

TRUTH IN NUMBERS:

The Security and Sustainability of Rhode Island's Retirement System



Gina M. Raimondo
Rhode Island General Treasurer

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INTRODUCTION

A robust state retirement system plays a critical role in recruiting and retaining talented employees on whom we depend for quality public services, such as teaching in our schools, fixing our roads, protecting our environment, policing our streets and highways, and prosecuting lawbreakers. Such a system is also designed to provide a level of secure income to these employees, once they retire. To be viable, a state retirement system must be affordable for both the employees and the taxpayers who support it.

Today Rhode Island's pension plans¹ provide neither retirement security nor financial sustainability and are in dire need of re-design. This challenge is not unique to Rhode Island. By one measure, state and local pension plans nationally are \$3 trillion short of the funds needed to provide the pension benefits promised to government retirees and active public employees.² This figure is more than the nation was prepared to pay for the \$400 billion bailout of mortgage giants Fannie Mae and Freddie Mac,³ as well as the \$700 billion initially authorized for the federal Troubled Asset Relief Program (TARP).⁴ Rhode Island's system has been recognized as one of the worst funded and most expensive retirement systems in the country.⁵ Each year that the state delays action to address its fundamental structural pension issues, the more risk the system faces and the harder it becomes to fix.

This report is organized around four key objectives:

- Estimating the price tag for past service
- Diagnosing the key drivers of the structural pension deficit
- Understanding the implications of further inaction
- Providing a framework for solutions

Ensuring a common understanding of the current pension situation is critical to fostering a lively and informed debate among all stakeholders, including: public sector employees; taxpayers; and state and local elected and appointed officials, on how to fix it. Given limited time and resources, this report is not an exhaustive empirical analysis of all Rhode Island retirement system issues. Rather, it focuses on succinctly explaining those issues that most challenge the state-administered retirement system, highlighting those that must be addressed in any solution. This report focuses only on the funds for state employees and teachers, which comprise the majority of assets and liabilities in the Employees' Retirement System of Rhode Island (ERSRI). The numbers in this report do not incorporate other state-administered plans or the municipal plans outside of ERSRI; however, the concepts introduced may be applied to those plans as well. It is also important to note that, much like the stock market, retirement system data is in constant flux. Even recognizing these changing numbers, however, the concepts presented remain consistent.

**Comprehensive, one-time
pension reform is required for a
financially secure RI.**

Only by developing a workable solution to the pension crisis can a financially secure future for all Rhode Islanders be created. While it is necessary to address this problem as quickly as possible, it is more important to make sure that solutions are thoughtfully considered and lasting. This problem is large and

complicated, with potential financial and legal implications. Past pension reform efforts, while steps in the right direction, have not been comprehensive enough to address the root causes of the problem. The result of this piecemeal approach is that state employees and teachers have endured several rounds of changes to their benefits, which have produced anxiety and insecurity, while the system remains woefully underfunded. The task ahead is to move swiftly to outline solutions, and to avoid the temptation to rush reforms that may be ill-designed or incomplete.

Above all, it is important to remember that real people and families are connected to every number and every actuarial assumption in this report. Any proposed reform has immediate and direct consequences for hardworking state employees and teachers, who have done nothing wrong and contributed what was asked of them to the pension system. The problem does not lie with them; rather the problem is a poorly designed system that has been faltering for decades. Another vital consideration is the hardworking Rhode Islanders outside the pension system, who are struggling to save for their own retirements, and are being asked to pay higher taxes, in good part, to fund the pension system. Of course, we all suffer if the state has to make severe cuts to vital public services to maintain the current pension system.

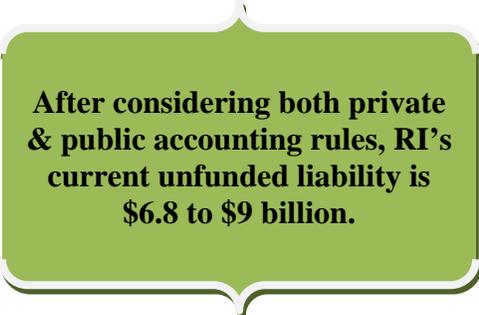
Ultimately, honest dialogue and real sacrifices will be required to re-design a system that:

- Attracts quality employees
- Provides a level of security for its retirees
- Preserves funding for public services
- Protects taxpayers

The primary objectives of *Truth in Numbers* is to lay out the main reasons for the state's pension challenges, explain the implications for all Rhode Islanders, and offer a framework for devising solutions.

ESTIMATING THE PRICE TAG FOR PAST SERVICE

At its simplest, an unfunded liability⁶ is the additional amount of money required to be infused into the system today to fully support promises made to retirees and current employees for service already rendered. It does not include amounts required to fund benefits for future service.



After considering both private & public accounting rules, RI's current unfunded liability is \$6.8 to \$9 billion.

Public and private pension funds are governed by different accounting rules⁷ with varying approaches to two key calculations, the discount rate⁸ and asset valuation⁹, which have a significant impact on determining the unfunded pension liability for any fund. Due to the greater risk of bankruptcy of a private company, private pension funds are required to adopt more conservative approaches in fund accounting. Unsurprisingly, given the uncertain condition of public finances, some experts believe that public plans have been reckless in their fund accounting and should be required to use more cautious approaches, similar to those used in private sector pension plans.¹⁰

In presenting a complete and accurate assessment of the unfunded liabilities facing the state's retirement system, calculations were conducted using approaches for both public and private pension funds. Some have advocated for using an even more conservative approach—using a risk-free discount rate.¹¹

Rhode Island's unfunded liability has been estimated at \$6.8 billion under public accounting rules.¹² When applying the private sector pension accounting rules, the unfunded liability grows to approximately

\$9 billion.¹³ The state also has unfunded liabilities of \$775 million for Other Post-Employment Benefits (OPEBs), which are principally healthcare benefits for retirees and their beneficiaries.¹⁴

DIAGNOSING THE KEY DRIVERS OF THE STRUCTURAL PENSION DEFICIT

As with solving any problem, it is critical to understand the history leading up to a crisis before offering proposals for change. The decisions made by our elected and appointed leaders, both Democrats and Republicans, during the 1960s, 1970s, 1980s and 1990s have caused the current crisis in our pension system. These officials, representing management and labor interests, made decisions based more on politics than policy, which understated the required contributions to the pension plan leaving the state with a significant unfunded pension liability.

Decades of ignoring actuarial assumptions led to lower taxpayer & employee contributions being made into the system.

Five primary factors have largely created the pension structural deficit. They include:

1. Failing to utilize sound actuarial practices: Over the last 30 years, key decisions were made—against the advice of actuarial experts—which had the effect of lowering contributions into the retirement system. As early as 1974, the actuary for ERSRI warned the General Assembly that it was not paying proper attention to the economic health of the pension plan:

“Continuously mounting actuarial deficits, if not viewed with complacency, are at least not considered with the degree of concern which such a situation demands...Perhaps, mingled with these attitudes is the feeling that though future generations of employees may be affected, the problem is of no concern to present employees, a sort of ‘let the future take care of itself’ psychology. Whatever may be the reason behind this lack of official and employee concern, the fact is that it is unrealistic. A change of attitude and remedial and corrective measures are imperative if the retirement system is to survive and fulfill its functions and stated objective for present employees as well as future participants.”¹⁵

The following timeline highlights significant actions impacting the retirement system’s unfunded liability:

1986 General Assembly begins funding the plan on an actuarial basis. This 50-year delay in using accurate actuarial information contributed substantially to the unfunded liability.

1992 The actuarially required contributions to the pension fund were not made during Rhode Island’s credit union (DEPCO) crisis. This impropriety was addressed in 1995, and the state has subsequently made all of its annual required contributions (ARC). In 2007, the plan’s actuaries calculated that the impact of this improper act was limited, accounting for less than one percent of the unfunded liability.¹⁶

1997 First commissioned full actuarial experience study to determine the accuracy of the plans’ actuarial assumptions and contribution amounts.

1997 Actuary and investment consultants advised the Retirement Board to adopt an investment return assumption no higher than eight percent. Against advice, the Board decided on an 8.25 percent rate of return. Using unrealistically optimistic actuarial assumptions increased the unfunded liability.

1996-1997 During the peaks of the financial market technology bubble, the Retirement Board twice veered from the consistent use of its “asset smoothing” method and instead increased the value of assets to market value, known as “marking to market.” At both times, the market value of the assets was higher than the actuarial value of assets. The result of this decision was lower contributions to the plans and,

now, a higher unfunded liability.

1999 The General Assembly voted to extend the amortization period to 30 years. By stretching out the payment schedule for the unfunded liability, this re-amortization reduced annual contributions and further increased the unfunded liability.

2. Generous benefit improvements without corresponding taxpayer or employee contributions: Throughout the 1960s, 1970s and 1980s, pension benefits were substantially increased for state employees and teachers without corresponding contributions being made. As shown below, normal retirement eligibility was reduced from age 60 and/or 38 years of service, to 28 years of service with no age requirement.¹⁷

SUMMARY OF RETROACTIVE BENEFIT INCREASES		
YEARS OF KEY CHANGES	1960	1970-1990
ELIGIBILITY	AGE 60 WITH 10 YEARS OF SERVICE, 38 YEARS OF SERVICE UNDER AGE 60 AT ACTUARIAL EQUIVALENT.	28 YEARS OF SERVICE AT ANY AGE
SALARY CALCULATION	5 YEAR AVERAGE SALARY	3 YEAR AVERAGE SALARY
ANNUAL ACCRUAL	1.66 PERCENT YEARS OF SERVICE	Y 1-10: 1.7% Y 11-20: 1.9% Y 21-34 : 3.0% MAX OF 80%
COLA	NONE	3 PERCENT COMPOUNDED ANNUALLY (AFTER THIRD YEAR OF RETIREMENT)

All of these benefit increases were applied retroactively to current employees. This means that many employees were able to retire at younger ages with richer benefits. Since employee and taxpayer contributions needed to fund these improved benefits during prior periods of service were never made, the unfunded liability increased substantially.

3. Current pension plan design: In Rhode Island, even under the new reduced benefit rules (also referred to as Schedule B) enacted through the reforms of 2005-2010, a state employee or teacher may receive:

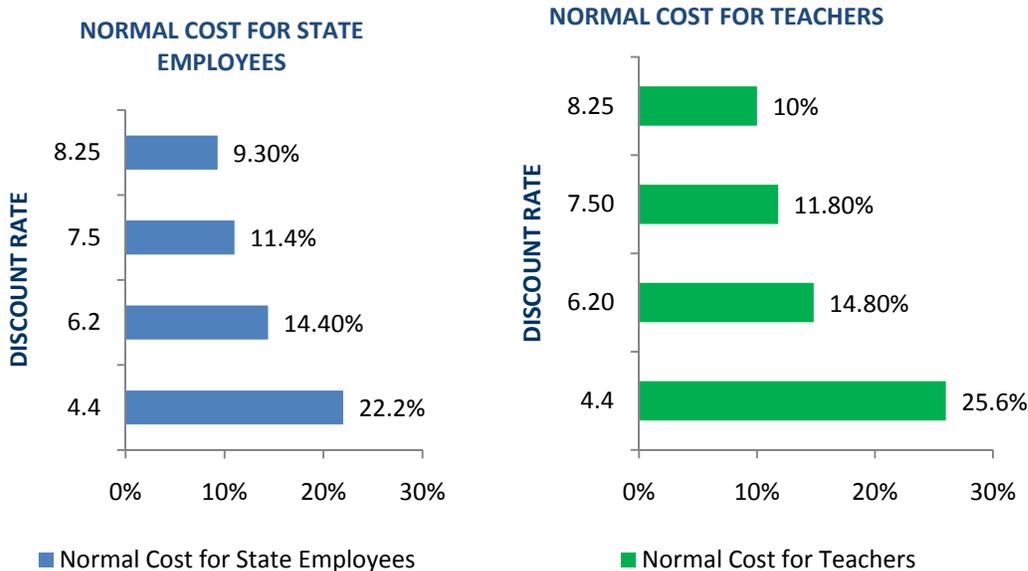
- Maximum pension benefits of 75 to 80 percent of final average five-year earnings starting at age 62, *plus*
- Social Security (approximately half of the teachers), which provides a benefit that replaces about one-third to one-half of a worker’s average earnings¹⁸, *plus*
- Cost-of-living adjustment (COLA) increases to annual pensions and Social Security. Current retirees have a three percent compounded COLA (active employees receive the lower of three percent or CPI compounded annually on the first \$35,000 of pension income).

Due to benefit changes & investment experience, retirees never paid their normal cost, which is the amount required to fund their projected pension.

As a result of this current design, retired public employees can routinely earn retirement benefits that exceed 100 percent of their final average earnings by the time they are several years into their retirement. Many retirees can earn more in retirement annually than a current employee in the same job position earns today.

A key concept in pension accounting is the “normal cost,” which is the amount required to be paid in any given year to fund the cost of pension benefits earned during the year.¹⁹ The chart below demonstrates the impact of varying discount/investment return rates upon normal cost calculations for those participating in Schedule B. State employees have been contributing 8.75 percent of their salary toward their pension over the last decade. During this same period, the discount rate/investment rate of return was set at 8.25 percent, whereas actual investment returns were 2.28 percent (net of fees and administrative expenses). Using the lower return as the discount rate would have raised the normal cost from 9.3 percent to more than 22 percent of salary (note that 10-year return through February 28, 2011 is 4.4 percent).

NORMAL COST ANALYSIS: STATE EMPLOYEES & TEACHERS



The normal costs for current retirees, who participated in Schedule A, are substantially larger because their benefit levels were much higher. For example, at a 7.5 percent discount rate/investment rate of return, the plan’s actuaries have estimated that the normal cost for employees eligible to retire before September 30, 2009, is 15.89 percent for state employees and 18.48 percent for teachers. The normal cost calculated at actual returns would be significantly higher than those figures.

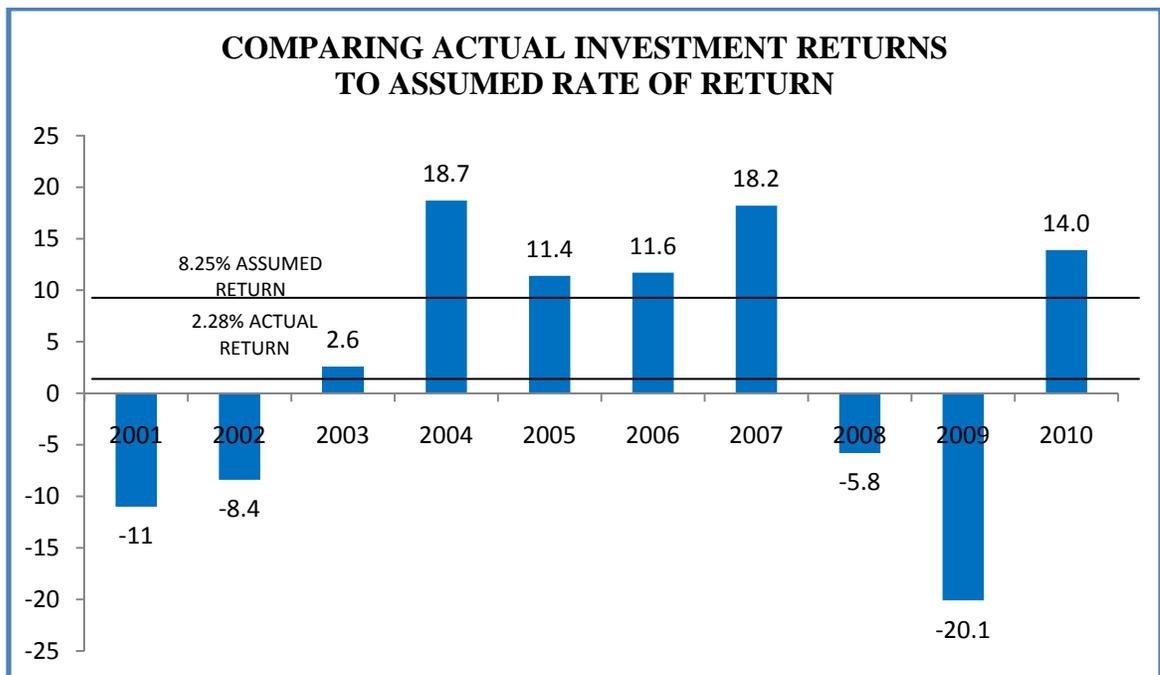
In short, a significant driver of the unfunded liability is that the true normal cost for nearly all employees and retirees has never been fully contributed to the system. This analysis also highlights how vitally important it is to adopt accurate and conservative assumptions because being unrealistic hurts employees, retirees and taxpayers.

4. Retirees living longer: People are living longer, which means that the period of time that they are supported by their pension is extended. The new mortality tables adopted by the Retirement Board extend projected life expectancy by one or two years, and project future increases in life expectancy consistent with past experience. The unfunded liability increased by more than \$500 million because of recent changes in mortality.²⁰ As people live longer, the impact of the COLA on the cost of providing pensions

is especially large.

5. Lower-than-assumed investment returns: The current high unfunded liability cannot be discussed without highlighting the impact of lower than assumed investment performance. As the following chart indicates, the state pension fund's investment performance (net of investments and administrative expenses to run the system) has averaged only 2.28 percent over the last decade through June 30, 2010, which is significantly below its assumed 8.25 percent rate of return.²¹

On July 1, 2012, the investment assumption will be 7.5 percent. While this is a more realistic rate of return, the actuaries have warned that the state only has a 42.5 percent chance of achieving this target.²²



It is important to note that several strong years of investment returns will only make up a fraction of the funding needed to reverse current trends. Because the plan uses asset smoothing, only approximately 50 percent of the losses from the 2008 recession have been recognized in the plan's valuation.²³ The continued recognition of these market losses over the next two to three years will likely further increase the unfunded liability.

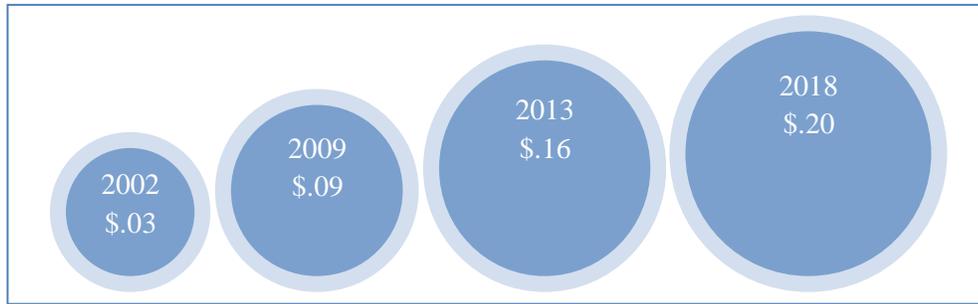
Due to asset smoothing, it will take the system two to three years to feel the full impact of the 2008 recession, likely making the unfunded liability worse in the coming years.

UNDERSTANDING THE IMPLICATIONS OF FURTHER INACTION

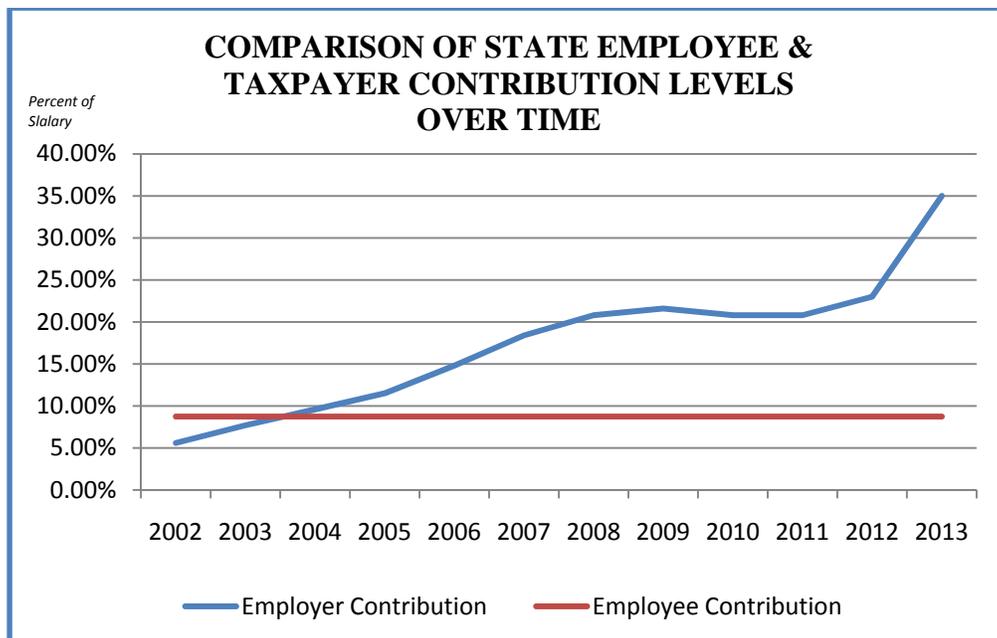
The pension bill is rapidly coming due, and without significant changes to the current course, present and future taxpayers along with current and future employees will be required to make huge contributions, primarily for past service. This pension bill has five specific implications for all Rhode Islanders:

1. Unsustainable annual costs for taxpayers: The taxpayer contribution to state retirement expenses has doubled in the last seven years, growing from \$139 million in 2003 to \$302 million in 2010. It is the fastest growing line-item in the state budget. Under the projections provided by the state’s actuaries, these contributions will double again to approximately \$615 million in 2013 and will soon exceed \$1 billion.²⁴ It is unrealistic to believe that taxpayers can continue to support these ever-increasing required contributions and unfair to let current state employees and retirees believe that this is likely.

PORTION OF EACH TAXPAYER DOLLAR REQUIRED TO SUPPORT PENSIONS²⁵



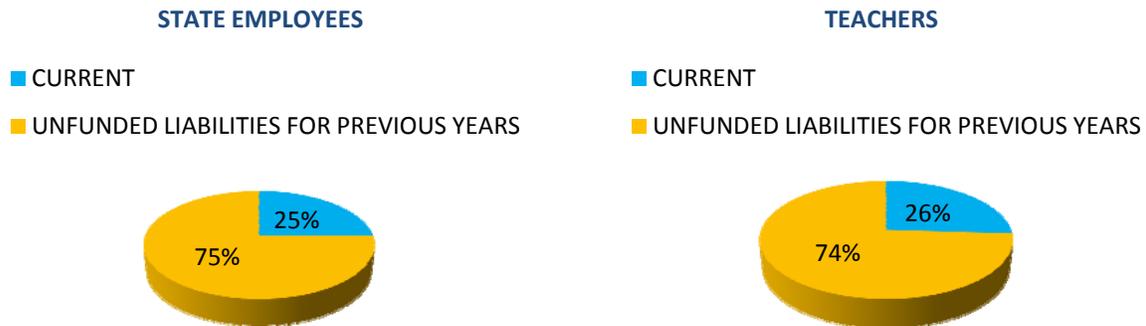
Since contribution rates for employees are fixed, taxpayers shoulder the burden for all required contribution increases. By statute, state employees contribute at an annual rate of 8.75 percent of salary and teachers at a rate of 9.5 percent.²⁶ At the same time, the total state budget contribution for state employees and teachers has grown steadily from 5.6 percent in 2002 to approximately 23 percent of salary in 2011, and is projected to grow to 35 percent of each employee’s salary in 2013.²⁷



2. Burden on active state employees: Compared to current retirees, active state employees and teachers are contributing more toward their retirement, but will receive lower levels of retirement benefits. If changes are not made, they face the risk that retirement fund assets might not be there at all.

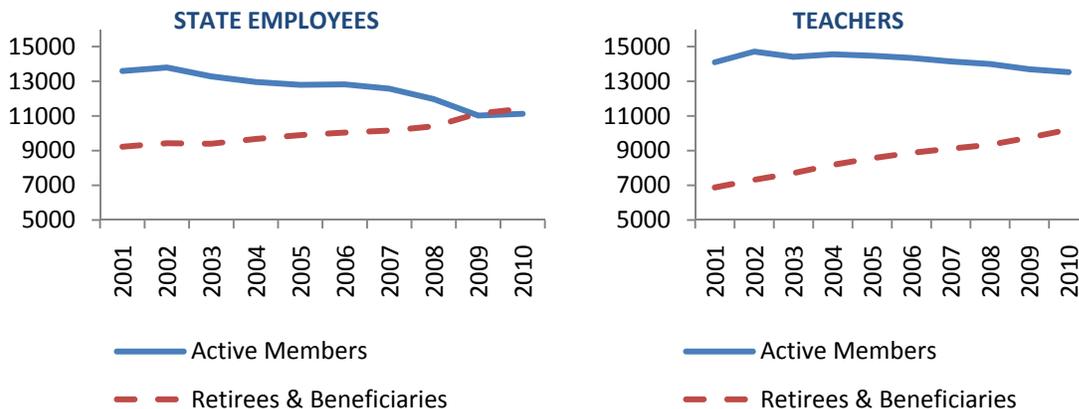
There is little disagreement that each generation of taxpayers should pay the full costs (including the pension costs) for the public services it receives. Approximately one-quarter of total contributions reported in the June 30, 2010 valuation were made for services rendered in fiscal year 2010. The vast majority (75 percent and 74 percent, respectively, for state employees and teachers) was required to underwrite the unfunded liabilities for past service.²⁸

EMPLOYEE & TAXPAYER TOTAL CONTRIBUTIONS FOR CURRENT SERVICE AND UNFUNDED LIABILITIES FOR PREVIOUS SERVICE



Moreover, as shown below, there are now many fewer active employees to support a growing number of retirees and beneficiaries. This drop has been driven by early retirement incentives, reductions in size of the overall workforce and demographic trends. In fact, the ratio of active to retired state employees has dropped significantly the last 10 years, from approximately 1.5:1 to less than 1:1, as the number of retired state employees now exceeds active employees.²⁹

COMPARISON OF ACTIVE MEMBERS TO RETIREES IN RETIREMENT



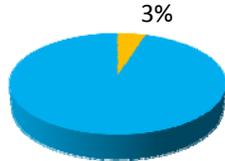
These declining ratios significantly increase the burden upon the contributions from current employees, who are receiving lower salary increases than projected, enduring unpaid furlough days and paying higher taxes.

3. Threats to vital public services: Since 1998, taxpayer-supported pension contributions have increased from \$145 million to \$330 million in 2010. This is an increase of 225 percent and these costs are projected to more than double during the next five years. In recent years, state aid to cities and towns, which is used mostly for K-12 education, has decreased annually by eight percent, and state aid for higher education has dropped by five percent each year.³⁰ Total taxpayer contributions for state employee and teacher pension benefits will exceed \$1 billion by FY 2022.

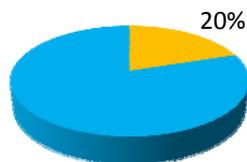
Immediate action will avoid painful decisions about whether to close schools, public libraries and reduce many other vital services.

Rhode Island has recently been ranked as having the worst maintained bridges and roads of any state in the country, spending 43 percent below the national average on transportation.³¹ In 2010, Rhode Island ranked 49th as the second worst state in the country for business³², and ranked 48th as the third worst state for starting a business.³³ These trends underline the fact that—given a finite set of available public resources— with every dollar spent the state is implicitly making choices about the future.

2002
STATE PENSION CONTRIBUTIONS AS A PERCENTAGE OF TOTAL STATE TAX REVENUE



2018
STATE PENSION CONTRIBUTIONS AS A PERCENTAGE OF TOTAL STATE TAX REVENUE

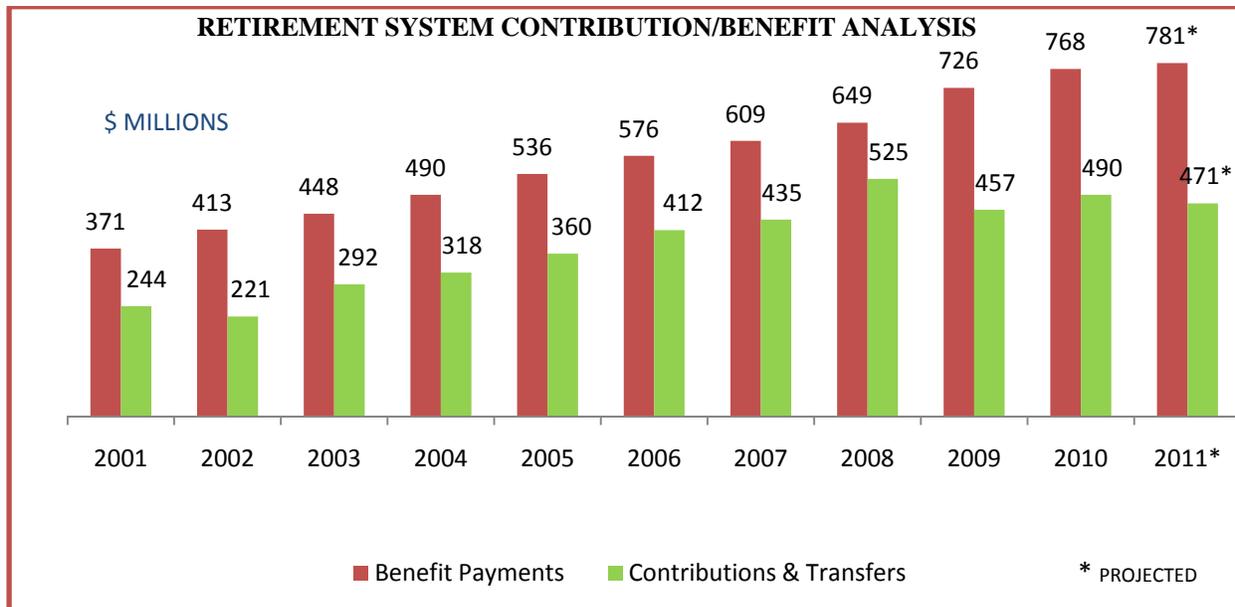


Total projected taxpayer contributions for state employees and teachers will exceed \$1 billion in FY 2022.

It is in everyone’s best interests to have safe streets, good schools, strong infrastructure and support services for our most vulnerable citizens. These services cannot be properly funded without pension reform. If the state acts soon to amend the pension system, it will avoid painful decisions about whether to close schools, public libraries, and many other vital services in order to keep the pension system afloat.

4. Pension fund could run out of money: According to a recent Boston College study, Rhode Island’s retirement plan for state employees and teachers could run completely out of assets between 2019 and 2023 (much sooner than most public plans in other states).³⁴ At that point, the fund will have no assets and billions of dollars of IOUs. While this study represents an unlikely scenario, given the projection that Central Falls will run out of assets in its municipal pension fund in the near future,³⁵ it is clear that insolvency of a state pension fund is not impossible. Providence and Pawtucket, among other municipalities, may find themselves in similar situations.

An additional symptom of the poor health of the retirement system is the annual difference between money coming in through contributions and transfers, and money going out to pay for retiree benefits. The chart below shows that in fiscal year 2011 the pension system will pay out \$300 million more in benefits than the system received in contributions, a deficit that has been growing over the last decade.



5. Impact of increasing pension expenses on borrowing costs: The state relies on the ability to access the bond market on favorable terms to support critical long term projects, such as roads; bridges; and the infrastructure at higher education facilities. The worse the state bond rating is, the more expensive it is to borrow funds to support and maintain its infrastructure. According to Standard and Poor’s April 2011 state ratings report, the agency cautioned that the state’s significantly underfunded pension system will automatically have a negative impact on the state’s rating if funding levels fall further. If quick action is not taken to fix the pension system, Rhode Island may have serious difficulty attracting investors to fund key projects.

PROVIDING A FRAMEWORK FOR SOLUTIONS

With a clear understanding of the nature and extent of the challenges before the state, Rhode Islanders must find a workable solution. Indeed, only by addressing and solving this urgent financial challenge can we move to a healthy local economy.

The rules governing pensions and benefit levels in Rhode Island are established in statute by the General Assembly. This structure differs from many other states, where pension benefits are set out in contracts that are collectively bargained. Therefore, any reform of our system requires legislative action.

Inaction or adoption of incomplete solutions is not an option.

The path to comprehensive pension reform should begin with agreement on a definition of retirement security – once we have agreement on a level of post-retirement income that ensures security and that the state can afford, we can design a sustainable system to provide that security. An unbalanced benefit structure threatens the entire system and results in great insecurity for employees, retirees and taxpayers.

All Rhode Islanders should share the following goals in creating a secure, sustainable retirement system that:

- Attracts and retains quality employees.
- Provides a level of benefits that retirees can plan on being there.
- Accumulates assets to cover 80 percent or more of its liabilities within the next 10 years.
- Allows the state to continue to invest in public services, such as higher education and public transportation.
- Eliminates the need for piecemeal reform by instituting self-correcting mechanisms that are triggered when funding levels dip below acceptable thresholds.

Reform impacting only new employees will not affect the \$6.8 to \$9 billion unfunded liability for past service.

There is more than one legislative solution that can accomplish these shared goals and produce a sustainable retirement system. This report is clear, however, the pension system's challenges are so great that it will be mathematically impossible to fix without dramatic changes that will affect all stakeholders not just the youngest and most recent employees.

A comprehensive & long-term solution must achieve the dual goals of retirement security & taxpayer affordability.

Any comprehensive legislative solution should be informed by the following guiding principles, which together form a framework for proposed legislation:

1. Accurate and transparent assumptions: Today's system was largely built by policymakers using little accurate data. Retirees, employees and taxpayers rely on government leaders to be honest about the system's liabilities and to have safeguards in place that require accurate accounting. Public employees depend upon their union leadership to insist on conservative, realistic assumptions. Using overly optimistic assumptions hurts everyone because these assumptions underestimate the true cost of pensions and increase the risk that not enough money will be set aside to pay for legislatively-granted pension benefits. In April 2011, the Retirement Board voted to lower the investment return assumption, based on recommendations from its actuaries. This was a critical first step in shifting the pension system to fact-based decision-making.

To continue this positive momentum, other initiatives to consider include:

- More timely updating of experience studies and annual reporting of results.
- A more conservative approach to actuarial assumptions to increase the security of members' retirement benefits.
- Ongoing auditing of retirement benefits (e.g., verification of disability status and service credit purchases) to ensure accuracy of benefit calculations.

2. Equitable and reasonable changes: Fair and balanced eligibility rules, benefit levels and contributions for all members must be required of any retirement system reform. This report underscores the truth that any reform impacting only new employees will not affect the existing \$7 billion to \$9 billion unfunded liability for **past service**. This problem is decades in the making and all stakeholders must now share in the solution. The following, among many other ideas, should be analyzed as possible areas of reform.³⁶

- **Retirement age** Given recently updated mortality tables, which extend projected life expectancy by one or two years, it is only prudent to analyze the potential impact of adjusting the retirement age. The following example illustrates the significance of the retirement age: it is estimated that the unfunded liability would be reduced by approximately \$700 million and the state's annual contribution reduced by approximately 4 to 6 percent of salary if the retirement age were set at 67, in line with the direction of Social Security (now at 66, going to 67).
- **Accrual rate** A key driver of the cost of any pension system is the annual accrual rate; therefore, this rate should be the focus of rigorous analysis. For example, if the accrual rate is 2 percent and an employee works for 35 years, the employee receives a 70 percent pension benefit (two percent times 35 years). Currently, the accrual rate in the state's system ranges from 1.6 percent to three percent per year of service. The following example illustrates the significance of the accrual rate. It has been estimated that a reduction of the accrual rate to one percent for future service would reduce the state's annual contribution by approximately seven percent of state employee salary. Note that one percent is a commonly used rate in defined benefit plans, which also have a defined contribution component, such as the federal employees' system or that used by the Narragansett Bay Commission.
- **COLA** Given the significant impact that the COLA has on the unfunded liability, any comprehensive solution will require an analysis of these adjustments. To demonstrate its magnitude, consider that it has been estimated that a suspension of the COLA for all active and retired members until the plan is 80 percent funded would reduce the unfunded liability by approximately \$1 billion and reduce the state's annual contribution from 35 percent of salary to approximately 28 percent of salary. While any changes should be carefully considered, it is clear that COLAs are a significant cost driver and modifications should be examined closely.
- **Hybrid plans and portability** Plans that combine of defined contribution and defined benefit features should also be examined. Adding defined contribution plans to the benefit package would offer employees an additional source of retirement savings. Important features of defined contribution plans include the ability of members to control their own contribution levels and the investment of their own account balances. This type of plan also allows participants to move their retirement balances when they change employment, also known as portability.
- **Other features:** Additional features to consider and evaluate should include anti-spiking provisions (e.g., use of average career salary) to prevent end-of-career increases in pension levels and coordination of benefits to account for the fact that most retirees also collect Social Security on top of the state's provided benefit.

As we analyze the various options for fixing our retirement system, we must again remind ourselves that real people and real families are connected to every change we consider. While all stakeholders must be prepared to collaborate in achieving a fair and sustainable system, we must also consider possible hardships that these changes may impose.

Therefore, reforms could be structured so that they have a smaller impact on plan members at lower income and lower benefit levels. One of the principal purposes of a public retirement system is to sustain public workers during their retirement years. Reforms that provide protection to sustenance level benefits should be considered. Also, public workers who are close to retirement have less time to adjust to changes in their pension benefits and mechanisms to address this situation should be considered.

3. Intergenerational fairness: Newer state employees and teachers bear a greater burden than their predecessors in that they are contributing a significant amount of their salary to the pension system, the majority of which goes to pay for past service, not for their own future retirement. Further, they shoulder the greatest risk that money will not be there in 20 to 30 years when it is time for them to retire. In addition, to the extent that there are budget cuts today that result in lower wages, furlough days and service cuts, it is the current employees that endure these challenges. Any solution needs to ensure fairness between newer and more veteran employees and retirees.

4. Comprehensive and self-correcting processes: As the collaboration on reform begins, it is important that any solutions protect the state from ever again facing the massively underfunded system that it has today. To maintain a defined benefit system at all, it is critical that the state adopt structures that provide for automatic self-corrections. Some self-correcting concepts to consider include:

- Establishing funding targets (for example, 80 percent funded) with annual actuarial certification of progress toward targets.
- Adjusting benefit and contribution levels automatically and temporarily, if the system dips below targeted funding levels or state contributions exceed certain percentages of state revenue or the budget.
- Linking employer and employee contributions to more evenly share the risk between taxpayers and employees.
- Taking steps to operate an integrated state retirement system to prohibit multiple public pensions (double dipping) and to help municipalities that are not today in the state system solve their own pension issues.

5. Unfunded liability is the lion's share of the problem: A real challenge in reforming the pension system is that it is extremely underfunded today and any solution must address the unfunded liability, the bill for past service. It is likely that any solution will require both an infusion of assets and a change to benefits in order to address this problem. The state must explore creative options, including asset transfers into the retirement system. Re-amortization could be part of the solution once reforms have significantly reduced the total size of the unfunded liability.

TIME TO ACT IS NOW

Historically, debate about the pension system has begun with a discussion of the state budget, and many reforms have been designed largely to balance a particular year's gap. It is time to take a different approach to solving this problem. We must begin this time by defining retirement security and designing a system that provides security in retirement for our valued public employees. This new system will necessarily also address budgetary concerns because no one is secure if they are promised a benefit that the state will not be able to afford.

The precise legislative solution that will be appropriate for Rhode Island's public retirement system requires further study and discussion among experts and key stakeholders. However, we must work with urgency because the pension system cannot be allowed to fail, nor can the state afford to fund the current system at least not without massive tax increases or extremely painful budget cuts that will impact every single Rhode Islander.

In 2009, when the General Assembly enacted a major round of reform, the unfunded pension liability was approximately \$4.3 billion and today, it is at least \$6.8 billion. Each day that the state avoids comprehensive reform, the liability grows. It is unfair to ask taxpayers to pay for the growing level of required contributions and it is dishonest to let state employees, teachers and retirees believe that full benefits will be there for their retirement. The time to act is now. It is in the interest of every Rhode Islander to solve this problem, once and for all. Almost every state faces a pension crisis. We have the opportunity to lead the way forward in confronting and solving this problem and, in so doing, serve as a model for other states to follow.

¹ The Employees' Retirement System of Rhode Island (ERSRI) administers five separate pension fund programs: state employees, teachers, 109 participating municipal employee retirement systems (MERS), state police and judges. In addition, local governments administer 36 independent pension plans in Rhode Island. As state employee and teacher pensions comprise the majority of assets, as well as the largest percentage of the unfunded liability in ERSRI, this report focuses on those plans. The key issues outlined in this report have similar implications for the other state and locally-administered plans.

² Novy-Marx, Robert and Joshua D. Rauh, 2009. "The Liabilities and Risks of State-Sponsored Pension Plans" *Journal of Economic Perspectives*, Volume 23, Number 4, pp. 191-210, Fall 2009.

³ Congressional Budget Office, *Budgetary Treatment of Fannie Mae and Freddie Mac*, January 2010, <http://www.cbo.gov/ftpdocs/108xx/doc10878/01-13-FannieFreddie.pdf>

⁴ Congressional Budget Office, *Report on the Troubled Asset Relief Program*, March 2011, <http://www.cbo.gov/ftpdocs/121xx/doc12118/03-29-TARP.pdf>

⁵ Businessinsider.com ranks Rhode Island's pension liabilities as the worst in the country, April 13, 2011, <http://www.businessinsider.com/rhode-islands-pension-liabilities-are-now-the-worst-in-the-country-2011-4#ixzz1KXaAZyeg>

⁶ Unfunded liability is the difference between the present value (calculated using an appropriate discount rate) of total liabilities owed to current employees and retirees for past service, and the present value of the total assets (measured by asset valuation approach) in a pension fund. For a basic understanding of pension fund asset and liabilities calculations, see the General Treasurer's report titled *Calculating Rhode Island's Pension Costs and Liabilities*, www.treasury.ri.gov.

⁷ Government Accounting Standards Board (GASB) for public plans, and Financial Accounting Standards Board (FASB) for private and non-profit plans.

⁸ The discount rate is the percentage rate used to discount future liabilities and future costs to their present value. For public plans, the discount rate and the investment return rate are the same. If a high discount rate is used, it reduces contributions. But if the discount rate is too high, it creates unfunded liabilities. Public pension funds are advised to use a discount rate based on the estimated long-term yield of plan assets, which in Rhode Island was 8.25 percent until April 13, 2011, when it was lowered to 7.5 percent effective July 1, 2012. The rules for private pension funds, on the other hand, advise using a rate consistent with the yields on high quality corporate bonds rated AA or better (which is approximately 6.2 percent). This reflects the contention of most economists that the rate should reflect the same level of risk as the risk associated with the liabilities, i.e. since it is highly likely that public pensions will be paid in the future, a Discount Rate should be used which reflects a high likelihood for achieving returns that will

provide those benefits. Alicia H. Munnell, Jean Pierre Aubrey, Lauren Quimby, Public Pension Funding in Practice, NBER Working paper No. 16442, October 2010, p.11; Government Accounting Standards Board Statements 25 and 27. We should note other current commentators suggest that the yields on Treasury securities (currently 4.6 percent) best reflect the low risk yield that investors require for making sure they receive a specific sum of money in the future. Navy-Marx and Rauch, Note 2.

⁹ Private pension plans are required to utilize their actual market value (“marked-to-market”) of fund assets at the time of reporting. Most public pension funds, on the other hand, recognize gains and losses over a period of years, through “asset smoothing,” which uses the average of investment returns over a period of years to create a more predictable level of contributions. Although asset smoothing may be beneficial for budgeting purposes, it can also distort an accurate calculation of the unfunded liability—either negatively or positively—if the actuarial value of assets differs greatly from its market value. The actuarial value of assets of RI’s fund was \$6.7 billion as of June 30, 2009, but the actual market value of the assets was only \$4.9 billion. This simple variance caused the unfunded liability to be understated by \$1.8 billion. In Rhode Island, assets are valued using a five-year asset smoothing method that starts with the market value of assets but phases in the asset gains and losses above or below the discount rate over a 5-year period. ERSRI 2009 Actuarial Report, p.32.

¹⁰ See note 8, discount rate.

¹¹ See note 2, Navy-Marx.

¹² Gabriel Roeder Smith & Company, Draft Employees’ Retirement System of Rhode Island Actuarial Experience Study for the Six Year Period Ending June 30, 2010, pp. 37-39.

¹³ See letter dated March 3, 2011 from Gabriel Roeder Smith & Company.

¹⁴ Rhode Island State Employees and Electing Teachers OPEB Actuarial Report, June 30, 2009. Historically, the state paid for these on a “pay-as-you-go” basis, which means annual costs were captured in the state’s annual budget. These growing obligations were largely hidden until recent accounting changes forced states to recognize these obligations on their books. The state recently established a trust to fund these expenses, but almost no funding for OPEBs has been set aside to date.

¹⁵ A.A. Weinberg, ERSRI Actuarial Valuation Report as of June 30, 1974

¹⁶ See, letter of Gabriel Roeder Smith & Company to Executive Director of ERSRI dated April 19, 2007.

¹⁷ Report to Special House Commission to Study All Aspects of the State Pension and Retirement System, slides 21-26, February 27, 2008.

¹⁸ 2008 Replacement Ratio study, Aon Consulting and Georgia State University, pp 2-3.

¹⁹ Calculating Rhode Island’s Pension Costs and Liabilities, www.treasury.ri.gov/securepath.

²⁰ See note 12, Gabriel Roeder, pg 39.

²¹ ERSRI 2010 Actuarial Valuation Report, pg. 22. Through February 28, 2011, the 10-year investment rate of return increased to 4.4 percent (net of investment expenses).

²² Pension Consulting Alliance Report, “Discussion of Capital Market Return Expectations”, pg. 23, April 2011.

²³ ERSRI 2010 Actuarial Valuation Report, pgs. 19-20.

²⁴ Gabriel Roeder Smith & Company projection results based on the June 30, 2010 Actuarial valuation.

²⁵ Projections based on revenue estimates from the Rhode Island Department of Revenue through 2016, increased by 3 percent for years 2017 and 2018.

²⁶ RIGL § 36-10-1; RIGL § 16-16-22.

²⁷ ERSRI 2010 Actuarial Valuation Report, page 24.

²⁸ ERSRI 2010 Actuarial Valuation Report, pps 11-12.

²⁹ Gabriel Roeder Smith & Company, Presentation on Actuarial Valuations as of June 30, 2010, May 11, 2011, slides 11-12.

³⁰ House Fiscal Advisory Staff report, Rhode Island Local Aid, October 2010.

³¹ Darren Soens, RI among worst in highway spending, published August 10, 2010, http://www.wpri.com/dpp/news/local_news/providence/providence-ri-lags-in-road-spending

³² Tim O'Coin, Survey: RI ranked 49th for businesses, Published July 14, 2010. <http://www.wpri.com/dpp/money/east-providence-report-ranks-rhode-island-second-worst-state-in-the-country-for-business>

³³ 10 worst states for starting a business, cnnmoney.com, 2007. <http://money.cnn.com/galleries/2007/fsb/0711/gallery.Bottom10BestStates.fsb/4.html>

³⁴ The Center for Retirement Research at Boston College came out with a study in March, 2011 that reviewed 126 public pension plans and predicted the years when these plans would run out of assets under four different scenarios. Munnell, Alicia H. and Jean-Pierre Aubry, Josh Jurwitz and Luara Quisby, 2011. "Can State and Local Pensions Muddle Through?", Center for Retirement Research at Boston College, Number 15, March 2011.

³⁵ In the matter of the Receivership of Central Falls, Rhode Island, Report of the State Receiver, December 14, 2010, pg. 48.

³⁶ The following calculations are preliminary calculations based on past actuarial studies conducted by the system's actuaries, with respect to prior reform alternatives studied by the General Assembly. These calculations have been verbally confirmed with the actuaries as directionally correct, but full and complete actuarial studies would be required to accurately identify future potential cost savings.