# **ECONOMIC INFORMATION - Quarter 2, FY 2010**

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 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 March 12, 2010. Information in the text, tables, charts, and graphs was current at least as of December 31, 2009.** 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, it makes no independent verification of the information presented herein and therefore does not warrant its accuracy.

Statistical Overview		
Population (p. A-2)	Massachusetts	United States
Estimated Percent Change in Population, April 1, 2000–July 1, 2009	3.9%	9.1%
Personal Income, Consumer Prices, and Poverty (p. A-7)		
Per Capita Personal Income, 2008	\$51,254	\$40,208
Average Annual Pay, All Industries, 2008	\$56,746	\$45,563
Percent Change in CPI-U*, 2008-2009	-0.7%	-0.4%
Percent Change in CPI-U*, January 2009 - January 2010	2.8%	2.7%
Poverty Rate, 2006-2008 Average	11.5%	12.7%
Average Weekly Earnings, Manufacturing Production Workers: 2008	\$825.40	\$724.23
Percent Change from previous year	5.3%	1.8%
Employment (p. A-15)		
Percent Change in Nonfarm Payroll Employment (Not Seasonally Adjusted), November 2008-November 2009p	-2.5%	-3.4%
Unemployment Rate, 2008	5.3%	5.8%
Unemployment Rate, November, 2009 (seasonally adjusted)	8.8%	10.0%
Economic Base and Performance (p. A-20)		
Percent Change in Gross Domestic Product, 2007-2008	1.9%	0.7%
Percent Change in International Exports, 2008-2009	-16.7%	-18.7%
Percent Change in Housing Permits Authorized, 2007-2008	-35.6%	-35.3%
Human Resources (p. A-41)		
Expenditure Per Pupil K-12 Public, 2007	\$12,738	\$9,666
Percent of Adults with a Bachelor's Degree or higher, 2008	38.1%	27.7%
*NOTE: Percent changes in the Consumer Price Index for All Urban Consumers (CPI Boston-Worcester-Lawrence, MA-NH-ME-CT CMSA & the United States. p = pre		

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, with the exception of the recession of the early 1990s and a seventeen month stretch in 2006 and 2007, considerably lower unemployment rates in Massachusetts than in the United States since 1980. While the state unemployment rate dropped to 8.8 percent in November 2009, the state has seen a slower rise in unemployment than the nation as a whole.

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

#### **POPULATION CHARACTERISTICS**

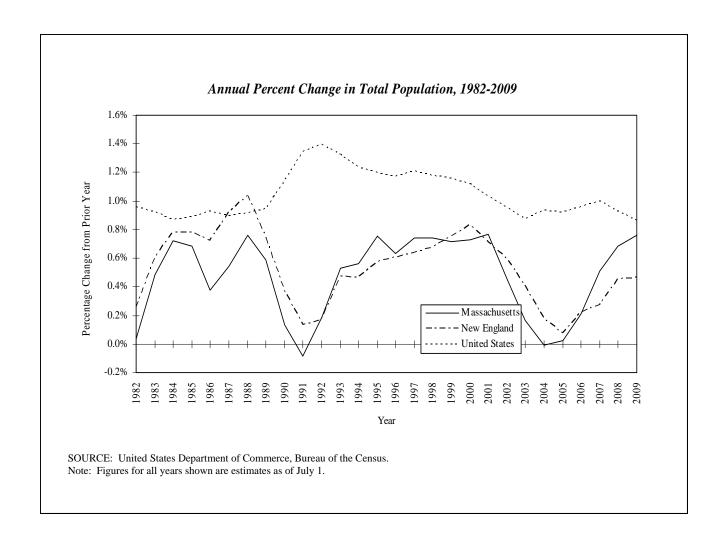
Massachusetts is a relatively slow growing but densely populated state with a comparatively large percentage of its residents living in metropolitan areas. The population density of Massachusetts was estimated as of July 1, 2009 to be 841.0 persons per square mile, as compared to 86.8 for the United 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 current county-based definition, 99.6 percent of the state's population lived in metropolitan areas.

The State's population is concentrated in its eastern portion. The city of Boston is the largest city in New England, with a 2008 population estimated at 609,023, or 9.4 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 2008 estimated at 4,522,858 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 2008 estimated at 1,884,659.

The second largest MSA in the state is the Worcester, MA MSA, with a 2008 population estimated at 783,806. The city of Worcester, situated approximately 40 miles west of Boston with a 2008 population estimated at 175,011, is the second largest city in New England as well as the second largest in the state. As a major medical and education 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, MA MSA, with a 2008 population estimated at 687,558. Springfield, the third largest city in the Commonwealth with a 2008 population estimated at 150,640, 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 at a similar rate to the population of New England and more slowly than the nation as a whole. According to the Census Bureau's latest revised estimates released in December 2009, the Massachusetts population has only grown by 3.9 percent since Census 2000; fourteen states have grown more slowly.



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

# Population, 1972-2008

(in thousands)

	Massachusetts		New Eng	land	United States		
		Percent		Percent		Percent	
Year	Total	Change	Total	Change	Total	Change	
1972	5,760	0.4%	12,082	0.7%	209,284	1.2%	
1973	5,781	0.4%	12,140	0.5%	211,357	1.0%	
1974	5,774	-0.1%	12,146	0.0%	213,342	0.9%	
1975	5,758	-0.3%	12,163	0.1%	215,465	1.0%	
1976	5,744	-0.2%	12,192	0.2%	217,563	1.0%	
1977	5,738	-0.1%	12,239	0.4%	219,760	1.0%	
1978	5,736	0.0%	12,283	0.4%	222,095	1.1%	
1979	5,738	0.0%	12,322	0.3%	224,567	1.1%	
1980	5,737	0.0%	12,348	0.2%	226,546	0.9%	
1981	5,769	0.6%	12,436	0.7%	229,466	1.3%	
1982	5,771	0.0%	12,468	0.3%	231,664	1.0%	
1983	5,799	0.5%	12,544	0.6%	233,792	0.9%	
1984	5,841	0.7%	12,642	0.8%	235,825	0.9%	
1985	5,881	0.7%	12,741	0.8%	237,924	0.9%	
1986	5,903	0.4%	12,833	0.7%	240,133	0.9%	
1987	5,935	0.5%	12,951	0.9%	242,289	0.9%	
1988	5,980	0.8%	13,085	1.0%	244,499	0.9%	
1989	6,015	0.6%	13,182	0.7%	246,819	0.9%	
1990	6,023	0.1%	13,230	0.4%	249,623	1.1%	
1991	6,018	-0.1%	13,248	0.1%	252,981	1.3%	
1992	6,029	0.2%	13,271	0.2%	256,514	1.4%	
1993	6,061	0.5%	13,334	0.5%	259,919	1.3%	
1994	6,095	0.6%	13,396	0.5%	263,126	1.2%	
1995	6,141	0.8%	13,473	0.6%	266,278	1.2%	
1996	6,180	0.6%	13,555	0.6%	269,394	1.2%	
1997	6,226	0.7%	13,642	0.6%	272,647	1.2%	
1998	6,272	0.7%	13,734	0.7%	275,854	1.2%	
1999	6,317	0.7%	13,838	0.8%	279,040	1.2%	
2000	6,363	0.7%	13,953	0.8%	282,172	1.1%	
2001	6,412	1.0%	14,052	0.9%	285,082	1.3%	
2002	6,441	0.5%	14,135	0.6%	287,804	1.0%	
2003	6,452	0.2%	14,192	0.4%	290,326	0.9%	
2004	6,451	0.0%	14,216	0.2%	293,046	0.9%	
2005	6,453	0.0%	14,227	0.1%	295,753	0.9%	
2006	6,466	0.2%	14,259	0.2%	298,593	1.0%	
2007	6,499	0.5%	14,298	0.3%	301,580	1.0%	
2008	6,544	0.7%	14,363	0.5%	304,375	0.9%	
2009	6,594	0.8%	14,430	0.5%	307,007	0.9%	

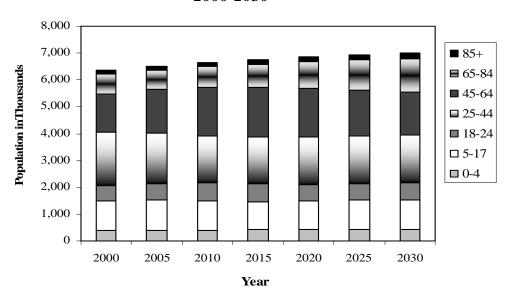
SOURCE: United States Department of Commerce, Bureau of the Census. 1980 figures are census counts as of April 1, 1980; figures for all other years shown are estimates as of July 1.

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)

									Median
Year	0-4	5-17	18-24	25-44	45-64	65-84	85+	AllAges	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

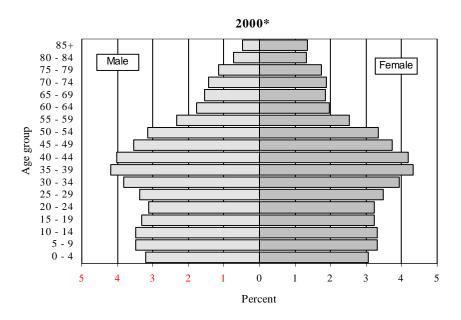
# Projected Massachusetts Population by Age Group 2000-2030



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.

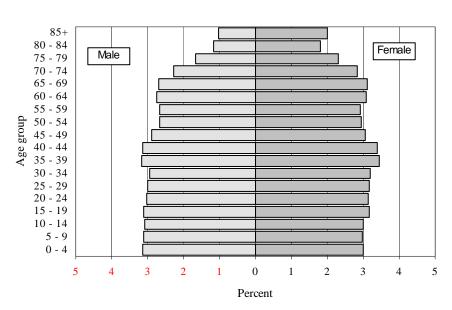
## Population Pyramids of Massachusetts

Percent of Total Population



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

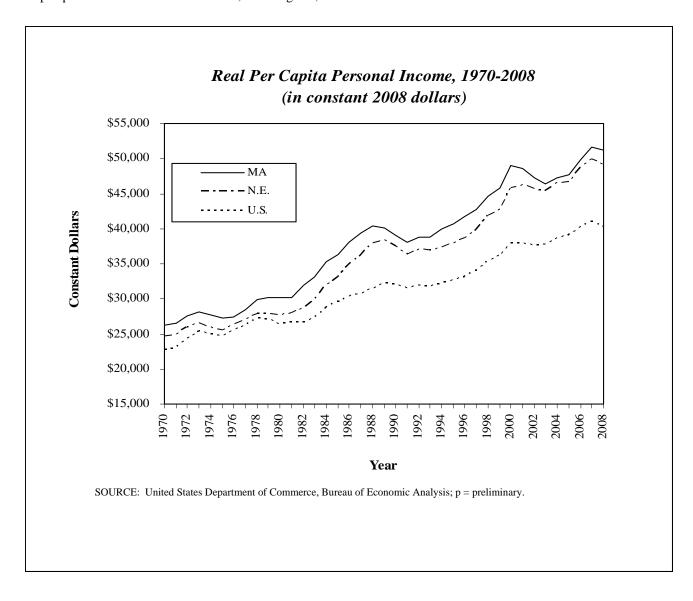




SOURCE: U.S. Census Bureau, Population Division, Interim State Population Projections, 2005.

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

**Personal Income.** 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 steeper declines in Massachusetts. However, real income levels in Massachusetts remained well above the national average. In 2004 and 2005, income growth was comparable in the state and the nation. In 2006 and 2007, income in the state grew faster than in the nation. In 2008, real income fell in both the state and the nation. 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 1970-2008.

# Per Capita Personal Income, 1970-2008

	Nominal Income (in current dollars)							cent Chang Real Income	
Year	MA	N.E.	U.S.	MA	N.E.	U.S.	MA	N.E.	U.S.
1970	4,483	4,445	4,085	26,248	24,666	22,668	9.1%	10.8%	11.0%
1971	4,752	4,680	4,342	26,504	24,879	23,083	1.0%	0.9%	1.8%
1972	5,109	5,029	4,717	27,517	25,903	24,296	3.8%	4.1%	5.3%
1973	5,547	5,481	5,231	28,199	26,578	25,366	2.5%	2.6%	4.4%
1974	6,016	5,958	5,707	27,656	26,020	24,924	-1.9%	-2.1%	-1.7%
1975	6,459	6,381	6,172	27,245	25,536	24,700	-1.5%	-1.9%	-0.9%
1976	6,998	6,959	6,754	27,452	26,332	25,556	0.8%	3.1%	3.5%
1977	7,620	7,593	7,405	28,423	26,977	26,309	3.5%	2.4%	2.9%
1978	8,430	8,413	8,245	29,882	27,781	27,227	5.1%	3.0%	3.5%
1979	9,385	9,392	9,146	30,177	27,853	27,123	1.0%	0.3%	-0.4%
1980	10,602	10,629	10,114	30,211	27,773	26,427	0.1%	-0.3%	-2.6%
1981	11,798	11,846	11,246	30,249	28,058	26,637	0.1%	1.0%	0.8%
1982	12,941	12,871	11,935	31,894	28,717	26,628	5.4%	2.3%	0.0%
1983	14,009	13,829	12,618	33,039	29,894	27,276	3.6%	4.1%	2.4%
1984	15,723	15,422	13,891	35,346	31,958	28,785	7.0%	6.9%	5.5%
1985	16,910	16,546	14,758	36,381	33,108	29,530	2.9%	3.6%	2.6%
1986	18,148	17,722	15,442	38,070	34,814	30,335	4.6%	5.2%	2.7%
1987	19,575	19,119	16,240	39,346	36,236	30,779	3.3%	4.1%	1.5%
1988	21,341	20,811	17,331	40,443	37,875	31,542	2.8%	4.5%	2.5%
1989	22,342	22,083	18,520	40,051	38,343	32,157	-1.0%	1.2%	1.9%
1990	23,043	22,712	19,477	39,047	37,414	32,085	-2.5%	-2.4%	-0.2%
1991	23,432	22,969	19,892	38,036	36,309	31,445	-2.6%	-3.0%	-2.0%
1992	24,538	24,172	20,854	38,866	37,094	32,002	2.2%	2.2%	1.8%
1993	25,176	24,752	21,346	38,755	36,880	31,805	-0.3%	-0.6%	-0.6%
1994	26,303	25,687	22,172	39,967	37,318	32,211	3.1%	1.2%	1.3%
1995	27,457	26,832	23,076	40,748	37,907	32,601	2.0%	1.6%	1.2%
1996	28,933	28,194	24,175	41,702	38,689	33,174	2.3%	2.1%	1.8%
1997	30,498	29,687	25,334	42,754	39,824	33,984	2.5%	2.9%	2.4%
1998	32,524	31,677	26,883	44,585	41,841	35,509	4.3%	5.1%	4.5%
1999	34,227	33,126	27,939	45,773	42,810	36,107	2.7%	2.3%	1.7%
2000	38,213	36,603	30,318	48,988	45,765	37,907	7.0%	6.9%	5.0%
2001	39,500	37,979	31,149	48,549	46,172	37,868	-0.9%	0.9%	-0.1%
2002	39,512	38,113	31,470	47,328	45,613	37,663	-2.5%	-1.2%	-0.5%
2003	40,161	38,788	32,284	46,359	45,387	37,776	-2.0%	-0.5%	0.3%
2004	42,123	40,842	33,899	47,325	46,551	38,637	2.1%	2.6%	2.3%
2005	43,897	42,391	35,447	47,745	46,733	39,078	0.9%	0.4%	1.1%
2006	47,330	45,652	37,728	49,933	48,755	40,292	4.6%	4.3%	3.1%
2007	49,885	48,027	39,430	51,631	49,871	40,944	3.4%	2.3%	1.6%
2008	51,254	49,146	40,208	51,254	49,146	40,208	-0.7%	-1.5%	-1.8%

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. Massachusetts has seen steady growth in average annual pay 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. Since 2001, average annual wages in the state have grown at a similar average annual rate to the nation, at 3.4 and 3.3 percent, respectively. The level of average annual pay in Massachusetts in 2008 was 24.5 percent higher than the national average: \$56,746 compared to \$45,563.

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 are recorded on a place-of-work basis, they are 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 1998 and 2000, Massachusetts shares of the New England and overall U.S. totals increased, but in the subsequent years the Massachusetts shares decreased slightly, before rising again in 2007 and 2008, reaching 50.2 percent and 2.9 percent respectively in 2008.

Annual Wage and Salary Disbursements, 1990-2008 (in millions of dollars)								
			1.4	[44				
Year	U.S.	N.E.	MA	IA as a pct. of N.E.				
1990	\$ 2,729,807	\$170,035	\$82,353	48.4%				
1991	\$ 2,802,016	\$169,101	\$81,605	48.3%				
1992	\$ 2,964,907	\$176,532	\$85,257	48.3%				
1993	\$ 3,069,735	\$181,878	\$88,236	48.5%				
1994	\$ 3,225,744	\$189,275	\$92,297	48.8%				
1995	\$ 3,413,758	\$200,510	\$98,274	49.0%				
1996	\$ 3,612,171	\$212,088	\$104,565	49.3%				
1997	\$ 3,872,441	\$228,515	\$112,601	49.3%				
1998	\$ 4,177,476	\$246,171	\$121,971	49.5%				
1999	\$ 4,456,833	\$264,389	\$132,683	50.2%				
2000	\$ 4,823,727	\$291,636	\$149,379	51.2%				
2001	\$ 4,948,357	\$299,079	\$151,715	50.7%				
2002	\$ 4,993,197	\$297,067	\$148,724	50.1%				
2003	\$ 5,133,724	\$303,347	\$150,509	49.6%				
2004	\$ 5,419,559	\$319,880	\$158,685	49.6%				
2005	\$ 5,694,792	\$330,876	\$163,474	49.4%				
2006	\$ 6,060,261	\$349,092	\$172,880	49.5%				
2007	\$ 6,400,720	\$370,097	\$184,477	49.8%				
2008	\$ 6,538,004	\$378,604	\$190,196	50.2%				

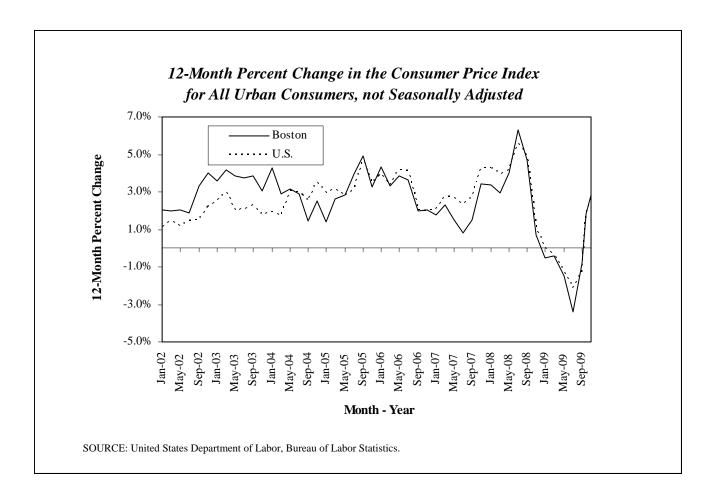
Consumer Prices. Higher income levels in Massachusetts relative to the rest of the United States are offset to some extent by the higher cost of living in Massachusetts. The following table presents consumer price trends for the Boston metropolitan area and the United States for the period between 1970 and 2008. 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 2009 the Boston metropolitan area and U.S. experienced their first monthly year over year declines in the CPI-U since 1953 and 1955, respectively. The latest available data for November 2009 show that the CPI-U for the Boston metropolitan area increased at a rate of 1.8 percent over November 2008, the same rate of increase as the U.S. index over the same period. While the U.S. index for 2009 declined 0.4 percent over 2008, November's increase was sustained with a 2.7 percent increase in December 2009. December and annual data for the Boston Metro area for 2009 are not yet available.

# Consumer Price Index for All Urban Consumers (CPI-U), 1970-2008

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

	Boston M	etro Area	United States			
Year	CPI- $U$	Pct.Change	CPI-U	Pct. Change		
1970	40.2		38.8			
1971	42.2	5.0%	40.5	4.4%		
1972	43.7	3.6%	41.8	3.2%		
1973	46.3	5.9%	44.4	6.2%		
1974	51.2	10.6%	49.3	11.0%		
1975	55.8	9.0%	53.8	9.1%		
1976	60.0	7.5%	56.9	5.8%		
1977	63.1	5.2%	60.6	6.5%		
1978	66.4	5.2%	65.2	7.6%		
1979	73.2	10.2%	72.6	11.3%		
1980	82.6	12.8%	82.4	13.5%		
1981	91.8	11.1%	90.9	10.3%		
1982	95.5	4.0%	96.5	6.2%		
1983	99.8	4.5%	99.6	3.2%		
1984	104.7	4.9%	103.9	4.3%		
1985	109.4	4.5%	107.6	3.6%		
1986	112.2	2.6%	109.6	1.9%		
1987	117.1	4.4%	113.6	3.6%		
1988	124.2	6.1%	118.3	4.1%		
1989	131.3	5.7%	124.0	4.8%		
1990	138.9	5.8%	130.7	5.4%		
1991	145.0	4.4%	136.2	4.2%		
1992	148.6	2.5%	140.3	3.0%		
1993	152.9	2.9%	144.5	3.0%		
1994	154.9	1.3%	148.2	2.6%		
1995	158.6	2.4%	152.4	2.8%		
1996	163.3	3.0%	156.9	3.0%		
1997	167.9	2.8%	160.5	2.3%		
1998	171.7	2.3%	163.0	1.6%		
1999	176.0	2.5%	166.6	2.2%		
2000	183.6	4.3%	172.2	3.4%		
2001	191.5	4.3%	177.1	2.8%		
2002	196.5	2.6%	179.9	1.6%		
2003	203.9	3.8%	184.0	2.3%		
2004	209.5	2.7%	188.9	2.7%		
2005	216.4	3.3%	195.3	3.4%		
2006	223.1	3.1%	201.6	3.2%		
2007	227.4	1.9%	207.3	2.8%		
2008	235.4	3.5%	215.3	3.8%		
2009	233.8	-0.7%	214.5	-0.4%		
Jan-09	230.8		211.1			
Jan-10	237.3	2.8%	216.7	2.7%		
oun IV	231.3	2.070	210.7	2.7/0		

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



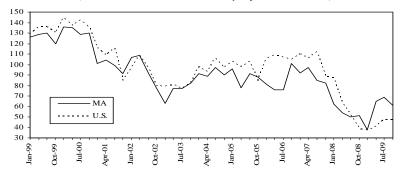
Consumer Confidence, Present Situation, and Future Expectations. These three measures offer multiple insights into consumer attitudes. The U.S. measures are compiled from a national monthly survey of 5,000 households and are published by The Conference Board, Inc. The survey for Massachusetts is conducted 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 for 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, followed by an all time low of 37.4 in January 2009. It rose to 54.5 in August 2009, but its rise is currently stalled, with a most recent score of 52.9 in December 2009. The Massachusetts index has been significantly higher than the U.S. index since both reached their lowest point in January 2009. The Mass Insight Corporation reported that the Massachusetts index rose substantially from 38.0 in January 2009, the lowest index since Mass Insight began tracking it in 1991, to 61.0 in October 2009. More recent data for Massachusetts were not available as of the close of data for this document. 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 - October 2009 (1985=100)

	Consumer Co	nfidence	Present S	Situation	Future Exp	ectations
	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
Apr-08	54.0	62.8	35.0	81.9	67.0	50.0
Jul-08	50.0	51.9	24.0	65.8	68.0	42.7
Oct-08	51.0	38.8	27.0	43.5	66.0	35.7
Jan-09	38.0	37.4	9.0	29.7	58.0	42.5
Apr-09	65.0	40.8	24.0	25.5	92.0	51.0
Jul-09	69.0	47.4	16.0	23.3	105.0	63.4
Oct-09	61.0	47.7	14.0	20.7	93.0	65.7

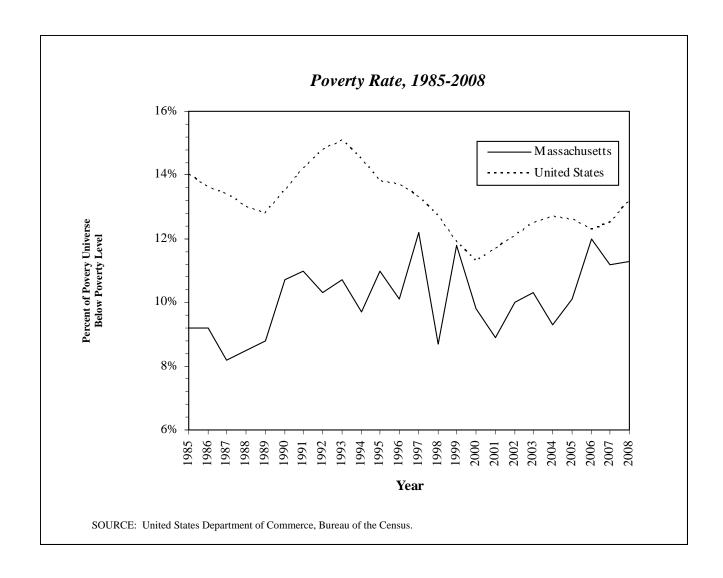
# Consumer Confidence: Massachusetts and the U.S., January 1999 – October 2009

(Massachusetts index not seasonally adjusted; 1985=100)



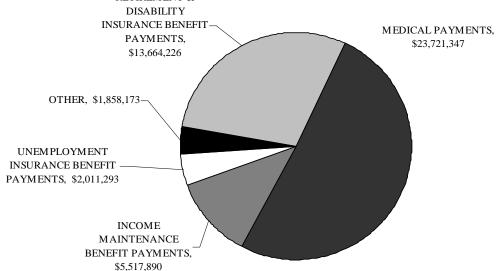
 $SOURCES: The\ Conference\ Board,\ Inc.\ (for\ U.S.\ measures,\ seasonally\ adjusted);\ Mass\ Insight$ 

**Poverty.** Through 2008, the Massachusetts poverty rate remained 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. The estimated poverty rate in Massachusetts increased from 11.2 percent in 2007 to 11.3 percent in 2008, while the poverty rate in the United States increased from 12.5 percent in 2007 to 13.2 percent in 2008. 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 - 2008) compared with the national average during similar periods. Poverty estimates for states are not as reliable as national estimates. 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. Poverty data for 2009 are not yet available.



*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 14.4 percent of total personal income in Massachusetts in 2008. 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 and businesses totaled 47.1 billion dollars for 2008. Just over fifty percent of government transfer payments to individuals were medical payments.

# Transfer Payments from Governments to Individuals in Massachusetts in 2008 (From Annual State Personal Income Estimates) (in thousands of current dollars) RETIREMENT & DISABILITY INSURANCE BENEFIT PAYMENTS, \$13 664 226



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

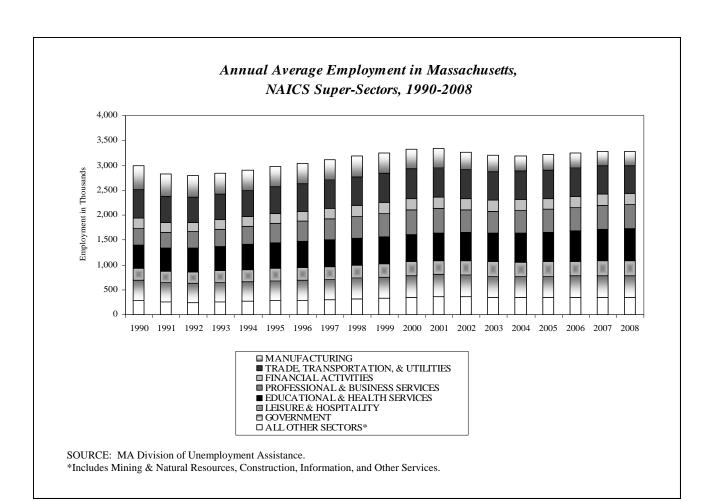
NOTE: The category "other" includes veterans' benefit payments, federal education and training assistance payments, and a small residual of miscellaneous other payments to individuals.

#### **EMPLOYMENT**

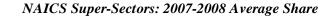
Employment by Industry. The chart on this page shows the annual level of non-agricultural payroll employment in Massachusetts on the North American Industry Classification System (NAICS) basis for the seven largest NAICS supersectors starting with 1990, the earliest year for which NAICS data are available. The chart on the following page compares the super-sector shares for the 2007-2008 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.

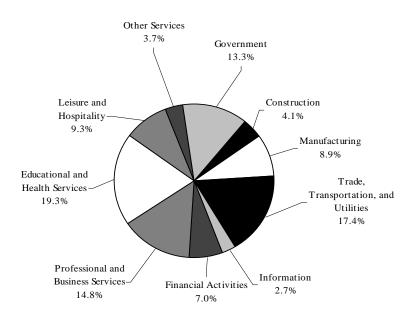
After significant declines in 2002 and 2003, total non-agricultural employment in Massachusetts eventually increased .5 percent in 2005 and continued to increase every year through 2008. In 2008, employment grew another .1 percent, but the state still had 54.5 thousand (1.6 percent) fewer jobs than in the peak year of 2001. The comparable growth rate for the nation in 2008 was 4.0 percent. The latest seasonally adjusted estimate (3.2 million for November 2009) is about 210 thousand below the peak month in 2001 (3.4 million in February 2001) and about 127 thousand below the 2008 peak in March (3.3 million).

After years of moderate but steady declines or near-zero growth in the late nineties and early 2000s, manufacturing employment experienced steep annual declines in 2002 (10.2 percent) and 2003 (7.0 percent) before returning to more moderate declines in 2004 (3.5 percent). The most recent declines for manufacturing employment returned to the steady declines prior to 2002, with a 1.6 percent decline in 2007 and a 3.0 percent decline in 2008. The seasonally adjusted estimates for the first 11 months of 2009 average 5.4 percent below the comparable estimates for 2008.

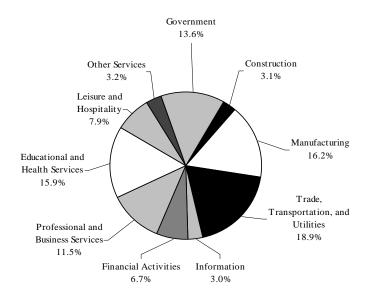


# Massachusetts Non-Farm Payroll Employment (NAICS Industry basis)





#### 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, 2009. Partners Healthcare Systems, Inc. replaces Tufts University from the June 2008 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, 2009

(listed alphabetically)

Bank of America, NA Partners Healthcare Systems, Inc.

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 Corporation

E.M.C. Corporation The Children's Hospital Corporation
General Hospital Corporation UMass Memorial Medical Center, Inc.

Harvard University
United Parcel Service, Inc.
Home Depot U.S.A., Inc.
Verizon New England, Inc.
Massachusetts CVS Pharmacy, LLC
Wal-Mart Associates, Inc.

Massachusetts Institute of Technology

SOURCE: Massachusetts Executive Office of Labor & Workforce Development, Division of Unemployment Assistance, Research Department 1-11-10.

NOTE: This alphabetic listing includes private employers reporting large numbers of jobs covered by the Massachusetts unemployment insurance program. The information is based on March 2009 employment for employers as registered for unemployment insurance. The list may not include those employers who do business in Massachusetts under multiple legal corporations and those who register each store, facility or franchisee as a separate employer.

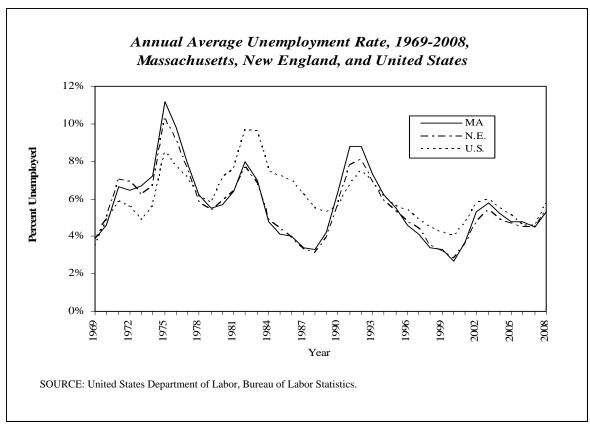
*Unemployment.* The unemployment rate in Massachusetts was consistently below the national average from mid-1995 through November 2005, with similar patterns of gradual improvement after the mid-2003 peak. The Massachusetts rate exceeded the U.S. rate for seventeen months starting in December 2005, but only three of those differences exceeded 0.2%. Since April 2007, the state rate has been at or below the comparable U.S. rate, seasonally adjusted. In October 2007, the Massachusetts rate was 4.4 percent, the lowest it had been since October 2001. By November 2009, the Massachusetts rate had decreased to 8.8 percent from 9.3 percent in September 2009. The tables and graphs on the following two pages compare the unemployment rate in the state with those in New England the U.S.

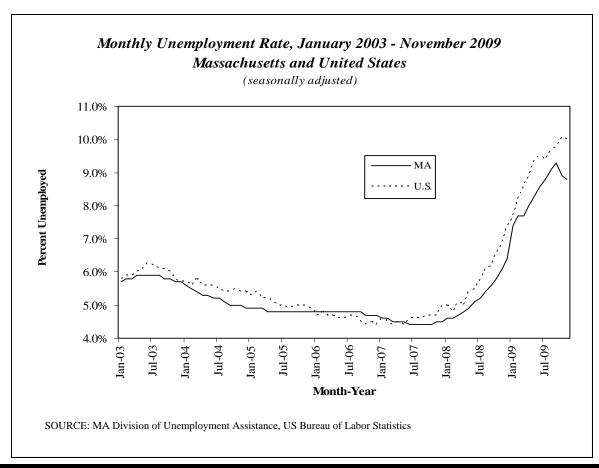
Annual Average Civilian Labor Force and Unemployment, 1969-2008

(in thousands)

	Civilian Labor Force		U	Unemployed			oloyment I	MA Rate as		
Year	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	2,885	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	104	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	3,381	7,476	147,401	177	366	8,149	5.2%	4.9%	5.5%	94.5%
2005	3,377	7,515	149,320	164	353	7,591	4.8%	4.7%	5.1%	94.1%
2006	3,408	7,598	151,428	163	343	7,001	4.8%	4.5%	4.6%	104.3%
2007	3,416	7,633	153,124	153	340	7,078	4.5%	4.5%	4.6%	97.8%
2008	3,424	7,669	154,287	180	415	8,924	5.3%	5.4%	5.8%	91.4%

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





*Unemployment Insurance Trust Fund.* The unemployment insurance system is a federal-state cooperative programestablished 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 November 30, 2009, the Massachusetts Unemployment Trust Fund had a balance of \$413.7 million, of which the private contributory account portion was \$304.2 million, compared to a August 31, 2009 balance of \$632.4 million with a private contributory portion of \$518.8 million. The December 2009 Unemployment Insurance Trust Fund report indicated that private contributory account reserves were estimated to be \$521 million at the end of 2013 according to the Moody's based outlook.

#### **ECONOMIC BASE AND PERFORMANCE—STATE OVERVIEW**

Comparing BEA GDP for the U.S., the region and Massachusetts. The U.S. Bureau of Economic Analysis (BEA) defines Gross Domestic Product by State (GDP) as "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)."

The BEA provides national, quarterly and annual state GDP estimates by industry. *Mass*Benchmarks releases quarterly estimates of Massachusetts economic activity. This is reported in the following section. While we do not have access to many of the components that BEA uses to calculate State GDP in advance of its release, we provide an overview of our state's components when they are available. Additionally, we provide state economic indexes and industrial sector data that is released more frequently and in some cases, are among the components used to calculate State GDP.

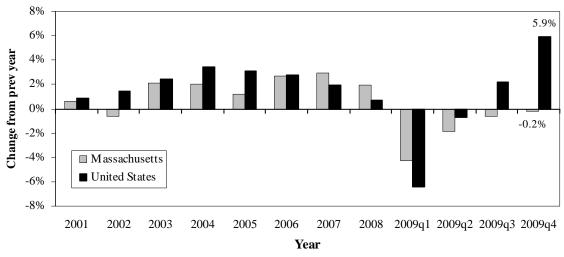
# State Gross Domestic Product - Annual Change

(millions of chained 2000 dollars)

	Mass	sachusetts	New	England	Unite	ed States
Year	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	\$286,541	2.0%	\$597,196	3.0%	\$10,580,223	3.5%
2005	\$289,869	1.2%	\$605,048	1.3%	\$10,912,180	3.1%
2006	\$297,634	2.7%	\$620,103	2.5%	\$11,218,785	2.8%
2007	\$306,503	3.0%	\$634,166	2.3%	\$11,439,232	2.0%
2008	\$312,476	1.9%	\$640,735	1.0%	\$11,523,637	0.7%

## Real GDP - Annual and Latest Quarterly Change

Seasonally Adjusted Rates

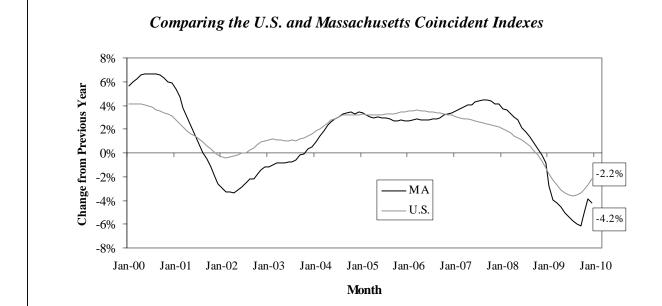


SOURCE: U.S. Bureau of Economic Analysis, www.MassBenchmarks.org.

#### **ECONOMIC BASE AND PERFORMANCE—ECONOMIC INDICATORS**

State Coincident Indexes. To track more recent changes in the state and national economies, we use the Federal Reserve Bank of Philadelphia's Coincident Indexes. It "produces a monthly coincident index for each of the 50 states. The indexes are released a few days after the Bureau of Labor Statistics (BLS) releases the employment data for the states. The coincident indexes combine four state-level indicators to summarize current economic conditions in a single statistic. The four state-level variables in each coincident index are nonfarm payroll employment, average hours worked in manufacturing, the unemployment rate, and wage and salary disbursements deflated by the consumer price index (U.S. city average). The trend for each state's index is set to the trend of its gross domestic product (GDP), so long-term growth in the state's index matches long-term growth in its GDP."

The graph below indicates the state and national index change from twelve months prior. Since the beginning of the decade, Massachusetts' peaks have been higher and it troughs deeper than the U.S. Beginning in September 2009, Massachusetts began what looks like the "v-shaped" recovery we are hoping for. The bottom chart compares Massachusetts' index to its New England neighbors.



Comparing the U.S. and New England States Coincident Indexes

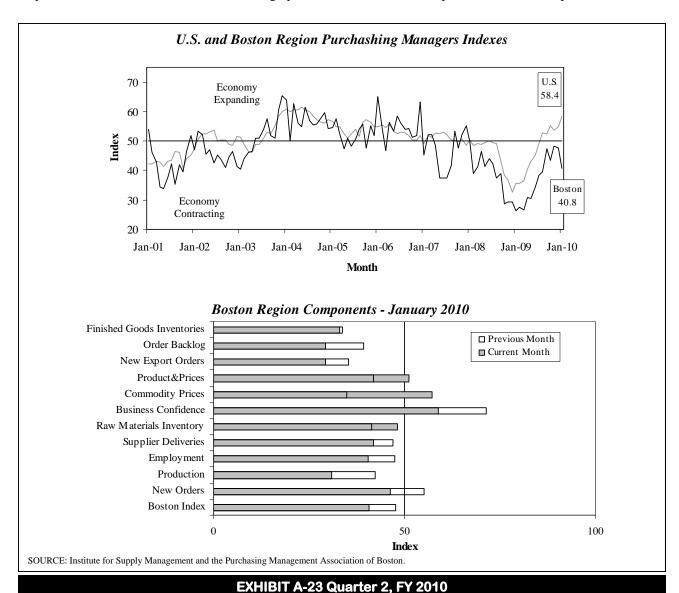
	December	1-Month	3-Month	12-Month
Area	2009	Change	Change	Change
U.S.	154.8	0.1%	0.3%	-2.2%
Massachusetts	167.7	-0.8%	1.0%	-4.2%
Connecticut	152.2	-0.5%	-0.9%	-4.6%
Maine	139.0	-0.3%	-0.7%	-4.5%
New Hampshire	192.1	-0.1%	0.2%	-2.7%
Rhode Island	150.0	-0.4%	-0.3%	-4.7%
Vermont	155.5	-0.5%	-0.5%	-2.6%

SOURCE: Federal Reserve Bank of Philadelphia. Note: Indexes are set to 100 at July 1992.

Institute for Supply Management Purchasing Manager Indexes (PMI). These indexes are compiled using survey data from purchasing and supply executives and are used as a leading business indicator. While national index is based on a survey of manufacturers and the Boston region's on a survey of "companies representing industries as diverse as the banking and financial services, pharmaceuticals and biotechnology, software development and communication, medical products and equipment, computers, chemicals, consumer products, education and the public sector. "

Index readings above 50 indicate the economy is generally expanding. Readings below 50 indicate the economy is generally contracting although a reading above 42 for a period of time indicates the economy is generally expanding. Components of the national index include new orders, production, employment, suppliers deliveries, inventories, customer's inventories, prices, backlog of orders, exports and imports. The Boston region's components are slightly different; new orders, production, employment, supplier deliveries, raw monthly materials inventory, business confidence, commodity prices, product prices, new export orders, order backlog and finished goods inventories. These components show which segments of the business supply chain are expanding or contracting.

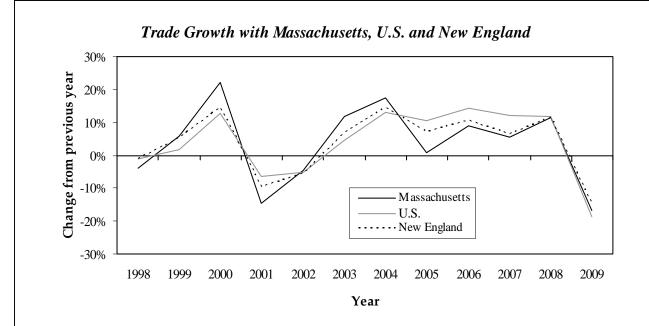
The January 2010 national index indicated that the manufacturing sector was expanding and for the ninth consecutive month. Its January components were all expanding except for two; inventories and customer's inventories. The Boston region's January index indicated that overall business conditions were contracting and have been since January 2008 although the index had been above 42 for the previous four months, which the index authors state would indicate an expansion. Three of the Boston region's components were above 50; business confidence, commodity prices and product prices. All others were below 50. The Boston region's new orders and supplier deliveries had been expanding from September to December 2009. See the second graph below for the current and previous month's component values.



## **ECONOMIC BASE AND PERFORMANCE—INTERNATIONAL TRADE**

*Exports.* Massachusetts ranked 14th in the United States, and first in New England, with \$23.6 billion in international exports in 2009. This represents a 16.7 percent decrease from the previous year's export value from the Commonwealth, while national exports decreased by 18.7 percent. Total exports from New England also shrank 14.9 percent.

The United Kingdom replaced Canada, our top trading partner in 2008, as our top trading partner in 2009.



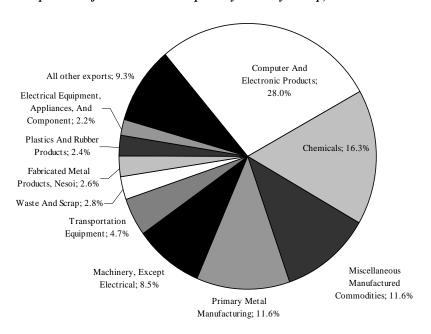
#### Massachusetts Top Export Partners

(top ten export destinations ranked by value of 2009 exports, in millions)

Country	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
United Kingdom	\$1,933	\$1,851	\$1,579	\$1,430	\$1,508	\$1,628	\$1,972	\$2,306	\$3,504	\$4,049
Canada	\$3,589	\$2,844	\$2,711	\$2,646	\$2,917	\$2,927	\$3,166	\$3,480	\$3,827	\$3,058
Netherlands	\$1,265	\$820	\$1,054	\$1,759	\$2,505	\$3,000	\$2,696	\$2,215	\$2,675	\$1,983
Germany	\$1,366	\$1,401	\$1,198	\$1,599	\$2,516	\$2,151	\$2,515	\$2,370	\$2,489	\$1,748
Japan	\$2,184	\$1,964	\$1,598	\$1,635	\$1,814	\$1,893	\$2,287	\$2,166	\$2,427	\$1,714
China (Mainland)	\$502	\$425	\$385	\$572	\$894	\$884	\$1,291	\$1,375	\$1,563	\$1,372
Mexico	\$701	\$571	\$569	\$702	\$755	\$782	\$824	\$996	\$1,166	\$901
France	\$1,024	\$865	\$921	\$619	\$861	\$803	\$715	\$887	\$944	\$671
Korea, Republic Of	\$747	\$491	\$471	\$558	\$650	\$803	\$875	\$821	\$666	\$625
China (Taiwan)	\$1,053	\$513	\$512	\$528	\$951	\$798	\$749	\$1,018	\$709	\$619
All other countries	\$6,150	\$5,745	\$5,706	\$6,604	\$ 6,528	\$6,385	\$6,965	\$7,717	\$8,321	\$6,834
Total Exports	\$20,514	\$17,490	\$16,705	\$18,652	\$21,899	\$22,052	\$24,057	\$25,351	\$28,293	\$23,575
Change from Prior Year	22.1%	-14.7%	-4.5%	11.7%	17.4%	0.7%	9.1%	5.4%	11.6%	-16.7%

SOURCE: U.S. Census Bureau, Foreign Trade Division. Data prepared by the World Institute for Strategic Economic Research (WISER).

#### Composition of Massachusetts Exports by Industry Group, 2009



SOURCE: U.S. Census Bureau, Foreign Trade Division. Data prepared by the World Institute for Strategic Economic Research (WISER).

#### Value of International Shipments from Massachusetts

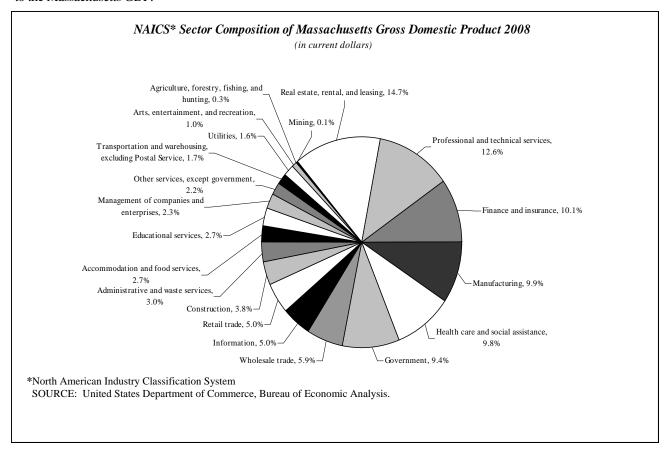
(top ten industry groups ranked by value of latest exports, in millions)

Major Industry Group	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Computer And Electronic Products	\$10,215	\$8,122	\$7,022	\$7,688	\$7,526	\$7,019	\$7,522	\$7,716	\$7,832	\$6,599
Chemicals	\$1,600	\$1,534	\$2,259	\$3,216	\$4,910	\$5,285	\$5,189	\$5,258	\$5,481	\$3,849
Miscellaneous Manufactured Commodities	\$1,053	\$1,213	\$1,211	\$1,571	\$1,930	\$2,114	\$2,240	\$2,319	\$3,118	\$2,738
Primary Metal Manufacturing	\$358	\$272	\$247	\$425	\$423	\$405	\$647	\$982	\$2,052	\$2,736
Machinery, Except Electrical	\$2,545	\$2,044	\$1,788	\$1,672	\$2,447	\$2,311	\$2,739	\$2,881	\$2,614	\$2,007
Transportation Equipment	\$659	\$449	\$346	\$379	\$454	\$477	\$548	\$926	\$1,186	\$1,100
Waste And Scrap	\$106	\$146	\$190	\$184	\$326	\$330	\$597	\$849	\$1,373	\$666
Fabricated Metal Products, Nesoi	\$649	\$569	\$691	\$534	\$621	\$664	\$679	\$615	\$721	\$605
Plastics And Rubber Products	\$374	\$400	\$407	\$375	\$404	\$470	\$530	\$582	\$586	\$563
Electrical Equipment, Appliances, And Component	\$834	\$691	\$649	\$592	\$752	\$810	\$872	\$769	\$624	\$514
Total Exports, Top Massachusetts Industries	\$18,393	\$15,438	\$14,809	\$16,636	\$19,792	\$19,884	\$21,563	\$22,898	\$25,588	\$21,375
All other exports	\$2,121	\$2,052	\$1,896	\$2,016	\$2,107	\$2,168	\$2,494	\$2,453	\$2,704	\$2,199

SOURCE: U.S. Census Bureau, Foreign Trade Division. Data prepared by the World Institute for Strategic Economic Research (WISER).

# **ECONOMIC BASE AND PERFORMANCE—INDUSTRY 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, finance and insurance, and manufacturing, contributed 47.3 percent of the GDP in 2008. The following pie chart displays the latest sector contributions to the Massachusetts GDP.



*GDP Subsectors*. When measured in chained 2000 dollars, the change in Massachusetts total GDP was 10.8 percent between 2001 and 2007. Between 2001 and 2007 (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.

# ${\it Industry \ Subsectors \ with \ a \ Substantial \ Growth \ or \ Reduction}$

(chained 2000 dollars)

NAICS* Industry Subsector	Percent change 2001-2007
Computer and electronic product manufacturing	121.5%
Information and data processing services	109.3%
Chemical manufacturing	84.4%
Machinery manufacturing	57.7%
Paper manufacturing	-13.7%
Plastics and rubber products manufacturing	-16.7%
Miscellaneous manufacturing	-20.5%
Fabricated metal product manufacturing	-26.6%

<sup>\*</sup>North American Industry Classification System.

## Gross Domestic Product by Industry in Massachusetts

(as a percent of total GDP chained 2000 dollars)

NAICS* Industry Sector	2000	2001	2002	2003	2004	2005	2006	2007	2008
Total Gross Domestic Product by State	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Private industries	91.5%	91.5%	91.4%	91.9%	92.1%	92.1%	92.3%	92.5%	92.6%
Agriculture, forestry, fishing, and hunting	0.2%	0.2%	0.2%	0.2%	0.3%	0.3%	0.3%	0.3%	0.3%
Mining	0.0%	0.1%	0.1%	0.1%	0.1%	0.0%	0.0%	0.1%	0.0%
Utilities	1.3%	1.1%	1.1%	1.2%	1.3%	1.2%	1.2%	1.2%	1.2%
Construction	4.1%	4.3%	4.1%	3.8%	3.6%	3.4%	3.1%	2.6%	2.5%
Manufacturing	13.5%	12.7%	12.9%	13.6%	12.8%	12.7%	13.6%	14.4%	13.7%
Wholesale trade	5.9%	6.4%	6.3%	6.4%	6.3%	6.0%	6.0%	5.7%	5.6%
Retail trade	5.3%	5.7%	5.8%	5.9%	5.9%	6.3%	6.1%	6.0%	5.9%
Transportation and warehousing, excluding Postal Service	1.9%	1.8%	1.8%	1.7%	1.8%	1.8%	1.7%	1.7%	1.6%
Information	4.7%	5.0%	5.0%	5.0%	5.4%	6.0%	5.8%	6.0%	6.3%
Finance and insurance	10.9%	10.8%	10.8%	10.9%	11.2%	10.4%	10.5%	10.6%	10.3%
Real estate, rental, and leasing	12.9%	13.6%	13.6%	13.5%	13.4%	13.2%	13.3%	13.4%	13.4%
Professional and technical services	10.4%	10.3%	10.0%	9.8%	10.6%	11.1%	11.4%	11.9%	12.9%
Management of companies and enterprises	2.7%	2.2%	2.1%	2.1%	1.8%	1.8%	1.8%	1.7%	1.7%
Administrative and waste services	3.0%	2.7%	2.6%	2.7%	2.6%	2.7%	2.7%	2.7%	2.7%
Educational services	2.2%	2.1%	2.2%	2.1%	2.1%	2.0%	2.0%	2.0%	2.0%
Health care and social assistance	7.4%	7.4%	7.7%	7.9%	7.9%	8.2%	8.3%	8.3%	8.5%
Arts, entertainment, and recreation	0.7%	0.7%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%
Accommodation and food services	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%
Other services, except government	2.0%	2.0%	2.0%	2.0%	1.9%	1.9%	1.8%	1.8%	1.8%
Government	8.5%	8.5%	8.6%	8.2%	8.0%	8.0%	7.8%	7.6%	7.6%

# Rank of Industry Contribution to GDP in Massachusetts

(millions of chained 2000 dollars)

NAICS* Industry Sector	2000	2001	2002	2003	2004	2005	2006	2007	2008
Total Gross Domestic Product by State									
Private industries									
Agriculture, forestry, fishing, and hunting	19	19	19	19	19	19	19	19	19
Mining	20	20	20	20	20	20	20	20	20
Utilities	17	17	17	17	17	17	17	17	17
Construction	10	10	10	10	10	10	10	11	11
Manufacturing	1	2	2	1	2	2	1	1	1
Wholesale trade	7	7	7	7	7	8	8	9	9
Retail trade	8	8	8	8	8	7	7	8	8
Transportation and warehousing, excluding Postal Service	16	16	16	16	15	16	16	15	16
Information	9	9	9	9	9	9	9	7	7
Finance and insurance	3	3	3	3	3	4	4	4	4
Real estate, rental, and leasing	2	1	1	2	1	1	2	2	2
Professional and technical services	4	4	4	4	4	3	3	3	3
Management of companies and enterprises	12	13	14	14	16	15	15	16	15
Administrative and waste services	11	11	11	11	11	11	11	10	10
Educational services	14	14	13	13	13	13	13	13	13
Health care and social assistance	6	6	6	6	6	5	5	5	5
Arts, entertainment, and recreation	18	18	18	18	18	18	18	18	18
Accommodation and food services	13	12	12	12	12	12	12	12	12
Other services, except government	15	15	15	15	14	14	14	14	14
Government	5	5	5	5	5	6	6	6	6

<sup>\*</sup> North American Industry Classification System SOURCE: United States Department of Commerce, Bureau of Economic Analysis.

**Industry Sector Analysis.** The following section contains a summary for each of the twenty major NAICS sectors. The data series start in 2001, the last time the state experienced a downturn, commonly referred to as "The Telecom Bubble." We report the latest quarterly data at an annual rate where available. This may skew sectors that experience seasonal trends, such as construction. Graphs include data value labels for the latest annual and quarterly annualized points.

Not all datasets are reported for all of the major NAICS sectors. From the Massachusetts Department of Workforce and Labor Development's Employment and Wages (ES-202) data series and available for every sector are; the number of establishments, average monthly employment, total annual wages and average weekly wage for the establishments with employees. The data is reported annually and quarterly for employees in the private, federal government, state government, and local government sectors.

The next graph, nonemployer businesses and receipts, uses the U.S. Census Nonemployer Statistics series and is available for every sector except 55-Management of Companies and Enterprises and 92-Public Administration. Some sectors also lack subsector (we used 4-digit NAICS) detail. This is annual data, with a two year reporting lag, for business that do not have paid employees and are subject to federal income tax. Census reports that "Nonemployers account for a majority of all business establishments, but average less than 4 percent of all sales or receipts." These can be second or part-time businesses and not the owners primary source of income.

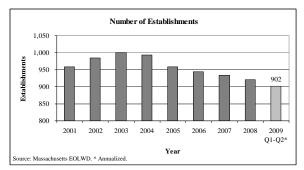
The sixth is State Gross Domestic Product, an annual series from the U.S. Bureau of Economic Analysis's Regional Economic Accounts. State GDP is inflation adjusted to 2000 while the new U.S. GDP is inflation adjusted to 2005. U.S. GDP is available quarterly.

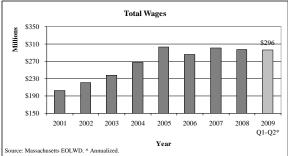
Graphs seven and eight, foreign exports from the U.S. Census Bureau's Foreign Trade Division and WISERTrade, are available for four industries on a quarterly basis. Total state exports are available on a monthly basis. Graph seven, sector exports, is a time series which includes the latest year-to-date data annualized. Graph eight lists the top ten export destinations for this industry sector by dollar value.

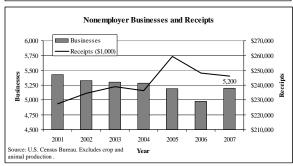
Each sector analysis has a summary at the bottom of each page. The summary provides (when available):

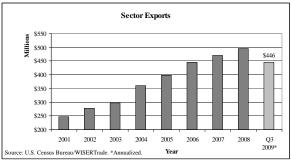
- 1. GDP contribution to state total: This sector's GDP divided by the state's total GDP.
- 2. GDP rank: This sector's GDP rank versus all state sectors.
- 3. Nonemployer to employer establishment ratio: The number of nonemployer establishments divided by the number of establishments with employers. In general, a ratio greater than one means there are more small businesses. A number less than one means there are more large business.
- 4. Establishments with employees: The subsector with the largest number of establishments who have employees.
- 5. Nonemployer establishments: The subsector with the largest number of establishments who do not have employees.
- 6. Employees: The subsector with the largest number of employees, at establishments with employees.
- 7. Annual wages: The subsector with the largest total annual wages, at establishments with employees.
- 8. Average weekly wage: The subsector with the largest average weekly wage, at establishments with employ-
- 9. Annual receipts at nonemployer establishments: The subsector with the most receipts, at establishments who do not have employees.
- 10. Most valuable export: The subsector export with the highest dollar value.
- 11. Large employers in Massachusetts: A few of the state's largest employers in this sector, from ReferenceUSA.com.

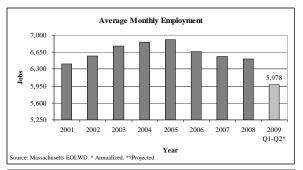
NAICS 11 - Agriculture, Forestry, Fishing & Hunting. The Agriculture, Forestry, Fishing and Hunting sector comprises establishments primarily engaged in growing crops, raising animals, harvesting timber, and harvesting fish and other animals from a farm, ranch, or their natural habitate.

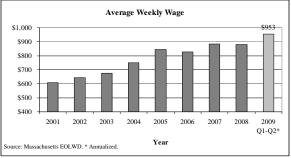


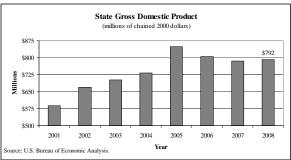


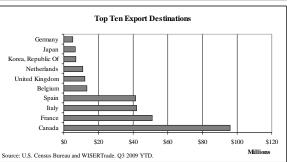












#### Summary.

GDP contribution to state total: 0.3%

GDP rank: 19 of 20

Nonemployer to employer establishment ratio: 5.6 (2007)

 $\textbf{Sector leaders.} \ \text{Industry subsectors with the majority of establishments, employees, payroll and receipts.}$ 

Establishments with employees: **Fishing** Nonemployer establishments: **Fishing** (2007)

 ${\bf Employees:} \textbf{Fishing and greenhouse and nursery production}$ 

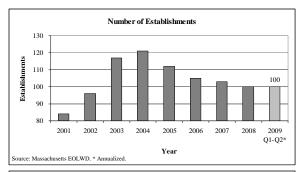
Annual wages: **Fishing**Average weekly wage: **Fishing** 

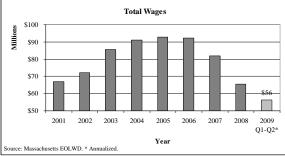
Annual receipts at nonemployer establishments: Fishing (2007)

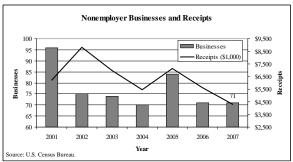
Most valuable export: Fish, fresh, chilled or other frozen marine products

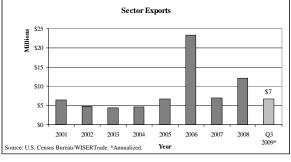
Large employers in Massachusetts: Idlywilde Farm, Brown and Regan LLC, Bartlett's Ocean View Farm.

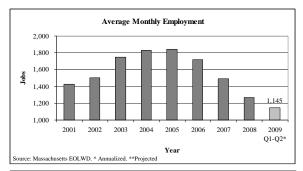
NAICS 21 – Mining. The Mining, Quarrying, and Oil and Gas Extraction sector comprises establishments that extract naturally occurring mineral solids, such as coal and ores; liquid minerals, such as crude petroleum; and gases, such as natural gas. The term mining is used in the broad sense to include quarrying, well operations, beneficiating (e.g., crushing, screening, washing, and flotation), and other preparation customarily performed at the mine site, or as a part of mining activity.

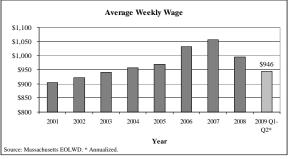


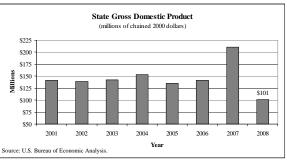


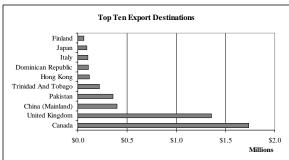












#### Summary.

GDP contribution to state total: 0.03%

GDP rank: 20 of 20

Nonemployer to employer establishment ratio: 0.7 (2007)

Sector leaders. Industry subsectors with the majority of establishments, employees, payroll and receipts.

Establishments with employees: Nonmetallic mineral mining and quarrying

Nonemployer establishments: Nonmetallic mineral mining and quarrying (2007)

Employees: Nonmetallic mineral mining and quarrying

Annual wages: Nonmetallic mineral mining and quarrying

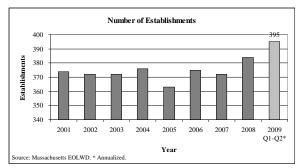
Average weekly wage: Support activities for mining

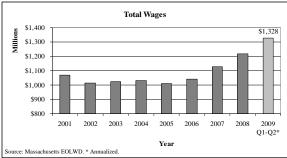
Annual receipts at nonemployer establishments: Nonmetallic mineral mining and quarrying (2007)

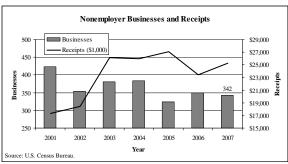
Most valuable export: Minerals and ores

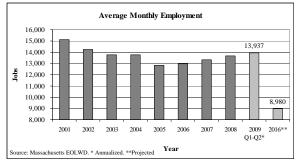
Large employers in Massachusetts: GulfOil Ltd., Specialty Minerals, S. M. Larusso and Sons and P. J. Keating.

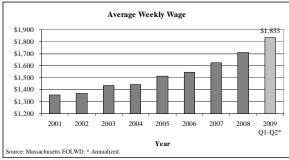
NAICS 22 – Utilities. The Utilities sector comprises establishments engaged in the provision of the following utility services: electric power, natural gas, steam supply, water supply, and sewage removal. See Appendix page 4 for electricity prices, supply and capacity by source.

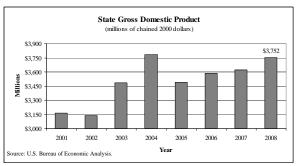












Summary.

GDP contribution to state total: 1.2%

GDP rank: 17 of 20

Nonemployer to employer establishment ratio: 0.9 (2007)

Sector leaders. Industry subsectors with the majority of establishments, employees, payroll and receipts.

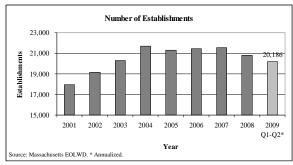
Establishments with employees: Water, sewage and other systems

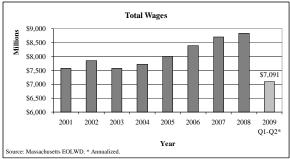
Nonemployer establishments: Subsector detail N/A Employees: **Power generation and supply** Annual wages: **Power generation and supply** Average weekly wage: **Power generation and supply** 

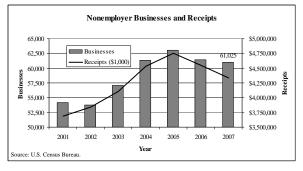
Annual receipts at nonemployer establishments: Subsector detail N/A

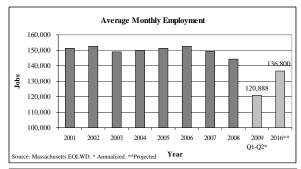
Large employers in Massachusetts: Bay State Gas CO, Mass Water Resources Authority, and National Grid USA.

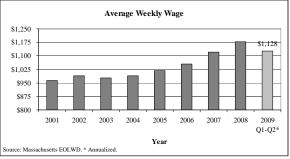
NAICS 23 – Construction. The construction sector comprises establishments primarily engaged in the construction of buildings or engineering projects (e.g., highways and utility systems). Establishments primarily engaged in the preparation of sites for new construction and establishments primarily engaged in subdividing land for sale as building sites also are included in this sector. See Appendix pages 1-3 for housing permits, housing sales and housing sale prices.

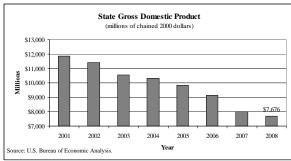












Summary.

GDP contribution to state total: 2.5%

GDP rank: 11 of 20

Nonemployer to employer establishment ratio: 2.8 (2007)

Sector leaders. Industry subsectors with the majority of establishments, employees, payroll and receipts.

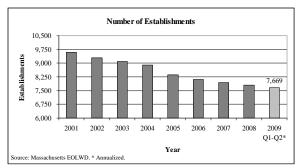
Establishments with employees: Printing and related support activities Nonemployer establishments: Building finishing contractors (2007)

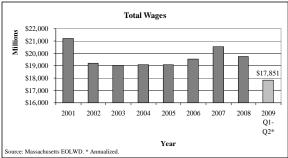
Employees: Building equipment contractors
Annual wages: Building equipment contractors
Average weekly wage: Utility system construction

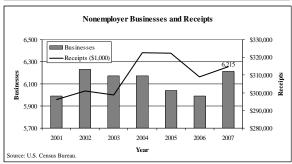
 $Annual\ receipts\ at\ nonemployer\ establishments:\ \textbf{Residential\ building\ construction}\ (2007)$ 

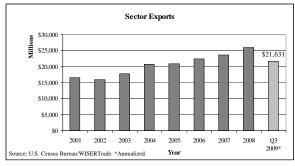
Large employers in Massachusetts: Shaw Group Inc., Suffolk Construction Company and R.H. White Company.

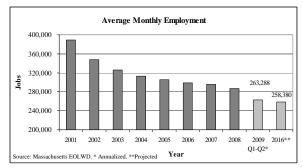
NAICS 31-33 – Manufacturing. The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

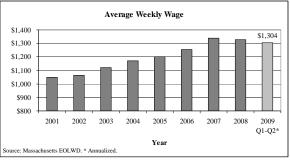


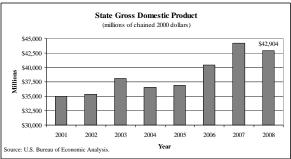


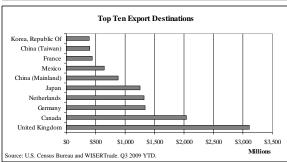












#### Summary.

GDP contribution to state total: 13.7%

GDP rank: 1 of 20

Nonemployer to employer establishment ratio: 0.8 (2007)

Sector leaders. Industry subsectors with the majority of establishments, employees, payroll and receipts.

Establishments with employees: Printing and related support activities Nonemployer establishments: Other miscellaneous manufacturing (2007)

Employees: Electronic instrument

Annual wages: Electronic instrument

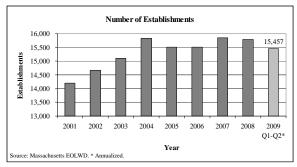
Average weekly wage: Computers and peripheral equipment

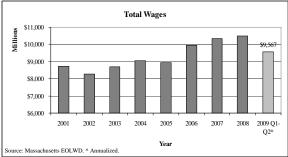
Annual receipts at nonemployer establishments: Agricultural chemical mfg. (2007)

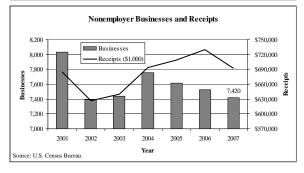
Most valuable export: Computers and electronic products and chemicals

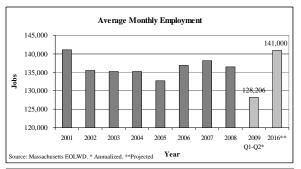
Large employers in Massachusetts: EMC Corporation, Yankee Candle and Wyeth Pharmaceuticals.

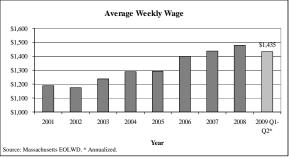
**NAICS 42 - Wholesale Trade.** The sector comprises establishments engaged in wholesaling merchandise, generally without transformation, and rendering services incidental to the sale of merchandise. The merchandise described in this sector includes the outputs of agriculture, mining, manufacturing, and certain information industries, such as publishing. The wholesaling process is an intermediate step in the distribution of merchandise.

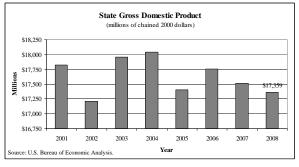












#### Summary.

GDP contribution to state total: 5.6%

GDP rank: 9 of 20

Nonemployer to employer establishment ratio: 0.5 (2007)

 $\textbf{Sector leaders.} \ \textbf{Industry subsectors with the majority of establishments, employees, payroll and receipts.}$ 

Establishments with employees: Electronic markets and agents/brokers

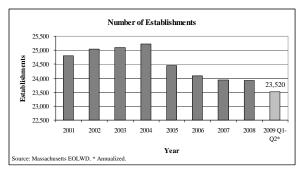
Nonemployer establishments: Miscellaneous durable goods merchant wholesalers (2007)

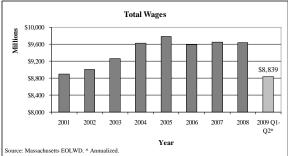
Employees: Electronic markets and agents/brokers
Annual wages: Electronic markets and agents/brokers
Average weekly wage: Druggists' goods merchant wholesalers

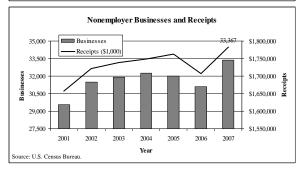
Annual receipts at nonemployer establishments: Miscellaneous durable goods merchant wholesalers (2007)

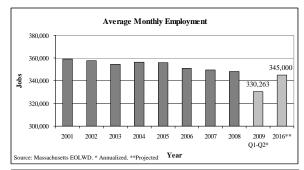
Large employers in Massachusetts: Vertex Pharmaceuticals, Teradyne and C&S Wholesalers.

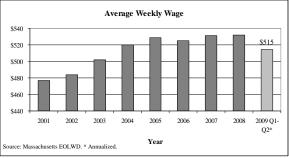
**NAICS** 44-45 - **Retail Trade**. The Retail Trade sector comprises establishments engaged in retailing merchandise, generally without transformation, and rendering services incidental to the sale of merchandise. The retailing process is the final step in the distribution of merchandise; retailers are, therefore, organized to sell merchandise in small quantities to the general public. This sector comprises two main types of retailers: store and nonstore retailers.

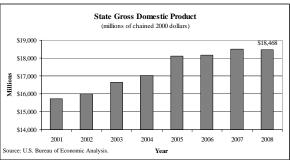












Summary.

GDP contribution to state total: 5.9%

GDP rank: 8 of 20

Nonemployer to employer establishment ratio: 1.4 (2007)

 $\textbf{Sector leaders.} \ \textbf{Industry subsectors with the majority of establishments, employees, payroll and receipts.}$ 

Establishments with employees: Grocery stores

Nonemployer establishments: Direct selling establishments (2007)

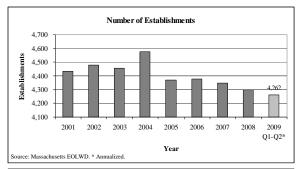
Employees: **Grocery stores**Annual wages: **Grocery stores** 

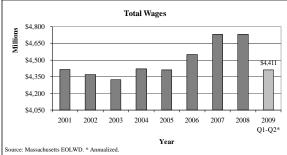
Average weekly wage: Automobile dealers

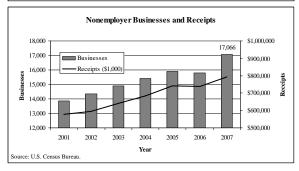
 $Annual\ receipts\ at\ nonemployer\ establishments:\ \textbf{Direct\ selling\ establishments}\ (\textbf{2007})$ 

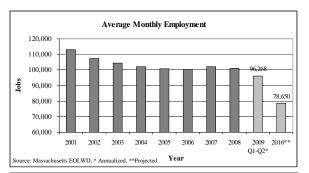
Large employers in Massachusetts: Walmart, CVS, Walgreen's, Wholefoods, Shaw's, Stop and Shop, TJX Co.

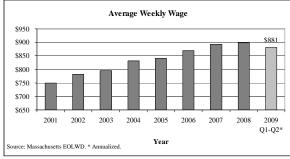
**NAICS 48-49** - **Transportation and Warehousing.** The Transportation and Warehousing sector includes industries providing transportation of passengers and cargo, warehousing and storage for goods, scenic and sightseeing transportation, and support activities related to modes of transportation. Establishments in these industries use transportation equipment or transportation related facilities as a productive asset. The type of equipment depends on the mode of transportation. The modes of transportation are air, rail, water, road, and pipeline. See Appendix page 5 and 6 for more information regarding transportation and warehousing.

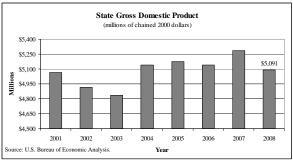












#### Summary.

GDP contribution to state total:1.6%

GDP rank:16th

Nonemployer to employer establishment ratio: 3.9 (2007)

Sector leaders. Industry subsectors with the majority of establishments, employees, payroll and receipts.

Establishments with employees: General freight trucking

Nonemployer establishments: Taxi and limousine service (2007)

Employees: Couriers

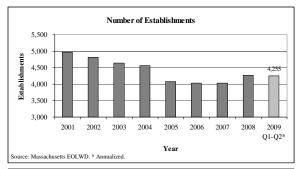
Annual wages: General freight trucking

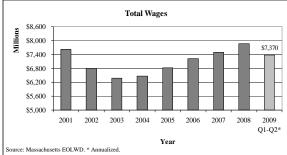
Average weekly wage: Pipeline transportation of natural gas

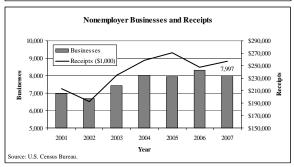
Annual receipts at nonemployer establishments: General freight trucking (2007)

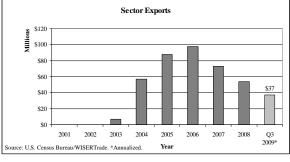
Large employers in Massachusetts: U.S. Post Office, MassPort, UPS and the Maine Central Railroad.

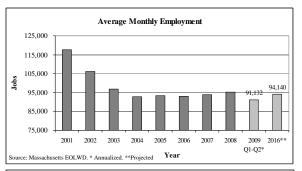
NAICS 51 – Information. The Information sector comprises establishments engaged in the following processes: (a) producing and distributing information and cultural products, (b) providing the means to transmit or distribute these products as well as data or communications, and (c) processing data.

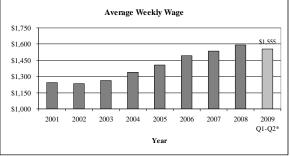


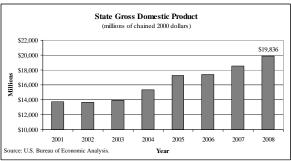


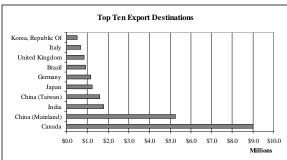












#### Summary.

GDP contribution to state total: 6.3%

GDP rank: 7 of 20

Nonemployer to employer establishment ratio: 2.0 (2007)

Sector leaders. Industry subsectors with the majority of establishments, employees, payroll and receipts.

Establishments with employees: Newspaper, book, & directory publishers

Nonemployer establishments: Other information services (2007)

Employees: Software publishers

Annual wages: Software publishers

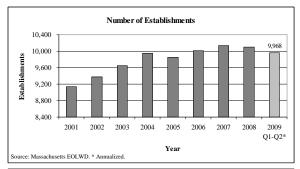
Average weekly wage: Software publishers

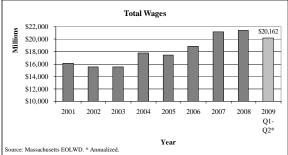
Annual receipts at nonemployer establishments: Other information services (2007)

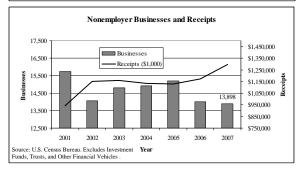
Most valuable export: Prepackaged software

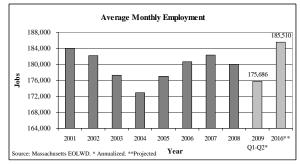
Large employers in Massachusetts: Boston Globe, Christian Science Monitor, Houghton Mifflin Harcourt and Thompson Research.

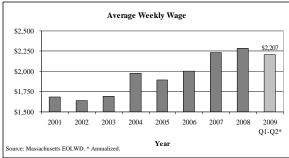
**NAICS** 52 - Finance and Insurance. The Finance and Insurance sector comprises establishments primarily engaged in financial transactions (transactions involving the creation, liquidation, or change in ownership of financial assets) and/or in facilitating financial transactions.

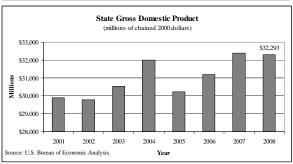












Summary.

GDP contribution to state total: 10.3%

GDP rank: 4 of 20

Nonemployer to employer establishment ratio: 1.4 (2007)

 $\textbf{Sector leaders.} \ \textbf{Industry subsectors with the majority of establishments, employees, payroll and receipts.}$ 

Establishments with employees: Insurance agencies, brokerages & support

Nonemployer establishments: Agencies, brokerages, and other insurance related activities (2007)

Employees: Depository credit intermediation

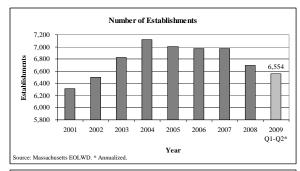
Annual wages: Other financial investment activities

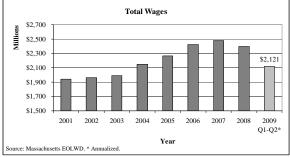
Average weekly wage: Other investment pools and funds

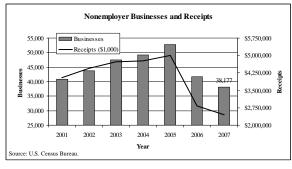
Annual receipts at nonemployer establishments: Other financial investment activities (2007)

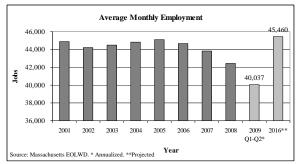
Large employers in Massachusetts: Deutsche Bank, Fidelity Investments Life Ins., John Hancock Life Ins. and Liberty Mutual Group.

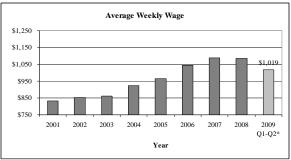
NAICS 53 - Real Estate and Rental and Leasing. The Real Estate and Rental and Leasing sector comprises establishments primarily engaged in renting, leasing, or otherwise allowing the use of tangible or intangible assets, and establishments providing related services. The major portion of this sector comprises establishments that rent, lease, or otherwise allow the use of their own assets by others. The assets may be tangible, as is the case of real estate and equipment, or intangible, as is the case with patents and trademarks.

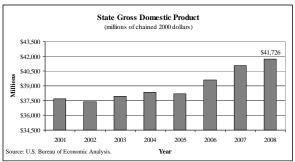












#### Summary.

GDP contribution to state total: 13.4%

GDP rank: 2 of 20

Nonemployer to employer establishment ratio: 5.5 (2007)

Sector leaders. Industry subsectors with the majority of establishments, employees, payroll and receipts.

Establishments with employees: Offices of real estate agents & brokers
Nonemployer establishments: Offices of real estate agents and brokers (2007)

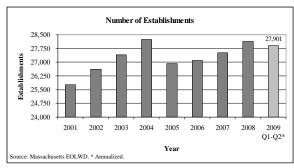
Employees: Activities related to real estate Annual wages: Activities related to real estate

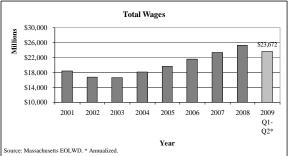
Average weekly wage: Lessors, nonfinancial intangible assets

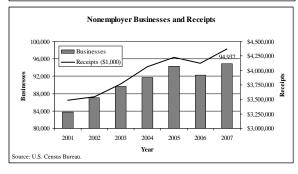
Annual receipts at nonemployer establishments: Lessors of real estate (2007)

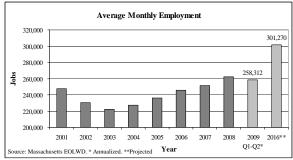
Large employers in Massachusetts: John Hancock Life Ins., Liberty Mutual Group, Mass Mutual Financial Group.

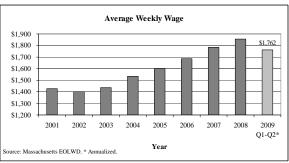
NAICS 54 - Professional and Technical Services. The sector comprises establishments that specialize in performing professional, scientific, and technical activities for others. These activities require a high degree of expertise and training. The establishments in this sector specialize according to expertise and provide these services to clients in a variety of industries and, in some cases, to households. Activities performed include: legal advice and representation; accounting, bookkeeping, and payroll services; architectural, engineering, and specialized design services; computer services; consulting services; research services; advertising services; photographic services; translation and interpretation services; veterinary services; and other professional, scientific, and technical services.

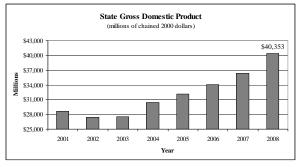












#### Summary.

GDP contribution to state total: 12.9%

GDP rank: 3 of 20

Nonemployer to employer establishment ratio: 3.4 (2007)

Sector leaders. Industry subsectors with the majority of establishments, employees, payroll and receipts.

Establishments with employees: Computer systems design and related services

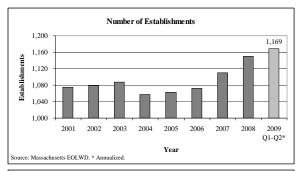
Nonemployer establishments: Other professional, scientific, and technical services (2007)

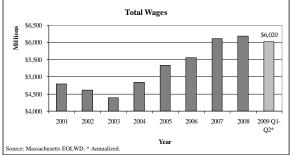
Employees: Computer systems design and related services
Annual wages: Computer systems design and related services

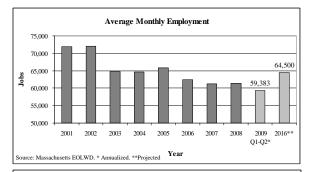
Average weekly wage: Computer systems design and related services

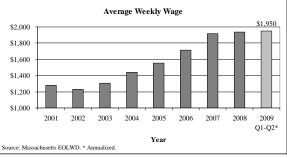
Annual receipts at nonemployer establishments: Management, scientific, and technical consulting services (2007) Large employers in Massachusetts: Massachusetts Institute of Technology, Alcatel-Lucent, Ropes and Gray LLP.

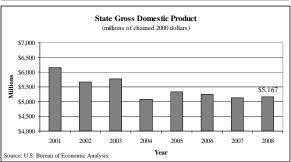
NAICS 55 - Management of Companies and Enterprises. The Management of Companies and Enterprises sector comprises (1) establishments that hold the securities of (or other equity interests in) companies and enterprises for the purpose of owning a controlling interest or influencing management decisions or (2) establishments (except government establishments) that administer, oversee, and manage establishments of the company or enterprise and that normally undertake the strategic or organizational planning and decision making role of the company or enterprise. Establishments that administer, oversee, and manage may hold the securities of the company or enterprise.











#### State nonemployer and export data is not available for this sector.

Summary.

GDP contribution to state total: 1.7%

GDP rank: 15 of 20

Nonemployer to employer establishment ratio: N/A

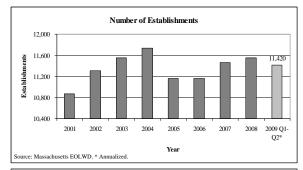
 $\textbf{Sector leaders.} \ \textbf{Industry subsectors with the majority of establishments, employees, payroll and receipts.}$ 

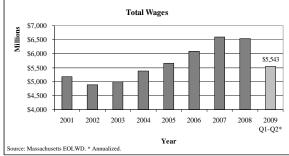
Establishments with employees: Subsector detail N/A

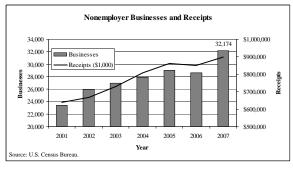
Nonemployer establishments: N/A Employees: Subsector detail N/A Annual wages: Subsector detail N/A Average weekly wage: Subsector detail N/A Annual receipts at nonemployer establishments: N/A

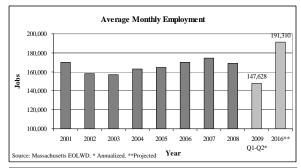
Large employers in Massachusetts: State Street Corp and Boston Private Financial Holdings.

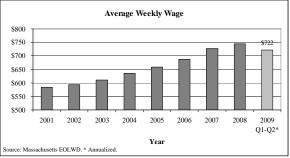
**NAICS** 56 - Administrative and Waste Services. This sector comprises establishments performing routine support activities for the day-to-day operations of other organizations. The establishments in this sector specialize in one or more of these support activities and provide these services to clients in a variety of industries and, in some cases, to households. Activities performed include: office administration, hiring and placing of personnel, document preparation and similar clerical services, solicitation, collection, security and surveillance services, cleaning, and waste disposal services.

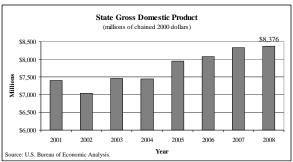












Summary.

GDP contribution to state total: 2.7%

GDP rank: 10 of 20

Nonemployer to employer establishment ratio: 2.8 (2007)

Sector leaders. Industry subsectors with the majority of establishments, employees, payroll and receipts.

Establishments with employees: Services to buildings and dwellings Nonemployer establishments: Services to buildings and dwellings (2007)

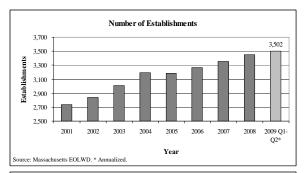
Employees: **Employment services**Annual wages: **Employment services** 

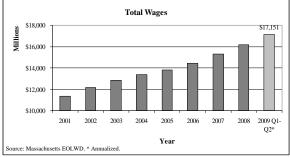
Average weekly wage: Office administrative services

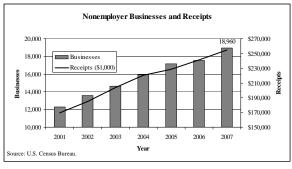
Annual receipts at nonemployer establishments: Services to buildings and dwellings (2007)

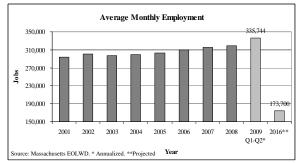
Large employers in Massachusetts: Technical Futures, ABM Janitorial Services and American Cleaning Co.

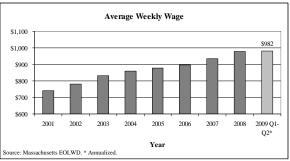
NAICS 61 - Educational Services. The Educational Services sector comprises establishments that provide instruction and training in a wide variety of subjects. This instruction and training is provided by specialized establishments, such as schools, colleges, universities, and training centers. These establishments may be privately owned and operated for profit or not for profit, or they may be publicly owned and operated. They may also offer food and/or accommodation services to their students.

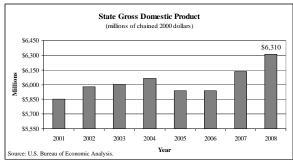












Summary.

GDP contribution to state total: 2.0%

GDP rank: 13 of 20

Nonemployer to employer establishment ratio: 5.7 (2007)

 $\textbf{Sector leaders.} \ \textbf{Industry subsectors with the majority of establishments, employees, payroll and receipts.}$ 

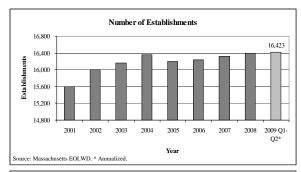
Establishments with employees: Other schools and instruction

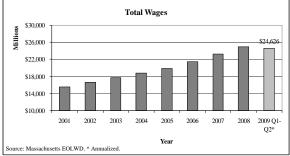
Nonemployer establishments: Subsector detail N/A Employees: **Elementary and secondary schools** Annual wages: **Elementary and secondary schools** Average weekly wage: **Colleges and universities** 

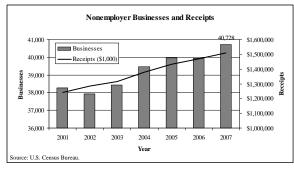
Annual receipts at nonemployer establishments: Subsector detail N/A

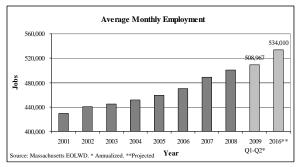
Large employers in Massachusetts: Boston University, Harvard University, MIT, University of Massachusetts-Amherst.

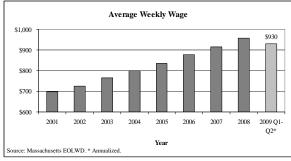
NAICS 62 - Health Care and Social Assistance. The Health Care and Social Assistance sector comprises establishments providing health care and social assistance for individuals. The sector includes both health care and social assistance because it is sometimes difficult to distinguish between the boundaries of these two activities.

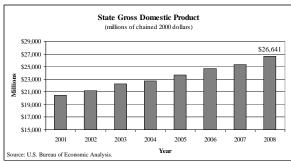












#### Summary.

GDP contribution to state total: 8.5%

GDP rank: 5 of 20

Nonemployer to employer establishment ratio: 2.5 (2007)

 $\textbf{Sector leaders.} \ \textbf{Industry subsectors with the majority of establishments, employees, payroll and receipts.}$ 

Establishments with employees: Offices of physicians

Nonemployer establishments: Offices of other health practitioners (2007)

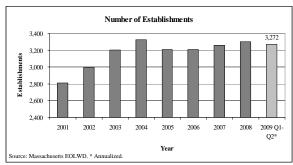
Employees: General medical and surgical hospitals Annual wages: General medical and surgical hospitals

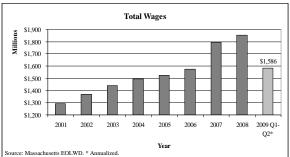
Average weekly wage: Offices of physicians

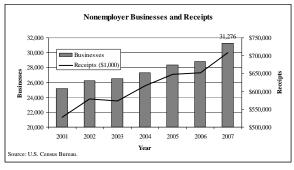
Annual receipts at nonemployer establishments: Offices of other health practitioners (2007)

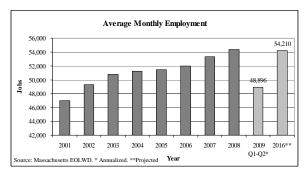
Large employers in Massachusetts: Massachusetts General Hospital and Brigham and Women's Hospital.

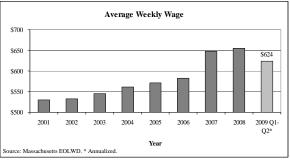
NAICS 71 - Arts, Entertainment, and Recreation. This sector includes a wide range of establishments that operate facilities or provide services to meet varied cultural, entertainment, and recreational interests of their patrons. It comprises establishments that are involved in producing, promoting, or participating in live performances, events, or exhibits intended for public viewing; establishments that preserve and exhibit objects and sites of historical, cultural, or educational interest; and establishments that operate facilities or provide services that enable patrons to participate in recreational activities or pursue amusement, hobby, and leisure-time interests. See Appendix page 5 for travel and tourism information.

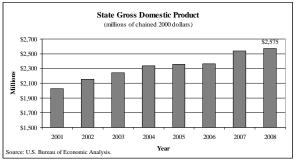












State export data is not available for this sector.

#### Summary.

GDP contribution to state total: 0.8%

GDP rank: 18 of 20

Nonemployer to employer establishment ratio: 9.6 (2007)

Sector leaders. Industry subsectors with the majority of establishments, employees, payroll and receipts.

Establishments with employees: Other amusement & recreation industries

 $Nonemployer\ establishments:\ \textbf{Independent\ artists,\ writers,\ and\ performers\ (2007)}$ 

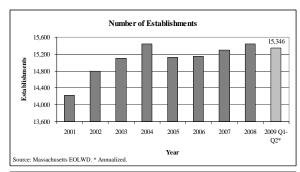
Employees: Other amusement & recreation industries Annual wages: Other amusement & recreation industries

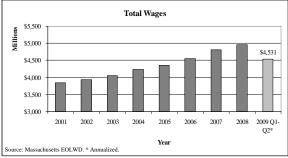
Average weekly wage: Spectator sports

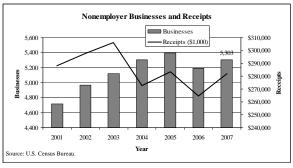
Annual receipts at nonemployer establishments: Independent artists, writers, and performers (2007)

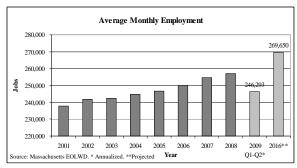
Large employers in Massachusetts: Boston Red Sox, Delaware North Companies and Museum of Fine Arts.

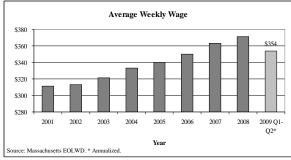
**NAICS 72 - Accommodation and Food Services.** The Accommodation and Food Services sector comprises establishments providing customers with lodging and/or preparing meals, snacks, and beverages for immediate consumption. The sector includes both accommodation and food services establishments because the two activities are often combined at the same establishment.

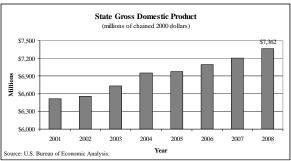












Summary.

GDP contribution to state total: 2.4%

GDP rank: 12 of 20

Nonemployer to employer establishment ratio: 0.3 (2007)

 $\textbf{Sector leaders.} \ \textbf{Industry subsectors with the majority of establishments, employees, payroll and receipts.}$ 

Establishments with employees: Limited-service eating places Nonemployer establishments: Special food services (2007)

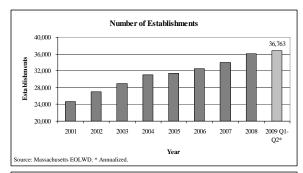
Employees: Full-service restaurants
Annual wages: Full-service restaurants

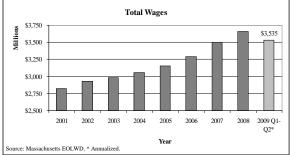
Average weekly wage: Traveler accommodation

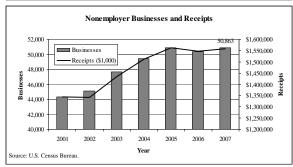
 $Annual\ receipts\ at\ nonemployer\ establishments: \textbf{Limited-service\ eating\ places}\ (\textbf{2007})$ 

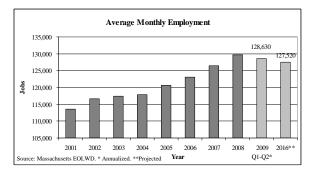
Large employers in Massachusetts: Eurest Dining Services, Canyon Ranch, Four Seasons Boston, Sheraton Boston and Westin-Copley Place.

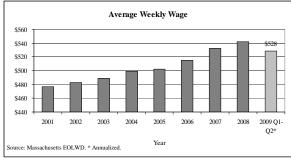
NAICS 81 - Other Services, Ex. Public Admin. The Other Services (except Public Administration) sector comprises establishments engaged in providing services not specifically provided for elsewhere in the classification system. Establishments in this sector are primarily engaged in activities, such as equipment and machinery repairing, promoting or administering religious activities, grant making, advocacy, and providing dry cleaning and laundry services, personal care services, death care services, pet care services, photofinishing services, temporary parking services, and dating services.

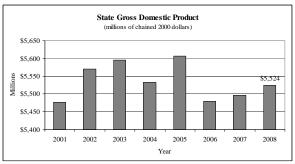












Summary.

GDP contribution to state total: 1.8%

GDP rank: 14 of 20

Nonemployer to employer establishment ratio: 1.5 (2007)

Sector leaders. Industry subsectors with the majority of establishments, employees, payroll and receipts.

Establishments with employees: Private households

Nonemployer establishments: Other personal services (2007)

Employees: Private households

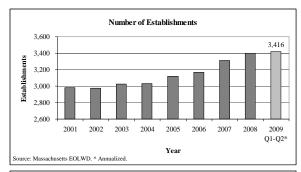
Annual wages: Automotive repair and maintenance

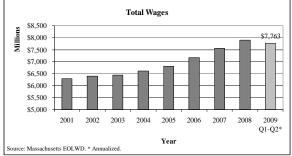
Average weekly wage: Electronic equipment repair/maintenance

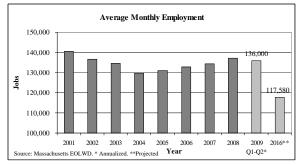
Annual receipts at nonemployer establishments: Other personal services (2007)

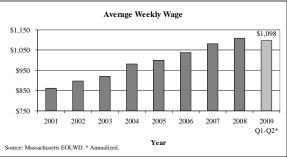
Large employers in Massachusetts: Eastern Enterprise Group, Ancient Order of Hibernians and Greater Lynn Senior Services.

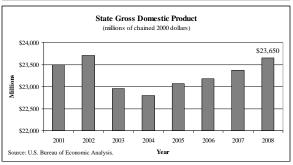
**NAICS 92 - Public Administration.** The Public Administration sector consists of establishments of federal, state, and local government agencies that administer, oversee, and manage public programs and have executive, legislative, or judicial authority over other institutions within a given area. These agencies also set policy, create laws, adjudicate civil and criminal legal cases, provide for public safety and for national defense.











#### State nonemployer and export data is not available for this sector.

Summary.

GDP contribution to state total: 7.6%

GDP rank: 6 of 20

Nonemployer to employer establishment ratio: N/A

 $\textbf{Sector leaders.} \ \textbf{Industry subsectors with the majority of establishments, employees, payroll and receipts.}$ 

Establishments with employees: Executive, legislative, & general government

Nonemployer establishments: N/A

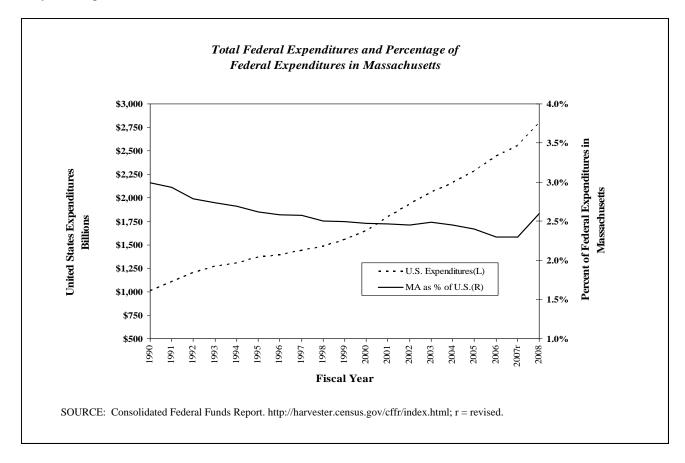
Employees: Justice, public order, and safety activities
Annual wages: Justice, public order, and safety activities
Average weekly wage: National security & international affairs

Annual receipts at nonemployer establishments: N/A

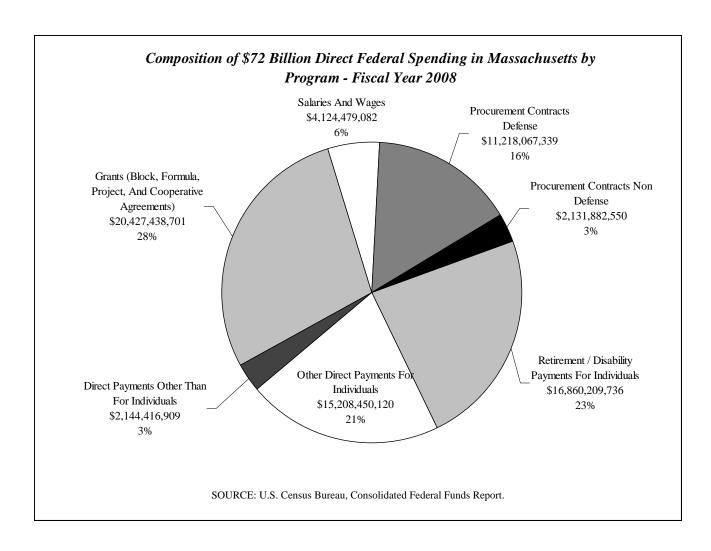
Large employers in Massachusetts: Boston Police, Hampden County House of Correction, MWRA, Suffolk County Sheriff.

## ECONOMIC BASE AND PERFORMANCE—GOVERNMENT REVENUES AND SPENDING

Federal Spending in Massachusetts. Federal government spending contributes significantly to the Massachusetts economy. In fiscal 2008, Massachusetts received over \$72 billion, an 18 percent increase from 2007, and ranked tenth among states in per capita distribution of federal funds, with total spending of \$11,098 per person, excluding loans and insurance. Massachusetts ranked twelfth in fiscal 2007. While federal spending in Massachusetts has increased every year since 1990, its share of total U.S. spending has declined steadily since 1990, until 2008. 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.



In FY 2008, 44.5 percent federal spending in Massachusetts was composed of health care and social programs like Medicare, Medicaid, Social Security, unemployment benefits and Section 8 Housing Vouchers, 3.7 percent less than 2007. Massachusetts was 68 percent above the national average in per capita federal grants to state and local governments, receiving \$3,144 per capita compared to a national average of \$1,868. Per capita federal spending on salaries and wages in 2008 was 23 percent lower in Massachusetts than in the rest of the nation at \$635 compared to a national average of \$823, but Massachusetts was 11 percent above the national average in per capita direct federal payments to individuals at \$5,265 compared to a national average of \$4,730. Massachusetts ranked 10th, 9th in 2007, among states in per capita procurement contract awards at \$2,054 compared to a national average of \$1,620 in 2008. The following chart shows the composition of direct federal spending within Massachusetts in fiscal 2008, excluding loans and insurance.



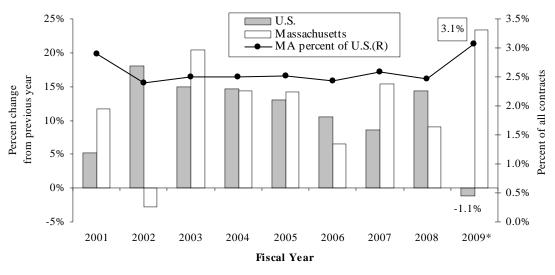
**Federal Contracts.** The total dollar value of all federal contracts performed in Massachusetts increased an average of 11.1 percent a year since 2000, 1.3 percent slower then the 12.4 percent U.S. average. The following two pages compare Massachusetts federal contract dollars to the U.S. total and summarize the fiscal year periods from 2000 to 2008 and as of September 24, 2009.

Federal Contracts Performed in Massachusetts and the U.S.										
	(millions of dollars)  Fiscal MA percent increase from U.S. percent increase from									
Fiscal			U.S. percent increase from							
Year	Massachusetts	previous year	MA portion of all	U.S.	previous year					
2000	\$5,697		2.7%	\$208,314						
2001	6,360	11.6%	2.9%	219,231	5.2%					
2002	6,187	-2.7%	2.4%	258,960	18.1%					
2003	7,451	20.4%	2.5%	297,791	15.0%					
2004	8,522	14.4%	2.5%	341,227	14.6%					
2005	9,739	14.3%	2.5%	385,931	13.1%					
2006	10,379	6.6%	2.4%	426,628	10.5%					
2007	11,974	15.4%	2.6%	463,071	8.5%					
2008	13,048	9.0%	2.5%	529,807	14.4%					
2009*	16,099	23.4%	3.1%	523,856	-1.1%					
2010*	1,354			72,441						

## Massachusetts Share of Federal Contracts Growing in 2009

2.6%

\$3,727,257



SOURCE: http://www.usaspending.gov.

Total

\$96,809

\*Note: Reported as of March 3, 2010. FY 2010 is partial data for the first quarter.

## Summary of Federal Contracts Performed in Massachusetts

## Fy 2000 To 2010\*

Total dollars: \$96,808,977,234

Total number of contractors: 16,162 Total number of transactions: 738,197

## **Top 5 Products or Services Sold**

Gas Turbines and Jet Engines, Aircraft; Prime Moving, and Components	\$9,936,044,959
Engineering Advanced Development (R&D)	\$4,510,708,145
Other Research and Development Advanced Development (R&D)	\$3,388,999,664
Defense Electronics and Communication Equipment Basic Research (R&D)	\$2,988,190,805
Miscellaneous Communication Equipment	\$2,704,931,292

## **Top 5 Contracting Agencies Purchasing From Contractor(S)**

NAVY, Department of the	\$28,066,247,642
ARMY, Department of the (except Corps of Engineers Civil Program Financing)	\$25,890,644,025
AIR FORCE, Department of the (Headquarters, USAF)	\$19,686,476,742
Defense Logistics Agency	\$2,932,554,472
VETERANS AFFAIRS, Department of	\$2,792,521,502

### **Top 10 Contractors**

\*Note: Reported as of March 3, 2010

Raytheon Company	\$21,450,852,489
General Dynamics Corporation	\$12,731,580,248
General Electric Company	\$11,448,148,985
Massachusetts Institute of Technology	\$6,196,918,324
The Charles Stark Draper Laboratory Inc	\$2,953,263,310
The Mitre Corporation	\$2,630,737,150
Textron Inc.	\$1,667,475,819
Bae Systems PLC	\$1,421,023,381
L-3 Communications Holdings, Inc.	\$1,111,538,656
McKesson Corporation	\$957,609,940
SOURCE: http://www.usaspending.gov.	

## Federal Contracts Performed in Massachusetts in:

Fiscal Year: 2010

Total dollars: \$1,354,055,383

The amount for this search is 1.9% of all awarded dollars for the fiscal year.

This state is ranked 17 among states for this year.

Total number of contractors: 2,057 Total number of transactions: 22,118

## **Top 5 Products or Services Sold**

Guided Missiles	\$210,265,400
Gas Turbines and Jet Engines, Aircraft; Prime Moving, and Components	\$103,831,945
Marine Charter for Things	\$55,618,747
Defense Missile and Space Systems Advanced Development (R&D)	\$47,958,597
Maintenance, Repair and Rebuilding of Equipment Guided Missiles	\$47,774,179

## **Top 5 Contracting Agencies Purchasing from Contractor(s)**

ARMY, Department of the (except Corps of Engineers Civil Program Financing)	\$354,270,804
NAVY, Department of the	\$293,484,008
AIR FORCE, Department of the (Headquarters, USAF)	\$104,791,680
VETERANS AFFAIRS, Department of	\$69,571,266
Research and Innovative Technology Administration	\$63,214,955

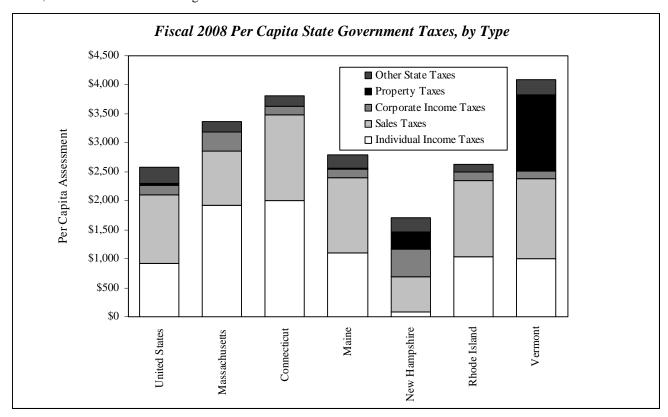
### **Top 10 Contractors**

•	
Raytheon Company	\$405,813,275
General Dynamics Corporation	\$122,851,279
General Electric Company	\$105,360,081
The Charles Stark Draper Laboratory Inc	\$47,004,724
Government of The United States	\$46,455,305
The Mitre Corporation	\$38,424,281
Hewlett-Packard Company	\$38,380,758
McKesson Corporation	\$37,313,666
Cookson Group PLC	\$33,150,620
Computer Sciences Corporation	\$27,134,107

SOURCE: http://www.usaspending.gov. \*Note: Reported as of March 3, 2010.

State Revenues. Per capita state taxes in Massachusetts were significantly higher, 30.1 percent, than the national average. In fiscal year 2008, the total per capita state tax bill in the United States was \$2,571. Citizens of the Commonwealth however, paid \$3,360 on average, the ninth highest (tenth last year) in the nation and an increase of 4.9 percent from the previous year's \$3,204. 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 two fifths for per capita state tax collections.

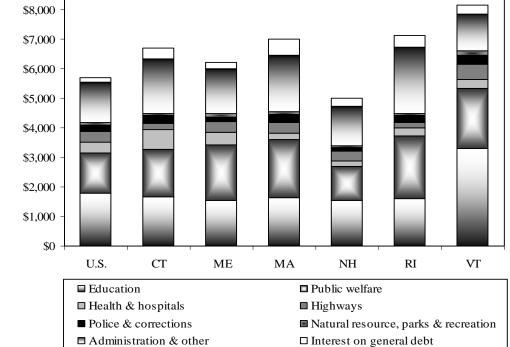
In fiscal year 2008, over half (57.2 percent), of the state taxes in Massachusetts came from the state income tax. Per capita individual income taxes in Massachusetts were \$1,923, up 8.8 percent from \$1,767 in fiscal year 2008. Also increasing in fiscal year 2008 was corporate net income at 2.7 percent. Sales receipts decreased very slightly by -0.1 percent. Other taxes (licenses, death and gift, and documentary and stock transfer) decreased 3.7 percent in Massachusetts on a per capita basis. Across the New England states, there was wide variation in both total per capita state taxes and in the breakdown of those taxes, as illustrated in the following chart.



State Expenditures. The following chart depicts fiscal 2008 per capita state general expenditures by category for the six New England states and the U.S. average state expenditure. Massachusetts ranked 9th in the nation in per capita expenditures, \$7,023 in 2008, while it ranked 8th and spent \$6,779 in 2007. This represents a 3.6 percent increase in per capita expenditures from 2007 to 2008 with the largest per capita dollar increase on highways.

Massachusetts Per Capita State Government General Expenditures, by Type										
Concept conceptitues by function	2000	2001	2002	2003	2004	2005	2006	2007	,	2008
General expenditures, by function  Education	\$890	\$1.026	\$1.020	\$1,055	\$1.183	\$1,346	\$1.401			1.649
Public welfare	\$1,030	\$1,135	\$932	\$824	\$1,647	\$1,719	\$1,843	. ,	•	1,952
Health & hospitals	\$308	\$363	\$377	\$372	\$172	\$177	\$187	\$227	\$	236
Highways	\$439	\$400	\$427	\$378	\$471	\$276	\$261	\$267	\$	346
Police & corrections	\$191	\$213	\$223	\$230	\$215	\$222	\$248	\$274	\$	293
Natural resource, parks & recreation	\$58	\$88	\$86	\$95	\$90	\$76	\$81	\$87	\$	89
Administration & other	\$1,392	\$1,473	\$1,630	\$1,755	\$1,815	\$1,660	\$1,690	\$1,890	\$ 1	1,901
Interest on general debt	\$335	\$371	\$418	\$386	\$401	\$435	\$487	\$518	\$	558
Total	\$4,643	\$5,067	\$5,115	\$5,095	\$5,994	\$5,911	\$6,198	\$6,779	\$ 7	7,023
SOURCE: US Census Bureau, Governments Divis	ion.									





Fiscal 2008 Per Capita State Government General Expenditures, by Type

(for the U.S. and the New England States)

General expenditures, by function	U.S.	CT	ME	MA	NH	RI	VT
Education	\$1,798	\$1,671	\$1,533	\$1,649	\$1,535	\$1,621	\$3,320
Public welfare	\$1,355	\$1,605	\$1,894	\$1,952	\$1,174	\$2,123	\$2,018
Health & hospitals	\$377	\$656	\$416	\$236	\$167	\$255	\$301
Highways	\$353	\$227	\$364	\$346	\$334	\$192	\$523
Police & corrections	\$209	\$269	\$163	\$293	\$125	\$245	\$318
Natural resource, parks & recreation	\$95	\$53	\$135	\$89	\$65	\$47	\$141
Administration & other	\$1,375	\$1,878	\$1,509	\$1,901	\$1,327	\$2,251	\$1,248
Interest on general debt	\$147	\$362	\$196	\$558	\$290	\$400	\$291
Total	\$5,709	\$6,720	\$6,210	\$7,023	\$5,017	\$7,134	\$8,161
State's rank of total per capita expenditure	S	11	17	9	34	8	4

SOURCE: U.S. Census Bureau, Governments Division

Per Capita Expenditure

**Primary and Secondary Education Expenditures.** Although spending on education is not necessarily an indicator of results, Massachusetts has spent from 12 to 32 percent more per pupil on primary and secondary education than the national average since 1981. During the 2006-2007 school year, Massachusetts increased per student expenditures to \$12,738; 32 percent higher than the national average and seventh in the nation. The table on the following page shows expenditures per pupil for Massachusetts and the United States since fiscal 1981.

(in current, unadjusted dollars)								
Fiscal Year	Massachusetts	United States	Ratio (MA/U.S.)					
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.

12,738

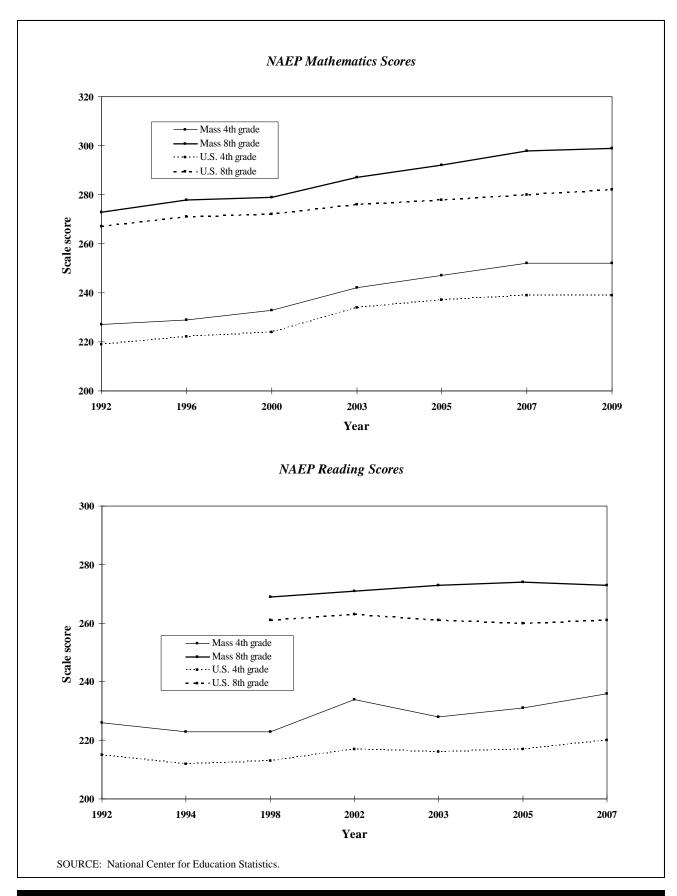
2007

**National Assessment of Educational Progress** (NAEP) scores. 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 administering the NAEP project.

9,666

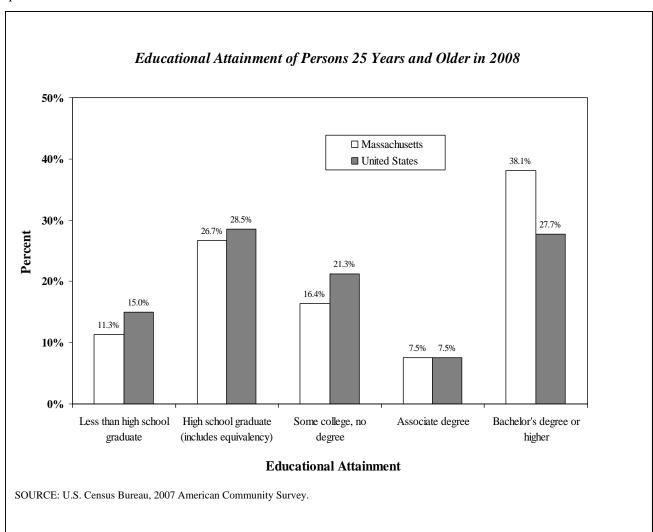
1.32

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.

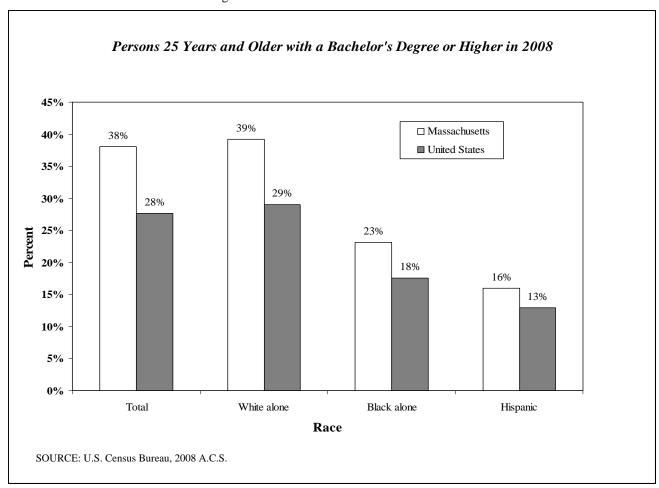


## **EDUCATION AND TECHNOLOGY**

*Educational Attainment.* The availability of a skilled and well-educated population is an important resource for the Commonwealth. Approximately three in eight adults in Massachusetts had a bachelor's degree or more in 2008 according to the Census Bureau's American Community Survey (ACS). ACS also found that Massachusetts had a smaller proportion of persons who had not completed high school, 11.3 percent, than the national average of 15.0 percent.



Massachusetts' black and Hispanic population achieved college degrees at roughly half the rate of its white population, they fared much better than the national average. The most current Census data is shown below.



*Higher Education Data.* Massachusetts has a higher minority enrollment in institutions of higher education than New England. However, the percentage of enrolled 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.

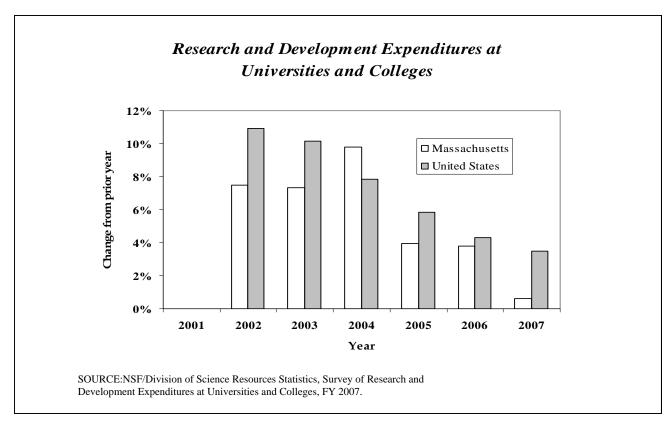
Higher Education Enrollment by Race and Hispanic Origin in 2008								
		White	Black	Asian	]	Hispanic or		
	Total	alone	alone	alone	Other race	Latino		
United States	21,326,487	71.5%	14.4%	6.9%	7.2%	12.1%		
Massachusetts	540,949	77.7%	8.7%	8.1%	5.5%	6.9%		

Massachusetts is an internationally recognized center for higher education, with 462,236 students in undergraduate, professional and graduate private and public programs in the 2006/2007 school year, according to the New England Board of Higher Education. Survey data released by the Institute of International Education state that 31,683 foreign students were enrolled in Massachusetts colleges and universities in the 2007/2008 school year. This was an increase of 10.5 from the previous year. Massachusetts remains 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 263,836 students in the 2007 school year. The system awarded 31,986 degrees in the 2007-08 school year. In addition, Massachusetts's system of private higher education enrolled 264,049 full and part-time students in 2007. 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. Public and private colleges and universities in Massachusetts awarded 47,739 bachelors, 27,575 masters and 3,325 doctoral degrees in 2007.

The higher education system in Massachusetts is particularly strong in post-graduate, scientific, and technical education, with 1,724 science and engineering doctorates awarded in 2006, 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 post doctorates in doctorate granting institutions in 2006, with 6,670 post doctorates.

The preeminence 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 4.4 percent or \$2.2 billion of total national academic expenditures on research and development in fiscal 2007. Massachusetts is still ranked sixth in the nation behind California, New York, Texas, Maryland and Pennsylvania. Life sciences receive almost half of the research and development funds performed at Massachusetts educational institutions. Of the \$2.2 billion in total fiscal 2007 outlays for science and engineering research to universities and colleges in Massachusetts, 48.3 percent was for life sciences, 18.3 percent for engineering, 11.3 percent for physical sciences, 9.3 percent for environmental, 4.6 percent for math and computer science, 3.9 percent for social sciences, 2.3 percent for other sciences, and 1.9 percent for psychology.



*Internet Access*. A larger portion of the state's population has access to the internet compared to the nation as a whole according to the latest Census survey taken in 2007. Massachusetts ranked third among states and the District of Columbia when comparing the percent (76.3) of individuals who had access to the internet in their household. The previous Census survey in 2003 ranked Massachusetts households thirteenth when 58.1 percent had access.

*Building Permits.* In 2008, construction activity contributed 2.5 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 2001. Overall loss between 2001 and 2008 was 1.8 percent in real dollars.

## Housing Permits Authorized

	Massa	chusetts	New England		United	l States
	Total	Percent	Total	Percent	Total	Percent
Year	Permits	Change	Permits	Change	Permits	Change
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%
2007	15,358	-21.6%	37,532	-19.8%	1,398,415	-24.0%
2008	9,883	-35.6%	24,454	-34.8%	905,359	-35.3%

SOURCES: Federal Reserve Bank of Boston; United States Department of Commerce. June 2009.

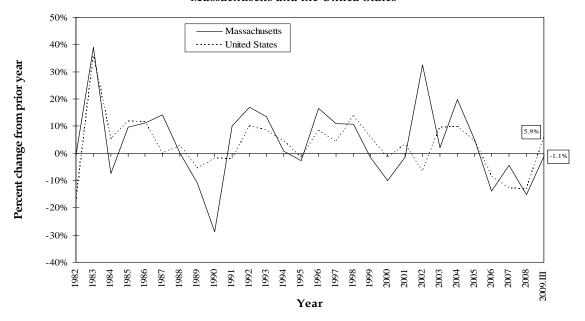
*Home Sales*. Sales of existing single-family homes for Massachusetts and the U.S. are presented in the following chart and graph.

## **Existing Home Sales**

(quarterly rates are seasonally adjusted, rates in thousands)

	Massachusetts		Unit	ted States
Year	Sales	% Change	Sales	% Change
1981	43.0		2,575.0	
1985	60.2	40.2%	3,382.5	31.4%
1990	48.6	-19.4%	3,603.5	6.5%
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%
2007	122.4	-4.4%	5,652.0	-12.8%
2008	103.8	-15.2%	4,913.0	-13.1%
2008.III	110.0		5,007.0	
2009.III	108.8	-1.1%	5,300.0	5.9%

## Change in Existing Home Sales - Annual and Latest Quarter Massachusetts and the United States



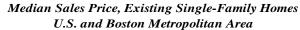
 $SOURCES: \ National\ Association\ of\ Realtors.\ Federal\ Reserve\ Bank\ of\ Boston;\ p=preliminary,\ r=revised.*=change\ from\ previous\ year's\ quarter.$ 

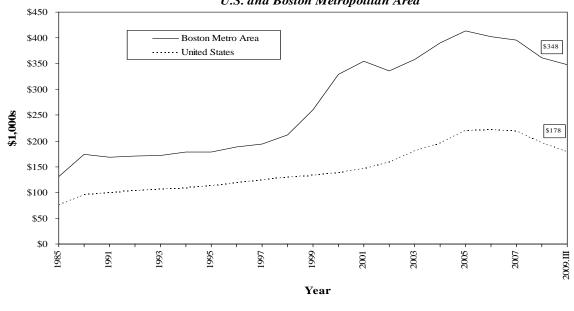
*Home prices*. Prices have been declining in the Boston metropolitan area but the median is still close to two times the national median.

## Median Sales Price for Existing Single-Family Homes

(quarterly price not seasonally adjusted, price in thousands)

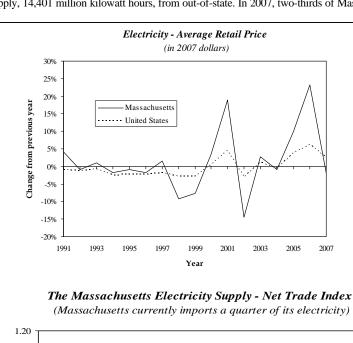
	Boston Metro		Boston Prices as a	Boston Annual	U.S. Annual
Year	Area	<b>United States</b>	Percent of the U.S.	Percent Change	Percent Change
1985	\$131	\$75	173.7%	33.5%	4.0%
1990	\$174	\$95	182.6%	-4.2%	2.3%
1991	\$169	\$99	169.5%	-3.0%	4.4%
1992	\$171	\$104	164.6%	1.2%	4.2%
1993	\$171	\$107	160.9%	0.5%	2.8%
1994	\$179	\$109	164.7%	4.4%	2.1%
1995	\$179	\$113	158.6%	-0.2%	3.7%
1996	\$189	\$119	158.7%	5.7%	5.6%
1997	\$195	\$124	157.1%	3.0%	4.0%
1998	\$212	\$130	162.9%	8.9%	5.1%
1999	\$261	\$133	196.2%	23.1%	2.2%
2000	\$330	\$138	238.3%	26.4%	4.1%
2001	\$355	\$146	242.4%	7.6%	5.8%
2002	\$335	\$158	212.1%	-5.5%	8.0%
2003	\$359	\$180	198.9%	6.9%	14.0%
2004	\$390	\$195	199.6%	8.7%	8.3%
2005	\$413	\$219	188.7%	6.0%	12.2%
2006	\$402	\$222	181.3%	-2.7%	1.3%
2007	\$396	\$218	181.6%	-1.6%	-1.8%
2008	\$361	\$197	183.7%	-8.7%	-9.8%
2008.III	\$374	\$200	186.7%		
2009.III	\$348	\$178	195.6%	-7.0%	-11.2%

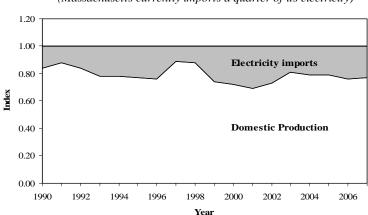


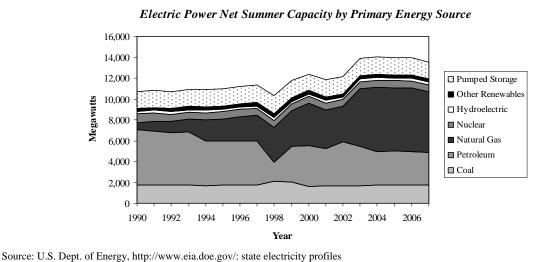


SOURCES: National Association of Realtors. Federal Reserve Bank of Boston.

Electricity Prices, Supply and Capacity by Source. Between 2001 and 2008, the utilities sector of Massachusetts GDP increased 18.7 percent when measured with year 2000 chained dollars. It contributed 1.2 percent to the total Massachusetts Real GDP in 2008. Massachusetts electric utilities generated \$4.9 billion in revenue as of July 2009 (YTD). This was 6.2 percent less than the same period in 2008, while they sold 18.6 percent less electricity. Massachusetts had the fourth highest electric rate in the country in 2007; 15.16 cents per kilowatt hour, while the U.S. average was 9.13. This was a decrease of 1.9 percent for Massachusetts and an increase of 2.6 percent for the U.S. from the previous year. The Massachusetts Net Electricity Trade Index, which represents the state's electricity self-sufficiency, was 0.77 in 2007. This means it imported 23 percent of its electricity supply, 14,401 million kilowatt hours, from out-of-state. In 2007, two-thirds of Massachusetts generating capacity was oil and natural gas based.







*Travel and Tourism.* In 2007, the arts, entertainment, recreation and accommodations industries (does not include food services and drinking places sub-industries) contributed 1.5 percent to Massachusetts total GDP (real 2000 dollars), a 0.1 percent difference from 2001. The Massachusetts Office of Travel and Tourism (MOTT) reported an annual increase of 1.7 percent in museum and attraction attendance, 12.2 million visitors, in 2008. July 2009 year-to-date museum and attraction attendance was up 1.1 percent compared to the same period in 2008.

*Transportation and Warehousing*. Between 2001 and 2008, the transportation and warehousing sector of Massachusetts GDP increased 0.6 percent when measured with year 2000 chained dollars. It contributed 1.6 percent to the total Massachusetts Real GDP in 2008; 0.2 percent less than it did in 2001.

Massachusetts' major air and seaports are managed by the Massachusetts Port Authority (Massport), an independent public authority. According to Massport, as of December 31, 2007, airline service at the airport, both scheduled and nonscheduled, was provided by 91 airlines, including nine U.S. major air carrier airlines, 28 non-major domestic carriers, 34 non-U.S. flag ("foreign flag") carriers and 20 regional and commuter airlines. Based on total passenger volume in calendar year 2007 data, Logan Airport was the most active airport in New England and remained the 20th most active in the U.S. according to the Federal Aviation Authority and 41st most active in the world according to Airports Council International. Massport reported that as of September, year-to-date 2009, total airport flight operations were down 8.8 percent and total airport passengers were down 4.7 percent from the same period in 2008.

Logan was served by 11 all-cargo and small package/express carriers in 2007. According to the FAA, Logan Airport ranked 25th in the nation in total air cargo volume in calendar year 2008. In 2008, the airport handled 984 million pounds of cargo, a 7.1 percent decrease from 2007. Massport reported that as of September, year-to-date 2009, the combined cargo volume was down 15.3 percent and total express mail was down 17.1 percent from the same period in 2008. Please refer to the Aviation Activity charts on the following page.

At Massport's Port of Boston properties, 2008 total cargo throughput was 15.5 million metric tons, a 1.0 percent increase from 2007. Automobile processing increased 166 percent to 26,779 units, and cruise passenger trips increased 15 percent to 269,911. Total containerized cargo decreased 15 percent to 1.5 million metric tons. The Army Corps of Engineers reported Massachusetts total waterborne cargo shipped or received in 2007 increased, for the first time since 2004, to 2.3 percent to 28.0 million short tons from 2006. Waterborne cargo in New England decreased just 0.5 percent and the U.S decreased 0.9 percent. Please refer to the Waterborne Tonnage by State charts on the following page.

### Aviation Activity for Massachusetts Primary Airports

Passenger Boardings	2001	2002	2003	2004	2005	2006	2007	2008
General Edward Lawrence Logan International	11,739,553	11,077,238	11,087,799	12,758,020	13,214,923	13,544,552	13,783,297	12,820,489
Nantucket Memorial	272,460	253,422	229,300	243,313	252,757	276,866	282,197	258,214
Barnstable Municipal-Boardman/Polando Field	197,106	180,807	158,360	167,522	177,761	206,980	204,152	191,906
Worcester Regional	79,653	37,298	2,234	1,274	2,036	14,823	460	3,182
Laurence G Hanscom Field	71,381	40,419	19,375	17,049	13,887	14,560	16,568	8,385
Marthas Vineyard	65,374	59,500	53,011	49,480	48,977	45,881	49,205	45,002
New Bedford Regional	21,786	21,667	21,097	19,686	17,960	15,211	14,567	13,908
Provincetown Municipal	12,986	10,533	11,801	11,424	10,236	11,375	12,459	11,468
Total	12,460,299	11,680,884	11,582,977	13,267,768	13,738,537	14,130,248	14,362,905	13,352,554
Cargo - Gross Landed Weight (lbs.)	2001	2002	2003	2004	2005	2006	2007	2008
General Edward Lawrence Logan International	1 301 842 100	1 272 185 900	1 199 383 800	1 172 103 700	1 148 881 400	1 100 485 850	1 059 947 900	984 258 400

### Change in Aviation Activity at Massachusetts Primary Airports

Passenger Boardings	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008
General Edward Lawrence Logan International	-13.8%	-5.6%	0.1%	15.1%	3.6%	2.5%	1.8%	-7.0%
Nantucket Memorial	-8.1%	-7.0%	-9.5%	6.1%	3.9%	9.5%	1.9%	-8.5%
Barnstable Municipal-Boardman/Polando Field	-4.3%	-8.3%	-12.4%	5.8%	6.1%	16.4%	-1.4%	-6.0%
Worcester Regional	50.5%	-53.2%	-94.0%	-43.0%	59.8%	628.0%	-96.9%	591.7%
Laurence G Hanscom Field	-13.2%	-43.4%	-52.1%	-12.0%	-18.5%	4.8%	13.8%	-49.4%
Martha's Vineyard	-8.1%	-9.0%	-10.9%	-6.7%	-1.0%	-6.3%	7.2%	-8.5%
New Bedford Regional	-4.8%	-0.5%	-2.6%	-6.7%	-8.8%	-15.3%	-4.2%	-4.5%
Provincetown Municipal	-17.3%	-18.9%	12.0%	-3.2%	-10.4%	11.1%	9.5%	-8.0%
Total	-13.2%	-6.3%	-0.8%	14.5%	3.5%	2.9%	1.6%	-7.0%
Cargo	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008
General Edward Lawrence Logan International	-7.4%	-2.3%	-5.7%	-2.3%	-2.0%	-4.2%	-3.7%	-7.1%

SOURCE: Federal Aviation Administration Sept. 2008.

 $http://www.faa.gov/airports\_airtraffic/airports/planning\_capacitypassenger\_allcargo\_stats/$ 

## Waterborne Tonnage by State (In Units of 1,000 Tons)

State	2000	2001	2002	2003	2004	2005	2006	2007
U.S. total	2,424,596	2,386,558	2,340,292	2,394,199	2,551,939	2,527,622	2,588,440	2,563,972
Maine	31,769	30,586	29,140	31,698	32,447	32,353	28,103	26,839
Massachusetts	26,973	26,446	26,117	30,655	31,787	28,812	27,411	28,043
Connecticut	18,959	18,267	17,610	18,579	20,075	19,617	19,340	20,148
Rhode Island	9,089	9,170	8,437	9,417	9,764	10,972	11,016	11,184
New Hampshire	4,462	4,447	4,108	4,971	4,795	5,254	4,823	4,026
Vermont	0	0	0	0	0	0	0	0
New England	91,252	88,916	85,412	95,320	98,868	97,008	90,693	90,240

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

State	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007
U.S. total	-1.6%	-1.9%	2.3%	6.6%	-1.0%	2.4%	-0.9%
Maine	-3.7%	-4.7%	8.8%	2.4%	-0.3%	-13.1%	-4.5%
Massachusetts	-2.0%	-1.2%	17.4%	3.7%	-9.4%	-4.9%	2.3%
Connecticut	-3.6%	-3.6%	5.5%	8.1%	-2.3%	-1.4%	4.2%
Rhode Island	0.9%	-8.0%	11.6%	3.7%	12.4%	0.4%	1.5%
New Hampshire	-0.3%	-7.6%	21.0%	-3.5%	9.6%	-8.2%	-16.5%
Vermont	-	-	-	-	-	-	-
New England	-2.6%	-3.9%	11.6%	3.7%	-1.9%	-6.5%	-0.5%

SOURCE: Army Core of Engineers, Waterborne Commerce Statistics Center (WCSC) Feb 2009. http://www.iwr.usace.army.mil/ndc/wcsc/wcsc.htm Massachusetts companies in the Fortune 1000 List. The economic base of Massachusetts is anchored by the twenty-two 2009 Fortune 1000 companies (twelve of which are Fortune 500) headquartered in Massachusetts. Joining the state's 2009 Fortune 1000 list was Sovereign Bancorp. When comparing the 2009 Fortune 1000 to 2008's, sixteen Massachusetts companies gained and six lost rank. Biogen Idec climbed 102 places on the list, the largest leap for a Massachusetts company.

Rank 20								
2009	2008	Company	Industry	(million				
86	94	Liberty Mutual Ins. Group (Boston)	Insurance: P & C (stock)	\$25,96				
108	112	Raytheon (Waltham)	Aerospace and Defense	\$25,20				
109	128	Staples (Framingham)	Specialty Retailers	\$22,4				
131	132	TJX (Framingham)	Specialty Retailers	\$19,3				
135	99	Mass. Mutual Life Ins. (Springfield)	Insurance: Life, Health (mutual)	\$18,6				
172	201	EMC (Hopkinton)	Computer Peripherals	\$13,2				
206	225	State St. Corp. (Boston)	Commercial Banks	\$11,8				
258	269	Thermo Fisher Scientific (Waltham)	Scientific, Photo, Control Equipment	\$9,7				
269	291	BJ's Wholesale Club (Natick)	Specialty Retailers	\$9,0				
291	364	Global Partners (Waltham)	Energy	\$8,3				
320	310	Boston Scientific (Natick)	Medical Products & Equipment	\$6,7				
432	499	Perini (Framingham)	Engineering, Construction	\$4,6				
502	572	Genzyme (Cambridge)	Pharmaceuticals	\$3,8				
546	648	Biogen Idec (Cambridge)	Pharmaceuticals	\$3,2				
641	631	NSTAR (Boston)	Utilities: Gas & Electric	\$3,1				
658	751	Cabot (Boston)	Chemicals	\$2,7				
674	469	Sovereign Bancorp (Boston)*	Savings Institutions	\$2,7				
681	722	Iron Mountain (Boston)	Diversified Outsourcing	\$2,7				
725	712	Hanover Insurance Group (Worcester)	Insurance: P & C (stock)	\$2,6				
734	718	Analog Devices (Norwood)	Semiconductors and Other Electronic Componer	\$1,9				
894	943	PerkinElmer (Waltham)	Scientific, Photo, Control Equipment	\$1,7				
965	994	Beacon Roofing Supply (Peabody)	Wholes alers: Diversified	\$1,6				

SOURCE: Fortune, May 4, 2009 issue. \* Previously headquartered in PA.

# **Sources List**

Listed below are the web sites of the original data sources used to compile Exhibit A. 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 <a href="http://lmi2.detma.org/Lmi/LMIDataProg.asp">http://lmi2.detma.org/Lmi/LMIDataProg.asp</a>
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/

**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/neei/neeidata.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, Consolidated Federal Funds Report

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

Federal Spending - contract, grant, and other award data.

http://www.usaspending.gov

Large employers by sector.

http://www.referenceusa.com/Home/Home

### **Human Resources and Infrastructure**

U.S. Census Bureau

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

#### **Massachusetts Department of Higher Education**

http://www.mass.edu/campuses/facts.asp

**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.iee.org