

# State of the Systems 2011

The financial condition of the Massachusetts systems must be put into the context of similar systems nationwide. The chart below is the result of a survey conducted by the Wisconsin Legislative Council in 2010 entitled "2010 Comparative Study of Major Public Employee Retirement Systems." Although the survey included nearly 100 pension systems, these are the systems that stand alone - that is, their members are not covered by Social Security. Because of the date of the Study we will focus on that timeframe. Subsequent valuations should confirm the relationship between systems although the numbers may be quite different. For example, in the most recent actuarial valuation of the Massachusetts State Retirement System (MSRS), the funded ratio is lower than that used in this Study (73.80% as of 1/1/12). The first observation that should be made is that the MSRS with a funded ratio of 81.00% was one of the better funded of the similarly situated funds surveyed. Out of the 15 funds surveyed, the MSRS placed second in terms of the ratio of assets to liabilities. The Massachusetts Teachers' System did not fare as well, placing ninth with a ratio of 63.00%. In the previous study, the MSRS had been ranked fifth and the MTRS was thirteenth. However, that ratio is not dramatically below the average funded ratio for the non-Massachusetts systems of 65.90%. In the context of comparisons with other systems it should be noted that the Massachusetts' valuations use the "Entry Age" method which generally results in greater liabilities than the "Projected Unit Credit" method used in the two Louisiana plans, the Kentucky TRS and the Illinois TRS. These plans, in spite of using the less conservative method, are listed with ratios below that of the Massachusetts Teachers. Also, as of 1/1/2011, the Commonwealth's Total Pension Liability was funded at a ratio of 71.1%, placing it fifth among these non-Social Security funds.

Connecticut SERS (Social Security)	44.40% (Unit Credit)
Connecticut TRS	61.42%
Maine PERS	65.90%
New Hampshire SRS (Social Security)	58.50%
Rhode Island ERS (Social Security)	48.40%
Vermont SRS (Social Security)	81.20%
Vermont TRS (Social Security)	63.80%
Massachusetts SERS	81.00%
Massachusetts TRS	63.00%

In light of the discussion of assumptions, particularly the investment return assumption, it should be stressed that according to the study, Connecticut SERS uses 8.25%; Connecticut TRS uses 8.50%; Maine uses 7.75%; New Hampshire uses 8.50%; Rhode Island uses 7.50%; Vermont SRS uses 8.25% and Vermont TRS uses 6.25-9.00%. Massachusetts is certainly not an outlier at 8.25% with a commitment to gradually reduce that assumption as conditions permit.

The funded ratios of pension funds in Massachusetts, based on information filed as of 4/1/12, break down as follows:

STATE NAME	METHOD	FUNDING RATIO %
Texas TRS	Entry Age	82.70%
Ohio STRS	Entry Age	59.10%
Ohio PERS	Entry Age	75.30%
Nevada PERS	Entry Age	70.50%
Missouri PSRS	Entry Age	77.70%
Maine PERS	Entry Age	65.90%
Louisiana TRSL	Projected Unit Credit	54.40%
Louisiana SERS	Projected Unit Credit	57.60%
Kentucky TRS	Projected Unit Credit	61.00%
Illinois TRS	Projected Unit Credit	48.40%
Connecticut TRS	Entry Age	61.42%
Colorado PERA	Entry Age	64.70%
California TRS	Entry Age	78.00%
Massachusetts SERS	Entry Age	81.00%
Massachusetts TRS	Entry Age	63.00%

BOARD NAME	FUNDED RATIO	DATE
Adams	81.2%	1/1/2010
Amesbury	51.9%	1/1/2010
Andover	55.1%	1/1/2010
Arlington	54.6%	1/1/2011
Athol	48.7%	1/1/2011
Attleboro	69.3%	1/1/2010
Barnstable	53.9%	1/1/2010
Belmont	51.3%	1/1/2010
Berkshire Regional	83.5%	1/1/2011
Beverly	51.2%	1/1/2010
Blue Hills Reg	62.0%	1/1/2010
Boston	60.2%	1/1/2010
Braintree	67.6%	1/1/2010
Bristol County	64.8%	1/1/2010
Brockton	72.3%	1/1/2011
Brookline	61.6%	1/1/2010
Cambridge	83.8%	1/1/2010
Chelsea	53.3%	1/1/2011
Chicopee	60.1%	1/1/2011
Clinton	65.6%	1/1/2011
Commonwealth	71.1%	1/1/2011
Concord	85.3%	1/1/2010
Danvers	64.4%	1/1/2010

Massachusetts fares even better when compared to other New England states in the study, including those who provide Social Security benefits in addition to a defined benefit plan:

BOARD NAME	FUNDED RATIO	DATE
Dedham	79.4%	1/1/2010
Dukes County	67.0%	1/1/2011
Easthampton	59.5%	1/1/2010
Essex Regional	51.9%	1/1/2011
Everett	37.8%	1/1/2010
Fairhaven	61.6%	1/1/2010
Fall River	46.1%	1/1/2011
Falmouth	61.3%	1/1/2010
Fitchburg	47.0%	1/1/2010
Framingham	67.7%	1/1/2010
Franklin Cty	66.6%	1/1/2010
Gardner	55.3%	1/1/2011
Gloucester	46.9%	1/1/2010
Greater Lawrence SD	89.5%	1/1/2011
Greenfield	61.1%	1/1/2011
Hampden County Regional	52.2%	1/1/2010
Hampshire County	57.5%	1/1/2010
Haverhill	51.4%	1/1/2010
Hingham	69.2%	1/1/2010
Holyoke	57.4%	1/1/2010
Hull	42.4%	1/1/2010
Lawrence	39.1%	1/1/2010
Leominster	78.6%	1/1/2011
Lexington	88.8%	1/1/2010
Lowell	60.1%	1/1/2011
Lynn	46.0%	1/1/2011
Malden	72.5%	1/1/2010
Marblehead	78.2%	1/1/2010
Marlborough	68.4%	1/1/2011
Mass Housing Finance	77.4%	1/1/2011
Mass Port	96.8%	1/1/2011
Mass. Teachers	66.3%	1/1/2011
Maynard	71.8%	1/1/2011
Medford	64.4%	1/1/2010
Melrose	54.5%	1/1/2010
Methuen	49.5%	1/1/2010
Middlesex	47.1%	1/1/2010
Milford	62.1%	1/1/2011
Milton	77.3%	1/1/2011
Minuteman Reg.	104.0%	1/1/2011
Montague	80.5%	1/1/2010
MWRA	87.6%	1/1/2011
Natick	64.0%	1/1/2011
Needham	77.9%	1/1/2011
New Bedford	41.6%	1/1/2010

BOARD NAME	FUNDED RATIO	DATE
Newburyport	60.9%	1/1/2010
Newton	55.0%	1/1/2011
Norfolk County	60.0%	1/1/2010
North Adams	67.9%	1/1/2011
North Attleboro	73.4%	1/1/2011
Northampton	65.2%	1/1/2010
Northbridge	69.5%	1/1/2010
Norwood	84.0%	1/1/2010
Peabody	53.7%	1/1/2010
Pittsfield	46.4%	1/1/2011
Plymouth	54.2%	1/1/2010
Plymouth County	56.1%	1/1/2011
Quincy	47.6%	1/1/2010
Reading	68.0%	7/1/2011
Revere	57.6%	1/1/2011
Salem	51.7%	1/1/2010
Saugus	67.8%	1/1/2011
Shrewsbury	70.8%	1/1/2010
Somerville	60.4%	1/1/2011
Southbridge	47.1%	1/1/2010
Springfield	33.6%	1/1/2010
State	81.0%	1/1/2011
Stoneham	70.4%	1/1/2011
Swampscott	46.2%	1/1/2011
Taunton	67.3%	1/1/2010
Wakefield	68.4%	1/1/2010
Waltham	55.8%	1/1/2011
Watertown	57.3%	1/1/2010
Webster	49.3%	1/1/2010
Wellesley	86.7%	1/1/2010
West Springfield	57.9%	1/1/2010
Westfield	68.9%	1/1/2011
Weymouth	58.0%	1/1/2010
Winchester	84.5%	1/1/2011
Winthrop	73.1%	1/1/2011
Woburn	67.9%	1/1/2010
Worcester	70.7%	1/1/2011
Worcester Regional	48.0%	1/1/2010

The first lesson from this data is that Massachusetts has not been reluctant to assess and confront the impact of 2008. All systems have conducted an actuarial valuation that incorporates that experience. In spite of those devastating losses, which for many systems exceeded 30%, 60 of these funds have a funded ratio above 60%. In 29 systems that ratio exceeds 70% and two systems are more than 90% funded. Nonetheless, the variance among systems is reflected by the 44 systems with a funded ratio below 60%, of which 15 have a ratio between 40% and 50% and three of which are faced with a funded ratio below 40%.

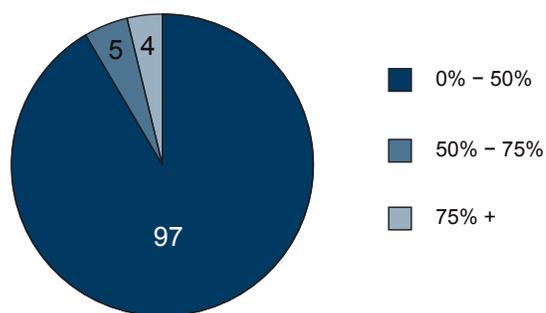
More importantly, all retirement systems have incorporated the losses of 2008 into the funding schedules on which appropriations are based. As a result, in many instances, systems will complete addressing that fiscal impact in the next few years and move forward in dealing with long-term liabilities. For example, under the existing funding schedule, the Commonwealth will have amortized the losses of 2008 by 2013. At that point the flexibility will exist to more aggressively revise assumptions and/or accelerate system funding.

This funded ratio record, in the wake of significant losses, is expected. Most Massachusetts systems have for many years employed a “smoothing” technique which is based on an actuarial rather than a market value of assets. Gains are spread out over a certain period and the result is that the funded status is less than it might have been under market value. The same is true of losses which when spread out result in a funded status that is greater than might be the case under market value. Consequently temporary distortions on the upside or downside are avoided. As a result, until the amortization of the 2008 losses is completed funding levels will remain stagnant.

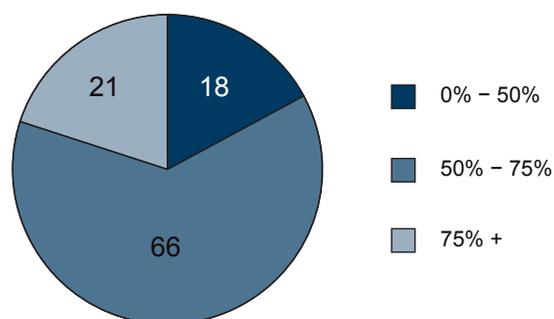
It is imperative that we not lose sight of the historical context in which our pension funds have operated. In 1987, 97 of the 106 Massachusetts’ public pension funds were less than 50% funded. Of the other 9, five were funded at a ratio between 50% and 75% and four had a funded ratio above 75%. Since that time we have experienced the capital markets losses of 1987, 2000, 2002 and particularly 2008, and yet, as the chart below indicates, our pension funds have made substantial, if sometimes unsteady, progress in funding. That progress is underscored by the fact that 18 systems, according to the data on hand as of April 2012, have a funded ratio below 50% — in sharp contrast to the 97 systems which were similarly funded in 1987.

### Funded Ratios for Massachusetts Systems

1987



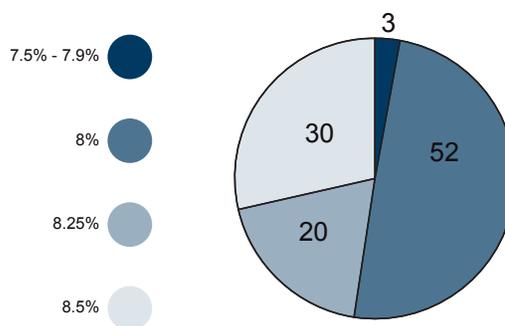
2012



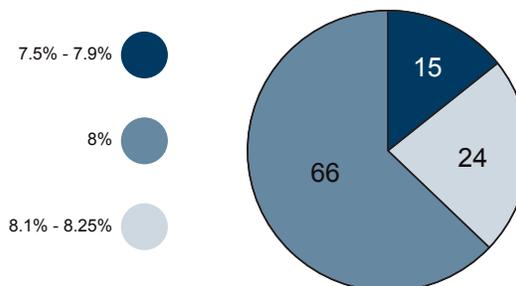
In Massachusetts we have been assessing and, when warranted, modifying certain assumptions for many years. Although some of these matters are a subject of debate, PERAC has adopted a measured and evolutionary approach to revision of assumptions in acknowledgement of the long-term nature of pension funding as well as past performance of our systems. For example, much debate exists as to the investment return assumption. As noted elsewhere in this Report, the PRIT Fund’s annualized return over the last 27 years has been 9.50%, well above the 8.25% assumption presently used in the actuarial valuation of the Commonwealth’s pension obligation. In spite of this record, the Actuary is moving towards a reduction of that assumption in the next several years.

This is manifested in the evolution of the investment return assumptions used in calculating assets and liabilities. Long before the more recent controversy relative to this issue PERAC and its actuary began the process of reducing these investment return assumptions. As the chart indicates, in 2003 30 valuations employed an 8.50% assumption and only three used an assumption between 7.50% and 7.90%. Today, no retirement boards use 8.50% and 15 use an assumption between 7.50% and 7.90%. In addition, PERAC has begun the process of updating mortality assumptions to better reflect improvements in life expectancy. In many instances, these actions have taken place at the same time that systems were adjusting funding to amortize the 2008 investment losses.

### Investment Return Assumptions (2003)



### Investment Return Assumptions (as of April 30, 2012)



Along these lines the annualized returns for the systems over varying periods support this evolutionary approach. The chart below breaks out the investment returns for each system over different periods. One aspect of this data that stands out is that the long term rates of return (27 years ending in 2011) find most systems achieving rates of return at or above the investment assumption. For the Commonwealth the return in excess of the assumption is 1.25% (9.50% - 8.25%). Similar divergence

exists in several local systems, particularly those who have invested in PRIT for most of this period: Wakefield 9.62% - 8.00%, Needham 9.64% - 8.00%, Saugus 9.11% - 8.00%, Dedham 9.46% - 8.00%, Fairhaven 9.22% - 8.00%, Hingham 9.21% - 8.00% Marblehead 9.12% - 8.00%, Milton 9.30% - 8.00%, Minuteman 9.46% - 8.00%, Montague 9.01% - 8.00%, Reading 9.17% - 7.75%, Saugus 9.11% - 8.00%, Northbridge 9.26% - 8.00%, and Gardner 9.33% - 8.00%). However this record also exists for many non-PRIT systems: Cambridge 9.08% - 8.25%, Holyoke 9.03% - 8.25%, Malden 9.71% - 8.00%, North Adams 9.53% - 8.00%, Northampton 9.32% - 7.75%, and Winchester 9.13% - 8.00%. Other systems in which assets have been invested in PRIT and outside of PRIT during the years also have substantially exceeded the assumption over this period: Framingham 9.19% - 8.00%, Lowell 9.00% - 8.25%, Wellesley 9.97% - 8.00%, and Weymouth 9.81% - 8.00%.

This chart also provides insight on the impact of a single year's return on these long-term records. For example, PRIT through the 26 years ending in 2010 had an annualized return of 9.87%. That long-term rate was reduced by .37% to 9.50% by the 2011 PRIT return of .18%. Consequently, although in 2011 the PRIT Fund missed the assumption by 8.07% (8.25% - .18%), in the long term that result lowered the return by only .37%.

The limited impact of one year's performance on long-range returns is underscored by the example of Lexington. In 2011 Lexington had an investment return of -05.81%, a full 13.00% below its assumption of 8.00%. Its annualized long-term performance for the period ending 2010 was 9.26%. The 2011 return reduced that long-range result by .59% to 8.67%. As the data proves, the impact of short-term investment performance on long-term investment performance is mitigated by the past performance and also, the length of the period.

The data related to funding schedules provides further support for the proposition that Massachusetts has met the funding challenge. As of April, 62 systems had adopted schedules that meet full funding by 2030; 20 such schedules do so by 2035 and 23 schedules do so by the statutory deadline of 2040. Consequently, our retirement boards and governmental units have committed to fully fund the systems, including the amortization of 2008 losses, within an acceptable, and in many cases aggressive, time frame.

As we are reminded almost daily the future is a challenging one for public pension funds nationwide. Massachusetts has acted to place itself in a position to meet that challenge.

## Investment Return History

BOARD NAME	27 yr 2011	26 yr 2010	25 yr 2009	10 yr 2011	10 yr 2010	10 yr 2009	5 yr 2011	5 yr 2010	5 yr 2009
ADAMS	8.01%	8.28%	8.24%	4.13%	4.44%	4.46%	2.01%	3.41%	2.69%
AMESBURY	7.70%	8.00%	7.79%	4.37%	3.83%	2.58%	0.72%	3.52%	2.35%
ANDOVER	8.11%	8.42%	8.22%	2.91%	2.16%	1.84%	-0.07%	2.58%	1.32%
ARLINGTON	8.19%	8.47%	8.29%	3.50%	2.73%	1.23%	-1.02%	1.44%	0.05%
ATHOL	6.98%	7.25%	7.01%	3.61%	3.39%	2.62%	1.05%	3.24%	2.36%
ATTLEBORO	8.71%	9.05%	8.77%	6.13%	5.95%	4.64%	2.00%	4.46%	3.32%
BARNSTABLE COUNTY	7.08%	7.35%	7.11%	4.51%	3.68%	2.44%	0.59%	3.25%	2.04%
BELMONT	9.35%	9.62%	9.46%	7.12%	6.54%	5.56%	4.76%	7.24%	6.10%
BERKSHIRE COUNTY	8.88%	9.23%	9.07%	6.20%	5.64%	4.22%	1.22%	4.33%	4.19%
BEVERLY	8.34%	8.66%	8.46%	4.65%	4.48%	3.75%	0.68%	2.10%	0.75%
BLUE HILLS REG	8.49%	8.81%	8.63%	6.29%	5.59%	4.82%	1.48%	4.45%	4.28%
BOSTON	8.97%	9.29%	9.13%	5.95%	5.24%	3.83%	2.77%	5.52%	4.57%
BRAINTREE	8.70%	9.00%	8.91%	6.01%	5.89%	5.02%	2.87%	5.36%	4.37%
BRISTOL COUNTY	8.69%	9.11%	8.92%	5.06%	4.96%	3.85%	1.72%	4.88%	3.58%
BROCKTON	8.82%	9.17%	9.00%	5.09%	4.84%	4.28%	1.22%	3.62%	2.60%
BROOKLINE	8.68%	9.09%	8.90%	5.26%	5.31%	4.02%	1.25%	4.25%	3.10%
CAMBRIDGE	9.08%	9.46%	9.25%	5.05%	4.85%	4.10%	1.90%	4.56%	3.16%
CHELSEA	7.64%	7.94%	7.72%	5.37%	4.52%	2.63%	1.22%	4.39%	3.87%
CHICOPEE	8.37%	8.67%	8.34%	5.26%	4.75%	3.11%	2.84%	4.86%	3.11%
CLINTON	7.37%	7.67%	7.45%	4.81%	4.33%	2.99%	-0.68%	2.69%	1.98%
COMPOSITE	9.11%	9.46%	9.30%	5.98%	5.42%	4.02%	1.38%	4.39%	3.97%
CONCORD	8.44%	8.64%	8.50%	5.42%	5.04%	4.05%	2.34%	4.34%	3.60%
DANVERS	7.93%	8.40%	8.12%	4.27%	4.10%	3.56%	1.59%	4.64%	3.33%
DEDHAM	9.46%	9.84%	9.68%	6.26%	5.66%	4.18%	1.22%	4.39%	4.20%
DUKES COUNTY	7.36%	7.54%	7.29%	5.52%	4.58%	3.06%	2.91%	5.17%	3.90%
EASTHAMPTON	8.00%	8.31%	8.11%	6.29%	5.70%	4.36%	1.15%	4.29%	4.15%
ESSEX COUNTY	8.54%	8.86%	8.62%	4.38%	4.15%	2.95%	0.80%	3.69%	2.09%
EVERETT	8.19%	8.51%	8.30%	4.70%	4.27%	2.44%	1.19%	4.32%	3.59%
FAIRHAVEN	9.22%	9.58%	9.43%	6.21%	5.62%	4.19%	1.12%	4.23%	4.11%

## Investment Return History (continued)

BOARD NAME	27 yr 2011	26 yr 2010	25 yr 2009	10 yr 2011	10 yr 2010	10 yr 2009	5 yr 2011	5 yr 2010	5 yr 2009
FALL RIVER	8.14%	8.45%	8.26%	3.46%	3.03%	1.74%	0.68%	3.00%	1.85%
FALMOUTH	8.80%	9.10%	8.89%	4.45%	4.52%	3.96%	1.28%	3.69%	2.47%
FITCHBURG	7.30%	7.58%	7.41%	3.50%	3.14%	2.32%	0.63%	2.94%	1.92%
FRAMINGHAM	9.19%	9.55%	9.40%	6.00%	5.29%	3.71%	1.16%	4.32%	4.17%
FRANKLIN REGIONAL	8.02%	8.31%	8.03%	4.78%	4.94%	3.90%	2.28%	4.69%	3.26%
GARDNER	9.33%	9.70%	9.55%	6.24%	5.65%	4.21%	1.09%	4.22%	4.12%
GLOUCESTER	8.70%	9.03%	8.86%	4.75%	4.66%	3.32%	0.70%	3.39%	2.53%
GREATER LAWRENCE	7.21%	7.49%	7.30%	4.82%	4.07%	3.63%	4.12%	5.93%	4.26%
GREENFIELD	8.24%	8.56%	8.36%	4.69%	4.10%	3.45%	1.19%	3.74%	3.10%
HAMPDEN COUNTY	8.43%	8.72%	8.56%	4.10%	3.78%	2.93%	0.93%	3.21%	2.12%
HAMPSHIRE COUNTY	8.22%	8.52%	8.33%	4.98%	4.37%	3.14%	2.08%	4.86%	3.82%
HAVERHILL	10.06%	10.46%	10.29%	6.30%	5.94%	5.76%	2.56%	5.37%	4.16%
HINGHAM	9.21%	9.54%	9.38%	6.35%	5.68%	4.21%	1.32%	4.34%	4.19%
HOLYOKE	9.03%	9.40%	9.10%	4.26%	4.45%	3.41%	1.54%	3.86%	1.86%
HULL	7.58%	7.88%	7.67%	5.53%	5.16%	3.92%	1.14%	4.25%	4.19%
LAWRENCE	7.44%	7.73%	7.50%	4.02%	3.15%	1.40%	0.75%	3.11%	1.75%
LEOMINSTER	8.15%	8.55%	8.41%	5.27%	5.69%	5.21%	0.99%	4.49%	3.45%
LEXINGTON	8.67%	9.26%	9.05%	5.07%	5.35%	4.06%	0.60%	4.60%	3.80%
LOWELL	9.00%	9.35%	9.20%	5.01%	3.91%	2.73%	0.93%	4.07%	3.84%
LYNN	7.70%	7.94%	7.77%	4.22%	3.59%	1.90%	0.33%	2.10%	1.58%
MALDEN	9.71%	9.97%	9.86%	5.96%	4.77%	3.76%	4.61%	5.76%	5.48%
MARBLEHEAD	9.12%	9.48%	9.32%	6.30%	5.71%	4.20%	1.18%	4.35%	4.18%
MARLBOROUGH	8.42%	8.66%	8.52%	5.77%	5.41%	4.58%	2.69%	4.80%	3.81%
MHFA	7.43%	7.63%	7.43%	4.74%	4.17%	2.86%	1.96%	3.71%	2.30%
MASSPORT	8.99%	9.30%	9.17%	5.71%	5.22%	3.94%	2.12%	4.83%	4.09%
MWRA	7.69%	7.94%	7.73%	6.63%	6.05%	4.73%	3.54%	5.93%	5.01%
MAYNARD	7.59%	7.83%	7.61%	5.15%	4.88%	4.09%	1.46%	2.67%	1.98%
MEDFORD	8.97%	9.30%	9.16%	5.78%	5.92%	5.64%	2.85%	5.29%	4.18%
MELROSE	8.22%	8.53%	8.35%	4.85%	4.45%	3.64%	1.09%	3.38%	2.85%
METHUEN	7.61%	7.85%	7.57%	3.78%	3.17%	2.19%	0.53%	2.46%	0.59%
MIDDLESEX COUNTY	8.21%	8.50%	8.33%	4.42%	4.10%	2.88%	1.43%	3.82%	2.83%
MILFORD	7.95%	8.26%	8.08%	4.49%	4.40%	3.86%	-0.31%	1.54%	0.91%
MILTON	9.30%	9.67%	9.51%	6.00%	5.42%	4.01%	1.17%	4.09%	3.79%
MINUTEMAN REGIONAL	9.46%	9.83%	9.67%	6.32%	5.71%	4.19%	1.17%	4.32%	4.13%
MONTAGUE	9.01%	9.36%	9.20%	6.26%	5.66%	4.22%	1.13%	4.27%	4.13%
NATICK	7.69%	7.99%	7.75%	3.27%	2.31%	1.17%	0.20%	2.37%	0.76%
NEEDHAM	9.64%	10.02%	9.89%	6.19%	5.61%	4.19%	1.13%	4.27%	4.13%
NEW BEDFORD	7.74%	8.14%	7.93%	5.80%	5.95%	4.72%	1.47%	4.62%	4.05%
NEWBURYPORT	7.96%	8.27%	8.07%	6.29%	6.08%	4.92%	1.12%	4.24%	4.10%
NEWTON	8.42%	8.73%	8.58%	4.51%	3.97%	2.96%	1.04%	3.34%	2.23%
NORFOLK COUNTY	8.50%	8.79%	8.60%	4.91%	4.84%	4.05%	1.67%	4.15%	2.81%
NORTH ADAMS	9.53%	9.75%	9.62%	6.27%	5.06%	4.15%	4.91%	5.94%	5.74%
NORTH ATTLEBORO	8.36%	8.57%	8.35%	5.13%	5.09%	4.06%	2.28%	4.04%	2.21%
NORTHAMPTON	9.32%	9.55%	9.42%	6.08%	5.06%	4.05%	4.96%	6.10%	5.66%

## Investment Return History (continued)

BOARD NAME	27 yr 2011	26 yr 2010	25 yr 2009	10 yr 2011	10 yr 2010	10 yr 2009	5 yr 2011	5 yr 2010	5 yr 2009
NORTHBRIDGE	9.26%	9.62%	9.46%	6.32%	5.70%	4.22%	1.20%	4.31%	4.11%
NORWOOD	9.07%	9.40%	9.34%	6.08%	6.04%	5.02%	3.48%	5.71%	5.23%
PEABODY	8.41%	8.74%	8.55%	3.87%	3.67%	2.76%	0.93%	3.08%	1.61%
PITTSFIELD	7.93%	8.20%	7.99%	3.64%	3.16%	1.99%	0.50%	2.59%	1.37%
PLYMOUTH	8.48%	8.84%	8.70%	4.99%	4.67%	3.22%	1.35%	4.14%	3.35%
PLYMOUTH COUNTY	9.10%	9.45%	9.21%	5.48%	4.42%	3.28%	1.30%	4.16%	2.89%
PRIM BOARD	9.50%	9.87%	9.73%	6.21%	5.61%	4.15%	1.07%	4.21%	4.05%
QUINCY	8.19%	8.50%	8.34%	5.12%	4.97%	4.02%	1.45%	3.92%	3.04%
READING	9.17%	9.53%	9.37%	6.29%	5.69%	4.22%	1.21%	4.37%	4.21%
REVERE	8.14%	8.46%	8.30%	6.00%	5.44%	4.03%	1.00%	4.06%	3.98%
SALEM	7.90%	8.19%	8.02%	3.84%	3.60%	2.74%	0.00%	2.73%	1.53%
SAUGUS	9.11%	9.46%	9.30%	6.26%	5.66%	4.20%	1.20%	4.33%	4.17%
SHREWSBURY	8.85%	9.20%	9.01%	5.30%	4.74%	2.86%	1.77%	4.21%	3.23%
SOMERVILLE	8.70%	8.95%	8.75%	6.21%	5.65%	5.10%	3.44%	5.27%	3.93%
SOUTHBRIDGE	7.77%	8.08%	7.94%	3.40%	3.18%	3.07%	-1.16%	1.32%	0.22%
SPRINGFIELD	8.11%	8.41%	8.23%	4.20%	3.51%	2.54%	0.78%	3.80%	2.64%
STATE	9.38%	9.75%	9.59%	6.29%	5.69%	4.17%	1.17%	4.34%	4.17%
STATE TEACHERS	9.39%	9.76%	9.60%	6.29%	5.69%	4.17%	1.17%	4.34%	4.17%
STONEHAM	8.63%	8.97%	8.78%	6.28%	5.69%	4.28%	1.21%	4.35%	4.17%
SWAMPSCOTT	8.79%	9.22%	9.17%	4.49%	4.58%	3.42%	1.05%	3.63%	3.32%
TAUNTON	9.54%	9.91%	9.69%	5.73%	5.70%	4.64%	2.72%	5.14%	3.29%
WAKEFIELD	9.62%	9.99%	9.85%	6.27%	5.67%	4.19%	1.19%	4.31%	4.14%
WALTHAM	8.42%	8.69%	8.49%	4.43%	3.80%	2.41%	0.67%	3.00%	1.71%
WATERTOWN	8.08%	8.42%	8.21%	4.72%	4.57%	3.31%	1.07%	4.12%	2.62%
WEBSTER	7.83%	8.14%	7.88%	5.57%	4.67%	2.91%	2.13%	4.54%	3.24%
WELLESLEY	9.97%	10.37%	10.24%	5.36%	4.80%	3.84%	0.55%	3.57%	2.89%
WEST SPRINGFIELD	7.92%	8.08%	7.91%	4.70%	4.41%	4.18%	2.54%	3.42%	2.39%
WESTFIELD	8.36%	8.68%	8.53%	4.31%	3.96%	3.19%	1.94%	4.14%	3.00%
WEYMOUTH	9.81%	10.27%	10.11%	5.82%	5.43%	3.89%	1.25%	4.59%	3.50%
WINCHESTER	9.13%	9.47%	9.49%	5.73%	5.58%	5.05%	1.30%	4.09%	4.47%
WINTHROP	8.50%	8.84%	8.68%	5.14%	4.98%	4.31%	1.23%	4.21%	4.08%
WOBURN	9.25%	9.59%	9.42%	5.63%	5.56%	4.38%	2.64%	5.17%	3.91%
WORCESTER	8.85%	9.22%	9.04%	5.45%	5.02%	3.80%	1.57%	4.53%	3.84%
WORCESTER COUNTY	7.91%	8.23%	8.08%	3.42%	2.94%	1.53%	0.21%	2.74%	1.47%