The Research Bureau

Public Employee Pensions: Is it Time to Retire the System?

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EXECUTIVE SUMMARY

Public pension systems have attracted recent attention as a result of a number of prominent scandals in Massachusetts and elsewhere, and because of the severe losses public pension funds have sustained during the current recession.[1] Indeed, according to Worcester's City Auditor, the Worcester Retirement System (WRS), which was about 86% funded at the beginning of 2008 is now only 68% funded. In order to compensate for these losses, Worcester taxpayers would have to increase their expenditures on pensions by $12.5 million, or 50%, in order to maintain the agreed-upon schedule to fully fund the system by 2019. Any increase will have the concomitant effect of reduced funding for core municipal services, such as public safety and public infrastructure.

The Research Bureau undertook this report to understand how public pension systems operate using the WRS as a case study: what is its history, what benefits does it provide to retirees, why are there abuses, how is it funded, and what are its current costs and costs to future generations?

Based on a thorough examination of the literature and discussions with pension experts, The Research Bureau found the following:

- The total employer (taxpayer) cost of the WRS in FY09 was $41.6 million, more than the budget of the Worcester Fire Department, the Department of Public Works and Parks, and almost as much as the Worcester Police Department.
- Public employees enjoy considerably more retirement security than workers in the private sector because a defined-benefit plan generates a retirement annuity regardless of market conditions.
- While the private sector has seen a massive shift from defined-benefit to defined-contribution retirement plans over the past 30 years (only about 10% of private-sector workers are now under a defined-benefit plan), defined-benefit plans remain the norm in public employment.
- The retirement benefits of public safety personnel are more expensive than most other public employees because they are allowed to retire and collect full benefits ten years earlier than other employees (age 45 for retirement and 55 for full benefits).
- Public safety employees have much higher rates of accidental disability retirements than other employees. About 50% of retired Worcester police and fire personnel are receiving accidental disability pensions, which are, on average, 70% higher than superannuation pensions.

In order to address the problems with the defined-benefit pension system in Massachusetts and Worcester, The Research Bureau offers the following recommendations:

[1] Craig Karmin, "Pension Bills to Surge Nationwide," *Wall Street Journal*, March 16, 2009, http://online.wsj.com/article/SB123716064273635495.html.

- The WRS and the City Council should adopt the City Auditor's plan of "smoothing" asset values and extending the amortization date to the maximum date allowable under current law (2028) in order to balance the impact of 2008's losses on the FY10 budget with the responsibility to fund the WRS.
- The state Legislature should grant the Home Rule Petition the City Manager has filed to extend the amortization date to 2038.
- The state Legislature should establish fitness standards for public safety personnel so as to reduce the number of applicants for accidental disability pensions.
- The City should be made a formal party to Worcester Retirement Board hearings so it can fully present its case regarding the claim for an accidental disability pension. The Board should act as a judge giving both parties a fair hearing.
- Employee contribution rates for new employees should be set by group classification, that is, the nature of the job (hazardous, non-hazardous), rather than by the date of hire.
- The state should establish a separate, state-wide retirement system for employees in hazardous occupations so that the costs are fully transparent.
- The state Legislature should reform the cancer presumption law, removing many of the current job-related cancer presumptions which are not based in medical evidence. (There are no cancer presumption laws in 23 other states.)
- The state Legislature should amend MGL ch.32 s. 3(8)(c) so that "sender" pension systems like Worcester (those that generally "send" employees to state agencies for higher-paying jobs) do not pay for a disproportionate part of that employee's pension when he retires.
- The state Legislature should adopt a more transparent and deliberate process for granting increases in benefits, such as the "cooling off" period in Georgia. This process enables legislators to understand the long-term liabilities of this increase in benefits and to locate a source of revenue for funding them.
- The Governor should appoint a commission to design a plan to close the current defined-benefit system to all new employees, and enroll them in a defined-contribution system. A defined-contribution retirement plan offers more certainty to public budgeting, less opportunity for abuse, equity with taxpayers in the private sector, and ultimately, the end of taxpayer liability for generations to come.

INTRODUCTION

In his 2009 State of the State address, Governor Patrick acknowledged "abuses" in Massachusetts' public pension system and "special benefits for a select few," and called for "meaningful pension reform this [legislative] session." This was in response to a number of notable pension scandals that have made headlines recently. According to a *Boston Globe* investigative report in January 2008, 102 Boston firefighters between 2005 and 2007 retired on disability pensions while temporarily filling in for their supervisors. This enabled them to retire at a higher pay grade with an increased accidental disability pension, boosting their retirement benefits by an average of $10,300 a year, adding an estimated $25 million in liability to the system. The *Globe* report prompted an investigation by Federal authorities.[2] In May 2008, Boston firefighter Albert Arroyo participated in a body-building competition just six weeks after applying for an accidental disability pension. At the time of the competition, while awaiting the Boston Retirement Board's approval, Arroyo was on injured leave from the Boston Fire Department, receiving his full salary, tax-free. State Senator Jim Marzilli, after losing his seat in the wake of allegations of sexual assault, applied to increase his pension from $14,000 to $27,000 under a provision of state law benefiting elected officials under the age of 55 with over 20 years of public service who fail to win reelection. Fourteen other former Massachusetts legislators, some of whose exits from public service were also tainted by allegations of wrongdoing, enjoy increased pensions under this provision, which was originally intended to benefit civil servants from politically-motivated firings.[3] A prominent lobbyist and former state Senator has sought to more than double his pension from $19,097 to $41,088 by counting years spent on a volunteer municipal library board.[4] The Governor's recently appointed stimulus chief, a real estate mogul, was able to secure a $29,000-31,000 pension after being fired from his job at a state development agency in 1995 by counting his years of service on the Ipswich school board.[5] Between 2005 and 2009, the number of retired state employees eligible for pensions worth over $100,000 has doubled.[6] And closer to home is the case of David McGrath, a retired Worcester firefighter. Mr. McGrath withdrew his application for an accidental disability pension after the Worcester Retirement Board viewed a video, prepared by a private investigator hired by

[2] Donovan Slack and Walter V. Robison, "US Probes Firefighter Disability Abuse," *Boston Globe*, April 17, 2008, http://www.boston.com/news/local/articles/2008/04/17/us_probes_firefighter_disability_abuse/.

[3] Michael Levenson, "Pay as They Go," *Boston Globe*, January 11, 2009, http://www.boston.com/news/local/massachusetts/articles/2009/01/11/pay_as_they_go/.

[4] Sean P. Murphy, "Increasing Light Library Board Duty Doubled Pension of Former Senator," *Boston Globe*, February 11, 2009, http://www.boston.com/news/local/massachusetts/articles/2009/02/11/increasingly_light_library_board_duty_doubled_pension_of_former_senator/.

[5] Andrea Estes and Frank Phillips, "Patrick Stimulus Chief was Fired from State Post," *Boston Globe*, February 13, 2009, http://www.boston.com/news/local/massachusetts/articles/2009/02/13/patrick_stimulus_chief_was_fired_from_state_post/.

[6] Hillary Chabot, "Politicians Tackle Reforms for State Pensions," *Boston Herald*, February 12, 2009, http://news.bostonherald.com/news/politics/view/2009_02_12_Politicians_tackle_reforms_for_state_pensions:_107_retirees_net_6-figure_pay/srvc=home&position=0.

the City of Worcester, showing Mr. McGrath moving heavy furniture after claiming a job-related injury. The local District Attorney requested that the state's Attorney General pursue the case.[7]

Public pension scandals are a nationwide phenomenon. *The New York Times* published a special report in the fall of 2008 on the Long Island Railroad, a public agency from which over 90% of employees retire early and draw enhanced disability pensions.[8] In May 2008, Vallejo, CA was forced to declare bankruptcy in part because of the burden of funding pensions to public safety employees, who are able to retire in their early 50s at 90% of their final salary.

Public pension systems have also attracted attention as a result of the massive losses sustained by pension funds during the current recession. According to a survey by Wilshire Associates, a California-based consulting firm, the average public pension fund lost 25% of its value in 2008.[9] In a report in January to the City Council, Worcester's City Auditor estimated that Worcester's pension fund declined by 27%, which, even if all currently available legal measures are taken to minimize the impact of these losses, could still require an increased annual budgetary appropriation almost $8 million greater than last year. Tax collections are down, budgets are already strained, and local aid has been cut, all of which means that state and local governments, in Worcester and elsewhere, will be less able to compensate for their pension funds' losses.

The Research Bureau undertook this report to understand the problems of public employee pension systems using the Worcester Retirement System (WRS) as a case study. What is the nature of the pension plan for City employees? What is its cost to City taxpayers? What will be the impact of the current crisis in the financial markets on the City's ability to meet its pension obligations? How rampant is pension abuse in Worcester? What is the best way to address these problems?

Section I will describe the basics of the system: its structure, its administration, state and local governmental responsibilities, and the cost to taxpayers. Section II will discuss the likely effect of the current market downturn on the WRS. Section III will discuss accidental disability pensions. Section IV will suggest some recommendations for improving the retirement system.

[7] Shaun Sutner, "AG Asked to Probe Pension Case," *Telegram and Gazette*, December 19, 2008, http://www.telegram.com/article/20081219/NEWS/812190616/1101.

[8] See "A Disability Epidemic: An Investigative Series," http://topics.nytimes.com/top/reference/timestopics/organizations/l/long_island_rail_road/index.html.

[9] Wilshire Trust Universe Comparison Service, "Wilshire Trust Universe Comparison Service Shows 2008 Institutional Investors' Performance down Approximately 25 Percent," February 3, 2009, http://www.wilshire.com/Company/PressRoom/PressReleases/Article.html?article=WARelease090302.htm.

SECTION I: BASICS OF THE SYSTEM

1. Funding

WRS has been in operation since January 1, 1945. It operates within the same uniform statuary framework shared by all the other 105 retirement systems in the Commonwealth, Massachusetts General Laws Chapter 32.[10] The state, through the Public Employee Retirement Administration Commission (PERAC) oversees and monitors the operations of the WRS, but primary responsibility is exercised by the Worcester Retirement Board. As required by MGL Ch. 32 s.20(4)(b), the Board has five members: the City Auditor, two members elected by current employees and retirees, one appointed by the City Manager, and one chosen by the other four Board members, who cannot be a City employee or retiree.

All permanent City employees, with the exception of teachers, who are part of the statewide Massachusetts Teachers' Retirement System, are required to participate in the WRS.[11] All members contribute a certain percentage of their salary towards their retirement. The contribution rate depends on the date of hire (see **Table 1**).

Table 1: Employee Contributions to WRS (% of salary)[12]

Employees hired before January 1, 1975	5%
Employees hired between January 1, 1975 and January 1,1984	7% (and 2% in excess of $30,000 for employees hired after January 1,1979)
Employees hired between January 1, 1984 and July 1, 1996	8% (and 2% in excess of $30,000)
Employees hired since July 1, 1996	9% (and 2% in excess of $30,000)

These contributions are collected into a fund which is invested by the Worcester Retirement Board at an expected annual return of 8.25%. This rate is determined by the Board based on historic market returns.[13] It implies a higher level of risk than most individual investors could tolerate, but since pension funds are expected to last indefinitely, through many market cycles, the WRS expects to be able to withstand losses ordinary investors could not.[14] In addition to

[10] The only public pension system in Massachusetts which is not subject to MGL ch. 32 is the MBTA's. The retirement benefits of MBTA employees are determined by collective bargaining, not statute, although Governor Patrick is proposing to change this with his Comprehensive Transportation Reform plan.

[11] Employees of the Worcester Housing Authority (WHA) are also part of the WRS. All employees of Worcester Public Schools (WPS) other than teachers are part of WRS.

[12] Source: WRS 2007 Comprehensive Annual Financial Report (CAFR), http://www.ci.worcester.ma.us/ret/reports/2007CAFR.pdf.

[13] 8.25% is also the rate for the Massachusetts State Employees Retirement System and the Massachusetts Teachers' Retirement System. (Source: PERAC 2007 Annual Report, http://www.mass.gov/perac/07annualreport/ar07.pdf.)

[14] PERAC's official view, according to its "Investment Best Practices Manual," is "PERAC prefers the actuarial assumption for investment return to be 8% or lower, although several systems do use an 8.5% assumption" (p. 4).

determining the expected rate of return on investment, the Board decides on an overall investment strategy designed to meet or exceed the expected annual rate of return, and also hedge against losses. State law regulates what asset classes may be invested in,[15] and which money managers may be used within those classes.

Not every local Retirement Board in the Commonwealth has control over its investments. Chapter 68 of the Acts of 2007, "An Act to Reduce the Stress on Local Property Taxes through Enhanced Pension Fund Investment," authorized the state's Pension Reserves Investment Management (PRIM) Board to take over the assets of local pension systems that are less than 65 percent funded and have failed to come within two percent of the performance of the PRIM-managed Pension Reserve Investment Trust over a 10-year period. This law was a response to the fact that a number of the smaller pension funds in the Commonwealth had been significantly underperforming for many years. As of 2008, PRIM manages all of the investments of 31 local pension funds, either because they voluntarily submitted them or because PRIM took them over.[16] WRS is not one of those 31; thus the Worcester Retirement Board retains considerable control over how Worcester's pension fund is invested. The Board employs an investment consultant at $132,000 per year to advise it on investment matters, especially in selecting investment managers. The Board employs 38 investment managers using 45 different strategies, and meets once a year with each of these managers to conduct due diligence on its investments. Fees for investment managers are by far the largest operating expense for the WRS, costing $4.3 million in 2007, 6.9% of the gross investment income in 2007.[17]

2. Eligibility

Employees become eligible for a pension, or "vested," after 10 years of creditable[18] service, although they cannot collect benefits until they are 55, 45 in the case of police and fire personnel, or have 20 years of service. Retirement age with full benefits is 65 for most employees; for police and fire personnel it is 55.

[15] Examples of traditional asset classes that pension funds in Massachusetts invest in are domestic equity and fixed income. Examples of non-traditional asset classes are private equity, hedge funds, timber and venture capital.
[16] Local systems have always had the option to transfer control of some or all of their assets to PRIM.
[17] Board members receive $3,000 a year. The WRS also paid $89,080 in legal expenses, and $325,486 in staff salaries in 2007. (Source: WRS 2007 CAFR.) Note-since WRS' official data for 2008 will not be available for a few months, for the most part we will be relying on data from WRS' 2007 CAFR. With the exception of all figures relating to assets and investment returns, which we have updated, there are no significant changes between 1/1/2008 and 1/1/2009.
[18] In certain cases, employees can gain credit for years not spent in public employment in Massachusetts. Employees may purchase years spent in the military, Peace Corps or the US State department, or years spent in unpaid public service positions (and thus were not contributing to the system) such as selectmen or school committee members. Teachers may buy credit for years spent on maternity leave, or out of state and non-public teaching. Early Retirement programs work by granting employees who participate in them extra years to use in their pension calculation. (Kenneth Ardon, "Public Pensions: Unfair to State Employees, Unfair to Taxpayers," Pioneer Institute, May 2006, http://www.pioneerinstitute.org/pdf/06_pension_paper1.pdf, p. 12).

Upon retirement, in normal cases (not disability, which we will discuss later[19]), the City employee is granted an annual allowance for the remainder of his life determined by multiplying his (a) years of creditable service by (b) a factor related to his age at retirement and (c) his three highest consecutive years' salary (see **Table 2**). Anyone can retire and begin to draw benefits after 20 years of service, but a .1% reduction is applied for each year under the maximum age. Massachusetts caps normal pensions at 80% of average salary.[20]

Table 2: Age Factor[21]

Age Factor	Group 1 (Age)	Group 2 (Age)	Group 4 (Age)	Percentage of average salary (20 years creditable service)	Percentage of average salary (30 years creditable service)
2.50%	65 and over	60 and over	55 and over	50%	75%
2.40%	64	59	54	48%	72%
2.30%	63	58	53	46%	69%
2.20%	62	57	52	44%	66%
2.10%	61	56	51	42%	63%
2.00%	60	55	50	40%	60%
1.90%	59	-	49	38%	57%
1.80%	58	-	48	36%	54%
1.70%	57	-	47	34%	51%
1.60%	56	-	46	32%	48%
1.50%	55	-	45	30%	45%

As **Table 2** indicates, the age at which an employee may retire with full benefits depends on his occupation or "Group." Group 1 is the general category and is composed of most state and local government employees. Group 2 is for non-public safety hazardous occupations, such as electricians in public service (this is a very small group). Group 4 is local police and firefighters. Group 3 is State Police, whose age factor is 3% for all ages, which means that after 20 years, their minimum pension is 60% of average salary. A State Police officer who retires in his late 40s and lives for 30 more years could collect 70% of his final salary for longer than he actually

[19] In addition to providing normal or superannuation benefits to retired City employees, WRS also provides ordinary (non-job related) and accidental (job-related) disability benefits, and accidental death benefits for survivors.
[20] It should be noted that public employees in Massachusetts are not eligible for Social Security. "When social security was first enacted in 1935, this federal old-age program intentionally excluded state and local government employees from coverage. This was mainly due to constitutional issues concerning the federal government's right to tax state and local governments." (Olivia S. Mitchell et al., "Developments in State and Local Pension Plans," *Pensions in the Public Sector*, Olivia S. Mitchell and Edwin C. Hustead, ed., Philadelphia, PA: University of Pennsylvania Press, 2001, p. 13.) Although Congress amended the Social Security Act in 1950 to allow public systems to participate, some state and local systems chose not to opt in, and Massachusetts was one of them.
[21] Source: MGL ch. 32 s. 5.

worked.[22] The cost of retirement benefits for State Police is slightly offset by the fact that they contribute 12% of salary to their pensions, the highest rate of all Massachusetts public employees, but their pensions are the most expensive to provide of any public employee, state or local, in the Commonwealth.[23]

Teachers are part of Group 1, although, as a result of Retirement Plus, a pension-enhancement bill for teachers passed by the state Legislature in 2000, their benefit structure is somewhat different. Under Retirement Plus, after 30 years of service, the retiree's pension is increased by 2% for each year in excess of 24. At minimum, this means an increase of 12% over the final average salary, since (30-24) x 2%=12%.[24] While this benefit applied to new teachers, whose contribution rate Retirement Plus raised from the normal 9% plus 2% above $30,000 to 11%, veteran teachers were given the option of "buying-in" by paying the equivalent of five-years' worth of contributions at the 11% rate. Ken Ardon, an economist at Salem State College, illustrates the effect of Retirement Plus: "A 30-year veteran aged 60 with a final average salary of $60,000 would have been able to retire under the old system with a pension of $36,000 per year. However, the teacher could opt-in to Retirement Plus by contributing approximately $18,000 (5 years at 11% rather than 5 years at 5%). This choice would immediately increase her pension by $7,200 per year for life, meaning the $18,000 payment would return almost $165,000 based on a life expectancy of 23 years."[25]

Due primarily to the retroactive benefit increase granted to veteran teachers, Retirement Plus added an estimated $1.25 billion in liability to the system, requiring an additional contribution of $125 million per year by the state.[26] (As already noted, there is one, statewide retirement system for all teachers in Massachusetts, so fiscal liability fell on the state, not the local school districts).

The group classification system described above is also established by state law and is the same for all retirement systems in the Commonwealth. Comparing **Table 1** (p. 5) with **Table 2** (p. 7)

[22] Originally, State Police were granted a more generous pension because they were required to live in barracks and be on-call at all times. Although they are no longer required to make such sacrifices regarding their living arrangements, they still enjoy the same retirement benefits which were offered under more onerous living conditions.

[23] As of 1/1/2006, employee contributions by State Police covered only 40.6% of the cost of their pension. The average for all state employees was 67.5%. (Blue Ribbon Panel on the State's Retirement Group Classification System, "Report of the Blue Ribbon Panel on Massachusetts Public Employees' Pension Classification System," Massachusetts Legislature's Joint Committee on Public Service, June 2006, p. 8.)

[24] By increasing benefits for teachers with 30 years of experience, Retirement Plus encouraged many teachers who would have retired at 65 to retire earlier. After the bill was enacted, the average number of retirements per year rose from 1,800 to 3,000, contributing to a teacher shortage in many districts. Retirement Plus was expected by its advocates to lead to such an immediate increase in retirements. The Act also included a "double-dip" provision, which enabled retired teachers to return to work two years after retiring, with no reduction in either salary or retirement benefits (although to receive full salary, a waiver is required from the Commissioner of Education). On Retirement Plus' contribution to the teacher shortage in Massachusetts, see Ardon, pp. 10-12, and Robert Costrell "Efficiency and Equity in the Time Pattern of Teacher Pension Benefits: An Analysis of Four State Systems," Calder Center, April 2007, http://www.caldercenter.org/PDF/1001070_Efficiency_Equity.pdf, pp. 9-10.

[25] Ardon, p. 11.

[26] Source: PERAC, referenced in Ardon, p 24.

indicates that retirement benefits for some municipal employees are more generous than for others. Even though Group 4 (public safety) employees contribute at the same rates as all other employees, they are able to retire, and also attain full benefits, ten years earlier than other employees. In many other states, separate systems are maintained for hazardous and non-hazardous occupation employees, which makes the greater cost of hazardous employees' retirement benefits more transparent. By making them part of the same system, Massachusetts somewhat masks the fact that hazardous occupation employees are more expensive than most others.

In addition to the pension, retirees and beneficiaries also get cost-of-living adjustments or COLAs, in order for their benefits to keep up with inflation. Prior to 1997, all COLAs for state and local employees were paid for by the state. However, in 1997, the state transferred responsibility for COLAs to local governments. The state granted localities the authority to grant up to 3% ($360), or the annual percentage increase of the Consumer Price Index, on the first $12,000 of each pension, whichever is less. While COLAs are not automatic and must be approved by the local retirement board each year, the authorizing legislation implied that the retirement systems were expected to grant the increase each year. (Part of the reason the state transferred responsibility for COLAs is that it could not afford to grant the increase on a regular basis.) Since public employees in Massachusetts are not eligible for Social Security, which does provide a COLA, the Legislature determined that it was fair for retirees to be able to expect one as well. In calculating a retirement system's long-term liabilities, each system's actuary assumes that the individual retiree will be granted the full $360 increase each year of his retirement. And in fact, the WRS has granted the maximum increase every year since 1997. Although a $360 annual increase may seem a small amount for the individual retiree, COLAs have a big impact on long-term liability costs, since they are cumulative. As **Table 3** indicates, COLA increases since 1997 accounted for an extra $9 million in annual costs for the WRS in 2007.

Table 3: 2007 WRS Benefit Expenses by Type of Pension[27]

Expense	Amount	% of Total
Regular	$23,437,804	42.60%
Disability	$10,890,179	19.80%
Beneficiary	$5,081,340	9.20%
COLA	$9,147,566	16.60%
Annuities	$6,476,577	11.80%
Total	$55,033,466	100%

The state Legislature's proposed FY09 state budget contained Section 15, which, had it passed, would have raised the COLA base amount to $16,000, resulting in an additional $120 increase

[27] Source: WRS 2007 CAFR p. 67. The "Annuities" row represents the sum that current retirees contributed to their retirement during their active employment. The reason it is so low is current retirees, when employed, drew lower salaries and contributed at lower rates (see **Table 1**, p. 5). It also does not include return on investment.

per year. The long term cost of this seemingly small raise for state employees was estimated by the Pioneer Institute to be $3.8-$8 billion over 20 years, and, according to the Massachusetts Municipal Association, $2 billion to cities and towns for their public employees. No provision was made to secure a funding source for this increase in benefits. Though it had *unanimous* support in both the House and the Senate, Governor Patrick vetoed this "union-friendly election-year maneuver."[28] Patrick had originally indicated that he would support the COLA increase, if it applied only to the 87% of retirees with pensions under $40,000. The Legislature adopted Patrick's plan for the first year, but granted the $120 "bump" for all pensions for all subsequent years. But the Governor's veto left the COLA at the previous level.[29]

As of December 31, 2007, the WRS had 3,299 active members and 2,849 retirees and their beneficiaries. The average salary of an active employee was $47,464. The current, average superannuation or normal pension was $18,576 and $31,374 for accidental disability.[30]

3. Public and Private, Defined-Benefit and Defined-Contribution Pensions

Like most other public-employee retirement systems in the U.S., WRS is a defined-benefit plan. It guarantees to its participant a lifetime annuity based on final or highest compensation and years of service. The pension is funded by employer contributions (taxpayers), employee contributions (in the case of public systems), and investment returns. Under a defined-benefit pension plan, the employer is obligated to provide to the retiree the same annuity each year regardless of economic conditions. In decades past, defined-benefit plans were also the norm in private-sector employment. More recently, however, private-sector employees, if they participate in a retirement plan, are much more likely to participate in a defined-contribution plan, such as a 401(k) or 403(b) plan.[31] Under a defined-contribution plan, the employer provides the employee with an individual retirement account, and the retirement benefit is based on the amount contributed by employee and employer over the employee's career and the return gained on investment. The individual employee/retiree assumes all investment risk in the defined-contribution plan, and upon retirement, the employer has no further obligation to the employee. While employees in a defined-benefit plan have virtually nothing to worry about

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28 Matt Viser, "Bigger Pensions Drawing Protests," *Boston Globe*, May 28, 2008, http://www.boston.com/news/local/articles/2008/05/28/bigger_pensions_drawing_protests/, and Matt Viser, "Patrick Rejects Pension Increase," *Boston Globe*, August 12, 2008, http://www.boston.com/news/local/articles/2008/08/12/patrick_rejects_pension_increase/.

29 However, the same bill, HD 244, "An Act relative to cost of living adjustments for retired public employees of the Commonwealth," has been reintroduced this legislative term.

30 Source: WRS.

31 According to data analyzed by The Center for Retirement Research at Boston College (CRRBC), between 1980 and 2006, the number of private-sector workers covered by a defined-benefit pension plan declined from 60.2% to 10.4%, and the number covered by a defined-contribution plan rose from 17.1% to 65.4%. ("Private Sector Workers with Pension Coverage, By Pension Type, 1980-2006," CRRBC, http://crr.bc.edu/frequently_requested_data/frequently_requested_data.html).

when the S&P 500 index drops 38.5% in one year, as it did in 2008, [32] those participating in a defined-contribution plan are severely affected.[33]

Typically, participation in a defined-contribution plan is voluntary,[34] but encouraged by an employer match, such as 50% of employee contributions up to 6% of salary.[35] In recent months, however, because of the recession, a number of prominent large corporations have suspended their match.[36] But even in cases in which there is no employer match, the chief advantage of a defined-contribution plan for an employee still exists, namely that his contributions for retirement are not taxed until they are withdrawn. Defined-contribution plans are more portable than defined-benefit plans: an employee can transfer the plan intact when he changes employers. Some have argued that this makes defined-contribution plans more attractive to younger employees today because they are less likely to remain in one position very long.

Finally, as **Table 4** shows, defined-contribution retirement benefits are taxed differently than defined-benefit plans for public employees in Massachusetts:

Table 4: Taxing Retirement: Private vs. Public in Massachusetts[37]

	Contributions Federally-taxed?	Contributions State-taxed?	Distributions Federally-taxed?	Distributions State-taxed?
Private defined-contribution	No	No	Yes	Yes
Public defined-benefit	No	Yes	Yes	No

[32] "Despite recent events in the financial markets, please be assured that your retirement benefits are secure," Massachusetts Teachers' Retirement System, October 2, 2008, http://www.mass.gov/mtrs/.

[33] According to data analyzed by the CRRBC, the median 401(k)/IRA holdings for the typical individual approaching retirement declined from $78,000 to $56,000 between the end of 2007 and the end of 2008. (Alicia H. Munnell, et al., Issue in Brief #9-5, "An Update on 401(k) Plans: Insights from the 2007 SCF," CRRBC, March 2009, http://crr.bc.edu/images/stories/Briefs/ib_9_5.pdf.)

[34] It is estimated that around 20% of people with access to a 401(k) defined contribution plan do not participate at all. (Munnell, et al., Issue in Brief #9-5.)

[35] According to the Profit Sharing/401(k) Council of America's *51st Annual Survey of Profit Sharing and 401(k) Plans* (reflecting 2007's experience), the most common employer match in a 401(k) plan is $.50 per $1.00 up to the first 6% of pay. (http://guest.cvent.com/EVENTS/Info/Agenda.aspx?e=4a886fb2-9843-4f4f-b490-32acc75a99f9.)

[36] The CRRBC has a table: "Companies Suspending or Reducing 401(k) Contributions, 2008-2009," http://crr.bc.edu/images/stories/download/table.pdf.

[37] Source: Massachusetts Department of Revenue. The only exception to this is accidental disability pension distributions, which are also not subject to Federal taxation.

4. Unfunded Liability

As noted earlier, the retirement system in Worcester is funded mainly by employee and employer contributions and the return on investment.[38] The employer, of course, is the City, and ultimately, the taxpayers. The employer's contribution to the WRS is not fixed like the employees,' but is dependent on the costs involved in paying off WRS' long-term liability costs to its retirees. For the first 40 years of its history, WRS was funded on a "pay-as-you-go" basis. Pensions owed to retirees were paid for by the contributions made by active employees, much like Social Security. But over the decades, as public employment expanded, more and more retirees were added to the rolls, and retroactive increases in benefits were granted by elected officials, the system began to show strain. No oversight was in place through which the City could monitor the amount of its liability to future retirees, and the degree to which this liability was unfunded. Consequently, the City did not set aside any revenues to cover its liabilities, even though it was recognized that the contributions from active employees eventually would be insufficient to cover future obligations.[39]

The situation was the same for public pension systems throughout the country. The Federal Employee Retirement Income Security Act or ERISA, passed in 1974, established regulations for pension plans in the private sector, but there was no ERISA for public systems.[40] Then, in the early 1980s, the Government Accounting Standards Board (GASB) was established, and began developing standards for sound accounting and financial reporting practices in public finance. GASB statement number 5, "Disclosure of Pension Information by Public Employee Retirement Systems and State and Local Governmental Employers," issued in November 1986 established the standard that states and localities report their retirement systems' assets and liabilities, and do so in a uniform manner, such that the funding adequacy of different plans could be easily compared.

In 1987 Massachusetts passed a law requiring all public retirement systems to amortize their "unfunded liability," that is, the extent to which their long-term liabilities to retirees exceeded their current assets, by 2028 at the latest.[41] Worcester and all the other systems had to move from funding their retirement plans on a pay-as-you-go basis to a "pre-funded" basis, by setting

[38] Technically speaking, the WRS is also funded by revenues from a pension obligation bond issued in 1998. We will explain this in Section II. The only other source of funding worth mentioning is the state's reimbursements for pre-1998 COLAs, discussed above.
[39] Technically, cities and towns in Massachusetts were not even legally permitted to pre-fund between 1945 and 1983. (PERAC 2007 Annual Report, p.4.)
[40] Private-sector defined-benefit pension plans are still more strictly regulated than public pensions. For example, as a result of ERISA and the Pension Protection Act passed in 2006, the pension funds of America's 500 largest companies had a surplus of $60 billion in 2007. (They now they have a $200 billion deficit.) (Jon Entine, "The next catastrophe," *Reason*, February 2009, http://www.reason.com/news/show/130843.html.) Although General Motors' legacy costs to retirees have often been cited as a major cause of its current problems, in 2007, GM's pension fund was actually overfunded. (Mary Williams Walsh, "GM's Pension fund Stays Afloat, Against the Odds," *New York Times*, November 24, 2008, http://www.nytimes.com/2008/11/25/business/25auto.html?partner=rss&emc=rss.)
[41] Unlike Massachusetts, many states and localities do not have a legally-mandated amortization date. Although all states and localities abide by GASB's standards, most do so more as a matter of good practice, since GASB possesses no formal authority to implement its standards.

up a pension trust fund, in which the contributions by current employees and the City would be collected and invested at a certain expected rate of return. To monitor the progress toward full funding of the retirement system, each system would be required to perform actuarial valuations at least every three years so as to take into consideration all fluctuations in assets and liabilities. The actuarial valuation would determine exactly how much the City needed to contribute in its annual budget to stay on schedule and amortize its unfunded liability by the appointed date.

Massachusetts public pension systems have seen dramatic improvements in their level of funding as a result of the transition from pay-as-you-go to pre-funding. In 1987, 100 out of Massachusetts' 106 systems were less than 50% funded and only two were funded above 75%. In 2007, only ten were below 50% and 28 were above 75%.[42] WRS went from being only about 38% funded in 1987 to over 85% funded in 2007. As a result of pre-funding on an actuarial basis, when benefits for current and future retirees are increased, no system can remain ignorant of their precise cost. The increase will immediately register in the next year's actuarial valuation, and thus be reflected in the general-fund expenditure in the following year's annual budget.

What then is the actual cost to the employer/taxpayer of Worcester's retirement system, beyond employee contributions and investment return? **Table 5** shows that in FY09, the cost of the WRS was $41.6 million. In most of the past nine years, the City has spent more on pensions than on core services such as police, fire and public works.

Table 5: The Cost of the WRS in Perspective, FY01-FY09 (in millions)[43]

	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09
Schools	202.9	214.8	219.3	228.4	236.3	244.4	237.6	249.9	256.1
Police	28.3	29.1	32.8	31.0	34.1	34.5	38.4	38.4	42.3
Fire	26.7	26.4	29.6	27.4	28.9	28.6	31.6	33.7	34.9
Health Insurance	15.1	16.4	20.6	22.8	28.2	27.4	29.7	31.9	29.8
Pension	24.4	26	29.7	35.5	36.7	40.2	39.9	40.8	41.6
Public Works	18.0	18.7	19.5	18.3	18.6	19.7	21.3	22.7	23.9

[42] Source: PERAC 2007 Annual Report.

[43] Source: City of Worcester Annual Budgets, FY01-FY09. The "pension" row figures include the city-side tax levy, contributions from the WPS (not teachers), WHA, and the City's Enterprise Fund, and debt service on the City's pension obligation bond. This figure represents the whole employer contribution into WRS for the fiscal year, less employee contributions. The Health Insurance figure is just city-side. Health Insurance for school employees is included in the "Schools" figure.

SECTION II: WRS, THE UNFUNDED LIABILITY AND THE ECONOMY

1. WRS' Unfunded Ratio

At the end of 2007, WRS' funded ratio was higher than that of most other systems in Massachusetts. Out of Massachusetts' 106 systems, WRS' 85.6% was the 11th-highest ratio in the state.[44]

WRS' assets and funded ratio rose steeply in 1999 due to the issuance of a $221 million pension obligation bond (POB). In 1997, WRS' unfunded liability increased by an estimated $63 million as a result of the state's transfer of responsibility for all future COLAs. This provided the impetus for issuing the POB. Instead of paying off the actuary's assessment on a year-by-year basis for 29 years, the City borrowed a large sum of money to pay off nearly all of the liability at once. Of course, the City must pay $16.6 million in debt service on the bond for 29 years, but assuming the WRS' average rate of return exceeds the 6.31% interest rate on the bond over this period, the City will save money over the long run. Unlike other bond issuances, the POB technically did not create any new debt for the City, since it was already obligated by state law to pay off its unfunded liability in 29 years.

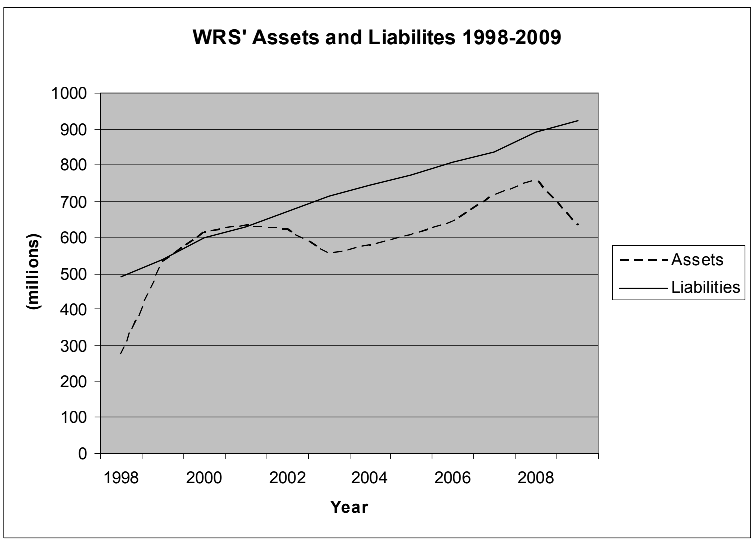
The POB is a controversial strategy. Defenders of POBs liken the strategy to refinancing a home mortgage. Critics prefer to describe it as borrowing a huge sum of money to invest in the stock market. In the case of the WRS, through 2007, the POB strategy proved successful: between 1999-2007, WRS' average annual rate of return exceeded 6.31%.

What then accounts for the fact that, although WRS was fully-funded after issuing the POB, and had averaged positive investment return since then, it has seen growth in its unfunded liabilities? The primary reason is investment return. Although WRS' rate of return exceeded the interest rate on the bond prior to 2008, 8% is lower than its current expected rate of return of 8.25%, and still lower than the rate at the time of the bond issuance, 8.5%. As **Table 6** and the accompanying **chart** indicate, WRS' assets have not grown steadily since 1998 although its liabilities have.

[44] Only Adams (90.7%), Brockton (89.2%), Concord (90.5%), Greater Lawrence (95.3%), Lexington (88.4%), MHFA (94.4%), Massport (103%), Minuteman Regional (118.3%), Norwood (89.7%), and Wellesley (103.2%) were better-funded.

Table 6: History of Worcester's Unfunded Liability, 1998-2009 (in millions)[45]

Valuation Date (as of…)	Assets ($)	Total Liability ($)	Unfunded Liability ($)	Funded Ratio
1/1/1998	274	489.8	215.7	55.90%
1/1/1999	529.9	538.8	8.8	98.30%
1/1/2000	614.8	598.1	-16.7	102.70%
1/1/2001	630.7	628.6	-2	100.30%
1/1/2002	620.8	671.8	51	92.40%
1/1/2003	554.1	715.8	161.6	77.40%
1/1/2004	577.1	743.5	166.4	77.60%
1/1/2005	606.1	771.9	165.8	78.50%
1/1/2006	644	806.9	162.9	79.80%
1/1/2007	716.7	837.6	120.8	86%
1/1/2008	759.4	889.9	130.5	85.30%
1/1/2009	630	925	295	68%



In addition, the liabilities grew as a result of the early retirement programs offered to employees in 2002 and 2003. While reducing payroll in the short term, these programs resulted in a $23 to $24 million increase in long-term liability costs to the retirement system.

[45] Source: WRS CAFR, 2003 and 2007. Figures from 1/1/2009 are estimates provided by the Worcester Retirement Board. The figures from 2000-4 and 2009 represent "smoothed," not market value. As we will discuss shortly, smoothing is an accounting method which minimizes yearly fluctuations by recognizing them over a five-year period.

Also worth mentioning are the costs related to MGL ch. 32, s. 3(8)(c). When a public employee in Massachusetts changes jobs and moves from one retirement system to another, the original "sender" system transfers to the new "receiver" system, at the time of separation, all the contributions the employee has made, plus interest. Then, at the time of the individual's retirement, an assessment is done, and the cost of his pension is split between the two systems based on number of years worked in each system. This arrangement benefits the state and state teachers systems, which tend on balance to be receiver systems, at the expense of sender systems such as WRS.[46] The receiver system possesses all the employee contributions, but is only responsible for a portion of the pension. Sender systems further lose out because City employees usually transfer to a higher-paying job in another system. Thus, when the employee retires at a higher pension, the sender system is responsible for paying part of a pension based on a salary often much higher than what he earned in the sender system.

In almost all of the last 22 years since Section 3(8)(c) became law, WRS has paid out more than it has received, resulting in an loss of over $16 million in net present value to the system. Section 3(8)(c)'s requirements largely accounted for the *increase* in WRS' unfunded liability in 2007, despite the fact that the system exceeded its investment return goal by .5%. PERAC has allowed WRS to contest some Section 3(8)(c) transfers, but only in the case of very large salary discrepancies between sender and receiver systems.

2. WRS and the Crisis in the Financial Markets

As a result of the recent crisis in the financial markets, the POB strategy, as well as the WRS more generally, is under considerable strain. In a report to the City Council in January, the City Auditor estimated that WRS' market losses in 2008 were 27% ($205 million), bringing its funded ratio down to approximately 68%.[47]

In the same report, the Auditor also addressed the challenge of reconciling the City's and Retirement Board's fiduciary responsibility to fund the WRS with the City's responsibility to fund basic municipal services. Before 2008, WRS' amortization schedule matured in 2019, with annual payments increasing by 4% each year. To remain on this schedule now, the WRS' FY10 amortization payment would have to increase by 50% from FY09's, to approximately $38.7 million ($55.3 million including debt service on the POB). If WRS fails to achieve its expected 8.25% rate of return in 2009 (which seems likely[48]), the assessment will increase even further in FY11.

[46] Teachers' aides are part of the local retirement system until they become teachers, and are then transferred to the State Teachers' Retirement System. Many employees also transferred from WRS to the state retirement system when Worcester City Hospital closed in the early 1990s; many of those people became employees at UMass Hospital, which assumed responsibility for the operation of the primary care center at the former Worcester City Hospital.

[47] Note- 68% represents the smoothed value of WRS' assets. On a non-smoothed, or market value basis, the funded ratio is closer to 58%.

[48] In the first two months of 2009, the S&P 500 declined 18.6%.

To emphasize: when public pension funds fail to make their expected rate of return on investments, some of the losses must be made up by employer, that is, taxpayer, contributions. Increasing the taxpayer contribution for pensions means less money for basic services.

According to the City Auditor, the Retirement Board has three options it can currently exercise to minimize the impact of WRS' 2008 losses on the City's budget for FY10. The first is to increase the percentage by which annual contributions increase from year-to-year. Instead of planning to pay off the unfunded liability in equal yearly payments by 2028, the state allows systems to make payments that increase by a certain rate annually. The payments earlier on in the amortization schedule will be less than the ones later, increasing at a certain rate. The WRS was already making use of this strategy, but at a rate of 4%: each year's payment would increase over the previous year's payment by 4%. The state allows the payments to increase at a rate of 4.5%. Adopting a rate of 4.5% would reduce the amount the City is required to contribute in FY10. Later payments will be higher than on the previous schedule, but the impact of 2008's market losses on the FY10 budget will be mitigated.

The second option is to employ asset smoothing, an accounting method permitted by MGL ch. 32 and also allowed by GASB.[49] Smoothed values recognize gains and losses over a five-year period, with the result that in down years, a fund's losses look less severe, and in good years, returns look less strong. With smoothing, the WRS may claim that the fund's value is up to 120% of its actual market value. WRS employed smoothing between 2000 and 2004, but has not done so in recent years, instead recognizing the point-in-time market value of its assets on December 31 of the year in question.

The third method proposed by the Auditor was to push back the amortization date from 2019 to 2028, the final date allowable under current state law. This would further reduce the required employer contribution to WRS in FY10, since the size of annual payments required to pay off the same liability over 20 years instead of 11 will be much smaller.[50]

But according to the Auditor, even with these three methods, the contribution would still be \$33.4 million (\$50 million including POB), an increase of \$7.3 million above the actuary's June 2008 recommendation, and almost \$8 million more than the contribution in FY09.

In Section 54 of his recently-filed Municipal Partnership Act, Governor Patrick has proposed allowing municipalities to make contributions in FY10 as low as 90% of the amount they made in FY09. In FY11, this number would increase to 95%. Under this legislation, municipalities would not be required to contribute at 100% of FY09 until FY12. In other words, the Governor

[49] See GASB #25 "Financial Reporting for Defined-Benefit Pension Plans and Note Disclosures for Defined-Contribution Plans."
[50] Last October, as part of an effort to close a \$1.4 billion budget deficit, Governor Patrick pushed back the State Teachers and State Employee's amortization date from 2023 to 2025.

has proposed that municipalities not be required to increase their contributions at all to compensate for 2008's market losses, and in the short term, to actually decrease their payments.

The City Manager has filed Home Rule legislation which would allow WRS to extend its amortization date by ten more years, to 2038. The Auditor estimates that, if this legislation passes, the employer contribution would only increase to $28.5 million in FY10, or a total of $45.1 million including $16.6 million in debt service on the POB. (The total payment in FY09 was $41.6 million.)

SECTION III: ACCIDENTAL DISABILITY PENSIONS

There are other causes, unrelated to the current market downturn, that make Worcester's public employee retirement system especially costly.

The most important is accidental disability benefits. MGL ch. 32 s. 7 provides special pensions for employees who, due to job-related injury, have become totally and permanently disabled such that they can no longer "perform the essential duties of [their] job." An individual must first petition the retirement board for the right to apply for a disability benefit. He then presents his case to the members of a regional medical panel, made up of three licensed physicians, who are responsible for answering three questions:

- (1) "Is the member mentally or physically incapable of performing the essential duties of his or her particular job as described in the current job description?"
- (2) "Is the member's medical condition likely to be permanent?"
- (3) "Did the member sustain the injury, or undergo the hazard while in the performance of his or her job duties?"

The medical panel answers these questions based on a thorough physical examination and review of past medical history.[51] If the panel says "no" to any of these questions, the Board is required to deny the benefit. The Board may still deny the disability benefit even if the panel answers "yes" to all three. If the Board grants the accidental disability pension, the individual gets 72% of his most recent salary, plus an annuity based on his contributions to the system, free of Federal taxes.[52]

Accidental disability pensions are almost always larger than normal pensions for several reasons: first, normal pensions are calculated based on the highest three consecutive years' salary (rather than only the most recent salary); second, normal pensions are subject to Federal taxes; third, retirees' contributions to the system are returned to them only as a component of the total retirement benefit, not *in addition* to the percentage of average salary they are already receiving, and fourth, it generally takes more years of service for a normal retiree to accrue a 72% replacement rate than it does one on accidental disability. As mentioned earlier, WRS' average superannuation retirement benefit for retirees was $18,576 and for accidental disabilities was $31,374, or 70% higher, on average.[53]

The cost of providing disability pensions is high. As **Table 3** (p. 9) indicated, in 2007, disability pensions accounted for almost 20% of WRS' costs. This is due to the high rates at which public safety personnel retire on accidental disability pensions. As **Table 7** below indicates, currently, about 50% of all retired firefighters and police officers are drawing accidental disability pensions.

[51] Source: PERAC's "The Accidental & Ordinary Disability Retirement Process."
[52] If the petition is denied, the retiree can appeal to the state Contributory Retirement Appeal Board, the administrative tribunal with statutory authority to hear appeals regarding public retirement matters.
[53] Source: WRS.

Table 7: City of Worcester Retirees by Department (as of 12-31-08)[54]

Department	Accidental Disability Retirees	Superannuation Retirees & Ordinary Disability	Total	% Accidental Disability
Police	139	164	303	45.9
Fire	179	159	338	53.0
DPWP	46	207	253	18.2
Housing	3	61	64	4.7
Other Departments	74	1217	1291	5.8

Table 8: Accidental Disability Requests/Approvals[55]

System	2007	2006	2005	2004
Worcester	26/25	25/17	26/29	33/19
Springfield	28/27	17/10	21/28	33/13
Lowell	13/10	14/8	5/5	8/10
Worcester Regional Retirement Board	17/6	14/17	15/12	12/7
Boston	90/103	122/115	143/122	119/81
State	187/179	234/203	252/221	220/174
State Teachers	45/26	30/26	37/20	28/20
Total for all Retirement Boards in Massachusetts	776/676	854/706	909/768	879/678

As **Table 8** indicates, disability requests are approved at high rates in Worcester and in Massachusetts as a whole. And although MGL ch. 32 s. does mandate that all accidental disabilities be reevaluated to determine if an employee was inaccurately diagnosed as totally and permanently disabled, very few individuals are ordered back to work. In 2007, only four individuals in the entire Commonwealth who were receiving disability pensions were ordered back to work.[56]

Many other cities struggle with high rates of accidental disabilities and the associated costs. Between 2005 and 2007, out of 166 Boston firefighters who retired, 123, or 74%, retired on accidental disability.[57] "Probing Pensions," an investigative report done last fall by WPRI

[54] Source: WRS.
[55] Source: PERAC Annual Reports, 2004-7. The number of approvals sometimes is larger than the number of requests for particular years because some of the approvals were for requests submitted in previous years.
[56] Source: PERAC 2007 Annual Report.
[57] And, as mentioned above, 67 of these firefighters went out on higher accidental disability pensions while temporarily elevated to a higher-paying, supervisory position, prompting an investigation by Federal authorities.

Eyewitness News in Rhode Island revealed, among other things, that as of November 2008, of Providence's 948 police and fire retirees, 409 or 43% were out on accidental disability pensions (30% of police and 55.6% of fire).[58] The *New York Post* recently reported that almost 75% of all New York City firefighters who retired in the last five years did so on accidental disability.[59] It should be noted, however, public safety employees elsewhere do not retire with such high rates of accidental disability pensions. **Table 9** offers a random sample of other retirement systems.

Table 9: Accidental Disability Rates in Other Systems[60]

System	Job-related or Accidental pensions/Total Pensions	%
Springfield, MO (police and fire)	110/383	28.70%
Baltimore (police and fire)	715/4,478	15.90%
Chicago (police)	349/12,135	2.80%
Arizona (police and fire)	1,195/7,181	16.60%
Iowa (police and fire)	898/2798	32%
Chicago (fire)	380/2,488	15.20%
Miami (police and fire)	195/1079	18%
Austin (police)	3/429	1%

Contributing factors to the high rate of disability retirement rates in Massachusetts are three health-presumption laws. The "heart and lung law," MGL ch. 32, s. 94, mandates that, if a police officer, firefighter or public employee in another specified hazardous occupation (such as corrections officer or someone who works with the criminally insane) is diagnosed with hypertension, he is presumed to have contracted it in the line of duty, unless evidence can be provided to the contrary. He is then automatically eligible for an accidental disability pension. MGL ch. 32 s. 94A stipulates that, in the case of firefighters, any medical condition relating to the lungs or respiratory tract is presumed to be job-related. Also in the case of firefighters, "any condition of cancer affecting the skin or the central nervous, lymphatic, digestive, hematological, urinary, skeletal, oral or prostate systems, lung or respiratory tract (MGL ch. 32 s. 94B)," is presumed to be job-related if the onset occurs while actively employed or within five years of retirement. In both the case of lung disease and the specified cancers, the firefighter is then eligible for an accidental disability pension.

[58] "Probing Pensions," WPRI Eyewitness News, http://www.wpri.com/generic/target_12/probing.
[59] Reuven Blau, "Raging Pension Fire," *New York Post*, February 8, 2009, http://www.nypost.com/seven/02082009/news/regionalnews/raging_pension_fire_154091.htm.
[60] Source: correspondence with system administrators, actuarial valuations, and annual reports. Some figures are current, some go back to 2007.

The cost of providing accidental disability pensions contributes to making retirement benefits for police and fire personnel substantially higher than for regular employees. According to the "Report of the Blue Ribbon Panel on Massachusetts Public Employees' Pension Classification System," issued in June 2006, whereas Group 1 employees pay for, on average, 74.1% of their retirement costs, Group 4 (public safety) only pay for about 44.9%.[61] Other reasons include the fact that, as noted above, police and fire personnel are allowed to collect benefits as early as age 45 and to retire at full pension at age 55, in both cases 10 years earlier than other employees (see **Table 2**, p. 7).

[61] The figures were provided to the panel by the head actuary at PERAC, and are as of January 1, 2006. These figures only reflect state employees, but state and municipal employees have the same contribution and benefit structure.

SECTION IV: RECOMMENDATIONS

As in many other states and municipalities, the cost of providing retirement benefits to Worcester employees under the current, defined-benefit system has become extremely burdensome. Whether the expense in FY10 will be $45.1 million or $50 million, the consequence is that municipal services to taxpayers will have to be eliminated or, at the very least, reduced in order to meet obligations to retirees.

There is currently some discussion of reform in the Commonwealth. As mentioned above, Governor Patrick, in his 2009 State of the State address, called for "meaningful reform" of public pensions. The Special House Committee on Pension Reform filed a report recently, recommending several reforms, such as to define more strictly "regular compensation," which serves as the basis for a pension, to eliminate the practice of allowing some public employees to get a full year's credit for as little as one day of work, to prevent legislators who lost an election from doubling their pensions, and to prevent workers who experience a job-related injury while temporarily filling in for their supervisors from calculating their pension based on the supervisor's salary.[62]

Although most of the legislation currently under consideration is aimed at reducing the cost of the pension system, HD 2064 "An Act to Preserve and Protect the Integrity of the State Pension System," filed by Rep. Jay Kaufman, chair of the Special House Committee on Pension Reform, includes a provision that the employee contribution rate for employees hired between July 1, 2011 and June 30, 2013 be changed from 9+2% over $30,000 to 9+2% over $50,000. This amounts to a substantial reduction in what many employees have to contribute and a greater burden for taxpayers.

In addition to the Special House Committee's recommendations, a "Special Commission to Study the Massachusetts Contributory Retirement Systems" will be considering more far-ranging changes to the pension system in the Commonwealth. Aspects of the pension system they are charged with examining include "contribution rates paid by employers and employees; vesting periods; the weight given to age versus years of service in the current system; cost-of-living-adjustments with special attention paid to the cost of increasing the cost-of-living-adjustments base; and the cost of any recommendations the commission may make." The commission's report is expected to be released by July 1, 2009.[63]

Clearly, the Commonwealth's public pension system is in need of considerable reform. We say the Commonwealth's system because in Massachusetts pension reform is almost completely a state, not local issue: all investment options, the funding schedule, the entire structure of benefits

[62] "Report of the House Special Committee on Pensions," February 11, 2009.
[63] "PERAC Pension Report News," No. 20, February 2009, http://www.mass.gov/perac/news/pensionnews20.pdf.

and contributions are dictated by state law and monitored by PERAC. Therefore, most of these changes will require changes in state laws.

Based on our research and discussions with pension experts, The Research Bureau offers the following recommendations:

Virtually every defined-benefit pension system, private and public, is struggling with how to address 2008's market losses. A number of suggestions have been proposed. The two most common are some form of pension holiday (as has been proposed in New Jersey and Kentucky) or an extension of the amortization date (currently under discussion in Philadelphia). A few places are discussing raising employee contribution rates, or in the case of New York state, requiring employee contributions in cases where they did not exist before.[64] Some governments have even proposed tax increases specifically directed at closing pension fund shortfalls-West Virginia and Springfield, Missouri are two cases in point. In December 2008, Congress granted a pension holiday to private-sector defined-benefit plans when it voted to suspend enforcing certain provisions of the 2006 Pension Protection Act, which would otherwise have required companies to maintain a funded ratio of 94%.

The Research Bureau recommends that the Worcester Retirement Board and City Manager adopt the City Auditor's plan of smoothing plus pushing back the amortization date to the latest allowable date under state law.

Regarding further proposals under discussion at the state level to reduce the impact of 2008's market losses on the FY10 budget, the state should grant the Home Rule petition sought by the City Manager to extend the funding schedule ten more years, to 2038. Many vital services do stand to be cut if the WRS stays on its current funding schedule. Moreover, if some relief is inevitable, extending the funding schedule is preferable to the sort of pension holiday being proposed by the Governor in his Municipal Partnership Act. The Governor is proposing not only to ignore the experience of 2008 and the need to somehow compensate for recent losses, but to *reduce* the annual pension appropriation from that made in FY09, all the way up through FY12.

Compensating for market losses is painful, but responsible. A defined-benefit plan requires a government to bear the burdens associated with it, rather than pass them on to future taxpayers, as former generations did. The City Manager's proposal would provide a more systematic, honest way of addressing fund losses, and would transfer less of the cost to future taxpayers than the Governor's proposal would.

[64] Currently, many public employees in New York state only have to make contributions through their first ten years of public employment.

The state Legislature should make fitness standards for police and fire personnel a condition of continued employment, not just initial employment.

To be hired as a firefighter or police officer, a candidate must meet certain fitness standards. All applicants must pass a physical fitness test and go through pre-employment physical screening. However, once a candidate is hired, and throughout his career, he is not required to meet any fitness standards as a condition of continued employment. This should be changed: basic fitness standards (regular medical examinations and fitness tests, similar to what applicants undergo when seeking initial employment) should be implemented on a regular basis or at least at the time of promotion. Meeting these standards should not be another compensation "perk" or matter of voluntary compliance, but a *requirement* for continued employment. It can be expected that those police officers and firefighters who do maintain proper fitness so as to be prepared for the rigors of their job will support the introduction of regular fitness testing. Knowing that their peers are fit will prevent them from having to undertake excessive burdens themselves.

Past attempts at strengthening fitness standards in Massachusetts have been allowed to languish and voluntary programs, such as installing fitness equipment at firehouses, have failed to curb high rates of accidental disabilities.[65] The difficulty involved in instituting standards is that public employee unions view them as a change in the conditions of employment and therefore a matter for collective bargaining. What this means in effect is that fitness standards could only be instituted in exchange for a concession by the City regarding wages or benefits.[66]

In order to avoid the inevitable tradeoffs that would occur from bargaining collectively for fitness standards, there must be legislation at the state level. This also means there will have to be an appropriation at the state level, additional local aid to enforce these standards. Otherwise, the standards would be considered an unfunded mandate that would not be implemented, as has happened in the past.

The Research Bureau recognizes the difficulty involved in calling for increased local aid for fitness standards at a time of fiscal crisis. However, there are considerable savings to be gained in reducing the rate of accidental disabilities.

The foregoing recommendation is intended to address accidental disabilities which are not cases of outright abuse. However, the numerous journalistic accounts of accidental disability abuse

[65] A number of reports about the Boston Fire Department have recommended instituting fitness standards. See, most recently, "Boston Fire Department Independent Review Panel," November 30, 2007, p. 8-9, and "The Challenge: Managing Diversity, Tradition, and Change," Boston Fire Department Review Commission, January 2000, Section 6.6.4. See also Donovan Slack, "Studies of Boston Fire Department Going Unheeded," *Boston Globe*, October 22, 2007, http://www.boston.com/news/local/massachusetts/articles/2007/10/22/studies_of_fire_dept_going_unheeded/.

[66] The issue is similar to the controversy surrounding instituting drug testing for Boston firefighters. See the Boston Municipal Research Bureau's "Time for Drug Testing for Firefighters," January 16, 2008, http://www.bmrb.org/content/upload/Fire081.pdf.

indicate a need for closer scrutiny of all such claims. In order to prevent such abuse, or at least reign in the costs, the state should authorize the following:

The City should be made formal party to Retirement Board hearings.

Retirement Board hearings are currently conducted more like an investigation by an independent commission than a standard legal proceeding. The Retirement Board decides if a benefit is deserved based on the information at its disposal. Although the City ultimately bears the cost of all pensions granted, an especially high cost in the case of accidental disability, it possesses no formal right to contest the proceeding or even to express its position. With the exception of the Human Resources Department, which compiles and presents the petitioner's employment history (including medical records) to the Board, the City's role in Retirement Board hearings is very limited. Benefits hearings should be structured more like standard legal proceedings, where both parties involved (the individual petitioning for the retirement benefit, and the City, who will have to pay for it) possess a right to state their case in front of the neutral third party, the judge or jury, or in this case the Retirement Board.

The state should set employee contribution rates by group classification, not by date of hire.

The current system of employee contributions is the result of raising contribution rates over several decades among new employees in order to fund benefits promised to current retirees. The rates have no connection to an employee's specific job or to the value of the retirement benefits he will receive. A more rational arrangement would be to link employee contribution rates to group classification. This could apply only to new employees, since current employees' contribution rates are protected as part of an employees' constitutional right to contract.[67]

A similar recommendation was made in the 2006 "Report of the Blue Ribbon Panel on Massachusetts Public Employees' Pension Classification System," although this report did not specify, as The Research Bureau does, that this should mean higher employee contribution rates: "Earlier ages for full pensions should be reflected in higher contribution rates. An explicit decision should be made of how those higher contribution rates should be divided between employee and employer. Thus, employee contributions should no longer be based on date of hire as under current law (p. 3)." The employer contribution rates are already, in effect, determined by group classification, because group classification determines generosity of benefits. In a defined-benefit system for public employees, the employer contributes whatever costs are not covered by the employees' contributions. If two groups of employees contribute at the same rate but one group enjoys more generous benefits than the other, as is the case with Group 1 (most public employees) and Group 4 (public safety) employees, then the employer has to contribute more for one group than another.

[67] In 1973, the Massachusetts Supreme Judicial Court ruled that employee contribution rates could only be raised for new employees. (*Opinion of the Justices*, 364 Mass. 847 (1973).) See also Karen Steffen, "State Employee Pension Plans," *Pensions in the Public Sector*, pp. 41-65.

As noted above, a main reason for the greater expense associated with police and fire retirees is the higher rates at which they retire on accidental disability pensions. Disability pensions for firefighters and police officers function like an insurance policy. Because these occupations are sometimes hazardous and physically demanding, provision must be made for the occurrence of job-related injuries. However, the entire pension system is designed like a health insurance policy: lower-risk employees subsidize higher-risk ones. In other words, police officers and firefighters pay the same "premium" of 9% plus 2% over $30,000 as janitors, office workers, and city councilmen, despite the much higher rates of disability of public safety personnel. The disability system should resemble the auto insurance industry: higher risk drivers (teenagers, drivers with a bad record) pay higher premiums.

The state should maintain a separate, statewide retirement system for employees in hazardous occupations.

It is common practice in many other states to maintain separate systems for hazardous and non-hazardous occupations. This has the advantage of making transparent the greater costliness of retirement benefits for hazardous employees. In Massachusetts, the greater costliness of providing retirement benefits to police and fire personnel is in fact masked by their being, on both the municipal and state level, part of the same system as other employees. Transferring all hazardous-occupation employees would not only make clearer the greater burden on taxpayer money for providing pensions to hazardous occupations employees, but might provide a disincentive to disability abuse. If new public safety employees have to pay higher rates which would increase with increases of the high number of accidental disability pensions, these employees might have the incentive to police one another to ensure that abuses were minimized.

The state should reform the cancer presumption law.

According to the International Association of Fire Fighters, 27 states have cancer presumption laws for firefighters.[68] These laws come in two varieties: about half list specific cancers which, if they have been contracted, are presumed to be related to firefighting. The other half are non-specific, but presume any cancer is related to firefighting if an individual can show he has been exposed to a known carcinogen. Of the ones that do list specific cancers, not all include those listed in Massachusetts' law. Alaska, Arizona, Maryland, Virginia and Washington do not include liver cancer. Arizona, Virginia, and Maryland do not presume a correlation between kidney cancer and firefighting. And of course, the 23 states that don't have a cancer presumption law don't recognize any correlation. There is no reason why medical evidence should differ from one state to the next. An exhaustive review of the medical evidence linking firefighting and cancer should be done to examine the validity of this presumption. This law should be based on medical evidence, not politics.

A recent survey of 32 previous studies of the link between firefighting and certain types of cancer may be found in "Cancer risk among firefighters: a review and meta-analysis of 32

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[68] http://www.iaff.org/hs/phi/disease/cancer.asp.

studies," published in the *Journal of Occupational and Environmental Medicine*.[69] The results are included in **Table 10**. Based on the best evidence available to them, the researchers determined that only three types of cancer are "probably" linked to firefighting: multiple myeloma, non-Hodgkin's lymphoma, and prostate cancer.

If this is the case, then the Massachusetts law should be reformed so as to eliminate the presumption that the kinds of cancer that have no demonstrated link to the professional activities of firefighters are job-related.

Table 10: Cancers in MGL ch. 32 s. 94B

Type of Cancer	Correlation with firefighting
Bladder	Unlikely
Brain and Other Nervous System	Possible
Colon & Rectum	Possible
Esophagus	Unlikely
Kidney	Unlikely
Larynx	Unlikely
Leukemia	Possible
Liver & Bile Duct	Unlikely
Lung	Unlikely
Melanoma of the Skin	Possible
Multiple Myeloma	Probable
Non-Hodgkin's Lymphoma	Probable
Oral Cavity and Pharynx	Possible
Pancreas	Unlikely
Prostate	Probable
Stomach	Possible

The state Legislature should amend Ch. 32 s. 3(8)(c).

There is no justification for "receiver" retirement systems in Massachusetts benefiting at the expense of "sender" systems like Worcester. Under current law, as noted earlier, the costs of the pension is split between the two systems based on years of service and is calculated at the time of retirement. Instead, an assessment should be made at the time of transfer to determine the amount of retirement benefits the individual accrued in the first system. Assets equal to this amount could then be transferred to the receiver system, with no further liability to the sender retirement system. Moreover, the amendment to 3(8)(c) should apply retroactively: an assessment for all employees who have transferred should be performed, and all imbalances between sender and receiver systems immediately restored.

[69] Grace K. LeMasters, et al., "Cancer risk among firefighters: a review and meta-analysis of 32 studies," *Journal of Occupational and Environmental Medicine*, 48.11, November 2006.

The process by which the state Legislature grants benefit increases should be more transparent and deliberate.

Other states, such as Georgia, have adopted "cooling-off" periods between proposing a retirement benefit increase and passing it. A similar measure adopted in Massachusetts would allow for PERAC to perform an actuarial study to precisely estimate the cost of the increase to the system before the Legislature votes it into law. It would also allow the Legislature time to identify a funding source to pay for the prospective increase. No new benefit increases should be granted without identifying a new funding source.

Another way of reforming the benefit-increase process would be to require any and all increases to be approved by popular referendum. In November 2008, Orange County, CA voters approved, by a 75% margin, "Measure J," which will subject all prospective pension increases for public employees to a popular vote.[70] County supervisors will have to request the approval of voters in a referendum, after having presented them with an actuarial report of the expected increase in future costs. San Diego voters adopted popular approval for pension increases in 2006 and San Francisco has required popular approval for benefit increases for retirees for its entire history.

Adopting a similar process for benefit increases would bring absolute transparency and clarity as to who is paying for benefit increases.

Either of these measures, the "cooling off" period, or a referendum vote, would do much to prevent the Legislature from approving benefit increases just because there is a temporary surplus (not, of course, that that will be an issue anytime soon).

The Governor should appoint a blue-ribbon commission to draw up a plan for moving all or some Massachusetts retirement systems to a defined-contribution system.

The most fundamental reform to the Massachusetts public pension system would be to change the system from a defined-benefit to a defined-contribution system. The former Lieutenant Governor Kerry Healey, in her 2006 gubernatorial campaign, proposed such a change.[71] Healey proposed closing all 106 retirement systems in the Commonwealth to new employees, and enrolling them into one large defined-contribution system. (The only exception was police and fire personnel, whose defined-benefit systems Healey proposed maintaining.) Michigan and Alaska, in 1997 and 2006, respectively, closed their defined-benefit plans to all new state employees, instead enrolling them in a defined-contribution plan. Eight other states (Washington, Vermont, North Dakota, Montana, Florida, South Carolina, Ohio, Colorado) offer

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[70] Girard Miller, "A Cap on Pension Benefits," *Governing*, November 19, 2008, http://www.governing.com/articles/0811gmillerd.htm.

[71] "A Modern Touch for the Pension System," *Boston Globe*, June 13, 2006, http://www.boston.com/news/globe/editorial_opinion/oped/articles/2006/06/13/a_modern_touch_for_the_pension_system/

employees the choice of enrolling in a defined-contribution plan or a traditional defined-benefit plan. And two states, Oregon and Indiana, enroll all new state employees into "combined" plans, where employees must participate in both a defined-contribution and defined-benefit plan.[72]

Moving from a defined-benefit to a defined-contribution retirement system would have the following advantages:

- A defined-contribution system is better for **budget discipline**. With a defined-benefit system, the employer (taxpayer) is always making promises that it cannot know if it can fulfill, or at least not without great expense. A defined-contribution plan is therefore more honest, and its cost to the employer is much more predictable. With a defined-contribution system, the employer would never get caught in the situation Worcester and all other cities and states across the nation will be faced with in FY10, of having to raise new revenues or cut services in order to continue to fund promised benefits amidst an environment of fiscal crisis. There is no such thing as an "unfunded liability" for a defined-contribution system, since a defined-contribution system is, by definition, always fully funded.
- A defined-contribution system would provide **equity with workers in the private sector**. A defined-benefit system is not necessarily more generous than a defined-contribution system. However, there is no question that during a recession, individuals in the private sector with a defined-contribution plan (especially if they are at retirement age) fare much worse than public employees. Not only does a defined-benefit system for public employees provide a safety net most taxpaying citizens do not have access to, it also asks those taxpaying citizens to compensate for the system's market losses. It seems inherently unfair to require private-sector workers who bear the investment risk for their own retirement to also bear all the investment risk for public employees.
- The traditional argument for a defined-benefit plan was that, because public employees were paid less than private-sector employees, their retirement and health benefits needed to be more generous in order to attract a qualified workforce. But with many City employees making over $100,000 per year, this argument lacks credibility.[73] In 2007, the average salary for a City worker was $47,464, which was actually greater than the average salary for Worcester and the surrounding area, $43,440, according to Bureau of Labor Statistics.[74] (Average *total* compensation, taking into account retirement and health benefits, is, of course, still greater.) Simply put, a defined-benefit retirement plan is **not necessary to attract a qualified workforce and has outlived its purpose**. A

[72] Alicia H. Munnell, et al., SLP #3, "Why Have Some States Introduced Defined Contribution Plans?," CRRBC, January 2008, http://crr.bc.edu/images/stories/Briefs/slp_3b.pdf?phpMyAdmin=43ac483c4de9t51d9eb41.

[73] Not including compensation for police details, 180 public employees in Worcester made over $100,000 in 2007. If detail work is included, the number increases to well over 250. According to the *Boston Herald*, 2,516 Boston city and school public employees earned more than $100,000 in 2008. (Source: Worcester Regional Research Bureau calculation based on "Your Tax Dollars at Work: 2009 Boston Payroll," http://www.bostonherald.com/projects/payroll/boston/total.DESC///1/.)

[74] "May 2007 Metropolitan and Nonmetropolitan Area Occupational Employment and Wage Estimates, Worcester, MA-CT," http://www.bls.gov/oes/2007/may/oes_79600.htm#b00-0000.

defined-contribution plan could be more attractive to certain employees such as younger employees or anyone not planning to spend his whole professional career in the public sector. Meanwhile, having a defined-benefit plan provides a disincentive for public employees to leave the public sector. Once the employee is vested and given limited years of service to receive full benefits, public employees have little incentive to pursue other opportunities.

- A defined-contribution system is a simpler system which offers virtually no potential for abuse. Salary spiking through temporary promotions or cashing in vacation days, double-dipping, and the numerous other forms of "gaming the system" are possible only in a defined-benefit system, which relies on a benefit formula that can be manipulated in numerous ways. In a defined-contribution system, one's retirement benefits are determined simply by whatever sums employee and employer have contributed throughout the employee's career, plus the investment return.

Proponents of the defined-benefit system argue, however, that making the transition to a defined-contribution plan will be not only difficult, but could be costlier, in both the long- and short-term, than the current system.

- Local retirement systems have very little autonomy in Massachusetts. When Michigan and Alaska made the transition from a defined-benefit to a defined-contribution plan, they did so only for state employees and left local systems, including the more expensive police and fire systems, untouched. In fact, some local systems in Michigan went to defined-contribution systems *before* the state did, as early as 1984. The level of uniformity and regulation that Massachusetts, through PERAC, imposes on local retirement systems makes the transition to a defined-contribution system-or indeed, any substantial reform-impossible without explicit state consent.
- 80% of the cost of maintaining the WRS is related to paying for unfunded benefit promises made by previous generations, and moving to a defined-contribution plan will do nothing to address this massive unfunded liability. Even if Worcester enrolled all new employees in a defined-contribution plan beginning tomorrow, it would still be paying over $40 million in obligations to current and future retirees for the next 20 years.
- Only new employees could be enrolled into a defined-contribution plan. Benefits, like contribution rates, for current employees are deemed constitutionally inviolate, protected as part of an employee's right to contract.[75] Although private employers can "freeze" their defined-benefit plans and not allow current employees to accumulate further benefits, this has never been allowed for public sector employees.
- The transition costs involved in moving to a defined-contribution system are not limited to those associated with paying off the unfunded liability. In the short term, it will be more expensive to enroll new employees into a defined-contribution plan than to keep them on the current defined-benefit plan. The retirement benefits for current employees

[75] See footnote 67.

are relatively cheap. Newer employees hired since 1996 in some cases may even pay for themselves, or contribute more than the value of their pension.[76]

- Moreover, the cost to the City of the current defined-benefit plan is projected to decline, as newer employees who contribute at a higher rate continue to replace older employees.

But to attempt to predict the long term cost of the defined-benefit plan by the current arrangement is speculative. Indeed, to presume that there will be no unfunded benefit increases over the next 20-30 years is not only speculative but contrary to past experience. Past experience shows that paying off the unfunded liability is not likely to be a smooth process. In a 20-30 year period, the state Legislature is likely to make further concessions to the unions regarding benefit increases. New employees, who contribute at the highest, post-1996 rate, may object to receiving the same benefits as those who contribute much less. Thus, their contribution rate might be lowered eventually-indeed, as mentioned earlier, the House is currently considering legislation to do just that. Can we be sure that investment returns will be as steady as expected, that WRS and many other systems will average a net return of over 8% for the next 20-30 years? Any early retirement programs will increase the unfunded liability. (The City Manager's current proposal for early retirement benefits for 100 employees is expected to increase the City's annual contribution to the WRS by $1.6 million per year.) Any pension holiday, such as Governor Patrick has proposed in his "Municipal Partnership Act," will lead to an increase in the unfunded liability. What if, due to breakthroughs in medical science, the average life span increases further, as has been happening gradually over the past century? An increase of only one or two years could have a dramatic impact on the unfunded liability.

There is much uncertainty about the long-term costs of the current defined-benefit pension system. The best way to eliminate that uncertainty as well as provide more equity with private-sector taxpayers and eliminate the numerous opportunities for abuse, would be to close the system and enroll all new employees on a defined-contribution plan. This would be truly "meaningful pension reform."

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[76] For instances in which this could be the case, see Raymond Depelteau, "The Massachusetts Pension System," White Paper, Voyageur Asset Management, Inc., June 2007, http://www.publicpensionsonline.com/public/images/MassPension%206%2007.pdf, and Ardon, p. 6

Mission Statement:
The Research Bureau serves the public interest of the Greater Worcester region by conducting independent, non-partisan research and analysis of public policy issues to promote informed public debate and decision-making.

The Research Bureau

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