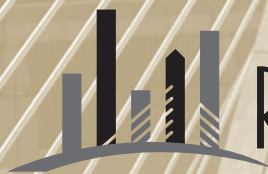


# The Utility of Trouble

Providing Pensions in Difficult Times:  
A Comprehensive Study of the Massachusetts Pension System  
and Its Impact on the City of Boston

*The Second in a Series of Occasional Reports About  
Bringing Systemic Change to Scale in an Era of Limited Resources*

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B O S T O N M U N I C I P A L  
**RESEARCH BUREAU**

May 2010

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*The Second in a Series of Occasional Reports About  
Bringing Systemic Change to Scale in an Era of Limited Resources*

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May 2010

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Dear Colleagues:

The Boston Municipal Research Bureau is pleased to partner with the Boston Foundation in presenting *Providing Pensions in Difficult Times: A Comprehensive Study of the Massachusetts Pension System and Its Impact on the City of Boston*. With reform of the most egregious abuses in the current pension system addressed by the Governor and Legislature in 2009, this report focuses on the importance for more systematic reform of the state pension system to improve the fiscal, management and equity challenges that remain.

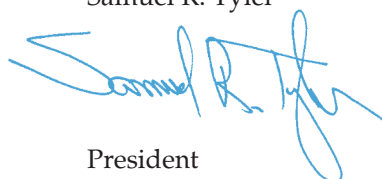
Some of the recommendations made reflect the issues raised by the state Pension Reform Commission and the Governor's pension reform legislation. An assessment of the State-Boston Retirement System is included to provide a local example of how the complex state pension system operates and to identify operational issues the Boston system should act on internally.

This report also updates previous work of the Research Bureau on the related issues of the growing costs of local health insurance and the retiree health insurance liability. Together these three benefits are poised to continue to absorb a larger share of limited revenue growth in the coming years. This trend brings with it serious budget implications for the future at the state and local level which require that prudent steps be taken in these difficult times.

A comprehensive report on a public policy issue as broad and complex as the Massachusetts retirement system cannot be achieved without considerable assistance from a broad group of state and local officials. The Research Bureau would like to acknowledge the invaluable advice and assistance from officials and staff of the State-Boston Retirement Board, the City's Office of Administration and Finance, Office of Budget Management, Auditing Department, Treasury Department, Office of Health Benefits & Insurance, Police Department and Fire Department. At the state level, we are grateful to officials in the Public Employee Retirement Administration Commission, Pension Reserves Investment Management Board, State Board of Retirement, Executive Office of Administration and Finance, Department of Elementary and Secondary Education, Department of Revenue, Group Insurance Commission and Legislative offices involved with the state Pension Reform Commission.

We are in an era of permanent fiscal crisis according to author David Osborne and the spending trends for pension and health insurance benefits indicate the importance of bringing improved management and control to these systems. Change in these sensitive areas will be difficult but the consequences of status quo will be unacceptable to the public. This report can be a guide in moving forward to achieve a reasonable balance.

Samuel R. Tyler



President  
Boston Municipal Research Bureau



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## Preface

Dear Friends,

The tumultuous two-year state legislative session set to end this summer has found state officials grappling with budget gaps amidst the most acute economic crisis since the Great Depression. While these conditions have been troubling to say the least, they have also helped to usher in several major reform efforts – and ultimately new laws – in areas from education and ethics to transportation and pensions.

As Greater Boston's community foundation, the Boston Foundation regularly calls on government to operate as efficiently as possible. Amidst the current turbulence, we have redoubled our efforts to encourage state and local leaders to adopt bold policies and practices to leverage limited taxpayer dollars. Too many cost-effective state programs that bolster our economy and quality of life are at stake. In short, we suggest that while one never invites trouble, there can be a utility to it that ought to be seized upon during challenging times.

In February of 2010, we released the first in a series of reports we're calling "The "Utility of Trouble." That report, titled "Leveling the Playing Field: Giving Municipal Officials the Tools to Moderate Health Insurance Costs," shows that cities and towns could save millions of dollars if they were accorded the same freedom with which to design their own health insurance plans as the state. It garnered significant media coverage and has helped to elevate this issue in the public debate.

We are pleased to release the second report in this series, "Providing Pensions in Difficult Times: A Comprehensive Study of the Massachusetts Pension System and its Impact on the City of Boston." While the new pension law has received wide acclaim for tightening the state's pension law to curb abuses, many have called for more systemic reform as argued for by a recent state Pension Reform Commission.

This report, conducted by the Boston Municipal Research Bureau, provides a comprehensive primer on the state pension system and outlines several recommendations for strengthening that system going forward.

I trust you will find this report both extremely informative and a helpful guide for further refinements to state and local policies and practice as we continue to navigate through challenging economic times.



Paul S. Grogan  
President & CEO  
The Boston Foundation



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## Executive Summary

The Commonwealth and the cities and towns of Massachusetts are facing a long-term budget challenge of employee-related spending absorbing a larger share of limited revenue growth. Escalating employee pensions and health insurance costs are less flexible and are gradually reducing resources for other basic services. At the same time, outdated laws and practices have restricted the ability of cities and towns to respond to these management challenges in a timely and sustainable way. The current fiscal stress being experienced by the state and municipalities makes this the opportune time to address these issues.

The primary purpose of this report is to provide a comprehensive assessment of the Massachusetts retirement system and make a series of recommendations to significantly improve the management of the system and make it more equitable so that public employees receive the security and protection they need in a manner that is sustainable and fair to the taxpayers who fund them. Indeed, this report can serve as a primer for anyone interested in the basics of how the Massachusetts retirement system works. Providing a factual description of the system and the pension benefits received will dispel the perception of high pensions for most public employees or that the pension plan is unsustainable. Several areas of concern are raised such as how the investment asset loss in 2008 could cause state and local funding for retirement systems to increase substantially over the next five years. Boston faces a potential \$70 million increase in its pension appropriations in fiscal 2012 for that reason.

This report does not call for a fundamental move to a defined contribution or hybrid system although it does note other states that are moving in that direction. The basis for this position is that approximately 75% of annual retirement costs are attributable to each system's amortization of its unfunded liability and that full funding will be reached at a legally specified time after which spending for pensions will be significantly reduced. Also, most employees pay approximately 70% and the employer or government unit pays 30% of the normal costs for the pension benefits being earned

annually by active employees. When considering the investment returns earned on their pension contributions, career employees in non-hazardous positions will likely fund most of their own retirement benefits under current contribution rates. In time, that situation will apply to most public employees based on Boston's example where 84% of all retirees receive regular (superannuation) pensions. For Boston employees retiring in 2009, the average regular pension was \$49,480.

Beyond making the current system work more effectively is the need to have an honest conversation about what level of retirement benefits should be provided by governmental units and how the cost should be shared among employers and employees. The recommendation in this report for further study of other retirement models to determine if another structure could address the inequities and cost concerns of the current pension system can be the start of that conversation.

The Governor and Legislature addressed the most egregious abuses in the current system with pension reform legislation enacted in 2009. Improving the management and equity of the system now needs to be achieved. The retirement system is financially inflexible for both employees and employers, quietly values some employees more than others, is designed to provide benefits to long-serving employees (and consequently penalizes employees with more limited careers in public service) and is complex requiring significant administration that leads to inefficiencies.

A section in this report on the operation of the State-Boston Retirement System describes the financial requirements of the government employer and the employee, the pension benefits for retirees and specific operational issues of the Boston system. Unlike any other local system in Massachusetts, the State-Boston Retirement System manages and administers benefits to Boston teachers. All other teachers are members of the Massachusetts Teachers' Retirement System which is funded directly by the state. The state provides the City of Boston with an annual reimbursement of the prior year's expenditures. To describe the true cost to the City

for pensions in this report, pension expenditures will be stated as net pension costs after excluding the state reimbursement. This process will affect the City's total operational expenditure numbers as well.

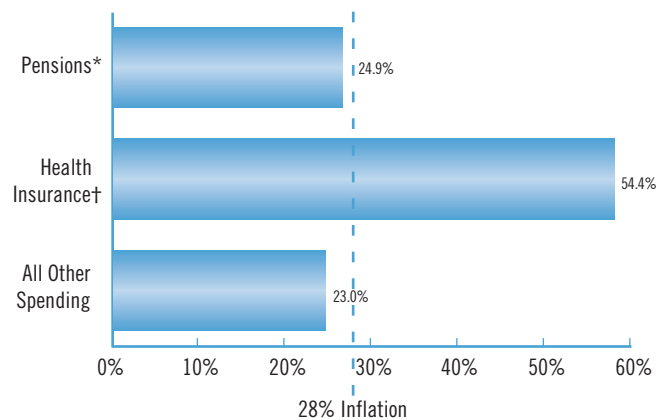
Closely aligned with pension costs as a driver of escalating employee benefit expenses is the spending for health insurance. Unlike the standard structure that exists for all retirement systems, health plans and costs differ among communities and the ability to manage health care expenses is distinctly different at the state level compared to the local level. In recent years, the cost of local health insurance has grown at a much faster pace than total operational spending in cities and towns and has become a larger share of total municipal spending. Of the two major employee benefits, health insurance has been more problematic in the strain it places on municipal budgets. New reporting requirements to recognize the unfunded liabilities of retiree health insurance will require significantly greater spending for health benefits in future years.

## Retirement System

All employees working in state and local governments in Massachusetts receive retirement benefits under one defined benefit pension plan administered by 105 retirement systems. This network of retirement systems includes two state-funded systems, the State Employers' Retirement System for state employees and the Massachusetts Teachers' Retirement System for most teachers in the Commonwealth and 103 local retirement systems serving municipalities, counties and public authorities. The State-Boston Retirement System (SBRS) is the largest local system and the only local pension system responsible for funding teacher pensions with the state reimbursing the City for actual expenses in the following year. The pension plan and all 105 retirement systems are governed by Chapter 32 of the Massachusetts General Laws.

The public pension plan and the 105 retirement systems are overseen by the Public Employee Retirement Administration Commission (PERAC), which is charged with enforcing Chapter 32 and monitoring the funding, investment and administrative practices of retirement systems. The Pension Reserves Investment Management Board (PRIM) is the state's investment manager and has general supervision of the Pension

FIGURE 1  
**City of Boston**  
**Pension and Health Insurance Growth vs. All Other Spending Fiscal 2004–09**



\*Net of Teacher Pension reimbursement

†Includes City & BPS Health Insurance

Reserves Investment Trust (PRIT) Fund into which the assets of the two state retirement systems and the assets transferred by any local retirement board are deposited. Each system is governed by a retirement board that manages the operations and, in some instances, the investment of system assets.

## Retirement Plan Overview

The Massachusetts defined benefit pension system guarantees that a specific annual retirement allowance will be paid for the rest of the retiree's life. The employer or governmental unit is responsible for maintaining the allowance regardless of economic circumstances or investment performance on retirement assets. The defined benefit plan is most prevalent in the public sector but only available to approximately 20% of private sector workers according to a 2007 federal Bureau of Labor Statistics report. In the Massachusetts system, state and local employees are vested or eligible to receive a public pension at age 55 after 10 years of credible service or after 20 years of credible service regardless of age. The size of the retirement allowance depends on the employee's years of credible service, age at retirement, job group and highest salary average for a three-year period. Most retirement

allowance formulas cap benefits at 80% of the employee's "high three" salary average.

There are four types of retirement benefits: regular (superannuation), ordinary disability, accidental disability and termination pensions. The vast majority of retirees receive modest pensions that accurately reflect their work histories. However, opportunities to manipulate benefit formulas do exist. Most employees retire with a superannuation or regular retirement allowance. An accidental disability pension consists of 72% of salary based on day-of-injury pay or 72% of the average regular compensation earned in the 12 months prior to retirement, whichever is greater.

The Massachusetts defined benefit system is structured to award more generous benefits earlier to employees in higher group classifications. The four group classifications include: Group 1: General employees, Group 2: Employees with hazardous duties, Group 3: State Police officers and Group 4: Public safety officers. Group classification determines at what age an employee receives a full benefit. For example, a Group 4 employee can receive full benefits at age 55, while a Group 1 employee receives them at age 65. A unique aspect of the Massachusetts pension system is that its state and local employees do not contribute to Social Security and therefore cannot rely on full Social Security benefits.

## Funding Pension Benefits

The annual pension obligation for a governmental unit consists of two parts: normal costs for benefits currently being earned and the amortization of the retirement system's unfunded liability. The amortization payments generally make up three-fourths (75%) of an employer's annual appropriation. In fiscal 2009, 76% of Boston's contribution to the SBRS was applied to amortizing the unfunded liability while only 24% paid for its share of normal costs. Thus reaching full funding of the unfunded liability will significantly reduce the City's pension obligation.

Both the employees and the governmental unit contribute to the "normal cost" that funds the benefits earned by active employees in a given year. Employees generally contribute approximately 70% to fund the normal cost and the governmental unit pays 30%. Employee contribution rates are determined legislatively by date

of hire regardless of position and cannot be changed during an employee's career. Public employees hired today generally contribute 9% of their salary plus an additional 2% on the portion of their salary in excess of \$30,000. When considering the investment returns earned on their contributions, career employees in non-hazardous positions will likely fund most of their own retirement benefits. Employees in higher groups, like Group 4, contribute at the same rate but receive higher benefits earlier and thus pay a smaller share of their pensions with the governmental unit paying a higher share.

The unfunded liability stems from funding practices prior to 1988 when most Massachusetts retirement systems appropriated only the amount needed to fund pension benefits for a given year. This pay-as-you-go system did not reserve funds for future pension benefits earned by active employees. No funds were invested to generate additional pension resources. Consequently, large actuarial unfunded liabilities were created which led to legislation being passed in 1988 that authorized increased oversight over retirement systems and a loosening of investment restrictions on retirement boards. Retirement systems were allowed to develop a funding schedule that would amortize unfunded liabilities over a 40-year period. Currently, the two state retirement systems are required to reach full funding by 2025 and the 103 local systems by 2030.

A retirement system's investment return assumption directly influences the employer appropriation by setting a benchmark for how much of the total liability will be covered by maturing assets rather than appropriations. Most systems assume an annual rate of 8% or less over the long-term. To manage market volatility, systems employ a process called "asset smoothing" that uses actuarial asset values that recognize gains and losses over time to make their schedules more predictable. The unfunded liability can also be affected by other factors such as early retirement incentives (ERI), demographic factors such as longer life expectancies and cost of living adjustments. Of the 103 local retirement systems, 51 invest mostly on their own through their retirement board's discretion. The remaining 52 systems have placed most or all of their assets with PRIM which administers the PRIT fund.

## 2008 Investment Loss

The volatile 2008 market resulted in retirement systems in Massachusetts posting significant investment losses that will increase their unfunded liability and require substantial increases in employer appropriations starting in fiscal 2011 or fiscal 2012. This situation may require a restructuring of funding schedules and increasing smoothing corridors. The composite investment return in 2008 for all retirement systems and PRIM was -28.6%, compared to the 11.3% increase in 2007. Many retirement systems that were required to perform actuarial valuations as of January 1, 2009, and recognize the 2008 losses face 30% to 50% increases in their funding schedules in fiscal 2011 without scheduled adjustment. Other systems that will complete actuarial valuations as of January 1, 2010 will be able to include investment gains in 2009 which will lessen but not significantly reduce their funding schedule increases in fiscal 2012 and subsequent years. Most systems are scheduled to reach full funding prior to 2030 which provides some flexibility to extend their schedules to manage the spike in appropriation. The Governor has submitted legislation to extend the statutory deadline to 2040 for local retirement systems.

## State-Boston Retirement System

The State-Boston Retirement System (SBRS) is the largest local system in Massachusetts serving close to 36,000 individuals receiving or accruing benefits from the SBRS for employment with the City of Boston and five other governmental units. The State-Boston Retirement Board (SBRB) manages the administration of benefits to members, collects employee and employer contributions for pension benefits and oversees a \$3.9 billion pension fund. The City of Boston's net appropriation for pensions is \$108 million in fiscal 2010.

The SBRS was 67.6% funded with an outstanding liability of \$2.1 billion as of its most recent actuarial valuation on January 1, 2008. The valuation assumed an annual investment return of 8% and that full funding would be achieved by 2023. An unaudited funding update as of January 1, 2009 recognized a 24.2% investment loss in 2008 and revised the funded ratio to 59.3% and increased the unfunded liability to \$2.8 billion, a 31.4% increase from the prior year. The next actuarial valuation will be set as of January 1, 2010 which will

factor in the 19.9% investment gain in 2009 but will still require a significantly larger appropriation increase starting in fiscal 2012.

**Pension Expenditures.** The City of Boston's pension costs, net of the state reimbursement for teacher pensions, grew slightly less than overall city operational spending. Over the five years from fiscal 2004 through fiscal 2009, Boston's net pension spending increased by \$18.8 million or 24.9% to \$94.4 million. The City's total expenditures increased by 26% during this same period. Total city spending excluding both pension and health insurance costs grew by only 23%. Pension expenditures not excluding state reimbursements increased by \$76.3 million or 55.7%.

The SBRS could experience a 30% to 40% spike in its pension appropriation in fiscal 2012 as a consequence of its investment losses in 2008. An increase of 30% would require an increase in the total SBRS appropriation of approximately \$80 million from fiscal 2011 to fiscal 2012. That jump would translate into an increase for the City of Boston of approximately \$70 million based on its proportion of the total SBRS appropriation. The SBRS has the flexibility to lessen the spike to a more manageable but still large increase since its planned schedule for full-funding is 2023, seven years before the current statutory deadline.

**Average Pensions.** The average retirement allowance from the SBRS as of January 1, 2008 was modest but did increase when considering more recent retirements with higher salaries. The average retirement allowance for all superannuation retirees system-wide in 2008 was \$29,769. However, for the 450 individuals who retired with superannuation pensions in 2009, the average retirement allowance was \$49,480 or 66.2% greater than the total system-wide average in 2008. The average 2009 superannuation retiree worked in public service for 29 years and retired at age 61. Of the total number of retirements since 2005, 49.3% retired at the maximum cap of 80% of the average of their highest salaries over three years.

Accidental disability retirements granted in 2009 averaged \$66,905 with most received by public safety officers. Accidental disability retirements represented 15.4% of all retirements in 2009. Compared to the average superannuation retirement allowance in 2009 of \$49,480, the average retirement allowance in the Police Department was \$60,225 and in the Fire Department



was \$69,946, in part, due to the disproportionate number of more costly accidental disability retirements in those departments. Collectively 41.4% of Boston Police and Fire Department retirees are disability retirees with 97.7% of these retirements approved for job-related injuries. A delayed and backlogged process of approving disability retirements at the SBRB caused the system to be more expensive. State law requires that disability applications be processed within 180 days or six months but the average time for the SBRB was 1.5 years before August 2008. A concerted effort by the Board to address this issue has resulted in the SBRB reducing the average process time to 186 days.

**Investments.** Over the long term, the SBRS has a healthy investment performance record with an annualized return of 8.71% from 1985 through the asset loss in 2008 which ranks it 34th among all retirement systems and PRIM. By comparison, the PRIT Fund has an annualized rate of 9.41% since 1985 and has outpaced the SBRS for five and ten-year annualized returns as well. The SBRS is one of only 14 systems without any assets transferred to the PRIT Fund for investment. The Board manages its investments with the assistance of its investment consultant, New England Pension Consultants (NEPC). The Board is very dependent on NEPC since no staff member has investment expertise or is responsible for monitoring or providing analysis on SBRS investments.

**Transition.** For the past two years, the management of the SBRB has undergone a transition with a new Executive Director and two new union Board members. These changes have led to greater attention focused on addressing long-standing operational issues, including reviewing its disability retirement approval process and moving forward on replacement of its data management system which has been operational since 1993. A serious weakness in the operation of the SBRB is that it is woefully behind current technology which limits its administrative efficiency and its access to basic management reports. The staff is far too dependent on paper records and tends to rely on manual calculations for routine transactions. The Genesis Project, the new data management system, is estimated to cost \$12 million and is scheduled to be completed by July 2011.

**Teacher Pension Transfer.** All pensions for teachers in the Commonwealth are funded by the state and

managed by the Massachusetts Teachers' Retirement System except Boston teachers who are in the SBRS. The state reimburses the City for the actual teacher expenditures in the following year. State and Boston officials have agreed that change is needed to allow the state to fund Boston teacher pensions in the same manner as it funds its other retirement obligations and to be responsible for the investment of assets attributable to teacher pensions. For Boston, the teacher transfer will be essentially budget neutral. Teacher benefits would be unaffected by these changes and the SBRS would continue to administer teacher pensions. Legislation has been introduced by the Governor to effect the agreement.

## Other State Pension Reforms

Around the country states are reviewing how to provide sufficient, fair retirement benefits while managing costs. Some states have departed from the traditional defined benefit system to plans with defined contribution components. In Massachusetts in 2009, the Governor and Legislature considered multiple pension reform proposals to alter but not fundamentally change the current defined benefit plan design. Michigan in 1997 required all employees hired after March 2007 to enroll in a defined contribution plan into which it annually contributed 4% of each employee's salary. Defined benefit plans were maintained for public safety officers, judges and school employees. The states of Indiana and Oregon and the federal government have adopted different variations of a hybrid defined benefit and defined contribution plan for new employees. The defined benefit plan remains the most common retirement plan for public employees as indicated by a 2007 report by the U.S. Department of Labor which found that 83% of state and local workers had access to a defined benefit plan.

## Health Insurance

Boston and other municipalities in Massachusetts are facing a crisis in funding and managing employee health insurance costs. These costs have become unsustainable and municipalities find themselves in a fiscal straightjacket, severely restricted in their ability to manage health benefit costs because of outdated state laws and practices and the requirement at the

local level that health benefits be subject to collective bargaining. In fiscal 2010 alone, Boston appropriated \$275.9 million for health care costs. New financial reporting standards being implemented that stipulate that the state and municipalities must acknowledge the full financial liability of retiree health insurance will exacerbate this situation in future years.

A double standard exists in Massachusetts in the authority granted the Commonwealth to manage employee health insurance compared to the cities and towns. The consequence of this situation is that the cost increase of municipal health insurance far exceeds the state's growth. In the five years from fiscal 2001 through fiscal 2006, total municipal health care costs increased by 84%, while during the same period state Group Insurance Commission (GIC) health care costs grew by 47% according to the Legislature's 2009 Special Commission on Municipal Relief.

The primary distinction between the Commonwealth and municipalities in managing health insurance costs is that the state is able to make all decisions on health plan selection and design administratively and set premium share legislatively outside of the collective bargaining process while cities and towns must negotiate all aspects of health insurance with each union. The state's Group Insurance Commission, a quasi-independent state agency, determines health plan selection and design, including deductibles and co-payments. The premium shares paid by the state and employees are set by the Legislature.

A comparison of the premium growth of fairly comparable health maintenance plans offered by the state and City of Boston demonstrates the dramatic cost differences in the two systems. Over the four years from fiscal 2006 to fiscal 2010, the premium cost for the Harvard Pilgrim HMO plan offered by the City increased by 39% while the rates for the Commonwealth's Harvard Pilgrim Independence PPO plan increased by 14%. The annual family premium for the City's plan was \$18,461 while the annual premium for the state plan was \$14,042 a difference of \$4,419. Aggressive management and higher employee co-pays and deductibles by the state contributed to the price differential.

The escalating cost of health insurance is straining municipal budgets throughout the state as it has grown at a much faster rate than general fund spending and

has absorbed a larger share of limited revenue growth over the past five years from fiscal 2004 through fiscal 2009. In a sample of eight communities, the largest disparity is found in New Bedford where health insurance costs have increased by 41% while overall spending for city services actually declined by 5% during this period.

During the same five years, Boston's actual spending for health insurance increased by 54.4% while all operational spending other than pensions and health insurance increased by 23%. Boston's cost of health insurance as a percent of total operational spending has increased from 9.4% in fiscal 2004 to 11.5% in fiscal 2009 and grew to 12.1% in fiscal 2010. Another measure to describe the impact of the growth of health insurance is to compare it to the City's 2.5% property tax levy growth. In four of the five years compared, the growth in health insurance costs absorbed no less than 67% of the 2.5% levy growth and as much as 73% in fiscal 2004. The correlation between the cost of the City's share of a family health insurance premium and the average property tax bill of a homeowner is revealing. Based on the fiscal 2010 average single-family tax bill of \$2,935, it takes approximately five average taxpayers to pay the City's share of the family HMO health insurance premium of one city employee and 9 average taxpayers to pay the family Master Medical Indemnity premium of one city employee.

Retiree health insurance costs will represent a larger share of total health insurance costs over time as more individuals retire, life expectancy increases and steps are taken to address the retiree health insurance liability (OPEB). Retiree health insurance costs represent 37% of Boston's total health care expense in fiscal 2010. Municipalities have the ability to require all eligible retirees to enroll in Medicare to shift some costs to the federal government but more than half the cities and towns in Massachusetts have not adopted that option.

Increasing health insurance costs and limited revenue growth have created an environment in which the City of Boston, for the first time in over two decades, negotiated an increase in the employees' share of their health maintenance premiums by 5% to 15%. Additionally, the City introduced a new lower cost but comparable Indemnity plan and succeeded in negotiating lower premium increases for HMO plans (8%) and

Indemnity plans (2.4%). Savings from these steps are estimated to exceed \$9.6 million in fiscal 2010.

Of the three drivers of employee spending featured in this report, pensions, health insurance and OPEB, health insurance is the only expense that is open-ended with no long-term structure in place to manage costs. The effect of the annual growth of health insurance spending on other local services requires a serious solution from the Governor and Legislature.

## Other Post Employment Benefits (OPEB)

The Commonwealth and cities and towns are now required to report in the footnotes to their financial statements their full liability and unfunded liability for other post employment benefits (OPEB) than pensions, such as health and life insurance for retired public employees and their spouses. These standards are set by the Governmental Accounting Standards Board (GASB) because even though these benefits are not received until after active employment has ended, they constitute compensation to attract and retain qualified employees and the expenses should be associated with the years of active service.

Because the state and most municipalities have funded only the annual pay-as-you-go costs for retiree health insurance and reserved no funds for investment for this purpose, actuarial reports show that the OPEB unfunded liability is now far greater than a governmental unit's pension liability. For example, Boston's unfunded pension liability as of January 1, 2008 was \$2.1 billion but its OPEB liability, assuming full funding, was \$3.7 billion in 2009.

While the GASB standards require state and local governments to identify the actuarial accrued OPEB liability, the standard does not have a funding requirement. Even so, the recognition of a large unfunded liability will create pressure to establish a funding solution. Indeed, if little or no action were taken to begin funding the liability in a reasonable time, the bond rating agencies would take note.

The Commonwealth and the few municipalities that have started to appropriate funds for their OPEB liability generally are raising only a small share of what would be required annually if a formal funding schedule were adopted. The Commonwealth's

actuarial accrued OPEB liability as of January 1, 2008 on a pay-as-you-go (partially funded) basis was \$15.6 billion and on a fully funded basis was \$11.6 billion. The difference is solely attributable to the standards requirement that a lower investment return rate must be used without full funding. If the state adopted a formal funding schedule, its annual required contribution (ARC) in fiscal 2009 based on a fully funded basis would have been \$981.4 million. That year the state only funded the pay-as-you-go expense of \$352 million, which is \$629 million less than the ARC.

The City of Boston's OPEB unfunded liability was between \$5.8 billion (partially funded) and \$3.7 billion (fully funded) based on an independent actuarial valuation as of June 30, 2009. The City's ARC would be between \$354.4 million (partially funded) and \$261.2 million (fully funded). Boston is an example of the challenge facing government in addressing the OPEB liability. In fiscal 2010, the retiree health insurance appropriation is approximately \$101.3 million and the City appropriated \$20 million for the OPEB Trust for a total of \$121.3 million. However, that amount is between \$233.1 million (partially funded) and \$139.9 million (fully funded) less than the ARC.

The growing OPEB liability cannot be ignored and should be an ongoing factor that influences state and local decisions concerning other employee matters involving pensions, health benefits and collective bargaining contracts.

## Recommendations

Massachusetts state and local governments are required to manage more effectively in a changing fiscal environment in which spending for employees is absorbing a growing share of more limited revenue growth. The pension system and health insurance management can both be improved to operate in a more efficient manner. Because Massachusetts operates with a single defined benefit pension system, the recommendations made apply to each of the 105 public systems. The same structure does not apply to health insurance which causes the recommendations to focus more on enabling municipalities to achieve similar management authority as the state. A separate set of recommendations apply to the operations of the State-Boston Retirement System.

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## Pensions

Legislative action to address the most visible pension abuses and to close loopholes has been undertaken in the past year. More comprehensive change in the public pension system should be implemented to improve management and funding, limit manipulation and create a more equitable system for employees. At the same time, the current spending trends are reason for the Commonwealth to evaluate whether a different pension structure for new employees is warranted.

At a fundamental level, Massachusetts should initiate a study of other retirement models to determine if an alternative structure would address the inequities and cost concerns of the current pension plan. Some states have begun to place more emphasis on defined contribution plans to gain more predictability in cost and to control liability growth. Indiana, Oregon and the federal government, for example, enroll new employees in hybrid plans that provide both a small defined benefit pension and a defined contribution plan.

There are also several specific steps we suggest the Commonwealth undertake now to strengthen the current state plan:

1. Set employee and employer contributions as a share of normal cost for the employer's group. Rather than set employee contribution rates by date of hire, link the contribution to the benefit the employee is expected to receive to make it more equitable.
2. Widen the salary averaging period from three to five years to increase the period for averaging and limit opportunities for manipulation.
3. Cap the maximum pension at \$85,000 to provide sufficient benefits and allow highly paid employees to contribute to individual retirement accounts for additional benefits.
4. Prorate benefits by time spent in each employee group to more appropriately represent the employee's work history.
5. Update and standardize the group classification system to determine which position should be included in each group to ensure that like positions are receiving similar benefits.
6. Strengthen employer scrutiny of disability retirement applications. Because of the high cost of disability

retirements, there should be more intense scrutiny of all applications and increased accountability at the state and local level.

7. Require more retirement systems to invest in the PRIT fund to consolidate investment functions and achieve long-term operational benefits.

## State-Boston Retirement System (SBRS)

8. The SBRS should limit any extension of years to reach full funding. The 2008 asset loss will put added pressure on pension costs over the next few years but reaching full funding of the pension liability around 2023 is an important component of the City's fiscal strategy.

9. The City of Boston should not adopt a new early retirement incentive. Boston should not do anything to increase its pension liability and its liability increased by \$61.8 million when the 2002 ERI was adopted.

10. The General Court should approve the Boston teacher pension transfer bill submitted by the Governor. A separate funding schedule would be paid by the state but not cause any changes to benefits to Boston teachers who would continue to be served by the SBRS.

11. The State Boston Retirement Board should explore opportunities to invest in the state PRIT fund for certain investments and take advantage of its investment expertise and large scale.

## Health Insurance

Local health insurance costs are absorbing a growing share of municipal budgets and have been moving in a direction that is unsustainable. The double standard that exists between state and municipal management of health insurance is indefensible and should be remedied.

1. Cities and towns should be authorized to implement the same administrative plan design procedures available to the GIC outside of collective bargaining. The authority should be set to enable municipalities to reach the premium levels established by the GIC but not exceed them.



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2. Massachusetts cities and towns should be allowed to join the GIC without maneuvering additional hurdles. The current coalition bargaining requirement should be eliminated.

3. The Legislature should amend existing state law (Chapter 32B) to require that all eligible local retirees enroll in Medicare at 65. This change would shift some of the health insurance costs to the federal government.

## OPEB

The cost of other post employment benefits for retirees will eventually be treated as pension expenses are now with (1) an annual payment for normal costs currently being earned and (2) the amortization of the unfunded liability over several years. For the short-term, the City should take the following steps:

1. The City of Boston should develop a plan to eventually fund the OPEB liability according to a formalized funding schedule. To achieve this objective, the City should increase its appropriation to the OPEB Trust Fund each year.
2. The Mayor and City Council should act to transfer the \$45 million in the OPEB Stabilization Fund to the OPEB Trust Fund so that its investment potential can be recognized to reduce the projected OPEB liability calculation.
3. A supplemental appropriation of \$5 million should be approved by the Mayor and City Council to increase the total fiscal 2010 appropriation to the OPEB Trust Fund to \$25 million, the same level as appropriated in fiscal 2009.

Implementation of these and other recommendations in the full report will enable Boston and other municipalities to improve the management and better control the cost of its employee benefits structure. Without substantive improvement in this area, the current trend of escalating benefit costs will continue to divert resources away from basic municipal services. Taking action on some of these recommendations will be hard and strong leadership will be required because the consequences of only incremental change will fail to meet the challenges ahead.





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# Introduction

The Commonwealth and Massachusetts cities and towns are facing a long-term budget challenge of employee related spending absorbing a larger share of limited revenue growth. Escalating employee pensions and health insurance costs are less flexible and are gradually reducing resources for other basic services. At the same time, outdated laws and practices have restricted the ability of cities and towns to respond to these management challenges in a timely and sustainable way. The City of Boston serves as a typical example. In a period of six years from fiscal 2004 to fiscal 2010 when inflation increased by 28%, the City's employee pension costs increased by 43% and health insurance increased by 61%. All other operational spending increased by only 20%. This trend is unsustainable which is why a more thorough understanding of the employee benefits of pensions and health insurance is important now.

This report provides a detailed explanation of the Massachusetts retirement system which can serve as a primer for understanding the intricate rules and

regulations that apply equally to the state's 105 active retirement systems at the state and local level. An assessment of the State-Boston Retirement System and its operations is also included. A distinctly less uniform structure exists between the state and municipalities in the provision and management of employee health insurance which is explored in this report. As one of the fastest growing expense items for all municipalities, a cost comparison between the state and Boston demonstrates the imperative need for reform. An emerging funding problem facing the Commonwealth and cities and towns is the growing unfunded liability for other post employment benefits (OPEB) which primarily involves retiree health insurance. The scope of the funding challenge and how it is being addressed by the state and Boston are described in the report.

The three employee benefit sections of this report are followed by suggested recommendations for improved management, greater efficiency, equity and fiscal stability.

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# 1.

## Organizational Structure

All employees working in state or local government in Massachusetts receive retirement benefits under one defined benefit pension plan administered by 105 retirement systems.<sup>1</sup> This network of retirement systems include two state-funded systems, the State Employees' Retirement System for state employees and the Massachusetts Teachers' Retirement System for most teachers in the Commonwealth, and 103 local systems serving municipalities, counties and public authorities. Each system manages the benefits due to retirees and beneficiaries as well as those benefits being accrued by active employees participating in the system. The employing governmental units provide systems with annual appropriations to cover their share of system costs. The pension plan and all 105 retirement systems are governed by Chapter 32 of the Massachusetts General Laws.

While all systems administer one consistent defined benefit plan, they vary greatly by the size and composition of their memberships. Some systems serve a few individuals from one employer, like the Greater Lawrence Sanitary District Contributory Retirement System serving less than 70 active and retired water treatment workers. Other systems provide benefits to multiple employers, like the Middlesex County Retirement System serving 71 municipalities and authorities. The state's retirement systems are responsible for the benefits of thousands of workers, with the Massachusetts Teachers' Retirement System, the largest system in the state, serving over 140,000 active and retired teachers and the State Employees' Retirement System serving over 138,000 active and retired state workers. The State-Boston Retirement System (SBRS) is the largest local system and serves close to 36,000 active employees, retirees and beneficiaries.

The public pension plan and all 105 retirement systems are overseen by the Public Employee Retirement Administration Commission (PERAC), which is

charged with enforcing Chapter 32 and monitoring the funding, investment and administrative practices of retirement systems. Some of the key duties performed by PERAC include:

- Reviewing actuarial valuations that determine employer appropriation levels and the current funding status of retirement systems. These valuations must be performed at least every three years.
- Annually certifying the appropriations that systems must collect from employers in the upcoming fiscal year.
- Approving all benefit calculations, though systems can receive waivers of this requirement if their automated calculation systems are approved by PERAC.
- Performing a full operational audit of each system at least once every three years.
- Collecting Annual Statements from each system detailing changes in its investment performance and financial condition over the past year.
- Coordinating the review of disability retirement benefit applications, including assembling regional medical panels to perform physical examinations.
- Reviewing the earnings of disability retirees to verify post-retirement earnings do not exceed earning limits.

The Pension Reserves Investment Management (PRIM) Board is the state's investment manager and has general supervision of the Pension Reserves Investment Trust (PRIT) Fund into which is pooled the assets of the two state retirement systems and the assets transferred by any local retirement board. PRIM is not subject to PERAC's investment regulations, and local systems can choose to invest all or a portion of their assets in the Pension Reserves Investment Trust (PRIT) Fund that PRIM administers.

Each system is governed by a retirement board that manages the operations and in some instances, the investment of system assets. For local systems, retirement boards are made up of five members:

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1. Prior to November 1, 2009, the Massachusetts Turnpike Authority had its own retirement system, increasing the total number of systems to 106. On November 1, 2009, the system was absorbed into the State Employees' Retirement System as a result of transportation reform legislation. Research referring to information collected prior to November 1, 2009 will be based on data from 106 retirement systems.

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- Two individuals elected by the system's active and retired membership who are either active or retired members of the system and serve three-year terms.
  - One individual appointed by the appropriate executive officer (Mayor, Board of Selectmen or County Commissioners).
  - The city auditor, town accountant or county treasurer, who serves ex-officio.
  - One individual elected by the other four board members or, in county systems, the County Retirement Board Advisory Council. If the retirement board members cannot make a decision, the executive officer will appoint the fifth member. This individual serves a three-year term.

Once assembled, city and town retirement boards elect a chair, while the county board structure requires the ex-officio member to be the chair. The chair is responsible for formulating the agenda and managing the board's monthly meetings. Appendix A details the governing structure of different Massachusetts retirement authorities.

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## 2. Funding Pension Benefits

The cost of retirement benefits in Massachusetts is shared by employees and employers, but employers are ultimately financially responsible for guaranteeing benefits and ensuring the financial stability of retirement systems. This commitment requires annual appropriations to retirement systems that constitute a substantial portion of spending. In fiscal 2010, the state will spend \$1.4 billion or 4.5% of its \$30.5 billion budget on its pension obligations.<sup>2</sup> The City of Boston's total appropriation to the State-Boston Retirement System is \$234.8 million in fiscal 2010, representing almost 10% of its \$2.4 billion General Fund budget. Boston is the only municipality responsible for funding teacher pensions in its appropriation, with the state reimbursing the City for actual expenses in the following year. The City's net pension cost in fiscal 2010 after the state reimbursement is expected to be \$108 million, which represents 4.5% of the total operating budget. While pension costs are closely monitored, the costs to state and local governments are sensitive to market volatility, legislative changes and demographic pressures that can create increases to this nondiscretionary spending item.

### Plan Overview

The high cost of the Massachusetts pension plan comes from the promise of lifetime benefits that defined benefit plans provide. A defined benefit plan guarantees a specific annual retirement allowance will be paid for the rest of a retiree's life. In these traditional pension plans, which today are most prevalent in the public sector, the employer is obligated to maintain the allowance regardless of economic circumstances or investment performance on retirement assets. According to the National Compensation Survey conducted by the U.S. Department of Labor, Bureau of Labor Statistics, 79% of state and local government workers participated in a defined benefit plan, compared to 20% of private sector workers. Defined benefit plans are generally structured to benefit long-serving career

employees, with pension calculations taking into account such factors as years of service, age and final average salary.

In contrast, most private sector employers offer a defined contribution plan where the employer agrees to contribute toward an employee's retirement but does not guarantee a specific benefit level. Generally, the employer, employee or both contribute a certain percentage of the employee's salary into an individual retirement account, which the employee is responsible for managing. In these plans, employees bear the investment and economic risk of developing and maintaining sufficient retirement assets. Because a defined contribution plan is managed by the employee and is the common plan design used in the private sector, employees in defined contribution plans can often transport their retirement assets between jobs and employers.

In the Massachusetts defined benefit plan, state and local employees are vested or eligible to receive a lifetime retirement allowance at age 55 after 10 years of creditable service or after 20 years of creditable service regardless of age. The size of the retirement allowance depends on an employee's years of creditable service, age at retirement, job group and highest salary average for a three-year period, with some benefit formulas recognizing different variables. Most retirement allowance formulas cap benefits at 80% of the employee's "high three" salary average.

Massachusetts's defined benefit plan is structured to award more generous benefits earlier to employees in higher group classifications. The four group classifications include:

- Group 1: General employees
- Group 2: Employees with hazardous duties
- Group 3: State Police officers
- Group 4: Public safety officers

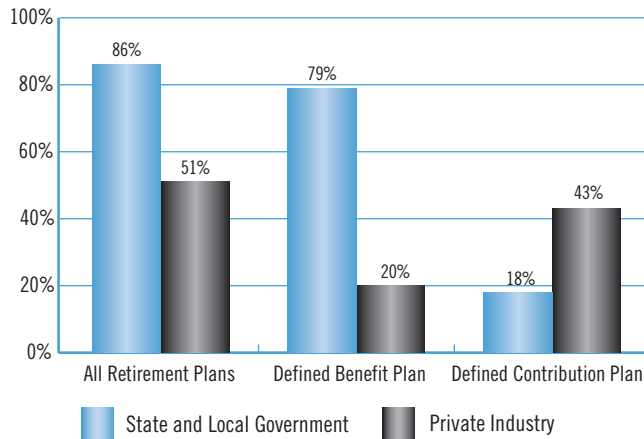
Group classification determines at what age an employee receives a full benefit multiplier in their pension calculation. For example, a Group 4 employee

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2. State spending figures are based on calculations from the Massachusetts Taxpayers Foundation as of March 18, 2010, which includes select off-budget items like pensions and health care.

FIGURE 2.1

### Participation in Retirement Plans by Plan and Worker Type, National Compensation Survey, 2007\*



\* Data for state and local workers is as of September 2007 and data on private industry workers is as of March 2007.

can receive full benefits at age 55, while a Group 1 employee receives them at age 65. Because employees in Group 4, 3 and 2 receive larger benefits at a younger age, benefits for these individuals generally cost more than benefits for employees in Group 1.

A unique aspect of the Massachusetts pension plan is that its state and local employees do not contribute to Social Security and therefore cannot rely on full Social Security benefits. This distinguishes the Massachusetts pension plan different from private sector plans and most other state pension plans. Like other states that had pre-existing retirement plans when Social Security was created, Massachusetts was not required to join the program, though it could have later joined voluntarily. Massachusetts public employees can receive Social Security benefits based on other employment or through Social Security survivor benefits, but these benefits are reduced for employment where Social Security withholdings were not collected. In October 2009, the state Pension Reform Commission reiterated that Social Security would be too costly to both employees and employers and offer too few benefit enhancements for Massachusetts to consider joining.

In addition to the pension plan, public employees in Massachusetts can participate in voluntary defined contribution plans, but without an employer match. Government entities in Massachusetts participate in both 457 deferred compensation plans for state and local government employees and 403(b) plans

for school employees. Over 93,000 active and retired employees from 270 municipalities and the state participate in the state-run 457 SMART Plan, with other municipalities and authorities offering independent 457 plans. Most school districts have also set up independent 403(b) plans. However, the 457 and 403(b) plans for Massachusetts public employees are designed to provide a supplement to the defined benefit plan.

## Funding History

The present defined benefit plan administered by Massachusetts retirement systems is funded through a combination of employee contributions, employer contributions and investment returns. The contributory retirement system was established in 1946 (Ch. 658, Acts of 1945), prior to which employees were not required to contribute toward their pensions. A few individuals who retired under the non-contributory system continue to collect pensions. For example, the City of Boston is providing these benefits to 161 retirees at a cost of \$4.1 million in fiscal 2010.

Pension benefits are currently funded through two basic payments to retirement systems. A normal cost payment is shared between employees and employers to fund the benefits earned by active employees in a given year. The employer also funds an amortization payment to pay down large unfunded liabilities. This amortization payment generally makes up three-fourths of the employer's annual pension costs.

Unfunded liabilities developed before pension reform in the 1980s, when employers would appropriate only the amount needed to fund the benefits that would be paid out in the current year to retirees and made no appropriation for the benefits being earned by active employees. Under this funding methodology, known as pay-as-you-go, the responsibility of funding an employee's retirement benefit lay with future generations of taxpayers rather than the current taxpayers who were utilizing an employee's services when he or she was working. The result was large gaps or unfunded liabilities between a retirement system's total benefit obligation to employees and retirees and its available assets.

To realign funding responsibility and ensure systems were financially sustainable, the Commonwealth

reformed pension funding practices in the 1980s by requiring employers to pay for benefits as they were earned and to amortize their unfunded liabilities over a 40-year period. Systems were also given more investment flexibility, elevating the role of investment returns in funding benefits.

Today, local systems have until 2030 and state systems until 2025 to fully amortize their unfunded liabilities and be 100% funded, though some systems have planned to be fully funded before then. State and local systems have made significant progress toward paying down their unfunded liabilities. With 20 years left in the statutory amortization period, most systems report being around 60% to 70% funded, with two systems reported fully funded. These funded ratios, which compare total assets over total liabilities, will likely decrease as more systems recognize unfunded liability increases due to 2008 investments losses in new actuarial valuations. See **Table 2.1** for the current funding status and unfunded liabilities of select retirement systems in Massachusetts.

Benefits are now funded through employee and employer contributions made regularly throughout an employee's career. These contributions, or normal cost payments, plus investment returns should fund the benefit when the employee retires and keep further unfunded liabilities from developing. The retiree's allowance is made up of an annuity portion funded by the employee's salary deductions and a pension portion funded by employer contributions and investment returns.

## Employee Contributions

Full-time and certain part-time public employees are required to contribute a set percentage of their salary toward their future retirement benefits. These employee contributions are considered the employee's share of the normal cost payment to fund the benefit earned that year by the employee. Employee contribution rates are determined legislatively by date of hire regardless of position, and cannot be changed during an employee's career. Public employees hired today generally contribute 9% of their total salary and an additional 2% on the portion of their salary in excess of \$30,000. **Table 2.2** shows the history of contribution rates by date of hire.

TABLE 2.1  
**Funding Progress of Select Systems (In Millions)**

System	Date of Actuarial Valuation	Unfunded Liability	Funded Ratio [1]
<b>State Systems</b>			
State Teachers	1/1/09	\$13,616.1	58.2%
State Employees	1/1/10	5,843.4	76.5%
<b>Boston</b>			
Full Valuation	1/1/08	\$2,138.1	67.6%
Funding Update [2]	1/1/09	2,810.2	59.3%
<b>Local Systems</b>			
Springfield	1/1/08	402.5	42.4%
New Bedford	1/1/09	319.7	38.1%
Worcester	1/1/09	297.7	68.0%
Lowell	1/1/07	163.2	58.8%
Somerville	1/1/08	96.6	65.5%
Cambridge	1/1/08	67.0	92.0%
Brockton	1/1/08	44.9	89.7%

[1] The ratio the total actuarial accrued liability to the actuarial value of assets. Note that funded ratios will be less for systems that conducted actuarial valuations as of 1/1/2009 that recognize 2008 asset losses.

[2] The SBRS conducts full actuarial valuations every other year, but funding progress updates are conducted on non-valuation years. These updates are conducted by an actuary but unlike full valuations are unaudited and do not dictate appropriation levels.

Special legislative action has provided unique benefits to teachers, State Police and judges in exchange for higher contribution rates.

- Teachers hired after July 1, 2001 contribute at a straight 11% of salary but are eligible for unique increases to their pensions after 30 years of service when 20 of those years are spent teaching in Massachusetts.
- State Police contribute 12% on their whole salary and 2% on amounts over \$30,000 and, in exchange, are eligible to receive a pension equal to 75% of their current salary after 25 years of service.
- Judges contribute 8% on the first \$30,000 of their salary, 9% on amounts between \$30,000 and \$45,000, and 10% on amounts over \$45,000 and in exchange have the opportunity to retire with an allowance equal to three-fourths of their salary at age 70 after 10 years of service.



TABLE 2.2  
Contribution Rates for Employees

Date of Hire	Contribution Rate
Prior to 1/1/1946	0%
1/1/1946 to 12/31/1974	5%
1/1/1975 to 12/31/1978	7%
1/1/1979 to 12/31/1983	7% plus 2%*
1/1/1984 to 6/30/1996	8% plus 2%*
7/1/1996 to Present	9% plus 2%*
Judges hired on or after 1/1/1988	Varies <sup>†</sup>
Teachers hired on or after 7/1/2001**	11%
State Police hired on or after 7/1/1996	12% plus 2%*

\*Added 2% contribution applied to portion of salary in excess of \$30,000.

<sup>†</sup>All judges except those that serve on the Supreme Judicial Court contribute 8% on the first \$30,000, 9% on amounts between \$30,000 and \$45,000, and 10% on amounts over \$45,000. Judges on the Supreme Judicial Court do not contribute toward their pension.

\*\*Also applies to teachers hired prior to 7/1/2001 who elected to join the Retirement Plus program.

See page 39 for more information on enhanced benefits for long-term service.

Overall, employee contributions generally pay around 70% of the annual normal cost payment, with the employer funding the remaining 30%. Appendix B illustrates the overall distribution of normal cost between employees and employers in select Massachusetts retirement systems. However, some employees pay a greater share of normal cost than others. When considering the investment returns earned on their contributions, career employees in non-hazardous positions contributing at the 9% plus 2% rate will likely fund most if not all of their retirement benefit. Employees contributing at the same rate in positions that generally receive higher benefits, like public safety officers in Group 4, fund less of their benefit and therefore require higher employer contributions.

Employee contributions are recorded in an Annuity Savings Fund (ASF) account and invested by the retirement system, with the balance of the account at retirement determining the annuity portion of the allowance. However, the ASF account does not record

investment returns earned on employee contributions. Instead, the ASF account earns a modest annual interest rate, which currently stands at 0.3%. Employees who voluntarily leave public service before retiring are eligible for a refund of their accumulated deductions and, depending on years of service, the interest on their ASF accounts. All investment returns earned on the employee's contributions and employer contributions remain in the pension fund to help fund the system's benefit obligations.

The Massachusetts defined benefit plan is designed to provide benefits to long-serving employees and consequently it penalizes employees with more limited careers in public service. Employees cannot transport their assets to another plan and can only receive refunds that do not include investment returns or an employer contribution. In addition, departing employees have lost Social Security credits while working for a non-participating employer, which will reduce their future Social Security benefits.

## Employer Contributions

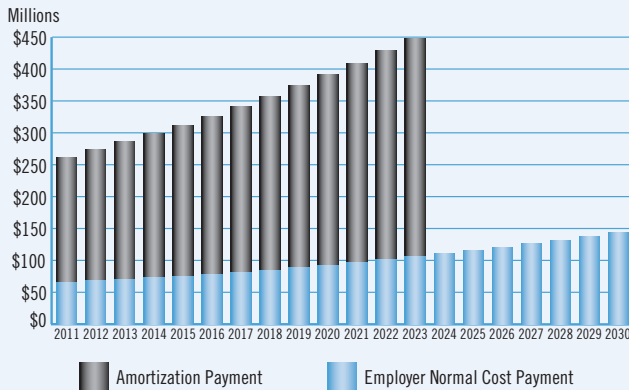
Like their employees, employers contribute toward the benefits earned by their active employees each year. However, the employer is also financially responsible for amortizing its retirement system's unfunded liability. The high cost of paying down these unfunded liabilities drives employer costs and makes up the majority of an employer's pension appropriation.

Under PERAC supervision, each retirement system contracts regularly for an actuarial valuation to schedule employer costs. The resulting funding schedules detail the annual contribution needed to meet funding targets for normal cost and amortization now and in future years. The annual contribution is divided among the governmental units that participate in the system.

**Employer Normal Cost.** In each actuarial valuation, the actuary determines how much needs to be contributed each year to fund future benefits currently being earned by employees. This normal cost payment is expressed as a percent of the compensation paid out to employees participating in the retirement system (active membership payroll). Employees contribute to normal cost through their fixed salary deductions which remain constant throughout an employee's

## Understanding Employer Pension Costs

FIGURE 2.2  
Funding Schedule Components

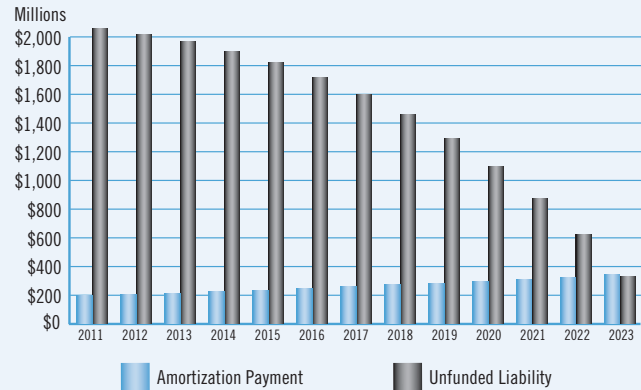


**The Funding Schedule.** During actuarial valuations, a funding schedule is developed that determines how much employers need to contribute to the system in the coming years meet funding goals. This contribution has two parts:

- A normal cost payment to pay for benefits earned that year by active employees, and;
- An amortization payment to pay down the system's unfunded liability.

In time, amortization payments bolster system assets and pay down the unfunded liability. When the unfunded liability is fully amortized, the recurring normal cost payment will be sufficient to cover total system costs.

FIGURE 2.3  
Amortizing the Unfunded Liability



**The Unfunded Liability.** The largest pension cost for most employers is amortizing their retirement system's unfunded liability, or the gap between the system's total benefit obligation and its assets. For example, the amortization payment to the State-Boston Retirement System has historically been three times larger than the employer normal cost payment.

Most systems structure their amortization payments to increase by a set percentage each year, illustrated in the graph to the left.

As the amortization period shortens and the system approaches its funding deadline, growth in the unfunded liability from asset loss or increasing costs has a more direct impact on the employer payment. Systems can develop unfunded liabilities even after reaching full funding if their investments underperform or costs increase.

career. The employer's normal cost payment funds the gap between employee contributions and the total normal cost calculated by the actuary. Because employee rates are static, the employer absorbs any increases in benefit costs. Employer normal cost also generally includes an amount for the system's administrative expenses.

A sample of large systems in Massachusetts shows that employers generally pay around 30% of the total normal cost. For example, for the State Employees' Retirement System, the normal cost in the January 1,

2010 valuation was \$577.5 million, or 12.3% of active membership payroll. Employee contributions were expected to total \$400.1 million, a contribution that covers 69.3% of the total normal cost. Employers would then contribute the remaining \$177.4 million or 30.7% of the total normal cost. See **Appendix B** for more detail.

On average, employees pay about 70% of the cost for future benefits, but some employees fund a greater percentage of their benefit than others. Benefit costs increase for employees in higher group classifications

who are eligible to receive more generous benefits earlier. However, contributions are based on date of hire and are not linked to the expected value of an employee's future benefit. The result is that for more expensive employees, like public safety officers in Group 4, the employer funds a greater share of the future benefit costs. **Table 2.3** shows that while the state funded on average 23.9% of a general administrative employee's future benefit in 2009, it funded 51.9% of a public safety employee's future benefit.

**Amortization.** While regular normal cost payments over an employee's career should be sufficient to cover benefit costs, almost all Massachusetts systems have substantial unfunded liabilities that require amortization payments from employers. For example, as of January 1, 2008, the State-Boston Retirement System had a \$2.1 billion unfunded liability with a board-approved funding deadline of 2023. Unfunded liabilities result when the system's assets are not sufficient to cover its actuarial accrued liability, or the projected cost of future benefits earned to date (present value of future benefits). Poor investment performance or an unexpected increase in benefit costs can create unfunded liabilities year-to-year, but most unfunded liabilities are tied to pay-as-you-go funding practices in place before funding reform in the 1980s.

During each actuarial valuation, the actuary determines what a system's current unfunded liability is and designs an amortization schedule to pay it down by a certain date. Currently, the two state systems are required to reach full funding by 2025 and the local systems by 2030. These amortization payments are more costly than normal cost payments, and generally make up three-fourths of an employer's annual appropriation. In Boston, for example, 76% of the contribution to the State-Boston Retirement Board's fiscal 2009 was applied to amortizing the unfunded liability, while only 24% paid the employer's share of normal cost.

An alternative to amortizing the full unfunded liability over time is to issue a Pension Obligation Bond (POB) that is applied against the unfunded liability, drastically reducing or eliminating the unfunded liability. The employer issuing the POB then pays debt service on the bond in addition to any amortization still needed on the unfunded liability. POBs can bring both positive and negative results. If the investment earnings on the assets are consistently higher

TABLE 2.3  
**State Normal Cost (NC)  
by Employee Group\*\***  
as a Percent of Active Membership Payroll

Employee Type	Total NC	Contributions to NC		Share of Cost State
		Employee	State	
Group 1- General Employees	10.9%	8.4%	2.6%	23.9%
Group 1- Teachers	11.6%	9.7%	2.0%	16.9%
Group 2- Hazardous Duties	12.3%	8.1%	4.2%	34.1%
Group 3- State Police	19.6%	9.1%	10.5%	53.6%
Group 4- Public Safety	18.9%	9.0%	9.8%	51.9%
All Groups	12.3%	8.3%	4.0%	32.5%

\*\*All data as of 1/1/2009, with the exception of Teachers which are as of 1/1/2006.

than the interest on the POB, the employer will save money. However, if the reverse occurs, the amortization payments on any new or existing unfunded liability increase and the employer now has two liabilities to pay down instead of one. Several communities in Massachusetts including Worcester and Brockton have issued POBs.

While most of today's unfunded liabilities are from pay-as-you-go practices, the unfunded liability is constantly changing depending on current asset values and benefit costs. Even a fully funded system can develop an unfunded liability if investments underperform or if the value of future benefits increases unexpectedly. The 2008 asset loss experienced universally across pension funds will add to unfunded liabilities and require increased amortization payments to meet current funding schedules. However, amortization schedules aim to achieve positive investment returns over the long-term to pay down unfunded liabilities and assume that increases and decreases may occur year-to-year.

**Cost-of-Living Adjustments.** Employers also now fund Cost of Living Adjustments (COLAs) for retirees to help mitigate the effects of inflation on retirement benefits. Under Chapter 32, COLAs are calculated by applying the Consumer Price Index (CPI) up to 3% to

the first \$12,000 of the retiree's annual allowance for a maximum increase of \$360 per year. The Commonwealth funded local COLAs in the name of property tax relief from 1981 until 1997, when it shifted funding responsibility back to local retirement systems. COLAs are not automatic; a system's retirement board must vote annually to grant a COLA and at what amount. Actuaries assume that all retirees will be granted the maximum COLA every year when determining employer costs. Over time, COLAs accumulate and increase benefits from their original amount. However, the current COLA does not always provide adequate inflation protection to older retirees with smaller pensions that face increasing costs on fixed incomes.

## Designing the Funding Schedule

The amount an employer contributes to its retirement system in a given year depends on the system's funding schedule. The schedule, prepared by an actuary and approved by the system's retirement board and PERAC, determines the total contribution needed from employers to meet normal cost and to amortize its unfunded liability by the system's funding deadline. A system's funding schedule is updated in each actuarial valuation to adjust for actuarial gains or losses in system costs that have occurred since the prior valuation.

Systems are required to conduct actuarial valuations to update their funding schedules at least every three years, with most systems conducting valuations more frequently. PERAC reviews each system's funding schedule in the fall and certifies the total contribution that needs to be collected from employers in the upcoming fiscal year and what is expected to be needed in the next two years. The contribution is then divided among the employers participating in the system.

How the funding schedule is structured has a direct financial impact on the employer's appropriation. The decisions made regarding the following variables will have a direct influence on the schedule and the resulting employer appropriation.

**Funding Deadline.** One critical variable is the system's funding deadline, which determines how much time the system has to fully amortize its unfunded liability. When systems began addressing their unfunded liabilities in the late 1980s, the state required systems to fully amortize their unfunded liabilities within 40

years. The statutory deadline was recently extended from 2028 to 2030 for local systems under Chapter 21 of the Acts of 2009. The two state systems have had their statutory deadlines changed through the state budget process multiple times and the current deadline is 2025. Many systems are currently scheduled to be funded before the statutory deadline because of investment returns that have exceeded assumptions, though many of these schedules have not been updated to account for 2008 investment losses.

When a system's unfunded liability increases, the employer's amortization payments must increase to balance out the growth and keep the system on track to meet its current funding deadline. As the amortization period shortens, it is more difficult to avoid direct and significant increases to employer appropriations when the unfunded liability increases.

**Amortization Structure.** With amortization payments making up the bulk of an employer's pension appropriation, the structure of these payments is a key component of employer cost. Systems have two options when planning how to amortize their unfunded liabilities. They can use a level-dollar approach, where the amortization payment is the same every year like the principal of a mortgage, or they can use the increasing percentage approach, where the payment increases by a set percentage every year. The increasing percentage approach is used by most systems, and guarantees the employer's appropriation will increase year-to-year. Under Chapter 32, systems utilizing this approach cannot schedule their amortization payments to increase by more than 4.5% a year.

**Return Assumption.** A system's investment return assumption directly influences the employer appropriation by setting a benchmark for how much of the total liability will be covered by maturing assets rather than appropriations into the system. PERAC prefers that retirement systems assume an annual rate of return of 8% or less, though some systems assume rates as high as 8.5%. Systems that do not meet their return assumption will require higher employer appropriations to compensate, while systems that consistently meet or exceed their target will stay on track to reach full funding on or before the funding schedule's deadline.

**Asset Smoothing.** Investment returns have a key role in funding retirement benefits, but because market returns are volatile, most retirement systems use actuarial



asset values that recognize investment gains and losses over time to make their schedules more predictable. PERAC allows systems to smooth investment returns to lessen the immediate impact of market activity on employer appropriations. PERAC generally prefers smoothed, actuarial values that fall within 90% to 110% of the market value in a given year, but some systems use wider smoothing corridors. For example, the State-Boston Retirement System allows actuarial values within 80% to 120% of market value. Smoothing also allows the opportunity for investment losses to be averaged in with positive returns earned in future years, allowing for a more even appropriation schedule.

For example, in the State Employees' Retirement System's actuarial valuation as of January 1, 2009, the actuary determined that the system lost \$7.1 billion or 31.5% of market value based on actual cash flow during 2008 for a final market value of \$15.4 billion. However, the system employs a smoothing methodology where the actuarial value of the assets are set between 90% to 110% of the market value. The actuary therefore was able to set the actuarial value to \$17 billion, 110% of the market value, and adjust the schedule for a smaller actuarial value loss of \$4.5 billion. Even with smoothing, the impact to the funding schedule is significant, and the state has chosen to remain on the January 1, 2008 funding schedule rather than update to the January 1, 2009 funding schedule.

## Changes to the Unfunded Liability

The unfunded liability is a moving target that grows and shrinks as a system's total liability and asset values change year-to-year. While the bulk of a system's unfunded liability was created under pay-as-you-go funding, actions that increase the cost of benefits already earned or lower the value of assets add to the unfunded liability. A growing unfunded liability requires increased amortization payments and slows funding progress. Common catalysts of unfunded liability growth include:

**Underperforming Investments.** One of the largest factors influencing the unfunded liability is investment performance. Actuaries assume between a 7.5% and 8.5% rate of return on system assets. If systems do not meet their targets, funding schedules will need to be adjusted to compensate for these losses. In 2008,

the 106 retirement systems saw a composite asset loss of 28.6%, with the State-Boston Retirement System's assets losing 24.2% of their market value.

**Collective Bargaining Contracts.** While actuaries estimate future salary increases in their projections, wage increases above assumptions influence employee earning histories and increase the value of future benefits. Salary increases are a significant driver of liability growth. Collective bargaining contracts can also include language adding compensation such as education awards, injury pay, longevity bonuses and annual vacation buybacks to an employee's pension-eligible compensation, thereby increasing retirement allowances and system costs.

**Early Retirement Incentives (ERI).** These policies encourage employees through legislation to retire earlier than they would normally be eligible in order to achieve short-term savings in personnel costs during times of financial stress. For example, an early retirement incentive approved in 2002 allowed employees to add five years of creditable service, age or a combination to reach retirement eligibility. However, the short-term savings are overshadowed by the long-term cost of having to provide pension benefits earlier than planned unless hiring controls are included in the ERI package. Strict hiring controls can help mitigate the added pension costs, but the tendency is to restore most positions in improved financial times, thus negating savings. Boston utilized the 2002 ERI to reduce its workforce by 476 employees through retirement. However, as a consequence, the SBRS pension liability grew by \$61.8 million. An ERI proposal has been included in legislation recently submitted to the House Ways and Means Committee as a municipal relief measure.

**Demographic Factors.** Changes to retiree characteristics and behaviors can directly increase pension costs and the total liability. One particular factor that continues to add to system costs is the longer life expectancies of retirees. In Boston, for example, updating mortality tables in the last actuarial valuation contributed to a \$40 million increase in the unfunded liability from changing assumptions.

**Cost of Living Adjustments (COLAs).** Actuaries now assume systems will annually fund the maximum COLA. However, the switch from state to local funding of COLAs in 1997 required adjustments to funding schedules. The change increased the SBRS's unfunded

liability by \$284.7 million or 25.4% in an updated January 1, 1997 valuation. There have also been legislative initiatives to increase COLAs, including language in the fiscal 2009 budget to increase the COLA base from \$12,000 to \$16,000 that was vetoed by the Governor. While there are valid points that more inflation protection is needed for non-Social Security retirees, increasing COLAs would add substantially to unfunded liabilities. For example, a PERAC cost analysis projected that increasing the COLA base from \$12,000 to \$16,000 would have increased the unfunded liability for the two state systems by \$911.8 million or 7.6%.

**Changes to Benefit Calculations.** Actions granting more generous benefits by adding creditable service buyback opportunities, moving a group of employees to a higher classification category, or otherwise enhancing other parts of the benefit formula add to a system's liability.

## Investing System Assets

In Massachusetts and other defined benefit plans, consistent investment performance is a critical component of the employer's financial commitment to the system. Employers sponsoring a defined benefit plan are responsible for ensuring promised benefits can be paid and bear all the investment risk for the employee. The ability of a Massachusetts retirement system to meet its investment targets directly impacts the annual appropriation paid for by employers, and in turn affects state and local budgets. With pension costs such a substantial expense for state and local governments in Massachusetts, it is important that systems employ effective and responsible investment strategies.

Massachusetts retirement systems assume that, over the long-term, their investments will grow by a certain annual rate. This investment target, generally around 8% a year, is used to plan a system's funding schedule and determine employer appropriation levels. The actual performance of a system is measured against its target during actuarial valuations conducted at least every three years, and the funding schedule is adjusted for returns above or below the target. Systems that exceed their targets will see actuarial gains that keep them on schedule to pay down their unfunded liabilities on or before the statutory deadline. Systems that fall short of their targets will need to increase employer

appropriations to compensate for investment losses in order to stay on schedule.

Of the 103 local retirement systems, 51 invest mostly on their own through their retirement board's discretion. Boards that invest in this way create an asset allocation strategy and interview, hire and fire fund managers that invest system assets at the board level. These boards also negotiate management fees with each manager, which are generally set either at a flat rate or a flat rate plus a share of returns. The remaining 52 systems have placed most or all of their assets with the state's investment manager, the Pension Reserves Investment Management Board (PRIM), which administers the Pension Reserves Investment Trust Fund (PRIT) and also manages the assets of the two state systems. PRIM makes all manager and asset allocation decisions for systems that participate.

**Investing Locally.** Systems that invest on their own are overseen by PERAC to ensure responsible investment practices are followed. PERAC requires verification that all manager and consultant searches are open and competitive and must approve manager hires before a system can distribute funds. PERAC also caps investments in certain nontraditional asset classes as a percentage of a system's portfolio. These caps include:

- A 3% cap on alternative investments (private equity), which increases to 5% for systems holding over \$25 million in total assets.
- A 5% cap on real estate, which increases to 10% for systems holding over \$50 million in total assets.
- A cap on hedge funds equal to the current PRIM allocation, which is currently 8%.

Caps are increased upon request for boards that have strong investment histories in that particular asset class and reasonable proposals for an increase.

While Chapter 32 empowers boards to manage system investments, there are some drawbacks to investing locally. Boards that invest on their own may find some managers want to work with larger allocations than the system can provide on its own, particularly managers in nontraditional asset classes. Individual boards are also subject to higher management fees that come with investing smaller allocations. Finally and most importantly, there is often little investment expertise among board members and staff, and boards



rely on hired investment consultants to advise their investment strategy and manager decisions. While these consultants add the experience and professional perspective needed to guide system investments, boards are less likely to challenge their analysis or advice without access to internal expertise.

**Investing with PRIM.** Systems can also invest with PRIM, which has significant internal investment experience and is free of PERAC regulation. PRIM held \$42.7 billion in assets as of December 31, 2009 and employs a full-time staff of experienced financial and investment officers and analysts, whose sole purpose is managing the assets of systems participating in the PRIT Fund, in addition to employing multiple investment consultants. Because of the PRIT Fund's size, PRIM has access to more managers and the ability to negotiate lower management fees than individual boards. Overall, the PRIT Fund has a strong performance record among Massachusetts systems, with its 9.41% annualized return since 1985 through 2008 ranking seventh among all Massachusetts retirement systems even after considering 2008 losses.

Local systems can invest in the PRIT Core Fund, also known as its general allocation account, or in one of the PRIT segmented funds for specific asset classes. Fifty-one systems are fully invested in the PRIT Fund and 38 systems have a portion of their assets in the PRIT Core Fund or one of its segmented funds. In total, 89 systems or 86.4% of all local retirement systems in Massachusetts invest in some way with the PRIT Fund.

Systems invest in the PRIT Fund with varying degrees of control over their assets as either a purchasing system or a participating system. By a simple vote of the retirement board, a system can become a purchasing system in the PRIT Fund and transfer all or a portion of their assets to the PRIT Fund with rights to withdraw or redistribute their assets. A system can also undergo a more permanent relationship with the PRIT fund as a participating system, where all system assets are transferred to the PRIT Fund and managed by PRIM for at least five years. To become a participating system, the retirement board and a majority of the local governing body must agree to the transfer.

A system is also considered a participating system if it is mandated to transfer its assets to the PRIT Fund due to underperformance. In 2007, the Legislature passed legislation requiring systems deemed

TABLE 2.4  
**Local System Investment Choices**

<b>Fully Invested in PRIT</b>	<b>52</b>	<b>50.5%</b>
Board vote to fully invest in PRIT*	16	15.5%
Board vote and local approval to fully invest in PRIT for 5 years†	31	30.1%
Permanent Chapter 68 Transfer†	0	
	5	4.9%
<b>Board Vote to Partially Invest in PRIT*</b>	<b>37</b>	<b>35.9%</b>
<b>No PRIT Fund Investments</b>	<b>14</b>	<b>13.6%</b>
<b>TOTAL</b>	<b>103</b>	<b>100.0%</b>

\*Purchasing systems that retain authority to withdraw assets.

†Participating systems that can never withdraw assets or are committed to the fund for at least five years.

underperforming to permanently transfer their assets to the PRIT Fund (Ch. 68, Acts of 2007). A system is considered underperforming if:

- Its funded ratio is less than 65%, and;
- Its 10-year annualized return trails the PRIT Fund's return by more than 2%.

To date, 20 systems have transferred to PRIT as a result of Chapter 68. Five systems, Methuen, Southbridge, Everett, Lynn and Springfield, were required to transfer their assets permanently. Fifteen other systems at risk for transfer utilized an option in the legislation to voluntarily transfer their assets to PRIT for five years.

**Investment Performance in 2008.** PRIM has proven to be a top performer over the long-term among other systems since 1985. However, PRIM did not perform as well compared to other systems in 2008. **Table 2.5** summarizes the investment performance of PRIM and some of the largest local retirement systems in Massachusetts.

The volatile 2008 markets resulted in retirement systems across Massachusetts and the nation posting significant investment losses. The composite return in 2008 for all 106 retirement systems and PRIM was -28.6%, compared to the 11.33% composite return in 2007. The PRIT Fund had the seventeenth worst return of all 106 retirement systems plus PRIM in 2008, and, because so many systems have PRIT Fund investments, its losses were felt throughout the Commonwealth. Losses of this size are unprecedented, and

TABLE 2.5  
Annualized Investment Returns  
in MA Pension Funds<sup>†</sup>

Category	Return Since 1985	10-Year Return	5-Year Return	2008 Return
PRIM	9.41%	4.65%	3.50%	-29.50%
<b>Large Urban Municipal Systems</b>				
Lowell**	8.90%	3.63%	3.14%	-29.27%
Cambridge*	8.81%	3.69%	1.24%	-28.61%
Boston	8.71%	3.66%	3.20%	-24.21%
Worcester*	8.60%	3.79%	2.52%	-27.28%
Brockton	8.44%	3.60%	0.95%	-29.26%
Somerville	8.21%	3.85%	2.47%	-26.27%
Springfield**	7.98%	2.15%	2.04%	-28.57%
Fall River**	7.92%	1.31%	0.31%	-27.55%
New Bedford*	7.45%	4.20%	2.78%	-26.95%
Lawrence**	7.10%	0.86%	0.26%	-29.16%
<b>Large County Systems</b>				
Middlesex**	8.15%	2.77%	2.50%	-24.50%
Norfolk*	8.13%	3.19%	1.11%	-28.70%

<sup>†</sup>Returns are as of PERAC's 2008 Annual Report

\*\*All or essentially all of assets with PRIM

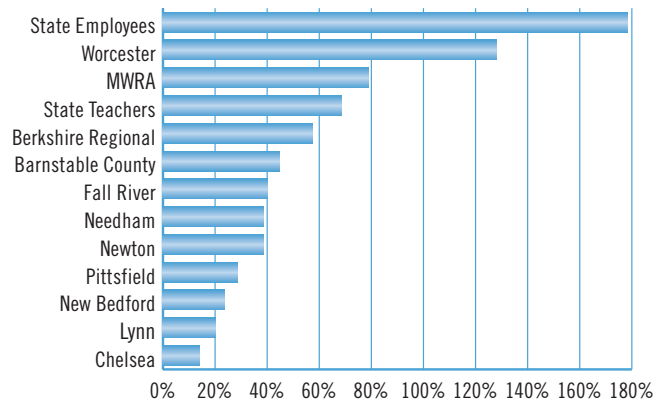
\*Invests in one or more PRIT Segmentation Funds

the final impact to funding schedules and employer appropriations remains unclear.

Today, systems that have performed actuarial valuations as of January 1, 2009 that captured their negative 2008 returns are experiencing a significant rise in their unfunded liabilities as shown in **Figure 2.4**. For example, the State Employees' Retirement System's unfunded liability more than doubled between its January 1, 2008 and January 1, 2009 valuations. By comparison, the system's unfunded liability decreased by 2.5% between its 2007 and 2008 valuations.

A normal increase in the funding schedule is around 5% to 6% but systems with January 1, 2009 valuations faced a 30% to 50% increase or more in one year if their schedules were not extended or adjusted. To avoid abnormal increases in employer appropriations, many of these systems substantially restructured their funding schedules by extending their funding deadlines closer to the statutory deadline and increasing their

FIGURE 2.4  
Percent Growth in Unfunded Liability  
Valuation Prior to 2009 vs. 1/1/09 Valuation



smoothing corridor to phase the appropriation increase over the next few years. Even with adjustments, many systems were not able to avoid significant increases in employer appropriations. The Governor recently submitted legislation to extend the statutory deadline to 2040 for local retirement systems. See page 52 for more information.

**Investment Performance in 2009.** Preliminary figures show investment gains in 2009 that will help mitigate the 2008 losses for systems scheduled to conduct actuarial valuations as of January 1, 2010. The State-Boston Retirement System, for example, gained 19.9% in 2009. However, to fully recover from 2008 in one year, systems would need to have regained all 2008 losses and met their return assumptions for both 2008 and 2009, which is too high a threshold for systems to meet. The State Employees' Retirement System recently completed its 2010 valuation, which indicated that a 17.7% investment return in 2009 helped to decrease its unfunded liability by \$887.7 million or 13.2% from its 2009 level. However, given the 178.2% increase in the unfunded liability between 2008 and 2009, the system still has a significant net unfunded liability increase of \$3.4 billion or 141.5% from 2008 to 2010.

While these gains will help offset some of the losses from 2008, the impact on employer appropriations is still expected to be significant in updated funding schedules. Approximately 75% of all systems are expected to experience a higher than normal increase in their employer appropriations for at least the next 5 to 10 years under current statutory funding guidelines.

### 3.

## Calculating Pensions

Public employees in Massachusetts receive a pension, also known as a retirement allowance, tailored to their employment history and retirement circumstances. There are four types of retirement an employee can apply for, each with a different formula for determining benefits. In general, benefit calculations consider an employee's age at retirement, job classification, salary history and years of creditable service, with some formulas giving more or less weight to different variables. Most pensions are capped at 80% of the applicant's high three salary average.

There are four types of retirement benefits: regular (superannuation), ordinary disability, accidental disability and termination pensions. Teachers, State Police officers, corrections officers and judges are also eligible to receive enhanced benefits for long-term service in their fields.

Because benefits are provided for life and a retiree's pension cannot be reduced after it is granted, any action that enhances benefits even slightly adds substantial cost to the retirement system. The vast majority of retirees receive modest pensions that accurately represent their work histories. However, opportunities to manipulate benefit formulas do exist.

An employee's retirement allowance is often referred to colloquially as his or her "pension" even though the pension is only part of the total allowance. For the purposes of this chapter, pension and retirement allowance will be used interchangeably, with the term "pension portion" used to address the technical pension.

### Superannuation or Regular Retirement

Most employees retire with a superannuation or regular pension (retirement allowance). To be eligible or vested for superannuation retirement, an employee must have at least 10 years of service and be 55 years of age or have 20 years of service regardless of age. The basic formula for superannuation retirement and an explanation of its variables are shown in **Table 3.1**.

TABLE 3.1  
**Superannuation**

	Benefit Accrual Rate (Determined by Job Classification and Age)
X	Highest 3-Year Average Salary
X	Years of Creditable Service
+	Veteran's Benefit (If Applicable)
=	Annual Superannuation Allowance

**Benefit Accrual, Classification and Age.** When employees retire under superannuation, a multiplier or benefit accrual rate based on their age and their position is used to calculate their retirement allowance. Benefit accrual rates are structured to provide employees in more hazardous positions larger benefits at a younger age than employees in less hazardous positions. The rationale governing this tiered approach is that older employees in hazardous jobs will have more difficulty working in these positions as they age and are more likely to be exposed to injuries during their careers that could shorten life expectancy.

All members covered by a Massachusetts retirement system are categorized into four job classification groups. They are:

- Group 1: General employees
- Group 2: Employees with hazardous duties
- Group 3: State Police officers
- Group 4: Public safety officers

An employee's group at retirement determines what benefit accrual rate will be used in the benefit formula. Group 1, 2 and 4 reach the maximum benefit accrual rate of 2.5% at different ages, as seen in **Table 3.2**. The highest group, Group 4 for public safety officers, reaches the maximum rate at age 55 while the lowest and largest group, Group 1, reaches the maximum rate at age 65. Employees who retire before attaining the 2.5% age for their group will receive reduced benefits. State Police in Group 3 receive full benefits outside

of the superannuation formula, and therefore benefit accrual rates do not apply.

However, what group an employee falls into can be murky, especially when systems assign classification by job title as opposed to job duties. Receiving a higher group classification increases benefits significantly. For example, a Group 2 employee who retires at age 60 with 30 years of service and a salary average of \$80,000 would receive \$12,000 or 25% more in annual benefits than a Group 1 employee with the same characteristics.

**Average Salary.** The average of the highest salaries earned for three consecutive years of an employee's career is used in the superannuation formula and to determine the benefit cap. Since salaries tend to be highest at the end of careers, the employee's "high three" salary is generally based on his or her last three years of employment. The high three can also be based on the last three years of employment prior to retirement, even if they are not consecutive. If the superannuation formula produces a retirement allowance that is more than 80% of the employee's high three salary average, the employee receives a pension at the 80% amount.

Employees who receive increases in their pension-eligible compensation have their benefits enhanced significantly. Collectively bargained add-ons, like longevity awards, differential pay, annual vacation buybacks and educational incentive programs are one way pensions are increased. For example, two 55-year-old police officers are planning to retire after 20 years of service, but one has completed a Master's degree in Criminal Justice and receives Quinn Bill educational benefits. The officer without Quinn Bill benefits has a salary average of \$81,000 while an officer on the same salary schedule with Quinn Bill benefits has a salary average of \$101,250. As a result, the officer with Quinn Bill benefits will receive a pension that is \$10,125 or 25% larger than the other officer.

**Creditable Service.** Employees with at least 10 years of creditable service are vested, or eligible to receive a retirement allowance at age 55. Creditable service is generally defined as those years in which the employee made contributions to their retirement system. However, an employee can transfer service from one Massachusetts system to another and has the opportunity to purchase years of service performed outside the retirement system. An employee who leaves public

TABLE 3.2  
**Benefit Accrual Rates**

Age at Retirement	Benefit Accrual Rates By Group**		
	Group 1	Group 2	Group 4
65 or older	0.025	0.025	0.025
64	0.024	0.025	0.025
63	0.023	0.025	0.025
62	0.022	0.025	0.025
61	0.021	0.025	0.025
60	0.020	0.025	0.025
59	0.019	0.024	0.025
58	0.018	0.023	0.025
57	0.017	0.022	0.025
56	0.016	0.021	0.025
55	0.015	0.020	0.025
54	0.014	0.014	0.024
53	0.013	0.013	0.023
52	0.012	0.012	0.022
51	0.011	0.011	0.021
50	0.010	0.010	0.020

\*\*Group 3 (State Police) receive full benefits under a different calculation that does not use benefit accrual rates.

service with a refund of his or her accumulated deductions can also reinstate past service if he or she returns. To buy back service, an employee pays what would have been contributed if he or she had been a member of the system plus buyback interest.

In some cases, but not all, the purchasing of prior years of service is worth the cost for the resulting increase in pension benefits. For example, a teacher planning to retire from the State-Boston Retirement System on October 31, 2009 at age 60 with 20 years of service and a high three salary average of \$75,000 could retire with an annual retirement allowance of \$30,000. However, if the teacher purchased 10 years of out-of-state teaching service earned before joining the SBRS, his or her pension could increase by 50% to \$45,000. Assuming the teacher entered the SBRS with a salary of \$30,000 and the purchased service was earned from 1979 to 1989, it would cost the employee \$55,768 to buy the service, a cost which would be repaid through increased pension payments in less than four years.



Employees who switch positions within governmental units have their service from their retirement system transferred to their new system. The pension costs are then divided between the two systems based on an employee's length of service with each system. For example, an employee who retires from the SBRS with 15 years of service with the City of Boston and 5 years of service with the state would have 75% of his pension paid by SBRS and 25% by the State Employees' Retirement System.

**Veteran's Benefit.** Employees with eligible military service receive a veteran's benefit added on to their normal superannuation retirement allowance. Veterans receive \$15 per year of creditable service up to \$300, even if it puts their total allowance over the 80% cap.

**Pension and Annuity.** After the superannuation allowance is calculated, it is then divided into an annuity portion and a pension portion. The annuity portion is determined by a calculation that considers the final balance of an employee's annuity savings fund (ASF) account and the employee's age at retirement. The pension portion is set as the difference between the annuity and the total superannuation allowance. When the employee's ASF account is depleted, which generally happens 10 to 15 years into retirement, the pension portion increases to cover the entire allowance.

## Disability Retirement

While most public employees will retire under a regular superannuation allowance, employees in more physically demanding jobs, particularly public safety officers, are more likely to retire under one of the two disability retirements. Both types of disability benefits can provide eligible members with more generous benefits than they would have received under the normal superannuation formula. There are two types of disability retirement allowances, one for ordinary disability and one for accidental disability.

**Ordinary Disability.** Ordinary disability pensions are provided to employees who undergo permanent, career-ending injuries and illnesses that are not job-related and meet minimum service requirements. The statewide service requirement is fifteen years of creditable service, but almost all systems have adopted a local option to lower the requirement to ten years. There are two formulas of ordinary disability

TABLE 3.3  
**Service Buyback Opportunities**

Type	Who Can Buyback	Max Amount
Reinstate Municipal or State Service	Anyone	No Max
Military Service	War Time Veterans	4 years
Out-of-State Teaching	Teachers	10 years*
Vocational Work Experience	Vocational Teachers	3 years
Non-Public School Teaching	Teachers	10 years
Peace Corp Service	Teachers/ Guidance	3 years
Police Cadet Service	Police Officers	No Max**

\*Teaching in Puerto Rico or a Department of Defense school, which is considered out-of-state teaching, is capped at five years.

\*\*Though there is no cap on service buyback, the cadet program has age and performance requirements that limit service.

retirement allowances: one for eligible non-veteran employees who are under age 55 and one for eligible veteran employees.

For eligible non-veteran employees under age 55, their ordinary disability retirement allowance is equal to the superannuation benefit they would receive if they were 55. Employees with eligible injuries who are over 55 retire under the regular superannuation formula and do not receive an enhanced benefit.

The veteran's ordinary disability pension is composed of a pension portion equal to 50% of their current average salary from the past 12 months and a standard annuity. Because of the unique veteran-specific ordinary disability formula that provides higher benefits than the superannuation formula, veterans who retire under ordinary disability do not receive the normal veteran's benefit available under superannuation retirement.

The shorter averaging period for the veteran's ordinary disability formula increases benefits significantly. For example, if a custodian with a three-year salary average of \$54,000 and 15 years of service retired under ordinary disability with a superannuation pension as if he was age 55, he would be eligible to receive an annual allowance of \$12,150. However, if he was a veteran with a current salary of \$55,000 and \$20,000 in his ASF account, he would receive an annual ordinary disability pension of \$29,019 that is 58.1% or

TABLE 3.4  
**Ordinary Disability**  
Non-Veteran, Younger than Age 55

	Benefit Accrual Rate as if Age 55
X	Highest 3-Year Average Salary
X	Years of Creditable Service
=	Annual Ordinary Disability Allowance

TABLE 3.5  
**Ordinary Disability**  
Veteran, Any Age

	Pension Portion Equal to 50% of Current Salary
+	Standard Annuity
=	Annual Ordinary Disability Allowance

\$16,869 larger than what he would have received if not a veteran.

**Accidental Disability.** Employees who sustain permanent, career-ending injuries in the performance of their duties as a public employee are eligible to receive an accidental disability retirement allowance. An accidental disability benefit is composed of a pension portion equal to 72% of one of two salary components and a standard annuity. The salary component is either 72% of day-of-injury pay or 72% of the average regular compensation earned in the 12 months prior to retirement, whichever is greater. Accidental disability retirement allowances are capped at 75% of the salary component used to calculate the benefit. Applicants can also receive an additional \$708 per year for each of the member's dependent children until the child is no longer considered dependent.

For employees who were acting out-of-grade at the time of their injury, meaning they were filling in for a superior at the superior's rate of pay, the pay of the employee's permanent position is used in the formula rather than the superior's rate of pay. This out-of-grade provision was recently added to the accidental disability legislation after reports that a high number of injuries were being reported out-of-grade, raising concerns that the formula was being abused. See page 60 for more details.

Since the accidental disability formula uses a salary average based on a shorter time frame than the

TABLE 3.6  
**Accidental Disability**

	Pension Portion Equal to 72% of Day-of-Injury Pay or 72% of Average Pay Earned in the 12 Months Prior to Retirement, Whichever is Greater*
+	Standard Annuity
+	Dependent Child Pension (If Applicable)
=	Annual Accidental Disability Allowance

\*Day-of-injury pay is the pay of the member's permanent position on the day of injury.

superannuation high three salary average, accidental disability retirement allowances are significantly larger than regular retirement allowances. To illustrate, a firefighter planning to retire at age 55 after 20 years of service with a high three salary average of \$90,000 and \$50,000 in accumulated deductions would receive a superannuation allowance of \$45,000 per year. However, if he is injured while earning \$91,000 per year, he could receive an accidental disability pension of \$69,726 based on 72% of his day-of-injury pay plus a standard annuity. This is a \$24,726 or 54.9% increase from the superannuation pension he would have received if he was not injured.

**Presumptions for Public Safety Officers.** Under Massachusetts law (Ch. 32 s. 94-94B) certain medical conditions suffered by public safety officers are presumed to be job-related irrespective of the specifics of an individual's case. Public safety officers who become incapacitated by these conditions while a member in active service are therefore eligible for an accidental disability pension. The three presumptions are:

- Disabilities caused by heart disease and hypertension are assumed to be job-related for police officers, corrections officers and the fire/crash crew at Logan airport.
- Diseases affecting the lungs or respiratory track are assumed to be job-related for firefighters and the fire/crash crew at Logan airport.
- Certain types of cancer, such as cancers affecting the lungs, skin, respiratory system and prostate system, among others, are assumed to be job-related for firefighters and the fire/crash crew at Logan airport that are actively employed or retired within five years.



**Disability Approval Process.** To receive an ordinary or accidental disability pension, the member's retirement board and PERAC must verify that the injury sustained is permanent, totally incapacitating and, for accidental disability applications, job-related. The verification process is extensive, long and often backlogged. While PERAC encourages applications to be processed within 180 days after the complete application is submitted to PERAC, the process has become more time consuming and the application more extensive since the standard was implemented.

Current pension law has established a comprehensive medical review process to verify disability applicants are indeed eligible for disability allowances. Applicants first submit to their retirement board an application for disability retirement and a statement from the physician that treated the injury. The board then collects the Employer's Statement, which includes the member's current job description, injury reports and records of the member's physical condition at hire and during employment and any statement by the employer's physician.

While the procedure varies by employer, the employee's doctor can generally treat and verify the injury. The employer's physician does not necessarily treat or examine all applicants, but since he or she reviews all injury reports, every disability retirement application will include some comment from the employer's physician regarding the injury.

PERAC then assembles a regional medical panel of three doctors to examine the applicant and verify or dispute that the disability is totally incapacitating, permanent and job-related. Doctors on the panel can examine the individual in three separate appointments or together in one appointment. Both the employee's and employer's physician and attorney can be present at the exam, but they cannot participate.

The member's retirement board then reviews the application and the regional medical panel's report and takes a vote to grant or deny an application. PERAC then reviews the record and can approve the application or remand it back to the board for further consideration. See **Appendix C** for an outline of the full approval process for disability applications.

While the lengthy application process occurs, applicants can receive other forms of compensation. Some

disability applicants will collect a superannuation pension while their disability application is pending. Public safety officers qualifying for 111F injury leave benefits receive 100% of their salary tax-free while injured. With most disability applicants public safety officers, the delays in retirement approval can have significant injury leave costs for employers. See the sidebar "Injury Leave (111F) and Accidental Disability Retirement" on page 38 for further explanation.

Despite the rigorous review process, there have been allegations of disability pension abuse. Boston faced scrutiny in 2008 after a high number of firefighter injuries were reported in higher pay grades, leading to larger disability pensions. Some Police and Fire Departments also see a high proportion of uniformed officers retiring on disability. However, because of ridged legal standards for public safety disability, injuries that may not be incapacitating for an administrative employee can be deemed incapacitating for a police officer or firefighter.

**Re-examination and Restoration to Service.** PERAC examines disability retirees periodically after retirement to verify that the retiree is still injured and unable to return to work. All disability retirees are scheduled for a Comprehensive Medical Examination (CME) each year for the first two years preceding retirement and for an additional exam every three years afterward to determine if they can return to work. PERAC can also schedule an CME at the retiree's request or if the retiree's post-retirement income statement shows substantial earnings.

In some instances, a review of the retiree's current medical records and disability files may determine the retiree cannot return to work and the CME ends there. If the review concludes that the retiree may be able to perform his or her duties, the retiree will undergo a physical examination by a physician. If the physician finds that the retiree can perform his or her essential duties, three physicians conduct separate examinations to determine if the individual can return to work.

If there is unanimous agreement among the three physicians that the retiree can return to work, the retiree can be restored to service. The retiree, if determined able to return to work within two years of retirement, will fill any vacancy for the position he or she retired from or a similar position or a vacancy must be created for the retiree. Retirees found able to

## Injury Leave (111F) and Accidental Disability Retirement

Police officers and firefighters, who represent the majority of disability applicants, receive a unique injury leave benefit (Ch.41, s. 111F) that provides 100% of their salary as of the day of the injury tax-free until the employee retires or the designated physician determines that such incapacity “no longer exist.” The injury to the police officer or firefighter must be sustained in the performance of his or her duties. If the officer or firefighter sustained the injury while assigned to a higher out-of-grade position, he or she would receive injury pay at the higher level.

The fact that 111F benefits are more generous than accidental disability pensions (100% of salary v. 72% of salary) creates incentives for injured police officers or firefighters to delay reinstatement to active duty or delay application for an accidental disability pension even if their injuries are permanently disabling. These factors, tied to a lengthy and backlogged accidental disability pension approval process, create an unnecessarily expensive injury leave program for municipalities.

Delayed returns to active duty after an injury are less of a factor with police officers who lose earnings from overtime and paid detail while not on active duty. The combination of both these sources represents a significant portion of their annual compensation. These same economic factors do not apply to firefighters.

The financial advantages of 111F injury leave have tended to delay application for accidental disability retirement or create the incentive to remain on injury leave to enhance pension benefits, both of

which are costly to municipalities. Public safety employees who sustain disabling injuries now are more likely to immediately seek 111F injury leave than apply for an accidental disability retirement allowance. As long as the public safety officer is on injury leave, the municipality must pay the officer’s or firefighter’s full salary as well as replacement overtime to ensure continuation of services normally provided by the employee. The November 2009 legislative change of a disability retirement allowance to 72% of the employee’s regular compensation on the date of the injury or the average regular compensation for the 12-month period prior to the effective date of retirement whichever is greater raises the incentive to remain on injury leave for 12 months to increase the lifetime disability pension. As part of the Legislature’s pension reforms approved in June 2009, the 12-month period had been changed to the time preceding the date of an out-of-grade injury, which created no incentive to unnecessarily extend injury leave.

By contrast, all other employees are covered by worker’s compensation benefits, which provide employees with 60% of the salary earned prior to injury. Worker’s compensation benefits can only be received for three years for a permanently incapacitating injury, and the worker’s compensation law has strict requirements for medical evaluations and pension offsets for receiving benefits. The 111F injury leave law requires no such standards so that any regulations of benefits are established through collective bargaining contracts or by departmental requirements.

return to work more than two years after retirement are given preference for current and future vacancies. Individuals who are restored to service receive creditable service for the time they received a disability allowance. Since 2004, 21 disability retirees statewide have been restored to service, with four in Boston.

## Termination Allowances (Section 10)

In some instances, an employee with at least 20 years of service who leaves public employment before reaching age 55 may be eligible to receive a termination or section 10 allowance that provides earlier and sometimes more generous benefits than what they would receive for a deferred allowance. The benefit provides a pension equal to one-third of the employee’s highest consecutive 5-year average salary plus a standard

TABLE 3.7  
**Termination**

	Pension Equal to 1/3 of Employee's Highest Consecutive 5-Year Average Salary**
+	Standard Annuity
=	Annual Termination Allowance

\*\*The two state systems and 12 local systems that have adopted a local option use a 3-year salary average.

annuity. Employees who have 20 years of service and have had their position abolished, fail reappointment or are terminated through no fault of their own are eligible to apply. In addition, the employer must certify that the employee's termination meets the conditions of the allowance and PERAC must also approve that the applicant was terminated in accordance with the statute. Employees with 30 years of service who have resigned can also apply for a termination allowance. In June 2009, legislation was passed to remove language that had allowed elected officials to qualify for termination allowances if they failed to be nominated or reelected.

The intent of this benefit when it was created was to protect employees from politically motivated firings who would lose years of service and receive a reduced allowance at age 55. However, termination allowances are not a common occurrence and raise the question of benefit equity. A 45-year-old employee with 20 years of service, an \$88,000 five-year average salary and \$50,000 in his ASF account would receive a termination allowance of \$33,539 for life. However, if this same employee had deferred his retirement until age 55 and had a three-year average salary of \$89,000, he would receive a superannuation pension of \$26,700. In this instance, the termination retirement provides an annual retirement allowance that is \$6,839 or 25.6% higher ten years earlier than if he had waited until age 55 to receive his superannuation retirement allowance.

## Involuntary Retirement

Most retirements are voluntary and employee-initiated, but in some instances employees are required to retire because of an involuntary retirement initiated by their employer, because the position was abolished or for meeting a mandatory retirement age. Department heads can file for involuntary retirement for employees

that meet the eligibility requirements for a retirement allowance. Members who are involuntarily retired and meet certain service requirements can appeal the retirement through a district court.

Involuntary retirements are useful for employers when one of their employees is injured and the employer does not expect he or she will be able to return to work. Since injuries occur often in public safety departments where the employer must provide generous 111F injury leave benefits, involuntary retirement is an important tool for employers to retire incapacitated employees rather than continuing to pay injury leave and waiting for an employee-sponsored retirement application.

Mandatory retirement provisions may also require certain employees to retire. Group 4 members and some Group 2 members are subject to a mandatory retirement age of 65. State Police are required to retire after reaching age 55. Judges also are subject to a mandatory retirement age of age 70.

## Enhanced Benefit Opportunities

The Legislature has approved special retirement benefits for specific groups of employees. These benefits reward employees for long-term service in a specific position with a more generous retirement calculation than a regular superannuation allowance. The positions with enhancements for long-term service include teachers, State Police, corrections officers and judges.

**Teacher Retirement Plus Benefits.** The Retirement Plus program, also known as the Teachers' Alternative Retirement Program (TARP) was approved in 2000 to provide teachers with enhanced benefits for long-term teaching service (Ch. 114, the Acts of 2000). Retirement Plus increases retirement benefits as a percentage of an employee's high three salary by 2% for each year of service over 24 years up to the 80% cap in exchange for a higher 11% employee contribution rate.

Only teachers who have contributed at the 11% rate for at least five years and have 30 years of service, of which 20 were for teaching in Massachusetts, are eligible to receive the enhanced benefit. All teachers hired after July 1, 2001 are now automatically enrolled in the Retirement Plus program and contribute at the higher rate. Teachers who do not meet the service

requirements are retired under the superannuation formula.

Retirement Plus can increase benefits significantly and allows more teachers to retire at the 80% cap. For example, a teacher who retired at age 60 with 32 years of service and an average salary of \$85,000 would receive a normal superannuation retirement allowance of \$54,400, equal to 64% of his or her average salary. If the teacher met the service requirements for Retirement Plus, the allowance would increase to \$68,000 or 80% of the teacher's salary average, adding \$13,600 or 25% to the teacher's retirement benefit.

The Retirement Plus legislation also allowed for retired teachers to be exempted from work restrictions after retirement when a district is deemed to have a "critical shortage" of certified teachers. See page 42 for more information.

**State Police.** Like teachers, State Police officers pay a higher contribution rate in exchange for greater benefits for long-term service in their field. State Police officers with 25 years of service with the State Police regardless of age receive an allowance equal to 75% of their average salary earned the year before their retirement. Officers who retire at age 55 receive 60% of their salary after 20 years of service, with additions for each month of service up to a 75% cap and deductions for each month of service less than 20 years. Officers who retire at an age less than 55 and have less than 20 years of service are retired as Group 1 employees under superannuation.

**Corrections Officers.** Corrections officers are also eligible for enhanced benefits for long-term service. Employees who have worked as a correction officer for more than 20 years are eligible to receive a special benefit equal to 50% of the employee's current salary earned in the 12-month period prior to retirement plus a standard annuity. For each month of service beyond 20 years, the employee receives an increase of  $\frac{1}{12}$  percent to the pension calculation.

**Judges.** Judges are another group that receives enhanced benefits for service in their positions. Judges receive up to three-fourths of their current salary when they reach the maximum retirement age of 70 with 10 years of continuous judicial service or if they have been retired by the Governor due to a mental or physical disability. At age 65, judges with 15 years of service

are also eligible for a three-fourths allowance. Judges as young as 55 years old with at least 10 years of service can also receive an early retirement allowance set as a percentage of their current salary determined by years of service and age.

Judges make unique, tiered contributions to their retirement, contributing 8% of the first \$30,000 of earnings, 9% on amounts between \$30,000 and \$45,000 and 10% on amounts over \$45,000. Interestingly, judges on the Supreme Judicial Court do not contribute toward their pensions because Chapter 32 refers to a definition of judge that does not include them. If a judge qualified for a regular superannuation or termination pension for service prior to judicial appointment, he or she can receive a deferred allowance in addition to his or her judge's pension at retirement.

**Pensions by Special Acts.** The Legislature also can enact legislation providing a specific individual with a retirement allowance beyond what he or she would receive normally under regular benefit formulas. These petitions are granted for state employees and local employees, with some local legislative bodies submitting home rule petitions for these individuals. Approximately 44 SBRS members receive enhanced benefits through a special legislative act, with six approved since 2004. All six of these acts were for public safety individuals retired under accidental disability. In each case, the legislative act increased the disability pension from 72% of regular compensation to 100% of regular compensation and provided enhanced survivor benefits to the spouse and children.

## Taxing Benefits

Retirement allowances are not taxed by the Commonwealth, but federal taxes do apply to all non-disability benefits and to portions of disability benefits. Benefits are exempt from federal taxation if they are related to an on-the-job injury. Therefore, accidental disability allowances are exempt from both state and federal taxation. However, only the pension portion is considered to be related to the injury, as the annuity is based on employee contributions and age. The annuity portion of accidental disability retirements are therefore subject to federal taxes. Ordinary disabilities, because they are not job-related, are subject to federal taxation.



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## Survivor Benefits

Along with the benefits provided to retirees, the Massachusetts retirement system also provides opportunities for beneficiaries of members to collect survivor benefits. Most survivor benefits are provided to beneficiaries through options that the member elects to provide at retirement in exchange for a reduction in the member's pension.

When members retire, they select one of three options:

**Option A.** Members who select Option A have elected not to provide any survivor benefits. They receive the full pension allotted to them by the formula during their retirement.

**Option B.** An Option B selection will pay the balance of a member's accumulated deductions, or ASF account, when the member dies to a designated beneficiary. Any individual, charity or institution can be a beneficiary under Option B. In exchange for the Option B survivor benefit, the member's pension is reduced approximately 1% to 3% from the Option A amount depending on the member's age and ASF balance at retirement. Since the ASF account is used to fund the annuity portion of a member's allowance and is generally depleted after 10 to 15 years of retirement, no award will be made if the account has been exhausted.

**Option C.** Under Option C, a member's beneficiary receives a lifetime survivor benefit equal to two-thirds of the member's pension. Like the member's pension, the Option C benefit receives COLAs approved by the member's retirement system. Only a member's current or former spouse, child, parent or sibling may be designated an Option C beneficiary and the decision cannot be changed after retirement, even if the member divorces his or her Option C beneficiary. After selecting Option C, a member's pension is reduced about 10% from the Option A amount. The size of the reduction depends on the member's and the beneficiary's life expectancies. A retiree's Option C pension will "pop-up" to the Option A amount if the member's designated beneficiary dies before the member. A new beneficiary cannot be designated in this situation.

Option B and C survivor benefits make up the majority of benefits paid out to beneficiaries. However, there are three additional kinds of survivor benefits that are provided in special circumstances when a member

dies before retirement or when death is caused by a work-related injury.

**Option D.** At any point while working for a public employer, employees can select Option D to provide a lifetime benefit to a beneficiary should they die in active service. Under Option D, the beneficiary would receive a benefit equal to the Option C pension the member would have received had retirement occurred on the day of death or at age 55, whichever produces the greater allowance. Like a member's pension, Option D benefits receive COLAs approved by the member's retirement system. Option D beneficiaries can only be the current or former spouse, parent, child or sibling of the member. While members are able to designate an Option D beneficiary while they are working, the member's spouse is empowered to petition the retirement board for Option D benefits after the member's death and override the member's designation.

**Accidental Death Benefits.** If a member dies as a result of a work-related injury, special accidental death benefits are available to his or her beneficiary. For members who die while in active service, their eligible beneficiary, generally their spouse, can petition the retirement board to receive a survivor benefit equal to 72% of the annual rate of compensation the member earned on the date of injury or 72% of the average annual compensation earned by the member in the 12 months prior to the injury, whichever is greater. Beneficiaries of members who retire on accidental disability and then die due to the work-related injury that prompted the retirement receive the member's accidental disability pension without the annuity portion. Recipients of accidental death benefits also receive COLAs approved by the system and an additional \$312 stipend per dependent child. Thirty-nine systems have accepted a local option allowing the child pensions provided through accidental death benefits to be increased annually through COLAs to a current value of \$708 per year per child.

**Death in the Line of Duty Benefits.** Special survivor benefits are available to the spouses of firefighters, police officers or corrections officers killed in the line of duty. In these instances, the member's spouse, or eligible beneficiary if the spouse is deceased, can petition the retirement board to receive the maximum salary the member could receive in his or her position

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at the time of death. These benefits, unlike other survivor benefits, are not increased through COLAs but rather grow according to the salary increases as negotiated in subsequent collective bargaining contracts. The families of police officers, fire fighters, corrections officers and public prosecutors who die in the line of duty also receive a \$100,000 lump sum award from the Commonwealth.

## Working After Retirement

After retirement, most members can continue to work in the private sector without restriction. However disability retirees are required to report their post-retirement earnings to PERAC annually. If a disability retiree's earnings exceed what he or she would be receiving currently in the position he or she retired from plus \$5,000, the retiree must refund the excess earnings to their retirement board. Disability retirees that fail to report their earnings will have their pensions suspended until they comply.

Retirees can also be reemployed by a state, local or public authority in Massachusetts but with time and earnings restrictions. Retirees returning to public service cannot work more than 960 hours a year, and the sum of a retiree's pension and earnings from public employment after retirement cannot exceed what he or she would earn currently in the position he or she retired from. For example, assume a librarian retired with a pension of \$30,000 from a position where he

was paid \$50,000. If he returns to public service and, according to the salary schedule, his past position is now paid \$53,000, his employer cannot pay him more than \$23,000. These restrictions also apply to retirees who return to public service consultants and independent contractors, as was recently clarified in pension reform legislation passed in 2009. (Ch. 21, Acts of 2009)

However, retired teachers can receive one-year waivers from these work and earning restrictions if they are reemployed by a school district with a "critical shortage" of certified teachers. The Retirement Plus legislation allows the Department of Elementary and Secondary Education (DESE) to declare a critical shortage in a school district at the request of the Superintendent or School Committee. When there is a critical shortage, teachers who have been retired for more than two years can receive one-year waivers to return to teaching without any earnings or work restrictions, with these waivers up for renewal annually. This provision was added to alleviate concerns that the Retirement Plus program would result in a wave of retirements that would leave school districts understaffed, which did not occur.

For example, if the retired librarian was now a retired teacher, he would be able to earn the full \$53,000 salary in addition to his \$30,000 pension if the district received a critical shortage waiver to rehire him. To date, 395 critical shortage waivers and waiver renewals have been granted from the DESE, including 5 waivers granted in Boston.



## 4. The State-Boston Retirement System

The State-Boston Retirement System (SBRS) is the largest local system in the state and the third largest retirement system in Massachusetts, with only the two state systems serving more members. As of January 1, 2008, close to 36,000 individuals were actively receiving or accruing benefits from the SBRS for employment with the City of Boston and five other governmental units. The system's Retirement Board manages the administration of benefits to members, collects employee and employer contributions for pension benefits and oversees a \$3.9 billion pension fund. The six governmental units that comprise the SBRS and their share of membership are shown in **Table 4.1**.

The SBRS was 67.6% funded with an outstanding unfunded liability of \$2.1 billion as of its most recent actuarial valuation on January 1, 2008. The funding schedule from this valuation set appropriation levels for fiscal 2010 and fiscal 2011. The valuation assumed investments will yield an annual 8% return and planned for the unfunded liability to be fully paid down by June 30, 2023. An unaudited funding update as of January 1, 2009 recognized a 24.2% investment loss in 2008 and revised the funded ratio to 59.3% and increased the unfunded liability to \$2.8 billion, a \$672.1 million or 31.4% increase from the prior year. In 2009, the SBRS regained some investment losses with a 19.9% return, but the next actuarial valuation scheduled to reflect information as of January 1, 2010 will include the 2009 return but will still show significant unfunded liability growth and will require appropriation increases above the norm in fiscal 2012.

The City of Boston is by far the SBRS's largest participating employer, with its fiscal 2009 appropriation of \$213.2 million (not net of state reimbursement), making up 87.3% of the total \$244.3 million contribution to the SBRS that year. Generally, 75% of the total SBRS contribution is tied to amortizing the unfunded liability, a cost that fluctuates depending on the SBRS's investment performance and the value of the SBRS's liabilities. For example, 75.7% of the fiscal 2009 SBRS contribution was tied to paying down the unfunded liability.

TABLE 4.1  
**State-Boston Retirement System**  
**Active and Retired Membership by Unit**  
As of 1/1/08

Employer	Active	% of Total	Retired*	% of Total
City of Boston	18,383	84.5%	11,457	82.2%
Boston Redevelopment Authority	127	0.6%	115	0.8%
Boston Water and Sewer Commission	477	2.2%	199	1.4%
Boston Public Health Commission	977	4.5%	1,373	9.9%
Boston Housing Authority	734	3.4%	477	3.4%
Suffolk County Sheriff's Department**	1,050	4.8%	318	2.3%
<b>TOTAL</b>	<b>21,748</b>	<b>100.0%</b>	<b>13,939</b>	<b>100.0%</b>

\*Includes beneficiaries receiving survivor benefits.

\*\*Legislation went into effect as of January 1, 2010 transferring active Sheriff's Department employees to the State Employees' Retirement System. Retired Sheriff employees will remain with the SBRS. This change will be reflected in the upcoming actuarial.

For the past two years, the management of the SBRS has undergone a transition in which a new Chair of the Board was elected and a new Executive Director was appointed. In addition, two new Retirement Board members were elected by the active employees and retirees. These changes have led to greater attention being focused on addressing long-standing operational issues, including reviewing its disability retirement approval processes and moving forward on improvements to its data management system. While improvements have been made, there are other steps that are needed to strengthen the system's management.

As of January 1, 2008, there were 35,687 members actively receiving or accruing benefits in the SBRS, including:

- 21,748 members currently employed by one of the governmental units participating in the SBRS.
- 11,198 retirees receiving pension benefits.
- 2,741 beneficiaries receiving survivor benefits.

There were also 6,240 inactive members no longer working for an employer participating in the system but who are eligible for benefits or refunds from the SBRS.

Retirees and beneficiaries receiving benefits comprised 39.1% of the total active membership. In 2009, the average SBRS retiree worked in public service for 29 years and retired at age 60 with an annual benefit of \$51,399. Employees working more than 20 hours a week for one of the six SBRS employers are required to join and contribute to the SBRS.

Unlike any other local system in Massachusetts, the SBRS manages and administers benefits to local teachers. All teachers in Massachusetts other than Boston teachers are members of the Massachusetts Teachers' Retirement System (MTRS), which is funded directly by the state. The state is responsible for funding Boston teacher retirement benefits, and the state provides the City of Boston with an annual reimbursement of the prior year's teacher pension costs through the MTRS. Currently, legislation is under consideration to restructure this funding arrangement so that the state can manage and directly fund Boston teacher pensions. See page 56 for more details.

## SBRS Operations

The SBRS, like all other retirement systems, is an independent entity from the governmental units it serves. While it receives funds from the City of Boston and other participating governmental units, the SBRS is a self-governing organization that has the authority to autonomously manage retirement assets and administer benefits under PERAC's oversight.

The SBRS is governed by the State-Boston Retirement Board (SBRB) which is charged with investing the system's assets and managing the administration of retirement benefits. The Board, like other city and town retirement boards, is composed of five members:

- Two active or retired members of the SBRS elected by the system's membership.

- A member appointed by the Mayor.
- The City Auditor.
- A member elected by the other four Board members. If the members cannot agree, the Mayor will appoint the fifth member.

The two elected members and the member elected by the other four Board members serve three-year terms, with the City Auditor serving annually as an ex-officio member and the appointed member serving at the pleasure of the Mayor. The City Treasurer serves as custodian of the system's funds.

The two members elected by the membership have traditionally represented the Boston firefighters' union, IAFF Local 718, and the Boston Teachers Union (BTU). Prior to 1996, city and town retirement boards were made up of only three members, one elected member, one appointed member and the ex-officio member. In Boston, a member of the firefighters' union has consistently held this elected member representative seat since 1990. In 1996, legislation passed adding a second elected member and a member elected by the other board members. A member of the BTU has consistently held the second elected seat since then.

The Chair of the Board is elected by the Board members. The firefighters' union representative served as Chair of the Board from 1993 to 2008. That situation changed in October 2008 when, for the first time in 14 years, a non-union member of the Board was elected Chair.

An Executive Director appointed by the Board manages the day-to-day operations of the Board and directs a staff of 41. The Executive Director was appointed in May 2009, having served as Interim Executive Director from August 2008 to May 2009 and previously as the General Counsel for the Board.

Staff members of the Retirement Board provide member support services, manage the benefit payroll, process retirement applications and perform daily administrative functions. The Board's investment activity is managed by its investment consultant, currently New England Pension Consultants (NEPC), which advises the Board on the selection and performance of fund managers and allocation strategies.

Though the Board is an independent entity, the Board's office is located in Boston City Hall and its employees receive health insurance and pension

benefits paid through the City. The employees are also members of two City of Boston unions. Like other independent public authorities in Boston, SBRB staff meet regularly with city officials to discuss its operations. However, because of its independent status, the Board does not have its operational budget reviewed or approved by the City Council, although it does file its budget with the City Council.

In 2009, the Board transferred its general ledger accounts to the City's PeopleSoft financial system which will improve its financial reporting capacity and the quality of its reports to PERAC. Eventually, this general ledger system will interface with the Genesis system which will reduce the need for manual input and system support.

The SBRB is currently engaged in a multi-year replacement of its pension administration system to improve operations and correct data reliability and consistency problems prevalent in the current system. The Genesis Project encompasses developing and implementing a new pension administration system, reorganizing operations and scanning thousands of paper documents for electronic use. The project is expected to be completed in July 2011 at a cost of \$12 million. Through this project, the SBRB will become a paperless office where even daily mail will be scanned and routed to the appropriate person. Managers would also be able to monitor electronic workflows and processing times, a management tool currently not available.

The Genesis Project will provide an opportunity to address many of the Board's long-standing operational and data weaknesses. As the third largest retirement system in Massachusetts with close to 36,000 members actively receiving or accruing benefits, the SBRB is woefully behind current technology and is far too dependent on paper records. The current pension administration system, in operation since 1993, has significant consistency and reliability problems, making hard copy files on each member often the best source of accurate information and requiring manual calculations of routine transactions. See more on the Genesis Project in the sidebar "SBRB Technology Investment" on page 52.

## SBRS Finances

A financial statement from a retirement system will look very different from the balance sheet of a regular public agency or department. Because retirement systems are structured to prefund their benefit obligations, they should post large surpluses each year even after paying out millions in benefit expenses and funding other costs. Systems report their current account balances and changes to their financial condition to PERAC on a calendar year basis with an Annual Statement. Within this system-wide financial picture is an internal budgeting process for retirement board expenses. These operational budgets run on a fiscal year schedule and include such spending items as staffing costs, consultant fees and other administrative expenses.

**System-wide Finances.** The major revenue sources for the SBRS include contributions from employees, employer appropriations and earnings on system investments. Other revenue sources are collections from member service buybacks, split service transfers and reimbursements from state-funded COLAs. Receipts into the system are then invested by the Board. Overall, the SBRS collected \$793.9 million in calendar 2007 but due to negative investment income, the system actually lost \$778 million in 2008.

On the expenditure side, the SBRS spent \$441.4 million in calendar 2008, with benefit payments to retired members and survivors the largest expenses. In calendar 2008, the \$405.8 million spent on benefits comprised 91.9% of system spending. As shown in **Table 4.3**, the pension portion of retirement allowances made up over three-fourths of benefit expenses.

The SBRS also spent \$18.1 million in calendar 2008 on administrative expenses, \$13.5 million of which was for investment management fees. Management fees are negotiated with each fund the Board invests in and are generally set at a flat monthly rate or a flat rate plus a portion of returns. While management fees are a significant administrative expense, their cost is tied to the Board's investment strategy which has produced strong returns over the long-term. For example, fees tend to be higher in more active asset classes like hedge funds, private equity and real estate.

TABLE 4.2  
**State-Boston Retirement System**  
**System Finances**  
(In Millions)

Revenues	CY2006	CY2007	CY2008
Employer Contributions	\$221.7	\$233.9	\$244.3
Employee Contributions	110.7	117.4	123.7
Investment Income	521.6	430.1	(1,167.6)
Misc [1]	19.8	12.4	21.6
<b>Total SBRS Revenue</b>	<b>\$873.9</b>	<b>\$793.9</b>	<b>(\$778.0)</b>
Expenses	CY2006	CY2007	CY2008
Benefits	\$369.1	\$391.6	\$405.8
System Administration	15.8	24.5	18.1
Operating Costs	3.9	6.2	4.6
Management Fees	11.9	18.3	13.5
Misc [2]	14.6	15.9	17.5
<b>Total SBRS Expense</b>	<b>\$399.5</b>	<b>\$432.1</b>	<b>\$441.4</b>
<b>Net Asset Increase/ (Decrease)</b>	<b>\$474.4</b>	<b>\$361.8</b>	<b>(\$1,219.5)</b>

[1] Includes state COLA reimbursement, split service transfers from other systems, service buybacks, etc.

[2] In 2007, the SBRB reimbursed the City of Boston for pension costs for grant employees. This resulted in a increase in reported administrative spending, but there was no net financial impact for this transaction.

[3] Includes member refunds and annuity balance transfers for members who enroll in another retirement system.

The remaining \$4.6 million in administrative expenses were for Board operating costs, which are also included in the Board's fiscal year operating budgets. An additional \$17.5 million was spent on refunds and annuity balance transfers for members withdrawing their contributions from the system. Because of negative investment returns, the SBRS did not post a surplus but rather lost a net total of \$1.2 billion in calendar 2008. By comparison, in calendar 2007 the system gained a net \$361.8 million that was then invested by the Board.

**SBRS Operating Budget.** The fiscal year operating budget prepared and approved by the Retirement Board is small in comparison to the SBRS's overall financial picture. As shown in **Table 4.2**, the SBRS's expenses in calendar 2008 totaled \$441.4 million but the operating budget approved by the Board totaled \$4.5 million at the end of the fiscal year.

TABLE 4.3  
**State-Boston Retirement System**  
**Breakdown of Benefit Costs** (In Millions)

	CY2006	CY2007	CY2008
<b>Annuities</b>	<b>\$50.6</b>	<b>\$54.5</b>	<b>\$57.5</b>
<b>Pensions</b>	<b>\$283.7</b>	<b>\$302.8</b>	<b>\$312.5</b>
Superannuation	231.0	244.3	254.9
Ordinary Disability	3.4	3.5	3.4
Accidental Disability	49.3	55.0	54.1
<b>Survivor Benefits</b>	<b>\$25.6</b>	<b>\$25.9</b>	<b>\$26.1</b>
Option C and D Benefits	8.8	9.2	9.5
Option B Refunds	1.1	1.2	1.0
Accidental Death	13.2	13.0	13.1
Line-of-Duty Death	2.4	2.5	2.5
<b>Transfers to Other Systems*</b>	<b>\$9.2</b>	<b>\$8.4</b>	<b>\$9.7</b>
<b>TOTAL</b>	<b>\$369.1</b>	<b>\$391.6</b>	<b>\$405.8</b>

\*3(8)c transfers to other retirement systems in Massachusetts for past SBRS members who later retire with a different retirement system.

The operating budget approved by the Board includes costs relating to Board staff, general operating costs and fees for its investment consultant and custodial services. Not included are investment manager fees, which are considered an administrative expense in reports to PERAC and totaled \$13.5 million in 2008.

The operating budget does not include a revenue estimate because it is funded exclusively through investment income. To ensure the drawdown on investment income does not impede the schedule to reach full funding, the funding schedule is adjusted to control for operating expenses. Actuaries add a small amount to the employer's regular pension appropriation for administrative expenses, which is then invested with the rest of the appropriation. Actuaries also set the system's investment return assumption to be net of management fees so that these costs are recognized and controlled for when projecting investment returns.

The SBRB's operating budget for fiscal 2010 is \$7 million, with \$2.2 million or 31.4% of spending tied to replacing the Board's pension administration system. Outside of the system replacement project, the SBRB's largest operational spending items include salaries and fees for its investment consultant and custodial services.



TABLE 4.4

**State-Boston Retirement Board**  
**Operational Spending History (In Thousands)**

Account	FY08	FY09	FY10 Budget
Salaries	\$2,524.8	\$2,614.5	\$3,274.7
Contracted Services	\$1,538.7	\$1,618.8	\$1,707.5
NEPC	535.4	535.4	540.0
State Street	344.4	317.5	308.0
Other	658.9	766.0	859.5
Supplies and Materials	185.5	128.7	65.8
Current Charges	209.1	223.8	219.7
Equipment	56.1	54.5	18.5
Debt Service [1]	0	1,432.2	1,432.2
Other [2]	0	1.7	282.0
<b>Total Spending</b>	<b>\$4,514.2</b>	<b>\$6,074.4</b>	<b>\$7,000.4</b>
Change from Prior Year	-809.5	1,560.2	926.0
%	-15.2%	34.6%	15.2%
<b>Investment Income Used For Operations</b>	<b>\$4,514.2</b>	<b>\$6,074.4</b>	<b>\$7,000.4</b>

[1] For the Genesis Project, which began in 2008.

[2] Includes reserve for federal investigation.

The Board's ability to rely on investment income as needed during the year has resulted in approved budgets that are inflated compared to actual spending trends. Over the past five years, actual spending has been as low as 2.7% below budget in fiscal 2007 and as high as 18.5% below budget in fiscal 2009. Overfunding generally occurred in anticipation of new positions that in the end were not filled and for special projects that did not come to fruition. See **Table 4.5**.

An effort was made to address this problem in the \$7 million fiscal 2010 budget, which came in 6.1% less than the fiscal 2009 budget. However, the fiscal 2010 budget still represents a 15% increase over actual fiscal 2009 spending indicating that more disciplined budgeting is required.

## Membership and Benefit Trends

The SBRS was serving 35,687 individuals actively receiving or accruing benefits from the City of Boston and five other governmental units as of January 1,

TABLE 4.5

**State-Boston Retirement System**  
**Budget-to-Actual Variance (In Millions)**

	FY05	FY06	FY07	FY08	FY09
<b>Budget</b>	\$4.8	\$4.8	\$5.5	\$4.9	\$7.5
<b>Actual</b>	4.0	4.3	5.3	4.5	6.1
<b>Variance \$</b>	(\$0.8)	(\$0.5)	(\$0.1)	(\$0.4)	(\$1.4)
<b>Variance %</b>	-17.4%	-10.3%	-2.7%	-7.7%	-18.5%

2008. Collectively, individuals currently receiving benefits from the SBRS made up 39.1% of the total active membership, with individuals actively accruing future benefits representing 60.9%. In addition, the SBRS also maintained accounts for 6,240 inactive members eligible for refunds or future allowances, increasing the total membership to 41,927. A full breakdown of the SBRS's total membership by type is shown in **Table 4.6**.

The average retirement allowance from the SBRS as of January 1, 2008 was modest but did increase when considering more recent retirements with higher salaries. The average retirement allowance for all superannuation retirees system-wide in 2008 was \$29,769. However, for the 450 individuals who retired with superannuation pensions in 2009, the average retirement allowance was \$49,480. The average 2009 superannuation retiree worked in public service for 29 years and retired at age 61. Overall, the average pension for the 553 disability and regular retirees in 2009, was \$51,399. Former teachers, and Boston Police Department and Fire Department employees, who collectively represented 61.1% of all retirees in 2009, received average retirement allowances of \$63,490, \$60,225 and \$69,946 respectively. These pensions were higher than the system average due to the higher salaries, enhanced benefit opportunities and a higher rate of disability experienced in public safety positions.

As expected, the most common pension received is the regular superannuation retirement allowance. Of the 11,198 retirees in the SBRS as of January 1, 2008, 84.4% were receiving this type of pension. Disability retirements represented 15.6% of all retirements, with accidental disability retirements for job-related injuries representing 90.8% of the total. Public safety employees were significantly more likely to retire on disability, with Police and Fire Department retirees

TABLE 4.6  
**State-Boston Retirement System**  
**Breakdown of Membership by Type**  
 As of 1/1/2008

Type	Number	Percent of Active Membership
<b>Employees</b>		
Active Employees	21,748	60.9%
<b>Retirees</b>		
Superannuation	9,450	26.5%
Accidental Disability	1,587	4.4%
Ordinary Disability	161	0.5%
<i>Subtotal Retirees</i>	<i>11,198</i>	<i>31.4%</i>
<b>Beneficiaries</b>		
Beneficiaries	2,741	7.7%
<b>Total Active Membership</b>	<b>35,687</b>	<b>100.0%</b>
<b>Inactive</b>		
Inactive, eligible for allowance	796	
Inactive, eligible for refund	5,444	
<i>Subtotal Inactive</i>	<i>6,240</i>	
<b>Total Membership</b>	<b>41,927</b>	
<b>Active Membership as % of Total</b>	<b>85.1%</b>	

representing 62.8% of all disability retirements system-wide.

Collectively, 41.4% of Boston Police and Fire Department retirees are disability retirees, with 97.7% of these disability retirements approved for job-related injuries. However, the rate of disability was noticeably higher for the Fire Department than the Police Department. While slightly less than a third of the Police Department retirements were for job-related injuries, more than half of the Fire Department retirements were accidental disability retirements. Since accidental disability retirement allowances provide generous benefits, the average benefit for Boston Fire Department retirees is significantly higher than the averages for the Boston Police Department retirees and retirees overall. See **Appendix D** for more information on public safety disability retirement trends.

Since 2005, 2,684 individuals have retired from the SBRS. The average pension for all retirees has

increased by 20.2% or \$8,650 from \$42,750 in 2005 to \$51,399 in 2009. Most pensions are capped at 80% of a member's highest three-year salary average, and this maximum benefit is generally attained by those with long careers in public service. Of the 2,199 retirements since 2005 subject to the 80% cap, 49.3% retired at the maximum 80% cap, with 34.5% retiring with 70% to 79% of their salary average and 7.6% at 60% to 69% of their salary average.

**Superannuation Retirement Trends.** In 2009, there were 450 individuals retiring on superannuation, representing 81.4% of all retirements that year. The average allowance has increased \$6,296 or 14.6% from \$43,184 in 2005 to \$49,480 in 2009, with the average age of superannuation retirees remaining steady at 61.

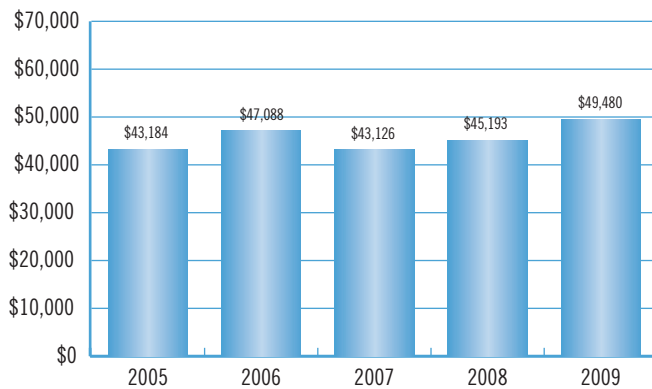
**Ordinary Disability Trends.** Ordinary disability retirements make up a small segment of total retirements from the SBRS. In 2009, only six individuals received ordinary retirement allowances, about 1.1% of all retirees that year. Given how few individuals receive these benefits, average allowance figures are volatile.

**Accidental Disability Trends.** Accidental disability retirements granted in 2009 totaled 85 or 15.4% of retirements in 2009. The average accidental disability allowance has increased each year since 2005 to the current average of \$66,905 in calendar 2009. In total, the average accidental disability retirement has increased by \$12,065 or 22% since 2005. The vast majority of accidental disability retirees are public safety officers.

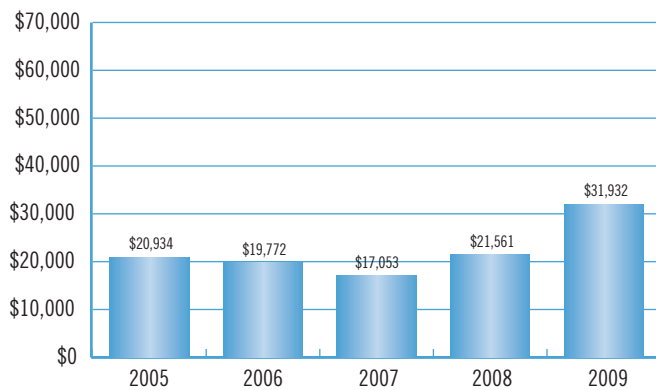
**Disability Pension Abuse.** Increasing disability pension trends among Boston firefighters raised concerns of pension abuse and captured the attention of the media, Governor, Legislature, Mayor and U.S. Attorney. Trends showed an alarming percentage of accidental disability retirements were being awarded to Boston firefighters, especially more senior firefighters, based on disabling injuries sustained while temporarily working in a higher pay grade. These out-of-grade injuries, even if sustained after only one day of out-of-grade work, increased pension payments for life, earning the nickname "king for a day" pensions. In 2006, over half, 52.7%, of all Boston firefighter retirements were out-of-grade disability retirements. Sixty-eight percent of disability retirees in 2007 had been working out-of-grade at the time of their injury.



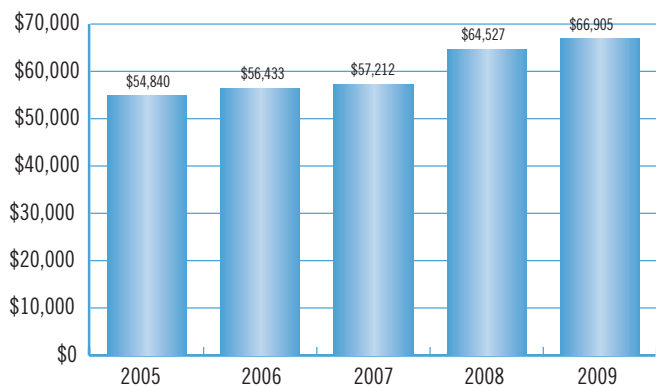
FIGURE 4.1  
Superannuation Allowance



Ordinary Disability Allowance



Accidental Disability Allowance



\*Averages for 2005 to 2008 based on data available as of 1/29/2010. Averages for 2009 as of 2/23/2010

In response to increasing attention to these trends, the Office of the U.S. Attorney began an investigation into the Boston Fire Department. In October 2009, the U.S. Attorney charged two firefighters with fraud and a civilian fire department clerk with perjury in connection with accidental disability pension abuse.

TABLE 4.7  
State-Boston Retirement System  
Average Allowances by Category  
Calendar 2005–2009\*

Year	All Retirees†	Teachers	Police Dept.	Fire Dept.
2005	\$42,750	\$50,382	\$56,202	\$61,096
2006	46,714	54,782	54,692	68,059
2007	44,136	55,096	54,442	62,091
2008	48,377	55,159	56,010	65,313
2009	51,399	63,490	60,225	69,946
Increase 05–09	\$8,650	\$13,108	\$4,023	\$8,850
%	20.2%	26.0%	7.2%	14.5%
# of Retirees 05–09	2,684	1,142	305	324

\*Averages by Department from 2005 through 2008 based on data available as of 1/29/2010. All retirees averages and 2009 data based on data available as of 2/23/2010.

†The all retiree count and average include individuals retired under special acts.

Additional indictments may come. The Legislature also approved a bill in June 2009 removing the “king for a day” incentive from the accidental disability allowance formula. See page 61 for more information on the Legislature’s pension reform efforts.

**Disability Backlog.** In the wake of concerns of disability pension abuse, attention was also given to the delayed and backlogged process of approving disability retirements at the SBRB. Though current pension law requires disability applications be processed within 180 days, or 6 months, the SBRB’s average for applications in the pipeline before August 2008 had an average approval time of 532 days, or 1.5 years. Because the vast majority of disability cases involve public safety officers, the delays have an immediate financial impact on the City, which must pay the officer’s full salary under 111F injury leave until he or she retires.

The delays in the application process are tied to a multitude of factors. The application for disability retirement has increased from 2 to 16 pages since the 180 day standard was implemented, requiring more information collection and review. Scheduling regional medial panel examinations, which is done by PERAC, is also a time-consuming process. Inadequate staffing levels at the SBRB also contributed to the delays.

After a concentrated effort to reduce the backlog by the Boston Retirement Board, new applications submitted after August of 2008 now average a processing time of 186 days.

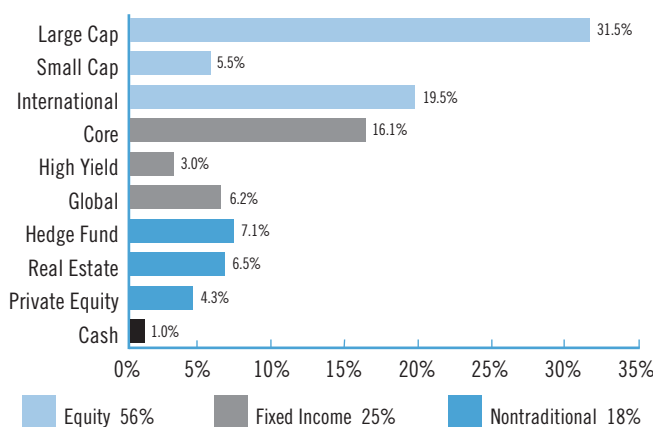
In the fall of 2008, the Board hired the public accounting firm of Grant Thornton to conduct a preliminary forensic audit of its disability operations to review the application process and intercept and recognize disability fraud. The audit's recommendations included, among other things, increasing fraud awareness among the staff, streamlining the disability approval process and scrutinizing medical reports more closely. Grant Thornton also provided recommendations to the Board on how to track disability application processing time more effectively to manage the 180 day standard.

**Termination Retirement Trends.** Termination allowances are a more common occurrence at the state level than in the SBRS, with only a few retirees receiving these special benefits. Since 2005 the SBRS has provided termination allowances to 11 individuals, including three from the Boston Public Health Commission, two from the Boston Housing Authority and two from the Property and Construction Management Department. The Election Department, Suffolk County Sheriff's Department, Consumer Affairs and Licensing Department and Boston Center for Youth and Families each retired one individual with a termination allowance.

## SBRS Investments

The SBRS is one of the 51 local systems in Massachusetts that invests at the Board's discretion, and it is one of only 14 systems without any PRIT Fund investments. With the system investing \$3.9 billion in assets as of December 31, 2009, it is by far the largest system to invest locally. The SBRS had a funded ratio of 67.6% as of its January 1, 2008 valuation and is on schedule to be fully funded by 2023 based on an annual return assumption of 8% a year. However, the next scheduled valuation as of January 1, 2010 will capture the 2008 investment losses and will require substantial increases in employer appropriations starting in fiscal 2012 even with full utilization of smoothing. At that point, the Board will need to decide how to restructure the schedule to mitigate the asset losses.

FIGURE 4.2  
State-Boston Retirement Board  
Asset Allocation



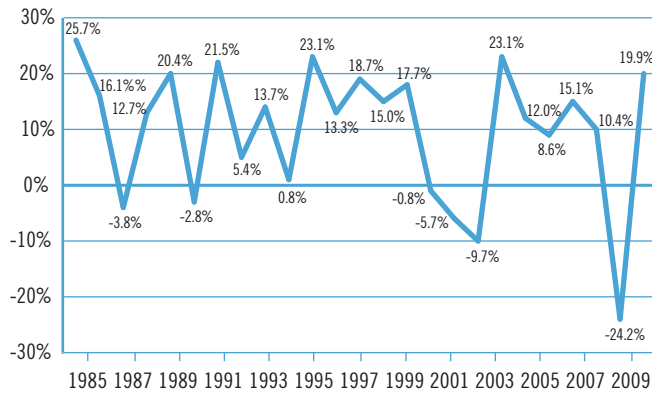
\*Real Estate and private equity as of 9/30/09

**Investment Management.** The SBRS's current asset allocation as of December 31, 2009 is spread across nine asset classes, with the target allocation approved by the Board being 54% equity, 24% fixed income and 22% nontraditional investments. As shown in **Figure 4.2**, the fund was 56.5% equity, 25.3% fixed income and 17.9% nontraditional investments at the end of 2009.

As a system investing locally, the SBRS is subject to PERAC regulation. However, as a large system with a strong investment history, PERAC has increased caps on certain asset classes for the SBRS. In anticipation of expected legislation to transfer 27% of SBRS assets to an independent funding schedule for Boston teachers, the SBRS repositioned assets to ease the transfer.

The Board manages its investments with the assistance of its investment consultant, New England Pension Consultants (NEPC). NEPC provides the Board with updates at each monthly Board meeting on investment and manager performance, and advises the Board on new investment strategies, asset allocation and the selection of managers for different types of investments. The Board is very dependent on NEPC for its professional advice since there is very little investment expertise on the Board or among the staff. One Board member has an investment background, but no internal staff member is devoted to monitoring or providing analysis to the Board on its investments.

FIGURE 4.3  
**State-Boston Retirement Board**  
**Annual Investment Returns: 1985–2009**



\*2009 reflects real estate and private equity returns as of 9/30/09.

**Performance.** Over the long-term, the SBRS has a healthy performance record and ranks well among comparable systems. From 1985, when performance began to be tracked, through 2008, the SBRS has had an annualized 8.71% return, which ranks 34th amongst all 106 retirement systems and PRIM. The SBRS assumes an 8% annual return in its actuarial valuation, which it has met or exceeded in 17 of the 24 years since 1985. See Figure 4.3.

By comparison, the PRIT Fund has an annualized return of 9.41% since 1985, and has outpaced the SBRS for five and ten-year annualized returns as well. The PRIT Fund's freedom from PERAC regulations, capacity for large scale investments and experienced staff focused solely on managing the fund have driven its long-term success. The PRIT Fund had also benefited from a diversified fund that capitalized on

nontraditional asset classes, but more recently this strategy has accelerated losses and slowed recovery. In the latest market downturn, the SBRS outperformed the PRIT Fund in both 2008 and 2009. However the SBRS has still not met the PRIT Fund's long-term returns. When comparing SBRS returns to PRIT Fund returns from 1985 to 2009, the SBRS has on average trailed the PRIT fund by 0.74% a year.

**2008 Investment Losses.** In 2008, SBRS assets fell by 24.21%. Because the SBRS is not scheduled for its next actuarial valuation until January 1, 2010, employer appropriations will not see an impact until fiscal 2012, as actuarial valuations are generally not completed until late into budget planning for the upcoming fiscal year or until after the fiscal year has started. Fortunately, positive performance in 2009 will lessen the impact of the 2008 return in setting employer appropriations. As of December 31, 2009, the SBRS's investments had grown by 19.9% since January 2009.

However, even with smoothing, which has historically set SBRB's actuarial values between 80% and 120% of market values to develop funding schedules, there will be a significant impact on appropriation levels. Even if the SBRS had gained 24.2% in 2009, the system would still be behind. In order to fully recover losses and remain on track, the SBRS would need to fully recoup its 2008 losses and then meet its 2008 and 2009 annual 8% return assumptions. The inability to meet this high threshold will require larger employer payments to make up the difference and keep the system on track to meet its deadline for full funding in 2023.

The SBRS has some flexibility within its schedule to lessen appropriation increases in its upcoming actuarial valuation. The statutory deadline to reach full funding, which was extended by legislation from 2028 to 2030 this summer, is seven years later than the SBRS's current deadline of 2023. However, it is important to recognize that delaying full funding will in turn delay addressing the retiree health insurance liability, which is currently larger than the pension liability.

TABLE 4.8  
**SBRS and PRIT Comparison**

	Since 1985*	10-Year*	5-Year*	2008	2009
SBRS	8.71%	3.66%	3.20%	-24.21%	19.90%
PRIT	9.41%	4.65%	3.50%	-29.50%	17.64%
<b>SBRS +/- PRIT</b>	<b>-0.70%</b>	<b>-0.99%</b>	<b>-0.30%</b>	<b>5.29%</b>	<b>2.26%</b>
<b>Average Outperformance of PRIT to SBRS, 1985–2009</b>					<b>0.74%</b>

\*As of PERAC's 2008 Annual Report

## SBRB Technology Investment

A serious weakness in the operation of the SBRB is its dated technology that restricts its efficiency in administering pension benefits and prevents the creation of management reports to operate more productively. The current system was developed in 1993 and after seventeen years the data have become less consistent and reliable. For example, the most recent PERAC audit found that the data on the system reported a benefit pay out that was \$70 million less than what was reported on the SBRB's general ledger's record of actual benefits paid. The deficiencies of the system have forced the SBRB to rely more on a paper system of hard copy files and manual calculations to provide benefit services for its 36,000 active members.

Aware of this problem, the SBRB began the multi-year Genesis Project in 2008 to develop and implement a new pension administration system that will transfer the almost completely paper operation online. The new system, which is still in development, is expected to create a paperless operation at the Retirement Board and allow for more self-service options for members, provide a full and complete membership history to SBRB staff, automate calculations and establish auditing trails for changes to retiree payroll accounts. Generating accurate, complete information on the system's membership will not only improve member services but will enable the Board to manage more effectively with a greater capacity to gather and analyze data. The new system will also provide opportunities for managers to oversee electronic

workflows, providing the tools to monitor employee productivity and efficiency. Today, basic information on retiree and allowance trends is not easily available and other data not specifically required for daily operations or PERAC reports are not maintained and must be collected manually.

The Genesis Project is an opportunity for the SBRB to reinvent its operations by simplifying benefit administration, ensuring data accuracy, automating calculations to reduce human error and creating new management tools. The project has experienced delays, staff capacity issues and disputes with vendors, raising concerns about how the project will be managed and implemented in the future. Given the opportunity to address long-standing operational issues through this project, it is important that the impediments of the current system are not replicated in the new system.

The Genesis Project is estimated to cost \$12 million during the development and implementation phases. Additional post-implementation expenses are expected for staffing, software updates and training costs. The current phase of the project is being funded through a \$6.2 million bond issued by the City of Boston in 2008. The SBRB will pay the annual debt service of \$1.4 million from fiscal 2009 to fiscal 2013. To date, \$3.1 million of the bond has been spent on the project and the SBRS has paid \$1.6 million in debt service. The project is currently scheduled to be completed in July 2011.

## 5.

# Pensions and Municipal Budgets

Pension appropriations represent a significant portion of municipal budgets, comprising between 5% and 9% of urban municipal spending in fiscal 2009 in a sample of eight Massachusetts municipalities. These costs are considered nondiscretionary and are difficult to reduce over the short-term, meaning any increase in pension costs for a municipality will likely put pressure on other budget accounts.

## Impact of 2008 on Municipalities

The opportunity for sharp growth in pension costs can create financial stress for municipalities. The results of the 2008 asset losses demonstrate this issue. Pension appropriations are generally set to increase around 5% a year on a retirement system's funding schedule. However, based on the experiences of systems that receive full actuarial valuations as of January 1, 2009, systems may face pension appropriation increases between 30% and 40% over the next two years.

In an attempt to soften the blow, many of the local systems that performed actuarial valuations as of January 1, 2009 adjusted their funding schedules to mitigate the increases in appropriation. Communities that had the flexibility to extend the schedule significantly were able to lessen the appropriation increase, but some systems did not have that option. Fall River, for example, was already close to the maximum funding schedule deadline and had little flexibility. The result was a \$5.2 million or 29.4% increase in the contribution to the system between fiscal 2010 and fiscal 2011.

Systems scheduled for actuarial valuations in 2010 will have the benefit of recognizing investment gains in 2009. However, because the losses in 2008 were so great, municipalities are expected to still see above average increases in employer appropriations from fiscal 2011 to fiscal 2012. Legislation has been proposed to extend the statutory funding deadline for local systems from 2030 to 2040 as a municipal relief measure.

TABLE 5.1  
Pensions as a Percent of Operating Spending  
Fiscal 2009

Municipality	% of Total FY09 Spending
Boston–Total Appropriation*	8.8%
Boston–Net Appropriation*	3.9%
New Bedford	9.1%
Worcester <sup>†</sup>	8.5%
Somerville	7.3%
Cambridge	6.3%
Springfield	5.3%
Brockton <sup>†</sup>	5.1%
Lowell	5.1%

\*The City receives a state-funded, pay-as-you-go reimbursement of the prior year's teacher pension costs. Boston is the only municipality where teacher pension costs are included in its pension appropriation.

<sup>†</sup>Includes debt service on Pension Obligation Bonds.

TABLE 5.2  
Impact to Local Retirement Systems  
in 1/1/09 Valuations

System	% Increase in Recommended Contribution FY10 – FY11	Schedule Extended?
Fall River	29.4%	2028 to 2030
Worcester	17.8%	2019 to 2030
New Bedford	17.0%	2026 to 2030
Newton	10.9%	No, 2026*
Barnstable Co.	10.0%	No, 2028
Pittsfield	6.9%	2025 to 2030
Lynn	6.8%	2027 to 2030
Needham	6.6%	2021 to 2028
Berkshire Reg.	5.9%	2016 to 2024
Chelsea	4.0%	2025 to 2029

\*In its 2009 valuation, Newton shortened the funding schedule in its 2008 valuation from 2028 to 2026 rather than develop a new funding schedule as of 1/1/09. This allowed the system to increase the FY11 ARC to prepare for the increase that would be needed when it is required to update its funding schedule.



## Boston's Pension Costs

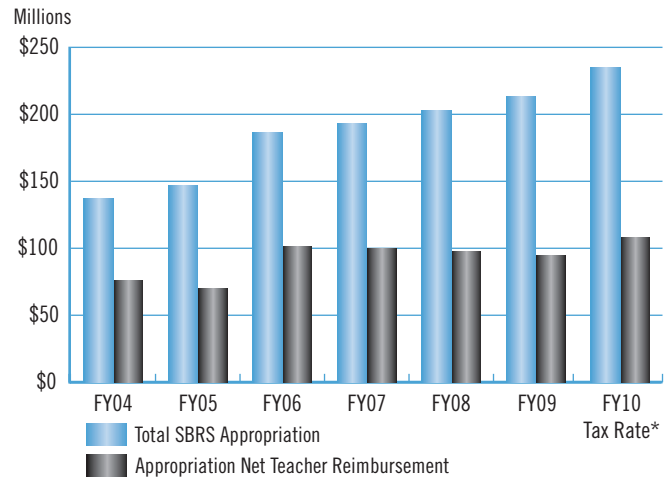
From fiscal 2004 to fiscal 2009, Boston's annual total appropriation to its retirement system increased almost twice as fast as its General Fund spending. A large 27.1% jump in the appropriation from fiscal 2005 to fiscal 2006 drove this trend. The increase was fueled by a new funding schedule that accounted for retirements due to the 2002 ERI, use of Retirement Plus by Boston teachers and poor investment performance from 2000 to 2002.

However, it is important to recognize that the City's pension appropriation is unique in that it assumes pension costs for teachers, which is not the responsibility of any other municipality. All other teacher pensions are administered by the Massachusetts Teachers' Retirement System (MTRS) and are funded directly by the state, which is responsible for teacher pension costs and liabilities. Instead of the state directly funding Boston teacher pensions, the City assumes teacher pension costs in its appropriation according to the SBRS funding schedule and in the following year receives a pay-as-you-go reimbursement from the state through the MTRS for the prior year's teacher pension costs.

The SBRS's 2008 valuation assumed that Boston teacher pension costs would to be transitioned to direct state funding through legislative action. A taskforce of state, City, SBRS and PERAC officials have signed a Memorandum of Understanding agreeing on the logistics of the transition. Legislation to enforce the MOU has been introduced by the Governor and is expected to be enacted later this fiscal year. In anticipation of this legislation, the City has adjusted its fiscal 2010 pension appropriation to reflect the new valuation methodology that recognizes Boston teachers as a separate entity in the SBRS. See **Appendix E** for more information.

Because of the adjustments for teachers in the fiscal 2010 appropriation, pension costs prior to fiscal 2009 are most comparable. The City's total pension spending has increased by 55.7% from fiscal 2004 to fiscal 2009, while its net pension cost has increased by a lower but still significant rate of 24.9%. Net General Fund spending has increased by 26% during this period.

FIGURE 5.1  
City of Boston SBRS Appropriation:  
FY04–FY10



\*The City's total FY10 pension appropriation includes a \$122.3 million payment to an independent funding schedule for Boston teachers. This payment will be refunded by the state to the City when legislation passes allowing the state to directly fund Boston teacher pensions.

Along with assuming teacher pension costs, the City's appropriation also includes certain pension costs for other agencies, including:

- Pension costs for the Boston Water and Sewer Commission. The Commission then reimburses the City for the benefits earned by retirees while working for the Commission.
- Early retirement incentive costs incurred by Boston City Hospital workers for the Boston Public Health Commission.

**Appendix C** provides more detail on the City's fiscal 2010 appropriation to the SBRS. The City also makes a payment outside of its pension appropriation for a small number of individuals retired under the non-contributory pension system predating the current pension plan's creation in 1946. In fiscal 2010, the City is expected to pay \$4.1 million for 161 retirees of the predecessor system.

**Changes in the Fiscal 2010 Pension Appropriation.** Currently, the City has budgeted \$234.8 million for the fiscal 2010 appropriation to the SBRS. However, this appropriation may be modified before the end of the fiscal year.

First, legislation to fund Boston teacher pension costs through direct state appropriations like other teacher pensions may pass by the end of the fiscal year and require the appropriation to be adjusted. Currently, the City's appropriation includes the first payment to a new Boston teacher funding schedule, which the state will repay once the legislation passes. If the legislation passes, the City's appropriation will no longer include this amount and will be adjusted to about \$112.6 million. While this is a significant decrease, the City's pension costs net the teacher pension reimbursement will remain essentially level.

Second, the fiscal 2010 appropriation will also be adjusted to account for the transfer of the Suffolk County Sheriff's Department, a SBRS member, to the state. In August 2009, legislation was passed transferring the remaining county sheriff departments to the state. The legislation states that for the Suffolk County Sheriff's Department, all active Sheriff employees will be enrolled in the State Employees' Retirement System, while retired members will remain in the SBRS. The transfer will require an adjustment of the distribution of costs among SBRS member units.

## Boston Teacher Transfer

All pensions for teachers in the Commonwealth are funded by the state, but the state funds Boston teacher pensions in a different way than other teacher pensions. The Massachusetts Teachers' Retirement System (MTRS), which manages the teacher pensions for all municipalities except Boston, is funded like a traditional retirement system and receives a direct appropriation from the state according to its funding schedule. Boston teacher pensions, on the other hand, are initially paid for by the City of Boston according to the SBRS's funding schedule. The state then reimburses the City through an annual pay-as-you-go payment of the prior year's teacher pension costs through the MTRS. This makes the SBRS different from any other local retirement system in Massachusetts because it administers and manages retirement benefits for teachers.

Boston, SBRS, PERAC and state administration officials have agreed that change is needed to allow the state to fund Boston teacher pensions in the same manner as it funds its other retirement obligations. Legislation was recently introduced by the Governor that would end

the pay-as-you-go reimbursement and allow the state to make direct appropriations to the SBRS for Boston teacher costs. A key provision of this legislation is transferring investment authority over Boston teacher assets from the SBRS to the state, which would provide the state with a critical tool to manage the Boston teacher pension unfunded liability. Any change to the funding arrangement for teacher pensions would not affect teacher benefits, and the SBRS would continue to administer benefits to Boston teachers after the transfer.

**Current Funding Arrangement.** The unique funding arrangement for Boston teacher pensions is complex and involves many parties. While other retirement systems were ending pay-as-you-go funding for their pension liabilities, the state continued to provide a pay-as-you-go reimbursement to the City of Boston under the following process:

- When conducting a valuation of all its pension liabilities, the state determines what would need to be paid for Boston teachers to reach full funding based on the state's assumptions.
- The state transfers this amount to the MTRS, which determines the prior year's pension costs and issues the City a pay-as-you-go reimbursement. Generally, the amount transferred to the MTRS is not equal to the pay-as-you-go reimbursement.

Meanwhile, the SBRS conducts its actuarial valuations as if Boston teachers were a local liability. The City then assumes the portion of the funding schedule associated with Boston teachers when it makes its appropriation to the SBRS, a cost that has more than covered by the reimbursement in recent years.

**Change Needed.** Despite the confusion it creates, there has been little appetite to change this arrangement because, until recently, the pay-as-you-go reimbursement was cheaper than actuarially funding Boston teacher pensions. The reimbursement, however, does not provide a coherent funding strategy for the Boston teacher unfunded liability and, as the Boston teacher pension system matured and the number of retirees grew, the pay-as-you-go reimbursement has become more costly. The arrangement also puts the MTRS in the middle of the transaction between the state and the City, even though it does not have any responsibility for Boston teacher pensions.

Change is also needed to reaffirm the state's responsibility for the Boston teacher unfunded liability. Currently, both the state and the SBRS assume Boston teacher costs in their actuarial valuations, causing the danger for confusion over ownership of the liability. While the state has assumed the financial obligation for all teacher pensions, it currently does not have the authority to manage the Boston teacher liability. The state did not want to continue ownership of the liability unless it could control how the assets influencing that liability were invested. The assets for other state pension costs, including all teachers, except Boston teachers, are invested in the PRIT Fund, which has historically outperformed the SBRS.

**Proposed Legislation.** A taskforce of representatives from the state Executive Office of Administration and Finance, the state Comptroller, the City of Boston, the SBRS, and PERAC have signed a Memorandum of Understanding to end the reimbursement and allow the state to fund Boston teacher benefits as it does its other pension liabilities. Legislation was recently introduced by the Governor that would allow this agreement to be enforced.

The legislation would divide the SBRS into two funding schedules: one for Boston teachers and one for all other SBRS members. Based on a methodology developed by the taskforce, 27% of the SBRS's total assets would be transferred to the Boston teacher schedule. The state would then fund this schedule directly through appropriations to the SBRS and would have authority to invest Boston teacher assets in the PRIT Fund. The City and all other member units would then fund the "all other employees" funding schedule, and the SBRS would retain investment authority over these assets. To see the funding schedules calculated by the SBRS actuary as of January 1, 2008, see **Appendix F**.

While teacher benefits would be unaffected by these changes, the shift of authority has financial and actuarial implications for the City and the state. To make the changes, the state will need to make a "double payment" in the year the transfer occurs. First, the state will need to pay the last reimbursement payment for prior year teacher pension costs to the City. Then, the state must make its first payment to the new Boston teacher funding schedule. The City has agreed that, rather than applying the last reimbursement to the General Fund as it normally does, it will apply it

as a one-time transfer payment to the SBRS all other employees funding schedule. At the time of the 2008 valuation, it was projected that this extra appropriation would reduce the amortization payments for the City by \$14.1 million a year.

For the City of Boston, the teacher transfer will be essentially budget-neutral. When the transfer is executed, the City will see its pension appropriation decrease significantly, as teachers make up a substantial portion of SBRS costs. However, when the state's teacher pension reimbursement ends, there will be little change in the City's net pension cost.

## Impact of 2008 on Boston

The SBRS could experience an increase of between 30% and 40% in its pension appropriation in fiscal 2012 as a consequence of its investment losses in 2008. An increase of 30% would require an increase in the total SBRS appropriation of approximately \$80 million from fiscal 2011 to fiscal 2012, which would translate into an annual increase for the City of Boston of approximately \$70 million based on its proportion of the total appropriation. In 2008 the SBRS experienced its worst return on record when its investments lost 24.2% of its market value. Compared to other systems in Massachusetts, where losses ranged from 19.32% to 33.05%, the SBRS had one of the stronger returns in 2008. However, a loss of this size is unprecedented, and the SBRS's unfunded liability and recommended appropriations are expected to increase significantly in its next actuarial valuation in 2010 that would impact the fiscal 2012 budget.

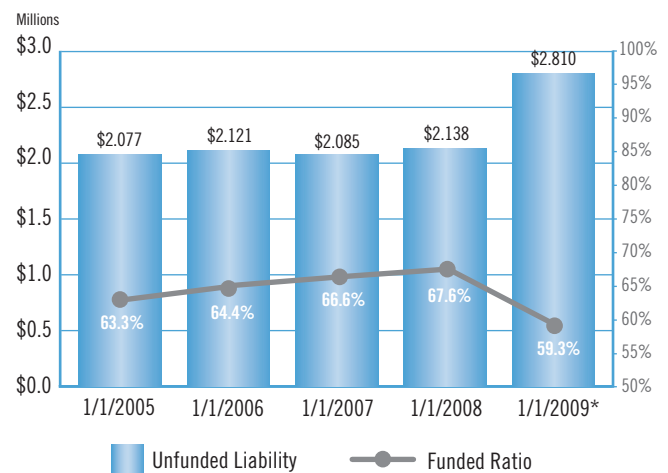
In 2009 the SBRS conducted a funding progress update to document the impact of the 2008 market on the system's unfunded liability. These updates, which are performed on non-valuation years, are conducted by an actuary but are unaudited and do not change appropriation requirements as full actuarial valuations do. The update showed that the SBRS's unfunded liability had increased by \$672.1 million or 31.4% from January 2008 to January 2009, for a final unfunded liability of \$2.8 billion. As a result, the funded ratio dropped from 67.6% to 59.3%. This funding update did not recognize the 19.9% return earned in 2009 by the SBRS, which will be included in the upcoming 2010 actuarial valuation.

The next full actuarial valuation is currently underway using values as of January 1, 2010 and will impact the City's fiscal 2012 pension appropriation. This valuation will recognize the pension fund's 19.9% return in 2009, which will help offset some pension losses. It is expected that the recommended appropriation for the SBRS would increase between 30% and 40% from fiscal 2011 to fiscal 2012 if there is no change to reaching full funding in 2023.

This increase can be mitigated by extending the funding schedule, and the SBRS has the flexibility to lessen the increase to an appropriate amount within the current statute. Local systems must be fully funded by June 30, 2030, seven years later than the SBRS's current funding deadline. A municipal relief proposal has been introduced that includes language to extend the funding schedule to 2040 for local systems. While this proposal will be helpful to some systems that need this extension to avoid unmanageable appropriation increases, the SBRS will have the flexibility within the current statutory deadline to manage the increase.

As the largest membership unit within the SBRS, the City will see its pension appropriation increase proportionally to the overall SBRS appropriation. The upcoming valuation will also reinforce the changes made in the 2008 valuation to reflect pending legislation that would allow the state to fund Boston teacher benefits directly. Since the legislation has not yet passed, the valuation will reflect timing changes regarding the crossover payment and future savings.

FIGURE 5.2  
**State-Boston Retirement System**  
**Unfunded Liability (in Billions) vs Funded Ratio**  
**2005–2009**



\*Data as of 1/1/2009 are based on an unaudited funding update that does not impact appropriation levels. These figures do not recognize a 19.9% return earned in 2009 by the SBRS, which will help mitigate some of the losses calculated as of 1/1/09 and will be reflected in the 2010 actuarial valuation currently in progress. This graph includes the 2009 data to demonstrate the expected trend but not the final results of the 2010 actuarial valuation.

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## 6. Pension Reform Efforts

In Massachusetts and around the country, state and local governments are reviewing how to provide sufficient, fair retirement benefits while managing costs. Some states have departed from the traditional defined benefit system to plans with defined contribution components. In 2009, the Massachusetts Legislature and Governor considered multiple pension reform proposals to alter but not fundamentally change the current defined benefit plan design. The paths taken by other states and the history of pension reform in Massachusetts provide an important perspective to inform the future of retirement benefits in Massachusetts.

### Alternative Retirement Plans

The 2007 National Compensation Survey, conducted by the U.S. Department of Labor, found that 83% of state and local government workers had access to a defined benefit plan, and 95% of those who had access participated. However, some states have ended their traditional defined benefit plan and offer alternative plans with a defined contribution element to its employees. Their decisions to move away from the traditional defined benefit plan are often rooted in reducing government obligations to pensions, establishing a more predictable funding system and increasing parity between public sector and private sector workers.

There are two common models for alternative public sector retirement plans: a defined contribution plan and a defined contribution-defined benefit hybrid plan. The defined contribution plans are generally set up as 401(a) accounts, which operate similarly to 401(k) plans. Michigan, Alaska and the District of Columbia have all adopted defined contribution plans. Hybrid defined benefit-defined contribution plans are structured so that the employee receives a small defined benefit pension coupled with a defined contribution plan with employer matching funds. Indiana, Oregon and the federal government have all switched its employees to a hybrid plan. However, it is important to note that employees in all these systems

with the exception of Alaska contribute to and receive Social Security benefits, which adds to their overall retirement earnings and provides a static base benefit. Public employees in Massachusetts, by contrast, do not contribute to Social Security.

**Michigan.** In 1997, Public Act 487 of 1996 went into effect and required all state employees hired after March 31, 1997 to enroll in a defined contribution plan. While the state defined benefit plan was 100% funded at the time, the switch to the defined contribution plan was pushed to provide employers with more cost stability and predictability. Once an individual is hired, the state begins an automatic 4% of salary contribution to the individual's retirement account. The employee can contribute up to federal contribution limits, with the state matching up to an additional 3% of salary. The defined contribution plan is available to all state employees and to municipalities that decide to enroll their employees in the plan. Defined benefit plans still exist for school employees, public safety officers and judges. In February 2010, the Governor introduced a proposal to switch new school employees to a hybrid defined benefit-defined contribution plan to control costs.

**Washington D.C..** Washington D.C. enrolled its employees in the federal Civil Service Retirement System until October 1, 1987, when the District developed its own plans. Defined benefit plans were established for teachers, police officers and firefighters, while all other employees were required to enroll in a defined contribution 401(a) plan. The District contributes 5% of salary for general employees and 5.5% for detention officers. The employee is not able to make contributions to the 401(a) plan, but can contribute to separate 457 and 403(b) plans.

**Alaska.** In 2005, Senate Bill 141 was passed in Alaska enrolling all new teachers, state employees and most municipal employees hired after July 1 2006 into a 401(a) defined contribution retirement plan. Unlike Michigan and Washington D.C., which maintained a defined benefit plan for public safety officers, most new public safety officers are enrolled in the defined



contribution plan. All employees must contribute 8% of their salary to their retirement accounts, with the employer contributing an additional 5% for state employees and 7% for teachers.

The switch to the defined contribution plan was instigated by an actuarial valuation in 2004 that showed employer costs would increase significantly in the next year. The Alaska Division of Retirement and Benefits conducted a survey of employers that found they desired more predictable, stable payments and did not want to be the sole bearer of investment risk. Since the switch, many legislators have advocated for a return to the defined benefit system.

**Indiana.** All state employees, teachers and some municipal employees are enrolled in a hybrid defined benefit-defined contribution plan. The plan provides a small defined benefit pension that is completely funded by the employer and a defined contribution benefit that is shared between the employee and employer. Employees must contribute at least 3% of salary to the defined contribution component of the plan, which can be partially or fully covered by the employer, and can voluntarily contribute up to 10% of their salary depending on the employer. Defined benefit plans are maintained for public safety officers, judges, public prosecutors, and legislators.

**Oregon.** Public employees in Oregon are now enrolled in a defined benefit-defined contribution hybrid plan. All new employees hired after August 29, 2003 are enrolled in the hybrid plan and are required to contribute 6% of their salary to the defined contribution portion of the plan, though the employer can agree to fund the employee's contribution. The defined benefit component is based on the employee's high three salary, years of service and a multiplier, 1.1% for general service and 1.8% for police officers and firefighters. Employers can also develop a separate defined contribution plan and make additional contributions for some or all of its employees.

**Federal Employees.** The federal government has also transitioned away from the defined benefit plan. The defined benefit plan, known as the Civil Service Retirement System, was closed on December 31, 1983. Employees hired since then are enrolled in a hybrid defined benefit-defined contribution plan called the Federal Employees' Retirement System (FERS). Employing agencies automatically contribute 1% of an

employees salary to the defined contribution portion of the plan, and matches employee contributions up to an additional 4% of salary. FERS also provides a defined benefit component to employees that meet minimum service and age requirements.

## Pension Reform in Massachusetts

Massachusetts has not considered moving away from the defined benefit plan and there is little indication that the state will move in this direction in the near future. However, the defined benefit plan has undergone many changes to ensure that benefits are properly financed and more recently to make the plan more equitable and less easily abused.

Like other public employers providing defined benefit plans, Massachusetts restructured the funding of its pension plan as pressure built nationally to ensure benefits were properly financed and protected. In the past, employers funded their defined benefit plans on a pay-as-you-go basis, appropriating only the amount needed to fund benefits for a given year. Growing concerns that failed corporations could default on retiree benefits led to the passage of the Employee Retirement Income Security Act of 1974 (ERISA), which required private pension plans to pre-fund their liabilities. State and local governments, while exempt from ERISA, began to adopt similar safeguards.

In Massachusetts, the switch to an actuarial funding schedule also led to increased oversight over retirement systems and a loosening of investment restrictions on retirement boards. Key legislative action during this period included:

- **Establishing Oversight of System Finance.** In 1982, the Public Employee Retirement Administration (PERA) was created under the Executive Office of Administration and Finance (Ch. 630, Acts of 1982). PERA was given the power to oversee the financial condition of all Massachusetts retirement systems and to review system liabilities. PERA would later be replaced by the Public Employee Retirement Administration Commission (PERAC) in 1996.
- **Expanding Investment Opportunities.** In 1983, legislation was passed (Ch. 661, Acts of 1983) requiring retirement systems to establish a specific fund for the payment of future retirement benefits. This

act also allowed systems to broaden their investment options in order to increase investment returns for the funding of pension liabilities. Finally, this act created the Pension Reserves Investment Management (PRIM) Board and its Pension Reserves Investment Trust (PRIT) Fund, which was charged with managing the investments of the two state systems and any local system that elected to join.

- **The Switch to Actuarial Funding.** Retirement systems began to fund their pension liabilities actuarially through legislation passed in 1988 (Ch. 697, Acts of 1987). The legislation allowed retirement systems to adopt a local option to develop a funding schedule that would amortize unfunded liabilities over a 40-year period. In exchange, systems would be exempt from an unpopular \$30,000 cap on pensionable earnings. Over the next few years, all retirement systems adopted this local option, starting with the SBRS. Thus, with this act, actuarial funding became the standard throughout Massachusetts.

More recently, the state has taken action to address underfunded systems that continue to show poor investment performance. In 2007, the state enacted legislation (Ch. 68, Acts of 2007) requiring systems that failed to meet funding benchmarks to transfer their assets to the PRIM Board permanently, thereby losing control over the investment of their assets. Systems are required to comply with this law if they meet two conditions:

- The system's funded ratio is less than 65% funded, and;
- The system's ten-year annualized investment return trails the PRIT fund's return by more than 2%.

To date, five systems have been transferred under this legislation and several systems at risk of permanent transfer have voluntarily transferred all or a portion of their assets to PRIT.

## Recent Legislative Actions

In June 2009, the Governor and Legislature approved legislation (Ch. 21, Acts of 2009) which closed loopholes and reformed statutory provisions that caused the most egregious pension abuses among workers and elected officials. A key catalyst for this legislation

was a series of high-profile pension abuses that were covered extensively by the media. Reforms in Chapter 21 included:

- Removing a provision that allowed elected officials to be eligible for a termination allowance if they failed reelection or reappointment.
- Redefining regular compensation used for pension purposes to exclude certain monetary benefits including housing and traveling allowances, overtime and one-time payouts.
- Extending earnings and work restrictions to retirees that return to work for a public employer as a consultant or independent contractor.
- Aligning elected official vesting requirements, previously six years, to the ten year standard used for other employees.
- Revising language that allowed certain officials to receive creditable service for positions with small stipends so that only positions with earnings over \$5,000 annually could be claimed as creditable service.

Most importantly, this legislation addressed a key flaw in the accidental disability pension formula that allowed individuals who reported injuries while temporarily working in a higher pay grade to receive enhanced pensions for life. Prior to Chapter 21, the accidental disability formula allowed individuals to receive a pension equal to 72% of their day-of-injury pay. This allowed individuals filling in for their superiors at an out-of-grade pay rate to inflate their benefits significantly by reporting injuries while working at the higher rate. A bump in benefits could be achieved for as little as one day of out-of-grade work, prompting the nickname "king for a day" pensions.

Chapter 21 revised the formula by changing the calculation so individuals acting out-of-grade at the time of injury would receive a benefit equal to 72% of the average regular compensation earned in the 12 months prior to injury. This practice was revised in November 2009 to allow individuals injured out-of-grade to receive an allowance equal to 72% of the day-of-injury pay in their permanent position or 72% of the average regular compensation they would have earned in their permanent position in the 12 months prior to retirement, whichever is greater. (Ch. 166, Acts of 2009).

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## Current Pension Reform Proposals

More comprehensive pension reform was recently introduced by Governor Patrick in January 2010 to control costs and update aspects of the plan for an aging workforce and to make the plan more difficult to abuse. The Governor's legislation was heavily based on the October 2009 report by the Special Commission to Study the Massachusetts Contributory Retirement Systems, also known as the Pension Reform Commission. Key proposals in this legislation include:

- Capping pension benefits by limiting pensionable earnings to 43% of the federal compensation limit, which is currently \$245,000. Today, this would translate to a \$85,000 cap on pension benefits.
- Increasing the minimum retirement age and age at which an employee can receive maximum benefits from 55–65 to 60–67 for Group 1, 55–60 to 55–62 for Group 2 and to 45–55 to 50–57 for Group 4.
- Increasing the penalty for retiring before reaching the maximum age.
- Prorating benefits for employees who serve in more than one group by the time spent in each group.
- Eliminating termination allowances.
- Increasing the salary averaging period from a high three salary average to a high five salary average.
- Establishing anti-spiking rules for calculating salary averages. The proposal would not allow increases in compensation over 7% plus inflation of the average compensation earned in the preceding two years to be included in the pension calculation unless the retirement board determined the increase to be valid.
- Requiring Supreme Judicial Court judges to contribute to their pensions
- Requiring individuals who buy back service to purchase service within one year of joining or rejoining the system or pay full actuarial interest on the service purchase.
- Requiring legislation benefitting a single individual to be accompanied by a cost analysis confirmed by PERAC and a recommendation from the applicable retirement board.

Recognizing that some of these changes would reduce benefits for some Group 1 employees who essentially pay for their own benefits, the legislation reduces the contribution rate for Group 1 employees hired after July 1, 2010 from the current 9% plus 2% on amounts over \$30,000 to 8.5% of salary plus 2% on amounts over \$30,000.

In addition, the Governor submitted separate legislation to extend the funding schedule for local retirement systems, a proposal that was also addressed by the Commission. Under the proposed legislation:

- The statutory funding deadline for local systems would be changed from 2030 to 2040. Systems that adopt the 2040 deadline would be held to the following conditions:
  - A payment cannot decrease from the prior year's payment until the system is fully funded.
  - If an updated schedule would allow for reduced payments, the schedule must be shortened rather than making lower payments.
  - Amortization payments cannot increase by more than 4% a year (currently 4.5%).
- If the appropriation for the first fiscal year of a schedule extended beyond 2030 is greater than 8% over the prior year's appropriation, PERAC will revise the appropriation to provide no more than an 8% increase.
- Systems that remain under the current 2030 deadline cannot make a payment in any year that is less than 95% of the prior year's payment.
- All systems would now be required to conduct actuarial valuations at least every other year, as opposed to the current triennial requirement.

Both bills are currently before the Legislature.

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## 7. Health Insurance

Boston and other municipalities in Massachusetts are facing a crisis in funding and managing employee health insurance costs. These costs have become unsustainable and cities and towns are constrained in their attempts to control them. The current local health insurance system is broken. Meaningful reform of the system will be difficult to achieve through the current requirement of contract negotiations. Absent reform, escalating health insurance costs will continue to absorb a larger and larger share of the annual operating revenues of cities and towns, forcing cuts in other basic services. Increasing pension costs also absorb limited revenue growth further adding to the financial burden of municipalities.

### Double Standard

The Commonwealth is in a far more advantageous position to manage health insurance expenses than cities and towns. At the local level, all aspects of health insurance are subject to collective bargaining. This severely limits the ability of municipalities to respond and control health insurance costs in a timely manner.

The City must negotiate every plan change with each of its bargaining units, including deductible and co-payment amounts, plan offerings, and the premium share to be paid by the City and its employees. Because health insurance is tied to collective bargaining, the City is generally only able to seek revisions every three years when a new employee contract is being negotiated. This delay precludes the City from responding to changing conditions or new plan offerings in a timely manner. In situations of protracted negotiations, the time required can be much longer. The time taken in these steps can mean that the municipality misses the window of opportunity to make the changes that would have achieved important savings.

At the state level, just the opposite is true. The Commonwealth is able to make changes in premium share legislatively and plan design administratively outside of the collective bargaining process when needed. In recent years, the state has been able to act

quickly in increasing the employees premium share and increasing employee co-pays and deductibles to manage rising health insurance costs. The fiscal 2010 state budget increases employee contributions for all active employees enrolled with the GIC. Previously, employees hired before June 30, 2003 paid 15% of their premiums, while those hired after that date paid 20%. The fiscal 2010 budget increases premium contributions by 5% for all employees. The change is expected to save the Commonwealth \$45 million in fiscal 2010.

### Municipal Burden

A review of health insurance costs of eight municipalities including Boston, further confirms that health insurance costs are straining municipal budgets throughout the state. From fiscal 2004 through fiscal 2009, health insurance costs in general have grown at a much faster rate than total general fund spending. The largest disparity is found in New Bedford, where health insurance costs have increased by 41% during this time frame, while overall spending for city services actually declined by 5%. City of Boston health insurance spending grew by 54% while overall spending grew by 26% from fiscal 2004 through fiscal 2009.

### Boston's Achievements

The current fiscal environment allowed Boston for the first time in over two decades, to negotiate changes to health insurance in an effort to share the burden of increasing costs with employees. Negotiations resulted in the portion of the premiums paid by employees increasing by 5% over two years. Additionally, Boston was able to offer a lower cost indemnity plan—all achieved through a lengthy collective bargaining process. Boston was also successful in negotiating lower premiums with health insurance providers, all of which contributed to the fiscal 2010 health insurance budget increase of 4.0% being one of the lowest in recent years. The City estimates that total savings from both employee contribution changes and the reduction of enrollment in Master Medical, will exceed \$9.6 million in fiscal 2010.



## Boston's Health Insurance

In fiscal 2010, 28,746 subscribers were enrolled in the City's health insurance programs, of whom 12,473 or 43.4% are retiree subscribers. Boston offers a variety of managed care plans as well as Master Medical, a costly Indemnity plan and lately Blue Care Elect, a lower cost comparable Indemnity product. For most employees, contributions to HMO plans will rise to 15% in fiscal 2010 with the City paying the balance of 85%. For the Indemnity plans, the City pays 75% of the premium and the employee 25%. Prior to the last round of employee contract negotiations, the City had been paying 90% of the HMO premiums. The City continues to pay 90% of the HMO premiums for retirees and 75% of their premiums for Indemnity plans. For retirees enrolled in Medicare, the City also pays 50% of their Part B premiums.

## The Rising Cost of Health Insurance

Boston's health insurance costs for city and school employees continue to grow at a higher percentage than total city spending. In fiscal 2009, health insurance accounted for 11.5% of city general fund spending, up from 9.4% in fiscal 2004. In fiscal 2010, 12.1% of the budget is allocated for health insurance costs.

The City plans to spend \$275.9 million on health insurance in fiscal 2010, a 4.0% increase over the prior year. From fiscal 2004 through fiscal 2009, actual spending for health insurance escalated by 54.4%, or 9.7% a year on average. At the same time, all other operational city spending has increased by 23.1%, or 3.5% a year on average.

Over time, the escalating costs for health insurance represent a disproportionate share of the growth of the City's total operating expenses. In seven of the last nine years, the annual increase in health insurance costs absorbed more than 17% of the total increase in the City's operating budget, comprising as much as 97.1% of the increase in fiscal 2004.

## Retiree Health Insurance

Retiree health insurance costs represent 37% of Boston's spending for health insurance in fiscal 2010. This cost is expected to continue on a growth pattern as more individuals retire, life expectancy increases

TABLE 7.1  
**City of Boston Health Insurance  
as Percent of Total General Fund Spending**  
Fiscal 2006–2010

	City & School Health Insurance	Total City Spending (a)	HI as % of Total Spending
FY06	\$209.7	\$2,005.2	10.5%
FY07	\$233.3	\$2,093.7	11.1%
FY08	\$256.1	\$2,221.8	11.5%
FY09 (b)	\$265.3	\$2,302.9	11.5%
FY10 (c)	\$275.9	\$2,276.2	12.1%
Variance FY06-FY10	31.6%	13.5%	

(a) Figures are net of teacher pensions

(b) FY09 includes \$23.3M in ARRA funds used for general fund operations. \$13.093,550 of this was used for BPS Health Insurance

(c) Tax Rate Budget

TABLE 7.2  
**City of Boston Health Insurance Growth vs. Total  
General Fund City Growth**  
Fiscal 2001–2009

	Health Insurance Growth (a)	Total City Spending Increase (b)	Health Insurance Increase as a % of Budget Increase
FY01	\$9,996,896	\$107,590,686	9.3%
FY02	16,839,065	62,679,803	26.9%
FY03	13,729,358	43,060,746	31.9%
FY04	19,047,825	19,615,243	97.1%
FY05	18,438,711	68,559,563	26.9%
FY06	19,483,355	109,655,614	17.8%
FY07	23,636,239	88,429,048	26.7%
FY08	22,720,538	128,184,743	17.7%
FY09	9,210,259	81,064,543	11.4%

(a) Does not include PHC

(b) Net of teacher pension reimbursement

and steps are taken to address the retiree health insurance liability (OPEB). In fiscal 2010, the City expects to spend \$101.3 million on retiree health insurance. Retiree health insurance is more expensive in Massachusetts because only in this state are Medicare eligible retirees permitted to enroll in active employee plans. As of 2008, the retiree health insurance liability (OPEB) must be reported in the footnotes to the City's financial



statements. This new expense obligation is further explained in the post employment benefits section of this report.

Cities and towns do have an option to reduce their retiree health insurance cost by requiring retirees to enroll in Medicare at age 65. Municipalities can adopt by local option Chapter 32B, Section 18, which requires eligible retirees to enroll in Medicare. Essentially, this provision shifts much of the cost of providing retiree health insurance to the federal government. The law requires that Medicare and the city-sponsored plans must together “be of comparable actuarial value to those under the retiree’s existing coverage.” Savings are also realized from a reduction in the premiums for municipal plans used by active employees and non-Medicare retirees as a consequence of retirees with higher, more expensive claims transferring to Medicare. Section 18 analytical reports have estimated premium savings of 5.0% or more.

The Commonwealth has required all state retirees to enroll in Medicare since 1992. The cities of Springfield (2004), Worcester (2007) and Somerville (2009) have adopted Section 18 as have 128 other cities and towns and a few regional school districts.

A second option became available in 2008 when a bill proposed by the City of Boston to make the Medicare enrollment requirement prospective was enacted (Chapter 374, Acts of 2008). This Act established Section 18A which requires only those employees who retire after the section is adopted to enroll in Medicare. Exempting all current retirees from the requirement to enroll in Medicare supplemental plans prevents a municipality from realizing any significant savings from shifting costs to Medicare for several years. The City of Boston adopted Section 18A in March 2010 which will become effective in July 2010. That means that over 1,700 retirees who are now Medicare eligible and current retirees who will become Medicare eligible will be exempt from this requirement.

## State Health Insurance

In contrast to Boston and other Massachusetts municipalities, the Commonwealth does not negotiate its employee and retiree health insurance benefits with its unions. Through its Group Insurance Commission (GIC), the state has greater administrative flexibility

to manage plan design and the associated costs. As a result, the premium costs under the Commonwealth have grown significantly less than Boston’s premium growth over the four years since fiscal 2006.

A review of the managed health care plan costs for both the Commonwealth and Boston demonstrates the distinct advantage the state’s administrative management of employee health insurance has over the City’s contract negotiated management. Although not completely comparable, the Harvard Pilgrim HMO offered through the City of Boston posted an increase in premium cost of 39%, while the Commonwealth’s Harvard Pilgrim Independence plan grew by 14% from fiscal 2006 through fiscal 2010. Fiscal 2010 is based on GIC rate changes that took effect in February 2010. The lower state premiums are achieved, in part, by the higher co-pays and deductibles paid by the employees.

A comparison of the premiums of the two managed care plans shows that an individual Harvard Pilgrim HMO plan grew by \$1,944 or 39% in four years for a City of Boston employee while an individual Harvard Pilgrim Independence plan grew by \$720 or 14% for a state employee. For a family plan, the City employee’s premiums increased by \$5,220 or 39% and the state employee’s premiums increased by \$1,680 or 14%. The cost difference between the two family premiums is \$3,540 over four years. See **Table 7.3**.

Since 1955, the Commonwealth’s health insurance plans for active employees and retirees have been management by the Group Insurance Commission. The GIC was established by the Legislature to provide and administer health insurance and other benefits to the Commonwealth’s employees and retirees, and their dependents and survivors. The GIC also covers housing and redevelopment authorities’ personnel, participating municipalities, and retired municipal employees and teachers in certain governmental units. The Group Insurance Commission is a quasi-independent state agency governed by a 15-member Commission appointed by the Governor. Commission members encompass a range of interests and expertise including labor and retirees, the public interest, the administration, and health economics. The GIC administratively determines plan selection, design, including deductibles and co-payments, outside of the collective bargaining process. Decisions of the GIC on health insurance coverage are considered beyond the control of the Legislature and the Commonwealth as employer

TABLE 7.3  
**Monthly Premium Rate Comparison**  
**City of Boston vs GIC**

City of Boston		FY06	FY10	%
Harvard Pilgrim HMO	Ind	\$410	\$572	39%
	Fam	\$1,103	\$1,538	39%
NHP	Ind	\$352	\$561	59%
	Fam	\$948	\$1,486	57%
Commonwealth of Massachusetts – GIC				
NHP HMO	Ind	\$328	\$385	17%
	Fam	\$869	\$1,021	17%
Harvard Pilgrim Independence PPO	Ind	\$426	\$486	14%
	Fam	\$1,030	\$1,170	14%
Tufts Navigator PPO	Ind	\$409	\$486	19%
	Fam	\$990	\$1,172	18%

NHP = Neighborhood Health Plan

Note: HMO and PPO Plans are not completely comparable. PPO tend to have higher rates because of the built in flexibility of those plans.

and thus are not required to be negotiated. The Legislature does have the responsibility to set the premium share paid by the state and its employees and retirees.

The GIC has worked aggressively to control costs, at times implementing original and creative solutions. For example, in 2004 the GIC established a Clinical Performance Improvement (CPI) Initiative that ranks physicians and in some plans, hospitals, based on quality and/or cost-efficiency in a tiered system. Employees are rewarded with lower co-payments when using Tier 1 (excellent) or Tier 2 (good) physicians, reducing their own out-of-pocket expenses. By drawing enrollees away from less efficient health care providers, Mercer, the GIC's consultant, estimated a cumulative savings of 20% over the first three years of the program.

The GIC also saves money through active management of its prescription drug program that promotes the purchase of mail order and generic drugs. For example, the GIC carves out the prescription drug portion of its indemnity plans to be administered by the pharmacy benefit manager (PBM) Express Scripts. CVS Caremark was selected as the new PBM effective July

1, 2010. The GIC's prescription step therapy program encourages subscribers to try certain less expensive first-line drugs before trying the more expensive second-line alternatives. The generics preferred program gives subscribers a financial incentive to use generic rather than brand name drugs. In fiscal 2006, the GIC saved an estimated \$5.2 million over the prior year through the generics preferred program.

In addition to these cost saving measures, in 2004, the GIC began self-insuring more of its health insurance plans, providing immediate cash-flow savings and ongoing risk premium savings. Finally, the GIC has assembled a vibrant health claims database that allows it to track spending and analyze health trends in order to identify opportunities to further control costs.

## Local Health Insurance Reform

Skyrocketing health insurance costs and restrictions on municipalities in their attempts to control those costs have led cities and towns to seek change at the state level. Legislation passed in 2007 allowed cities and towns to join the GIC if local officials could reach agreement with a committee of its union leaders. That process has been arduous and after two and a half years only 17 municipalities have joined the GIC with two more expected to join on July 1, 2010.

Specifically, municipalities interested in joining the GIC must enter into coalition bargaining with a committee of representatives from each employee union, each with a weighted vote based on their members' participation in the health insurance system. The municipality and employee committee must negotiate conditions for entering the GIC and 70% of the unions' weighted vote must support the move to the GIC. Any agreement made between the municipality and the committee would be binding on all active employees and retirees who receive their health insurance from the municipality. If no agreement can be reached, health insurance decisions would continue to be made through the collective bargaining process.

The Legislature has not acted on requests by municipal officials to be granted the same administrative plan design authority employed by the Commonwealth since 1955. Two bills, H.2509 and H.3736 are before the Legislature to achieve that objective.

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## 8. Other Post-Employment Benefits

The Commonwealth and cities and towns are facing a relatively new requirement to acknowledge the full extent of their financial liability for retiree benefits other than pensions. The state and municipalities are required to report in the footnotes to the financial statements their full liability and unfunded liability for other post employment benefits (OPEB) than pensions, such as health and life insurance for retired public employees and eligible spouses. The Governmental Accounting Standards Board (GASB) has established these standards for state and local governments as presented on a GAAP basis. These standards require the state and municipalities to account for and report the full value of OPEB benefits earned each year rather than presenting annual OPEB costs on a pay-as-you-go basis. Initial valuation reports by independent actuarial firms indicate that the OPEB liabilities are significant and exceed existing pension liabilities. The state and the few municipalities in Massachusetts that have started to appropriate funds for their OPEB liability generally are raising only a small share of what would be required annually if a formal funding schedule were adopted.

Accounting standards promulgated in 2004 by GASB included GASB Statement No. 43, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans, and GASB Statement No. 45, Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions which became effective June 30, 2007 and June 30, 2008, respectively. For states and big cities like Boston, the accounting and reporting rules were required to be included in the financial statements for fiscal 2008. Medium governments and small governments had to comply with the requirements in their fiscal 2009 and fiscal 2010 financial statements, respectively.

The concept behind GASB's requirement is that OPEB, as with pensions, is a promise made to employees as a condition of their employment that is part of their compensation each year. Similar to pensions, the cost of these future benefits is a part of the cost of providing public service today. Even though these benefits are

not received until after employment has ended, they constitute compensation to attract and retain qualified employees and the expenses should be associated with the years of active service.

OPEB generally takes the form of health insurance and life insurance but may also include dental, vision, prescription and other healthcare benefits provided to retirees and eligible surviving spouses or dependents of deceased employees. In Massachusetts, the state and municipalities that offer post-employment benefits are obligated to provide retirees and eligible spouses with at least 50% of the health and life insurance benefits provided to active employees and each community may choose to pay a larger percentage and provide other benefits as well. Boston and most municipalities offer their retirees 100% of the health and life insurance benefits received by its active employees. For retirees and their beneficiaries, the City currently pays 75% of the indemnity premiums and 90% of HMO premiums. That is more than the 85% of HMO premiums the City pays for most active employees as a result of its success in negotiating a 5% decrease in its share of HMO premiums by fiscal 2009.

While the new GASB standards require state and local governments to include a footnote in their financial statements indicating the actuarial accrued liabilities, the standard does not include a funding requirement. Nevertheless, the recognition of the large unfunded liability will create pressure to establish a funding solution. Indeed, if the Commonwealth and municipalities took no action to begin funding the liability in a reasonable time, the bond rating agencies would take note. The annual OPEB cost is similar to calculations for pensions, and is equal to the current year's estimated present value of benefits earned during the year (normal cost) and a component for amortization of the total unfunded actuarial accrued liabilities over a period not to exceed 30 years.

The Legislature has enacted legislation authorizing each municipality to establish a trust fund for the purpose of prefunding its OPEB liabilities in the same manner as traditional pension benefits. This legislation

became effective in January 2009 (Chapter 479 of the Acts of 2008) and authorized any city or town in the Commonwealth, by local option, to establish a separate and irrevocable trust fund to which appropriations could be approved for the purpose of reducing the unfunded actuarial OPEB liability and to meet the normal cost of future OPEB benefits.

This law also requires that each municipality that adopts Chapter 479 establish a funding schedule for the Trust. OPEB actuarial valuation reports include a payment schedule to reach full funding over a 30-year period which has been interpreted to meet the schedule requirement in the law. Cities and towns are not legally obligated to appropriate funds consistent with the actuarial schedule. A more strict requirement at this time would not be fiscally practical and would discourage any effort by municipalities to annually appropriate funds into an OPEB Trust.

## Funding the OPEB Liability

The Commonwealth has determined its OPEB liability and has been working to develop a short- and long-term strategy for funding the liability. The actuarial accrued liability of the state for OPEB obligations earned through January 1, 2008 on a partially funded basis was \$15.64 billion according to the most recent report released in December 2008. If full funding was assumed, the actuarial required liability was reduced to \$11.65 billion. The difference is solely attributable to the standards requirement that a lower investment return rate must be used without full funding. Under full funding, the state's annual required contribution (ARC) was \$981.4 million for fiscal 2009 and projected to increase to \$1.6 billion for fiscal 2018. The state established a Retiree Benefits Trust Fund in fiscal 2008 which received a one-time transfer of approximately \$336 million from the tobacco settlement proceeds in the Health Care Security Trust.

Since 2008 the state has appropriated only the amount required to fund the annual pay-as-you-go expenses for its retiree health insurance which totaled \$352 million in fiscal 2009 and \$372 million in fiscal 2010. The Governor's recommended fiscal 2011 budget provides \$397 million for retiree health insurance. The \$352 million appropriated for retiree health insurance in fiscal 2009 is \$629 million or 64% less than the

required ARC that year based on an actuarially determined funding schedule.

The Governor's fiscal 2011 budget does recommend a plan for fully funding the state's OPEB liability but it is tied to the vagaries of the economy and the state's collection of capital gains income. The Governor's plan caps the use of capital gains income for operations at \$1 billion and the excess over that cap would be transferred to the Commonwealth Stabilization Fund. Of that amount, 5% would be allocated to the State Retiree Benefits Trust Fund. While this plan, if approved by the Legislature, does establish a dedicated revenue source, it would not have any effect in the next year or two as the state Department of Revenue's forecast for capital gains income in 2011 is less than \$700 million.

TABLE 8.1  
**Boston OPEB ARC vs. Actual Fiscal 2010**  
(In Millions)

	Paygo	Pre-Funding
ARC	\$354.4	\$261.2
City Appropriation	\$121.3	\$121.3
Annual Gap	\$233.1	\$139.9

## City of Boston

The City of Boston has identified its OPEB liability and has adopted a limited short-term strategy to fund the liability. An independent actuarial valuation as of June 30, 2009 indicated that Boston's OPEB liability was between \$5.80 billion (partially funded) and \$3.69 billion (fully funded) depending on the funding policy adopted by the City. Based on the estimates in the 2009 report, the City's annual required contribution would be approximately \$354.4 million on a partially funded basis and approximately \$261.2 million under an actuarially fully funded basis. In fiscal 2008, the Commonwealth had not authorized municipalities to establish trust funds for the purpose of fully funding OPEB liabilities in the same manner as traditional pension benefits. That year the City established an OPEB Stabilization Fund to which it appropriated \$20 million for the purpose of paying a portion of its future OPEB costs. An additional \$25 million was appropriated in fiscal 2009 for a two year total of \$45 million. Through special legislation for Boston in 1983, the City is able to invest the \$45 million in the Stabilization Fund just

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as it would if the funds were in an OPEB Trust Fund. The difference is that following OPEB standards, the actuarial investment benefit of these funds over time cannot be considered in determining the City's OPEB liability.

The City of Boston did adopt Chapter 479 with the City Council's approval of the City's fiscal 2010 budget in June 2009. The City has established the OPEB Trust Fund which will be an irrevocable trust devoted solely to funding the OPEB liability. Into this Trust, the City will transfer the \$20 million appropriated for that purpose in the fiscal 2010 budget and all subsequent OPEB appropriations. These funds will be factored in future OPEB actuarial valuations. The \$20 million appropriated in fiscal 2010 is \$5.0 million less than appropriated in the previous fiscal year, reversing a two-year trend of at least increasing the annual appropriation over the prior year.

Boston is a good example of the fiscal challenge of funding the OPEB liability on an annual basis. The 2009 valuation report indicated that the City's annual actuarially required contribution (ARC) to meet its OPEB liability is between \$354.4 million (partially funded) and \$261.2 million (fully funded). In fiscal 2010, the retiree health insurance appropriation is approximately \$101.3 million and the City appropriated \$20 million for the OPEB Trust for a total of \$121.3 million. Thus, the annual amount the City appropriated for retiree health insurance in fiscal 2010 is \$233.1 million (partially funded) or \$139.9 million (fully funded) less than the ARC.



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## Recommendations

Massachusetts state and local governments are required to manage more effectively in a changing fiscal environment in which spending for employees is absorbing a growing share of more limited revenue growth. Employee pension and health insurance benefits are large inflexible costs that add pressure to public budgets, but for different reasons. The pension system is state-wide and the same rules and regulations apply equally to the two state systems and the 103 local systems. While the pension costs continue to grow, the larger financial burden is tied to the amortization of the unfunded liability from previous years and each system is scheduled to reach full funding within a specified time frame. State and local employees generally pay the majority of the remaining normal costs for their pensions.

Health insurance costs, on the other hand, are neither sustainable nor able to be managed effectively under current law. Double standards between the state and municipalities in how their health insurance plans can be designed and implemented have left municipalities with limited tools to control escalating costs. The retiree health insurance liability is rising without clear funding strategy.

The pension plan and health insurance management can both be improved to operate in a more efficient manner. Massachusetts operates with a single defined benefit pension system that applies to all levels of government so the recommendations made below will apply to each of the 105 public systems. That same concept does not apply to health insurance which causes the recommendations to focus more on enabling municipalities to achieve similar management authority as the state and eliminate the double standard that now exists. A separate set of recommendations apply to the operations of the State-Boston Retirement System. The acknowledgement of the other post employment benefit liability (OPEB) for retiree health insurance for the state and each city and town creates a new dynamic that must be addressed and which will influence decisions regarding future salary increases and management of pension and health insurance benefits.

### Pensions

Legislative action to address the most visible pension abuses and to close loopholes have been undertaken in the past year but more substantive steps to reform the larger deficiencies of the system have yet to occur. The Pension Reform Commission has made a series of suggestions to implement further reform of the existing system as has the Governor in legislation he filed in January 2010. However, given the growing trend of increasing pension expenses with more limited revenue growth, the Commonwealth should reevaluate the future pension obligations for state and local systems and determine whether a different pension structure is warranted going forward. In the meantime, more comprehensive change in the public pension system regulated under Chapter 32 should be implemented to improve administration and funding, limit manipulation and create a more equitable system for employees. For Boston, progress is being made in addressing management and system improvements but additional steps are required.

At a fundamental level, Massachusetts should initiate a study of other retirement models to determine if an alternative structure would address the inequities and cost concerns of the current pension plan.

While defined benefit plans remain prevalent in the public sector, some government employers have moved away from traditional pension plans. Some states have begun to place more emphasis on defined contribution plans to gain more predictability in cost and to control liability growth. Michigan, Alaska and the District of Columbia, for example, enroll all their new employees in defined contribution plans, while new employees in Indiana, Oregon and the federal government are enrolled in hybrid plans that provide both a small defined benefit pension and a defined contribution plan.

While cost predictability is also an issue for public employers in Massachusetts, the current plan is expected to be more affordable in the long run. State and local employer costs are concentrated in the

amortization of unfunded pension liabilities, which will eventually be paid down. The cost of future benefits or normal cost, on the other hand, will be funded mostly by employees. This means that when unfunded liabilities are fully paid down, employers will only need to pay their share of normal cost, and they will see their pension costs decrease dramatically.

While affordability is expected in the future, there are concerns about the current system that need to be addressed now. Employees are locked into a plan with limited portability, no Social Security credits and substantial salary contributions. Employers bear the investment risk on plan assets and systems manage a complicated, formula-based system full of caveats and special benefits for certain individuals. The current plan also continues to operate without a clear standard for how the cost of benefits should be distributed among employees and employers, with some employees funding significantly more of their pension benefit than others. The Pension Reform Commission that released its report in October 2009 focused on how to make the current system work rather than addressing opportunities for system-wide change.

The Governor and the Legislature should review all the plan options available to determine if a more affordable, flexible option can be built on today's priorities. A hybrid defined benefit-defined contribution plan is an option that can provide more flexibility for employees while retaining the security of a set pension base. However, this type of plan may increase costs for employers, and therefore this opportunity should be studied carefully to determine if it serves both employees and employers well. PERAC should assist this effort by conducting a detailed review of what other states have done, what occurs in the private sector and the long-term cost impacts of implementing an alternative retirement plan.

The Research Bureau makes the following recommendations to strengthen the current retirement system.

## Changes to the Current Chapter 32 Plan

**I. Set employee and employer contributions as a share of normal cost for the employee's group, similar to what is done to pay for health insurance premiums.**

A key flaw of the current system is the way future benefit costs are shared between employers and different employee groups. Under the current system, all employee contribution rates are set by date of hire and are not linked to the benefit the employee is expected to receive. The employer's contribution to future benefit costs is simply the amount needed to fill the gap between the employee's contribution and the total normal cost calculated by the actuary.

The result is that some employees in Group 1 will fund all or essentially all of their own benefit through their own contributions and investment returns, while other employee groups like public safety officers in Group 4 with more expensive benefits fund a much smaller share. Employee rates also remain the same throughout an employee's career even if benefits become more generous or expensive, leaving the employer to absorb any increases in costs that develop.

To be more transparent about the distribution of benefit costs, employee and employer contributions for future benefits should be set as a percentage of normal cost for the employee's group. Funding normal cost in this way allows increases in benefit costs to be shared among employees and employers when normal cost is updated in each actuarial valuation. This would resemble the method for paying health insurance premiums, where employees and employers contribute according to a percentage of total premium cost.

Most importantly, an employee contribution that is based on normal cost would be linked to the expected value of future benefits, rather than an arbitrary date of hire. By setting contributions as a share of normal cost, a Group 1 employee would not be expected to contribute the same amount as a Group 4 employee, who is expected to receive more generous benefits. This would make employee contributions not only more logical, but more equitable as well.

## **II. Update Chapter 32 and plan design elements to limit abuse and create a more sustainable system.**

Recent legislation has addressed some of the largest loopholes found in Chapter 32, but there are still opportunities within the system to provide more equal benefits and limit manipulation further. The Governor's recently submitted pension reform legislation, H.4440, addresses some of these items, but additional actions can be taken.

- **Prorate benefits by time spent in each group.** Currently, retirement benefits can be greatly enhanced by moving to a higher group prior to retirement. Rather than basing benefits on an employee's group at retirement, proration will provide a better representation of an employee's work history and remove an incentive for abuse.
  - **Widen the salary averaging period.** Similar to group classification, benefits can be greatly inflated by a temporary salary bump. Increasing the averaging period from three years to five years will provide a wider view of employee earnings and limit opportunities for manipulation.
  - **Prevent salary spiking with limits to pensionable compensation increases.** While extending the averaging period allows for a better perspective of an employee's earning history, temporary salary increases can still influence averages and inflate pension benefits. Capping increases for the earnings used in benefit formulas would provide another safeguard for abuse. The Governor's proposal to not allow one-year increases in compensation that are more than 7% plus inflation of the average earnings in the prior two years to be recognized in pension calculations should be supported.
  - **Cap the maximum pension at \$85,000.** While most workers receive modest pensions, there are those that receive very generous benefits that are difficult to justify to taxpayers. Capping the amount of pension-eligible compensation used in pension calculations and subject to deductions would allow high-paid employees to receive sufficient benefits while limiting overly generous pensions. This would also allow highly paid individuals to contribute to individual retirement accounts outside the pension plan. The Governor has included a proposal to cap pension-eligible compensation to allow for a maximum pension benefit of \$85,000 that should be supported.
  - **Eliminate termination allowances.** There is no need to provide a larger benefit earlier to an individual already eligible for a retirement allowance simply because he or she was terminated. Individuals who are eligible for termination allowances (section 10) are by definition eligible for a deferred retirement allowance when they turn 55, and therefore do not need to receive an earlier enhanced benefit.
  - **Update and standardize the group classification system.** Uncertainty over what positions fall into which groups results in some employees receiving very different benefits than similar employees depending on their retirement system's interpretation of their classification. A detailed review that examines which groups are necessary and which positions should be classified in each group should be performed to limit this confusion.
  - **Require a higher standard for approving individual benefits legislatively.** More scrutiny should be required to pass special legislation that provides enhanced pension benefits to an individual employee. The Governor's proposal to require a PERAC-confirmed cost analysis and comment from the applicable retirement board for all individual benefit legislation should be supported.
  - **Reform presumption laws for public safety.** Under these laws, certain medical conditions are presumed to be job-related for public safety officers regardless of the specifics of an individual's case, thus making them eligible for accidental disability retirement benefits. A study should be initiated to determine whether advances in medical research can enable the current presumption language to be more narrowly defined regarding medical conditions specifically tied to the work environment.
  - **Remove waivers on work restrictions for teachers.** When Retirement Plus was passed in 2001, the legislation allowed for teachers to return to work for school districts deemed in "critical shortage" of qualified teaching staff without the earnings and work restrictions in place for all other public employees. This provision was included to address fears that districts would see a large number of retirements due to Retirement Plus. That has not happened, and it is time to remove this provision and have teachers comply with the same earnings restrictions that apply to other public employees.
- III. Employers should scrutinize disability retirement applications more carefully and increase light duty options for public safety officers.**
- Disability retirement benefits are an important and essential benefit, but because of their high cost, there should be more intense scrutiny of all applications and increased accountability. Each individual involved in

the disability review and approval process, including the employee's own physician, should be held accountable if abuse of the benefit is later determined to exist. The process currently in place provides employers with opportunities to contest employee injury claims through their review of disability claims and in their statements in disability retirement applications. Employers should utilize these opportunities more extensively to ensure injuries are valid and truly career-ending.

Disability retirement rates among public safety officers are high not only because of a higher opportunity for injury in the field, but also because of the high physical standards for the position. Currently, the accidental disability law states that an employee "unable to perform the essential duties of his job" due to a work-related injury is eligible for disability retirement. This law should be amended to allow police and fire chiefs to assign injured public safety officers to light duty administrative positions while their disability claim is pending after a doctor's certification that an employee can perform the work.

#### **IV. Require more systems to invest in the Pension Reserves Investment Trust (PRIT) Fund.**

A system of 103 local retirement boards responsible for the same defined benefit plan that hire investment managers to advise them on pension investment strategies is inefficient and a more expensive option than a more centralized approach. Fifty-two systems have transferred their assets to the PRIT fund administered by PRIM, leaving 51 systems responsible for their own investment of resources. Over the long-term, PRIM has supplied strong returns to state and local systems with a greater staff capacity and investment expertise than is available in smaller systems.

Consolidating investment functions by having more systems invest in the PRIT Fund will achieve long-term operational benefits. Currently, systems can be required to permanently transfer their assets to PRIT if they are less than 65% funded and their 10-year annualized return is more than 2% less than the PRIT Fund's 10-year return. To encourage efforts to reach full funding and transition more systems to the PRIT Fund, the funded ratio threshold should be increased by 1.5% a year until 2030, when it will reach 95%. This will result in only those systems that have demonstrated progress to reach full funding and hold

strong investment histories to retain control over their investments.

### **Reform in Boston**

#### **I. The State-Boston Retirement Board should limit any extension of years to reach full funding.**

The SBRS's unfunded liability is expected to increase above the norm in the 2010 valuation as a result of 2008 investment losses even when considering gains in 2009. Recent experiences with other retirement systems indicate that the recommended contribution to the SBRS could increase by 30% to 40% from fiscal 2011 to fiscal 2012. The SBRS is presently scheduled to reach full funding by 2023 and under current law can extend its schedule to 2030. The Retirement Board should resist any significant extension of its full funding schedule. Reaching full funding of the pension liability is an important component of the City's fiscal health. The unfunded liability for retiree health insurance (OPEB) is even larger than the pension liability, and it will not be seriously addressed until the pension liability from prior years is fully amortized.

#### **II. Boston should not adopt an ERI.**

The latest version of municipal relief legislation also includes a proposal to offer a local-option Early Retirement Incentive (ERI) to municipalities. In 2002, the City adopted an ERI and increased its pension liability by \$61.8 million. While the current ERI proposal requires adopters to be more disciplined in refilling positions to preserve savings, any action that would increase the pension liability should not be considered. The pension liability is already expected to grow considerably when 2008 investment losses are realized in the January 1, 2010 valuation, and an ERI would only add to the liability increase.

#### **III. The Legislature should approve the Boston teacher pension transfer bill submitted by the Governor.**

The Governor recently submitted a supplemental fiscal 2010 appropriations bill with language that would finance Boston teacher benefits in the same way as other teacher benefits. The bill includes language to create a separate funding schedule in the SBRS for Boston teachers that would be funded directly by the state. The legislation would also allow the state to invest Boston teacher assets in the PRIT fund, where



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MTRS assets are invested. The legislation would not cause any changes to the benefits earned by Boston teachers and the SBRB would continue to administer benefits to Boston teachers. The legislation should be supported and passed before the close of the fiscal year.

Boston teachers' retirement benefits are uniquely funded when compared to other teacher benefits in Massachusetts. The current funding arrangement where a pay-as-you-go reimbursement is provided to the City for the prior year's costs by the state is outdated and leaves the unfunded liability for Boston teachers without a coherent funding strategy. All other teachers are funded directly by the state according to a funding schedule developed by the Massachusetts Teachers' Retirement System (MTRS). The SBRB is the only local system that manages and administers teacher benefits.

#### **IV. The State-Boston Retirement Board should continue to pursue operational and data management reforms.**

The SBRB holds an immense responsibility to effectively administer benefits to close to 36,000 active employees and retirees. An operation as large as the SBRB should be a undeniably professional and well managed organization. While progress has been made, there is still work to be done to fully meet this standard.

The continued reliance on paper records and difficulty in collecting essential membership and trend data for management purposes are real concerns. The \$12 million Genesis Project to update the SBRB's pension administration system is an opportunity to correct the data maintenance and integrity issues that exist today. While this project is long overdue, it is important that it be managed effectively and the proper operational reforms accompany the implementation of the new system. Also, the Genesis Project should interface with the general ledger account in the City's PeopleSoft financial system.

#### **V. Efforts should continue to prevent disability application backlogs.**

The SBRB has made investments to reduce the disability application backlog that gained attention 2008. A review of the disability review process by Grant Thornton provided multiple recommendations to improve operations that the Board continues to pursue.

Given the high costs in injury leave that emerge as a result of a delayed process, efforts should continue to streamline the Retirement Board's operations and prevent backlogs from occurring in the future.

#### **VI. The State-Boston Retirement Board should approve a comprehensive, system-wide budget each year and strengthen operational budget planning.**

The Board should approve a budget each year that covers all system expenses and revenues and receive updates monthly on the performance of the budget plan and an explanation for any modifications. Under the current structure, the Retirement Board approves a small operational budget in a system that incurs hundreds of millions of dollars in transactions a year. Reporting to PERAC and actuarial valuations provide the Board with insight into the larger system costs, but the Board should be more accountable for the financial management of the retirement system they are responsible for administering.

The overfunding of the operating budget is also a concerning practice. This trend does not impact the pension fund, but it suggests weak planning and budgeting practices. The SBRB should require tighter budgeting discipline and base budgets on actual spending trends. If additional expenses are required throughout the year, the Board should approve supplemental budget requests for specific purposes.

#### **VII. The State-Boston Retirement Board should invest a portion of its assets in the PRIT Fund.**

The SBRB has shown strong returns over the long-term, and its size allows it to access a diverse array of investment strategies not always available to smaller systems. However, the PRIT Fund has the investment expertise, freedom from PERAC regulations and large scale that has made it a top performer over the long-term with efficient administrative costs. The SBRB is one of 14 systems that do not invest in the PRIT Fund. The Retirement Board should invest a portion of its assets in the PRIT Fund to take advantage of its strong performance, lower fees and expertise in selected investment categories.

#### **VIII. The State-Boston Retirement Board should create a position of investment manager.**

The Board should create a position of investment manager to work closely with the Board's investment



consultant (NEPC), meet with various investment managers and monitor the management fees and investment performance.

## Health Insurance

Local health insurance costs are absorbing a growing share of municipal budgets and have been moving in a direction that is unsustainable. The double standard that exists between state and municipal management of health insurance is inequitable and indefensible and should be changed to enable cities and towns to devote more limited resources to the delivery of basic services. To achieve that objective, the following recommendations are made.

### I. Extend Plan Design to Municipalities.

Cities and towns should be authorized to implement the same administrative plan design procedures as available to the GIC outside of collective bargaining. The authority could be set to enable municipalities to gradually reach the premium levels established by the GIC but not exceed those levels. In an environment of financial limitations, cities and towns need to be able to react quickly to changing conditions as the GIC has over the past few years. Such flexibility is not possible at the local level, limiting the ability of municipalities to respond to marketplace changes or new health care offerings in a timely manner. As with the GIC, decisions of changes in premium share should continue to be negotiated between the municipality and its unions.

### II. Simplify Entrance into the GIC.

Massachusetts cities and towns should be allowed to join the GIC without maneuvering additional hurdles. The current coalition bargaining requirement should be eliminated. Its limited success clearly indicates that this process is inadequate to provide relief to municipalities. Easier access to the GIC would also enable cities and towns to participate in its less expensive drug plans, its management and technical expertise and excellent customer service. Joining the GIC will not be the solution for all communities, especially if plan design is available, but should it be necessary, entrance into the GIC could be phased-in to manage the administrative burden on the GIC.

### III. Require Eligible Retirees to Enroll in Medicare.

The Legislature should amend existing state law (Chapter 32B) to require that all eligible local retirees enroll in Medicare at 65. The eligible retirees would receive comparable health services as they had before enrolling in Medicare. Savings would be achieved from shifting costs to the federal government and reducing premiums for active employees and non-Medicare eligible retirees on municipal plans. These savings would also help reduce the OPEB liability for cities and towns. The Commonwealth has required all state retirees to enroll in Medicare since 1992. If municipalities are seeking additional health insurance authority from the state, they should be required to utilize the tools to control health insurance expenses already available to them.

## OPEB

The City's obligation for funding other post employment benefits other than pensions is not a new requirement but acknowledging that these are financial obligations being earned by active employees and are part of the cost of providing public service today is now recognized and the full liability is visible in each year's financial statements. Eventually, this liability will be treated as pension costs are now with the annual payment for normal cost being earned each year and the gradual amortization of the unfunded liability over a period of years. Without a concerted effort to begin to fund this liability, even in tight fiscal times, the liability will grow and will be a factor noticed by bond rating agencies. The City has been proactive with regard to this liability by procuring actuarial valuations to track the liability and by appropriating funds for three consecutive fiscal years to begin to prefund the liability. However, more can be done as recommended below.

### I. The City of Boston should develop a plan to fund the OPEB liability according to a formalized funding schedule.

The City of Boston should commit to a planned schedule to increase its total annual retiree health insurance appropriation to reach the annual required contribution (ARC) of a formal funding schedule in a reasonable time. In addition to funding the required annual pay-as-you-go costs of retiree health

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insurance, the City should increase its appropriation to the OPEB Trust Fund each year. That strategy hit a set-back when the final appropriation this year was \$5.0 million less than originally recommended in the Mayor's budget and \$5.0 million less than appropriated in the prior year.

**II. The City of Boston should transfer funds from the OPEB Stabilization Fund to the OPEB Trust Fund.**

The Mayor and City Council should act to transfer the \$45 million in the OPEB Stabilization Fund to the OPEB Trust Fund so that its investment potential can be included in the actuarial valuation reports which would reduce the projected OPEB liability calculation under GASB regulations. This transfer would also reinforce the City's commitment to fund this liability which would be beneficial since the City has not yet adopted a long-range plan to reach the ARC of a formal schedule.

**III. The City of Boston should add \$5 million to the fiscal 2010 OPEB appropriation.**

The Mayor and City Council should adopt a supplementary appropriation that increases the fiscal 2010 OPEB Trust Fund account by \$5.0 million to a total of \$25 million. While this supplementary appropriation would return the annual appropriation to the same level approved last year, the increase in this fiscal year would show good faith in the policy of increasing the annual appropriation in this account each year.

# Technical Appendices

## Appendix A

### Governing Structure of Massachusetts Retirement Organizations

TABLE A-1  
**PERAC\***

**Chair: The member appointed by the other six board members serves as Chair.**

1	The Governor or his designee.
2	A representative of a public safety union appointed by the Governor.
3	An individual with at least 10 years of professional experience in the investment of funds appointed by the Governor.
4	The Auditor or his designee.
5	The President of MA AFL-CIO or his designee appointed by the State Auditor.
6	A representative of the Massachusetts Municipal Association appointed by the State Auditor.
7	A member appointed by the other six members.

\*Each appointed member of the commission serves for five years, with appointments initially staggered

TABLE A-1B

#### Teachers' Retirement Board

**Chair: The Commissioner of Education or designee serves as Chair.**

1	Commissioner of Education or his designee (ex-officio).
2	State Treasurer or his designee.
3	State Auditor or his designee.
4	Retired former Commonwealth public school teacher appointed by the Governor (4-year term).
5	Two active or retired system members elected by Teachers' Retirement System membership (term determined by the Commission, but not to exceed 4 years).
6	
7	Member chosen by the other six board members (4-year term).

TABLE A-1A  
**PRIM Board**

**Chair: The State Treasurer serves as Chair.**

1	The Governor or his designee (ex-officio).
2	The State Treasurer or designee (ex-officio).
3	A private citizen with experience in investment or financial management appointed by State Treasurer (4-year term).
4	An active or retired member elected by membership of the Teachers' Retirement System (3-year term).
5	An active or retired member elected by membership of the State Employees' Retirement System (3-year term).
6	One of the elected members of the State Employees' Retirement Board, chosen by that board.
7	One of the elected members of the Teachers' Retirement Board, chosen by that board.
8	An individual who is not an employee or state official appointed by the Governor (4-year term).
9	A representative of a public safety union appointed by the Governor (4-year term).

TABLE A-1C

#### State Employees' Retirement Board

**Chair: The State Treasurer serves as Chair.**

1	State Treasurer (ex-officio).
2	Member appointed by the Treasurer.
3	Two active or retired system members elected by system membership (term determined by the Commission, but not to exceed 3 years).
4	
5	Member chosen by the other four board members who cannot be a retiree, employee or official of the Commonwealth (3-year term).

TABLE A-2A  
**City/Town System\***

**Chair: One of five members is elected by the other members to serve as Chair.**

1	The City Auditor, Town Accountant or official with similar duties (ex-officio).
2	A member appointed by the Board of Selectmen, Mayor or City Manager.
3	Two active or retired members of the system elected by the system's membership (term determined by Board of Selectmen or Mayor, but not to exceed 3 years).
4	
5	A member chosen by the other four board members who cannot be a retiree, employee or official of the city/town (3-year term).

\*Two Boards (North Adams and Braintree) have adopted a local option (M.G.L. Chapt. 32 Sect 20 (4c)). Under this section, the Board includes two members elected by the membership, two members appointed by the Mayor or Board of Selectmen, and one member nominated by the other four who is appointed by PERAC.

TABLE A-2C  
**Regional Systems**

**Chair: The member appointed by the other Board members serves as Chair.**

1	A member appointed by the other board members (6-year term).
2	A member of the Regional Retirement Board Advisory Council elected by the Council (3 year term).
3	Two active or retired members of the regional retirement system elected by the system's membership (3-year term).
4	
5	A member chosen by the other four board members who cannot be a retiree, employee or official of the retirement system or any of its member units (5-year term).

TABLE A-2B  
**County System**

**Chair: The County Treasurer or Director of Finance serves as Chair.**

1	The County Treasurer, or if there is none, the Director of Finance (ex-officio).
2	A member appointed by the County Commissioners.
3	Two active or retired members of the county retirement system elected by the system's membership (3-year term).
4	
5	A member of the County Retirement Board Advisory Council, elected by the Council, who is the Treasurer of one of the participating governmental units (3-year term).

## Appendix B

### Distribution of Future Benefit Costs

Annual normal cost payments from employees and employers fund the benefits earned in a given year by employees. Over time, these normal cost payments plus investment returns should fully fund an employee's pension benefit. Actuaries project the total normal cost for a retirement system in each actuarial valuation as a percent of the system's active membership payroll. Employees contribute to normal cost through

mandatory salary deductions based on their date of hire, with employers funding the remaining amount needed to meet total normal cost.

A sample of seven large retirement systems in Massachusetts shows that employees generally fund around 70% of the annual normal cost, while employers fund around 30%

TABLE B  
**Normal Cost (NC) Distribution – Employees and Employers**  
As of Most Recent Actuarial Valuations  
Normal Cost (NC) is displayed as a % of active membership payroll

System (Year of Valuation)	NC	Employee NC	Employer NC*	Employee NC as % of Total NC	Employer NC as % of Total NC
<b>State Systems</b>					
State Employees (2010)	12.3%	8.5%	3.8%	69.3%	30.7%
State Teachers (2009)	11.6%	9.7%	1.9%	83.5%	16.5%
<b>Large Urban Municipal Systems</b>					
Boston (2008)	13.2%	9.4%	4.1%	70.9%	31.4%
Springfield (2008)	11.1%	8.1%	3.0%	73.3%	26.7%
Worcester (2009)	14.0%	8.8%	5.6%	62.8%	39.9%
<b>Large County Systems</b>					
Middlesex (2008)	11.9%	9.0%	3.8%	75.2%	31.8%
Norfolk (2008)	12.5%	8.3%	4.3%	66.1%	33.9%

\*Does not include administrative costs.

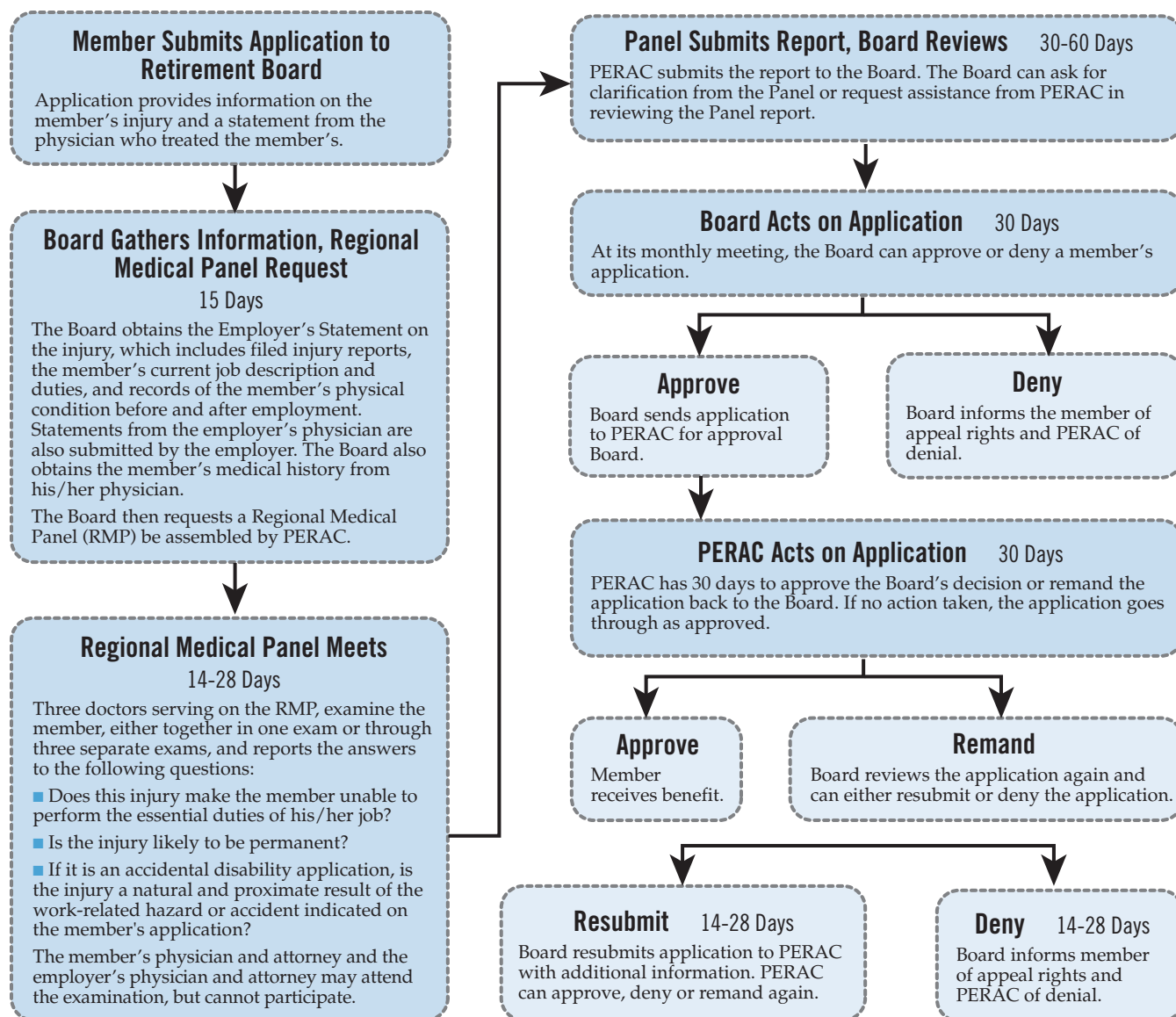
In comparing normal cost distribution across systems, the following factors should be considered.

- Employees are required to contribute to the pension plan based on their date of hire. The contribution rate has been adjusted upward multiple times since 1974, and currently stands at 9% of total salary plus an additional 2% on amounts over \$30,000 for most employees hired after 7/1/1996. As more employees are hired at the higher rate and individuals contributing at lower rates retire or leave employment, employee contributions will increase and fund a greater share of a system's normal cost.
- Employer costs will vary depending on the composition of a system's membership. Costs will increase if there are more individuals eligible for generous benefits in the system. Public safety officers in Group 4, for example, will have a higher normal cost because they are eligible to receive larger benefits earlier than other employees and are more likely to retire on disability, which provides enhanced benefits. The two state systems have significantly fewer public safety officers than local systems. Similarly, employers will see lower normal cost in systems with mostly Group 1 employees. The Massachusetts Teachers' Retirement System, for example, is only Group 1 employees and teachers now contribute at a higher rate than other employees (11% of total salary), meaning they fund a greater portion of their future benefit.
- Investment returns can also have an impact on employer normal cost. A higher return will assume a larger portion of future benefits will be funded through investment earnings, and therefore lowers the payment needed in a given year. The systems below hold different investment assumptions, with Boston assuming an annual 8.0% return.



## Appendix C

### Guide to the Disability Approval Process



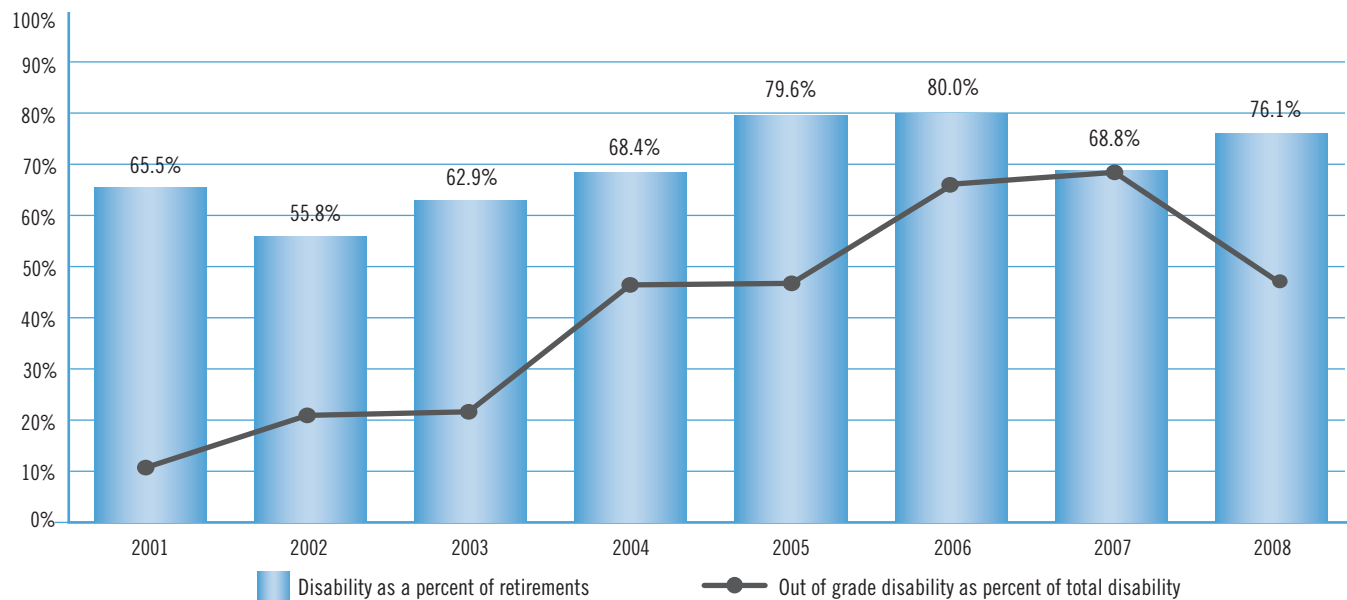
## Appendix D

### Disability Retirements in Boston's Police & Fire Departments

TABLE D  
State-Boston Retirement System Public Safety Disability Retirements  
All Retirees as of 1/1/08

	# of Retirees	% of Dept. Retirees
<b>Police Dept.</b>		
Superannuation	1,051	68.9%
Ordinary Disability	13	0.9%
Accidental Disability	461	30.2%
Total Police Dept.	1,525	100.0%
<b>Fire Dept.</b>		
Superannuation	504	44.7%
Ordinary Disability	12	1.1%
Accidental Disability	612	54.3%
Total Fire Dept.	1,128	100.0%
Total Public Safety Retirees		2,653
Total Public Safety Disability Retirees		1,098
% of Public Safety Retirees on Disability		41.4%
Total Disability Retirees in SBRS		1,748
% of Disability Retirees that are Public Safety		62.8%

FIGURE D  
Boston Fire Department Disability Retirements vs.  
Disability Retirees Injured at Higher Grade Level 2001 to 2008



## Appendix E

### Understanding the FY10 City of Boston Pension Appropriation

In anticipation of legislation that would allow the state to directly fund Boston teacher pension costs, the State-Boston Retirement Board adopted a funding schedule in 2008 based on two sub-schedules: one for Boston teachers and one for all other SBRS members. Per an agreement with state and Boston officials, the transition to this two schedule system will require a double payment from the state when it will make its first payment to the Boston teacher funding schedule and its final pay-as-you-go reimbursement to the City of Boston.

The City originally set its fiscal 2010 appropriation under the same methodology used in fiscal 2009 where teacher costs are assumed in the City's portion of the total contribution to the SBRS, resulting in a \$227.7 million appropriation. In December with the legislation advancing, the City revised its appropriation in its tax rate budget to reflect the methodology used in the 2008 valuation that developed two separate schedules. However, because the legislation has not been passed, the City assumed the first appropriation to the new Boston teacher funding schedule. This amount will be refunded by the state once legislation has passed.

TABLE E  
**Breakdown of the FY10 SBRS Appropriation**

Components funded by the City of Boston are indicated in the blue boxes.

Participating Employer	% of total funding amount (w/o ERI) [1]	Funding Amount (w/o ERI)	ERI	FY10 Required Funding
<b>Non-Teacher Appropriation</b>				
City of Boston, Not Assuming Teachers	76.1%	\$101,554,127	\$5,805,167	\$107,359,294
Boston Housing Authority	4.6%	6,087,706	342,414	6,430,120
Boston Redevelopment Authority	1.2%	1,577,038	162,421	1,739,459
Boston Water & Sewer Commission [2]	3.5%	4,730,847	436,229	5,167,076
Suffolk County Sheriff	7.6%	10,162,957	769,615	10,932,572
Boston Public Health Commission [3]	7.0%	9,410,155	323,306	9,733,461
<b>Subtotal Non-Teacher</b>	<b>100.0%</b>	<b>\$133,522,831</b>	<b>\$7,839,152</b>	<b>\$141,361,983</b>
<b>Boston Teacher Appropriation</b>				
<b>Subtotal Boston Teachers [4]</b>				<b>\$122,271,467</b>
<b>Total Contribution to SBRS</b>				<b>\$263,633,450</b>
<b>City of Boston FY10 Appropriation [5]</b>				<b>\$234,834,915</b>
<b>Revised City of Boston FY10 Appropriation after Transfer</b>				<b>\$112,563,448</b>

[1] Based on each employer's percent of payroll costs for SBRS members.

[2] The City assumes BWSC costs but is reimbursed by the BWSC for a significant portion of pension costs. The BWSC originated from the City's Public Works Department, and the City and BWSC split pension costs depending on where a retiree's service was earned. The City charges the BWSC for pension costs associated with service earned at the BWSC. The City assumes the costs from service earned in the Public Works Department, a cost that continues to decline.

[3] The City assumes ERI costs for BPHC as they relate to costs incurred by Boston City Hospital workers prior to the merger with University Hospital in 1996.

[4] With legislation to have the state fund Boston teacher costs directly still pending, the City has assumed this appropriation in its fiscal 2010 appropriation. After the transfer, the state will fund this appropriation for Boston teachers directly.

[5] Includes a \$150,000 Worker's Compensation credit to the Annuity Savings Fund.

## Appendix F

### Current Funding Schedule for the State Boston Retirement System

TABLE F-1  
**SBRS Actuarial Valuation Summary**  
 As of 1/1/08

Finance		Membership	
Actuarial Accrued Liability	\$6,596,148,098	Valuation Participants	41,927
Actuarial Value of Assets	\$4,458,002,174	Active	21,748
Market Value of Assets	\$4,613,555,905	Inactive	6,240
		Retiree	11,198
Funded Ratio	67.6%	Beneficiary	2,741
Unfunded Liability	\$2,138,145,924		
		Average Salary*	\$56,993
Funding Deadline	2023	Average Years of Service	12.8 Years
Investment Assumption	8% Annual Return	Average Benefit- Normal Retiree	\$29,340
Amortization Structure	4.5% increasing	Average Benefit- Disabled Retiree	\$31,860

\*Actuary assumed a 3.275% salary increase for police and firefighters in calendar 2007 due to unsettled collective bargaining contracts.

In anticipation of legislation to allow Boston teacher pension costs to be funded directly by the state, the SBRS actuary produced two funding schedules in the 2008 valuation: one for Boston teachers and one for all other employees. A third summary schedule combines both schedules for the SBRS as a whole. The funding schedules follow provisions in the legislation to transfer 27% of SBRS assets to a funding schedule for Boston teacher pension costs to be managed and funded by the state. The legislation also provides for the final teacher pension reimbursement from the state to the City of Boston to be applied to the City's amortization payments as a crossover payment. At the time of the valuation, this crossover payment was set at \$111.8 million to reduce the City's amortization costs by \$14.1 million a year from fiscal 2011 to fiscal 2023. Legislation is needed to finalize the agreement and is currently before the Legislature.

## Appendix F

### Current Funding Schedule for the State Boston Retirement System (Continued)

TABLE F-2  
**Funding Schedule: All SBRS**

Fiscal Year	Employer Normal Cost	Amortization Payment	Crossover Payment and Future Savings	Total Employer Contributions	Unfunded Liability at Beginning of Fiscal Year
2009	\$59,432,136	\$184,886,652	\$0	\$244,318,788	\$2,222,026,425
2010	62,403,082	201,230,368	111,827,321	375,460,771	2,207,669,478
2011	65,089,721	210,285,735	(14,148,595)	261,226,861	2,058,943,943
2012	67,897,258	219,748,593	(14,148,595)	273,497,256	2,019,827,763
2013	70,831,135	229,637,279	(14,148,595)	286,319,819	1,967,748,198
2014	72,497,036	239,970,957	(14,148,595)	298,319,398	1,901,225,644
2015	74,400,902	250,769,650	(14,148,595)	311,021,957	1,818,642,212
2016	77,748,943	262,054,284	(14,148,595)	325,654,632	1,718,229,775
2017	81,247,645	273,846,727	(14,148,595)	340,945,777	1,598,057,007
2018	84,903,789	286,169,830	(14,148,595)	356,925,024	1,456,015,352
2019	88,724,460	299,047,472	(14,148,595)	373,623,337	1,289,803,820
2020	92,717,061	312,504,608	(14,148,595)	391,073,074	1,096,912,528
2021	96,889,329	326,567,316	(14,148,595)	409,308,050	874,604,866
2022	101,249,349	341,262,845	(14,148,595)	428,363,599	619,898,196
2023	105,805,570	356,619,673	(14,148,595)	448,276,648	329,542,951
2024	110,556,821			110,556,821	
2025	115,542,328			115,542,328	
2026	120,741,733			120,741,733	
2027	126,175,111			126,175,111	
2028	131,852,991			131,852,991	
2029	137,786,376			137,786,376	
2030	143,986,763			143,986,763	



## Appendix F

### Current Funding Schedule for the State Boston Retirement System (Continued)

TABLE F-3  
**Funding Schedule: All Other Employees**

Fiscal Year	Employer Normal Cost	Amortization Payment	Crossover Payment and Future Savings	Total Employer Contributions	Unfunded Liability at Beginning of Fiscal Year
2009	\$49,381,914	\$82,278,584	\$0	\$131,660,498	\$988,957,112
2010	51,800,401	89,561,582	111,827,321	253,189,304	982,567,268
2011	54,050,979	93,591,853	(14,148,595)	133,494,237	851,883,162
2012	56,402,833	97,803,485	(14,148,595)	140,057,723	837,473,959
2013	58,860,520	102,204,643	(14,148,595)	146,916,568	817,535,163
2014	60,501,920	106,803,852	(14,148,595)	153,157,178	791,427,446
2015	62,325,099	111,610,026	(14,148,595)	159,786,530	758,451,473
2016	65,129,728	116,632,477	(14,148,595)	167,613,610	717,842,700
2017	68,060,566	121,880,939	(14,148,595)	175,792,910	668,765,741
2018	71,123,291	127,365,581	(14,148,595)	184,340,277	610,308,264
2019	74,323,839	133,097,032	(14,148,595)	193,272,276	541,474,381
2020	77,668,412	139,086,398	(14,148,595)	202,606,215	461,177,490
2021	81,163,491	145,345,285	(14,148,595)	212,360,181	368,232,515
2022	84,815,848	151,885,823	(14,148,595)	222,553,076	261,347,516
2023	88,632,561	158,720,686	(14,148,595)	233,204,652	139,114,591
2024	92,621,026			92,621,026	
2025	96,788,972			96,788,972	
2026	101,144,476			101,144,476	
2027	105,695,977			105,695,977	
2028	110,452,296			110,452,296	
2029	115,422,649			115,422,649	
2030	120,616,668			120,616,668	

## Appendix F

### Current Funding Schedule for the State Boston Retirement System (Continued)

TABLE F-4  
**Funding Schedule: Teachers**

Fiscal Year	Employer Normal Cost	Amortization Payment	Total Employer Contributions	Unfunded Liability at Beginning of Fiscal Year
2009	\$10,050,223	\$102,588,067	\$112,638,290	\$1,233,069,312
2010	10,602,682	111,668,785	122,271,467	1,225,102,211
2011	11,038,743	116,693,881	127,732,624	1,207,060,782
2012	11,494,427	121,945,106	133,439,533	1,182,353,807
2013	11,970,616	127,432,635	139,403,251	1,150,213,040
2014	11,995,117	133,167,104	145,162,221	1,109,798,204
2015	12,075,805	139,159,622	151,235,427	1,060,190,747
2016	12,619,216	145,421,806	158,041,022	1,000,387,085
2017	13,187,081	151,965,786	165,152,867	929,291,278
2018	13,780,500	158,804,247	172,584,747	845,707,102
2019	14,400,623	165,950,438	180,351,061	748,329,456
2020	15,048,651	173,418,208	188,466,859	635,735,058
2021	15,725,840	181,222,029	196,947,869	506,372,375
2022	16,433,503	189,377,020	205,810,523	358,550,708
2023	17,173,011	197,898,985	215,071,996	190,428,392
2024	17,945,796		17,945,796	
2025	18,753,357		18,753,357	
2026	19,597,258		19,597,258	
2027	20,479,135		20,479,135	
2028	21,400,696		21,400,696	
2029	22,363,727		22,363,727	
2030	23,370,095		23,370,095	

In anticipation of legislation to allow Boston teacher pension costs to be funded directly by the state, the SBRS actuary produced two funding schedules in the 2008 valuation: one for Boston teachers and one for all other employees. A third summary schedule combines both schedules for the SBRS as a whole. The funding schedules follow provisions in the legislation to transfer 27% of SBRS assets to a funding schedule for Boston teacher pension costs to be managed and funded by the state. The legislation also provides for the final teacher pension reimbursement from the state to the City of Boston to be applied to the City's amortization payments as a crossover payment. At the time of the valuation, this crossover payment was set at \$111.8 million to reduce the City's amortization costs by \$14.1 million a year from fiscal 2011 to fiscal 2023. Legislation is needed to finalize the agreement and is currently before the Legislature.

## City of Boston Pension Expenditures

Fiscal Year 2004–2009

	Contributory Pensions	Non-Contributory Pensions	Total Pension Expense	Change Over Prior Year	Percent Change	State Teacher Reimbursement	Net Pension Expense	Change Over Prior Year	Percent Change
FY 2004	\$136,966,877	\$4,600,000	\$141,566,877	\$2,541,715	1.8%	\$61,389,720	\$75,577,157	(\$5,120,158)	-6.3%
FY 2005	146,562,530	4,599,985	151,162,515	9,595,638	6.8%	76,520,673	70,041,857	(5,535,300)	-7.3%
FY 2006	186,284,877	4,599,999	190,884,876	39,722,360	26.3%	85,164,054	101,120,823	31,078,966	44.4%
FY 2007	192,925,530	4,599,896	197,525,426	6,640,550	3.5%	93,329,794	99,595,736	(1,525,087)	-1.5%
FY 2008	202,905,269	4,100,000	207,005,269	9,479,843	4.8%	105,420,350	97,484,919	(2,110,817)	-2.1%
FY 2009	213,229,786	4,100,000	217,329,786	10,324,517	5.0%	118,840,800	94,388,986	(3,095,933)	-3.2%
<b>Variance</b>									
FY04-FY09	\$76,262,909	(\$500,000)	\$75,762,909	\$57,451,080			\$18,811,829		
Percent	55.7%	-10.9%	53.5%	93.6%			24.9%		

Appendix H  
**City of Boston Health Insurance Trends (a)**  
Fiscal Year 2000–2010

	Boston Public Schools			Health Insurance as a % of Total City Spending			City Spending less Health Insurance		
	City Health Insurance	Health Insurance	Total	Change	% Change	Total City Spending (b)	Change	% Change	Change
FY00	\$79,326,103	\$32,841,861	\$112,167,964	–	–	\$1,594,065,485	–	–	\$1,481,897,520
FY01	87,232,847	34,932,014	122,164,861	\$9,996,896	8.9%	1,701,656,170	\$107,590,686	6.7%	1,579,491,310
FY02	99,260,487	39,743,438	139,003,925	16,839,065	13.8%	1,764,335,973	62,679,803	3.7%	1,625,332,048
FY03	108,927,233	43,806,050	152,733,283	13,729,358	9.9%	1,807,396,719	43,060,746	2.4%	1,654,663,436
FY04	124,956,847	46,824,261	171,781,108	19,047,825	12.5%	1,827,011,962	19,615,243	1.1%	1,655,230,854
FY05	139,104,893	51,114,926	190,219,819	18,438,711	10.7%	1,895,571,525	68,559,563	3.8%	1,705,351,707
FY06	151,575,199	58,127,975	209,703,174	19,483,355	10.2%	2,005,227,139	109,655,614	5.8%	1,795,523,966
FY07	168,525,433	64,813,980	233,339,413	23,636,239	11.3%	2,093,656,188	88,429,048	4.4%	1,860,316,774
FY08	183,101,302	72,958,649	256,059,951	22,720,538	9.7%	2,221,840,931	128,184,743	6.1%	1,965,780,980
FY09 (c)	187,018,947	78,251,263	265,270,210	9,210,259	3.6%	2,302,905,474	81,064,543	3.6%	2,037,635,264
FY10 (d)	196,076,530	79,837,900	275,914,430	10,644,220	4.0%	2,276,187,488	-26,717,986	-1.2%	2,000,273,058
Change FY04-09	\$62,062,100	\$31,427,002	\$93,489,102		Average Annual Increase	\$475,893,512		Average Annual Increase	\$382,404,410
Percent Change	49.7%	67.1%	54.4%			26.0%			23.1%
									\$63,828,638
									3.5%

(a) Includes dental, life and some administrative costs. Does not include the Public Health Commission

(b) Figures are net of teacher pension reimbursement.

(c) FY09 includes \$23.3M in ARRA funds used for general fund operations. \$13,093,550 of this was used for BPS Health Insurance

(d) Tax Rate Budget

Appendix I

## City of Boston Health Insurance as % of Total General Fund Spending

Fiscal Year 2006–2010

TABLE I

	City & School Health Insurance	Total City Spending (a)	HI as % of Total Spending	Estimated Retiree Costs	Retirees as % of Total HI Spend	# Of Retirees/ Beneficiaries/ Spouses
FY06	\$209.7	\$2,005.2	10.5%	\$78.3	37%	12,899
FY07	\$233.3	\$2,093.7	11.1%	\$86.6	37%	12,964
FY08	\$256.1	\$2,221.8	11.5%	\$92.7	36%	12,630
FY09 (c)	\$265.3	\$2,302.9	11.5%	\$94.1 (b)	35%	12,473
FY10 (d)	\$275.9	\$2,276.2	12.1%	\$101.3	37%	12,473

(a) Figures are net of teacher pensions

(b) Low increase for retirees from previous year partially because Suffolk County Retirees were no longer included.

(c) FY09 includes \$23.3M in ARRA funds used for general fund operations. \$13,093,550 of this was used for BPS Health Insurance

(d) Tax Rate Budget



## Appendix J

TABLE J-1  
Boston's Health Insurance Costs vs. General Fund State Aid

	Health Insurance	Increase	Percent	State Aid (a)	Increase/ (Decrease)	Percent	Health Insurance Growth Over/(Under) State Aid Growth
FY00	\$112,167,964			\$492,252,564			
FY01	122,164,861	\$9,996,896	8.9%	505,668,184	\$13,415,620	2.7%	(\$3,418,724)
FY02	139,003,925	16,839,065	13.8%	522,659,117	16,990,933	3.4%	(151,868)
FY03	152,733,283	13,729,358	9.9%	476,595,961	(46,063,156)	-8.8%	59,792,514
FY04	171,781,108	19,047,825	12.5%	459,842,477	(16,753,484)	-3.5%	35,801,309
FY05	190,219,819	18,438,711	10.7%	461,134,318	1,291,841	0.3%	17,146,870
FY06	209,703,174	19,483,355	10.2%	464,613,182	3,478,864	0.8%	16,004,491
FY07	233,339,413	23,636,239	11.3%	483,041,643	18,428,461	4.0%	5,207,778
FY08	256,059,951	22,720,538	9.7%	493,326,279	10,284,636	2.1%	12,435,902
FY09 (b)	265,270,210	9,210,259	3.6%	477,723,213 (b)	(15,603,066)	-3.2%	24,813,325
FY10 (c)	275,914,430	10,644,220	4.0%	418,254,390	(59,468,823)	-12.4%	70,113,043

(a) Figures are net of teacher pension reimbursement.

(b) FY09 includes \$23.3M in ARRA funds that were used for General Fund purposes (BPS Health Ins. & Transportation costs)

(c) Tax Rate Budget

TABLE J-2  
Boston's Health Insurance Growth vs. Prop 2½ Growth and Gross Levy Growth

	Health Insurance Growth	2.5% Property Tax Growth	Health Insurance Growth as a % of 2.5% Property Tax Growth	Growth in Gross Property Tax	Health Insurance Growth as a % of Gross Property Tax Growth
FY01	\$9,996,896	\$21,666,034	46.1%	\$51,713,640	19.3%
FY02	16,839,065	22,963,619	73.3%	54,733,111	30.8%
FY03	13,729,358	24,331,596	56.4%	63,218,349	21.7%
FY04	19,047,825	25,898,622	73.5%	58,278,625	32.7%
FY05	18,438,711	27,360,303	67.4%	56,440,107	32.7%
FY06	19,483,355	28,738,308	67.8%	61,005,346	31.9%
FY07	23,636,239	30,201,766	78.3%	59,180,101	39.9%
FY08	22,720,538	31,784,310	71.5%	63,810,642	35.6%
FY09	9,210,259	33,366,417	27.6%	69,811,924	13.2%

## Appendix K

### City of Boston Spending Comparison, FY04–FY09<sup>a</sup>

TABLE K  
City of Boston Spending Comparison,  
FY04–FY09 (d)

	FY 2004	FY2009 Actual <sup>b</sup>	Change FY04–FY09	Percent Change
Health Insurance <sup>c</sup>	\$171,781,108	\$265,270,210	\$93,489,102	54.4%
Pensions	75,577,157	94,388,986	18,811,829	24.9%
Public Works	85,605,180	108,441,734	22,836,554	26.7%
Fire	137,753,681	165,300,211	27,546,530	20.0%
Police	211,363,261	288,631,946	77,268,685	36.6%
Schools <sup>d</sup>	609,714,550	755,040,179	145,325,629	23.8%
Public Health Com.	58,762,237	69,445,774	10,683,537	18.2%
Collective Barg. Res.	21,300,000	16,862,130	(4,437,870)	-20.8%
All Other Dept.	186,582,515	233,652,760	47,070,245	25.2%
Non-Departmental	8,844,085	9,448,790	604,705	6.8%
Other (less flexible)	259,728,188	296,422,754	36,694,566	14.1%
Grand Total Net of Teacher Pensions	\$1,827,011,962	\$2,302,905,474	\$475,893,512	26.0%

<sup>a</sup>Spending is net of teacher pension costs for each year

<sup>b</sup>FY09 includes \$23.3M in ARRA funds that were used for General Fund purposes

<sup>c</sup>Includes City and BPS. Also includes \$13.1M in ARRA funds used for BPS general fund HI costs in FY09 only.

<sup>d</sup>Does not include health insurance. Includes \$10.2M in ARRA funds for general fund transportation costs.



