THE PERAC

ACTUARIAL UPDATE

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COMMONWEALTH OF MASSACHUSETTS
PUBLIC EMPLOYEE RETIREMENT ADMINISTRATION COMMISSION

THE PERAC ACTUARIAL UPDATE #2

We are pleased to publish this second *Actuarial Update*. In this issue our primary focus is on the funding condition of the retirement systems. This subject takes on greater importance in light of recent experience in the investment market.

TEACHERS RETIREMENT PLUS STUDY

The Commission recently completed our Cost Analysis of Chapter 114 of the Acts of 2000, an Act Improving Teacher Recruitment, Retention and Retirement. That legislation created an alternative benefit structure for members of the Teachers Retirement System and Boston Teachers. All members hired after 7/1/00 as well as active members electing the alternative benefit will, upon achieving 30 years of creditable service, be eligible for a benefit based on the standard table of age factors multiplied by the member's creditable service (the same method used before consideration of the alternative program) increased by 2% per year for each year of service in excess of 24. Members must contribute 5 years at a rate of 11% of regular compensation in order to participate in the alternative program. As of 12/31/01, 1,900 members had retired and approximately 44,000 eligible members had elected to participate under the new plan. The PERAC study concluded that the total first year cost for those participating in the alternative program as of 2001 was estimated at $56.5 million. Copies of the report may be obtained by contacting Lindsay Deaver at (617) 666-4446 ext. 937.

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PENSION FUNDING & THE MARKET DOWNTURN

2000 and 2001 have been unprecedented years for negative investment performance. Most investors have seen their portfolios suffer losses. For Massachusetts' pension funds these losses will have a direct impact on their funded status, and for governmental units that impact will be seen in the possibility of significant increases in pension appropriations. The chart on pages 2-3 shows the funded ratios of the retirement systems based on information available to PERAC as of 1/1/02.

The full extent of the impact of recent investment performance on these systems will not be known until actuarial valuations as of 1/1/02 or 1/1/03 are conducted. A number of systems that adopted funding schedules based on 1/1/01 actuarial valuations (incorporating the experience of 2000) increased the level of appropriation. Actuarial losses resulting from failing to meet investment return assumptions could directly impact appropriations, as those losses must be amortized as part of the schedule. Systems with schedules at or near the minimum schedule allowed under Chapter 32 (4.5% increasing amortization) are at the most risk of an increased level of appropriation. PERAC is available to work with systems in reviewing alternative funding schedules.

Review of Retirement Board Funded Ratios

Board	Valuation Date	Amortization of UAL	Year Fully Funded	Funded Ratio
Barnstable	2000	4.50% increase	2028	65.0%
Berkshire	2000	4.50% increase	2019	81.7%
Bristol	2001	3.50% increase	2018	73.7%
Dukes	2001	4.50% increase	2021	69.5%
Essex	2000	4.50% increase	2025	75.0%
Franklin	1999	4.50% increase	2028	75.9%
Hampden	2001	3.50% increase	2027	73.0%
Hampshire	2000	4.50% increase	2028	64.2%
Middlesex	2000	4.50% increase	2028	63.0%
Norfolk	2000	2.50% increase	2028	69.6%
Plymouth County	2000	4.00% increase	2028	73.7%
Worcester Reg.	2001	4.50% increase	2026	74.2%
Adams	2000	Level	2021	81.1%
Amesbury	1999	4.50% increase	2017	71.6%
Andover	1998	2.77% increase	2018	68.5%
Arlington	2001	0.50% increase	2011	83.8%
Athol	2000	4.50% increase	2028	56.1%
Attleboro	2001	4.50% increase	2028	65.0%
Belmont	2000	4.50% increase	2014	70.4%
Beverly	2000	4.50% increase	2028	62.4%
Boston	2000	3.50% increase	2020	72.7%
Braintree	2000	Level	2023	76.6%
Brockton	2000	2.50% increase	2020	65.9%
Brookline	2000	2.50% increase	2017	73.9%
Cambridge	2000	Level	2009	89.8%
Chelsea	1999	4.50% increase	2028	44.7%
Chicopee	2000	3.35% increase	2019	67.0%
Clinton	2001	4.50% increase	2028	69.1%
Concord	2000	Level	2004	94.2%
Danvers	2001	Level	2014	82.9%
Dedham	2001	Level	2011	84.4%
Easthampton	2000	4.50% increase	2028	64.7%
Everett	2001	4.50% increase	2028	45.5%
Fairhaven	2000	4.50% increase	2017	77.3%
Fall River	2001	Level	2023	81.1%
Falmouth	2001	4.50% increase	2028	76.3%
Fitchburg	2000	2.50% increase	2025	66.6%
Framingham	2000	4.50% increase	2028	81.5%
Gardner	2001	4.50% increase	2027	67.3
Gloucester	2001	4.00% increase	2028	59.9%
Greenfield	2001	4.50% increase	2028	76.1%
Haverhill	2000	4.50% increase	2028	74.0%
Hingham	2000	4.50% increase	2008	84.5%
Holyoke	1999	4.50% increase	2019	69.5%
Hull	2000	4.50% increase	2028	44.1%
Lawrence	2000	2.50% increase	2028	58.9%
Leominster	2001	2.50% increase	2028	68.7%
Lexington	1999	Level	2003	95.6%
Lowell	2001	Level	2012	78.3%
Lynn	2000	4.50% increase	2024	60.5%
Malden	2000	Level	2021	75.4%
Marblehead	2000	15 yr decrease	2015	84.5%
Marlborough	1999	3.50% increase	2020	61.4%
Mass Housing	1998	Fully funded	NA	134.7%

Review of Retirement Board Funded Ratios

Board	Valuation Date	Amortization of UAL	Year Fully Funded	Funded Ratio
Mass Port	2000	Fully funded	NA	127.7%
Mass Turnpike	2000	Fully funded	NA	102.8%
Maynard	1996	4.50% increase	2028	52.0%
Medford	2001	4.50% increase	2021	68.2%
Melrose	2000	3.50% increase	2019	66.6%
Methuen	2001	4.50% increase	2024	74.2%
Milford	2000	4.50% increase	2016	81.0%
Milton	1999	Level	2015	79.2%
Montague	2000	3.50% increase	2020	76.4%
Natick	2000	Level	2020	72.1%
Needham	2000	Level	2010	91.4%
New Bedford	1998	4.50% increase	2028	53.7%
Newburyport	1999	4.30% increase	2022	61.4%
Newton	2001	NA	NA	81.6%
North Adams	2001	3.00% increase	2019	80.3%
Northampton	2000	3.50% increase	2027	75.8%
North Attleboro	2000	Level/Increase	2028	89.8%
Northbridge	2000	4.50% increase	2022	77.5%
Norwood	2001	Fully funded	NA	101.7%
Peabody	2000	4.50% increase	2011	71.3%
Pittsfield	2000	3.75% increase	2026	63.2%
Plymouth	2001	3.25% increase	2028	74.8%
Quincy	2001	Level	2019	71.6%
Reading	2001	1.50% increase	2021	70.6%
Revere	2001	2.25% increase	2019	57.4%
Salem	2001	4.50% increase	2024	62.8%
Saugus	2001	2.50% increase	2020	65.0%
Shrewsbury	2000	Level	2002	97.1%
Somerville	2001	3.50% increase	2023	65.7%
Southbridge	1999	4.50% increase	2028	64.2%
Springfield	2001	4.50% increase	2024	54.0%
Stoneham	2001	2.50% increase	2020	67.1%
Swampscott	2000	4.00% increase	2021	66.3%
Taunton	2000	4.50% increase	2026	70.3%
Wakefield	2000	4.50% increase	2026	81.8%
Waltham	1999	3.00% increase	2012	69.4%
Watertown	2001	1.00% increase	2013	66.2%
Webster	1998	3.50% increase	2028	51.6%
Wellesley	2001	Fully funded	NA	133.6%
Westfield	2001	4.50% increase	2028	80.4%
West Springfield	2000	4.50% increase	2028	56.3%
Weymouth	2001	4.00% increase	2021	69.7%
Winchester	2001	Level	2015	89.1%
Winthrop	2001	4.50% increase	2014	66.0%
Woburn	2000	Level	2011	85.6%
Worcester	2001	Fully funded	NA	100.3%
State	2001	Level	2018	91.8%
Teachers	2001	Level	2018	79.2%
Minuteman	2001	Fully funded	NA	122.5%
Blue Hills	2000	4.50% increase	2028	89.2%
Gr Lawr SD	2001	Fully funded	NA	121.6%
MWRA	2001	Fully funded	NA	100.0%

LOCAL EXPERIENCE STUDY

PERAC is completing an experience study of the local retirement systems, working with several actuaries that have experience with Massachusetts' pension plans. This will be the first such study ever undertaken and will assess whether actual experience has reflected the actuarial assumptions used in performing actuarial valuations of the systems. We expect that this report will be released in March. Previously we conducted an experience study of the State Employees Retirement System and the Teachers Retirement System

APPROPRIATION LETTERS

We would like to thank all boards for the assistance provided to PERAC that enabled us to send out the Fiscal Year 2003 Appropriation Letters on time. This year 59 boards submitted their appropriation data via the Internet. This expedited the process and enhanced efficiency.

Staff Profile: John Boorack

Senior Actuarial Analyst, John Boorack has worked at PERAC for six years. He has a degree from Bridgewater State College in Mathematics and is presently seeking to become an Associate of the Society of Actuaries. John has passed three of the six examinations necessary to receive that important designation.

PERAC's Actuarial Unit has a new employee, Joe Dowgielewicz. Joe replaces Stella Ren who took a position with Aon Consulting in New York City.

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