The Massachusetts Economic Due Diligence Report

THIRD QUARTER FY 2012



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Cover and this photo: The harbor New Bedford Massachusetts. New Bedford Harbor is home to the most valuable seafood catch in the United States. Photo by Dennis Wilkinson. December 2011

ECONOMIC INFORMATION—QUARTER 3, FY 2012

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EXHIBIT A

ECONOMIC INFORMATION - Quarter 3, FY 2012

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 April 20, 2012. Information in the text, tables, charts, and graphs is current as of April 2, 2012.** Sources of information are indicated in the text or immediately following the charts and tables, and also from the *Sources* 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.

| Population (p. A-2) | Massachusetts | United State |
|---|---------------|--------------|
| Estimated Percent Change in Population, April 1, 2000 - July 1, 2010 | 4.4% | 9.8% |
| Personal Income, Consumer Prices, and Poverty (p. A-8) | | |
| Per Capita Personal Income, 2011 | \$53,621 | \$41,66 |
| Average Annual Pay, All Industries, 2010 | \$57,770 | \$46,75 |
| Percent Change in CPI-U*, 2010-2011 | 2.7% | 3.29 |
| Percent Change in CPI-U*, March 2011 - March 2012 | 1.8% | 2.7% |
| Poverty Rate, 2008-2010 Average | 10.9% | 14.29 |
| Average Weekly Earnings, Manufacturing Production Workers: 2011 | \$806.98 | \$784.6 |
| Percent Change from previous year | 0.3% | 2.6% |
| Employment (p. A-18) | | |
| Percent Change in Nonfarm Payroll Employment (Not Seasonally Adjusted), | | |
| February 2011 - February 2012p | 0.5% | 1.69 |
| Unemployment Rate, 2011 | 7.4% | 8.9% |
| Unemployment Rate, March 2012 (seasonally adjusted) | 6.5% | 8.29 |
| Education (p. A-24) | | |
| Expenditure Per Pupil K-12 Public, 2009 | \$14,118 | \$10,49 |
| Percent of Adults with a Bachelor's Degree or higher, 2010 | 39.0% | 28.29 |
| Economic Base and Performance (p. A-30) | | |
| Percent Change in Gross Domestic Product, 2009-2010 | 3.5% | 2.99 |
| Percent Change in International Exports, 2010-2011 | 5.5% | 15.99 |
| Percent Change in Housing Permits Authorized, 2009-2010 | 14.3% | 3.79 |

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 25 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 25 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 17 month stretch between 2006 and 2007, considerably lower unemployment rates in Massachusetts than in the United States since 1980. The state unemployment rate fell to 6.5 percent in March 2012, and the state has typically seen a slower rise in unemployment than the nation as a whole. In 2011, Massachusetts was ranked second in the U.S. according to the American Human Development Index, modeled after the United Nations Human Development Index, which compares health, income and education outcomes.

The following five sections provide detailed information on population characteristics, personal income, employment, human resources, economic base and performance, 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, 2011 to be 840.2 persons per square mile, as compared to 88.1 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 live 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 July 1, 2010 population (the most recent estimate) estimated at 617,594, 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 had a total population as of July 1, 2011 estimated at 4,591,112, or 34.8 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 as of July 1, 2011 estimated at 1,903,947.

The second largest MSA in the state is the Worcester, MA MSA, with a July 1, 2011 population estimated at 801,327. The city of Worcester, situated approximately 40 miles west of Boston with a 2010 population of 181,045, is the second largest city, both in New England and the state. As a major medical and education center, the Worcester area is home to 18 patient care facilities, and 13 colleges and universities, including the University of Massachusetts Medical School.

The third largest MSA in Massachusetts is the three-county Springfield, MA MSA, with a July 1, 2011 population estimated at 693,204. Springfield, the third largest city in the Commonwealth with a 2010 population of 153,060, 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, Hartford Hospital, and MassMutual Financial Group. In addition, Springfield is home to three independent colleges.

As the following graph and table indicate, the population in Massachusetts generally grows at a rate similar 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 February 2011, the Massachusetts population has only grown by 4.4 percent since Census 2000 while 15 states have grown more slowly.



The following table compares the population level and percentage change in the population of Massachusetts to the six-state New England region and to the United States.

| | | | lation, 1 9 in thousa | 972-2011 nds) | | |
|------|--------|---------|---------------------------------|-------------------------|------------|---------|
| | Maggaa | | | | Tin:40 d 6 | States |
| | Massac | Percent | New En | Percent | United S | 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 | 1.19 |
| 1991 | 6,018 | -0.1% | 13,248 | 0.1% | 252,981 | 1.3% |
| 1992 | 6,029 | 0.2% | 13,271 | 0.2% | 256,514 | 1.49 |
| 1993 | 6,061 | 0.5% | 13,334 | 0.5% | 259,919 | 1.3% |
| 1994 | 6,095 | 0.6% | 13,396 | 0.5% | 263,126 | 1.29 |
| 1995 | 6,141 | 0.8% | 13,473 | 0.6% | 266,278 | 1.2% |
| 1996 | 6,180 | 0.6% | 13,555 | 0.6% | 269,394 | 1.29 |
| 1997 | 6,226 | 0.7% | 13,642 | 0.6% | 272,647 | 1.2% |
| 1998 | 6,272 | 0.7% | 13,734 | 0.7% | 275,854 | 1.29 |
| 1999 | 6,317 | 0.7% | 13,838 | 0.8% | 279,040 | 1.2% |
| 2000 | 6,361 | 0.7% | 13,950 | 0.8% | 282,162 | 1.19 |
| 2001 | 6,398 | 0.6% | 14,041 | 0.7% | 284,969 | 1.0% |
| 2002 | 6,417 | 0.3% | 14,122 | 0.6% | 287,625 | 0.9% |
| 2003 | 6,423 | 0.1% | 14,182 | 0.4% | 290,108 | 0.9% |
| 2004 | 6,412 | -0.2% | 14,207 | 0.2% | 292,805 | 0.9% |
| 2005 | 6,403 | -0.1% | 14,217 | 0.1% | 295,517 | 0.9% |
| 2006 | 6,410 | 0.1% | 14,246 | 0.2% | 298,380 | 1.0% |
| 2007 | 6,432 | 0.3% | 14,279 | 0.2% | 301,231 | 1.0% |
| 2008 | 6,469 | 0.6% | 14,340 | 0.4% | 304,094 | 1.0% |
| 2009 | 6,518 | 0.8% | 14,404 | 0.4% | 306,772 | 0.9% |
| 2010 | 6,557 | 0.6% | 14,457 | 0.4% | 309,350 | 0.8% |
| 2011 | 6,588 | 0.5% | 14,492 | 0.2% | 311,592 | 0.7% |

The next 18 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.

| | | | 2 | 2000-2030 | (in thousa | nds) | | | |
|------|-------|---------|-------|-----------|------------|---------|-------|----------|---------------|
| Year | 0-4 | 5-17 | 18-24 | 25-44 | 45-64 | 65-84 | 85+ | All Ages | Median Age |
| 2000 | 397.3 | 1,102.8 | 579.3 | 1,989.8 | 1,419.8 | 743.5 | 116.7 | 6,349.1 | 36.5 |
| 2005 | 395.1 | 1,055.6 | 488.9 | 1,844.0 | 1,602.5 | 693.1 | 103.7 | 6,182.9 | 38.2 |
| 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 |



2005 as of July 1; all other figures are projections as of July 1 of the indicated year.

EXHIBIT A-5 Quarter 3, FY 2012



Internet Release Date: April 21, 2005

Migration. Migration is one of several components of annual population change in Massachusetts. The movement of people from place to place is often linked to economic opportunities or downturns. These data are derived from the filing addresses and number of exemptions submitted with federal tax returns. A tax filer is considered a migrant when he/she files a tax return with an address different from the previous year's filing address. Of the New England states, New Hampshire was the largest net loss for Massachusetts and Rhode Island was the largest net gain for Massachusetts from 2000 through 2010. Massachusetts also sends many more migrants to Florida, North Carolina, California and Georgia than it gains. The chart below illustrates the net migration for Massachusetts to and from the New England states and rest of the country using IRS data.



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 declined in Massachusetts while staying roughly flat for the nation. However, real income levels in Massachusetts remained well above the national average. In 2006 and 2007, income growth in Massachusetts outpaced the nation. In 2006 and 2007, income in the state grew faster than in the nation, and since 2008, Massachusetts personal income has either declined more slowly, or grown more quickly, than the nation during the recession and its aftermath. Only the District of Columbia, and Connecticut 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 1970-2010.

| | | | Per Capi | ita Personal . | Income, 1 | 970-2011 | | | | | |
|------|--------|--------------|----------|----------------|-------------|----------|-------|----------------|-------|--|--|
| | | ninal Incom | | | Real Incor | | | Percent Change | | | |
| | | rrent dollar | | | n 2011 doll | | | Real Income | | | |
| Year | MA | N.E. | U.S. | MA | N.E. | U.S. | MA | N.E. | U.S. | | |
| 1970 | 4,472 | 4,438 | 4,084 | 27,130 | 26,739 | 23,677 | 4.8% | 4.7% | 5.6% | | |
| 1971 | 4,743 | 4,674 | 4,340 | 27,411 | 26,756 | 24,105 | 1.0% | 0.1% | 1.8% | | |
| 1972 | 5,102 | 5,025 | 4,717 | 28,473 | 27,649 | 25,384 | 3.9% | 3.3% | 5.3% | | |
| 1973 | 5,541 | 5,477 | 5,230 | 29,187 | 28,386 | 26,496 | 2.5% | 2.7% | 4.4% | | |
| 1974 | 6,011 | 5,954 | 5,708 | 28,632 | 27,754 | 26,044 | -1.9% | -2.2% | -1.7% | | |
| 1975 | 6,453 | 6,376 | 6,172 | 28,204 | 27,538 | 25,805 | -1.5% | -0.8% | -0.9% | | |
| 1976 | 6,993 | 6,954 | 6,754 | 28,424 | 28,405 | 26,700 | 0.8% | 3.1% | 3.5% | | |
| 1977 | 7,611 | 7,586 | 7,402 | 29,416 | 29,345 | 27,475 | 3.5% | 3.3% | 2.9% | | |
| 1978 | 8,422 | 8,407 | 8,243 | 30,933 | 30,605 | 28,438 | 5.2% | 4.3% | 3.5% | | |
| 1979 | 9,371 | 9,381 | 9,138 | 31,221 | 31,055 | 28,313 | 0.9% | 1.5% | -0.4% | | |
| 1980 | 10,570 | 10,598 | 10,091 | 31,209 | 31,072 | 27,547 | 0.0% | 0.1% | -2.7% | | |
| 1981 | 11,744 | 11,800 | 11,209 | 31,200 | 31,250 | 27,738 | 0.0% | 0.6% | 0.7% | | |
| 1982 | 12,892 | 12,833 | 11,901 | 32,923 | 32,283 | 27,741 | 5.5% | 3.3% | 0.0% | | |
| 1983 | 13,942 | 13,770 | 12,583 | 34,070 | 33,252 | 28,418 | 3.5% | 3.0% | 2.4% | | |
| 1984 | 15,639 | 15,342 | 13,807 | 36,428 | 35,382 | 29,892 | 6.9% | 6.4% | 5.2% | | |
| 1985 | 16,798 | 16,440 | 14,637 | 37,447 | 36,550 | 30,599 | 2.8% | 3.3% | 2.4% | | |
| 1986 | 18,003 | 17,592 | 15,338 | 39,132 | 38,160 | 31,479 | 4.5% | 4.4% | 2.9% | | |
| 1987 | 19,397 | 18,958 | 16,137 | 40,398 | 39,386 | 31,953 | 3.2% | 3.2% | 1.5% | | |
| 1988 | 21,127 | 20,612 | 17,244 | 41,485 | 40,783 | 32,788 | 2.7% | 3.5% | 2.6% | | |
| 1989 | 22,095 | 21,848 | 18,402 | 41,040 | 40,943 | 33,382 | -1.1% | 0.4% | 1.8% | | |
| 1990 | 22,797 | 22,462 | 19,354 | 40,027 | 39,716 | 33,309 | -2.5% | -3.0% | -0.2% | | |
| 1991 | 23,314 | 22,867 | 19,818 | 39,213 | 38,673 | 32,730 | -2.0% | -2.6% | -1.7% | | |
| 1992 | 24,422 | 24,077 | 20,799 | 40,081 | 39,392 | 33,346 | 2.2% | 1.9% | 1.9% | | |
| 1993 | 25,182 | 24,773 | 21,385 | 40,166 | 39,433 | 33,289 | 0.2% | 0.1% | -0.2% | | |
| 1994 | 26,393 | 25,804 | 22,297 | 41,554 | 40,095 | 33,843 | 3.5% | 1.7% | 1.7% | | |
| 1995 | 27,662 | 27,048 | 23,262 | 42,536 | 40,971 | 34,334 | 2.4% | 2.2% | 1.5% | | |
| 1996 | 29,279 | 28,521 | 24,442 | 43,727 | 42,014 | 35,041 | 2.8% | 2.5% | 2.1% | | |
| 1997 | 30,911 | 30,087 | 25,654 | 44,899 | 43,263 | 35,954 | 2.7% | 3.0% | 2.6% | | |
| 1998 | 33,006 | 32,128 | 27,258 | 46,881 | 45,546 | 37,616 | 4.4% | 5.3% | 4.6% | | |
| 1999 | 34,671 | 33,581 | 28,333 | 48,043 | 46,645 | 38,254 | 2.5% | 2.4% | 1.7% | | |
| 2000 | 38,222 | 36,610 | 30,319 | 50,771 | 49,180 | 39,605 | 5.7% | 5.4% | 3.5% | | |
| 2001 | 39,547 | 37,996 | 31,157 | 50,364 | 49,658 | 39,573 | -0.8% | 1.0% | -0.1% | | |
| 2002 | 39,597 | 38,131 | 31,481 | 49,145 | 48,828 | 39,362 | -2.4% | -1.7% | -0.5% | | |
| 2003 | 40,264 | 38,798 | 32,295 | 48,159 | 48,321 | 39,480 | -2.0% | -1.0% | 0.3% | | |
| 2004 | 42,276 | 40,837 | 33,909 | 49,214 | 49,159 | 40,378 | 2.2% | 1.7% | 2.3% | | |
| 2005 | 44,097 | 42,376 | 35,452 | 49,697 | 49,217 | 40,832 | 1.0% | 0.1% | 1.1% | | |
| 2006 | 47,559 | 45,627 | 37,725 | 51,989 | 51,144 | 42,092 | 4.6% | 3.9% | 3.1% | | |
| 2007 | 50,150 | 48,223 | 39,506 | 53,783 | 52,703 | 42,859 | 3.4% | 3.0% | 1.8% | | |
| 2008 | 51,902 | 49,726 | 40,947 | 53,779 | 52,261 | 42,780 | 0.0% | -0.8% | -0.2% | | |
| 2009 | 49,788 | 47,513 | 38,846 | 51,940 | 49,927 | 40,729 | -3.4% | -4.5% | -4.8% | | |
| 2010 | 51,304 | 48,840 | 39,937 | 52,694 | 50,329 | 41,198 | 1.5% | 0.8% | 1.1% | | |
| 2011 | 53,621 | 51,074 | 41,663 | 53,621 | 51,074 | 41,663 | 1.8% | 1.5% | 1.1% | | |

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. p=preliminary

Annual Pay in Nominal Dollars. Massachusetts saw steady growth in average annual pay for most of the past decade, lost ground in 2009, but resumed growth in 2010. 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 an annual rate of 2.8 percent, compared to 2.9 percent for the nation. The level of average annual pay in Massachusetts in 2010 was 23.5 percent higher than the national average: \$57,770 compared to \$46,751.

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. In subsequent years the Massachusetts shares of New England and the U.S. decreased slightly before rising again starting in 2006, reaching 50.8 and 3.0 percent respectively in 2011.

| Annual | Wage and Sal (in mil | ary Disburs llions of dollar | | 990-2011 |
|--------|-------------------------|--|-----------|------------------------|
| Year | U.S. | N.E. | МА | MA 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 | \$ 6,414,505 | \$370,462 | \$184,622 | 49.8% |
| 2008 | \$ 6,546,600 | \$378,682 | \$190,110 | 50.2% |
| 2009 | \$ 6,262,819 | \$363,036 | \$182,396 | 50.2% |
| 2010 | \$ 6,400,786 | \$372,513 | \$188,290 | 50.5% |
| 2011 | \$ 6,675,860 | \$388,781 | \$197,428 | 50.8% |

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

Consumer Prices. Higher income levels in Massachusetts relative to the rest of the United States are offset to some extent by the higher cost of living in Massachusetts. The following graph presents consumer price trends for the Boston metropolitan area and the United States for the period between January 2002 and March 2012. The table on the following page 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 1954 and 1955, respectively. The annual CPI-U for Boston and the U.S. rose slightly year-over-year in 2010, and in 2011 rose by 2.7 and 3.2 percent, respectively. The latest available data for March 2012 show that the CPI-U for the Boston metropolitan area increased at a rate of 1.8 percent over March 2011, while the U.S. index increased by 2.7 percent over the same period.



EXHIBIT A-11 Quarter 3, FY 2012

Consumer Price Index for All Urban Consumers (CPI-U), 1970-2012

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

| | Boston M | etro Area | United St | tates |
|--------|----------|------------|-----------|------------|
| Year | CPI-U | Pct.Change | CPI-U | Pct. Chang |
| 1970 | 40.2 | | 38.8 | |
| 1971 | 42.2 | 5.0% | 40.5 | 4.49 |
| 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 |
| 2000 | 227.4 | 1.9% | 207.3 | 2.8 |
| 2007 | 235.4 | 3.5% | 215.3 | 3.8 |
| 2000 | 233.8 | -0.7% | 213.5 | -0.4 |
| 2009 | 235.8 | 1.6% | 214.3 | -0.4 |
| 2010 | 243.9 | 2.7% | 210.1 | 3.2 |
| | | 2.170 | | 5.2 |
| Mar-11 | 242.8 | | 223.5 | |
| Mar-12 | 247.2 | 1.8% | 229.4 | 2.7 |

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

EXHIBIT A-12 Quarter 3, FY 2012

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 25.3 in February 2009. U.S. consumer confidence was measured at 70.2 in March 2012. The Massachusetts index has been higher than the U.S. index since sharing lows in January 2009, except for a brief period when they tracked closely together in 2011. The Mass Insight Corporation reported that the Massachusetts index stood at 84.0 in January 2012, well above the comparable U.S. value of 61.5. The following graph and table detail the recent record of these measures.



EXHIBIT A-13 Quarter 3, FY 2012

Consumer Confidence, Present Situation, and Future Expectations for Massachusetts and the U.S. January 2002 - January 2012 (1985=100)

| | Consumer Co | onfidence | Present | Situation | Future Exp | ectations |
|--------|-------------|-----------|---------|-----------|------------|-----------|
| | MA | U.S. | MA | U.S. | MA | U.S. |
| Jan-02 | 107.0 | 97.8 | 72.0 | 98.1 | 130.0 | 97.6 |
| Apr-02 | 109.0 | 110.5 | 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 | 28.0 | 75.3 | 86.0 | 81.1 |
| 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. |
| 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 | 48.7 | 14.0 | 21.1 | 93.0 | 67.0 |
| Jan-10 | 73.0 | 56.5 | 14.0 | 25.2 | 112.0 | 77.3 |
| Apr-10 | 80.0 | 57.7 | 22.0 | 28.2 | 119.0 | 77.4 |
| Jul-10 | 61.0 | 51.0 | 16.0 | 26.4 | 91.0 | 67.5 |
| Oct-10 | 65.0 | 49.9 | 15.0 | 23.5 | 99.0 | 67.5 |
| Jan-11 | 74.0 | 64.8 | 17.0 | 31.1 | 112.0 | 87. |
| Apr-11 | 67.0 | 66.0 | 24.0 | 40.2 | 96.0 | 83.2 |
| Jul-11 | 56.0 | 59.5 | 20.0 | 35.7 | 80.0 | 75.4 |
| Oct-11 | 64.0 | 40.9 | 24.0 | 27.1 | 91.0 | 50.0 |
| Jan-12 | 84.0 | 61.5 | 34.0 | 38.8 | 118.0 | 76.7 |

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

Poverty. Through 2010, 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 decreased from 10.8 percent in 2009 to 10.6 percent in 2010, while the poverty rate in the United States increased from 14.3 percent in 2009 to 15.1 percent in 2010. 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 - 2010) 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 2011 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 16.5 percent of total personal income in Massachusetts in 2010, holding steady from 16.5 percent in 2009. 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 \$55.6 billion for 2010. Just over 47 percent of government transfer payments to individuals were medical payments, only slightly down from almost 48 percent in 2009.



Health Insurance Coverage. Massachusetts leads the nation in the percent of individuals with health insurance coverage. This is mostly the result of the law passed in 2006 mandating universal coverage in the Commonwealth. In 2010, 95.6 percent of the civilian non-institutionalized population was covered in the state by either public or private insurance, compared with 84.5 percent nationwide. Massachusetts also leads the other New England states in coverage, with Vermont as the next closest at 92 percent. All of the New England states have higher rates of coverage than the nation. These data do not indicate the comprehensiveness of coverage, however.



EXHIBIT A-17 Quarter 3, FY 2012

EMPLOYMENT

Employment by Industry. The chart on this page shows the annual level of non-agricultural payroll employment in Massachusetts based on the North American Industry Classification System (NAICS) 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 2009-2011 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 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 Financial Activities, Government, Information, and Trade, Transportation & Utilities have remained relatively level or declined in share.

After significant declines in 2002 and 2003, total non-agricultural employment in Massachusetts eventually increased 0.5 percent in 2005 and continued to increase every year through 2008. After a 0.3 percent increase in 2010, employment grew 0.6 percent in 2011, still 3.9 percent below the last peak in 2001. The comparable growth rate for the nation in 2011 was up 1.1 percent from 2010 and down 0.4 percent from 2001. The latest seasonally adjusted estimate for the state (3.23 million for February 2012) is about 150.2 thousand below the peak month in 2001 (3.38 million in February 2001) and about 13.1 thousand below the last peak in January 2009 (3.22 million).

After years of moderate but steady declines or near-zero growth in the late nineties and early 2000s, manufacturing employment in the state 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 declines for manufacturing employment in 2007 and 2008 were similar to the steady declines prior to 2002. After a steep decline of 9.5 percent in 2009, the decline returned to a less dramatic 2.2 percent in 2010, and most recently a slight uptick of 0.2 percent in 2011. The preliminary seasonally adjusted estimates for the first two months of 2012 were higher than the estimates for the same period in 2011 (253.7 million compared to 251.4 million).



EXHIBIT A-18 Quarter 3, FY 2012

Massachusetts Non-Farm Payroll Employment

(NAICS Industry basis)



EXHIBIT A-19 Quarter 3, FY 2012

Largest Employers in Massachusetts. The following inset lists the 25 largest private employers in Massachusetts based upon employment covered by the Unemployment Insurance system for March 2011. UMass Memorial Medical Center replaces Tufts University from the March 2010 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.

| (1.5.00 0 | lphabetically) |
|---|--|
| 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 |
| 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 | |
| Assistance, Research Department 10-14-11. NOTE: This alphabetic listing includes private employunemployment insurance program. The information | & Workforce Development, Division of Unemployment yers reporting large numbers of jobs covered by the Massachusetts is based on March 2010 employment for employers as registered clude those employers who do business in Massachusetts under h store, facility or franchisee as a separate employer. |

Massachusetts Companies in the Fortune 500 List. The economic base of Massachusetts is anchored by the thirteen 2011 Fortune 500 companies headquartered here. When comparing the 2011 Fortune 500 to that of 2010, four Massachusetts companies gained, eight lost rank, and one remained the same. EMC climbed 14 places on the list, the largest leap for a Massachusetts company.

| Ra | nk | | | 2010 revenues |
|------|------|--------------------------------------|--------------------------------------|---------------|
| 2011 | 2010 | Company | Industry | (millions) |
| 82 | 71 | Liberty Mutual Ins. Group (Boston) | Insurance: P & C (stock) | \$33,193 |
| 101 | 93 | Mass. Mutual Life Ins. (Springfield) | Insurance: Life, Health (mutual) | \$25,647 |
| 104 | 95 | Raytheon (Waltham) | Aerospace and Defense | \$25,183 |
| 108 | 101 | Staples (Framingham) | Specialty Retailers | \$24,545 |
| 119 | 119 | TJX (Framingham) | Specialty Retailers | \$21,942 |
| 152 | 166 | EMC (Hopkinton) | Computer Peripherals | \$17,015 |
| 221 | 232 | BJ's Wholesale Club (Westborough) | Specialty Retailers | \$11,025 |
| 227 | 234 | Thermo Fisher Scientific (Waltham) | Scientific, Photo, Control Equipment | \$10,789 |
| 253 | 249 | State St. Corp. (Boston) | Commercial Banks | \$9,716 |
| 305 | 279 | Boston Scientific (Natick) | Medical Products & Equipment | \$7,806 |
| 306 | 368 | Global Partners (Waltham) | Energy | \$7,802 |
| 476 | 471 | Biogen Idec (Weston) | Pharmaceuticals | \$4,716 |
| 487 | 458 | Genzyme (Cambridge) | Pharmaceuticals | \$4,536 |

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

As of December 31, 2011, the Massachusetts Unemployment Trust Fund had a balance of \$195.4 million. This balance is the sum of the private contributory account balance of \$101.0 million and the government contributory account balance of \$94.4 million. This compares to an October 2011 balance of \$403.8 million with a private contributory portion of \$304.4 million. The January 2012 Unemployment Insurance Trust Fund report indicated that the private contributory account balance was estimated to be \$2.725 billion by the end of 2015 according to the Moody's-based outlook.

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 17 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 (seasonally adjusted) U.S. rate. In October 2007, the Massachusetts rate was 4.4 percent, the lowest it had been since October 2001. By March 2012, the Massachusetts rate had dropped to 6.5 percent from 6.9 percent in December 2011. The tables and graphs on the following two pages compare the unemployment rate in the state with those in New England and the U.S.

| | | | | (in | thousa | nds) | | | | |
|------|--------|------------|---------|-----|---------|--------|-------|-----------|------|-------------|
| | Civili | an Labor 1 | Force | U | nemploy | yed | Unemp | loyment] | Rate | MA Rate a |
| 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.′ |
| 1971 | 2,459 | 5,157 | 84,382 | 163 | 364 | 5,016 | 6.6% | 7.1% | 5.9% | 112. |
| 1972 | 2,487 | 5,260 | 87,034 | 161 | 363 | 4,882 | 6.5% | 6.9% | 5.6% | 115. |
| 1973 | 2,557 | 5,387 | 89,429 | 171 | 336 | 4,365 | 6.7% | 6.2% | 4.9% | 136. |
| 1974 | 2,637 | 5,514 | 91,949 | 190 | 368 | 5,156 | 7.2% | 6.7% | 5.6% | 128. |
| 1975 | 2,725 | 5,633 | 93,775 | 305 | 578 | 7,929 | 11.2% | 10.3% | 8.5% | 131.: |
| 1976 | 2,726 | 5,714 | 96,158 | 268 | 521 | 7,406 | 9.8% | 9.1% | 7.7% | 127. |
| 1977 | 2,760 | 5,820 | 99,009 | 218 | 437 | 6,991 | 7.9% | 7.5% | 7.1% | 111. |
| 1978 | 2,809 | 5,936 | 102,251 | 173 | 343 | 6,202 | 6.2% | 5.8% | 6.1% | 101.0 |
| 1979 | 2,863 | 6,080 | 104,962 | 156 | 326 | 6,137 | 5.5% | 5.4% | 5.8% | 94. |
| 1980 | 2,885 | 6,154 | 106,940 | 164 | 365 | 7,637 | 5.7% | 5.9% | 7.1% | 80. |
| 1981 | 2,938 | 6,268 | 108,670 | 189 | 400 | 8,273 | 6.4% | 6.4% | 7.6% | 84. |
| 1982 | 2,966 | 6,345 | 110,204 | 236 | 489 | 10,678 | 8.0% | 7.7% | 9.7% | 82.: |
| 1983 | 2,972 | 6,386 | 111,550 | 209 | 434 | 10,717 | 7.0% | 6.8% | 9.6% | 72. |
| 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. |
| 1986 | 3,080 | 6,724 | 117,834 | 123 | 264 | 8,237 | 4.0% | 3.9% | 7.0% | 57. |
| 1987 | 3,114 | 6,827 | 119,865 | 104 | 228 | 7,425 | 3.4% | 3.3% | 6.2% | 54. |
| 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. |
| 1990 | 3,226 | 7,128 | 125,840 | 204 | 409 | 7,047 | 6.3% | 5.7% | 5.6% | 112. |
| 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. |
| 1993 | 3,173 | 7,062 | 129,200 | 232 | 486 | 8,940 | 7.3% | 6.9% | 6.9% | 105. |
| 1994 | 3,188 | 7,041 | 131,056 | 199 | 415 | 7,996 | 6.2% | 5.9% | 6.1% | 101.0 |
| 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% | 75.0 |
| 1999 | 3,355 | 7,327 | 139,368 | 110 | 234 | 5,880 | 3.3% | 3.2% | 4.2% | 78.0 |
| 2000 | 3,366 | 7,348 | 142,583 | 92 | 204 | 5,692 | 2.7% | 2.8% | 4.0% | 67. |
| 2001 | 3,401 | 7,424 | 143,734 | 126 | 266 | 6,801 | 3.7% | 3.6% | 4.7% | 78.2 |
| 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. |
| 2004 | 3,381 | 7,476 | 147,401 | 177 | 366 | 8,149 | 5.2% | 4.9% | 5.5% | 94.: |
| 2005 | 3,383 | 7,516 | 149,320 | 164 | 353 | 7,591 | 4.8% | 4.7% | 5.1% | 94. |
| 2005 | 3,418 | 7,607 | 151,428 | 162 | 344 | 7,001 | 4.8% | 4.5% | 4.6% | 104 |
| 2000 | 3,431 | 7,646 | 153,124 | 154 | 342 | 7,078 | 4.5% | 4.5% | 4.6% | 97.8 |
| 2008 | 3,462 | 7,711 | 154,287 | 185 | 418 | 8,924 | 5.3% | 5.4% | 5.8% | 91.4 |
| 2000 | 3,468 | 7,732 | 154,142 | 284 | 629 | 14,265 | 8.2% | 8.1% | 9.3% | 88.2 |
| 2009 | 3,469 | 7,756 | 153,889 | 289 | 659 | 14,205 | 8.3% | 8.5% | 9.6% | 86. |
| 2010 | 3,456 | 7,740 | 153,617 | 254 | 599 | 13,747 | 7.4% | 7.7% | 8.9% | 83. |

EXHIBIT A-22 Quarter 3, FY 2012





EXHIBIT A-23 Quarter 3, FY 2012

EDUCATION AND TECHNOLOGY

Educational Attainment. The availability of a skilled and well-educated population is an important resource for the Commonwealth. Approximately two out of five adults in Massachusetts had a bachelor's degree or more in 2010, according to the Census Bureau's American Community Survey (ACS). The ACS also found that Massachusetts had a smaller proportion of persons who had not completed high school, 10.9 percent, than the national average of 14.4 percent.





Massachusetts' black and Hispanic populations achieved college degrees at roughly half the rate of its white population but their rates were higher than their national averages. The most current Census data are 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 and Hispanics 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.

| | | White | Black | Asian | Other | Hispanic or |
|---------------|------------|-------|-------|-------|-------|-------------|
| | Total | alone | alone | alone | race | Latino |
| United States | 22,255,504 | 73.2% | 16.0% | 7.8% | 3.0% | 14.6% |
| Massachusetts | 554,736 | 80.6% | 9.9% | 9.5% | 0.0% | 8.9% |

Survey data released by the Institute of International Education state that 38,698 foreign students were enrolled in Massachusetts colleges and universities in the 2011/2010 school year. This was an increase of 9.6 percent from the previous year. The national enrollment increased 5 percent. Massachusetts remains 4th ranked among states for foreign student enrollment.



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 2009. Massachusetts ranked sixth among states and the District of Columbia when comparing the percent (81.7) of individuals who had access to the internet in their household.



Patents. The U.S. Patent and Trademark Office notes: "This report shows the number of U.S. patent documents (i.e., utility patents, design patents, plant patents, reissue patents, defensive publications, and statutory invention registrations) granted since 1977, broken down by the state or country of origin (patent origin is determined by the residence of the first-named inventor)."

In 2010, Massachusetts was fifth among all states for the number of new patents issued. Only five nations originated more U.S. patents than Massachusetts, putting the state on par with the United Kingdom, France, and Canada for origination of U.S. patents. Since 1977, Massachusetts has received more new patents than any other New England state. With 5,261 new patents in 2010, up over 30 percent from 2009, Massachusetts innovators were responsible for over twice as many patents as Connecticut, which originated 2,111 patents in 2010.



EXHIBIT A-27 Quarter 3, FY 2012

Primary and Secondary Education Expenditures. Although spending on education is not necessarily an indicator of results, Massachusetts has spent from 12 to 34 percent more per pupil on primary and secondary education than the national average since 1981. During the 2008-2009 school year, Massachusetts increased per student expenditures 4.9 percent to \$14,118, which is eighth in the nation but less than its average increase of 6.1% since 1981. The table and chart below show expenditures per pupil for Massachusetts and the U.S. since fiscal 1981.

| | | | | MA change from |
|-------------|---------------|---------------|-----------------|----------------|
| Fiscal Year | Massachusetts | United States | Ratio (MA/U.S.) | previous yea |
| 1981 | \$2,735 | \$2,307 | 1.19 | |
| 1982 | 2,823 | 2,525 | 1.12 | 3.2% |
| 1983 | 3,072 | 2,736 | 1.12 | 8.8% |
| 1984 | 3,298 | 2,940 | 1.12 | 7.4% |
| 1985 | 3,653 | 3,222 | 1.13 | 10.8% |
| 1986 | 4,031 | 3,479 | 1.16 | 10.3% |
| 1987 | 4,491 | 3,682 | 1.22 | 11.4% |
| 1988 | 4,965 | 3,927 | 1.26 | 10.6% |
| 1989 | 5,485 | 4,307 | 1.27 | 10.5% |
| 1990 | 5,766 | 4,643 | 1.24 | 5.1% |
| 1991 | 5,881 | 4,902 | 1.20 | 2.0% |
| 1992 | 5,952 | 5,023 | 1.18 | 1.2% |
| 1993 | 6,141 | 5,160 | 1.19 | 3.2% |
| 1994 | 6,423 | 5,327 | 1.21 | 4.6% |
| 1995 | 6,783 | 5,529 | 1.23 | 5.6% |
| 1996 | 7,033 | 5,689 | 1.24 | 3.7% |
| 1997 | 7,331 | 5,923 | 1.24 | 4.2% |
| 1998 | 7,651 | 6,137 | 1.25 | 4.4% |
| 1999 | 8,106 | 6,458 | 1.26 | 5.9% |
| 2000 | 8,444 | 6,836 | 1.24 | 4.2% |
| 2001 | 9,038 | 7,284 | 1.24 | 7.0% |
| 2002 | 9,856 | 7,701 | 1.28 | 9.1% |
| 2003 | 10,223 | 8,019 | 1.27 | 3.7% |
| 2004 | 10,693 | 8,287 | 1.29 | 4.6% |
| 2005 | 11,267 | 8,701 | 1.29 | 5.4% |
| 2006 | 11,981 | 9,138 | 1.31 | 6.3% |
| 2007 | 12,738 | 9,666 | 1.32 | 6.3% |
| 2008 | 13,454 | 10,259 | 1.31 | 5.6% |
| 2009 | 14,118 | 10,499 | 1.34 | 4.9% |



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

EXHIBIT A-28 Quarter 3, FY 2012

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.

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 below compare the data available for Massachusetts to the nation.



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 are released more frequently and in some cases, are among the components used to calculate State GDP.

| | | | | roduct - Annual C ned 2005 dollars) | Thange | | |
|------|---------------|---------------|-------------|--|---------------|---------------|--|
| | Massachusetts | | New England | | United States | | |
| Year | GDP | Annual change | GDP | Annual change | GDP | Annual change | |
| 1997 | \$254 | | \$547 | | \$9,846 | | |
| 1998 | \$266 | 4.6% | \$569 | 4.1% | \$10,275 | 4.4% | |
| 1999 | \$280 | 5.3% | \$593 | 4.1% | \$10,771 | 4.8% | |
| 2000 | \$301 | 7.8% | \$635 | 7.2% | \$11,216 | 4.1% | |
| 2001 | \$309 | 2.4% | \$647 | 1.8% | \$11,338 | 1.1% | |
| 2002 | \$309 | 0.1% | \$649 | 0.3% | \$11,543 | 1.8% | |
| 2003 | \$313 | 1.5% | \$659 | 1.5% | \$11,836 | 2.5% | |
| 2004 | \$320 | 2.0% | \$680 | 3.2% | \$12,247 | 3.5% | |
| 2005 | \$323 | 1.1% | \$687 | 1.0% | \$12,623 | 3.1% | |
| 2006 | \$328 | 1.5% | \$701 | 2.1% | \$12,959 | 2.7% | |
| 2007 | \$334 | 1.9% | \$713 | 1.7% | \$13,206 | 1.9% | |
| 2008 | \$340 | 1.6% | \$716 | 0.4% | \$13,162 | -0.3% | |
| 2009 | \$328 | -3.3% | \$697 | -2.6% | \$12,703 | -3.5% | |
| 2010 | \$342 | 4.2% | \$721 | 3.4% | \$13,088 | 3.0% | |

Real GDP - Annual and Latest Quarterly Change



Seasonally Adjusted Annual Rates

EXHIBIT A-30 Quarter 3, FY 2012

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 12 months prior. Massachusetts monthly trend follows the nation's but it outperformed the nation from November 2006 to September 2010. From December 2010 on the nation has outperformed Massachusetts, a revision from previous releases. The bottom table compares the Massachusetts' index to its New England neighbors and the U.S.

| Area | November 2011 | 1-Month Change | 3-Month Change | 12-Month Change |
|---------------|------------------|-------------------|-------------------|--------------------|
| U.S. | 158.5 | 0.5% | 1.5% | 4.6% |
| Massachusetts | 172.6 | 0.2% | 0.5% | 2.4% |
| Connecticut | 160.0 | 0.4% | 1.2% | 3.3% |
| Maine | 136.5 | 0.1% | 0.6% | 2.0% |
| New Hampshire | 184.5 | 0.2% | 0.7% | 1.9% |
| Rhode Island | 150.1 | -0.1% | 0.5% | 1.7% |
| Vermont | 145.8 | 0.4% | 1.0% | 2.3% |





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

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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 the national index is based on a survey of manufacturers, the Boston region's is based 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, supplier deliveries, inventories, customer inventories, prices, backlog of orders, exports and imports. The Boston region's components are slightly different and include 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 March 2012 national index indicated that the manufacturing sector was expanding for the 34th consecutive month. The Boston region's March 2012 index indicated that overall business conditions were close to expansion. Five of the Boston region's eleven components were above 50. The Boston employment and new export orders component stand out at 70 and 0 respectively. See the second graph below for the current and previous year's component values.



ECONOMIC BASE AND PERFORMANCE—INTERNATIONAL TRADE

Total Trade Volume. Total trade volume, exports and imports, increased 7 percent from 2010 to \$61 billion in 2011 and has returned to prerecession levels. Canada, at \$11.4 billion and 18.6 percent, was by far our most valuable trading partner. Our trade deficit, \$5.7 billion, grew at a slower pace, 29.5 percent in 2011 versus 53.1 percent in 2010.

Exports. Massachusetts ranked 15th in the United States in 2011 and first in New England with \$27.7 billion in exports. This was a 5.5 percent increase from the previous year's export value from the Commonwealth, while national exports increased almost three times as much by 15.9 percent. Total exports from New England also grew by 4.2 percent. Canada was our top export destination 2011 with \$3.7 billion.

Imports. Imports grew to \$33.4 billion in 2011 but at a slower pace, 8.8 percent, than in 2010. Canada was also the largest source for Massachusetts imports in 2011 where we imported \$7.7 billion or 22.9 percent of our total.


Top Ten Trade Partners by Trade Type.





Massachusetts 2011 Top Ten Commodities Imported



EXHIBIT A-35 Quarter 3, FY 2012

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 health care and social assistance, contributed 47.2 percent of the GDP in 2010. The following bar chart displays the latest sector contributions to the Massachusetts GDP.



GDP Subsectors. When measured in chained 2005 dollars, the change in Massachusetts total GDP was 6.4 percent between 2001 and 2010. Between 2001 and 2009 (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.

| (chained 2005 dollars) | | | | | | |
|---|--------------------------|--|--|--|--|--|
| NAICS* Industry Subsector | Percent change 2001-2009 | | | | | |
| Support activities for mining | 250.0% | | | | | |
| Water transportation | 210.3% | | | | | |
| Funds, trusts, and other financial vehicles | 199.9% | | | | | |
| Computer and electronic product manufacturing | 174.7% | | | | | |
| Paper manufacturing | -46.0% | | | | | |
| Fabricated metal product manufacturing | -48.7% | | | | | |
| Textile and textile product mills | -57.4% | | | | | |
| Mining, except oil and gas | -64.2% | | | | | |

SOURCE: United States Department of Commerce, Bureau of Economic Analysis. Revised November 2010.

Gross Domestic Product by Industry in Massachusetts (as a percent of total GDP chained 2005 dollars)

| NAICS* Industry Sector | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 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 | 90.4% | 90.8% | 91.0% | 91.0% | 91.3% | 91.5% | 91.4% | 91.2% | 91.5% |
| Agriculture, forestry, fishing, and hunting | 0.2% | 0.2% | 0.2% | 0.2% | 0.2% | 0.2% | 0.2% | 0.2% | 0.2% |
| Mining | 0.1% | 0.1% | 0.1% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Utilities | 1.2% | 1.2% | 1.2% | 1.2% | 1.2% | 1.2% | 1.3% | 1.2% | 1.2% |
| Construction | 5.3% | 4.9% | 4.6% | 4.3% | 3.9% | 3.5% | 3.4% | 2.9% | 2.9% |
| Manufacturing | 9.5% | 10.1% | 9.9% | 10.1% | 10.7% | 11.2% | 11.1% | 9.7% | 10.49 |
| Wholesale trade | 5.5% | 5.8% | 5.9% | 5.5% | 5.6% | 5.7% | 5.6% | 6.0% | 5.9% |
| Retail trade | 5.5% | 5.6% | 5.5% | 5.4% | 5.1% | 5.0% | 4.6% | 4.8% | 4.9% |
| Transportation and warehousing, excluding Postal Service | 1.6% | 1.6% | 1.7% | 1.7% | 1.7% | 1.7% | 1.7% | 1.5% | 1.5% |
| Information | 4.3% | 4.2% | 4.6% | 5.1% | 4.8% | 5.0% | 5.4% | 5.2% | 5.79 |
| Finance and insurance | 11.1% | 10.7% | 10.6% | 10.4% | 10.6% | 10.3% | 10.3% | 11.2% | 10.79 |
| Real estate, rental, and leasing | 14.3% | 14.5% | 14.4% | 14.3% | 14.0% | 14.0% | 14.0% | 14.3% | 14.4% |
| Professional and technical services | 10.1% | 9.8% | 10.5% | 10.7% | 11.1% | 11.3% | 11.9% | 12.0% | 11.99 |
| Management of companies and enterprises | 2.4% | 2.3% | 2.2% | 2.1% | 2.1% | 2.0% | 1.9% | 2.1% | 1.99 |
| Administrative and waste services | 2.6% | 2.7% | 2.6% | 2.8% | 2.8% | 2.9% | 2.9% | 2.6% | 2.6% |
| Educational services | 2.8% | 2.7% | 2.7% | 2.5% | 2.5% | 2.5% | 2.4% | 2.4% | 2.49 |
| Health care and social assistance | 8.1% | 8.4% | 8.4% | 8.6% | 8.8% | 8.9% | 9.3% | 9.7% | 9.8% |
| Arts, entertainment, and recreation | 0.8% | 0.9% | 0.9% | 0.9% | 0.9% | 1.0% | 1.0% | 0.9% | 1.0% |
| Accommodation and food services | 2.8% | 2.8% | 2.8% | 2.8% | 2.8% | 2.7% | 2.5% | 2.4% | 2.4% |
| Other services, except government | 2.5% | 2.4% | 2.4% | 2.4% | 2.3% | 2.3% | 2.2% | 2.1% | 2.0% |
| Government | 9.7% | 9.2% | 9.0% | 9.0% | 8.7% | 8.5% | 8.6% | 8.8% | 8.5% |

Rank of Industry Contribution to GDP in Massachusetts (millions of chained 2005 dollars)

| NAICS* Industry Sector | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|--|------|------|------|------|------|------|------|------|------|
| 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 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 10 | 10 |
| Manufacturing | 5 | 3 | 4 | 4 | 3 | 3 | 3 | 5 | 4 |
| Wholesale trade | 8 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| Retail trade | 7 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 |
| Transportation and warehousing, excluding Postal Service | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| Information | 10 | 10 | 9 | 9 | 9 | 8 | 8 | 8 | 8 |
| Finance and insurance | 2 | 2 | 2 | 3 | 4 | 4 | 4 | 3 | 3 |
| Real estate, rental, and leasing | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Professional and technical services | 3 | 4 | 3 | 2 | 2 | 2 | 2 | 2 | 2 |
| Management of companies and enterprises | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 |
| Administrative and waste services | 13 | 13 | 13 | 11 | 11 | 11 | 11 | 11 | 11 |
| Educational services | 11 | 12 | 12 | 13 | 13 | 13 | 13 | 12 | 12 |
| Health care and social assistance | 6 | 6 | 6 | 6 | 5 | 5 | 5 | 4 | 5 |
| Arts, entertainment, and recreation | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 |
| Accommodation and food services | 12 | 11 | 11 | 12 | 12 | 12 | 12 | 13 | 13 |
| Other services, except government | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 |
| Government | 4 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 |

* 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. The Massachusetts Department of Workforce and Labor Development's Employment and Wages (ES-202) data series are available for every sector and contain the number of establishments, average monthly employment, total annual wages and average weekly wages for the establishments with employees. The data are 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 four digit NAICS) detail. These are annual data, with a two-year reporting lag for businesses 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 four percent of all sales or receipts." These can be second or part-time businesses and not the owner's primary source of income.

State Gross Domestic Product is an annual series from the U.S. Bureau of Economic Analysis's Regional Economic Accounts. U.S. and state GDP is inflation adjusted to 2005. U.S. GDP is available quarterly.

Foreign exports from the U.S. Census Bureau's Foreign Trade Division and WISERTrade, are available for four industries on a monthly basis. Total state exports are available on a monthly basis. Sector exports and the top ten export destinations for this industry sector are 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 that 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 employees.
- 9. Annual receipts at nonemployer establishments: the subsector with the most receipts, at establishments that 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 habitats.





Source: Massachusetts EOLWD





Summary.

GDP contribution to state total: **0.2%** GDP rank: **19 of 20** Nonemployer to employer establishment ratio: **5.5 to 1**

Sector leaders. Industry subsectors with the majority of establishments, employees, payroll and receipts. Establishments with employees: Fishing Nonemployer establishments: Fishing Employees: Fishing and greenhouse and nursery production Annual wages: Fishing Average weekly wage: Fishing Annual receipts at nonemployer establishments: Fishing 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









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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.





Source: Massachusetts EOLWD













Summary.

GDP contribution to state total: 0.03%

GDP rank: 20 of 20

Nonemployer to employer establishment ratio: 0.6 to 1

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

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

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 the appendix, pages five and six for supplemental tables regarding electricity generation, supply and capacity.









State export data are not available for this sector.

Summary.

GDP contribution to state total: 1.2% GDP rank: 17 of 20 Nonemployer to employer establishment ratio: 0.9 to 1

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 the appendix pages two through four for housing permits, housing sales, and housing sale prices.









State export data are not available for this sector.

Summary.

GDP contribution to state total: 2.9% GDP rank: 10 of 20 Nonemployer to employer establishment ratio: 2.8 to 1

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

Establishments with employees: Specialty Trade Contractors

Nonemployer establishments: Building finishing contractors

Employees: Building equipment contractors

Annual wages: Building equipment contractors

Average weekly wage: Utility system construction

Annual receipts at nonemployer establishments: Residential building construction

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







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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.





Source: Massachusetts EOLWD





Summary.

GDP contribution to state total: 10.4%

GDP rank: **4 of 20**

Nonemployer to employer establishment ratio: ${\bf 0.8 \ to \ 1}$

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 Employees: Electronic instrument

Annual wages: Electronic instrument

Average weekly wage: Computers and peripheral equipment

Annual receipts at nonemployer establishments: Agricultural chemical mfg.

Most valuable export: **Computers and electronic products and chemicals**

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









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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.





Source: Massachusetts EOLWD



State export data are not available for this sector.

Summary.

GDP contribution to state total: **5.9%** GDP rank: **7 of 20** Nonemployer to employer establishment ratio: **0.4 to 1**

Sector leaders. 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

Employees: Electronic markets and agents/brokers

Annual wages: Electronic markets and agents/brokers

 $\label{eq:constraint} Average weekly wage: \textbf{Druggists' goods merchant wholesalers}$

Annual receipts at nonemployer establishments: Miscellaneous durable goods merchant wholesalers 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.







State export data are not available for this sector.

Summary.

GDP contribution to state total: **4.9%** GDP rank: **9 of 20** Nonemployer to employer establishment ratio: **1.3 to 1**

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

- Establishments with employees: Grocery stores
- Nonemployer establishments: Direct selling establishments
- Employees: Grocery stores
- Annual wages: Grocery stores
- Average weekly wage: Automobile dealers
- Annual receipts at nonemployer establishments: Direct selling establishments
- 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 pages six and seven of the appendix for more information regarding transportation and warehousing.







State export data are not available for this sector.

Summary.

GDP contribution to state total:1.5% GDP rank:16 of 20 Nonemployer to employer establishment ratio: 3.8 to 1

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

Employees: Couriers

Annual wages: General freight trucking

Average weekly wage: Pipeline transportation of natural gas

Annual receipts at nonemployer establishments: General freight trucking

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: producing and distributing information and cultural products, providing the means to transmit or distribute these products as well as data or communications, and processing data.





Source: Massachusetts EOLWD













Summary.

GDP contribution to state total: 5.7%

GDP rank: 8 of 20

Nonemployer to employer establishment ratio: 1.9 to 1

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

Employees: Software publishers

Annual wages: Software publishers

Average weekly wage: Software publishers

Annual receipts at nonemployer establishments: Other information services

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.





Source: Massachusetts EOLWD



State export data are not available for this sector.

Summary.

GDP contribution to state total: **10.7%** GDP rank: **3 of 20** Nonemployer to employer establishment ratio: **1.3 to 1**

Sector leaders. 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

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

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







EXHIBIT A-48 Quarter 3, FY 2012

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.









State export data are not available for this sector.

Summary.

GDP contribution to state total: **14.4%** GDP rank: **1 of 20** Nonemployer to employer establishment ratio: **5.2 to 1**

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

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

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







EXHIBIT A-49 Quarter 3, FY 2012

NAICS 54 - Professional and Technical Services. The Professional and Technical Services 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 - 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.





State export data are not available for this sector.

Summary.

GDP contribution to state total: **11.9%** GDP rank: **2 of 20** Nonemployer to employer establishment ratio: **3.3 to 1**

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

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

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 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 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 are not available for this sector.

Summary. GDP contribution to state total: 1.9% GDP rank: 15 of 20 Nonemployer to employer establishment ratio: N/A

Sector leaders. 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. The Administrative and Waste Services 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.





Source: Massachusetts EOLWE



State export data are not available for this sector.

Summary.

GDP contribution to state total: **2.6%** GDP rank: **11 of 20** Nonemployer to employer establishment ratio: **2.8 to 1**

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

Employees: Employment services

Annual wages: Employment services

Average weekly wage: Office administrative services

Annual receipts at nonemployer establishments: Services to buildings and dwellings

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.







State export data are not available for this sector.

Summary.

GDP contribution to state total: **2.4%** GDP rank: **12 of 20** Nonemployer to employer establishment ratio: **5.8 to 1**

Sector leaders. 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.









State export data are not available for this sector.

Summary.

GDP contribution to state total: **9.8%** GDP rank: **5 of 20** Nonemployer to employer establishment ratio: **2.5 to 1**

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

Establishments with employees: Offices of physicians

Nonemployer establishments: Offices of other health practitioners

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

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







EXHIBIT A-54 Quarter 3, FY 2012

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





State export data are not available for this sector.

Summary.

GDP contribution to state total: **1.0%** GDP rank: **18 of 20** Nonemployer to employer establishment ratio: **9.4 to 1**

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

Establishments with employees: Other amusement & recreation industries

Nonemployer establishments: Independent artists, writers, and performers

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

Annual wages. Other and sement & recreation

Average weekly wage: Spectator sports

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

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.





Source: Massachusetts EOLWD



State export data are not available for this sector.

Summary.

GDP contribution to state total: 2.4% GDP rank: 13 of 20 Nonemployer to employer establishment ratio: 0.3 to 1

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

Establishments with employees: Limited-service eating places

Nonemployer establishments: Special food services

Employees: Full-service restaurants

Annual wages: Full-service restaurants

Average weekly wage: Traveler accommodation

Annual receipts at nonemployer establishments: Limited-service eating places

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







NAICS 81 - Other Services, Except Public Administration. 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, providing dry cleaning and laundry services, personal care services, death care services, pet care services, photofinishing services, temporary parking services.







State export data are not available for this sector.

Summary.

GDP contribution to state total: **2.0%** GDP rank: **14 of 20** Nonemployer to employer establishment ratio: **1.4 to 1**

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

Establishments with employees: Private households

Nonemployer establishments: Other personal services

Employees: Private households

Annual wages: Automotive repair and maintenance

Average weekly wage: Electronic equipment repair/maintenance

Annual receipts at nonemployer establishments: Other personal services

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 and provide for public safety and national defense.











State nonemployer and export data are not available for this sector.

Summary.

GDP contribution to state total: 8.5%

GDP rank: 6 of 20

Nonemployer to employer establishment ratio: N/A

Sector leaders. 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

EXHIBIT A-58 Quarter 3, FY 2012

ECONOMIC BASE AND PERFORMANCE—GOVERNMENT REVENUES AND SPENDING

Federal Spending in Massachusetts. Federal government spending contributes significantly to the Massachusetts economy. In fiscal 2010, Massachusetts received almost \$82.5 billion, a 1.7 percent decrease from 2009, and ranked ninth among states in per capita distribution of federal funds, with total spending of \$12,593 per person, excluding loans and insurance. Massachusetts ranked seventh in fiscal 2009. While federal spending in Massachusetts has increased every year since 1990, its share of total U.S. spending has declined steadily since 1990, excluding 2008-2009. The following graph 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.

Note: Due to budget cuts the U.S. Census Bureau has discontinued the CFFR data series, the source for these data. FY 2010 will be the last year reported. The Massachusetts SDC will replace this series with data from USASpending.gov, its source for federal contract data. Historical data from USASpending does not include spending by all federal agencies (81 percent of FY 2010 CFFR total spending) as some agencies were not required to report via that database. USASpending will eventually add all federal agencies to their spending database to meet the requirements of the federal Transparency Act.



In FY 2010, 44.7 percent of federal spending in Massachusetts was composed of health care and social programs like Medicare, Medicaid, Social Security, unemployment benefits and Section 8 Housing Vouchers; 2 percent more than 2009. Massachusetts was 56 percent above the national average in per capita federal grants to state and local governments, receiving \$3,414 per capita compared to a national average of \$2,187. Per capita federal spending on salaries and wages was 37 percent lower in Massachusetts than in the rest of the nation, \$688 compared to a national average of \$1,099 in 2010. Massachusetts however, was 9 percent above the national average in per capita direct federal payments to individuals, \$6,049 compared to a national average of \$5,568. Massachusetts ranked sixth (seventh in 2009), among states in per capita procurement contract awards, \$2,442 compared to a national average of \$1,7605 in 2010. The following chart shows the composition of direct federal spending within Massachusetts in fiscal 2010, excluding loans and insurance.



EXHIBIT A-60 Quarter 3, FY 2012

Federal Contracts. The total dollar value of all federal contracts performed in Massachusetts increased an average of 18.8 percent per year from 2000 to 2011, 4.2 percent faster then the 14.6 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 2012 as of April 12, 2012.

| Ì | Federal Contracts Received by Massachusetts Companies as a Percent all Federal Contracts | | | | | | | | | | |
|--------|--|--------------------------|-------------------|-----------|--------------------------|--|--|--|--|--|--|
| | (millions of dollars) | | | | | | | | | | |
| Fiscal |] | MA percent increase from | n | U. | S. percent increase from | | | | | | |
| Year | Massachusetts | previous year | MA portion of all | U.S. | previous year | | | | | | |
| 2000 | \$6,173 | | 3.0% | \$205,564 | | | | | | | |
| 2001 | 7,244 | 17.4% | 3.2% | 223,194 | 8.6% | | | | | | |
| 2002 | 7,513 | 3.7% | 2.9% | 263,507 | 18.1% | | | | | | |
| 2003 | 9,675 | 28.8% | 3.0% | 318,344 | 20.8% | | | | | | |
| 2004 | 10,114 | 4.5% | 2.9% | 346,413 | 8.8% | | | | | | |
| 2005 | 11,438 | 13.1% | 2.9% | 391,241 | 12.9% | | | | | | |
| 2006 | 12,204 | 6.7% | 2.8% | 431,843 | 10.4% | | | | | | |
| 2007 | 14,451 | 18.4% | 3.0% | 475,283 | 10.1% | | | | | | |
| 2008 | 16,490 | 14.1% | 3.0% | 541,811 | 14.0% | | | | | | |
| 2009 | 18,463 | 12.0% | 3.4% | 541,301 | -0.1% | | | | | | |
| 2010 | 18,077 | -2.1% | 3.4% | 537,878 | -0.6% | | | | | | |
| 2011 | 18,935 | 4.7% | 3.5% | 535,989 | -0.4% | | | | | | |
| 2012 | 4,864 | | 3.4% | 144,822 | | | | | | | |
| Total | 155,641 | | 3.1% | 4,957,191 | | | | | | | |

Massachusetts Federal Contracts FY 2000-2011



| Summary of Federal Contracts Perform | ned in Massachusetts |
|---|----------------------|
| FY 2000 To 2012 | |
| Total Dollars: \$133,429,761,636 | |
| Number of Transactions: 952,987 | |
| Top 5 Products or Services Sold | |
| Gas Turbines & Jet Engines Aircraft | \$13,104,887,433 |
| Engineering (Advanced) | \$5,455,176,067 |
| R&D-Electronics & Comm Eq-B Res | \$4,812,288,221 |
| Misc Communication Equipment | \$4,656,783,502 |
| Guided Missiles | \$3,957,640,045 |
| Top 5 Prime Award Major Agencies | |
| Department of Defense | \$108,590,124,858 |
| Department of Treasury | \$4,625,017,395 |
| Department of Veterans Affairs | \$3,574,746,586 |
| Department of Health and Human Services | \$2,914,426,724 |
| Department of Transportation | \$2,799,721,710 |
| Top 5 Prime Award Sub Agencies | |
| Department of the Army | \$36,542,208,596 |
| Department of the Navy | \$35,117,878,134 |
| Department of the Air Force | \$25,645,488,117 |
| Defense Logistics Agency | \$4,317,742,062 |
| United States Mint | \$3,864,827,832 |
| Top 5 Prime Award Contractors | |
| Raytheon Company | \$30,974,592,239 |
| General Dynamics Corporation | \$15,994,828,928 |
| General Electric Company | \$15,101,865,843 |
| Massachusetts Institute of Technology | \$8,303,889,671 |
| The Charles Stark Draper Laboratory Inc | \$3,760,132,267 |
| SOURCE: http://www.usaspending.gov. Note: Reported as of 4/12/2012 | |

| Federal Contracts Performed in Massachusetts in: | |
|---|-----------------|
| Fiscal Year: 2012 | |
| Total Dollars: \$4,345,856,089 | |
| This amount is 3.0% of all awarded dollars for the fiscal year. | |
| Massachusetts is ranked 9th among states, D.C. and territories for this year. | |
| Number of Transactions: 33,789 | |
| Top 5 Products or Services Sold | |
| Precious Metals Primary Forms | \$1,098,824,068 |
| Gas Turbines and Jet Engines, Aircraft, Prime Moving; and Components | \$334,517,400 |
| R&d-Defense System: Electronics/Communication Equipment (Basic Research) | \$271,681,602 |
| R&d- Defense System: Missile/Space Systems (Engineering Development) | \$249,143,128 |
| Medical- General Health Care | \$139,448,039 |
| Top 5 Prime Award Major Agencies | |
| Department of Defense | \$2,492,150,797 |
| Department of Treasury | \$1,104,983,057 |
| Department of Transportation | \$170,822,819 |
| Department of Veterans Affairs | \$114,128,164 |
| National Aeronautics and Space Administration | \$74,327,606 |
| Top 5 Prime Award Sub Agencies | |
| United States Mint | \$1,099,027,482 |
| Department of the Army | \$678,096,954 |
| Department of the Air Force | \$629,820,485 |
| Department of the Navy | \$553,926,425 |
| Missile Defense Agency (MDA) | \$252,633,326 |
| Top 5 Prime Award Contractors | |
| Raytheon Company | \$908,756,379 |
| Coins 'N Things INC. | \$858,920,549 |
| General Electric Company | \$441,849,750 |
| Massachusetts Institute of Technology | \$263,376,139 |
| General Dynamics Corporation | \$252,038,023 |
| SOURCE: http://www.usaspending.gov. Note: Reported as of 4/12/2012 | |

State Revenues. Taxes collected by all states in FY 2011 totaled \$763.7 billion, 8.4 percent more than FY 2010. Massachusetts collected \$22.1 billion in FY 2011, 10.2 percent more than it did in FY 2010. Massachusetts' revenues grew more than any other New England state. Massachusetts ranked 11th in total taxes collected in 2011, no change from 2010 or 2009.

In fiscal year 2011, Massachusetts collected 52.5 percent of its revenue from individual income tax. Overall, states received 33.9 percent of all revenues from individual income taxes and seven states did not have the tax in 2011. In FY 2011, the state collected 14.5 percent more individual income taxes than it did in FY 2010.



State Lottery Proceeds. Massachusetts ranked second in revenue, \$4.2 billion, and prize money awarded, \$3.2 billion, among the 43 states with lotteries in FY 2010. It ranked first on per capita sales, eighth in the portion of revenue used for its administration, and second in the portion of revenue used for prizes.



State Expenditures. The following table and graph depict fiscal 2010 per capita state general expenditures by category for the six New England states and the U.S. average state expenditure. Massachusetts ranked 8th in the nation in per capita expenditures, \$7,901 in 2010, while it ranked 8th and spent \$7,373 in 2009. This represents a 7.2 percent increase in per capita expenditures from 2009 to 2010 with the largest per capita dollar increase in the Administration, Insurance Trust & Other category.

| Massachusetts Per Capita State Government General Expenditures, by Type | | | | | | | | | | |
|---|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| General expenditures, by function | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
| Education | \$1,026 | \$1,020 | \$1,055 | \$1,183 | \$1,346 | \$1,401 | \$1,640 | \$1,649 | \$1,735 | \$1,814 |
| Public Welfare | \$1,135 | \$932 | \$824 | \$1,647 | \$1,719 | \$1,843 | \$1,877 | \$1,952 | \$2,030 | \$2,103 |
| Health & Hospitals | \$363 | \$377 | \$372 | \$172 | \$177 | \$187 | \$227 | \$236 | \$237 | \$235 |
| Highways | \$400 | \$427 | \$378 | \$471 | \$276 | \$261 | \$267 | \$346 | \$294 | \$298 |
| Police & Corrections | \$213 | \$223 | \$230 | \$215 | \$222 | \$248 | \$274 | \$293 | \$294 | \$279 |
| Natural Resource, Parks & Recreation | \$88 | \$86 | \$95 | \$90 | \$76 | \$81 | \$87 | \$89 | \$96 | \$91 |
| Administration, Insurance Trust & Other | \$1,473 | \$1,630 | \$1,755 | \$1,815 | \$1,660 | \$1,690 | \$1,890 | \$1,901 | \$2,126 | \$2,558 |
| Interest on General Debt | \$371 | \$418 | \$386 | \$401 | \$435 | \$487 | \$518 | \$558 | \$561 | \$522 |
| Total | \$5,067 | \$5,115 | \$5,095 | \$5,994 | \$5,911 | \$6,198 | \$6,779 | \$7,023 | \$7,373 | \$7,901 |

| Fiscal 2010 Per Capita State Government General Expenditures, by Type (for the U.S. and the New England States) | | | | | | | | |
|---|---------|---------|---------|---------|---------|---------|--------|--|
| General expenditures, by function | U.S. | СТ | ME | MA | NH | RI | V | |
| Education | \$1,849 | \$1,853 | \$1,579 | \$1,814 | \$1,522 | \$1,680 | \$3,67 | |
| Public Welfare | \$1,499 | \$1,687 | \$2,189 | \$2,103 | \$1,450 | \$2,213 | \$2,24 | |
| Health & Hospitals | \$400 | \$655 | \$399 | \$235 | \$109 | \$236 | \$283 | |
| Highways | \$359 | \$303 | \$441 | \$298 | \$426 | \$279 | \$61 | |
| Police & Corrections | \$202 | \$249 | \$169 | \$279 | \$132 | \$240 | \$319 | |
| Natural Resource, Parks & Recreation | \$88 | \$51 | \$138 | \$91 | \$66 | \$45 | \$13 | |
| Administration, Insurance Trust & Other | \$1,748 | \$2,470 | \$1,688 | \$2,558 | \$1,843 | \$2,701 | \$1,62 | |
| Interest on General Debt | \$147 | \$408 | \$192 | \$522 | \$306 | \$408 | \$240 | |
| Total | \$6,293 | \$7,677 | \$6,794 | \$7,901 | \$5,853 | \$7,801 | \$9,15 | |
| State's rank of total per capita expenditures | 5 | 11 | 20 | 8 | 34 | 9 | í | |

Fiscal 2010 Per Capita State Government General Expenditures, by Type (for the U.S. and the New England States)



Supplementary Data Section. The following appendix contains more detailed data for industry sectors or subsectors.

EXHIBIT A-Appendix-1 Quarter 1, FY 2012

Building Permits. The Census Bureau's Residential Construction Branch Building Permits Survey is a leading economic indicator used to track the housing industry.

| | | Housin | ng Permits A | uthorized | | |
|------|-------------|----------------|---------------|----------------|-------------|----------------|
| | Mas | sachusetts | United States | | | |
| | | Percent Change | | Percent Change | | Percent Change |
| Year | Total Units | Previous Year | Total Units | Previous Year | Total Units | Previous Yea |
| 1970 | 38,330 | 14.2% | 74,068 | 5.0% | 1,354,746 | 1.8% |
| 1971 | 52,116 | 36.0% | 97,801 | 32.0% | 1,913,601 | 41.3% |
| 1976 | 19,190 | 8.4% | 47,441 | 13.9% | 1,286,942 | 37.7% |
| 1985 | 39,360 | 38.2% | 96,832 | 33.8% | 1,732,335 | 2.5% |
| 1990 | 15,276 | -29.4% | 36,811 | -31.2% | 1,125,583 | -16.3% |
| 1995 | 15,946 | -12.9% | 37,357 | -7.7% | 1,335,835 | -2.39 |
| 1996 | 17,360 | 8.9% | 40,425 | 8.2% | 1,419,083 | 6.29 |
| 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 | 12.39 |
| 1999 | 18,967 | 0.0% | 47,632 | 0.6% | 1,663,533 | 2.79 |
| 2000 | 18,000 | -5.1% | 45,335 | -4.8% | 1,592,267 | -4.39 |
| 2001 | 17,034 | -5.4% | 44,594 | -1.6% | 1,636,676 | 2.89 |
| 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 | 8.19 |
| 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 | 4.19 |
| 2006 | 19,580 | -20.2% | 46,782 | -20.4% | 1,838,903 | -14.79 |
| 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 | -35.39 |
| 2009 | 7,941 | -19.6% | 19,463 | -20.4% | 582,963 | -35.6% |
| 2010 | 9,075 | 14.3% | 20,964 | 7.7% | 604,610 | 3.7% |

Housing Permits Authorized Percent Change from Previous Year



EXHIBIT A-Appendix-2 Quarter 3, FY 2012

| | Ŀ | Existing Home Sa | les | | |
|-----------|------------|-----------------------|---------|------------|--|
| (qua | | e seasonally adjusted | | unds) | |
| | Ma | ssachusetts | Uni | ted States | |
| Year | Year Sales | | 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% | |
| 2009 | 107.8 | 3.9% | 5,156.0 | 4.9% | |
| 2010 | 105.3 | -2.3% | 4,908.0 | -4.8% | |
| 2010.QIII | 86.0 | | 4,170.0 | | |
| 2011.QIII | 96.4 | 12.1% | 4,880.0 | 17.0% | |

Home Sales. Sales of existing single-family homes for Massachusetts and the U.S. are presented in the following table and graph. The state existing-home sales report includes single-family houses, condos and co-ops.

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



EXHIBIT A-Appendix-3 Quarter 3, FY 2012

Home prices. Prices had been declining in the Boston metropolitan area since 2006 but increased in 2010. The median price in the Boston areas is two times the national median.

| | | | ce for Existing Sing | | | | | | | |
|---|---------------------|---------------|----------------------|----------------|----------------|--|--|--|--|--|
| (quarterly price not seasonally adjusted, price in thousands) | | | | | | | | | | |
| | Boston Metro | | Boston Prices as a | Boston | U.S. | | | | | |
| Year | Area | United States | 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% | | | | | |
| 2009 | \$333 | \$172 | 193.3% | -7.9% | -12.5% | | | | | |
| 2010 | \$357 | \$173 | 206.4% | 7.4% | 0.6% | | | | | |
| 2011p | \$346 | \$166 | 208.3% | -3.1% | -4.0% | | | | | |



Median Sales Price, Existing Single-Family Homes

SOURCES: National Association of Realtors. Federal Reserve Bank of Boston; p= preliminary, r=revised.*

\$0

 EXHIBIT A-Appendix-4 Quarter 3, FY 2012

Year

 2011p

Electricity Prices, Supply and Capacity by Source. Massachusetts had the seventh highest electric rate in the country in 2010, 14.26 cents per kilowatt hour, while the U.S. average was 9.83. This was a decrease of 7.7 percent for Massachusetts and an increase of 0.1 percent for the U.S. from the previous year. Massachusetts electric utilities generated \$8.1 billion in revenue in 2010. This was 3.0 percent less than in 2009, while they sold 5.1 percent more electricity. Massachusetts's latest reported average combined electric rate, year-to-date January 2012, has dropped 1.0 percent compared to the same period last year 2011 to 14.05 cents per kilowatt hour. The Massachusetts Net Electricity Trade Index, which represents the state's electricity self-sufficiency, was 0.77 in 2010. This means that Massachusetts imported 23 percent of its electricity supply, 14,030 million kilowatt hours, from out-of-state. In 2010, two-thirds of Massachusetts generating capacity was oil and natural gas based.



EXHIBIT A-Appendix-5 Quarter 3, FY 2012



Travel and Tourism. The Massachusetts Office of Travel and Tourism (MOTT) reported a 12.4 percent increase in museum and attraction attendance, 12.4 million visitors, in calendar year 2011, compared to 2010.

Transportation and Warehousing. Between 2001 and 2010, the transportation and warehousing sector of Massachusetts GDP increased 3.2 percent when measured with year 2005 chained dollars. It contributed 1.5 percent to the total Massachusetts Real GDP in 2010; 0.12 percent less than it did in 2001.

Massachusetts' major air and seaports are managed by the Massachusetts Port Authority (Massport), an independent public authority. Based on total passenger volume in calendar year 2010 data, Logan Airport was the most active airport in New England, remaining the 19th most active in the U.S. according to the Federal Aviation Authority and 45th most active in the world according to Airports Council International. Massport reported that as of December 2011, total airport flight operations were up 4.6 percent and total airport passengers were up 5.4 percent from the same period in 2010. According to the FAA, in calendar year 2010, Logan Airport ranked 29th in the nation in total air cargo volume. In 2010, the airport handled 546 million pounds of cargo; a 5.6 percent and total express mail was down 2.0 percent from the same period in 2010. Please refer to the Aviation Activity charts on the following page.

At Massport's Port of Boston properties, 2011 total cargo throughput was 11.5 million metric tons, a 3 percent decrease from 2010. Automobile processing decreased 11 percent to 37,242 units, and cruise passenger trips decreased 4 percent to 310,238. Total containerized cargo at public and private terminals increased 16 percent to 1.4 million metric tons.

The Army Corps of Engineers reported Massachusetts total waterborne cargo shipped or received in 2010 decreased by 9.4 percent to 22.7 million short tons from 2009. Waterborne cargo in New England decreased 7.4 percent while the U.S. increased 10.8 percent. Please refer to the Waterborne Tonnage by State charts on the following page.

EXHIBIT A-Appendix-6 Quarter 3, FY 2012

| Aviation Activity for Massachusetts' Primary Airports | | | | | | | | |
|---|---------------|---------------|---------------|---------------|---------------|-------------|-------------|-------------|
| Passenger Boardings | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
| General Edward Lawrence Logan International | 11,087,799 | 12,758,020 | 13,214,923 | 13,544,552 | 13,783,297 | 12,820,489 | 12,566,797 | 13,561,814 |
| Nantucket Memorial | 229,300 | 243,313 | 252,757 | 276,866 | 282,197 | 258,214 | 204,981 | 201,390 |
| Barnstable Municipal-Boardman/Polando Field | 158,360 | 167,522 | 177,761 | 206,980 | 204,152 | 191,906 | 138,858 | 124,560 |
| Worcester Regional | 2,234 | 1,274 | 2,036 | 14,823 | 460 | 3,182 | 17,241 | 35,833 |
| Laurence G Hanscom Field | 19,375 | 17,049 | 13,887 | 14,560 | 16,568 | 8,385 | 7,350 | 7,952 |
| Marthas Vineyard | 53,011 | 49,480 | 48,977 | 45,881 | 49,205 | 45,002 | 42,248 | 43,904 |
| New Bedford Regional | 21,097 | 19,686 | 17,960 | 15,211 | 14,567 | 13,908 | 11,680 | 12,363 |
| Provincetown Municipal | 11,801 | 11,424 | 10,236 | 11,375 | 12,459 | 11,468 | 10,747 | 11,450 |
| Total | 11,582,977 | 13,267,768 | 13,738,537 | 14,130,248 | 14,362,905 | 13,352,554 | 12,999,902 | 13,806,666 |
| | | | | | | | | |
| Cargo - Gross Landed Weight (lbs.) | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
| General Edward Lawrence Logan International | 1.199.383.800 | 1.172.103.700 | 1.148.881.400 | 1.100.485.850 | 1.059.947.900 | 984.258.400 | 835,954,035 | 817.235.460 |

Change in Aviation Activity at Massachusetts' Primary Airports

| Passenger Boardings | 2002-2003 | 2003-2004 | 2004-2005 | 2005-2006 | 2006-2007 | 2007-2008 | 2008-2009 | 2009-2010 |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| General Edward Lawrence Logan International | 0.1% | 15.1% | 3.6% | 2.5% | 1.8% | -7.0% | -2.0% | 7.9% |
| Nantucket Memorial | -9.5% | 6.1% | 3.9% | 9.5% | 1.9% | -8.5% | -20.6% | -1.8% |
| Barnstable Municipal-Boardman/Polando Field | -12.4% | 5.8% | 6.1% | 16.4% | -1.4% | -6.0% | -27.6% | -10.3% |
| Worcester Regional | -94.0% | -43.0% | 59.8% | 628.0% | -96.9% | 591.7% | 441.8% | 107.8% |
| Laurence G Hanscom Field | -52.1% | -12.0% | -18.5% | 4.8% | 13.8% | -49.4% | -12.3% | 8.2% |
| Martha's Vineyard | -10.9% | -6.7% | -1.0% | -6.3% | 7.2% | -8.5% | -6.1% | 3.9% |
| New Bedford Regional | -2.6% | -6.7% | -8.8% | -15.3% | -4.2% | -4.5% | -16.0% | 5.8% |
| Provincetown Municipal | 12.0% | -3.2% | -10.4% | 11.1% | 9.5% | -8.0% | -6.3% | 6.5% |
| Total | 12.0% | 14.5% | 3.5% | 2.9% | 1.6% | -7.0% | -2.6% | 6.2% |
| Cargo | 2002-2003 | 2003-2004 | 2004-2005 | 2005-2006 | 2006-2007 | 2007-2008 | 2008-2009 | 2009-2010 |
| General Edward Lawrence Logan International | -5.7% | -2.3% | -2.0% | -4.2% | -3.7% | -7.1% | -15.1% | -2.2% |
| | | | | | | | | |

SOURCE: Federal Aviation Administration June 2011. p=preliminary

http://www.faa.gov/airports_airtraffic/airports/planning_capacitypassenger_allcargo_stats/

| Waterborne Tonnage by State (In Units of 1,000 Tons) | | | | | | | | | | | |
|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--|
| State | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | |
| U.S. total | 2,386,558 | 2,340,292 | 2,394,199 | 2,551,939 | 2,527,622 | 2,588,440 | 2,563,972 | 2,477,094 | 2,210,752 | 2,334,399 | |
| Massachusetts | 26,446 | 26,117 | 30,655 | 31,787 | 28,812 | 27,411 | 28,043 | 25,993 | 25,018 | 22,661 | |
| Maine | 30,586 | 29,140 | 31,698 | 32,447 | 32,353 | 28,103 | 26,839 | 24,747 | 22,996 | 20,907 | |
| Connecticut | 18,267 | 17,610 | 18,579 | 20,075 | 19,617 | 19,340 | 20,148 | 18,196 | 16,767 | 16,229 | |
| Rhode Island | 9,170 | 8,437 | 9,417 | 9,764 | 10,972 | 11,016 | 11,184 | 10,517 | 8,404 | 8,315 | |
| New Hampshire | 4,447 | 4,108 | 4,971 | 4,795 | 5,254 | 4,823 | 4,026 | 3,833 | 3,583 | 2,964 | |
| Vermont | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| New England | 88,916 | 85,412 | 95,320 | 98,868 | 97,008 | 90,693 | 90,240 | 83,286 | 76,768 | 71,076 | |

Waterborne Tonnage by State - Percent Change from Previous Year

| State | 2001-2002 | 2002-2003 | 2003-2004 | 2004-2005 | 2005-2006 | 2006-2007 | 2007-2008 | 2008-2009 | 2009-2010 | |
|---------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--|
| U.S. total | -1.9% | 2.3% | 6.6% | -1.0% | 2.4% | -0.9% | -3.4% | -10.8% | 5.6% | |
| Massachusetts | -1.2% | 17.4% | 3.7% | -9.4% | -4.9% | 2.3% | -7.3% | -3.8% | -9.4% | |
| Maine | -4.7% | 8.8% | 2.4% | -0.3% | -13.1% | -4.5% | -7.8% | -7.1% | -9.1% | |
| Connecticut | -3.6% | 5.5% | 8.1% | -2.3% | -1.4% | 4.2% | -9.7% | -7.9% | -3.2% | |
| Rhode Island | -8.0% | 11.6% | 3.7% | 12.4% | 0.4% | 1.5% | -6.0% | -20.1% | -1.1% | |
| New Hampshire | -7.6% | 21.0% | -3.5% | 9.6% | -8.2% | -16.5% | -4.8% | -6.5% | -17.3% | |
| Vermont | - | - | - | - | - | - | - | - | - | |
| New England | -3.9% | 11.6% | 3.7% | -1.9% | -6.5% | -0.5% | -7.7% | -7.8% | -7.4% | |
| | | | | | | | | | | |

SOURCE: Army Corps of Engineers, Waterborne Commerce Statistics Center (WCSC) January 2012. http://www.iwr.usace.army.mil/ndc/wcsc/wcsc.htm



Massachusetts Top Export Partners (top ten export destinations ranked by value of 2011 exports, in millions) Country 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 Canada \$2,711 \$2,646 \$2,917 \$2,927 \$3,166 \$3,480 \$3,907 \$3,086 \$3,242 \$3,733 United Kingdom \$1,579 \$1,430 \$1,508 \$1,628 \$1,972 \$2,306 \$3,504 \$4,049 \$3,213 \$3,179 China \$385 \$572 \$894 \$884 \$1,291 \$1,375 \$1,563 \$1,372 \$2,194 \$2,089 \$1 198 \$1 599 \$2 516 \$2,151 \$2 515 \$1 750 \$2,050 Germany \$2,370 \$2,489 \$1 872 Japan \$1,598 \$1,635 \$1,814 \$1,893 \$2,287 \$2,166 \$2,427 \$1,717 \$2,045 \$2,035 Mexico \$569 \$702 \$755 \$782 \$824 \$996 \$1,163 \$902 \$1,272 \$1,434 Netherlands \$1,054 \$1,759 \$2,505 \$3,000 \$2,696 \$2,215 \$2,675 \$1,982 \$1,695 \$1,104 Korea, Republic Of \$471 \$558 \$650 \$875 \$624 \$893 \$1.026 \$803 \$821 \$666 \$512 Taiwan \$528 \$951 \$798 \$749 \$1,018 \$709 \$619 \$906 \$957 Hong Kong \$382 \$496 \$523 \$507 \$561 \$579 \$590 \$525 \$668 \$769 \$10,459 \$11,926 \$15,033 \$16,937 \$17,326 \$19,694 \$16,625 \$18,379 Total Exports, Top Destinations \$15,371 \$18,000 \$6,246 \$8,303 \$9,332 All other countries \$6,726 \$ 6.866 \$7.120 \$8.026 \$8.675 \$6,968 \$6.681 \$23,593 Total Exports \$16,705 \$18,652 \$21,899 \$22,052 \$24,057 \$25,351 \$28,369 \$26,304 \$27,711 Change from Prior Year -4.5% 11.7% 17.4% 0.7% 9.1% 5.4% 11.9% -16.8% 11.5% 5.4%

Value of International Shipments from Massachusetts (top ten industry groups ranked by value of latest exports, in millions)

| Major Industry Group/3-Digit NAICS | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Computer And Electronic Products | \$7,022 | \$7,688 | \$7,519 | \$7,012 | \$7,513 | \$7,711 | \$7,821 | \$6,600 | \$7,488 | \$7,708 |
| Machinery, Except Electrical | \$1,788 | \$1,672 | \$2,447 | \$2,311 | \$2,739 | \$2,881 | \$2,615 | \$2,008 | \$3,462 | \$3,652 |
| Chemicals | \$2,259 | \$3,216 | \$4,910 | \$5,285 | \$5,189 | \$5,258 | \$5,515 | \$3,863 | \$3,620 | \$3,354 |
| Miscellaneous Manufactured Commodities | \$1,211 | \$1,571 | \$1,930 | \$2,114 | \$2,240 | \$2,319 | \$3,120 | \$2,737 | \$3,046 | \$3,190 |
| Primary Metal Manufacturing | \$247 | \$425 | \$423 | \$405 | \$647 | \$982 | \$2,052 | \$2,735 | \$2,398 | \$2,688 |
| Waste And Scrap | \$190 | \$184 | \$326 | \$330 | \$597 | \$849 | \$1,373 | \$666 | \$654 | \$1,096 |
| Transportation Equipment | \$346 | \$379 | \$461 | \$485 | \$557 | \$932 | \$1,237 | \$1,107 | \$1,059 | \$1,084 |
| Fabricated Metal Products, Nesoi | \$691 | \$534 | \$621 | \$664 | \$679 | \$615 | \$721 | \$605 | \$809 | \$863 |
| Plastics And Rubber Products | \$407 | \$375 | \$404 | \$470 | \$530 | \$582 | \$587 | \$563 | \$748 | \$809 |
| Electrical Equipment, Appliances, And Component | \$649 | \$592 | \$752 | \$810 | \$871 | \$769 | \$624 | \$508 | \$557 | \$677 |
| Total Exports, Top Massachusetts Industries | \$14,809 | \$16,636 | \$19,792 | \$19,884 | \$21,563 | \$22,899 | \$25,664 | \$21,392 | \$23,841 | \$25,121 |
| All other exports | \$1,896 | \$2,016 | \$2,107 | \$2,168 | \$2,494 | \$2,453 | \$2,705 | \$2,202 | \$2,463 | \$2,590 |
| Total Exports | \$16,705 | \$18,652 | \$21,899 | \$22,052 | \$24,057 | \$25,351 | \$28,369 | \$23,593 | \$26,304 | \$27,711 |

SOURCE: United States Department of Commerce and WISERTrade.org.

EXHIBIT A-Appendix-8 Quarter 3, FY 2012

Sources

Listed below are the web sites of the original data sources used to compile Exhibit A. For more information contact the UMass Donahue Institute Economic and Public Policy Unit Tel: 413-545-0001 Email: di.eppr@umassp.edu

Introduction

American Human Development Project *http://www.measureofamerica.org/*

Population Characteristics

U.S. Department of Commerce, Bureau of the Census http://www.census.gov U.S. Internal Revenue Service http://www.irs.gov

Personal Income, Consumer Prices, and Poverty

U.S. Department of Commerce, Bureau of Economic Analysis http://www.bea.gov/regional/index.htm U.S. Department of Labor, Bureau of Labor Statistics http://www.bls.gov The Conference Board, Inc. http://www.conference-board.org Mass Insight Corporation http://www.massinsight.com/index.asp U.S. Department of Commerce, Bureau of the Census http://www.census.gov

Employment

Mass. Executive Office of Labor and Workforce Development, Division of Unemployment Assistance http://lmi2.detma.org/Lmi/LMIDataProg.asp U.S. Department of Labor, Bureau of Labor Statistics http://www.bls.gov/data/home.htm.

Economic Base and Performance

U.S. Department of Commerce, Bureau of Economic Analysis http://www.bea.gov/regional/index.htm Fortune Magazine http://www.fortune.com/fortune/

Economic Base and Performance - Sector Detail (NAICS Basis)

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

http://www.bea.gov/regional/index.htm U.S. Census Bureau, Foreign Trade Division. Prepared by the World Institute for Strategic Economic Research (WISER) http://www.wisertrade.org

Massport

http://www.massport.com **Airports Council International** http://www.aci.aero **Federal Aviation Administration** http://www.faa.gov/airports_airtraffic/airports/ planning capacity/passenger allcargo stats/ **Army Corps of Engineers** http://www.iwr.usace.army.mil.ndc/ **Federal Reserve Bank of Boston** http://www.bos.frb.org **U.S. 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 U.S. Department of Education, National Center for Education Statistics http://nces.ed.gov Institute of International Education http://www.iee.org U.S. Patent Office http://www.uspto.gov