984	\$98	\$72	135.4%	19.1%
1985	\$131	\$75	173.7%	33.5%
1986	\$158	\$80	197.3%	20.9%
1987	\$177	\$86	205.7%	11.6%
1988	\$181	\$90	201.9%	2.4%
1989	\$182	\$93	195.0%	0.4%
1990	\$174	\$95	182.6%	-4.2%
1991	\$169	\$99	169.5%	-3.0%
1992	\$171	\$104	164.6%	1.2%
1993	\$171	\$107	160.9%	0.5%
1994	\$179	\$109	164.7%	4.4%
1995	\$179	\$113	158.6%	-0.2%
1996	\$189	\$119	158.7%	5.7%
1997	\$195	\$124	157.1%	3.0%
1998	\$212	\$130	162.9%	8.9%
1999	\$261	\$133	196.2%	23.1%
2000	\$330	\$138	238.3%	26.4%
2001	\$355	\$146	242.4%	7.6%
2002	\$335	\$158	212.1%	-5.5%
2003	\$359	\$180	198.9%	6.9%
2004	\$390	\$195	199.6%	8.7%
2005	\$413	\$219	188.7%	6.0%
2006	\$402	\$222	181.3%	-2.7%
2007p	\$396	\$218	181.6%	-1.6%

SOURCES: National Association of Realtors. Federal Reserve Bank of Boston.  
p= preliminary.

**Median Sales Price, Existing Single-Family Homes**  
*(U.S. and Boston Metro, 1983-2007)*

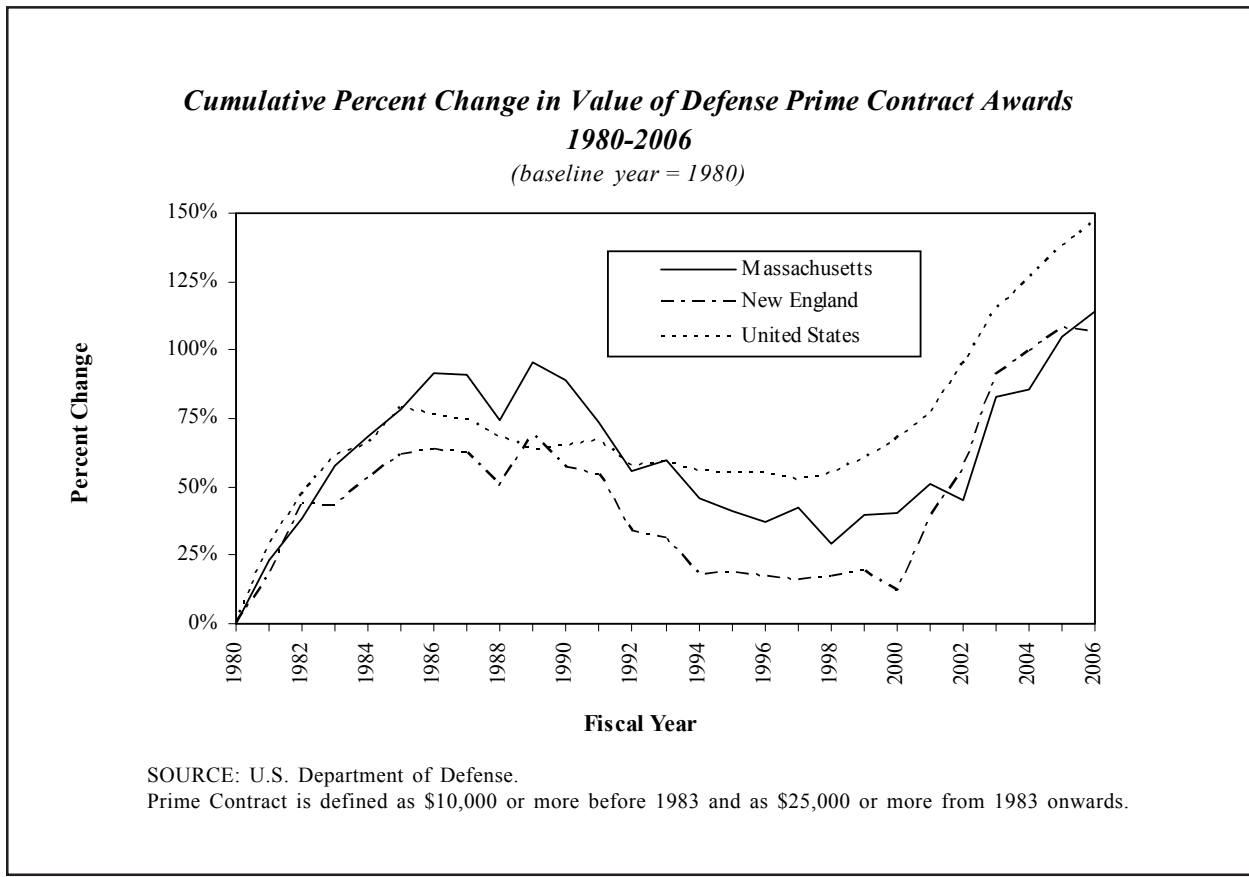


SOURCES: Federal Reserve Bank of Boston; National Association of Realtors. p=preliminary  
Note: Boston-Cambridge-Quincy, MA-NH - Data from New Hampshire not available for 2004-2005.

**Defense Industry.** Massachusetts contract awards have increased every year since 1988 with the exception of 2002. The value of military prime contracts awarded to Massachusetts companies peaked in FY 2006 at \$9.1 billion and troughed in 1998 at \$4.3 billion. U.S. Navy contracts to Massachusetts companies increased by over a billion dollars in FY 2006. The chart below illustrates the yearly changes in the value of Massachusetts military prime contracts from 1980 to 2006.

From the early 1980 to 1993, the Commonwealth's share of total prime contract awards in the U.S. remained around 5 percent. In 2002, the Commonwealth's share of the national total reached its lowest point in over two decades, 3.1 percent, and has increased slightly to 3.5 percent in 2005. While Massachusetts' contract total has increased significantly in the past four years, its share of the U.S. total was only 3.5% in 2006. Massachusetts is the eighth largest recipient in defense spending.

The importance of the defense industry to the Massachusetts economy is reflected in the table on the following page, which shows the value of Department of Defense prime contract awards between 1980 and 2006.





**Net Value of Department of Defense Prime Contract Awards Since 1980-2006**

(in millions)

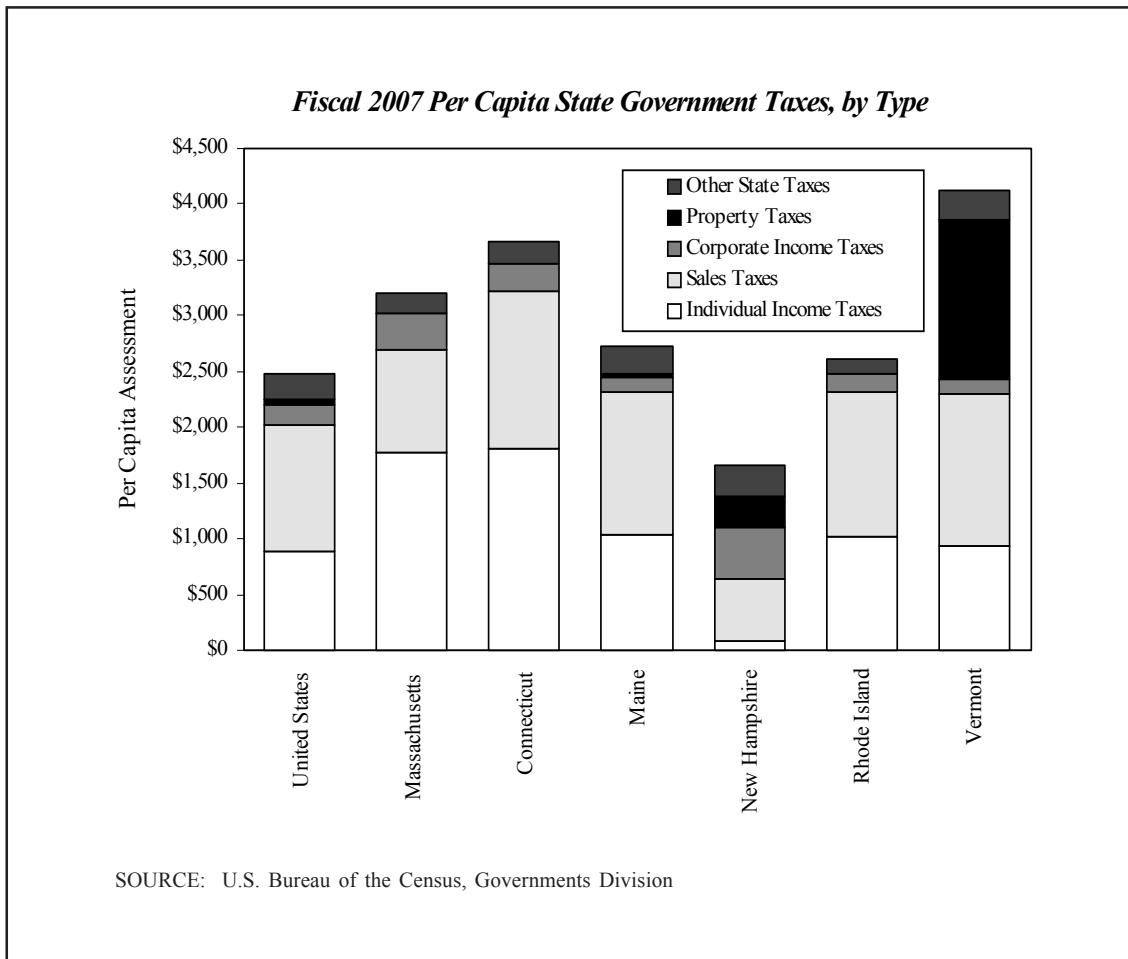
<i>Fiscal Year</i>	<i>MA</i>	<i>N.E.</i>	<i>U.S.</i>	<i>Massachusetts' Share (as a Percent)</i>	
				<i>of New England</i>	<i>of U.S.</i>
1980*	\$3,743	\$8,775	\$68,070	42.7%	5.5%
1981*	4,605	10,372	87,761	44.4%	5.2%
1982*	5,317	13,037	103,858	40.8%	5.1%
1983	6,328	12,967	118,744	48.8%	5.3%
1984	7,029	14,249	123,995	49.3%	5.7%
1985	7,714	15,487	140,096	49.8%	5.5%
1986	8,735	15,748	136,026	55.5%	6.4%
1987	8,685	15,606	133,262	55.7%	6.5%
1988	7,212	13,673	125,767	52.7%	5.7%
1989	8,757	16,268	119,917	53.8%	7.3%
1990	8,166	14,271	121,254	57.2%	6.7%
1991	6,933	13,889	124,119	49.9%	5.6%
1992	5,686	11,033	112,285	51.5%	5.1%
1993	5,936	10,779	114,145	55.1%	5.2%
1994	5,106	9,329	110,316	54.7%	4.6%
1995	4,846	9,375	109,005	51.7%	4.4%
1996	4,675	9,237	109,408	50.6%	4.3%
1997	4,910	9,152	106,561	53.6%	4.6%
1998	4,245	9,284	109,386	45.7%	3.9%
1999	4,715	9,456	114,875	49.9%	4.1%
2000	4,737	8,745	123,295	54.2%	3.8%
2001	5,248	11,094	135,225	47.3%	3.9%
2002	4,929	13,029	158,737	37.8%	3.1%
2003	6,800	17,544	191,221	38.8%	3.6%
2004	6,961	19,062	212,740	36.5%	3.3%
2005	8,333	20,699	236,986	40.3%	3.5%
2006	9,077	20,243	257,456	44.8%	3.5%

SOURCE: United States Department of Defense. \*Prime Contract is defined as \$10,000 and above for these years; beginning in 1983 it is defined as \$25,000 and above.

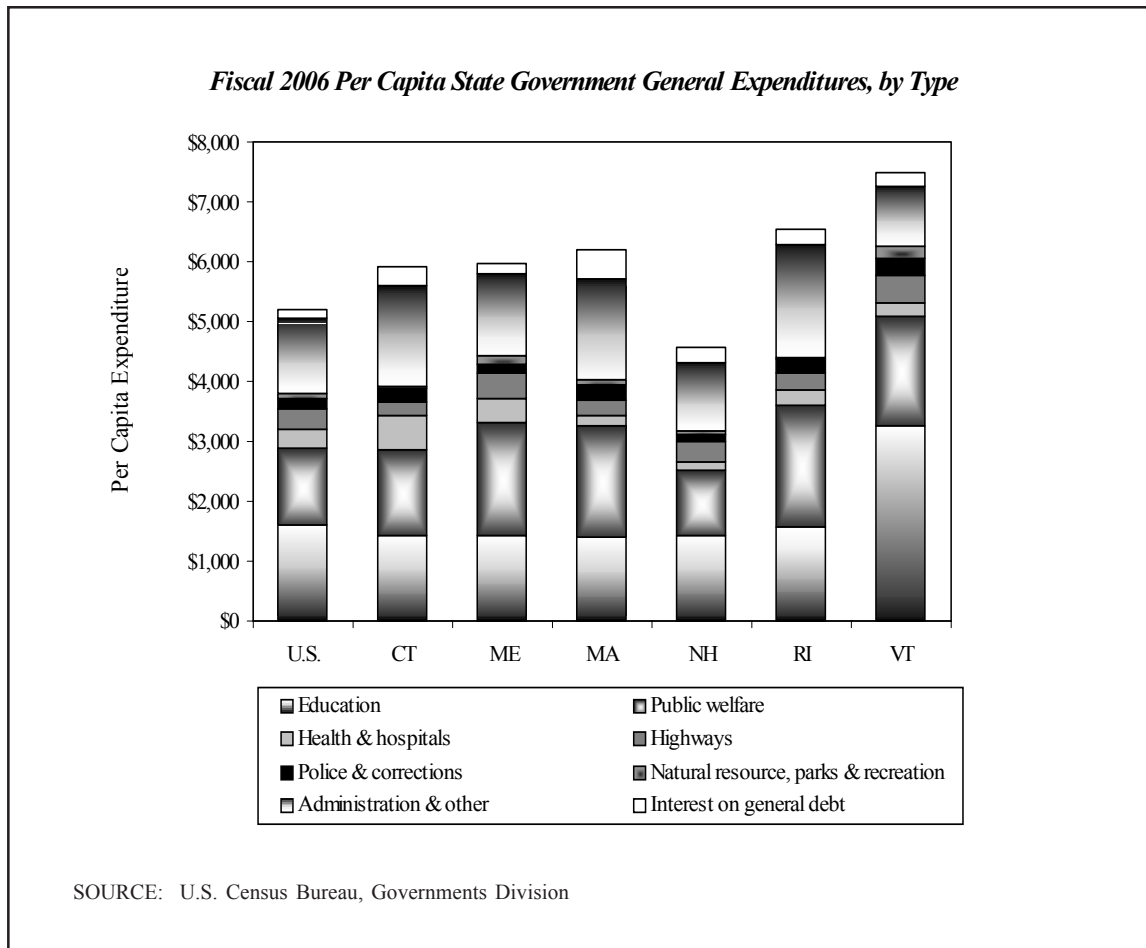
**Travel and Tourism.** The travel and tourism industry represents an important component of the overall Massachusetts economy. In 2006, the arts, entertainment, recreation and accommodations industries contributed 3.4 percent to Massachusetts total GDP. The Massachusetts Office of Travel and Tourism (MOTT) reported an annual increase of 0.1 percent in museum and attraction attendance, 11.9 million visitors, in 2007. December 2007 attendance was 633,304, 26.5 percent less than December 2006. MOTT estimated that 1.6 million international travelers visited Massachusetts in 2006, an increase of 14.3 percent from 2005.

**State Taxes.** Per capita state taxes in Massachusetts are significantly higher, 28.8 percent, than the national average. In fiscal year 2007, the total per capita state tax bill in the United States was \$2,487. Citizens of the Commonwealth however, paid \$3,204 on average, the tenth highest (ninth last year) in the nation and an increase of 6.3 percent from the previous year's \$3,013. In New England, citizens in Connecticut and Vermont paid more per capita, and all New England states except New Hampshire (49th), ranked in the top third for per capita state tax collections.

In fiscal year 2007, over half, 55.2 percent, of the state taxes in Massachusetts came from the state income tax. Per capita individual income taxes in Massachusetts were \$1,767, up 8.5 percent from \$1,629 in fiscal year 2006. Also increasing in fiscal year 2007 were sales receipts at 1.0 percent and corporate net income at 13.1 percent. Other taxes (licenses, death and gift, and documentary and stock transfer) increased 4.0 percent in Massachusetts on a per capita basis. Across the New England states, there is wide variation in both total per capita state taxes and in the breakdown of those taxes, as illustrated in the following chart.



**State Government Spending in Massachusetts.** The following chart depicts fiscal 2006 per capita state general expenditures by category for the six New England states and the U.S. average state expenditure. Massachusetts ranked 11th in the nation in per capita expenditures, \$6,198 in 2006 while it ranked 9th and spent less, \$5,911 in 2005. This represents a 4.9 percent increase in per capita expenditures from 2005 to 2006. Massachusetts spent more state funds per capita on debt service, \$487 in 2006 than any of its New England neighbors.



**Fiscal 2006 Per Capita State Government General Expenditures, by Type  
For the U.S. and New England States**

<i>General expenditures, by function</i>	<i>U.S.</i>	<i>CT</i>	<i>ME</i>	<i>MA</i>	<i>NH</i>	<i>RI</i>	<i>VT</i>
Education	\$1,613	\$1,440	\$1,420	\$1,401	\$1,440	\$1,560	\$3,264
Public welfare	\$1,267	\$1,408	\$1,893	\$1,843	\$1,066	\$2,049	\$1,818
Health & hospitals	\$321	\$568	\$400	\$187	\$142	\$252	\$226
Highways	\$333	\$229	\$430	\$261	\$340	\$284	\$456
Police & corrections	\$184	\$233	\$147	\$248	\$124	\$214	\$303
Natural resource, parks & recreation	\$86	\$42	\$142	\$81	\$59	\$51	\$180
Administration & other	\$1,262	\$1,687	\$1,368	\$1,690	\$1,130	\$1,881	\$1,007
Interest on general debt	\$127	\$307	\$174	\$487	\$263	\$260	\$235
<b>Total</b>	<b>\$5,193</b>	<b>\$5,914</b>	<b>\$5,974</b>	<b>\$6,198</b>	<b>\$4,565</b>	<b>\$6,552</b>	<b>\$7,487</b>
State's rank of total per capita expenditures		14	13	11	35	8	4

SOURCE: U.S. Census Bureau, Governments Division

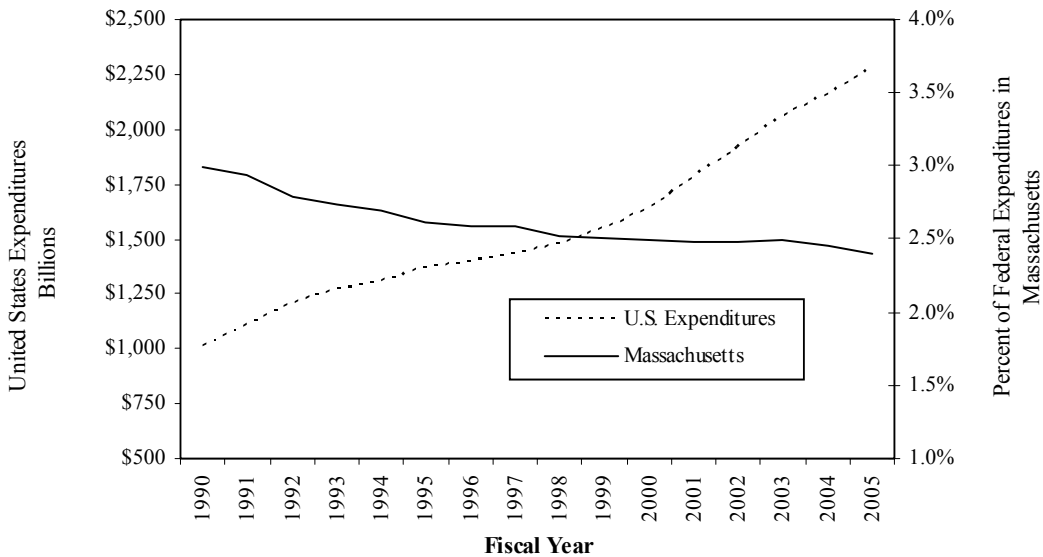
**Massachusetts Per Capita State Government General Expenditures, by Type  
FY2000-2006**

<i>General expenditures, by function</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>
Education	\$890	\$1,026	\$1,020	\$1,055	\$1,183	\$1,346	\$1,401
Public welfare	\$1,030	\$1,135	\$932	\$824	\$1,647	\$1,719	\$1,843
Health & hospitals	\$308	\$363	\$377	\$372	\$172	\$177	\$187
Highways	\$439	\$400	\$427	\$378	\$471	\$276	\$261
Police & corrections	\$191	\$213	\$223	\$230	\$215	\$222	\$248
Natural resource, parks & recreation	\$58	\$88	\$86	\$95	\$90	\$76	\$81
Administration & other	\$1,392	\$1,473	\$1,630	\$1,755	\$1,815	\$1,660	\$1,690
Interest on general debt	\$335	\$371	\$418	\$386	\$401	\$435	\$487
<b>Total</b>	<b>\$4,643</b>	<b>\$5,067</b>	<b>\$5,115</b>	<b>\$5,095</b>	<b>\$5,994</b>	<b>\$5,911</b>	<b>\$6,198</b>

US Census Bureau, Governments Division

**Federal Government Spending in Massachusetts.** Federal government spending contributes significantly to the Massachusetts economy. In fiscal 2005, Massachusetts ranked fourteenth among states in per capita distribution of federal funds, with total spending of \$8,678 per person, excluding loans and insurance. While federal spending in Massachusetts has increased every year since 1990, its share of total U.S. spending has declined every year since 1990. The following chart shows total federal expenditures and the percentage of federal expenditures in Massachusetts. Federal spending includes grants to state and local governments, direct payments to individuals, wage and salary employment, and procurement contracts, and includes only those expenditures that can be associated with individual states and territories.

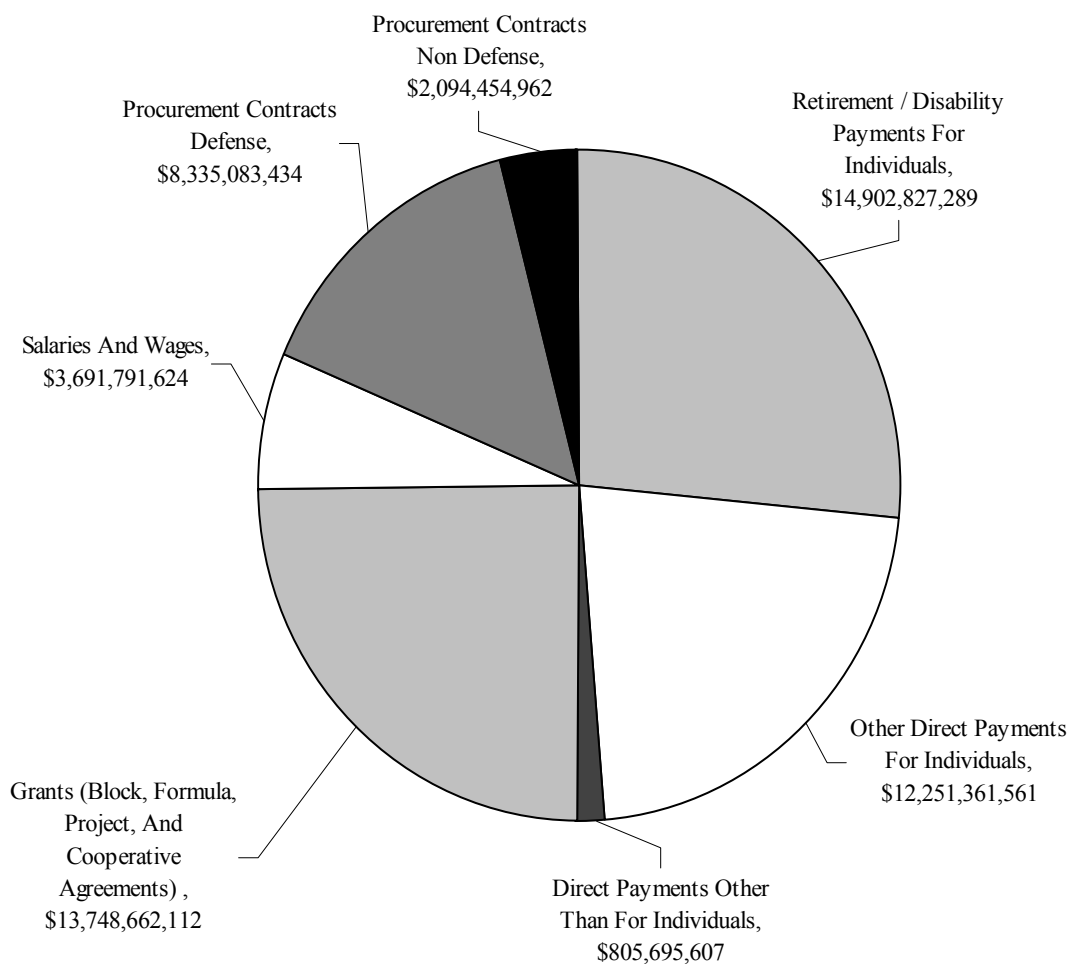
**Total Federal Expenditures and Percentage of Federal Expenditures in Massachusetts, 1990-2005**



SOURCE: U.S. Department of Commerce, Bureau of the Census, 2005 Consolidated Federal Funds Report.

Half of FY 2005 federal spending in Massachusetts was composed of health care and social programs like Medicare, Medicaid, Social Security, unemployment benefits and Section 8 Housing Vouchers. Massachusetts was above the national average in per capita federal grants to state and local governments, receiving \$2,137 per capita compared to a national average of \$1,560. Per capita federal spending on salaries and wages in 2005 was lower in Massachusetts than in the rest of the nation at \$574 compared to a national average of \$762, but Massachusetts was above the national average in per capita direct federal payments to individuals at \$4,346 compared to a national average of \$4,024. Massachusetts ranked 9th among states in per capita procurement contract awards at \$1,621 compared to a national average of \$1,222 in 2005. The following chart shows the composition of direct federal spending within Massachusetts in fiscal 2005, excluding loans and insurance.

**Composition of Direct Federal Spending in Massachusetts by Program  
Fiscal 2005**

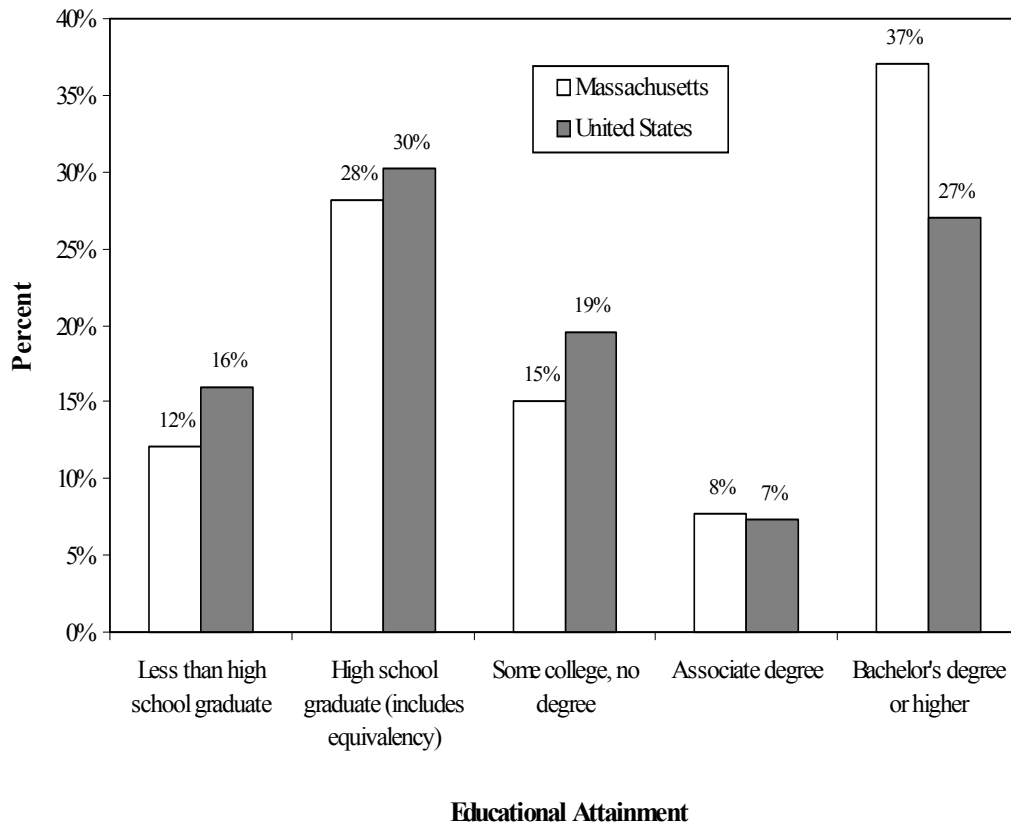


SOURCE: U.S. Census Bureau, Consolidated Federal Funds Report: FY 2005

## HUMAN RESOURCES

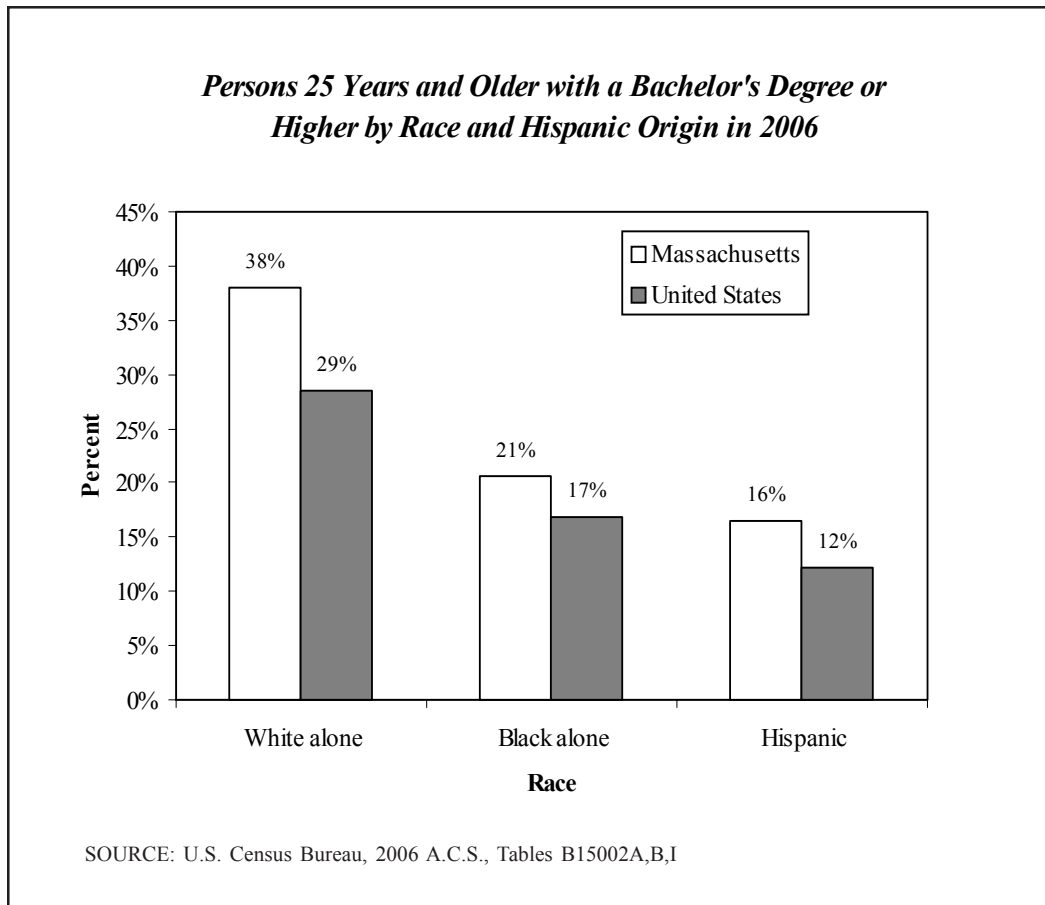
**Human Resources.** The availability of a skilled and well-educated population is an important resource for the Commonwealth. The level of education reached by the population of Massachusetts compares favorably with the level in the United States as a whole. In 2006, the Census Bureau's American Community Survey (ACS) reported that Massachusetts had a smaller proportion of persons who had not completed high school (12.1 percent) than the national average (15.9 percent) and a much higher proportion of persons with a bachelor's degree or more (37.0 percent) than the nation (27.0 percent).

*Educational Attainment of Persons 25 Years and Older in 2006*



SOURCE: U.S. Census Bureau, 2006 American Community Survey, Selected Social Characteristics

While Massachusetts' black and Hispanic population achieved college degrees at roughly half the rate of the white population, they fared much better than the national average.



**Higher Education Data.** Massachusetts has a higher minority enrollment in institutions of higher education than New England. However, the percentage of enrollment of blacks, Hispanics, and Asians in higher education in Massachusetts is below the national average. These percentages, which do not include military academy enrollment, are seen in the chart below.

**Higher Education Enrollment by Race and Hispanic Origin in 2006**

	White alone	Black alone	Asian alone	Indian/Alaskan Native alone	Other race	Hispanic or Latino
Massachusetts	77.4%	7.8%	8.6%	0.3%	5.8%	6.8%
New England	80.6%	7.5%	6.3%	0.3%	5.2%	6.3%
United States	71.0%	13.8%	7.0%	0.7%	7.4%	11.7%

SOURCE: U.S. Census Bureau, 2006 A.C.S., Tables B14001 A-I.

Massachusetts is an internationally recognized center for higher education, with 443,316 students in undergraduate, professional and graduate private and public programs in the 2005/2006 school year, according to the New England Board of Higher Education. According to Institute of International Education, 28,680 foreign students were enrolled in Massachusetts colleges and universities in the 2006/2007 school year. This was a 2.4 percent increase from the previous year and Massachusetts is still ranked 4th among states for foreign student enrollment.

The Massachusetts public higher education system is composed of universities, state colleges, and community colleges with a combined enrollment of 187,913 students in 2005, 43.4 percent of whom attended part-time. In addition, Massachusetts has a system of private higher education that accounted for 57.6 percent of total enrollment in Massachusetts in 2005. More than a fifth of the students attending private institutions were enrolled on a part-time basis. The strength of both public and private colleges and universities as centers for research and education contributes to the high quality of the Massachusetts work force and plays a key role in attracting and retaining business and industry within the state.

The higher education system in Massachusetts is particularly strong in post-graduate, scientific, and technical education, with 1,632 science and engineering doctorates awarded in 2005, 4th in the nation. Massachusetts conferred a total of 2,676 doctorates in 2005. Massachusetts was also ranked 2nd in the U.S. in science and engineering postdoctorates in doctorate granting institutions in 2005, with 6,502 post doctorates.

The pre-eminence of higher education in Massachusetts contributes not only to the quality of its work force, but also to its stature in the nation and the world as a center for basic scientific research and for academic and entrepreneurial research and development. Doctorate-granting institutions in Massachusetts received 4.5 percent or \$2.2 billion of total national academic expenditures on R&D in fiscal 2006. Massachusetts is still ranked sixth in the nation behind California, New York, Texas, Maryland and Pennsylvania.

The diversity of federal funding sources reflects the variety of research and development work performed at Massachusetts educational institutions. Of the \$1.5 billion in total fiscal 2005 federal outlays for science and engineering research to universities and colleges in Massachusetts, 62.9 percent was from the Department of Health and Human Services, 17.5 percent was from the National Science Foundation, 7.8 percent from the Department of Defense, 5.9 percent was from the Department of Energy, and 2.3 percent was from the National Aeronautics and Space Administration. Massachusetts ranked 4th in the nation in 2004 in total federal outlays, \$5.3 billion, for research and development.

Given the quality of the Commonwealth's research and development sector, it is not surprising that Massachusetts fares better than the national average in homes with computer and internet access. According to Census's October 2003 Current Population Survey, 64.2 percent of Massachusetts households had access to a computer, compared to 61.8 nationally and 58.1 percent of its households were connected to the internet while the national average was 54.7 percent.

***Primary and Secondary Education Data.*** Although spending on education is not necessarily an indicator of results, Massachusetts has spent from 12 to 31 percent more per pupil on primary and secondary education than the national average since 1981. During the 2005-2006 school year, Massachusetts increased per student expenditures to \$11,981; 31 percent higher than the national average. The table on the following page shows expenditures per pupil for Massachusetts and the United States since fiscal 1981.



***Per Pupil Expenditure in Public Elementary and Secondary Schools  
1981-2006***

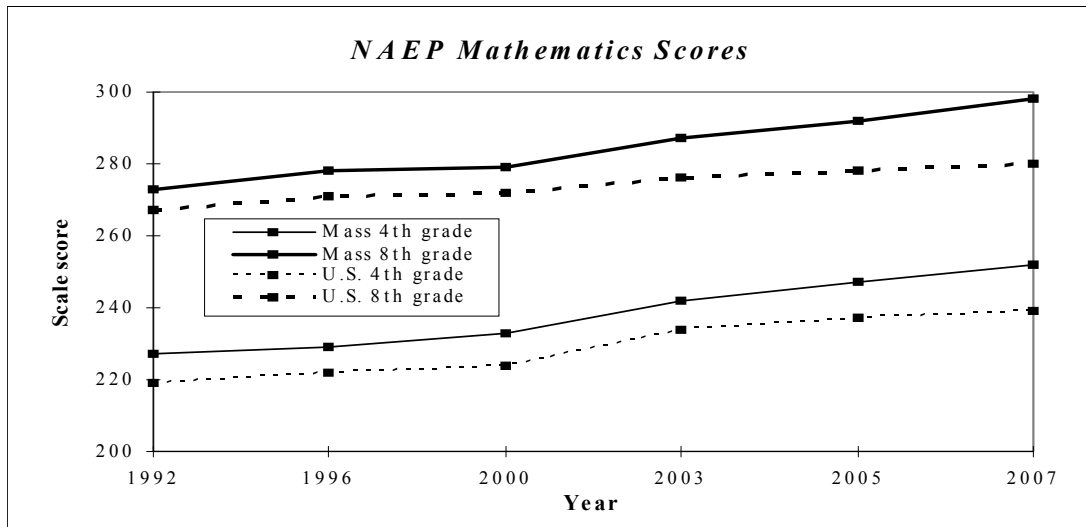
*(in current, unadjusted dollars)*

<i>Fiscal Year</i>	<i>Massachusetts</i>	<i>United States</i>	<i>Ratio (MA/U.S.)</i>
1981	\$2,735	\$2,307	1.19
1982	2,823	2,525	1.12
1983	3,072	2,736	1.12
1984	3,298	2,940	1.12
1985	3,653	3,222	1.13
1986	4,031	3,479	1.16
1987	4,491	3,682	1.22
1988	4,965	3,927	1.26
1989	5,485	4,307	1.27
1990	5,766	4,643	1.24
1991	5,881	4,902	1.20
1992	5,952	5,023	1.18
1993	6,141	5,160	1.19
1994	6,423	5,327	1.21
1995	6,783	5,529	1.23
1996	7,033	5,689	1.24
1997	7,331	5,923	1.24
1998	7,651	6,137	1.25
1999	8,106	6,458	1.26
2000	8,444	6,836	1.24
2001	9,038	7,284	1.24
2002	9,856	7,701	1.28
2003	10,223	8,019	1.27
2004	10,693	8,287	1.29
2005	11,267	8,701	1.29
2006	11,981	9,138	1.31

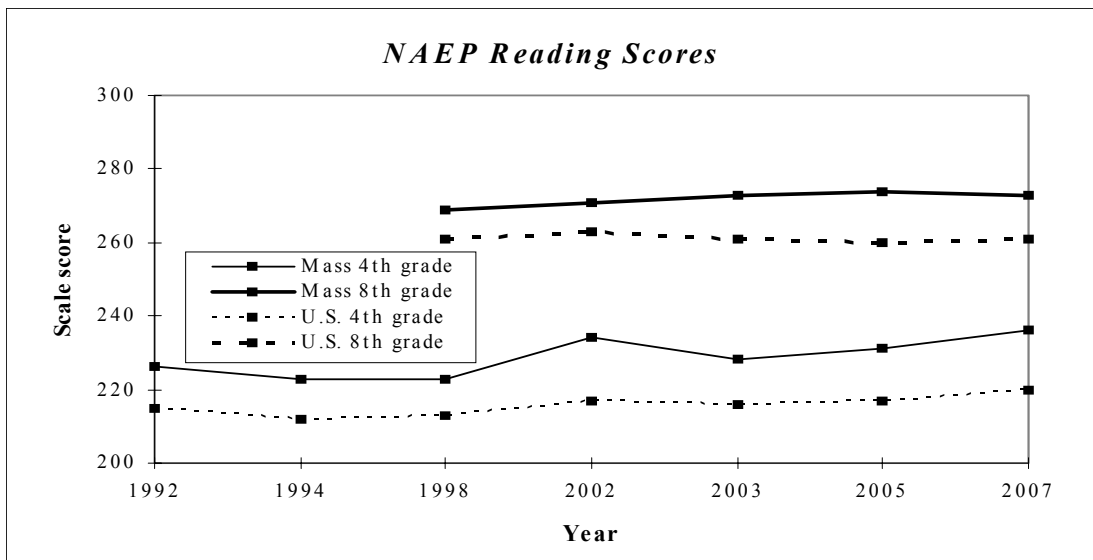
SOURCE: U.S. Census Bureau, <http://www.census.gov/govs/www/school.html>

The National Assessment of Educational Progress (NAEP), also known as "the Nation's Report Card," is the only nationally representative and continuing assessment of what America's students know and can do in various subject areas. Since 1969, assessments have been conducted periodically in reading, mathematics, science, writing, U.S. history, civics, geography, and the arts. Under the current structure, the Commissioner of Education Statistics, who heads the National Center for Education Statistics in the U.S. Department of Education, is responsible by law for carrying out the NAEP project.

Since 1990, NAEP assessments have also been conducted to give results for participating states. Those that choose to participate receive assessment results that report on the performance of students in that state. In its content, the state assessment is identical to the assessment conducted nationally. However, because the national NAEP samples were not, and are not currently designed to support the reporting of accurate and representative state-level results, separate representative samples of students are selected for each participating jurisdiction/state. The graphs on the following page compare the data available for Massachusetts to the nation.



SOURCE: National Center for Education Statistics



SOURCE: National Center for Education Statistics

# Sources List

Listed below are the the web sites of the original data sources used to compile this section (Exhibit A) of the Economic Due Diligence report. The sites are listed in section title order.

## **Population Characteristics**

**United States Department of Commerce, Bureau of the Census**

<http://www.census.gov>

## **Personal Income, Consumer Prices, and Poverty**

**U.S. Department of Commerce, Bureau of Economic Analysis**

<http://www.bea.gov/regional/index.htm>

**United States Department of Labor, Bureau of Labor Statistics**

<http://www.bls.gov>

**The Conference Board, Inc.**

<http://www.conference-board.org>

**Mass Insight Corporation**

<http://www.massinsight.com/index.asp>

**U.S. Department of Commerce, Bureau of the Census**

<http://www.census.gov>

## **Employment**

**Mass. Executive Office of Labor and Workforce Development, Division of Unemployment Assistance**

<http://lmi2.detma.org/Lmi/LMIDataProg.asp>

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

<http://www.bls.gov/data/home.htm>

## **Economic Base and Performance**

**U.S. Department of Commerce, Bureau of Economic Analysis**

<http://www.bea.gov/regional/index.htm>

**Fortune Magazine**

<http://www.fortune.com/fortune/>

## **Economic Base and Performance - Sector Detail (NAICS Basis)**

**U.S. Department of Commerce, Bureau of Economic Analysis**

<http://www.bea.gov/regional/index.htm>

**U.S. Census Bureau, Foreign Trade Division. Prepared by the World Institute for Strategic Economic Research (WISER)**

<http://www.wisertrade.org>

**Massport**

<http://www.massport.com>

**Airports Council International**

<http://www.aci.aero>

**Federal Aviation Administration**

[http://www.faa.gov/airports\\_airtraffic/airports/planning\\_capacity/passenger\\_allcargo\\_stats/](http://www.faa.gov/airports_airtraffic/airports/planning_capacity/passenger_allcargo_stats/)

**Army Corps of Engineers**

<http://www.iwr.usace.army.mil.ndc/>

**Federal Reserve Bank of Boston**

<http://www.bos.frb.org>

**United States Department of Commerce**

<http://www.census.gov>

**National Association of Realtors; Federal Reserve Bank of Boston**

<http://www.bos.frb.org/economic/needi/needidata.htm>

**U.S. Department of Defense**

<http://web1.whs.osd.mil/peidhome/geostats/geostat.htm>

**Massachusetts Office of Travel and Tourism**

<http://www.massvacation.com>

**U.S. Census Bureau, Governments Division**

<http://www.census.gov/govs/www/statetax.html>

<http://www.census.gov/govs/www/state.html>

**U.S. Department of Commerce, Bureau of the Census, 2003 Consolidated Federal Funds Report**

<http://www.census.gov/govs/www/cffr.html>

## **Human Resources and Infrastructure**

**U.S. Census Bureau, 2003 A.C.S. PCT35A-I**

<http://www.census.gov/acs/www/>

**New England Board of Higher Education**

<http://www.nebhe.org.connection.html>

**National Science Foundation**

<http://www.nsf.gov/statistics>

**United States Department of Education, National Center for Education Statistics**

<http://nces.ed.gov>

**Institute of International Education**

<http://www.iese.org>