Tax Supported
New Issue

# Commonwealth of Massachusetts

## Ratings

**New Issue**

| | |
|---|---|
| General Obligation Bonds, Series 2008A | AA |

**Outstanding Debt**

| | |
|---|---|
| General Obligation Bonds | AA |

*Fitch issued an exposure draft on July 31, 2008 proposing a recalibration of tax-supported and water/sewer revenue bond ratings, which, if adopted, may result in an upward revision of this rating (see Fitch Research on "Exposure Draft: Reassessment of Municipal Ratings Framework").*

## Rating Outlook

Stable

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## New Issue Details

**Sale Information:** $661,890,000 General Obligation Bonds, Series 2008A, scheduled to sell Sept. 4 via negotiation.
**Security:** General obligations of the commonwealth, to which its full faith and credit are pledged.
**Purpose:** New money and refunding purposes.
**Final Maturity:** Aug. 1, 2038.

## Related Research

- *U.S. State General Obligation Bond Rating Criteria, April 25, 2008*
- *Commonwealth of Massachusetts, Oct. 1, 2007*
- *Massachusetts School Building Authority, March 7, 2007*

## Rating Rationale

- Massachusetts has a fundamentally strong and wealthy economy, although population growth is slow and economic performance in the last few years was below average.
- The commonwealth has benefited from conservative budgeting and sound financial practices. Reserve levels remain solid, providing a hedge against the commonwealth's somewhat volatile revenue stream.
- Debt levels are high and are expected to remain so.

## Key Rating Drivers

- Continued commitment to sound financial practices in a weakened economic and revenue environment.

## Credit Summary

The 'AA' rating reflects the commonwealth's considerable economic resources and record of prudent financial management. Reserve levels remain solid, a significant credit factor in light of the commonwealth's economically sensitive tax base. Credit strengths are tempered by a very heavy debt burden. Like most states, the commonwealth is currently experiencing a decline in the pace of economic and revenue growth.

Massachusetts built up significant fund balances through fiscal 2001 and used the large accumulated reserve position as a safety valve when revenues, under pressure from recession and drastically reduced capital gains, dropped sharply in fiscal 2002. The commonwealth did not rely as heavily on nonrecurring resources to solve its budget problems as did some other states, although the stabilization fund balance dropped from $1.7 billion in fiscal 2001 to $641 million in fiscal 2003.

With recovery, revenue performance has meaningfully exceeded forecasts in every year since fiscal 2004 and reserves have been rebuilt. Consistent with strong revenue growth and conservative forecasting in recent years, fiscal 2008 tax revenues of $20.9 billion were 6.4% more than fiscal 2007 results (after correcting for tax law changes) and $1 billion above the consensus forecast upon which the budget was based. Despite the revenue overperformance, the commonwealth drew on stabilization fund moneys, albeit to a lesser degree than originally budgeted. The fiscal 2008 ending stabilization fund balance is estimated at $2.2 billion, down from $2.3 billion at fiscal 2007 year end.

The budget for fiscal 2009 includes corporate tax measures expected to generate $285 million, a cigarette tax increase dedicated to health care spending, and a stabilization fund drawdown to $1.9 billion. Given fiscal 2008 revenue overperformance, excluding one-time fiscal 2008 settlement payments, tax revenue would need to grow just 1.6% to meet the January 2008 consensus tax revenue forecast upon which the budget relies. Nevertheless, in light of economic and financial developments since January and the weakening of revenue collections in the past few months it is possible that the revenue forecast will be reduced at the next regularly scheduled review in October. The commonwealth is developing contingency plans in the event of lowered revenue forecasts and/or increased expenditure estimates, particularly for health care.

### Rating History

| Rating | Action | Outlook/ Watch | Date |
|---|---|---|---|
| AA | Affirmed | Stable | 8/21/08 |
| AA | Affirmed | Stable | 4/13/06 |
| AA | Upgraded | — | 7/8/05 |
| AA– | Upgraded | — | 1/21/98 |
| A+ | Upgraded | — | 10/13/93 |
| A | Assigned | — | 10/1/92 |

Net tax-supported debt of about $30 billion equaled 9.3% of 2007 personal income as of June 30, 2008. Fitch Ratings expects that debt will remain high. In addition to other initiatives, the commonwealth has announced plans to issue $1.1 billion in federal grant anticipation notes and $1.9 billion in gas tax revenue bonds to fund an eight-year accelerated bridge rehabilitation program. The commonwealth also recently authorized the extension of the commonwealth credit to certain Massachusetts Turnpike Authority obligations.

Massachusetts has a fundamentally strong and wealthy economy, with the third highest personal income per capita in the nation (127% of the U.S. level). After experiencing among the steepest employment drops in the country in the early part of this decade, the commonwealth has registered year-over-year employment gains in every month since July 2004. Nonfarm employment is still well below peak levels and economic recovery had lagged the U.S.; however, employment growth of 1% in 2007 was just less than the nation's 1.1%, and commonwealth employment rose 0.3% from July 2007 to July 2008 compared to a loss of 0.1% for the U.S. Massachusetts' unemployment levels are below the nation's, with the 5.1% commonwealth rate equal to 89% of the U.S. level in July. Personal income growth of 6.3% in 2007 exceeded that of the U.S. and New England. The percentage of the Massachusetts population with a bachelor's degree is the highest in the nation.

## Debt

The commonwealth's debt levels are high, with net tax-supported debt equal to about 9.3% of personal income, and Fitch expects debt to remain high. The commonwealth has a statutory debt limit that establishes a limit on direct debt, with numerous exclusions, of 105% of the prior fiscal year's limit. The statutory direct debt limit for fiscal 2008 is estimated at $15.6 billion, with $13.5 billion in outstanding direct debt counting against the cap. Another limit restricts general obligation (GO) debt service appropriations to no more than 10% of total appropriations in any fiscal year; actual appropriations are well below this limit. The governor issued a debt affordability policy in August 2007 that established an issuance cap of $1.5 billion for fiscal 2008, expected to rise by $125 million per year through fiscal 2012, with a goal of limiting debt service on debt paid out of general funds to 8% of annual budgeted revenues. A bond bill passed in 2007 authorized the commonwealth to issue 30-year bonds; the limit was formerly 20 years. Cash flow borrowing is through a commercial paper program and revenue anticipation notes.

### Debt Statistics

($000, As of June 30, 2008)

| | |
|---|---|
| General Obligation Bonds | 16,086,470 |
| Special Obligation Debt | 1,112,590 |
| Federal Grant Anticipation Notes | 1,535,380 |
| **Direct Bonded Debt** | **18,734,440** |
| GO Contract Assistance Liabilities | 1,470,190 |
| Budgetary Contract Assistance Liabilities | 1,033,353 |
| MBTA Contingent Liabilities | 955,300 |
| Other Contingent Liabilities | 411,285 |
| MBTA Sales Tax Bonds | 3,211,350 |
| MBTA Grant Anticipation Notes | 56,275 |
| School Building Authority Sales Tax Bonds | 3,899,605 |
| **Gross Debt** | **29,771,798** |
| Less: | |
| Higher Education and Steamship Authority | 261,700 |
| **Net Tax-Supported Debt** | **29,510,098** |
| Net Tax-Supported Debt: | |
| Per Capita ($) | 4,575 |
| As % of Personal Income | 9.3 |
| Amortization (General Obligation Debt) | |
| % Due in Five Years | 31 |
| % Due in 10 Years | 57 |

MBTA – Massachusetts Bay Transportation Authority.

GO debt continues to represent the bulk of the commonwealth's outstanding debt and capital spending. In addition, direct bonded debt includes special obligation debt and federal grant anticipation notes. The commonwealth also has GO contract assistance liabilities, budgetary contract assistance liabilities, and contingent liabilities. The Massachusetts Bay Transportation Authority (MBTA) has been issuing bonds backed by a dedicated portion of the commonwealth's five-cent sales tax since fiscal 2001 and the Massachusetts School Building Authority issued its first series of dedicated sales tax bonds in July 2005.

About 25% of the commonwealth's GO debt is variable rate, although the bulk of this is synthetically fixed. The commonwealth has experienced failed auctions on its auction-rate debt, but debt service costs remain within budget.

Transportation is the largest component of the commonwealth's capital spending plan. As in many states, transportation funding, including for mass transit, remains a pressure. In addition to its ongoing capital program, the commonwealth plans to issue $1.1 billion in federal grant anticipation notes and $1.9 billion in gas tax revenue bonds to fund an eight-year accelerated bridge rehabilitation program. The commonwealth also recently authorized the extension of the commonwealth GO credit to certain Massachusetts Turnpike Authority obligations. Pursuant to legislation passed in August 2008, the commonwealth may provide an appropriation backstop on $800 million in Turnpike Authority refunding bonds and/or guarantee payments under swap agreements to avoid swap termination. Turnpike Authority finances remain strained.

**Special Obligation Debt:** Convention center special obligation debt was issued for convention centers in Boston, Springfield, and Worcester. The bonds are payable from tourism-related revenues credited to the convention center fund, including hotel and sales taxes. Special obligation highway revenue bonds are secured by certain highway fund revenues, primarily gas taxes. About $620 million in such bonds is outstanding, and total issuance is capped at $1.125 billion. The $1.9 billion in additional gas tax revenue bonds recently authorized for the accelerated bridge rehabilitation program allow for a pledge of up to 10 cents of the commonwealth's 21-cent motor fuels excise tax; the current pledge is 6.86 cents.

**Federal Grant Anticipation Notes (GANs):** Federal grant anticipation notes totaling $1.5 billion, secured primarily by future federal reimbursements, were issued for the Central Artery/Ted Williams Tunnel (CA/T) project (also referred to as the big dig). In addition, 10 cents of the commonwealth's 21-cent gas tax is pledged (subject to appropriation) as a backstop for the notes. Including $408 million of crossover refunding notes, about $1.5 billion of this debt is outstanding. The additional $1.1 billion in GANs to be issued as part of the accelerated bridge rehabilitation program will begin amortizing in fiscal 2016 after the current GANs are paid off. The new bonds will not benefit from a backup pledge of gas tax revenues.

**GO Contract Assistance Liabilities:** GO contract assistance liabilities represent a pledge of the commonwealth's GO for payment. These commitments are primarily to the Massachusetts Turnpike Authority and the Massachusetts Water Pollution Abatement Trust.

**Budgetary Contract Assistance Liabilities:** Budgetary contract assistance liabilities involve contractual commitments of the commonwealth, subject to appropriation. The commonwealth has made such commitments to the Chelsea Industrial Development Financing Authority, Plymouth County, Route 3 North Transportation Improvements Association, and Saltonstall Building Redevelopment Corporation Project. A bond bill passed in 2007 authorized the commonwealth to refinance contract assistance and capital lease obligations with GO bonds.

**Contingent Liabilities:** Contingent liabilities entail a commonwealth GO guarantee of debt service. Such guarantees have been applied to the MBTA's general transportation system revenue bonds and Boston Metropolitan District obligations, as well as to debt of the Woods Hole, Martha's Vineyard, and Nantucket Steamship Authority (which is self-supporting debt), 15 other regional transit authorities, and certain debt of the commonwealth higher education building authorities (which is also self-supporting debt).

**Massachusetts Bay Transportation Authority (MBTA):** Beginning in fiscal 2001, the MBTA's funding base shifted from commonwealth support to a dedicated one cent of the commonwealth's five-cent sales tax under a trust fund mechanism that does not require commonwealth appropriation. As a result, the commonwealth is no longer liable for operating subsidy (net cost of service) payments or contract assistance on any debt sold after June 30, 2000, although the security status of outstanding bonds does not change (see the Contingent Liabilities paragraph above). The MBTA has about $3.2 billion in sales tax bonds outstanding as well as $459 million in bonds backed by community assessments that are not commonwealth tax-supported debt.

**School Building Authority:** The Massachusetts School Building Authority is an independent public authority created in 2004 to address a substantial backlog of programs funded under the commonwealth's prior school building assistance program and create a sustainable system for school capital funding going forward. Authority bonds are funded by an irrevocable dedication of one cent of Massachusetts' five-cent sales tax, with some exclusions, to be phased in through fiscal 2011. The authority has total bonding authorization of $10 billion and issued its first series of dedicated sales tax bonds (rated 'AA' by Fitch) in July 2005. Dedicated revenues are segregated from the commonwealth general fund, and the authority has no role in funding school operations. The commonwealth issued $1 billion in GO bonds in 2005 to help fund authority liabilities.

### Pensions and Other Post-Employment Benefits (OPEB)

The commonwealth is responsible for the pension benefits of not only commonwealth employees but also teachers statewide. The state employees' retirement system has an 85% funded ratio, but the funded ratio of the teachers' retirement system is lower at 71%. Pension contributions rose 46% in fiscal 2005, to $1.2 billion, and annual commonwealth pension contributions are expected to rise about 4.75% annually going forward. Consensus tax revenue forecasts used in budget development are net of the required pension contribution.

The commonwealth's OPEB liability is estimated at $13.3 billion (equal to 4.2% of personal income) assuming no prefunding and $7.6 billion with prefunding. The estimated fiscal 2008 annual required contributions of $1.2 billion (no prefunding)/ $763 million (prefunding) compare to pay-as-you-go (PAYGO) spending of $354 million in fiscal 2008. In fiscal 2008 the commonwealth created an irrevocable trust for retiree health benefits. Annual PAYGO expenditures now flow through the fund. The fund also received a transfer of about $400 million from the health care security trust fund, which was funded from tobacco settlement payments through fiscal 2002. A July 2008 report from a study commission that was established to identify OPEB funding options discussed use of tobacco settlement funds (currently used for operations), budgetary surplus, and legislative appropriations to address the OPEB liability; no dedicated funding is included in the current budget.

## Finances

Massachusetts operates through two major funds — general and highway — which together account for the bulk of budgeted operating expenditures. About 65% of total revenues, and 85% of own-source revenues, are derived from taxes, with personal income taxes and sales taxes the most significant. Medicaid and direct local aid are the two largest expenditure categories.

**Massachusetts General Fund — GAAP Financial Information**

($000, Fiscal Years Ended June 30)

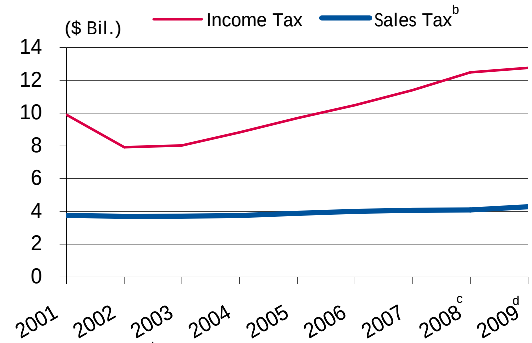
| | 2004 | 2005 | 2006 | 2007 |
|---|---|---|---|---|
| Taxes | 14,640,568 | 15,711,796 | 16,735,598 | 17,933,736 |
| Assessments | 110,211 | 110,562 | 128,922 | 145,962 |
| Federal Grants and Reimbursements | 4,294,639 | 4,403,224 | 4,919,297 | 6,163,260 |
| Departmental | 1,242,653 | 1,323,416 | 1,362,739 | 1,322,906 |
| Miscellaneous | 142,086 | 156,024 | 298,862 | 436,373 |
| **Total Revenue** | **20,430,157** | **21,705,022** | **23,445,418** | **26,002,237** |
| | | | | |
| Administration and Finance | 1,266,696 | 1,421,349 | 1,525,031 | 1,672,853 |
| Direct Local Aid | 4,855,183 | 4,505,419 | 4,660,801 | 5,064,364 |
| Education | 753,559 | 1,090,524 | 1,155,643 | 1,237,202 |
| Health and Human Services | 4,500,487 | 4,529,589 | 4,458,139 | 4,653,992 |
| Medicaid | 5,200,738 | 5,565,835 | 6,466,156 | 7,571,347 |
| Other | 2,180,364 | 2,499,453 | 3,181,201 | 3,576,589 |
| Pension | 208,914 | 439,353 | 345,934 | 372,732 |
| **Total Expenditures** | **18,965,941** | **20,051,522** | **21,792,905** | **24,149,079** |
| Transfers In and Other Sources | 1,888,101 | 2,134,721 | 1,806,291 | 1,894,002 |
| Transfers Out and Other Uses | (2,164,787) | (2,217,783) | (2,604,615) | (3,770,080) |
| | | | | |
| **Net Surplus/(Deficit)** | **1,187,530** | **1,570,438** | **854,189** | **(22,920)** |
| | | | | |
| **Balance Sheet** | | | | |
| Cash and Investments | 2,048,751 | 2,573,917 | 3,110,394 | 2,578,931 |
| Less: Current Liabilities/Encumbrances | 3,289,752 | 2,901,393 | 2,638,485 | 2,557,523 |
| **Current Position** | **(1,241,001)** | **(327,476)** | **471,909** | **(21,408)** |
| | | | | |
| Total Fund Balance | 2,497,447 | 4,067,885 | 4,922,074 | 4,899,154 |
| Unreserved Fund Balance | 1,014,469 | 1,730,350 | 1,861,875 | 2,144,694 |
| Reserved for Commonwealth Stabilization | 1,137,320 | 1,729,051 | 2,155,861 | 2,335,021 |
| Reserved for Transitional Escrow | — | 304,838 | — | — |
| Reserved for Continuing Appropriations | 345,658 | 303,646 | 904,338 | 319,399 |

Note: Numbers may not add due to rounding.

Personal income taxes account for about 60% of commonwealth tax revenues. Performance has been somewhat volatile in recent years, with a drop of 20% in fiscal 2002 followed by strong growth in recent years. The commonwealth's flat income tax rate dropped from 5.95% to 5.3% between Jan. 1, 2000 and Jan. 1, 2002. The rate was scheduled to be reduced finally to 5% on Jan. 1, 2003. However, financial pressures caused a deferral of the last planned reduction. The commonwealth has held the rate at 5.3% since then, although the rate will automatically drop in increments in years when baseline state tax revenue grows by 2.5% more than the rate of inflation for state and government purposes; state revenue growth did not meet this test in fiscal 2008. A November 2008 ballot initiative would eliminate the personal income tax effective in 2010. This is not a constitutional amendment and, if approved by voters, it could be amended or repealed by the Massachusetts Legislature.

**Performance of Key Tax Revenues[a]**

(Fiscal Years Ending June 30)




[a]Budgetary basis. [b]Before transfers to MBTA and the School Building Authority. [c]Preliminary. [d]Estimated.

Sales taxes account for about 20% of commonwealth tax revenues. The commonwealth has imposed a sales tax since 1966 and there has been base revenue growth in all but five years, although recent performance has been sluggish. Commonwealth budgeted operating funds are losing sales tax revenues due to the reconfigured funding structure for the MBTA and School Building Authority programs, which at full phase-in of the School Building Authority dedication in fiscal 2011 will receive a combined 40% of revenues from the commonwealth's five-cent sales tax. In fiscal 2009, the MBTA will receive $767 million in sales tax revenues and the School Building Authority $702 million. This diversion of portions of the commonwealth sales tax was designed to lend predictability and parameters to the commonwealth's obligations.

The secretary of administration and finance provides updated revenue estimates for the current fiscal year on Oct. 15, Jan. 15, and April 15 of each year, unless no significant change is identified, and forecasts subsequent year revenues on Oct. 15 and March 15. The Jan. 15 consensus forecast, developed with the Legislature, is used for budgeting purposes. The secretary must notify the governor and Legislature whenever projected revenues are insufficient to meet expenditures, and the governor is then required to reduce allotments (limited to state agencies under the governor's control) or submit proposals to the Legislature to raise revenues or make a stabilization fund appropriation to cover the deficiency. The governor is advocating expansion of these powers in preparation for a possible fiscal 2009 insufficiency.

State finance law requires that 0.5% of current-year net tax revenues and any consolidated net surplus at the close of a fiscal year be deposited into the stabilization fund. The state has suspended these automatic funding provisions and removed interest earnings from the fund in recent years.

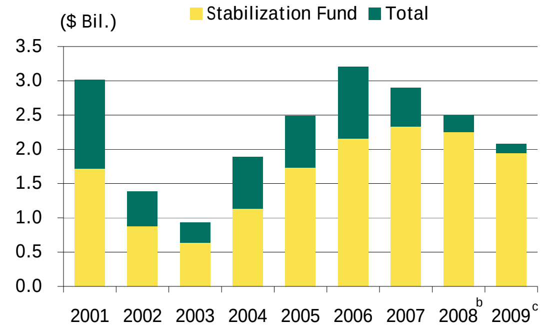
The recessionary pressures of the early 1990s, which required deficit financing, were followed by a period of very favorable financial operations for the commonwealth. As the economy expanded, financial operations were extremely strong through fiscal 2001. Revenues surpassed projections (frequently increased throughout the fiscal year), and the undesignated and stabilization fund balances steadily grew. After achieving levels equal to 3%–4% of revenues in the mid-1990s, balances in these funds enlarged to 9% in fiscal 2001. The statutory limit of the stabilization fund was increased and other reserves were developed, affording considerable tax relief. A tax reduction fund was built up and applied for reductions in fiscal years 1999–2002.

In fiscal 2002, the commonwealth confronted deteriorating economic conditions and dramatically reduced revenue collections. After years of solid base growth, personal income tax revenues dropped a remarkable 20% in fiscal 2002, reflecting a radically lowered level of capital gains, options, and bonus income. Total tax revenues fell almost 15%, or $2.4 billion. Weakness continued in fiscal 2003. Despite some aggressive spending cuts in areas including local aid and higher education, tax increases, loophole closings, tax amnesty, and the shift of certain Medicaid spending off budget, as well as suspension of the scheduled final phase of the income tax rate cut, the stabilization fund was drawn down to a low of $641 million.

Conditions improved in fiscal 2004. Fiscal 2005, originally budgeted with an operating deficit, saw continued improvement. Fund balances steadily rose. The adopted budgets for fiscal years 2006 and 2007 assumed use of stabilization fund moneys; however, since they relied on revenue forecasts that required very little growth, balance drawdowns were not necessary. The stabilization fund balance stood at $2.3 billion at the end of fiscal 2007. In the recovery, the consensus tax revenue forecasts upon which the budgets are based have been conservative. Forecasts consistently have been raised over the course of the fiscal years and final results have substantially exceeded even upwardly revised estimates.

Consistent with the trend of strong revenue growth and conservative forecasting, fiscal 2008 tax revenues of $20.9 billion were 6.4% over fiscal 2007 results (after correcting

Ending Fund Balances[a]
(Fiscal Years Ending June 30)




[a]Budgetary basis. [b]Preliminary. [c]Estimated.

for tax law changes), more than $650 million higher than revised estimates and $1 billion above the consensus forecast upon which the budget was based. This reflected $218 million in settlements from three financial institutions for taxes due in prior years and particular strength in income tax receipts related to capital gains. Capital gains and other nonwithholding income have been significant to the commonwealth's recent revenue strength. While income tax receipts rose 10% in fiscal 2008, including withholding collection growth of 5.7% and estimated payment growth of more than 19%, sales tax revenues grew just 0.8%. Despite the revenue overperformance, the commonwealth drew on stabilization fund moneys, albeit to a lesser degree than originally budgeted. The fiscal 2008 ending stabilization fund balance is estimated at $2.2 billion.

The budget for fiscal 2009 includes corporate tax measures expected to generate $285 million, a cigarette tax increase dedicated to health care spending (about $145 million per year), and a stabilization fund drawdown to $1.9 billion. The corporate tax reform is expected to result in increased revenue even after the rate reductions that are part of the reform commence in 2010. The budget relies on a January 2008 consensus tax revenue forecast of $20.987 billion, adjusted for tax changes. Given fiscal 2008 revenue overperformance, excluding the one-time fiscal 2008 settlement payments, tax revenue would need to grow just 1.6% to meet the forecast, compared to the 3.8% growth assumption at the time of the consensus forecast. Nevertheless, in light of economic and financial developments since January and the weakening of revenue collections in the last few months, it is possible that the revenue forecast will be reduced at the next regularly scheduled review in October. The important capital gains forecast, for example, seem likely to be revised downward. The current forecast, from January 2008, assumes that the national and state economies will experience slowdowns through June 2009 but avoid recession. The commonwealth is developing contingency plans in the event of lowered revenue forecasts and/or increased expenditure estimates, particularly for health care. In July, tax revenue collections would have been below forecast but for a one-time corporate tax settlement payment.

## Health Care Reform

In April 2006, the commonwealth passed a health care reform initiative focused on expanding health care coverage to all residents of the commonwealth. The health care reform legislation was designed to provide health insurance coverage for 95% of the commonwealth's uninsured by 2009 and reduce reliance on the commonwealth's uncompensated care pool. The legislation included a mandate requiring individuals to have insurance by 2007 and an annual fee on businesses with at least 11 employees that do not offer their full-time employees health insurance. It also created programs to foster the accessibility of affordable private health insurance coverage, including offering income-based subsidies and permitting payment of premiums on a pretax basis. The commonwealth estimates that 440,000 residents are newly enrolled in private and public health coverage programs since the legislation was passed.

The Commonwealth Health Insurance Connector Authority offers links to affordable and subsidized coverage. Commonwealth Care, the commonwealth's subsidized health coverage program, has experienced higher-than-expected enrollment. Supplemental funds were provided for the program in May 2008 and additional revenue-raising measures for health care were included in the final fiscal 2008 supplemental appropriations bill. This is an area of potential expenditure pressure for the commonwealth.

### CA/T Project

As the most complex highway infrastructure project in the U.S., the CA/T ( also known as the big dig) project faced a series of construction, financial, project management, environmental, political, and legal challenges. The addition of project features, changes in design, contingency and insurance needs, and the effects of inflation contributed to significant cost growth from the initial estimate of $2.6 billion (in 1982 dollars) to the current estimate of $14.798 billion. Financing for the CA/T project included $7 billion in federal highway reimbursements, $3.1 billion in commonwealth GO debt, $1.5 billion in federal grant anticipation notes, and moneys from the turnpike ($1.7 billion) and port authorities. Despite subsequent and ongoing issues, the substantial completion of the project in January 2006 considerably reduced what had been a financial risk to the commonwealth.

The Massachusetts Turnpike Authority has been responsible for the CA/T project since 1997, when it assumed management from the Massachusetts Highway Department. Since July 1, 2007 the commonwealth's secretary of transportation has served as the authority's chairman. This significantly increased the commonwealth's exposure to debates surrounding toll increases, which have been controversial. Turnpike Authority finances are strained.

## Economy

Massachusetts' economy has always been diverse, with a large service industry component. Institutions of higher education and health care are significant and lend stability, in addition to supporting development and innovation in other areas. The percentage of the Massachusetts population with a bachelor's degree is the highest in the nation. The financial and insurance sectors are well developed and professional and business services prominent. Manufacturing, especially electronics and defense-related industries, plays an important but steadily declining role. In June 2008, the commonwealth passed legislation in support of the Massachusetts life sciences industry.

The early 1990s recession was very harsh in Massachusetts, with the severity of the economic contraction clearly evident in a more than 10% employment loss and a sharp decline in the rate of personal income growth (to about one-third of the nation's gains). Employment did not regain the prerecession level for a decade and personal income growth lagged the nation's until 1996.

Employment increased annually beginning in 1993, with annual gains generally exceeding 2% through 2000. Technology growth fueled the economic expansion then contributed to the subsequent overall economic weakness with the virtual collapse of that sector. Employment fell 4.3% from 2001–2004, with the Boston metropolitan area hit particularly hard. This was amongst the steepest drops in the country. Manufacturing employment dropped almost 20%, with large losses in computer and electronic product manufacturing, and professional and business services employment was down 7.4%. After several years of significant increases, construction employment moderated in 2002 and fell 2.8% in 2003.

Recovery began in 2004. The commonwealth has added jobs in every month since July 2004, although growth significantly lagged that of the nation in 2005 and 2006.

Commonwealth employment rose 1% in 2007, compared with 1.1% for the nation, with declines in construction (down 2.7%) and manufacturing (down 1.5%) offset by increases in professional and business services (up 2.1%) and educational and health services (up 3%). Although the pace of growth decelerated to 0.3% in July 2008 compared with that of July 2007, this exceeded the U.S. loss of 0.1%. Employment in the construction and manufacturing sectors continued to be down in July ( negative 2.7% and negative1.5%, respectively, year over year) and the financial activities sector now also is shedding jobs (down 0.7% year over year). Education and health services and professional and business services employment rose 2.2% and 1.4%, respectively, in July year over year. Total employment remains well below its prerecession peak. Massachusetts' annual unemployment rates have been below the national average in all but one year since 1995 and were below the U.S. level in July 2008.

As mentioned, the technology sector contributed to strong personal income gains through 2000, but then produced a severe loss of capital gains and options income in the downturn. The commonwealth's personal income gains accelerated from 1996–2000, but growth sharply deflated in 2001 and fell further in 2002. After rising 11.1% in 2000 (138% of the U.S. growth, and the third fastest of the states), personal income growth dropped to only 0.3% in 2002 (19% of the U.S. gain, and the fourth slowest of the states). Although growth slightly improved to 1.6% in 2003, this was still only 52% of the U.S. gain. The pace of growth has since improved significantly, at 6.3% in 2007 (101% of the U.S.). The commonwealth's current revenue forecast assumes fiscal 2009 employment growth of 0.6% and personal income growth of 4.6%.

On a per capita basis, Massachusetts' personal income ranks third among the states. At $49,082 in 2007, personal income per capita was 127% of the national level. Poverty levels are much lower than the U.S. average.

As in most of New England, population growth in Massachusetts is well below the national average. From 2000–2007, the commonwealth's population grew only 1.6%, compared with 7.2% growth for the U.S. This places the commonwealth in the bottom ten states by growth rate. Internal out-migration outweighs international migration. The median age is also well above average.

## Economic Trends

### Nonfarm Employment
(000, Not Seasonally Adjusted)

| | MA | % Change | U.S. | % Change |
|---|---|---|---|---|
| 1980 | 2,654 | — | 90,528 | — |
| 1989 | 3,118 | 17.5 | 108,014 | 19.3 |
| 1990 | 2,988 | (4.2) | 109,487 | 1.4 |
| 1991 | 2,824 | (5.5) | 108,374 | (1.0) |
| 1992 | 2,798 | (0.9) | 108,726 | 0.3 |
| 1993 | 2,843 | 1.6 | 110,844 | 1.9 |
| 1994 | 2,907 | 2.2 | 114,291 | 3.1 |
| 1995 | 2,980 | 2.5 | 117,298 | 2.6 |
| 1996 | 3,039 | 2.0 | 119,708 | 2.1 |
| 1997 | 3,114 | 2.5 | 122,776 | 2.6 |
| 1998 | 3,184 | 2.3 | 125,930 | 2.6 |
| 1999 | 3,243 | 1.8 | 128,993 | 2.4 |
| 2000 | 3,329 | 2.7 | 131,785 | 2.2 |
| 2001 | 3,339 | 0.3 | 131,826 | 0.0 |
| 2002 | 3,259 | (2.4) | 130,341 | (1.1) |
| 2003 | 3,198 | (1.9) | 129,999 | (0.3) |
| 2004 | 3,195 | (0.1) | 131,435 | 1.1 |
| 2005 | 3,212 | 0.5 | 133,703 | 1.7 |
| 2006 | 3,246 | 1.1 | 136,086 | 1.8 |
| 2007 | 3,277 | 1.0 | 137,623 | 1.1 |
| July 2007 | 3,290 | — | 137,410 | — |
| July 2008p | 3,300 | 0.3 | 137,236 | (0.1) |

### Unemployment Rates
(%, Not Seasonally Adjusted Annual Rates)

| | MA | U.S. | MA as % of U.S. |
|---|---|---|---|
| 1980 | 5.7 | 7.1 | 80 |
| 1989 | 4.2 | 5.3 | 79 |
| 1990 | 6.3 | 5.6 | 113 |
| 1991 | 8.8 | 6.8 | 129 |
| 1992 | 8.8 | 7.5 | 117 |
| 1993 | 7.3 | 6.9 | 106 |
| 1994 | 6.2 | 6.1 | 102 |
| 1995 | 5.5 | 5.6 | 98 |
| 1996 | 4.6 | 5.4 | 85 |
| 1997 | 4.1 | 4.9 | 84 |
| 1998 | 3.4 | 4.5 | 76 |
| 1999 | 3.3 | 4.2 | 79 |
| 2000 | 2.7 | 4.0 | 68 |
| 2001 | 3.7 | 4.7 | 79 |
| 2002 | 5.3 | 5.8 | 91 |
| 2003 | 5.8 | 6.0 | 97 |
| 2004 | 5.2 | 5.5 | 95 |
| 2005 | 4.9 | 5.1 | 96 |
| 2006 | 4.8 | 4.6 | 104 |
| 2007 | 4.5 | 4.6 | 98 |
| July 2007 | 4.4 | 4.7 | 94 |
| July 2008p | 5.1 | 5.7 | 89 |

### Personal Income
(Change from Prior Year)

| | % Change | | MA as % of |
|---|---|---|---|
| | MA | U.S. | U.S. Growth |
| 1995 | 5.2 | 5.3 | 97 |
| 1996 | 6.0 | 6.0 | 101 |
| 1997 | 6.2 | 6.1 | 102 |
| 1998 | 7.4 | 7.4 | 101 |
| 1999 | 6.0 | 5.1 | 117 |
| 2000 | 11.1 | 8.0 | 138 |
| 2001 | 3.7 | 3.5 | 106 |
| 2002 | 0.3 | 1.8 | 19 |
| 2003 | 1.6 | 3.1 | 52 |
| 2004 | 5.0 | 6.1 | 81 |
| 2005 | 5.2 | 5.9 | 87 |
| 2006 | 6.2 | 6.7 | 94 |
| 2007p | 6.3 | 6.2 | 101 |

### Personal Income Per Capita
(Change from Prior Year)

| | % Change | | MA as % |
|---|---|---|---|
| | MA | U.S. | U.S. Growth |
| 1995 | 4.4 | 4.1 | 108 |
| 1996 | 5.4 | 4.8 | 113 |
| 1997 | 5.4 | 4.8 | 113 |
| 1998 | 6.6 | 6.1 | 109 |
| 1999 | 5.2 | 3.9 | 133 |
| 2000 | 10.3 | 6.8 | 151 |
| 2001 | 3.0 | 2.4 | 122 |
| 2002 | 0.0 | 0.8 | (4) |
| 2003 | 1.5 | 2.2 | 68 |
| 2004 | 5.1 | 5.1 | 98 |
| 2005 | 5.2 | 4.9 | 106 |
| 2006 | 6.2 | 5.6 | 109 |
| 2007p | 6.0 | 5.2 | 116 |

### Components of Personal Income: Earnings
(%)

| | MA | | | U.S. | | |
|---|---|---|---|---|---|---|
| | 2002 | 2007p | % Change | 2002 | 2007p | % Change |
| Construction | 6 | 5 | 11 | 6 | 6 | 32 |
| Manufacturing | 13 | 11 | 9 | 14 | 12 | 16 |
| Durable Goods Manufacturing | 9 | 8 | 8 | 9 | 8 | 15 |
| Trade, Transportation, and Utilities | 14 | 13 | 18 | 16 | 16 | 25 |
| Financial Activities | 13 | 14 | 30 | 10 | 10 | 34 |
| Professional and Business Services | 19 | 20 | 35 | 13 | 16 | 39 |
| Education and Health Services | 14 | 15 | 35 | 15 | 11 | 34 |
| Government and Government Enterprises | 12 | 11 | 22 | 16 | 17 | 30 |
| Total Nonfarm Earnings | — | — | 24 | — | — | 29 |

State population: 6,349,097(2000 census), 6,449,755 (2007 census estimate). Population change 1990–2000: U.S. 13.2%, Massachusetts 5.5%; 2000–2007: U.S. 7.2%, Massachusetts 1.6%. Personal income per capita 2007p: $49,082 =127% of U.S., rank 3rd. p-Preliminary. Note: Monthly unemployment rates are seasonally adjusted.