

ECONOMIC INFORMATION

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

All information is presented on a calendar-year basis unless otherwise indicated. The section was prepared for release on May 5, 2004. Information in the text, tables, charts, and graphs was current as of May 5, 2004. Sources of information are indicated in the text or immediately following the charts and tables. Although the Commonwealth considers the sources to be reliable, the Commonwealth has made no independent verification of the information presented herein and does not warrant its accuracy.

Statistical Overview

| | <u>Massachusetts</u> | <u>United States</u> |
|--|----------------------|----------------------|
| <u>Population</u> (p. A-2) | | |
| Percent Change in Population, 2002-2003 | 0.2% | 1.0% |
| <u>Personal Income, Consumer Prices, and Poverty</u> (p. A-7) | | |
| Per Capita Personal Income, 2003 | \$39,815 | \$31,632 |
| Average Annual Pay, 2002 | \$44,954 | \$36,764 |
| Percent Change in CPI-U, 2002-2003* | 3.8% | 2.3% |
| Percent Change in CPI-U, March 2003-March 2004* | 2.9% | 1.7% |
| Poverty Rate, 2002 | 10.0% | 12.1% |
| Average Weekly Manufacturing Earnings, Nov. 2003(p) | \$674.44 | \$645.86 |
| Percent Change in Manufacturing Earnings, Nov. 2002-Nov. 2003(p) | 1.7% | 3.3% |
| <u>Employment</u> (p. A-15) | | |
| Percent Change in Nonfarm Payroll Employment, Mar. 2003-Mar. 2004(p) | -1.1% | 0.5% |
| Unemployment Rate, 2003 | 5.8% | 6.0% |
| Unemployment Rate, March, 2004 | 5.1% | 5.7% |
| <u>Economic Base and Performance</u> (p. A-21) | | |
| Percent Change in Gross State Product, 2000-2001 | -0.4% | 0.4% |
| Percent Change in International Exports, 2002-2003 | 11.7% | 4.4% |
| Percent Change in Housing Permits Authorized, 2002-2003 | 8.5% | 5.1% |
| <u>Human Resources and Infrastructure</u> (p. A-36) | | |
| Expenditure Per Pupil, 2002 (estimate) | \$9,509 | \$7,376 |
| Percent of Adults with a Bachelor's Degree, March 2002 | 34.3% | 26.7% |

* NOTE: Percent changes in the CPI-U are for the Boston area & the U.S.

Massachusetts is a densely populated state with a well-educated population, comparatively high income levels, low rates of unemployment, and a relatively diversified economy. While the total population of Massachusetts has remained fairly stable in the last twenty 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 2015 and 2025. 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 significantly lower poverty rate and, with the exception of the recession of the early 1990s, considerably lower unemployment rates in Massachusetts than in the United States since 1980. While economic growth in Massachusetts slowed considerably during the recession of 1990–1991, indicators such as retail sales, housing permits, construction, and employment levels suggest a strong and continued economic recovery.

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

POPULATION CHARACTERISTICS

Massachusetts is a densely populated state with a comparatively large percentage of its residents living in metropolitan areas. According to the 2000 census, the population density of Massachusetts is 809.8 persons per square mile, as compared to 79.6 for the United States as a whole. Among the 50 states, only Rhode Island and New Jersey have a greater population density. Massachusetts also ranks third among the states in percentage of residents living in metropolitan areas as they were defined at the time of the Census: 96.1 percent of Massachusetts residents live in metropolitan areas, compared with a national average of 80.3 percent. A subsequent version of this Economic Information section will introduce a new set of metropolitan area definitions based on whole counties. According to this new definition, announced in 2003 but not yet in general use, the entire state will be considered to be metropolitan except for the two island counties (99.6 percent of state residents in 2000.)

The State's population is concentrated in its eastern portion. The City of Boston is the largest city in New England, with a 2000 population of 589,141. Boston is the hub of the Boston-Worcester-Lawrence, MA-NH-ME-CT Consolidated Metropolitan Statistical Area ("CMSA"), which also includes all of southeastern New Hampshire, as well as towns in Maine and Connecticut, and which had a total population in 2000 of 5,819,100, over 40 percent of the total New England population. The Boston, MA-NH Primary Metropolitan Statistical Area ("PMSA")—which stretches from the town of Plymouth on the south shore to Seabrook, New Hampshire on the north shore—is the largest component of that CMSA, with a total population in 2000 of 3,406,829.

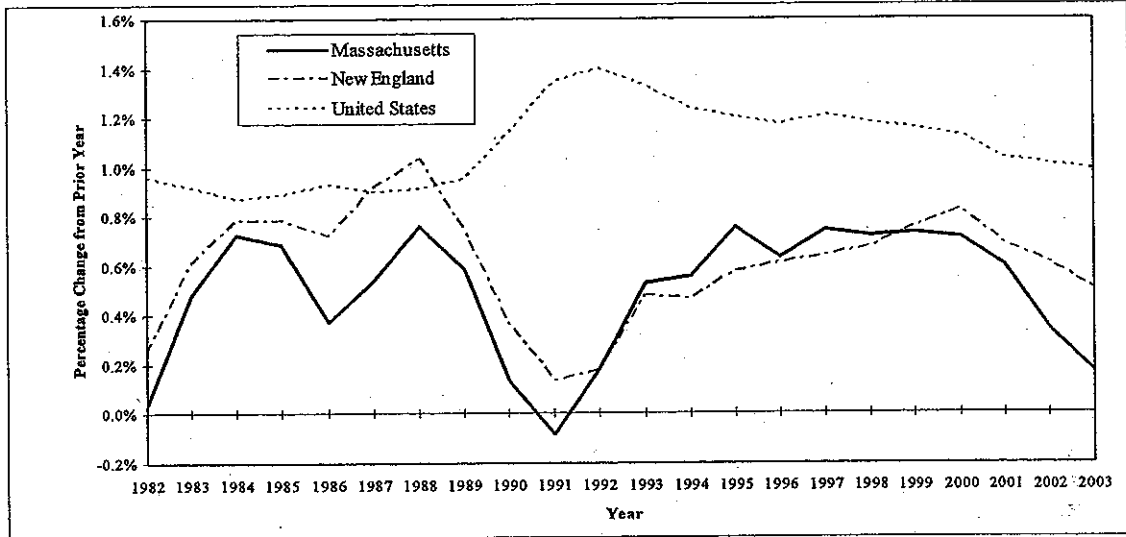
The second largest component of that CMSA is the Worcester, MA-CT PMSA, with a 2000 population of 511,389. Worcester, situated approximately 40 miles west of Boston with a 2000 population of 172,648, is the second largest city in New England. Its service, trade, and manufacturing industries combine for more than 70 percent of Worcester's total employment. As a major medical and educational center, the Worcester area is home to 19 patient care facilities, including the University of Massachusetts Medical School, and twelve other colleges and universities.

The largest Metropolitan Statistical Area ("MSA") within Massachusetts which is not a part of this larger CMSA is the Springfield MSA, with a 2000 population of 591,932. Springfield, the third largest city in the Commonwealth with a 2000 population of 152,082, is located in the Connecticut River Valley in western Massachusetts and enjoys a diverse body of corporate employers, the largest of which are the Bay State Medical Center, the Massachusetts Mutual Life Insurance Company, the Milton Bradley Company, and Smith and Wesson. In addition, Springfield is home to four independent colleges.

As the following chart indicates, the percent change in population in Massachusetts since 1980 has been both lower and more erratic than the change in population for the United States as a whole. While this

trend is similar to that experienced by New England, it differs considerably from the steady growth rates for the United States over the same period of time.

Percent Change in Total Population, 1982-2003



SOURCE: United States Department of Commerce, Bureau of the Census.

Note: 1980 and 1990 figures are census counts as of April 1; figures for other years are estimates as of July 1.

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

Population, 1970-2003
(in thousands)

| Year | Massachusetts | | New England | | United States | |
|------|---------------|----------------|-------------|----------------|---------------|----------------|
| | Total | Percent Change | Total | Percent Change | Total | Percent Change |
| 1970 | 5,689 | | 11,817 | | 203,302 | |
| 1971 | 5,738 | 0.9% | 11,993 | 1.2% | 206,827 | 1.7% |
| 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% | 213,542 | 0.9% |
| 1975 | 5,758 | -0.3% | 12,163 | 0.1% | 215,465 | 1.0% |
| 1976 | 5,740 | -0.2% | 12,192 | 0.2% | 217,566 | 1.0% |
| 1977 | 5,738 | -0.1% | 12,239 | 0.4% | 219,760 | 1.0% |
| 1978 | 5,736 | 0.0% | 12,233 | 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 | 5,905 | 0.4% | 12,833 | 0.7% | 240,193 | 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 | 6,271 | 0.7% | 13,734 | 0.7% | 275,854 | 1.2% |
| 1999 | 6,317 | 0.7% | 13,838 | 0.8% | 279,040 | 1.2% |
| 2000 | 6,362 | 0.7% | 13,952 | 0.8% | 282,178 | 1.1% |
| 2001 | 6,400 | 0.6% | 14,048 | 0.7% | 285,094 | 1.0% |
| 2002 | 6,422 | 0.3% | 14,134 | 0.6% | 287,974 | 1.0% |
| 2003 | 6,453 | 0.5% | 14,216 | 0.6% | 290,810 | 1.0% |

SOURCE: United States Department of Commerce, Bureau of the Census.
Note: 1980 and 1990 figures are census counts as of April 1; figures for other years are estimates as of July 1.

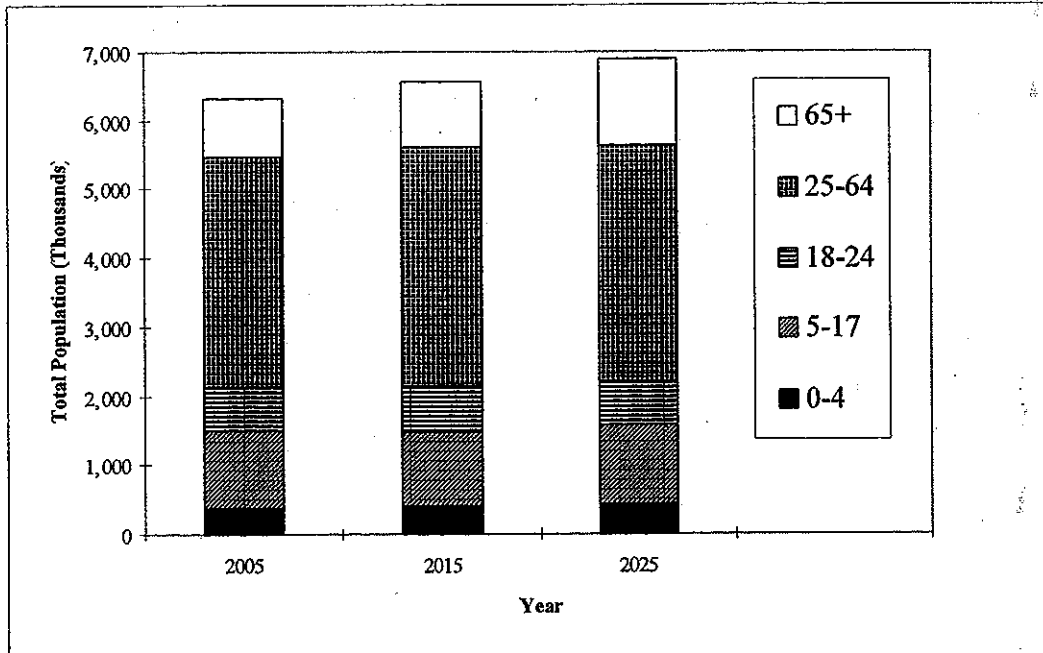
The next fifteen years are expected to bring about a considerable change in the age distribution of the Massachusetts population. As the following table and chart show, the population of Massachusetts is expected to be distributed more heavily in the 65 and over age groups in 2015 and in 2025. The chart and table show the projected population by age for Massachusetts for 2005 through 2025.

Projected Massachusetts Population By Age Group, 2005-2025
(in thousands)

| Year | 0-4 | 5-17 | 18-24 | 25-64 | 65+ |
|------|-----|-------|-------|-------|-------|
| 2005 | 382 | 1,106 | 633 | 3,362 | 827 |
| 2015 | 411 | 1,053 | 681 | 3,464 | 965 |
| 2025 | 439 | 1,128 | 650 | 3,439 | 1,252 |

SOURCE: United States Department of Commerce, Bureau of the Census.
Note: Projections released in 1996; new projections expected in 2004.

Projected Massachusetts Population By Age Group, 2005-2025



SOURCE: United States Department of Commerce, Bureau of the Census.
Note: Projections released in 1996; new projections expected in 2004.

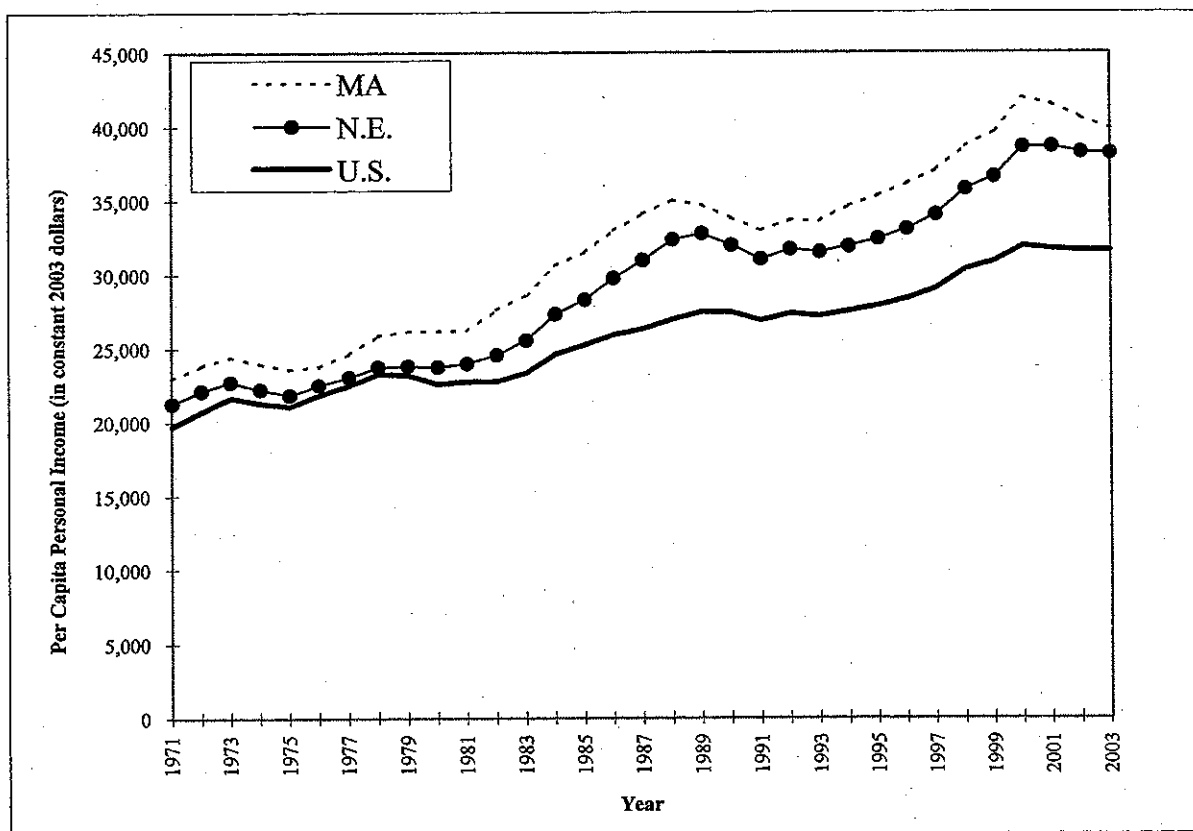
**Massachusetts Population by County
1990 and 2000 Census**

| Count | 1990 Census | 2000 Census | % 1990-00 |
|---------------|-------------|-------------|--------------|
| Barnstable | 18,881 | 22,231 | 19.1% |
| Berkshir | 139,352 | 134,953 | - |
| Bristol | 56,706 | 54,038 | - |
| Duke | 11,639 | 14,987 | 28.8% |
| Franklin | 70,092 | 71,535 | 2.1 |
| Hampshir | 146,568 | 152,251 | 3.9 |
| Nantucke | 6,012 | 9,520 | 58.3% |
| Norfolk | 615,102 | 650,216 | 5.6 |
| Plymout | 435,276 | 472,822 | 8.6 |
| Suffolk | 765,018 | 808,387 | 5.0 |
| Worceste | 709,705 | 750,963 | 5.8 |
| Massachusetts | 6,016,495 | 6,319,407 | 5.5 |

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

PERSONAL INCOME, CONSUMER PRICES, AND POVERTY

Personal Income. Since at least 1929, real and nominal per capita income levels have been consistently higher in Massachusetts than in the United States. After growing at an annual rate higher than that for the United States between 1982 and 1988, real income levels in Massachusetts declined between 1989 and 1991. Real per capita income levels in Massachusetts increased faster than the national average between 1994 and 1997. In 2000 Massachusetts had its highest per capita income growth in 16 years, exceeding the national growth rate by 1.6 percentage points. In 2001 and 2002, nominal and real income in both Massachusetts and the United States declined, while in 2003 the state showed a slight decline while the nation was essentially flat. Even with slight declines in income, both real and nominal income levels in Massachusetts remain well above the national average. Again in 2003 as in the past several years, only two states had higher levels of per capita personal income. The following chart illustrates real per capita personal income in Massachusetts, New England, and the United States since 1971.



The following table compares per capita personal income in Massachusetts, New England, and the United States for the period 1970-2003.

| Per Capita Personal Income, 1970-2003 | | | | | | | | | |
|---------------------------------------|--|--------|--------|----------------------------------|--------|--------|----------------------------------|-------|-------|
| Year | Nominal Income (in current dollars) | | | Real Income (in 2003 dollars) | | | Percent Change in Real Income | | |
| | MA | N.E. | U.S. | MA | N.E. | U.S. | MA | N.E. | U.S. |
| 1970 | 4,483 | 4,445 | 4,085 | 22,738 | 21,079 | 19,372 | 0.3% | 0.5% | 0.7% |
| 1971 | 4,752 | 4,680 | 4,342 | 22,960 | 21,262 | 19,727 | 1.0% | 0.9% | 1.8% |
| 1972 | 5,109 | 5,029 | 4,717 | 23,838 | 22,137 | 20,764 | 3.8% | 4.1% | 5.3% |
| 1973 | 5,547 | 5,481 | 5,231 | 24,428 | 22,714 | 21,678 | 2.5% | 2.6% | 4.4% |
| 1974 | 6,016 | 5,958 | 5,707 | 23,958 | 22,237 | 21,300 | -1.9% | -2.1% | -1.7% |
| 1975 | 6,459 | 6,381 | 6,172 | 23,602 | 21,823 | 21,109 | -1.5% | -1.9% | -0.9% |
| 1976 | 6,998 | 6,959 | 6,754 | 23,782 | 22,504 | 21,841 | 0.8% | 3.1% | 3.5% |
| 1977 | 7,620 | 7,593 | 7,405 | 24,623 | 23,055 | 22,484 | 3.5% | 2.4% | 2.9% |
| 1978 | 8,430 | 8,413 | 8,245 | 25,887 | 23,742 | 23,268 | 5.1% | 3.0% | 3.5% |
| 1979 | 9,385 | 9,392 | 9,146 | 26,142 | 23,803 | 23,180 | 1.0% | 0.3% | -0.4% |
| 1980 | 10,602 | 10,629 | 10,114 | 26,171 | 23,735 | 22,585 | 0.1% | -0.3% | -2.6% |
| 1981 | 11,798 | 11,846 | 11,246 | 26,205 | 23,979 | 22,764 | 0.1% | 1.0% | 0.8% |
| 1982 | 12,941 | 12,871 | 11,935 | 27,630 | 24,542 | 22,757 | 5.4% | 2.3% | 0.0% |
| 1983 | 14,009 | 13,829 | 12,618 | 28,622 | 25,548 | 23,310 | 3.6% | 4.1% | 2.4% |
| 1984 | 15,723 | 15,422 | 13,891 | 30,620 | 27,311 | 24,600 | 7.0% | 6.9% | 5.5% |
| 1985 | 16,910 | 16,546 | 14,758 | 31,517 | 28,294 | 25,237 | 2.9% | 3.6% | 2.6% |
| 1986 | 18,148 | 17,722 | 15,442 | 32,980 | 29,752 | 25,925 | 4.6% | 5.2% | 2.7% |
| 1987 | 19,575 | 19,119 | 16,240 | 34,085 | 30,967 | 26,304 | 3.3% | 4.1% | 1.5% |
| 1988 | 21,341 | 20,811 | 17,331 | 35,036 | 32,369 | 26,956 | 2.8% | 4.5% | 2.5% |
| 1989 | 22,342 | 22,083 | 18,520 | 34,696 | 32,768 | 27,481 | -1.0% | 1.2% | 1.9% |
| 1990 | 23,043 | 22,712 | 19,477 | 33,826 | 31,974 | 27,420 | -2.5% | -2.4% | -0.2% |
| 1991 | 23,432 | 22,969 | 19,892 | 32,950 | 31,030 | 26,873 | -2.6% | -3.0% | -2.0% |
| 1992 | 24,538 | 24,172 | 20,854 | 33,670 | 31,701 | 27,350 | 2.2% | 2.2% | 1.8% |
| 1993 | 25,176 | 24,752 | 21,346 | 33,573 | 31,518 | 27,181 | -0.3% | -0.6% | -0.6% |
| 1994 | 26,303 | 25,687 | 22,172 | 34,624 | 31,892 | 27,528 | 3.1% | 1.2% | 1.3% |
| 1995 | 27,457 | 26,832 | 23,076 | 35,299 | 32,396 | 27,861 | 2.0% | 1.6% | 1.2% |
| 1996 | 28,933 | 28,194 | 24,175 | 36,126 | 33,064 | 28,351 | 2.3% | 2.1% | 1.8% |
| 1997 | 30,498 | 29,687 | 25,334 | 37,037 | 34,034 | 29,043 | 2.5% | 2.9% | 2.4% |
| 1998 | 32,524 | 31,677 | 26,883 | 38,623 | 35,758 | 30,346 | 4.3% | 5.1% | 4.5% |
| 1999 | 34,227 | 33,126 | 27,939 | 39,653 | 36,586 | 30,857 | 2.7% | 2.3% | 1.7% |
| 2000 | 37,756 | 36,121 | 29,847 | 41,931 | 38,596 | 31,892 | 5.7% | 5.5% | 3.4% |
| 2001 | 38,945 | 37,183 | 30,527 | 41,467 | 38,632 | 31,716 | -1.1% | 0.1% | -0.6% |
| 2002 | 39,085 | 37,413 | 30,906 | 40,557 | 38,266 | 31,610 | -2.2% | -0.9% | -0.3% |
| 2003 | 39,815 | 38,171 | 31,632 | 39,815 | 38,171 | 31,632 | -1.8% | -0.2% | 0.1% |

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

Notes: Massachusetts real income is calculated using Boston CPI-U data.
New England and United States real income are calculated using national CPI-U data.

Annual pay in nominal dollars has grown steadily in Massachusetts over the past decade. Average annual pay is computed by dividing the total annual payroll of employees covered by Unemployment Insurance programs by the average monthly number of employees. Data are reported by employers covered under the Unemployment Insurance programs. While levels of annual pay were nearly equal in Massachusetts and the United States in 1984, average annual pay levels in Massachusetts have grown more rapidly than the national average since that time. The level of annual pay in Massachusetts in 2002 was 22 percent higher than the national average: \$44,954 compared to \$36,764.

Wage and Salary Disbursements. Wage and Salary Disbursements by Place of Work is a component of personal income and measures monetary disbursements to employees. This includes compensation of corporate officers, commissions, tips, bonuses, and receipts in-kind. Although the data is recorded on a place-of-work basis, it is then adjusted to a place-of-residence basis so that the personal income of the recipients whose place of residence differs from their place of work will be correctly assigned to their state of residence. The table below details Wage and Salary Disbursements since 1990. Between 1991 and 2000, Massachusetts accounted for a steadily increasing percentage of the overall New England total, but in 2002 it dropped slightly to 50.3 percent.

| Year | U.S. | N.E. | MA | MA as a pct. of N.E. |
|------|-----------|---------|---------|----------------------|
| 1990 | 2,743,016 | 172,148 | 82,311 | 47.8% |
| 1991 | 2,811,076 | 170,333 | 82,311 | 48.3% |
| 1992 | 2,922,828 | 175,148 | 82,311 | 47.0% |
| 1993 | 3,076,276 | 183,236 | 89,047 | 48.6% |
| 1994 | 3,159,599 | 187,663 | 90,000 | 47.9% |
| 1995 | 3,415,368 | 201,946 | 99,194 | 49.1% |
| 1996 | 3,519,599 | 211,663 | 103,000 | 48.7% |
| 1997 | 3,874,011 | 230,032 | 113,579 | 49.4% |
| 1998 | 4,019,599 | 241,663 | 118,000 | 48.8% |
| 1999 | 4,463,650 | 266,554 | 134,045 | 50.3% |
| 2000 | 4,519,599 | 271,663 | 138,000 | 50.8% |
| 2001 | 4,939,157 | 300,571 | 153,068 | 50.9% |
| 2002 | 5,019,599 | 306,663 | 154,000 | 50.2% |

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

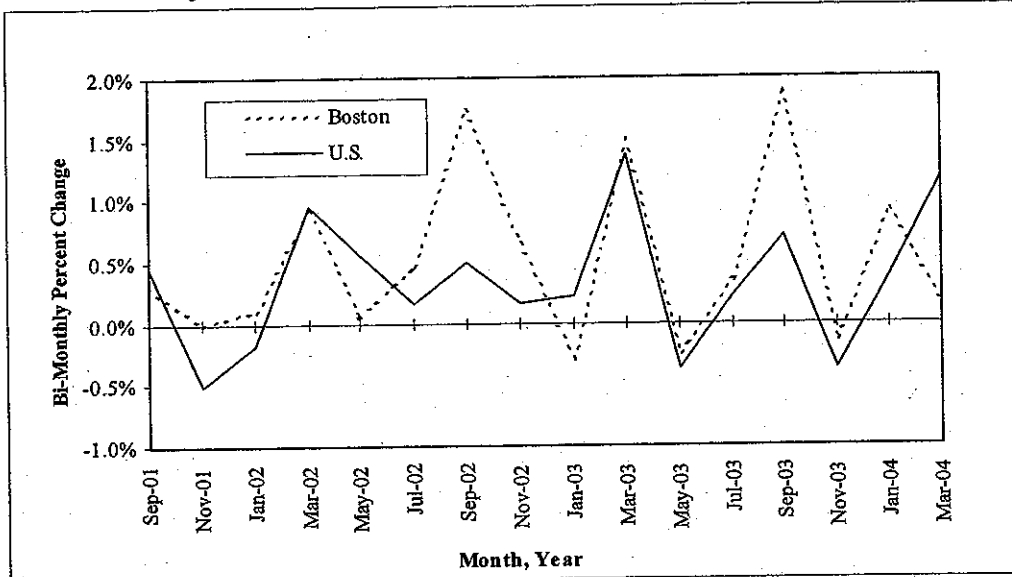
Consumer Prices. Higher income levels in Massachusetts relative to the rest of the United States are offset to some extent by the higher cost of living in Massachusetts. The following table presents consumer price trends for the Boston metropolitan area and the United States for the period between 1970 and 2002. Data reflect changes to methodology made by the Bureau of Labor Statistics in January 1998 and indicate the Consumer Price Index for all urban consumers (CPI-U) and the percentage change in the Consumer Price Index for all urban consumers from the previous year. In 2003, the CPI-U for Boston increased 3.8 percent compared to an increase of 2.3 percent for the United States as a whole. The latest available data for March 2004 show that the CPI-U for the Boston metropolitan area grew at a rate of 2.9 percent from March 2003 compared with 1.7 percent for the U.S.

Consumer Price Index for all Urban Consumers (CPI-U), 1970-2003
(1982-1984=100)

| Year | Boston Metro Area | | United States | |
|--------|-------------------|-------------|---------------|-------------|
| | CPI-U | Pct. Change | CPI-U | Pct. Change |
| 1971 | 42.2 | 5.0% | 40.5 | 4.4% |
| 1973 | 46.3 | 5.9% | 44.4 | 6.2% |
| 1975 | 55.8 | 9.0% | 53.8 | 9.1% |
| 1977 | 63.1 | 5.2% | 60.6 | 6.5% |
| 1979 | 73.2 | 10.2% | 72.6 | 11.3% |
| 1981 | 91.8 | 11.1% | 90.9 | 10.3% |
| 1983 | 99.8 | 4.5% | 99.6 | 3.2% |
| 1985 | 109.4 | 4.5% | 107.6 | 3.6% |
| 1987 | 117.1 | 4.4% | 113.6 | 3.6% |
| 1989 | 131.3 | 5.7% | 124.0 | 4.8% |
| 1991 | 145.0 | 4.4% | 136.2 | 4.2% |
| 1993 | 152.9 | 2.9% | 144.5 | 3.0% |
| 1995 | 158.6 | 2.4% | 152.4 | 2.8% |
| 1997 | 167.9 | 2.8% | 160.5 | 2.3% |
| 1999 | 176.0 | 2.5% | 166.6 | 2.2% |
| 2001 | 191.5 | 4.3% | 177.1 | 2.8% |
| 2003 | 203.9 | 3.8% | 184.0 | 2.3% |
| Mar-04 | 208.7 | 2.9% | 187.4 | 1.7% |

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

***Bi-Monthly Percent Change in Consumer Price Index
for all Urban Consumers, September 2001 – March 2004***



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

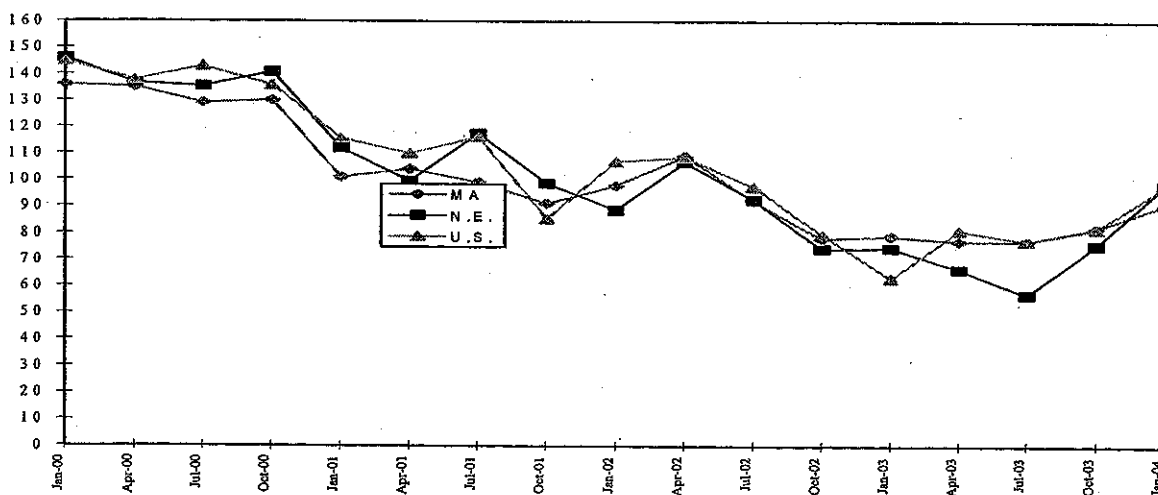
Consumer Confidence, Present Situation, and Future Expectations. These three measures offer multiple insights into consumer attitudes. The U.S. and New England measures are compiled from a national monthly survey of 5,000 households and are published by The Conference Board, Inc. The measures for Boston are conducted in a similar manner and published by the New England Economic Project (NEEP), based on the polling of 500 adult residents of Massachusetts. “Consumer confidence” is a measure of consumer optimism regarding overall economic conditions. “Future expectations” focuses on consumers’ attitudes regarding business conditions, employment, and employment income for the coming six months. “Present situation” measures the same attitudes as future expectations but at the time of the survey. Although the U.S. and the New England measures are compiled by a different source than the Boston measures, according to the Federal Reserve Bank of Boston the numbers are generally comparable. The following table and chart detail these three measures since 2000.

**Quarterly measures of Consumer Confidence, Present Situation, and Future Expectations
for Massachusetts, New England, and the U.S., 2000 – January 2004**
(Not Seasonally Adjusted, except United States (1985=100))

| | Consumer Confidence | | | Present Situation | | | Future Expectations | | |
|--------|---------------------|-------|-------|-------------------|-------|-------|---------------------|-------|-------|
| | MA | N.E. | U.S. | MA | N.E. | U.S. | MA | N.E. | U.S. |
| Jan-00 | | | | | | | | | |
| Apr-00 | 135.0 | 136.5 | 137.7 | 155.0 | 195.7 | 179.8 | 122.0 | 97.0 | 109.7 |
| Jul-00 | | | | | | | | | |
| Oct-00 | 130.0 | 140.7 | 135.8 | 157.0 | 195.5 | 176.8 | 111.0 | 104.1 | 108.4 |
| Jan-01 | | | | | | | | | |
| Apr-01 | 104.0 | 99.5 | 109.9 | 124.0 | 161.7 | 156.0 | 91.0 | 58.0 | 79.1 |
| Jul-01 | | | | | | | | | |
| Oct-01 | 91.0 | 98.6 | 85.3 | 94.0 | 105.6 | 107.2 | 90.0 | 64.0 | 70.7 |
| Jan-02 | | | | | | | | | |
| Apr-02 | 109.0 | 106.7 | 108.5 | 84.0 | 115.5 | 106.8 | 125.0 | 100.8 | 109.6 |
| Jul-02 | | | | | | | | | |
| Oct-02 | 78.0 | 74.2 | 79.6 | 48.0 | 70.8 | 77.2 | 97.0 | 76.5 | 81.1 |
| Jan-03 | | | | | | | | | |
| Apr-03 | 77.0 | 66.4 | 81.0 | 31.0 | 52 | 75.2 | 108.0 | 76.0 | 84.8 |
| Jul-03 | | | | | | | | | |
| Oct-03 | 82.0 | 75.5 | 81.7 | 36.0 | 57.4 | 67.0 | 112.0 | 87.6 | 91.5 |
| Jan-04 | | | | | | | | | |

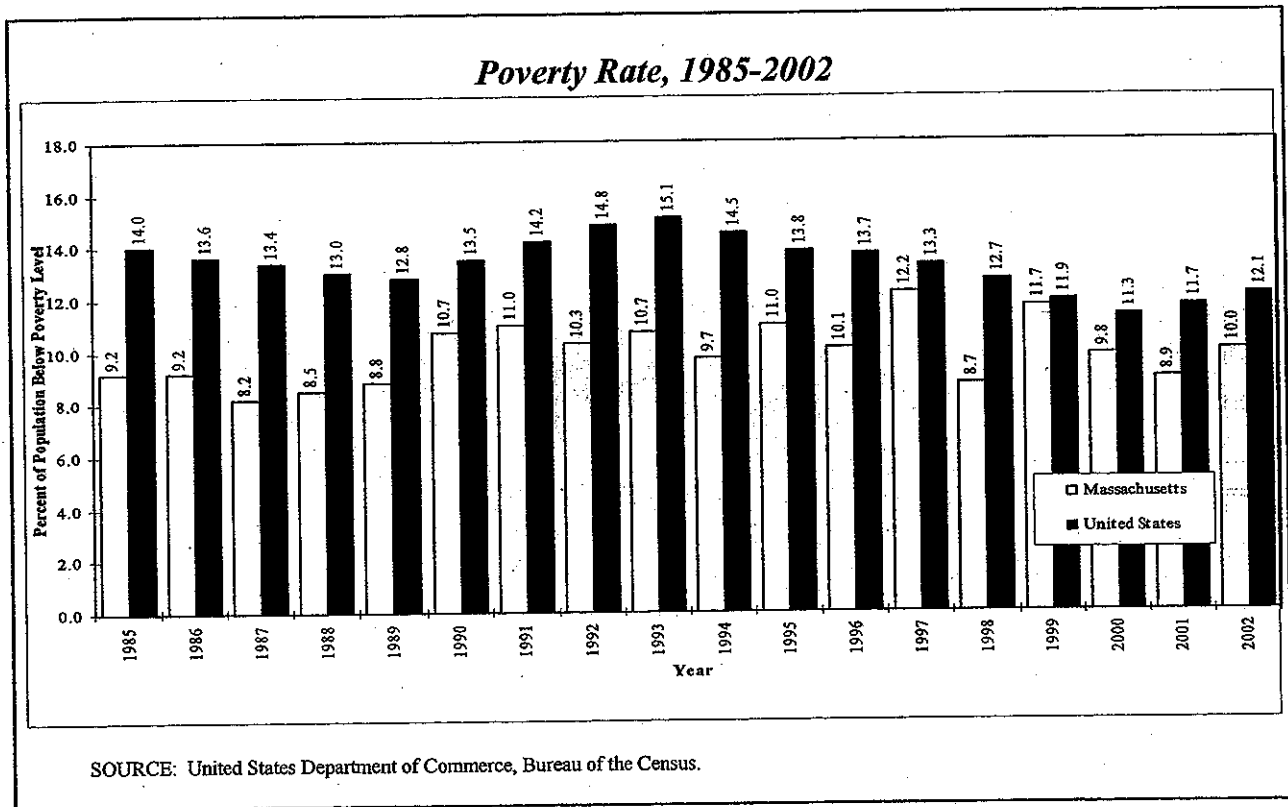
SOURCES: The Conference Board, Inc. (for U.S. and N.E. measures) and the New England Economic Project (for MA measures).

**Consumer Confidence for Massachusetts, New England, and the U.S.
January 2000 – January 2004**
(Not Seasonally Adjusted, except United States (1985=100))



SOURCES: The Conference Board, Inc. (for U.S. and N.E. measures), New England Economic Project (for MA measures).

Poverty. The Massachusetts poverty rate remains below the national average. Since 1980, the percentage of the Massachusetts population below the poverty line has varied between 7.7 percent and 12.2 percent. During the same time, the national poverty rate varied between 11.3 percent and 15.1 percent. In 2001, the poverty rate in Massachusetts declined to 8.9 percent while the poverty rate in the United States rose slightly to 11.7 percent. Since 1980, the ratio of the Massachusetts rate of poverty to the United States rate of poverty has varied from a low of 0.51 in 1983 to 0.99 in 1999. These official poverty statistics are not adjusted for regional differences in the cost of living. The following chart illustrates the lower poverty rates in Massachusetts (1985-2002) compared with the national average during similar periods. Poverty estimates for states are not as reliable as national estimates. One should use caution when comparing poverty rate estimates across states, or poverty rates for the same state across years, because their variability is high.

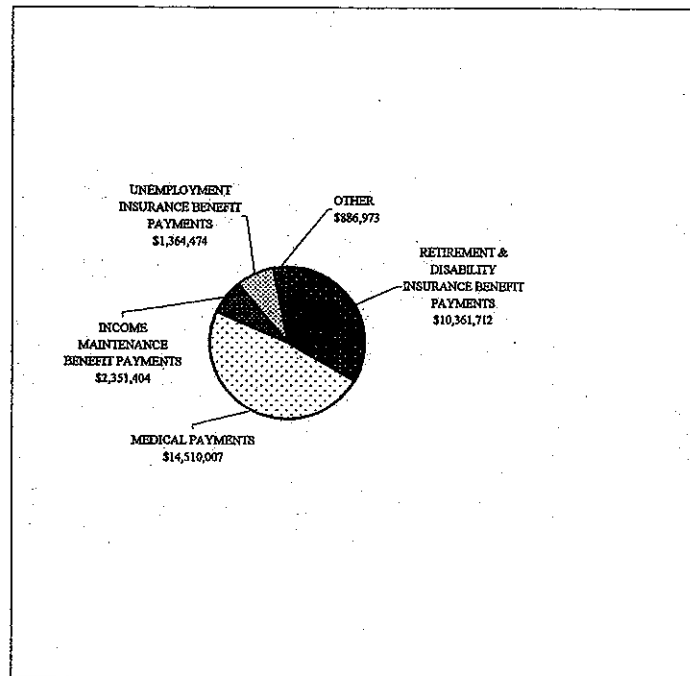


Transfer Payments. Transfer payment income is payment to individuals from all levels of government and from businesses, for which no current services are performed, including payments to nonprofit institutions serving individuals. These payments accounted for more than 13 percent of total personal income in Massachusetts in 2002. The chart above does not include transfer payments from business or payments to nonprofit organizations. Total transfer payments to individuals in Massachusetts totaled 32.1 billion dollars for 2002.

***Transfer Payments from Governments to Individuals – Massachusetts
(from Annual State Personal Income Estimates)***

2002

(thousands of dollars)



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

NOTE: The category "other" includes payments for: veterans benefit payments, federal education and training assistance payments, and other payments to individuals

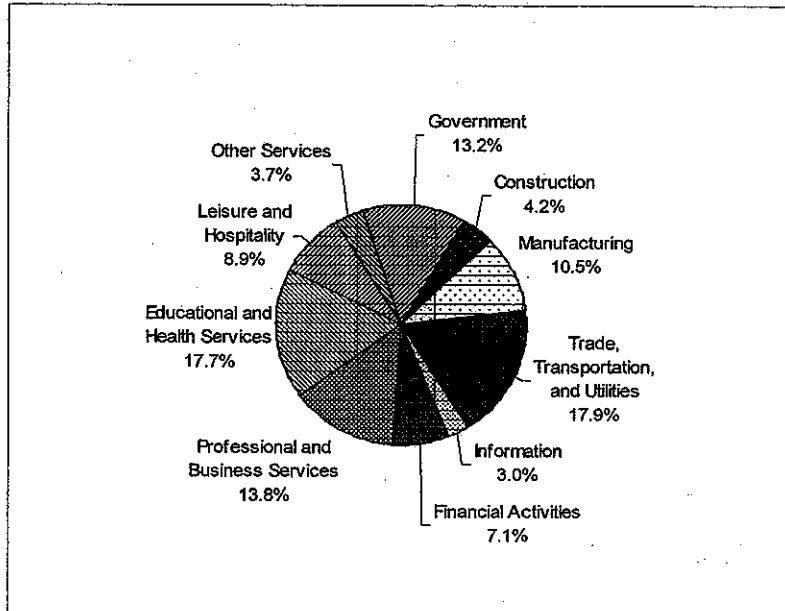
EMPLOYMENT

Employment by Industry. The following charts show the distribution of non-agricultural payroll employment by industry in Massachusetts for 2002 and 2003 on the new North American Industry Classification System (NAICS) basis, and the corresponding shares twelve years earlier, the earliest years for which NAICS data is available. Subsequent versions of this Economic Information section will discuss these new sectors in more detail. Like many industrial states, Massachusetts has seen a steady diminution of its manufacturing jobs base over the last two decades, both absolutely and as a share of total employment. Several NAICS service sectors have grown to take the place of manufacturing in driving the Massachusetts economy.

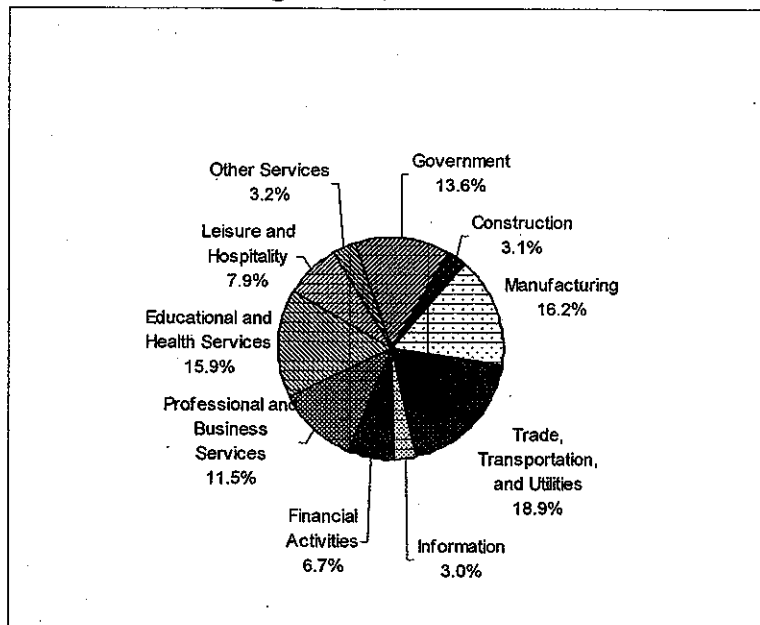
Total non-agricultural employment in Massachusetts declined 2.4 percent in 2002 and another 1.9 percent in 2003. Between March 2003 and March 2004, manufacturing employment (on the NAICS basis) declined 2.5 percent.

Massachusetts Non-Farm Payroll Employment
(NAICS Industry basis)

Average Share, 2002-2003



Average Share, 1990-1991



SOURCE: Massachusetts Division of Employment and Training.

Largest Employers in Massachusetts. The following table lists the twenty-five largest employers in Massachusetts based upon employment data for June 2003. The list is unchanged from the previous list based on June 2002.

Twenty-five Largest Massachusetts Employers in June 2003
(Listed Alphabetically)

| | |
|---------------------------------------|-----------------------------------|
| Baystate Medical Center | May Department Stores |
| Beth Israel Deaconess Hospital | Raytheon Company |
| Boston University | Sears, Roebuck & Company |
| Brigham & Women's Hospital | Shaw's Supermarkets |
| The Children's Hospital Corporation | Southcoast Hospitals Group |
| Demoulas Supermarkets | S&S Credit Corporation |
| E.M.C. Corporation | State Street Bank & Trust Company |
| Fleet National Bank | Tufts University |
| Friendly Ice Cream Corporation | UMass Memorial Medical Center |
| General Hospital Corporation | United Parcel Service |
| Harvard University | Verizon New England |
| Home Depot USA | Wal-Mart Associates |
| Massachusetts Institute of Technology | |

SOURCE: Massachusetts Division of Employment and Training.

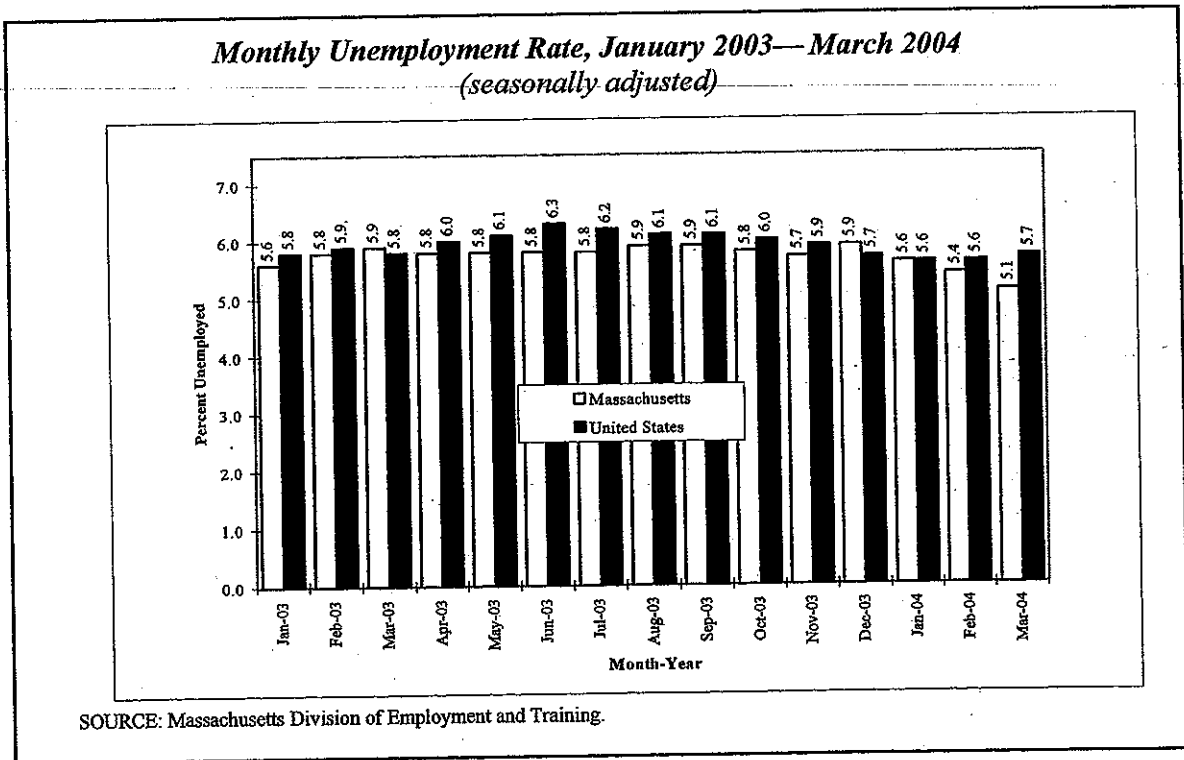
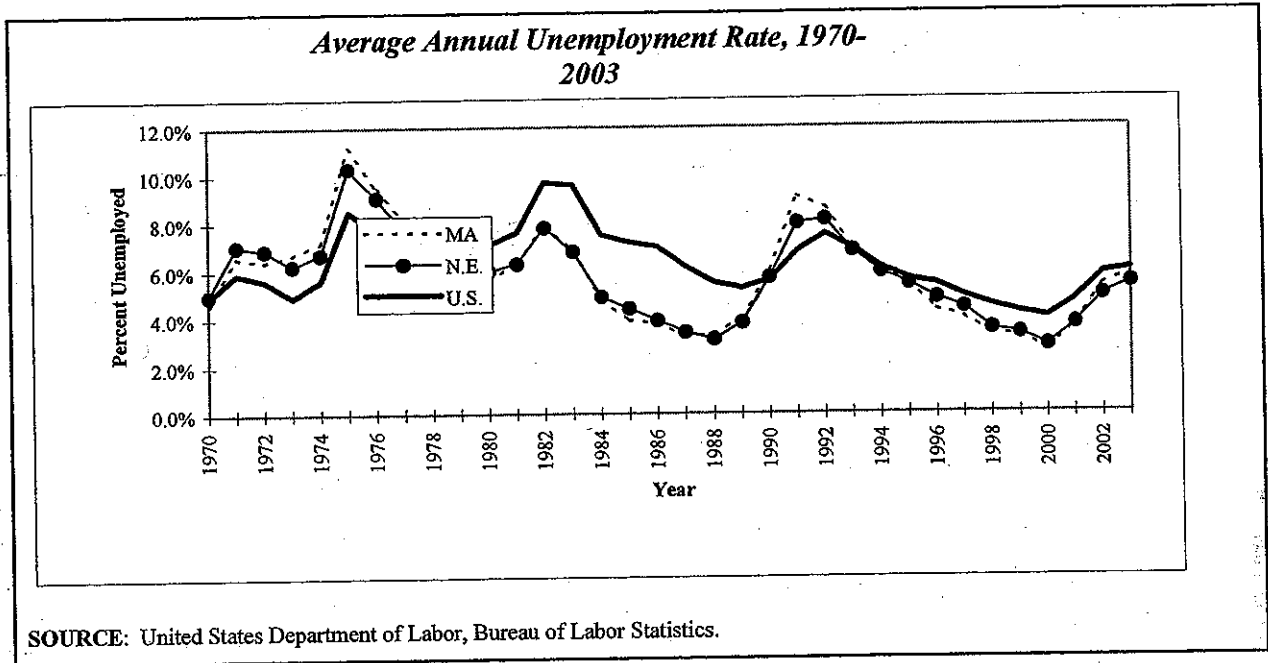
Unemployment. The economic recession of the early 1990s caused unemployment rates in Massachusetts to rise significantly above the national average, as much as 2.3 points above in 1991. However, since 1994 the unemployment rate in Massachusetts has been consistently below the national average. The following table compares the annual civilian labor force, the number unemployed, and unemployment rates of Massachusetts, the New England states, and the United States between 1970 and 2003.

Annual Average Civilian Labor Force and Unemployment, 1970-2003
(in thousands)

| Year | Civilian Labor Force | | | Unemployed | | | Unemployment Rate | | | MA Rate as Pct. of U.S. |
|------|----------------------|-------|---------|------------|------|--------|-------------------|------|------|-------------------------|
| | MA | N.E. | U.S. | MA | N.E. | U.S. | MA | N.E. | U.S. | |
| 1970 | 2,458 | 5,129 | 82,771 | 114 | 256 | 4,093 | 4.6% | 5.0% | 4.9% | 93.9% |
| 1972 | 2,475 | 5,261 | 87,034 | 160 | 363 | 4,882 | 6.4% | 6.9% | 5.6% | 114.3% |
| 1974 | 2,622 | 5,512 | 91,949 | 189 | 369 | 5,156 | 7.2% | 6.7% | 5.6% | 128.6% |
| 1976 | 2,727 | 5,717 | 96,158 | 259 | 519 | 7,406 | 9.5% | 9.1% | 7.7% | 123.4% |
| 1978 | 2,816 | 5,908 | 102,251 | 171 | 340 | 6,202 | 6.1% | 5.7% | 6.1% | 100.0% |
| 1980 | 2,867 | 6,167 | 106,940 | 162 | 367 | 7,637 | 5.6% | 6.0% | 7.1% | 78.9% |
| 1982 | 2,993 | 6,339 | 110,204 | 237 | 495 | 10,678 | 7.9% | 7.8% | 9.7% | 81.3% |
| 1984 | 3,047 | 6,549 | 113,544 | 145 | 318 | 8,539 | 4.8% | 4.9% | 7.5% | 63.5% |
| 1986 | 3,056 | 6,721 | 117,834 | 118 | 265 | 8,237 | 3.8% | 3.9% | 7.0% | 54.3% |
| 1988 | 3,155 | 6,914 | 121,669 | 103 | 216 | 6,701 | 3.3% | 3.1% | 5.5% | 60.1% |
| 1990 | 3,228 | 7,147 | 125,840 | 195 | 408 | 7,047 | 6.0% | 5.7% | 5.6% | 107.1% |
| 1992 | 3,145 | 7,057 | 128,105 | 269 | 568 | 9,613 | 8.6% | 8.1% | 7.5% | 114.7% |
| 1994 | 3,173 | 6,964 | 131,056 | 191 | 412 | 7,996 | 6.0% | 5.9% | 6.1% | 98.4% |
| 1996 | 3,174 | 6,996 | 133,943 | 137 | 335 | 7,236 | 4.3% | 4.8% | 5.4% | 79.6% |
| 1998 | 3,273 | 7,113 | 137,673 | 109 | 250 | 6,210 | 3.3% | 3.5% | 4.5% | 73.3% |
| 2000 | 3,318 | 7,358 | 140,863 | 88 | 203 | 5,655 | 2.6% | 2.8% | 4.0% | 65.0% |
| 2002 | 3,486 | 7,565 | 142,535 | 185 | 367 | 8,266 | 5.3% | 4.9% | 5.8% | 91.4% |

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

The unemployment rate in Massachusetts has been consistently below that of the United States over the past year. Unemployment levels in the United States as a whole and in the New England region have shown similar patterns in the last year, generally rising for much of the year, then falling slightly in recent months. The unemployment rate in Massachusetts dropped from 5.9 to 5.1 percent between March, 2003 and March, 2004, while the United States unemployment rate dropped from 5.8 to 5.7 percent over those same months. The following chart shows the unemployment rates for Massachusetts and the United States for each of the past fifteen months.



Help Wanted Advertising Index, 1989-2003
(Seasonally Adjusted), 1987=100)

| | US | % Change | N.E. | % Change | Boston | % Change |
|------|------|----------|------|----------|--------|----------|
| 1989 | 98.0 | | 60.8 | | 59.5 | |
| 1990 | | | | | | |
| 1991 | 62.0 | -26.0% | 31.0 | -25.3% | 34.7 | -20.3% |
| 1992 | | | | | | |
| 1993 | 69.4 | 11.1% | 40.3 | 12.6% | 45.4 | 13.8% |
| 1994 | | | | | | |
| 1995 | 84.3 | 1.6% | 47.8 | -0.7% | 54.5 | -1.7% |
| 1996 | | | | | | |
| 1997 | 87.0 | 4.6% | 50.6 | 1.7% | 56.7 | -0.3% |
| 1998 | | | | | | |
| 1999 | 87.3 | -2.4% | 52.4 | 4.8% | 57.8 | 7.1% |
| 2000 | | | | | | |
| 2001 | 58.3 | -29.3% | 37.7 | -24.7% | 40.9 | -24.3% |
| 2002 | | | | | | |
| 2003 | 37.8 | -13.5% | 23.8 | -8.4% | 25.8 | -7.7% |

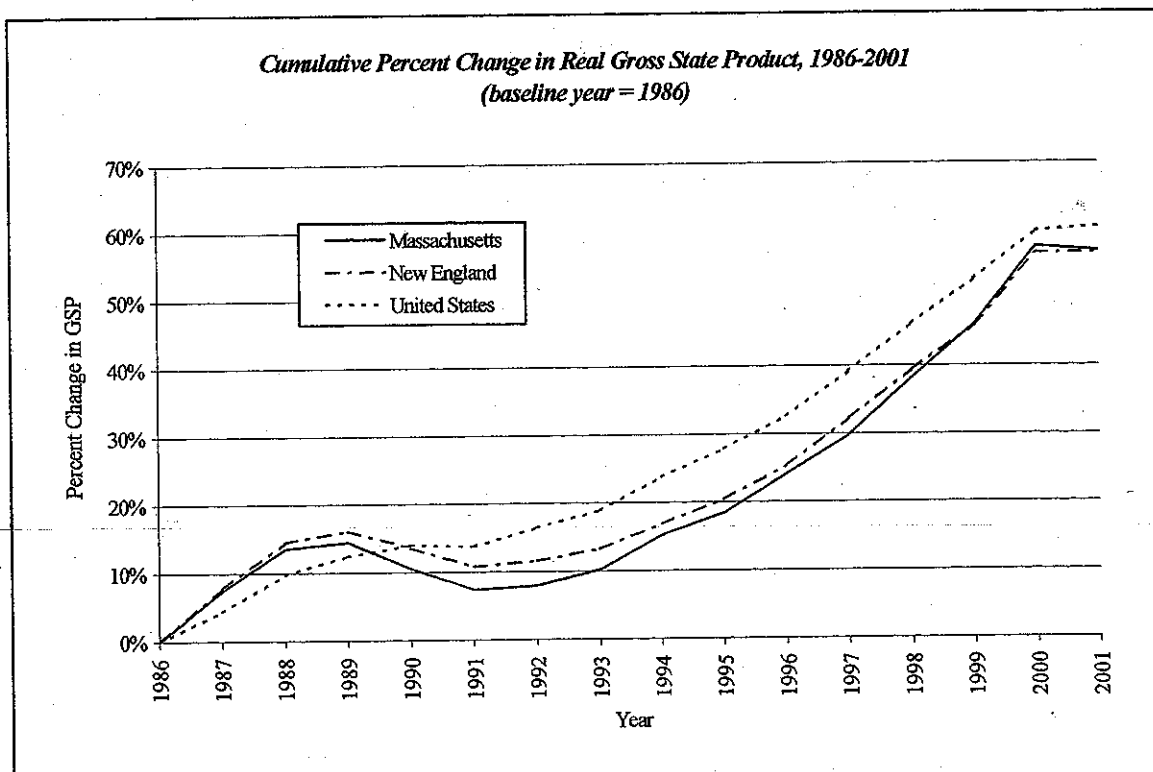
SOURCE: The Conference Board, Inc.

Help Wanted Advertising Index. This index is an additional measure of the employment conditions in various regions across the country and for the nation as a whole. Compiled by The Conference Board, Inc., the index is based on the volume of help wanted advertising in 51 major newspapers across the country whose circulation covers about half of the country's nonagricultural employment. The index is compiled for each of the 51 markets, then weighted into regional averages which are then weighted into the national index. The index is intended to be a proxy measure for labor demand. According to the Conference Board, Inc., rising trends in want-ad volume have generally corresponded to improved labor market conditions and declining volume has indicated a decline in new employment.

Unemployment Compensation Trust Fund. The unemployment insurance system is a federal-state cooperative program established by the Social Security Act and the Federal Unemployment Tax Act to provide for the payment of benefits to eligible individuals when they become unemployed through no fault of their own. Benefits are paid from the Commonwealth's Unemployment Compensation Trust Fund, financed through employer contributions. The assets and liabilities of the Commonwealth Unemployment Compensation Trust Fund are not assets and liabilities of the Commonwealth. As of May 31, 2003, the private contributory sector of the Massachusetts Unemployment Trust Fund had a surplus of \$520 million, and the Division of Employment and Training's April 2003 quarterly report indicates that the contributions provided should result in trust fund system reserves of \$1.375 billion by the end of 2007.

ECONOMIC BASE AND PERFORMANCE

In 1987 and 1988, the economies of Massachusetts and New England were among the strongest performers in the nation, with growth rates considerably higher than those for the national economy as a whole. Between 1989 and 1992, however, Massachusetts and New England experienced growth rates significantly below the national average. From 1992 to 1997, growth rates in Massachusetts and New England tracked the U.S. growth rate quite closely. In 1999 and 2000 the economies of both the Commonwealth and the region grew at a faster pace than the nation as a whole. However, both the U.S. and Massachusetts experienced slower growth in 2000 than in 1999, while New England's growth accelerated. Over the decade, growth of the Massachusetts economy averaged 3.9 percent, while New England and the nation have each experienced average growth of 3.5 percent. The Massachusetts economy is the largest in New England, making up an average of 47.7 percent of New England's total Gross State Product and an average of 2.7 percent of the nation's economy over the past decade. In 2001, Massachusetts experienced negative growth in the GSP of 0.4 percent, the first decline since 1991. New England GSP was flat in 2000 and the United States GSP grew by 0.4 percent.



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

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

| Gross State Product, 1986-2001 (millions of chained 1996 dollars) | | | | | | |
|---|---------------|--------|-------------|--------|---------------|--------|
| Year | Massachusetts | | New England | | United States | |
| | GSP | Change | GSP | Change | Total GSP | Change |
| 1986 | \$169,338 | | \$350,747 | | \$5,816,661 | |
| 1988 | 192,255 | 5.7% | 401,698 | 6.2% | 6,386,132 | 5.2% |
| 1990 | 187,167 | -3.4% | 398,368 | -2.2% | 6,630,740 | 1.4% |
| 1992 | 182,789 | 0.5% | 391,385 | 0.7% | 6,774,505 | 2.4% |
| 1994 | 195,171 | 4.5% | 410,014 | 3.2% | 7,203,002 | 4.1% |
| 1996 | 210,127 | 4.8% | 439,596 | 4.0% | 7,715,901 | 3.8% |
| 1998 | 233,981 | 6.5% | 488,673 | 5.4% | 8,502,663 | 5.1% |
| 2000 | 266,840 | 7.9% | 549,341 | 7.4% | 9,298,227 | 4.7% |

SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis. Note: Chained dollars are utilized by the Bureau of Economic Analysis as a measure of real GSP.

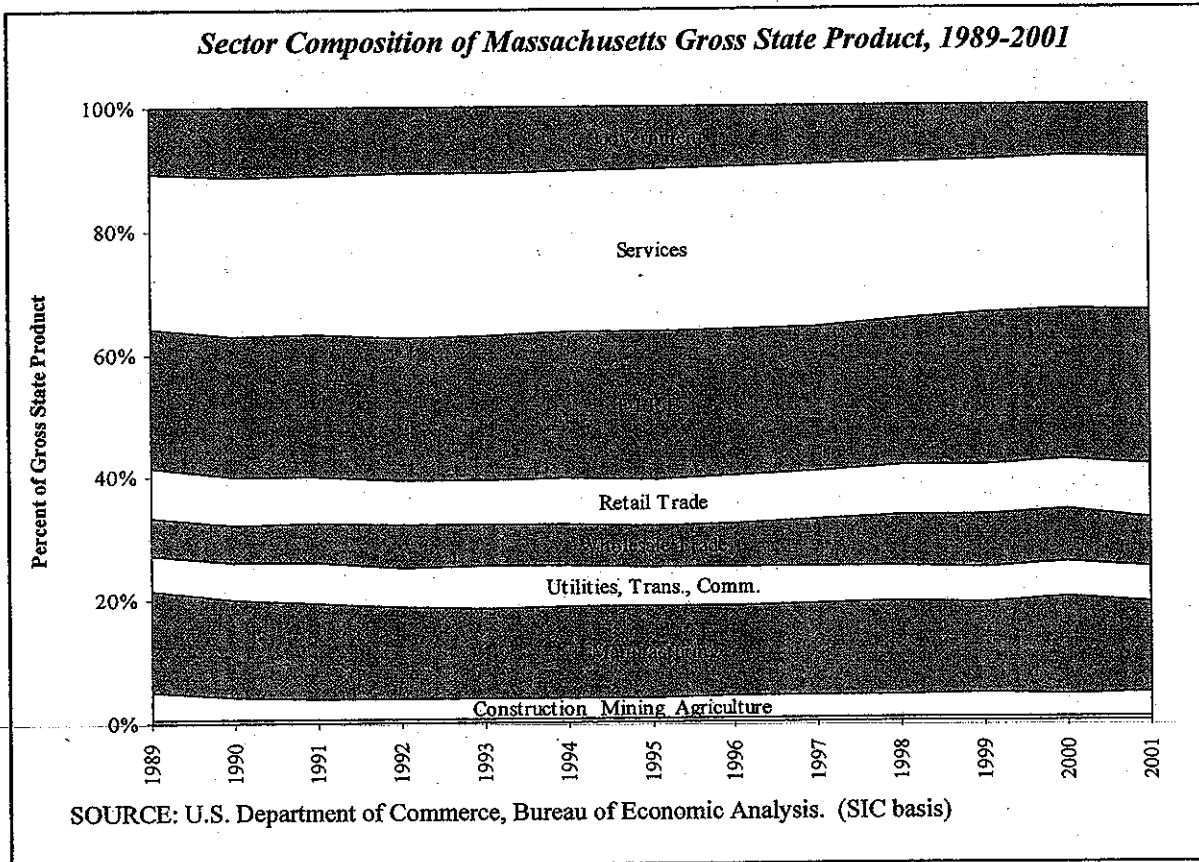
The commercial base of Massachusetts is anchored by the fourteen 2003 Fortune 500 industrial and service firms headquartered within the state, as the following table indicates. The Fortune 500 firms are ranked according to total revenues in 2003. All companies listed in the 2003 Fortune 500 are also in the 2004. Nine out of thirteen companies improved their rank and Boston Scientific was added at 478.

| Massachusetts Companies in the 2004 Fortune 500 | | | | |
|--|------|---------------------------------|--|---------------|
| Rank | | | | 2003 revenues |
| 2004 | 2003 | Company | Industry | (millions) |
| 107 | 105 | Raytheon (Lexington) | Aerospace | 18,109 |
| 140 | 115 | FleetBoston (Boston) | Commercial Banks | 14,362 |
| 152 | 165 | Staples (Framingham) | Specialty Retailers | 13,181 |
| 215 | 218 | Gillette (Boston) | Metal Products | 9,252 |
| 299 | 308 | EMC (Hopkinton) | Computer Peripherals | 6,237 |
| 477 | 483 | Reebok International (Canton) | Apparel | 3,485 |
| 494 | 456 | Allmerica Financial (Worcester) | Insurance: Property and Casualty (Stock) | 3,264 |

SOURCE: *Fortune*, April 5, 2004.

Economic Base and Performance – Sector Detail (SIC basis)

The economy of Massachusetts remains diversified among several industrial and non-industrial sectors. The three largest sectors of the economy (services, F.I.R.E., and manufacturing on the old S.I.C. basis) contributed a 64.5 percent of the GSP in 2001, the same as their combined contribution in 1990. The next release of the GSP will be on a NAICS basis. The data below show the contributions to the Massachusetts real Gross State Product of all industrial and non-industrial sectors.



Gross State Product by Industry in Massachusetts, 1992-2001
(millions of chained 1996 dollars)

| Industrial Sector | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
|------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Ag., Forestry, Fishing | \$1,173 | \$1,194 | \$1,124 | \$1,098 | \$1,143 | \$1,280 | \$1,263 | \$1,362 | \$1,465 | \$1,539 |
| Mining | 99 | 74 | 107 | 97 | 94 | 82 | 88 | 79 | 92 | 97 |
| Construction | 5,696 | 6,130 | 6,753 | 6,933 | 7,477 | 8,026 | 8,780 | 9,479 | 10,136 | 10,469 |
| Manufacturing | 27,381 | 27,402 | 28,789 | 29,835 | 30,687 | 32,117 | 33,486 | 34,688 | 41,868 | 38,543 |
| Trans., Util., Comm. | 11,940 | 12,621 | 13,035 | 12,683 | 13,334 | 13,063 | 13,245 | 14,034 | 15,354 | 15,354 |
| Wholesale Trade | 12,457 | 12,548 | 13,367 | 13,333 | 15,100 | 16,677 | 19,331 | 21,011 | 22,345 | 21,385 |
| Retail Trade | 13,791 | 13,996 | 14,695 | 15,163 | 16,591 | 17,683 | 19,228 | 20,219 | 22,039 | 23,243 |
| F.I.R.E. | 49,721 | 53,415 | 46,072 | 47,712 | 49,516 | 51,595 | 57,258 | 60,752 | 65,117 | 67,709 |
| Services | 48,822 | 49,610 | 51,261 | 53,055 | 55,508 | 57,576 | 59,717 | 61,867 | 66,263 | 66,268 |
| Government | 19,245 | 19,690 | 19,963 | 20,315 | 20,657 | 20,963 | 21,135 | 21,332 | 22,052 | 22,292 |
| Total GSP | 182,739 | 186,630 | 195,171 | 200,857 | 210,127 | 219,710 | 233,991 | 247,354 | 266,840 | 265,722 |

SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis. (SIC basis)

Finance, Insurance, Real Estate. The F.I.R.E. sector, the second largest contributor to the Massachusetts Gross State Product over the last decade, took the leading position in 2001 at 25.1 percent of GSP. In 2000, it contributed 24.0 percent of the Gross State Product. The sector has experienced yearly growth since the declines of 1989 to 1991, and was the only one of the top three sectors to grow in 2001, increasing by 1.7 percent over 2000.

Services. In 2001, the services sector, long the largest contributor to the Massachusetts Gross State Product, lost its leading position as it declined slightly in real terms from its 2000 level to represent 24.9 percent of GSP. After a period of stagnation and slight decline from 1989 to 1991, the sector showed solid growth through the 1990s and a 7.1 percent jump in 2000, but no growth in 2001.

Manufacturing. The manufacturing sector was the third largest contributor to the Massachusetts Gross State Product in 2000, contributing 14.5 percent of the Gross State Product. Manufacturing in New England was hit hard during the recession of 1989-1991, and posted only moderate growth during the mid-nineties. The manufacturing sector grew at least 6.9 percent in three of the years from 1997 to 2000, including a gain of 14.0 percent in 2000, but suffered a 7.8 percent decline in 2001.

Wholesale and Retail Trade. Taken together, the wholesale and retail trade sectors contributed 16.7 percent of the Massachusetts Gross State Product in 2001, with each sub-sector contributing almost equally to the total. Growth in the wholesale trade sector rebounded in 1991 and varied through the early 1990s but was very strong in the period from 1996 to 1999, increasing by more than 10 percent in each of those years. Growth of 6.9 percent in 2000 was offset by a decline of 6.6 percent in 2001, returning to 1999 levels. The retail sector was harder hit during the 1989-1991 recession, and did not rebound as quickly, with annual growth not exceeding 1.5 percent until 1994. In each of the six years from 1996 to 2001, however, retail growth exceeded 5 percent, including a 5.5 percent increase in 2001.

Trade and International Trade. A significant portion of what Massachusetts produces is exported internationally. Massachusetts ranked 10th in the United States, and first in New England, with \$18.7 billion in international exports in 2003. This represents an 11.7 percent increase from the previous year's exports from the Commonwealth, while national exports increased by 4.4 percent in the same period. Through February 2004, Massachusetts's exports totaled \$3.28 billion, an increase of 17.8 percent compared with exports in the first two months of 2003. National exports were up 10.9 percent in the same period. It is not possible to provide balance of trade comparisons for Massachusetts because import data are not compiled on a state-by-state basis.

Construction and Housing. In 2001, construction activity contributed 3.9 percent of the Massachusetts Gross State Product. This sector experienced a significant decline between 1989 and 1991, with declines as large as 19.6 percent and 17.2 percent in 1990 and 1991. Beginning in 1992, however, the sector rebounded and has grown every year since, and by at least 6.9 percent in each year from 1995 to 2000. Growth tapered to 3.3 percent in 2001.

The following table shows the number of housing permits authorized on an annual basis in Massachusetts, New England, and the United States. Between 1983 and 1986, both Massachusetts and New England experienced strong growth in the number of housing permits authorized. This period was followed by a prolonged decline from 1987 to 1991 during which the number of housing permits authorized in Massachusetts declined by 71.2 percent. With the exception of a 12.9 percent drop in 1995, Massachusetts housing permit authorizations increased each year from 1992 to 1999, for a total increase in that period of 50.3 percent. All three regions experienced declines in 2000, and Massachusetts and New England saw continuing, if milder, decreases in authorizations for 2001. All regions experienced growth in 2002 and 2003, with New England surging by 14.2 percent from 2001, Massachusetts rebounding with 11.5 percent growth, while nationwide growth in authorizations was similar at 12.1 percent.

| <i>Year</i> | <i>Massachusetts</i> | | <i>New England</i> | | <i>United States</i> | |
|-------------|----------------------|-----------------------|----------------------|-----------------------|----------------------|-----------------------|
| | <i>Total Permits</i> | <i>Percent Change</i> | <i>Total Permits</i> | <i>Percent Change</i> | <i>Total Permits</i> | <i>Percent Change</i> |
| 1970 | 38,330 | 14.2% | 74,068 | 5.0% | 1,354,746 | 1.8% |
| 1980 | 16,055 | -20.4% | 40,195 | -25.1% | 1,171,763 | -23.6% |
| 1982 | 15,958 | 2.3% | 39,470 | 3.7% | 1,000,500 | 1.5% |
| 1984 | 28,471 | 24.1% | 72,356 | 25.7% | 1,689,667 | 5.3% |
| 1986 | 43,877 | 11.5% | 108,272 | 11.8% | 1,771,832 | 2.3% |
| 1988 | 31,766 | -20.6% | 82,123 | -18.9% | 1,450,583 | -6.0% |
| 1990 | 15,276 | -29.4% | 36,811 | -31.2% | 1,125,583 | -16.3% |
| 1992 | 16,346 | 29.5% | 36,876 | 18.5% | 1,105,083 | 15.9% |
| 1994 | 18,302 | 3.3% | 40,459 | 3.1% | 1,366,916 | 13.0% |
| 1996 | 17,360 | 8.9% | 40,425 | 8.2% | 1,419,083 | 6.2% |
| 1998 | 18,958 | 8.0% | 47,342 | 12.6% | 1,619,500 | 12.3% |
| 2000 | 17,342 | -8.6% | 43,735 | -7.7% | 1,598,332 | -3.9% |
| 2002 | 17,122 | 2.8% | 47,173 | 10.3% | 1,749,584 | 6.9% |
| 2003 | | | | | | |

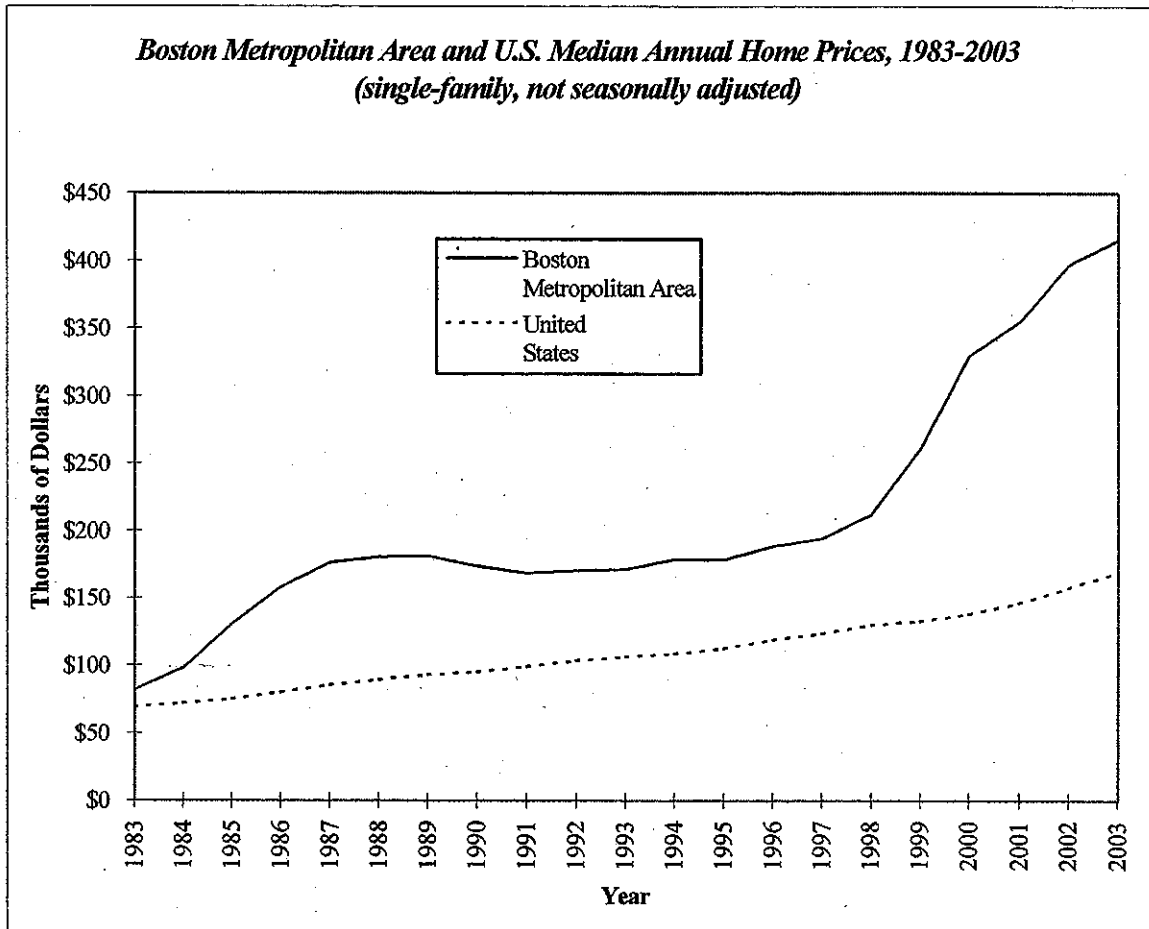
SOURCES: Federal Reserve Bank of Boston; United States Department of Commerce.

Both the economic recession of 1990-1991 and the subsequent economic recovery were strongly reflected in the Massachusetts housing sector, but the recession that began in 2001 has had a less pronounced impact on home sales. Significant declines in existing home sales in Massachusetts in 1989 and 1990 (of 10.9 percent and 28.8 percent, respectively) were followed by rapid sales growth between 1991 and 1993, when home sales in Massachusetts increased at a yearly rate substantially higher than the national average. Following this period of rapid growth, the growth in existing home sales slowed to a rate of 0.7 percent in 1994 and declined 2.6 percent in 1995. In 1996, 1997, and 1998, however, growth in existing home sales in Massachusetts was significant, outpacing the New England and national average in 1996 and 1997 with rates of 16.6 percent and 11.0 percent, respectively. This strong growth ended in 1999 when existing home sales in the Commonwealth declined 1.3 percent while growth in existing home sales nationally was 6.0 percent. In 2000, existing home sales in Massachusetts declined by 10 percent and did not start growing again until 2002. On a seasonally adjusted annual basis, existing home sales for the Commonwealth, New England, and the United States appear in the following table.

| <i>Existing Home Sales, 1981-2003</i> | | | | | | |
|---|----------------------|-----------------|--------------------|-----------------|----------------------|-----------------|
| <i>(seasonally adjusted annual rates, in thousands)</i> | | | | | | |
| <i>Year</i> | <i>Massachusetts</i> | | <i>New England</i> | | <i>United States</i> | |
| | <i>Sales</i> | <i>% Change</i> | <i>Sales</i> | <i>% Change</i> | <i>Sales</i> | <i>% Change</i> |
| 1982 | 42.6 | -0.8% | 98.6 | -6.9% | 2,117.5 | -17.8% |
| 1984 | 54.9 | -7.3% | 140.7 | -0.4% | 3,027.5 | 5.3% |
| 1986 | 67.0 | 11.3% | 169.2 | 7.8% | 3,772.5 | 11.5% |
| 1988 | 76.6 | 0.2% | 178.5 | 2.3% | 3,882.5 | 3.1% |
| 1990 | 48.6 | -28.8% | 134.0 | -17.8% | 3,603.5 | -1.9% |
| 1992 | 62.5 | 17.0% | 170.6 | 21.4% | 3,889.5 | 10.1% |
| 1994 | 71.4 | 0.7% | 200.3 | 3.4% | 4,409.8 | 4.5% |
| 1996 | 81.2 | 16.6% | 200.7 | 8.1% | 4,705.3 | 8.4% |
| 1998 | 99.9 | 10.8% | 248.3 | 13.2% | 5,585.3 | 13.8% |
| 2000 | 88.7 | -10.0% | 242.0 | -4.4% | 5,831.8 | -1.5% |
| 2002 | 91.9 | 5.0% | 244.5 | 2.0% | 6,421.3 | 6.6% |

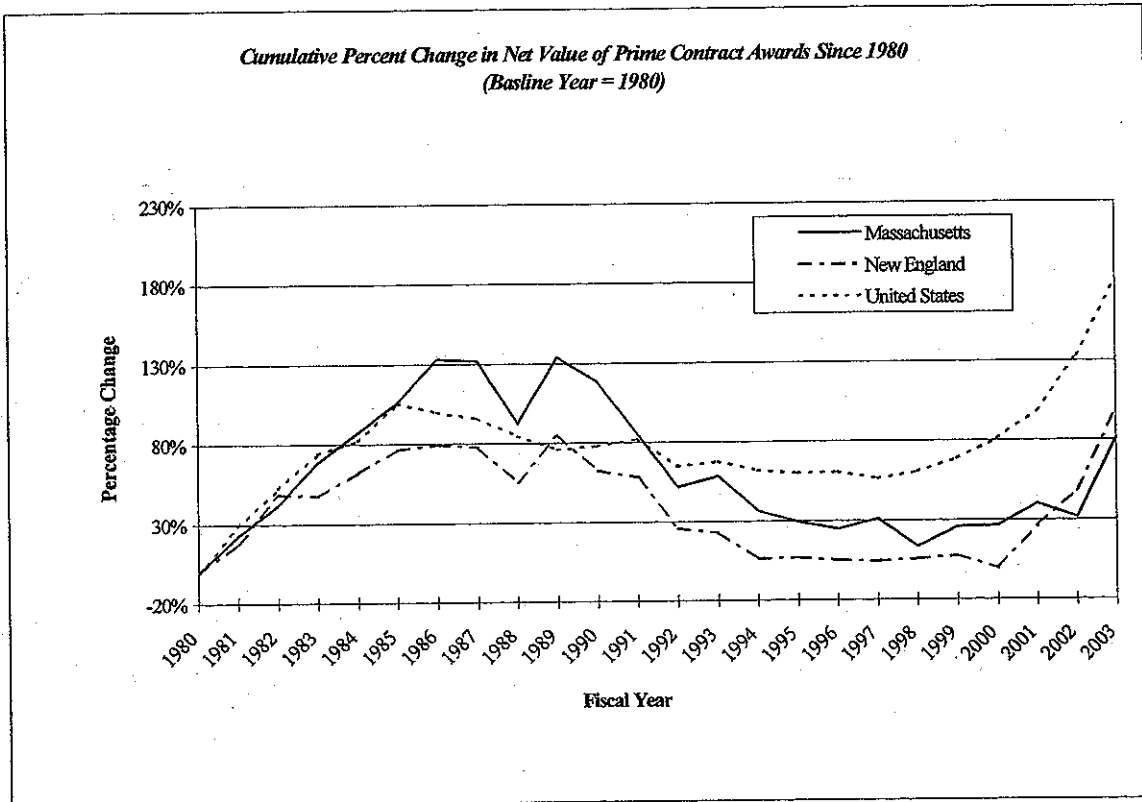
SOURCES: Federal Reserve Bank of Boston; National Association of Realtors. Revised May 2004

Median single-family home prices for the Boston Metropolitan area appear below. While Boston housing prices were 118.1 percent of the U.S. median in 1983, by 1987 Boston housing prices as a percent of the national median had reached 205.7 percent. After dipping to 160.9 percent of the national median in 1993 and remaining as low as 162.9 percent of the national median in 1998, Boston home prices soared to 237 percent of the national median in the fourth quarter of 2003. The Boston metropolitan area median home price rose to \$406,800 in the fourth quarter of 2003, compared to the national home price of \$171,600.



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

Defense. Following a peak at \$8.7 billion in the value of military prime contracts awarded to Massachusetts firms in fiscal 1986, defense-related contracts declined 17.2 percent by fiscal 1988 to \$7.2 billion. By fiscal 1995, the value of defense-related prime contracts had declined to \$4.8 billion. The net value of prime contract awards in Massachusetts oscillated between \$4.2 and \$4.9 billion from 1995 to 2000, but jumped 10.8 percent in 2001 to reach \$5.2 billion. The chart below illustrates the yearly changes in the value of Massachusetts military prime contracts from 1981 to 2001.



Source: U.S. Department of Defense. A prime contract is defined as \$10,000 or more before 1983 and \$25,000 or more from 1983 on.

The importance of the defense industry to the Massachusetts economy is reflected in table on the following page, which shows the value of Department of Defense prime contract awards between 1980 and 2003. Since the early 1980s, the Commonwealth's share of New England's prime contract awards had remained around or above 50 percent. In 1998, Massachusetts' share of New England's prime contract awards dipped to 45.7 percent and in 1999, the Commonwealth's share recovered only some of its losses, rising to 49.9 percent. In 2000, the Commonwealth's share of New England's prime contract awards rose to a recent peak of 54.2 percent, but large increases elsewhere in New England in 2001 offset the Massachusetts increase and pushed the Commonwealth's share in the region back down to 47.3 percent. In 2002, the Commonwealth's share of the national total reached its lowest point in over two decades, but increased slightly to 3.6 percent in 2003 due to a \$1.6 billion increase in aircraft engine, missile and space system, services and weapons procurement contracts. Despite this trend, Massachusetts remains the eighth largest recipient in defense spending.

Net Value of Department of Defense Prime Contract Awards, 1980-2003
(in millions of real dollars)

| <i>Fiscal Year</i> | <i>MA</i> | <i>N.E.</i> | <i>U.S.</i> | <i>MA as Percentage of N.E.</i> | <i>MA as Percentage of U.S.</i> |
|--------------------|-----------|-------------|-------------|-------------------------------------|-------------------------------------|
| 1980 | 4,744 | 10,772 | 88,096 | 44.0% | 5.4% |
| 1981* | 4,605 | 10,372 | 87,761 | 44.4% | 5.2% |
| 1982 | 5,317 | 12,337 | 101,333 | 42.9% | 5.3% |
| 1983 | 6,328 | 12,967 | 118,744 | 48.8% | 5.3% |
| 1984 | 7,189 | 14,771 | 127,073 | 48.7% | 5.6% |
| 1985 | 7,714 | 15,487 | 140,096 | 49.8% | 5.5% |
| 1986 | 8,738 | 17,773 | 147,024 | 49.2% | 5.9% |
| 1987 | 8,685 | 15,606 | 133,262 | 55.7% | 6.5% |
| 1988 | 8,746 | 15,672 | 137,074 | 55.8% | 6.4% |
| 1989 | 8,757 | 16,268 | 119,917 | 53.8% | 7.3% |
| 1990 | 8,156 | 14,271 | 112,222 | 57.2% | 7.3% |
| 1991 | 6,933 | 13,889 | 124,119 | 49.9% | 5.6% |
| 1992 | 5,836 | 10,779 | 102,408 | 54.2% | 5.7% |
| 1993 | 5,936 | 10,779 | 114,145 | 55.1% | 5.2% |
| 1994 | 5,116 | 9,275 | 103,316 | 54.2% | 5.0% |
| 1995 | 4,846 | 9,375 | 109,005 | 51.7% | 4.4% |
| 1996 | 4,625 | 9,222 | 102,408 | 50.0% | 4.5% |
| 1997 | 4,910 | 9,152 | 106,561 | 53.6% | 4.6% |
| 1998 | 4,445 | 8,744 | 101,333 | 50.8% | 4.4% |
| 1999 | 4,715 | 9,456 | 114,875 | 49.9% | 4.1% |
| 2000 | 4,715 | 9,456 | 114,875 | 49.9% | 4.1% |
| 2001 | 5,248 | 11,094 | 135,225 | 47.3% | 3.9% |
| 2002 | 5,977 | 12,629 | 147,024 | 47.3% | 4.0% |
| 2003 | 6,800 | 17,544 | 191,221 | 38.8% | 3.6% |

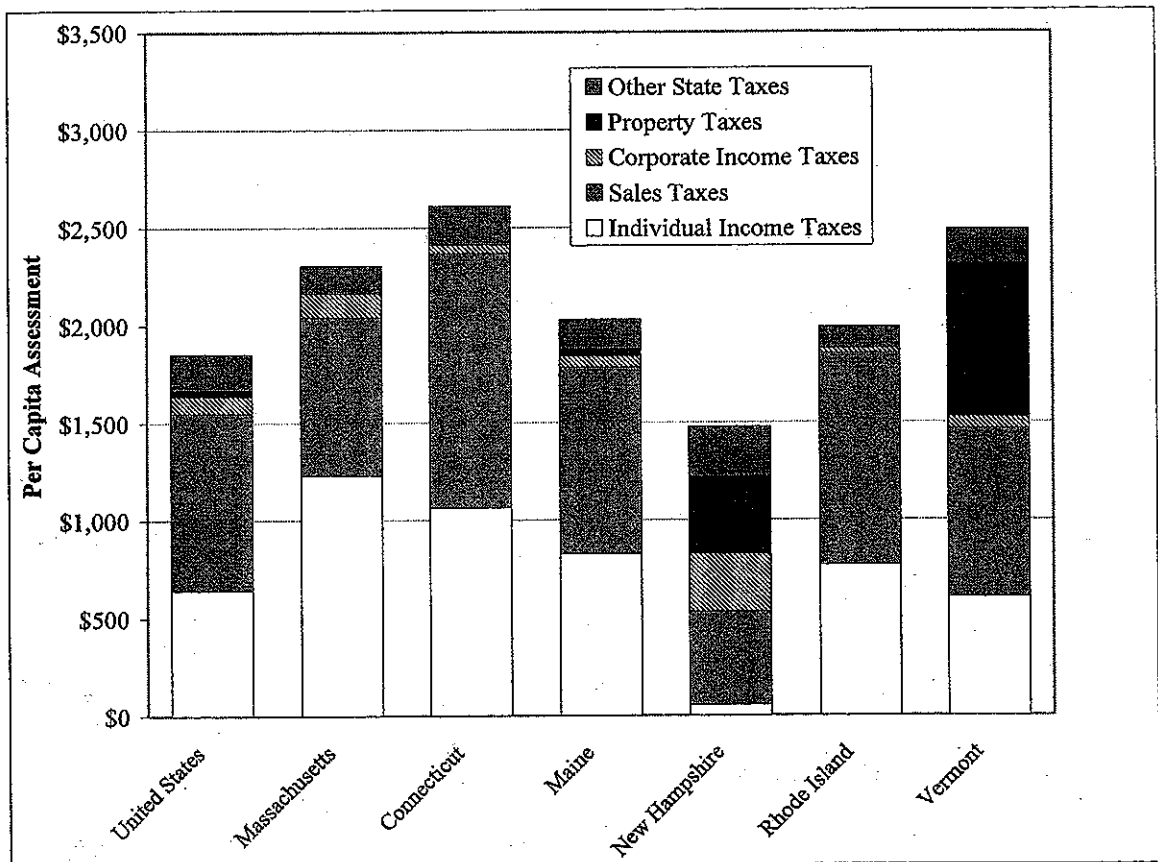
SOURCE: U.S. Department of Defense.
Prime Contract is defined as \$10,000 or more before 1983 and as \$25,000 or more from 1983 onwards.

Travel and Tourism. The travel and tourism industry represents a substantial component of the overall Massachusetts economy. Massachusetts is one of the nation's most popular tourist and travel destinations for both domestic and international visitors. The greater Boston area is New England's most popular destination, as the site of many popular and historic attractions including the New England Aquarium, Boston's Museum of Fine Arts, Boston's Museum of Science, the U.S.S. Constitution, the Kennedy Library and Museum, and Faneuil Hall Marketplace.

The Massachusetts Office of Travel and Tourism estimates that 24.3 million domestic travelers traveled to or within the Commonwealth in 2002, a decrease of 6.9 percent from 2001. Additionally, 1.8 million international travelers visited Massachusetts in 2002. Leisure is the primary reason for 77 percent of tourist trips to Massachusetts. The latest available economic impact data indicates that direct spending by visitors to Massachusetts totaled \$11.7 billion in 2001, a decrease of 12.0 percent from the 2000 level.

State Taxes. State taxes in Massachusetts are significantly higher than the national average. In 2002, the total per capita state tax bill in the United States was \$1,860. Citizens of the Commonwealth, however, paid \$2,308 on average, the sixth highest rate in the nation. In New England, citizens in Connecticut and Vermont paid more per capita, and all New England states except New Hampshire, 43rd, ranked in the top 15 for per capita state tax collections. Over half of the state taxes in Massachusetts come from the state income tax. Per capita individual income taxes in Massachusetts were \$1,332. Across the New England states, there is wide variation in both total per capita state taxes and in the breakdown of those taxes, as illustrated in the following chart.

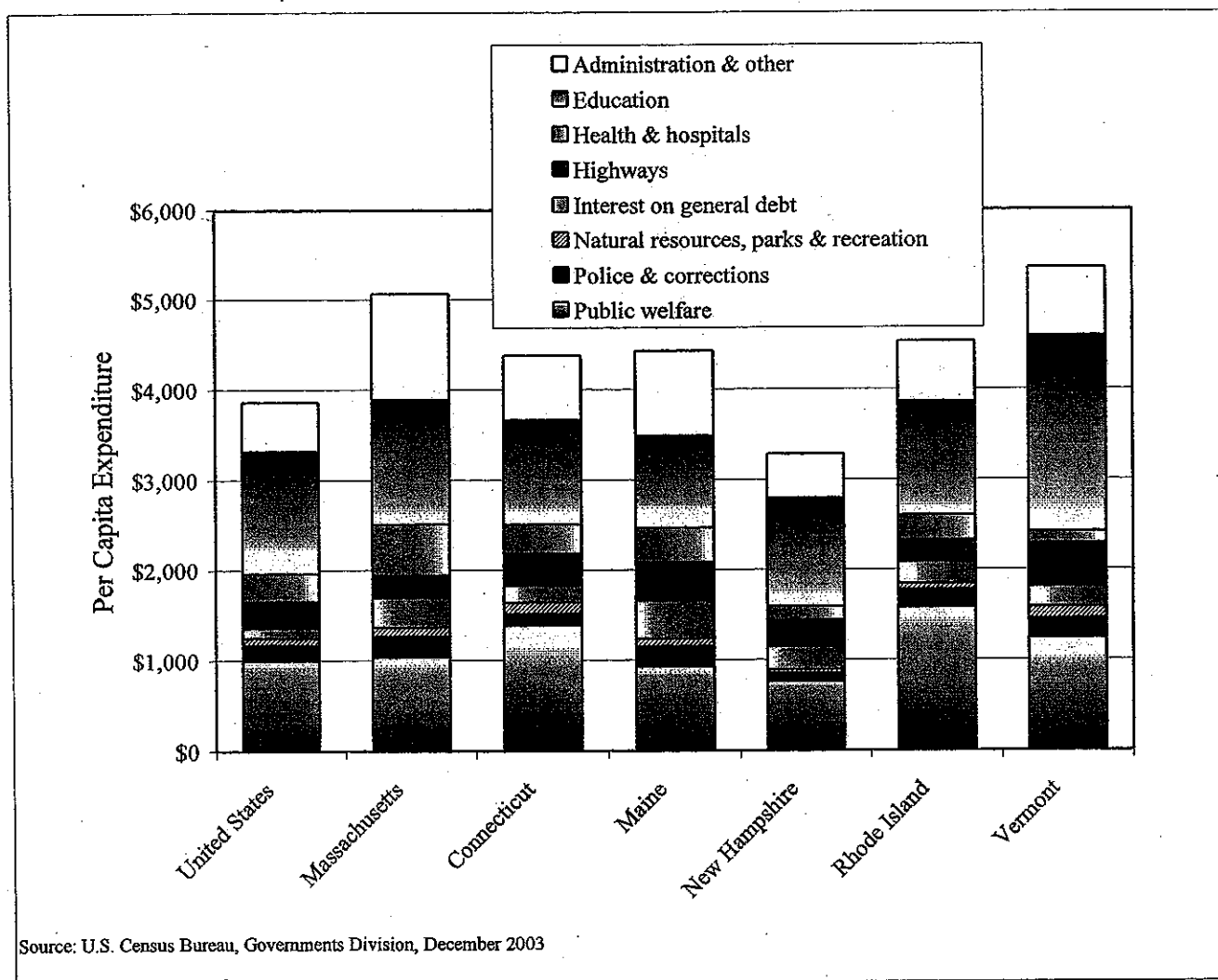
Fiscal 2002 Per Capita State Taxes, by Type



SOURCE: U.S. Bureau of the Census, revised March 2004

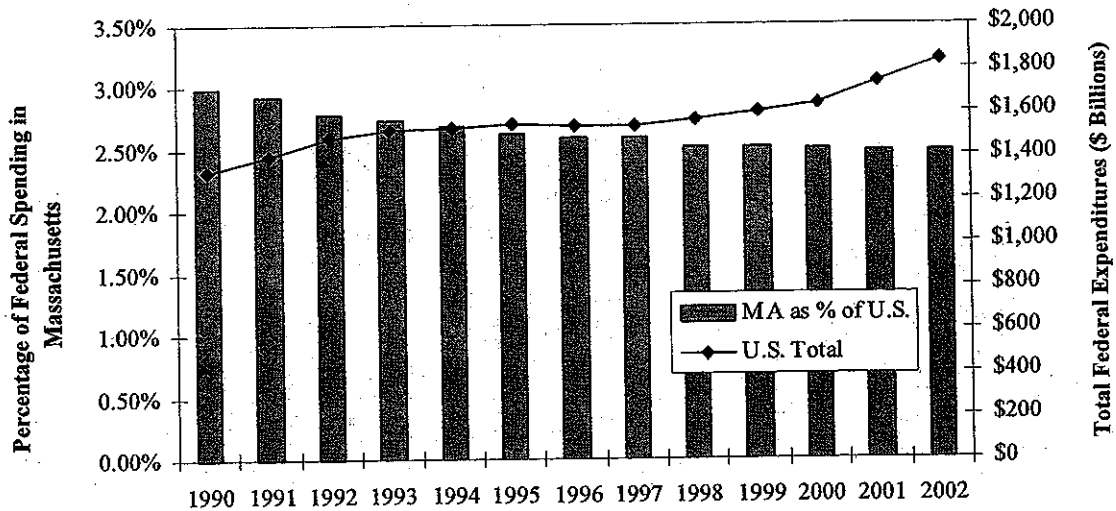
State Government Spending in Massachusetts. The following chart depicts fiscal 2002 per capita state expenditures by category for the six New England states and the U.S. average state expenditure. Massachusetts spent more state funds per capita on debt service (\$418) and less on education (\$1020) than any of its New England neighbors. The differences between states in per capita spending are similar to those in taxation, with intergovernmental transfers (to and from local and federal governments) accounting for the degree to which per capita spending exceeds per capita taxation. While all New England states used less than the national average of 28.5 percent for intergovernmental expenditures, the variation within the region is significant, with intergovernmental expenditures representing 13.0 percent of Rhode Island expenditures, 19.1 percent of Massachusetts expenditures, and 26.1 percent of Vermont expenditures.

Fiscal 2002 Per Capita State Expenditures by Type



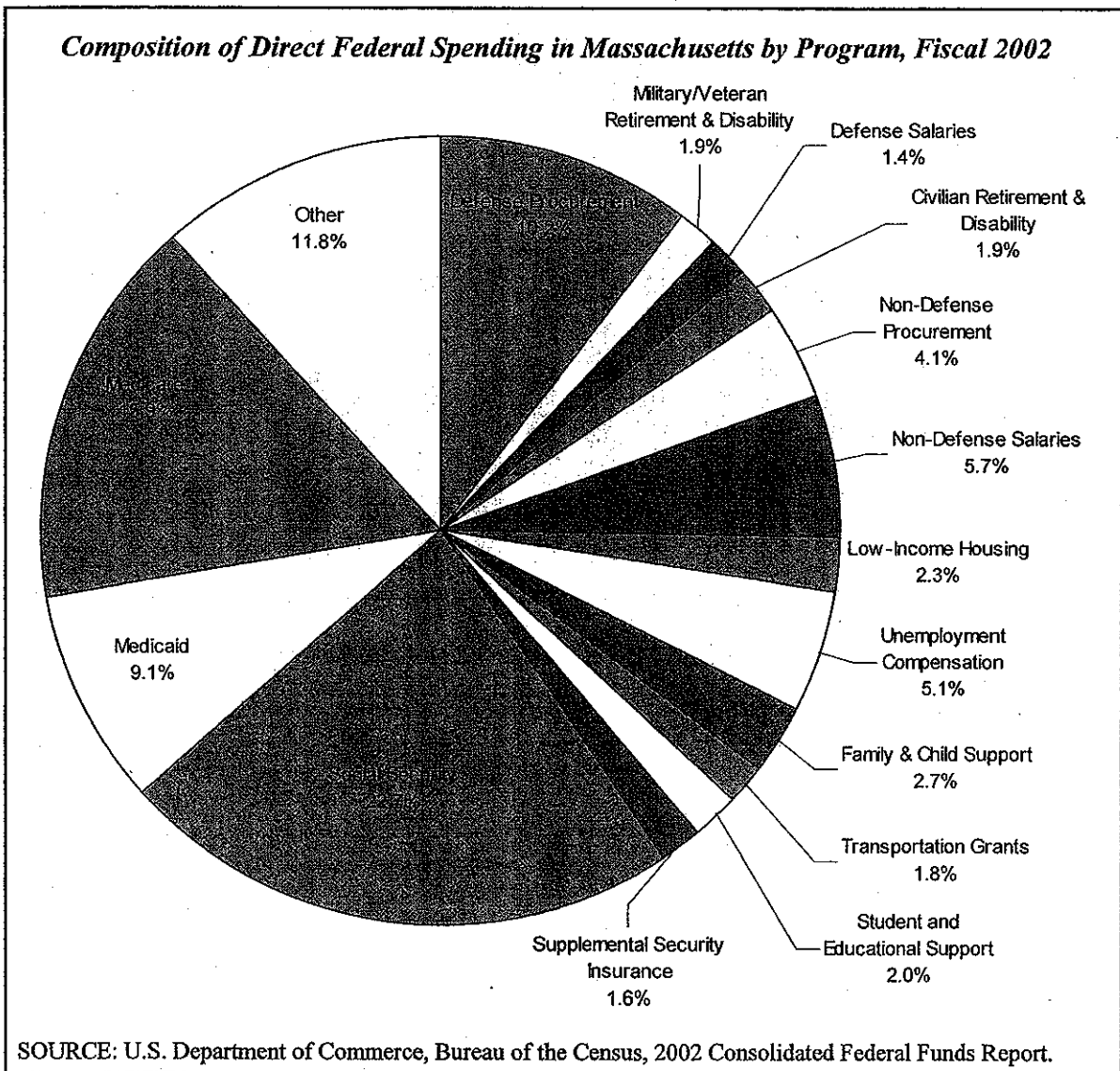
Federal Government Spending in Massachusetts. Federal government spending contributes a significant amount to the economy of Massachusetts. In fiscal 2002, Massachusetts ranked thirteenth among states in per capita distribution of federal funds, with total spending of \$7,387 per person, excluding loans and insurance. Massachusetts' share of total federal spending declined steadily between 1990 and 1999, and has stabilized in the range of 2.48 percent to 2.52 percent between 1998 and 2002. The following chart shows total federal expenditures and the percentage of federal expenditures in Massachusetts. Total federal spending data were converted to 2000 dollars by MASSSDC using Consumer Price Index data for the United States. Federal spending includes grants to state and local governments, direct payments to individuals, wage and salary employment, and procurement contracts and includes only those expenditures that can be associated with individual states and territories.

**Total Real Federal Expenditures and
Percentage of Federal Expenditures in Massachusetts, 1990-2002**
(in billions of constant 2000 dollars)



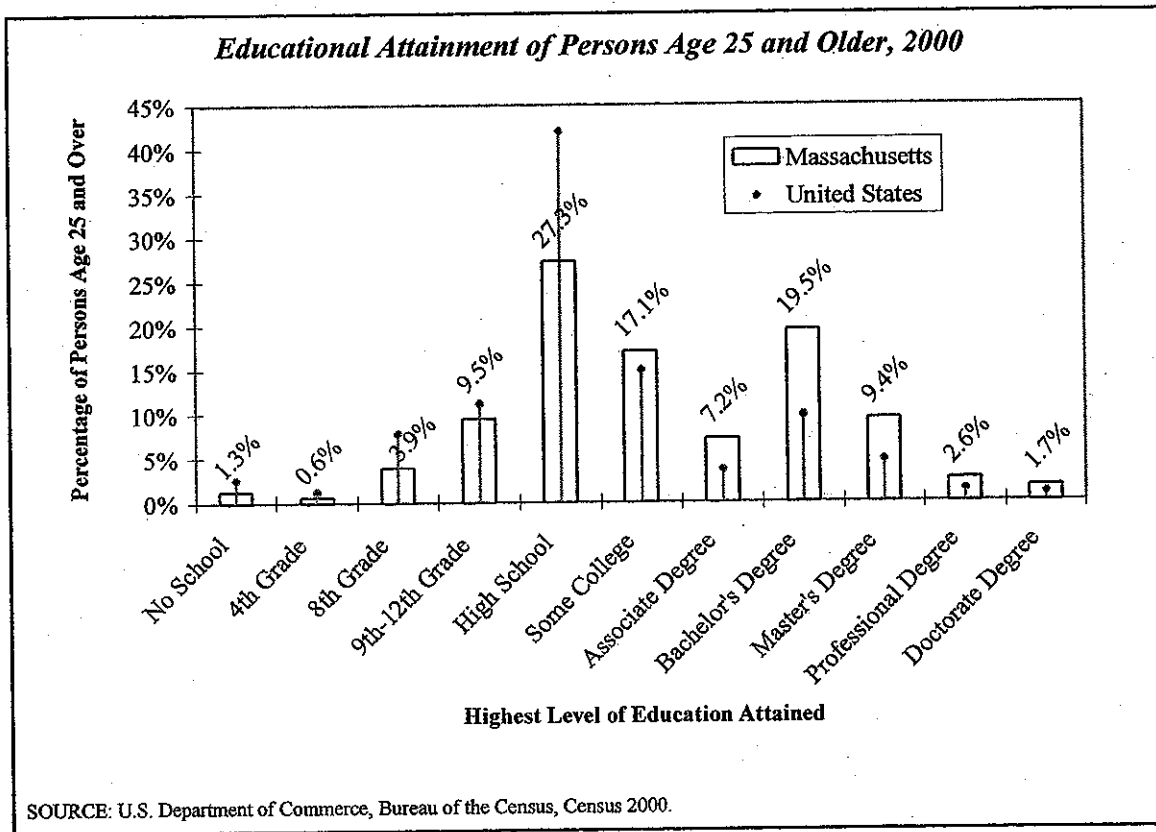
SOURCE: U.S. Department of Commerce, Bureau of the Census, 2002 Consolidated Federal Funds Report.

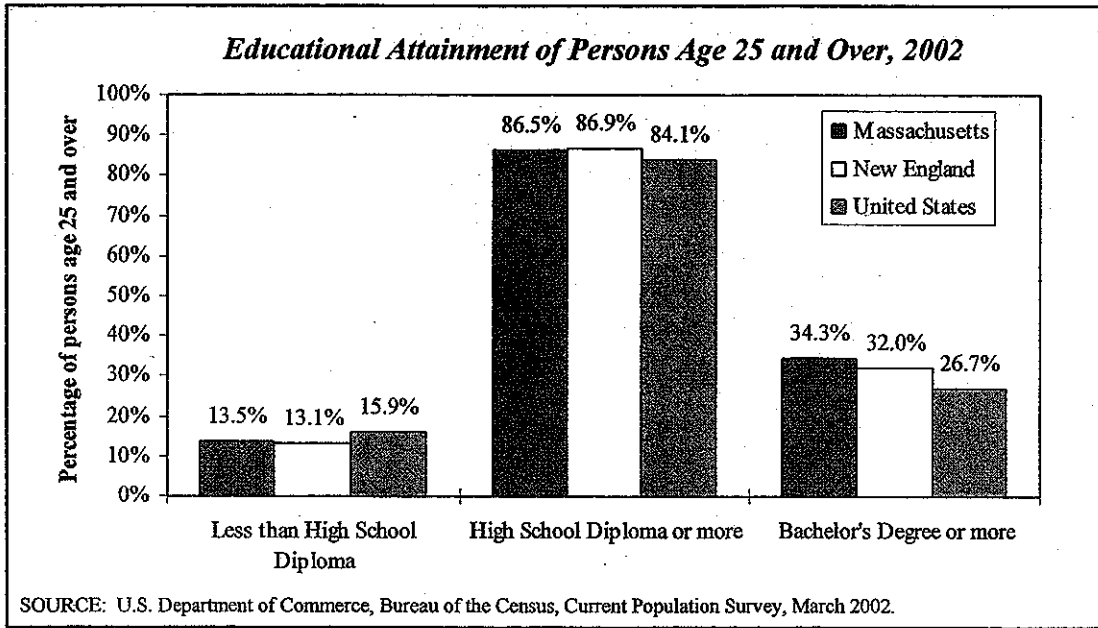
A large percentage of federal spending in Massachusetts in 2002 was composed of health care and social programs like Medicare and Social Security. Massachusetts was above the national average in per capita federal grants to state and local governments, receiving \$1,920 per capita compared to a national average of \$1,410. Per capita federal spending on salaries and wages in 2002 was lower in Massachusetts than in the rest of the nation (\$525 compared to a national average of \$675) but Massachusetts was above the national average in per capita direct federal payments to individuals (\$3,885 compared to a national average of \$3,560). Massachusetts ranked 11th among states in per capita procurement contract awards (\$1,057 compared to a national average of \$882) in 2002. The following chart shows the composition of direct federal spending within Massachusetts in fiscal 2002, excluding loans and insurance.



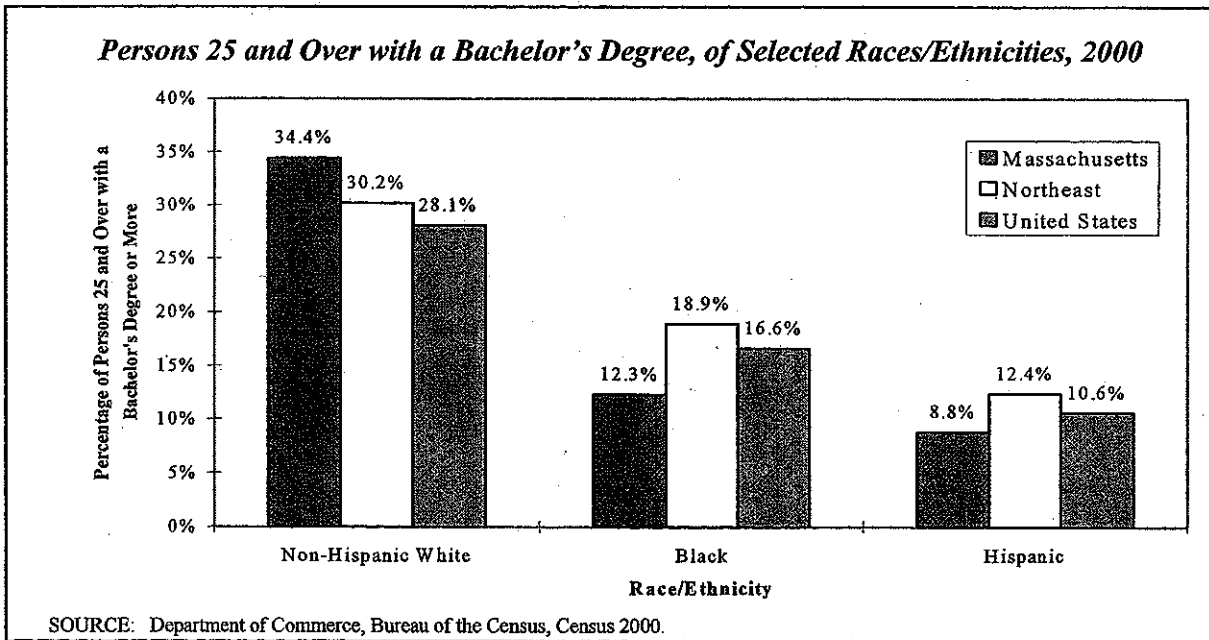
HUMAN RESOURCES AND INFRASTRUCTURE

Human Resources. The availability of a skilled and well-educated population is an important resource for the Commonwealth. The level of education reached by the population of Massachusetts compares favorably with the level in the United States as a whole. In 2002, 13.5 percent of Massachusetts residents age 25 and above had never graduated from high school, as compared with 15.9 percent of their peers nationwide. A significant difference between Massachusetts and the United States is the percentage of people age 25 and above with a Bachelor's Degree or higher: 34.3 percent in Massachusetts as compared to 26.7 percent for the United States as a whole. Relative to the nation as a whole, Massachusetts has a lower percentage of adults (25 and older) who ended their schooling after high school or earlier, and a greater percentage of adults in every post-secondary category. The following charts show the differences in educational attainment between Massachusetts and the United States for key threshold levels of education. Actual percentages are given for Massachusetts only, and each category represents the highest educational level reached for individuals in that group.





Massachusetts has a smaller percentage of persons who have not completed high school than the United States as a whole and a higher percentage of persons with a bachelor's degree or more than either the New England region or the nation. Massachusetts ranks thirty-first in the nation in percentage of its population having received a high school diploma or more. The Commonwealth ranks second among the fifty states in percentage of persons over 25 with a bachelor's degree or more. However, these data obscure significant differences in educational attainment across racial and ethnic lines. While blacks and Hispanics fare worse than whites in educational attainment throughout the nation, the difference is more pronounced in Massachusetts than in the nation as a whole. As the chart below indicates, a far higher percentage of whites have a bachelor's degree or more in Massachusetts than in the rest of the nation, but blacks and Hispanics in Massachusetts trail the national average.



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

Percentage Minority Enrollment in Higher Education, 2001

| | Black | Hispanic | Asian | Race Unknown |
|----------------------|-------|----------|-------|--------------|
| Massachusetts | 5.7 | 4.7 | 5.7 | 6.5 |
| New England | 5.4 | 4.4 | 4.3 | 12.8 |
| United States (1998) | 11.0 | 9.1 | 5.9 | N/A |

SOURCE: New England Board of Higher Education, *Connections*, Spring 2003.

In the 2002 National Assessment of Educational Progress conducted by the U.S. Department of Education, 4th graders and 8th graders around the nation were given standardized exams in reading. Massachusetts 4th graders achieved the nation's highest reading scores by a statistically significant margin. Among 8th graders, no state had statistically significant higher reading scores than Massachusetts, and 13 other states had statistically equivalent scores. In a similar 2000 study, 4th and 8th graders were given standardized exams in science. In science, only 8th graders in Montana achieved statistically significant higher scores than 8th graders in Massachusetts. Additionally, Massachusetts 4th graders scored highest in the nation on the science exam. In 2000, 4th and 8th graders were given standardized exams in mathematics. Massachusetts scores for both 4th and 8th graders in 2000 were significantly higher than scores from both 1992 and 1996. Additionally, Massachusetts 4th graders were the highest scoring in the nation. Only 8th graders in Minnesota, Montana, Maine, and Kansas scored higher than those in Massachusetts.

Although spending on education is not necessarily an indicator of results, Massachusetts has spent from 12 to 31 percent more per pupil on primary and secondary education than the national average since at least 1981. In fiscal 2002, Massachusetts increased per student expenditures to \$9509, 29 percent higher than the national average. The following table shows expenditures per pupil for Massachusetts and the United States since fiscal 1981.

Per Pupil Expenditure in Public Elementary and Secondary Schools, 1981-2001
(in current, unadjusted dollars)

| Fiscal Year | Massachusetts | United States | Ratio (MA/US) |
|-------------|---------------|---------------|---------------|
| 1982 | 2,823 | 2,525 | 1.12 |
| 1984 | 3,298 | 2,940 | 1.12 |
| 1986 | 4,031 | 3,479 | 1.16 |
| 1988 | 4,965 | 3,927 | 1.26 |
| 1990 | 5,766 | 4,643 | 1.24 |
| 1992 | 5,952 | 5,023 | 1.18 |
| 1994 | 6,423 | 5,327 | 1.21 |
| 1996 | 7,033 | 5,689 | 1.24 |
| 1998 | 7,778 | 6,189 | 1.26 |
| 2000 | 8,761 | 6,911 | 1.27 |
| 2001 | 8,509 | 6,500 | 1.29 |

SOURCE: United States Department of Education, National Center for Educational Statistics.

Massachusetts is an internationally recognized center for higher education, with 413,305 students in undergraduate, professional and graduate programs in 2000, according to data supplied by the New England Board of Higher Education. The number of foreign students enrolled in Massachusetts colleges and universities in 2000 was 29,395, representing 5.4 percent of total foreign student enrollment in the United States. The Massachusetts public higher education system is composed of universities, state colleges, and community colleges with a combined enrollment of 178,729 students in 2000, almost half of whom attended part-time. In addition, Massachusetts has a system of private higher education that accounted for 56.8 percent of total enrollment in Massachusetts in 2000, and in which approximately one quarter of students attend school part-time. The strength of both public and private colleges and universities as centers for research and education contributes to the high quality of the Massachusetts work force and plays a key role in attracting and retaining business and industry within the state.

The higher education system in Massachusetts is particularly strong in post-graduate, scientific, and technical education, with 64.5 percent of New England's graduate science and engineering students attending Massachusetts institutions in 2001. The strength of the Massachusetts higher education system is evidenced by the draw it has upon new students. The strength of the Commonwealth's educational institutions is also reflected in the large number of degrees awarded. In 2001, Massachusetts institutions conferred a total of 2,234 doctoral degrees. This represents 5.0 percent of the total number of doctoral degrees conferred in the United States in 2001.

The pre-eminence of higher education in Massachusetts contributes not only to the quality of its work force, but also to its stature in the nation and the world as a center for basic scientific research and for academic and entrepreneurial research and development. Doctorate-granting institutions in Massachusetts spent 4.8 percent of total national expenditures on R&D at such institutions in fiscal 2001, ranking Massachusetts fifth in

the nation behind California, New York, Texas, and Pennsylvania. Doctorate-granting institutions in New England spent 7.9 percent (\$2.53 billion) of the total research and development funds (\$32.2 billion) spent by such institutions in fiscal 2001. Massachusetts institutions spent 61.6 percent of these funds (\$1.56 billion). [Source: National Science Foundation, Division of Science Resources Statistics, *Academic Research and Development Expenditures: Fiscal Year 2001*, NSF 03-316, Table B-23.]

The diversity of federal funding sources reflects the variety of research and development work performed at Massachusetts educational institutions. Of the \$1.16 billion in total fiscal 2000 federal outlays for science and engineering research to universities and colleges in Massachusetts (and their affiliated federally funded research and development centers), 48.8 percent was from the Department of Health and Human Services, 14.1 percent was from the National Science Foundation, 25.6 percent was from the Department of Defense, 6.2 percent was from the Department of Energy, and 3.6 percent was from the National Aeronautics and Space Administration. Massachusetts ranked 4th in the nation in 2000 in total federal outlays for research and development, with total federal spending of \$4.15 billion in the state. The educational sector captured 28.0 percent of this pool, while industry garnered 40.4 percent and non-profit institutions received 25.2 percent. [Source: National Science Foundation, Division of Science Resources Statistics, *Federal Funds for Research and Development: Fiscal Years 2000, 2001, and 2002*, NSF 02-321, Tables C-85, C-83b.]

Given the quality of the Commonwealth's research and development sector, it is not surprising that Massachusetts fares better than the national average in homes with telephone, computer, and internet access. According to a 1998 survey, 95.5 percent of homes in Massachusetts had telephones compared with 94.1 percent of homes in the United States. In 2001, among homes in Massachusetts, 59.1 percent had a computer compared with 56.5 percent nationally, and 54.7 percent of homes in Massachusetts had internet access while 50.5 percent of homes nationwide had such access. In New England, however, only Rhode Island had a lower percentage of households with a computer and only Vermont, Rhode Island and Maine had a lower percentage of households with internet access. [Sources: National Telecommunications and Information Administration (NTIA), *A Nation Online*, 2/2002; NTIA, *Falling Through The Net—Toward Digital Inclusion*, 10/2000.]

Major Infrastructure Projects. Several major public sector-sponsored construction projects are underway or recently completed in the Boston region, providing significant economic and employment benefits to the state. The "Big Dig," the world's largest highway project, includes the depression of the central artery which traverses the City of Boston, and the construction of a third harbor tunnel linking downtown Boston to Logan Airport. The new Central Artery is designed to meet Boston's future traffic demand and is anticipated to carry 245,000 vehicles per day by 2010 with minimal congestion. The Project will also strengthen connections among Boston's air, rail, and seaport terminals. By offering travelers and shippers increased choice and flexibility among these different modes of transportation, the Project is contributing to the creation of an integrated, intermodal transportation system for the entire region. The Ted Williams Tunnel, which stretches under Boston Harbor from South Boston to Logan Airport, opened to commercial traffic in late 1995 and to all traffic in December 2001, and will carry an estimated 98,000 vehicles daily in 2010. The Central Artery Project is expected to be completed by 2005 at an estimated total cost of \$14.63 billion, with nearly half funded by the federal government. As of April 30, 2003, construction is 89.2 percent complete.

The Massachusetts Port Authority (Massport) owns and operates Logan International Airport, the Port of Boston, and several smaller assets. A \$3.7 billion, ten-year modernization program is well underway at the Authority's key facilities, including expansion of airport terminal space. Massport reported fiscal 2002 operating income of \$17 million (down 53.3 percent from fiscal 2001), with operating revenues down 3.4 percent and operating costs up 2.8 percent. In fiscal 2002, 22.1 million passengers (a 19.3 percent decrease from fiscal 2001) and more than 842 million pounds of cargo and mail (a 14.1 percent decrease) passed through Logan. At the Port of Boston, 2001 cargo throughput was 16.3 million metric tons (a four percent decline from 2000), automobile imports decreased 13 percent to 80,000 units, and cruise passenger trips increased 28 percent to 253,000.

