RIPEC

Comments on Your Government

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Rhode Island's State Pension System

This RIPEC *Comments* is intended to provide a summary of the State's current pension system, evaluate how it compares with other New England states, and to develop strategies to curb future costs to taxpayers while providing appropriate benefits to the State's workforce. In the upcoming weeks, RIPEC will release reports that review the issues related to retiree health care costs and alternatives to begin addressing an estimated unfunded retiree health care liability in excess of $480 million, as well as municipal pensions.

The report does not include an analysis of the impact of the current economic crisis on the stock and bond markets and the resultant reductions in the asset value of state and local pension systems. These declines in value will further reduce the funding levels contained in this report. The actuarial report is expected to be released soon and will include new liability and funding requirements.

Between 1991 and 2005, employee retirement and health care costs throughout the country have risen faster than wages. Indeed, the cost of health and retirement benefits increased by 34.0 percent compared to 10.0 percent in wage growth.[1] This has served as a catalyst for employers to seek out cost-control strategies to remain competitive and efficient.

State and local governments are facing similar financial stresses, and health care and retirement costs represent significant budget drivers. Personnel costs represent nearly 25.0 percent of the State's general revenue budget. Given this, there has been increased attention on the variables driving personnel costs. The FY 2008 Revised Budget included changes to the employee share of the costs associated with retiree health care benefits, and the FY 2009 Budget as Enacted had a number of changes to benefits for both judges and state police personnel. The Governor's FY 2009 Supplemental Budget also proposes significant changes, summarized in this analysis, which would affect State and municipal employee and teacher pensions. The Legislature has also embarked on a process to evaluate the State's pension system and identify potential savings in the operating budget.

February 2009

Summary of key findings

- The estimated funding ratio for the Employee's Retirement System of Rhode Island (ERSRI) is 57.5 percent while the Rhode Island teacher pension has a funded ratio of 55.4 percent. Studies of major pension plans in the U.S. indicate the aggregate funding ratio is approximately 86 percent;

- Combined, Rhode Island's State employee and teacher pensions have a net estimated unfunded liability of approximately $5.0 billion;

- The State's annual required contribution for pensions for State employees and teachers increased from 4.6 percent of general revenue expenditures in FY 1997 to 5.9 percent in FY 2007;

- Based on a recent comparison among New England states, Rhode Island's State employee pension system (Schedule A) appears to be more generous due to the availability of early age retirement without penalty and the program's 3.0 percent COLA that is applied to years of service; and

- Even with changes made as of July 1, 2005, Schedule B participants still receive the 2nd highest pension for retirees in New England, assuming retiring at age 60 with 30 years of service, and a final average salary of $70,000.

The national economic downturn, combined with the crisis in the financial sector, has had an additional impact on the fiscal health of the State's employee pension system. If the stock market does not rebound and the recession continues, State leaders may be faced with difficult choices to shore up pension funds that have lost a large amount of value in recent months.

Public employee retirement costs are already one of the State's fastest growing costs. As such, the current market falloff with its impact on state finances could not come at a more inopportune time. As a percentage of general revenues, pension costs increased from 4.6 percent in FY 1997 to 5.9 percent in FY 2007. Pension costs for State employees funded by general revenues accounted for 7.0 percent of the costs allocated to State operations (excluding costs related to local aid and grants and benefits) in the FY 2009 Budget as Enacted.

To address the economic downturn and the risks for pension funds associated with it, as well as the growing amount State and local governments contribute to pensions, RIPEC recommends that State and municipal governments continue to seek alternative ways to reduce cost and minimize risk. This is a necessary step to begin to control the rate of growth of pension cost and to reduce the unfunded liability.

Governor Carcieri has proposed several reforms to the current pension system for State and municipal employees and teachers. These reforms are proposed to reduce both the

unfunded liability and the growth in operating budget expenses related to pensions. The pension reform is based upon five components:

1. Eliminating the cost-of-living adjustments (COLA) for State employees, teachers, judges and State Police who retire after April 1, 2009;
2. Establishing a minimum retirement age of 59 for those who retire after April 1, 2009;
3. Changing the calculation of the retirement benefit for State Police who retire after April 1, 2009;
4. Changing the maximum benefit and establishing reporting criteria for State employees and teachers who retire on accidental disability after April 1, 2009; and
5. Reducing the actuarially determined employer retirement contribution.

The Pension Review Committee formed by the House of Representatives has asked the Actuary to review additional reforms, such as providing for COLAs to go into effect only when retirees reach the age of 65, establishing a minimum retirement age of 59, and the implementation of a plan similar to the Federal Employees Retirement System.

These, and other, reforms are intended to address reducing cost and reducing the unfunded liability and ought to be seriously considered. Without the reforms, State and local governments will not be able to contain one of the major budget drivers they face in the coming years.

While the proposed reforms will address reducing mandatory cost and the unfunded liability, they will not take the risk out of providing a defined benefit pension system. State and local governments assume all the risk inherent in the provision of a defined benefit plan including investment risk and the actuarial assumptions. If the assumptions are not met, State and local governments must then increase funding as was shown in the recent five-year review of the State's pension system. Recently, the State had to adjust its annual payments because actuarial assumptions were not met.

In addition, RIPEC recommends that the State consider a defined contribution plan. If the plan is structured around using the "normal cost" of pensions as the funding mechanism, the cost can better be absorbed. The unfunded portion of the Annual Required Contributions (ARC) would still be an issue, but this would be the case with or without a defined contribution plan. A hybrid plan would also mitigate several of the risk issues. Later in this report the concept of a hybrid plan is discussed.

Furthermore, it is also necessary to consider the impact these proposed reforms will have on employment within the State. This will be the second round of pension reform over the last several years. Coupled with the recent healthcare changes these adjustments to employee benefits have, and will continue to have, an effect on the composition of the State and municipal workforce.

Any changes to the pension system should give consideration to the affordability and sustainability of the State's pension fund and include an evaluation of the overall impact on the State's pension contribution in out-years. For example, the reduction in workforce produces payroll savings to the State. However, when payroll significantly declines, as it has for State employees since June 30, 2007, the scheduled contribution rate does not produce the expected amortization payments. This shortfall in payments must then be funded in the future.

In addition, any reform of the pension system should also evaluate the effect on State employees and on the State's ability to deliver services. The concept of vesting and its impact upon employees of the State as they make employment decisions needs to be carefully considered.

Definition and Overview of Terms

A **Pension Plan** is a program to provide a benefit to employees who meet minimum requirements based on age and years of service to receive a portion of their salary post-employment. A pension plan represents a liability – an obligation to pay future benefits to employees. Pension plans acquire assets through contributions from employees and employers, as well as earnings on the assets invested. Assets grow when investments increase at a faster rate than assumed, benefits decline, or a combination of both. An unfunded liability occurs when liabilities exceed the assets available.

*A **defined benefit** pension plan promises a benefit to employees who meet a series of criteria.*

*A **defined contribution** plan promises a contribution to a retirement savings fund by the employer.*

*A **hybrid** plan attempts to take elements of both plans to spread the risk among employers and employees.*

There are essentially two types of pension plans, which are very different from each other in terms of who bears the risk, how a benefit is calculated, how the funds are invested, and how they influence behavior.

A **Defined Benefit Plan** is a plan that promises a benefit to employees based on eligibility, years of service (often, under these types of plans, credit is given for outside service, such as that in the military), retirement age, and a salary base. This benefit is paid regardless of the performance of the assets in the pension fund. These plans are typically pre-funded by contributions from both employees and the employer. The plans typically have disability components, COLA provisions, and Social Security offset provisions. A defined benefit plan is generally considered a low risk to the employee in that the employer bears the risk and reward of the fund performance and actuarial performance, while the employees generally bear inflation risk and potential job loss before eligibility.

Because defined benefit plans provide guaranteed lifetime income to retirees, they provide more income for career employees which, in turn, increases the likelihood of longer service. However, this also means that, should an employee leave service prematurely, that employee stands to lose a significant investment. Therefore, defined benefit plans tend to encourage longer terms of service, reduce mobility, and can create a more expensive climate and workforce due to longer employment, which results in higher salaries and lower turnover.

Generally speaking, public employee defined benefit programs tend to have higher benefit levels than those in the private sector. In the public sector, employees participating in Social Security have a median accrual rate of 1.9 percent while those not participating in Social Security have an estimated rate of 2.2 percent, and private sector defined benefit employees have a 1.5 percent rate. These percentages are typically applied to each year of service and the final average salary. One should note that all

private sector employees must participate in Social Security while public sector employee participation is not mandatory.[ii]

A **Defined Contribution Plan** is a plan that promises a contribution to a retirement saving fund by the employer. Typically, the employer contributes a percentage of salary, often with a minimum contribution by the employee for the employer match. Most plans require workers to affirmatively elect to enroll in a defined contribution plan although an increasing number of plans automatically enroll employees (designed to increase participation). Private sector plans are almost entirely 401(k) plans.

There are essentially four types of defined contribution plans:

401(k) Plans permit primarily private sector employees to defer a portion of their pay to a qualified tax-deferred plan. Employers often make contributions to these plans, but the employee typically directs the investments of the funds.

401(a) Money purchase plans, with employee and employer contributions structured as mandatory or voluntary - the employer decides on the method of participant contribution, as well as whether participant contributions will be made on a pre-tax (picked-up contributions) or an after-tax basis. These types of plans are available to governmental units.

403(b) Plans permit public education employees to defer a portion of their pay to a qualified tax deferred plan. These funds are invested in annuity contracts through insurance companies or through mutual funds. Employers often make contributions to the plans.

457(b) Plans permit employees to defer their pay. Employees are immediately vested in the funds, which will not be taxed until the funds are paid from the plan.

The benefit amount is determined primarily by contribution rates and the rate of return on accumulated assets invested. Again, these plans are typically funded by contributions from both the employee and the employer. However, the employee bears the risk (and reward) based on the asset performance in the funds. Whatever is in the fund is what is available for retirement. A distinct advantage of this type of plan is that it is portable. It can also be drawn down in installments or in one lump sum.

Over the last decade, twelve states have introduced a defined contribution plan. Most states use these plans to supplement other retirement programs, but both Michigan and Alaska have required all new hires to join their defined contribution program. Two of the twelve states – Oregon and Indiana – require employees to participate in both a defined benefit and a defined contribution plan.[iii] However, those participating in defined contribution plans represent less than 4.0 percent of the state and local workforce and less than 1.0 percent of the total state and local pension assets.[iv]

A **Hybrid Plan** is designed to distribute the share of risk and reward between employer and employee by combining components of a defined benefit with a defined contribution plan.

Annual required contributions (ARC) – Actuaries annually calculate a contribution amount that would maintain or improve the funding status of a pension plan, ensuring that the amounts set aside in reserve would not only cover current benefits but a portion of estimated unfunded liabilities. A government's ability to maintain its ARC is critical and determines whether or not the entity is keeping pace with benefits accumulated. Should a government contribute less than actuarially required, the assets in the pension fund would eventually be insufficient to meet obligations, and this cost will fall on future generations of taxpayers. The most common reason for a government to underfund its contribution is financial crisis. However, to minimize significant fluctuations in the ARC, state and local governments often use smoothing techniques, which use the average of the plan's assets over a number of years to determine the contribution rates.

Funded ratio - represents the percentage of plan liabilities covered by the plan assets. Low ratios will eventually require additional funding, either from government or employee contributions. Most experts indicate that a funded ratio of 80 percent or better represents a relatively sound position for government pensions. The aggregate funded ratio in 2006 was about 86 percent. It should be noted that private pensions are not permitted to fall under 80.0 percent without intervention. In a Government Accountability Office (GAO) study that used data from 2006, 58.0 percent of the 65 state and local public plans evaluated were funded at or above the 80.0 percent threshold. This represents a slight decline since 2000.[v] According to the GAO report, state and local governments would have to increase pension contribution rates from 9.0 percent to 9.3 percent of salaries to ensure appropriate funding for pension funds on an ongoing basis.

Unfunded Actuarial Accrued Liability (UAAL) – The dollar amount of benefits accrued for which no funds are set aside to cover. An unfunded liability indicates the degree of accumulated liabilities over assets. Unfunded liabilities can occur when state and local governments fail to make the full contribution to the fund, actual returns on investments of the assets are lower than assumed, or there is an increase in benefits. Demographic factors, such as age of retirement and longevity can increase the liability as well. Faltering pension assets due to low contributions, poor investment returns, and inaccurate demographic factors can translate into greater fiscal and budgetary problems for the future. For Rhode Island State employees the estimated normal cost rate for the employer is 1.64 percent and 19.05 percent for the amortized payments, resulting in a total of 20.69 percent. For teachers, the normal cost rate for the employer is 2.33 percent and amortization payments are 21.55 percent, resulting in a total of 23.88 percent.[vi]

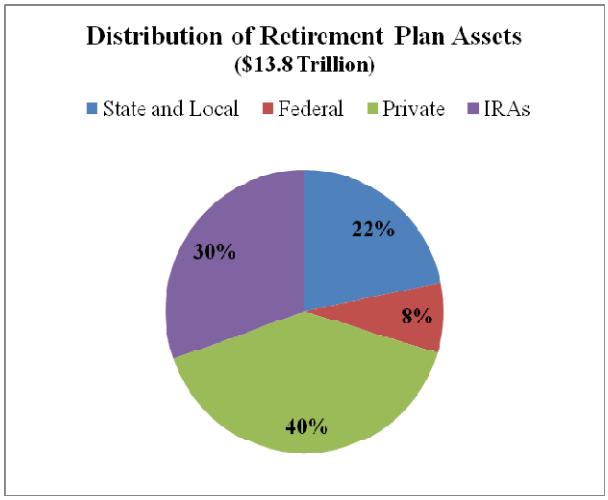
Cost of living provisions (COLA) – for pension benefits are designed to ensure that the benefit does not erode over time due to inflation costs. These provisions vary among the states, and differ if states have multiple tiers or schedules for their pension systems.

Characteristics of Pension Plans

Overview

In 2006, state and local pension systems covered 18.4 million participants, made payments to 7.3 million beneficiaries and paid out $151.7 billion in benefits. Nearly 90 percent of full time state and local employees participate in defined benefit programs.

Private pension plans are mostly 401(k) plans; however, less than half of the private workforce is covered by a 401(k) plan and the rest of the private workforce does not have a pension plan. All private employees are required to participate in Social Security. Conversely, nearly all state and local pension plans are defined benefit pension plans with nearly 100 percent participation. However, only 72.0 percent of the public workforce participates in Social Security.[vii]



State and local governments held approximately 22 percent of the total retirement assets in the U.S. in 2006 – nearly $3.0 trillion of the $13.8 trillion in pension assets. Private pensions represented approximately $5.5 trillion, or 40.0 percent of the total. Approximately $3.3 trillion of the $5.5 trillion was in defined contribution programs while the $2.2 trillion balance was in defined benefit pension plans. One should note that the majority of IRAs (Individual Retirement Accounts) are likely to be rollovers from 401(k)s - therefore, the private sector presence is much more significant.[viii] An IRA is a retirement investing tool for employed individuals (and their non-working spouses) that permits annual contributions up to a specified maximum amount. An individual's income and whether they participate in an employer-sponsored retirement plan dictates whether or not a tax deduction is permitted.

Generally speaking, state administered defined benefit pension plans represent less than 10.0 percent of the total number of state and local pension plans in the U.S. with the remaining 90.0 percent administered by local government. However, these plans represent nearly 88 percent of the participants and approximately 82 percent of the assets held in state and local pension plans nationwide.[ix] State and local pensions have an estimated $185,900 in assets per employee while private sector pension plans have an estimated $84,800 in assets per employee.[x] This is, in part, due to the fact that only 72.0 percent of public employees are covered by Social Security compared to nearly 100 percent of private employees. Further, public defined benefit plans typically have cost of living adjustments while private plans do not. Small, local pension plans have more

assets per active employee than state plans: state plans have an estimated $143,035 per active employee and local plans have $223,305 per active employee.

Not only have State and local pensions continued to experience rates of return that, on average, outperform private plans by 1.0 percent, it appears that the rate of return improved as the size of the pension plan grew.[xi] Those plans with less than $500 million in assets experienced an average yield of 9.0 percent while those with assets above $1.5 billion experienced a yield of 10.2 percent during the same period. Therefore, the size of the plan has some influence in determining return on invested assets. According to Munnell, larger plans tend to be more efficiently operated as well, with administrative expenses accounting for 0.26 percent for plans with $1.5 billion or more in assets as compared to 0.48 percent for those with less than $500 million. Public pension holdings tend to have a higher concentration in equities than those held in the private sector.

Investment Return Rate History

Year Ending June 30,	Market	Actuarial
1995	17.0%	10.2%
1996	13.7%	13.7%
1997	19.1%	19.1%
1998	16.1%	16.5%
1999	10.1%	14.7%
2000	9.1%	8.8%
2001	-11.0%	4.9%
2002	-8.4%	0.9%
2003	2.6%	-0.8%
2004	18.7%	0.4%
2005	11.4%	1.8%
2006	11.6%	7.4%
2007	18.2%	13.0%
Average Returns		
Last 5 Years	12.4%	4.2%
Last 10 Years	7.4%	6.6%

Source: Employees' Retirement System of Rhode Island Actuarial Valuation Report (June 30, 2007)

Over the past ten years, the State employee retirement system in Rhode Island has experienced an average rate of return of 7.4 percent. However, the current economic conditions have altered the rates of returns over the last year and have begun to put additional pressures on state and local plans to meet the decreased asset values. The actuarial consultant for the State, Gabriel Roeder Smith & Company, note that the State retirement trust declined by approximately 6.0 percent in FY 2008. The impact of the -6.0 percent return in the last fiscal year is phased in slowly over the five valuations from June 30, 2008 through June 30, 2012, with prior gains from years FY 2007 and earlier offsetting part of this loss. Thus, because of the five-year smoothing in the actuarial value of assets, as of June 30, 2008, there was a $59.4 million actuarial gain for State employees. The firm also notes that the trust has had significant losses since the beginning of the current fiscal year, which is likely due to the current market turmoil and financial crisis.

While state and local pension benefits do not receive the same Federal oversight that private pensions do (neither controlled nor guaranteed), there is considerable interest in ensuring that these funds are adequate to meet their obligations. There are a number of key measures to understand the funding status of pension plans, with each providing some insight into the overall health of pension plans. One such measure is the funded ratio. Based on data as of June 30, 2007, the Rhode Island State employee pension fund has a funded ratio of 57.5 percent, and the State's teacher pension fund has a ratio of 55.4

percent. The Rhode Island municipal employee pension fund (MERS) has a funded ratio of 90.5 percent.

Nationally, the number of private defined benefit plans has decreased as have as the percentage of current workers who participate in said plans. The number of defined benefit plans has declined from approximately 148,000 plans with nearly 30.1 million participants in 1980 to roughly 47,000 plans with 21.3 million participants in 2003. There has been a 68.2 percent decline in the number of plans and a 29.2 percent decrease in the number of participants in defined benefit plans since 1980.[xii]

Changes in Private Sector Retirement Plans

	Defined Benefit				Defined Contribution			
Year	Plans	Change	Participants	Change	Plans	Change	Participants	Change
1980	148,096		30.1		340,805		18.9	
1985	170,172	14.9%	29.9	-0.7%	461,963	35.6%	33.17	75.5%
1990	113,062	-33.6%	26.2	-12.4%	599,245	29.7%	35.34	6.5%
1995	69,492	-38.5%	23.4	-10.7%	623,912	4.1%	42.2	19.4%
2000	48,773	-29.8%	22.2	-5.1%	686,878	10.1%	50.87	20.5%
2003	47,036	-3.6%	21.3	-4.1%	652,976	-4.9%	51.83	1.9%
1980 - 2003	(101,060)	-68.2%	(8.8)	-29.2%	312,171	91.6%	32.9	174.2%

Note: Participants are in millions

Source: CRS Report for Congress, Retirement Savings: How Much Will Workers Have When They Retire? Jan 2007

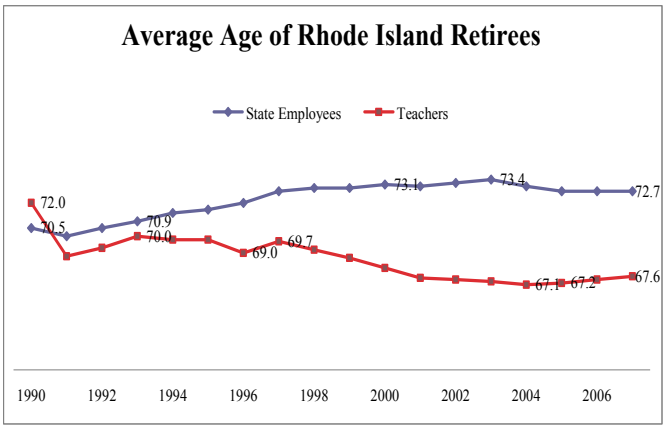
Conversely, the share of the private workforce participating in defined contribution plans (and the number of plans) has risen sharply. There were nearly 19.0 million participants in over 340,800 defined contribution plans in 1980, which has since increased to 52.0 million participants in over 650,000 defined contribution plans in 2003. The number of defined contribution plans has nearly doubled since 1980, and the number of participants has increased by 174.2 percent during this period of time.[xiii] Data also shows that, between 2003 and 2006, the percentage of private sector workers participating in a defined contribution plans increased from 40.0 percent to 43.0 percent.[xiv]

While the private sector has moved from defined benefit plans to defined contribution plans, states have continued to use defined benefit plans to provide retirement benefits to their employees. In FY 2005, the Nation's state and local governments provided retirement benefits to nearly 7.3 million beneficiaries (retirees and their families).[xv] As of 2007, nearly all the states (90.0 percent, or 45 states) had defined benefit pension programs as their primary retirement plan for employees. Alaska and Michigan have both adopted defined contribution plans for general state retirees, Indiana and Oregon have adopted hybrid plans, and Nebraska has a cash balance defined benefit program as its primary plan.[xvi]

Rhode Island Pension Systems

Overview

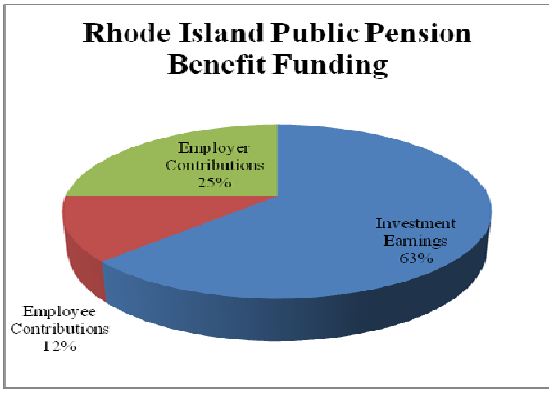
Based on the June 30, 2007 valuation of the retiree pension systems for Rhode Island, there are approximately 12,600 active State employees, with an average age of 48.2 years. There are nearly 9,200 State employee retirees and beneficiaries with an average age of 72.7. The active to retiree ratio is estimated at 1.24. As of June 30, 2007, the average State employee pension was approximately $23,781.[xvii]



There are approximately 14,150 active teachers, with an average age of 44.6 years. There are nearly 9,100 teacher retirees and beneficiaries, with an average age of 74.8.[xviii] The active to retiree ratio is estimated at 1.55. It is expected that these ratios will continue to degrade as the rates of increase in retired members will continue to outpace the rate of growth in active members, particularly in the teacher ranks. As of June 30, 2007, the average teacher pension was approximately $41,340.

The State's pension funds are primarily funded through investment earnings of the assets currently in the fund. Nearly 63 percent of the funding sources come from these investments. Therefore, it is essential to balance the need to protect the assets in the fund with the need to invest them in a manner that will help sustain the long-term viability of the fund. The employer contribution, which is funded by the State, represents 25.0 percent of the funding for the pension funds. This amount represents the taxpayer's investment into the fund. It should be noted that the employer contribution rate, discussed in greater detail below, exceeds 20.0 percent for all employees.

The other major portion of funding comes from employee contributions, representing approximately 12 percent of the total funding for the pension systems. Again, contribution rates range from 8.75 percent to 9.5 percent. However, it should be noted that the difference between employee and employer contributions (net of investment returns) and the payout of benefits is negative, fluctuating between $0 and a negative cash flow of $30 million per month with negative cash flows totaling between $150 and $200 million annually.[xix]



Revenue sources nationally have a similar distribution; investment earning provided 63.7 percent of the revenue for defined benefit pension plans, 24.3 percent came from employer contributions and the 12.0 percent balance was from employee contributions.[xx]

Funded Ratio

A key measure of the overall health of a pension system is its overall funded ratio, and what direction the ratios are going. A ratio of 1.0 (or 100 percent) reflects actuarial assets equal to the accrued liability. A ratio higher than 1.0 indicates that the plan is over-funded and the accrued assets exceed accrued liabilities. A ratio below 1.0 indicates the plan is underfunded and that liabilities exceed assets. The following discussion converts the ratios to percentages for ease of reading.

Funded Ratio Trends
Rhode Island Retirement Systems

Year	State Employees	Teachers	State Police	Judges	Municipal Employees
1996	77.5%	74.0%	84.8%	97.1%	121.4%
1997	78.3%	73.4%	89.4%	74.3%	132.9%
1998	80.6%	76.2%	92.1%	81.6%	128.8%
1999	84.4%	82.1%	78.2%	74.5%	126.7%
2000	81.6%	80.6%	81.5%	75.9%	124.6%
2001	77.9%	77.4%	86.4%	76.4%	118.1%
2002	71.7%	73.2%	75.5%	68.5%	111.3%
2003	64.5%	64.2%	73.7%	72.0%	100.7%
2004	59.6%	59.3%	75.8%	73.3%	93.2%
2005	56.3%	55.4%	79.0%	87.0%	87.2%
2006	54.6%	52.7%	86.0%	86.8%	87.0%
2007	57.5%	55.4%	76.1%	83.8%	90.5%

Actuarial Value of Assets/Actuarial Accrued Liability

The State Police's funded ratios decreased from 84.8 percent in 1996 to 76.1 percent in 2007, with a low of 73.7 percent in 2003. However, the police pension's funded ratio is still under 80.0 percent, with a funded ratio of 76.1 percent in 2007. The pension fund for judges has experienced slight erosion from 1996, declining from 97.1 percent in 1996 to 83.8 percent in 2006. Interestingly, municipal employee pension funded ratios were 121.4 percent in 1996, and remained above 100 percent until 2003. The ratios have since fallen to 90.5 percent in 2007. While the municipal pensions are supported with assets covering over 90 percent of liabilities, this decline represents significant erosion since the days of over-funding.

As the table above shows, the ERSRI ratio declined from 77.5 percent in 1996 to 57.5 percent in 2007. One way to describe the 2007 funded ratio for the State Employee Retirement Fund is that accrued assets represented slightly more than half the total liabilities of the Fund. Similarly, the funded ratio for the teacher's pension declined from 74.0 percent in 1996 to 55.4 percent in 2007. The rapid decline in the funded ratio is

attributable to a number of factors. First, a significant portion of the increase in the unfunded liability can be explained by underperformance in asset growth compared to assumptions (currently at 8.25 percent annual growth). Second, demographic and socio-economic factors have had a significant impact on the overall fiscal health of the plans – people are retiring earlier and they are living longer than anticipated. Third, the State is experiencing fewer employee turnovers than expected, and salary growth has outpaced assumptions.[xxi]

Benefit increases to employees and retirees, without corresponding contributions to provide adequate resources for the additional benefits, can have a major impact on the long-term viability of defined benefit programs.

Employer Contribution Rates

The State is statutorily required to make its actuarial required contribution (RIGL 36-10-2). Since FY 1991, the State has made 100 percent of its required contribution except for three years – fiscal years 1991, 1992 and 1995. The State deferred $45.7 million in FY 1991 pension contributions and $41.3 million in FY 1992 pension contributions. In 1995, the State only contributed 81 percent of the required teacher pension contribution of $36.9 million and only 66 percent of the $52.6 million in required actuarial contributions for State employees. The State is on a funding plan and is required to make the plan funded by 2029.

Clearly, some of the decisions in the past have affected the State's unfunded pension liability. Early retirement incentives in 1989 and 1990 had significant impacts on the health of the fund by providing benefits without corresponding contributions. It was estimated that the actuarial cost of the early retirements were in excess of $230.0 million.[xxii]

Summary of Contributions to the Employees' Retirement System of Rhode Island
FY 1992 - FY 2007 State Employees and Teachers Only

	State Employees			Teachers (State Share)			Teachers (Local Share)		
Fiscal Year	Required Contribution	Change	Percent Contributed	Required Contribution	Change	Percent Contributed	Required Contribution	Change	Percent Contributed
1992	$42.1		52.0%	$23.3		0.0%	$49.5		100.0%
1993	41.3	-2.1%	100.0%	25.3	8.3%	100.0%	43.2	-12.8%	100.0%
1994	47.6	15.3%	100.0%	32.7	29.6%	100.0%	47.1	9.1%	100.0%
1995	52.6	10.5%	66.0%	36.9	12.8%	81.0%	50.2	6.6%	100.0%
1996	42.9	-18.3%	100.0%	30.8	-16.6%	100.0%	47.2	-5.9%	100.0%
1997	45.4	5.7%	100.0%	34.9	13.3%	100.0%	48.9	3.6%	100.0%
1998	51.3	13.0%	100.0%	35.0	0.4%	100.0%	52.0	6.3%	100.0%
1999	48.5	-5.4%	100.0%	30.2	-13.7%	100.0%	42.4	-18.6%	100.0%
2000	44.4	-8.6%	100.0%	40.7	34.8%	100.0%	57.7	36.1%	100.0%
2001	44.5	0.4%	100.0%	35.4	-13.1%	100.0%	48.2	-16.5%	100.0%
2002	31.8	-28.6%	100.0%	30.8	-13.0%	100.0%	44.4	-7.8%	100.0%
2003	45.1	41.9%	100.0%	38.2	24.3%	100.0%	55.5	25.0%	100.0%
2004	55.7	23.4%	100.0%	45.0	17.8%	100.0%	70.7	27.3%	100.0%
2005	66.1	18.7%	100.0%	48.8	8.4%	100.0%	73.0	3.3%	100.0%
2006	91.3	38.1%	100.0%	54.5	11.7%	100.0%	83.8	14.8%	100.0%
2007	118.3	29.6%	100.0%	70.5	29.3%	100.0%	109.4	30.6%	100.0%

Source: Testimony - March 12, 2008 to Special house Commission to Study All Aspects of The State Pension Retirement System, Frank Karpinski, Executive Director, Employees' Retirement System of Rhode Island

As the table shows, there has been a significant increase in the required contribution in recent years, placing additional pressure on the State's operating budget. The FY 2007 State contribution to both the State employee and teacher pensions was $188.8 million.

Employee Contribution Rates

Employees typically contribute a portion of their *pre-tax* salaries to their respective pension funds. Requirements for contributions to state defined benefit pension plans across the U.S. for general state employees range from 1.25 percent to 10.5 percent.[xxiii] Contribution rates for other categories of employees, such as judges, police officers and teachers can differ significantly. There is a distinct difference in contribution rates due to whether the employees participate in Social Security. The GAO found that, for those plans where employees were covered by Social Security, the 2006 median contribution rate was 8.5 percent of payroll for employers and 5.0 percent of pay for employees, in addition to the 6.2 percent of payroll from both to Social Security. For those plans where employees were not covered by Social Security, the median contribution rate was 11.5 percent of payroll for employers and 8.0 percent of pay for employees.[xxiv]

Employee Contribution Rates
Rhode Island Retirement Systems

	State Employees		Teachers		State Pollice		Judges	
Year	Employer	Employee	Employer	Employee	Employer	Employee	Employer	Employee
2001	7.99%	8.75%	12.01%	9.50%	25.89%	8.75%	31.09%	8.75%
2002	5.59%	8.75%	9.95%	9.50%	27.10%	8.75%	30.66%	8.75%
2003	7.68%	8.75%	11.97%	9.50%	27.48%	8.75%	33.42%	8.75%
2004	9.60%	8.75%	13.72%	9.50%	26.77%	8.75%	33.90%	8.75%
2005	11.51%	8.75%	14.84%	9.50%	28.87%	8.75%	36.19%	8.75%
2006	14.84%	8.75%	16.47%	9.50%	31.35%	8.75%	35.51%	8.75%
2007	18.40%	8.75%	19.64%	9.50%	31.78%	8.75%	36.07%	8.75%
2008	20.77%	8.75%	22.01%	9.50%	31.00%	8.75%	32.07%	8.75%

Note: Teacher employer rate is shared by State and Local Government

The employee contribution rates for State employees and teachers in Rhode Island are among the highest in the country. Among the New England states, Maine has the next highest at 7.65 percent, and New Hampshire is at 5.0 percent. Note that many of these employees contribute an additional 6.0 percent of their income for Social Security, whereas employees in Maine and Massachusetts do not participate in Social Security.

Retirement contribution rates vary depending on the type pension system in which one participates. Since 2001, State employee contribution rates have remained at 8.75 percent of salary. The State's contribution rate for the State employee retirement system has increased from 7.99 percent in 2001 to 20.77 percent in 2008. A similar trend is seen in the Teacher Retirement Program, where teachers have contributed 9.5 percent of salary to the fund, and the State and local combined contribution has increased from 12.01 percent in 2001 to 22.01 percent in 2008. Both State Police members and judges have contributed 8.75 percent since 2001, and current State contribution rates are 31.0 percent and 32.07 percent, respectively.

Rhode Island Pension Calculations

There are several categories of State employees that receive different types of pension benefits once the retirement requirements are met. These include State employees, teachers, judges, State Police, and municipal employees. Each category of employee has different calculations for retirement benefits, different contribution rates by both the employee and the State, and different retirement benefit eligibility requirements. Each will be discussed below. The following outlines how Rhode Island calculates the pension benefit for a typical State employee. There are two plans depending on date of hire since changes to new hires were made as of July 1, 2005.

Rhode Island State Employee Retirement Provisions

Provisions	Schedule A	Schedule B
Social Security Coverage	Yes	Yes
Vesting Requirement	10 Years	10 Years
Average Final Compensation	Highest three consec. years	Highest three consec. years
Normal Retirement Age	60/10; 00/28	65/10; 59/29
Formula Calculation		
- Years 1-10	1.70%	1.60%
- Years 11-20	1.90%	1.80%
- Years 21-25	3.00%	2.00%
- Years 26-30	3.00%	2.25%
- Years 31-34	3.00%	2.50%
- Year 35	2.00%	2.50%
- Years 36-37	-	2.50%
- Year 38	-	2.25%
Maximum Benefit	80.00%	75.00%
Early Retirement Option	None	55/20
Formula Calculation	NA	Actuarial
COLA	3.0% Fixed	100% of CPI. 3.0% Max, whichever is lower
COLA Delay	2.5 Years	3.0 Years

Source: Employees' Retirement System of Rhode Island

Because the methods are similar but the variables applied differ in calculating retirement benefits, the following outlines the methodology and an example of how the retirement benefit would differ under the two schedules with a Rhode Island State employee who has 30 years of service with an average final compensation of $70,000 (note – this salary represents estimated average salary for teachers). The tables also reflect the same calculations for a State employee with an average salary of $56,000.

Schedule A – State Employees

Schedule A applies to about half of the active membership in the State Employee pension fund (one should note that most of the employees who retire now are in Schedule A). An eligible employee can collect benefits at any age as long as they have at least 28 years of service, or at age 60 with 10 years of service. The maximum benefit for an employee is

80 percent, regardless of the number of years served. There are no penalties or adjustments for early retirement. There is a cost of living provision for those who retire, providing 3.0 percent compounding interest, with an initial delay for the COLA of 2 years.

- *Step 1* – Calculate the average final compensation (AFC), which is based on the highest three consecutive annual salaries.
- *Step 2* – Use the formula based on a certain percentage multiplied by the employee's total number of years of service. Rhode Island does not have a single multiplier. It is a graduated multiplier depending on the number of years served. Rhode Island applies 1.7 percent to each of the first ten years of service, 1.9 percent for each of the next ten years of service and 3.0 percent per year for the next 14 years, and 2.0 percent for the 35th year.
- *Step 3* – Apply these factors to the AFC.

Schedule A
Rhode Island Pension Benefit
Employee With 30 Years of Service

			Teacher	State
Average Final Compensation:			**$70,000**	**$56,000**
Pension Calculation	**Factor**	**Years**	**Benefit**	**Benefit**
- First 10 Years	1.70%	10	$11,900	$9,520
- Second 10 Years	1.90%	10	13,300	10,640
- Third Ten Years	3.00%	10	21,000	16,800
Estimated Total Benefit			**$46,200**	**$36,960**
Percent of AFC:			66.0%	66.0%

For example, under Schedule A, a Rhode Island State employee with 30 years of service and an average final compensation of $70,000 would receive estimated benefits of $46,200, which would be approximately 66 percent of the retiree's average final compensation. As one can see from the calculation, Schedule A was designed as a "back-loaded" program, where nearly 50 percent of the benefit was earned in the last ten years of service. The entire pension is taxable in Rhode Island.

Schedule B – State Employees Hired After July 1, 2005
Schedule B applies to those employees hired after July 1, 2005 or who had less than 10 years of service as of July 1, 2005 (approximately 3,500 employees). An eligible employee can collect benefits at age 59 with 29 years of service or at age 65 with 10 years of service. The maximum benefit for an employee is 75 percent, regardless of the number of years served. Employees may retire at age 55 with 20 years of service as well. There is a cost of living provision for those who retire, providing 100 percent of the CPI or 3.0 percent, whichever is less, with an initial delay for the COLA of 3 years.

- *Step 1* – Calculate the average final compensation (AFC), which is based on the highest three consecutive annual salaries.

- *Step 2* – Use the formula based on a certain percentage multiplied by the employee's total number of years of service. This schedule also has a graduated multiplier depending on the number of years served. For those under Schedule B, Rhode Island applies 1.6 percent to each of the first ten years of service, 1.8 percent for each of the next ten years of service, 2.0 percent for the next five years, 2.25 percent for the following five years, 2.5 percent for years 31-37, and 2.25 percent for the 38th year.
- *Step 3* – Apply these factors to the AFC.

Schedule B
Rhode Island Pension Benefit
Employee With 30 Years of Service

			Teacher	State
Average Final Compensation:			**$70,000**	**$56,000**
Pension Calculation	**Factor**	**Years**	**Benefit**	**Benefit**
- First 10 Years	1.60%	10	$11,200	$8,960
- Second 10 Years	1.80%	10	12,600	10,080
- Next Five Years	2.00%	5	7,000	5,600
- Next Five Years	2.25%	5	7,875	6,300
Estimated Total Benefit			**$38,675**	**$30,940**
Percent of AFC:			55.3%	55.3%
Percent of Schedule A:			*83.7%*	*83.7%*

The same employee used in the first scenario would have a different pension benefit under Schedule B. Again, based on an assumption that the Rhode Island State employee would have 30 years of service with an average final compensation of $70,000, the employee would receive estimated benefits of $38,675, which would be 55.3 percent of the retiree's average final compensation. As one can see from this calculation, Schedule B is no longer as heavily "back-loaded" as Schedule A. In fact, given these assumptions, the pension benefit earned by the employee under Schedule B would be 83.7 percent of the value of the pension under Schedule A.

Judges

Up until enactment of the FY 2009 Appropriation Bill, justices eligible to retire from service in the Rhode Island Supreme Court, the Superior Court, the Family Court, the District Court or any combination of service among these courts, received either 75 percent of their salary (those on reduced pay) or 100 percent of their salary (those on full pay).

As the following table shows, judges can currently retire at age 65 with a pension of up to 100.0 percent of their pay. Currently, judges may receive pensions equal to 75.0 percent of their annual salary if they have worked 20 years, or served 10 years and reached age 65. They receive 100.0 percent of salary if they have worked 20 years and have reached age 65, or have served for 15 years and reached the age of 70.

Rhode Island Retirement for Judges

Provisions	Prior to July 2, 1997	July 2, 1997 - Jan 1, 2009	January 1, 2009 and After
		Reduced Pay	
Average Final Compensation	Salary at Retirement	Highest 3 Consecutive Years	Highest 3 Consecutive Years
Normal Retirement Age	20/0, 10/65	20/0, 10/65	20/0, 10/65
Formula Calculation	75% of AFC	75% of AFC	70% of AFC
		Full Pay	
Average Final Compensation	Salary at Retirement	Highest 3 Consecutive Years	Highest 3 Consecutive Years
Normal Retirement Age	20/65 15/70	20/65 15/70	20/65 15/70
Formula Calculation	100% of AFC	100% of AFC	90% of AFC

Source: State Appropriations Act, H-7390 Substitute A as Amended and Enacted, Article 35

Article 35 of the FY 2009 Appropriations Act (H-7390 Sub A as Enacted) instituted a number of changes to the retirement plans applicable to judges, depending on beginning date of service. First, for those engaged as a judge prior to July 2, 1997, the calculation of benefits remained unchanged. Those engaged as a judge after July 2, 1997 will have the average final compensation calculation based on the average of the three highest consecutive years of salary.

Those engaged as judges after January 1, 2009 will also have the average final compensation calculation changed as noted above. In addition, judges on reduced pay will receive 70.0 percent rather than 75.0 percent of the average final compensation and those on full pay will receive 90 percent rather than 100.0 percent of average final compensation. Article 35 also changed the allowances for surviving spouses of judges for those hired after January 1, 2009, requiring them to receive reduced benefits if they elect to receive a spousal benefit.

It should be noted that workers compensation judges prior to January 1, 2009 had the pension calculated the same as the reduced pay judges noted above prior to July 2, 1997. Those engaged as workers compensation judges after January 1, 2009 will have retirement benefits calculated the same as the reduced pay judges noted above engaged after January 1, 2009.

State Police

The State Police pension fund is currently 76.1 percent funded, which represents a decline from 92.1 percent in 1998. The State currently contributes 31.0 percent of State Police salaries into their pension funds, while the employees contribute 8.75 percent. State Police officers hired prior to July 1, 2007 receive 50.0 percent of the officer's salary for the position from which he or she retired, once he or she has served either 20 years or has attained the age of 62 – whichever comes first. Those hired after July 1, 2007 may retire after 25 years of service. These officers will also receive 50.0 percent of the officer's salary for the position from which he or she retired. However, these officers may serve a maximum of 30 years, and are allowed an additional amount equal to 3.0

percent for each year served after 25 years. The total retirement cannot exceed 65.0 percent of the salary upon retirement.

Article 22 of the FY 2009 Appropriations Act (H-7390 Sub A as Enacted) instituted a number of changes to the retirement plans for the State Police. Any member of the State Police, other than the superintendent, who is hired on or after July 1, 2007 and who has served for 25 years, shall be entitled to a retirement allowance of 50.0 percent of the final salary. In addition, any member may serve up to a maximum of 30 years, and shall be allowed an additional amount equal to 3.0 percent for each completed year served after 25 years to a maximum retirement allowance not to exceed 65.0 percent of the final salary.

All Rhode Island communities participate in the teacher retirement pension fund, and continue to make their required contributions. The Employees' Retirement System of Rhode Island for Teachers, again administered by the State, covers all local public school teachers and has an estimated $3.8 billion in assets. However, there is an estimated $2.6 billion in estimated net unfunded liabilities, thereby resulting in an estimated funding ratio of 55.4 percent. Note that the teacher contribution is 9.5 percent of salary.

Recent Events and Proposed Changes to the Pension System

The data presented in this report are based on the June 30, 2007 valuation. As noted before, several things have happened since then that might have an impact on the pension system. Based on an analysis of the actuarial consultant to the State, Gabriel Roeder Smith & Company, the impact of events after the June 30, 2007 valuation date is summarized below:

- The State has significantly downsized its workforce. As of June 30, 2008, the number of State employees active in the ERSRI decreased by about 5 percent, from 12,572 to 11,970, and has fallen further since then as result of the implementation of Article 4.
- In 2008, Article 4 of the State's FY 2008 Revised budget included significant changes to the post-retirement medical benefits for State employees. These changes were effective as of October 1, 2008. However, anyone retired before that date was eligible to keep the prior set of benefits. As a result, many State employees who were eligible for retirement retired before October 1, 2008, in order to retain eligibility for the pre-Article 4 benefits.

The consultants estimated that the current annualized payroll for active members is about $566.4 million with an estimated payroll for FY 2009 of $587.5 million. This is considerably less than the $688.1 million payroll for FY 2009 that was anticipated in June 30, 2007 actuarial valuation. For FY 2010, they project a payroll of $590.5 million (versus the $717.3 million payroll projected for FY 2010 in the June 30, 2007 valuation). These new projections will have an impact on the employer contribution rates, increasing the rate for FY 2010 from 20.7 percent to 25.0 percent.

One should also note that Article 35 of the FY 2009 Appropriation Act (H-7390 Sub A as Enacted) instituted a number of changes to retirement plans for judges, and Article 22 for the State Police. These changes are discussed under the appropriate sections.

In addition to the changes mentioned above, the Governor's FY 2009 Supplemental budget proposes the following changes to the pension system:

- Eliminating cost-of-living adjustment for public employees retiring after April 1, 2009;
- Mandating a minimum age of 59 to be eligible for retirement for public employees who leave service after April 1, 2009;
- Making changes to disability pension provisions;
- Lowering the State employer contribution rate for pensions to 25.0 percent of the required rate for the last five months of the fiscal year, for anticipated general revenue savings of $25.9 million ($43.0 million in all funds);
- Reducing the funding requirement for the Teacher Retirement System to 25.0 percent of the actuarial rate from February 1 to June 30, resulting in general revenue savings of $28.1 million for the State and local government savings of $41.1 million.

Comparison of Retirement Benefits for New England States

The Rhode Island Treasurer's Office recently requested an analysis of the retirement benefits for Rhode Island and the other New England states' general state employees using a range of assumptions and scenarios. Its actuarial consultant, Gabriel Roeder Smith & Company prepared an analysis and the findings are discussed below. The data and results of the calculations are those performed by Gabriel Roeder Smith & Company, while the comments and analysis of the findings are RIPEC comments.

The analysis used three case studies to demonstrate the differences in estimated retirement benefits depending on certain assumptions. In all three case studies (shown below), the analysis assumes a Final Average Salary (FAS) of $70,000 (teachers). Alternative runs of the estimates were done at a Final Average Salary of $57,000 (state employees). All the New England retirement systems use a three-year average of compensation. The benefits under each system except Connecticut are proportional to the FAS, minimizing differences in comparisons. (Connecticut has a pension system that integrates participation with Social Security – a formula that is different for those participating in Social Security than for those who do not).

In addition, the analysis reflects the annual retirement benefit and the actuarial present value of the benefit, taking into account the various COLA provisions for each state's retirement system. Maine and Massachusetts do not cover state employees under Social Security. The balance of New England does have their state employees covered under Social Security.

In Case I, it was assumed that an employee retired at age 55 with 30 years of service. For each of the states, including Rhode Island, the consultant used the retirement provisions that would apply to those employees that have been in their respective retirement system the longest. In Rhode Island's case, this would be those that would fall under Schedule A.

Case I
Member Retiring at Age 55 with 30 Years of Service and $70,000 FAS

State	Annual Benefit	Benefit Rank	Benefit % of RI	Actuarial Present Value	Rank	Actuarial Value % of RI
Connecticut (Tier II)	$26,801	6	58.0%	$358,664	4	57.4%
Maine (Tier I)	37,275	2	80.7%	524,735	2	84.0%
Massachusetts	31,500	3	68.2%	354,041	5	56.7%
New Hampshire	29,810	5	64.5%	345,797	6	55.3%
Rhode Island (Sched A)	**46,200**	**1**	**100.0%**	**624,759**	**1**	**100.0%**
Vermont	30,660	4	66.4%	372,486	3	59.6%
Average (no RI)	**$31,209**		**67.6%**	**$391,145**		**62.6%**

Source: Gabriel, Roeder Smith & Company, Correspondence December 11, 2007 to Rhode Island General Treasurer

As the table on page 21 shows, the calculations under Case I show that the annual benefit among the New England states range from a low of $26,801 in Connecticut to a high of $46,200 in Rhode Island. Rhode Island's benefit was estimated to be the highest, nearly 24.0 percent higher than the next highest benefit in Maine ($37,275). The average annual benefit for the New England states excluding Rhode Island is estimated at $31,209, which is 68.0 percent of the Rhode Island benefit.

The actuarial present value (APV) of the benefit ranged from a low of $345,797 in New Hampshire to a high of $624,759 in Rhode Island. Rhode Island's estimated APV under this scenario was nearly 20.0 percent higher than the next highest in Maine ($524,735). The average APV among the New England states excluding Rhode Island was estimated at $391,145 – less than two-thirds the benefit in Rhode Island.

The same calculations were made for a Final Average Salary of $57,000 rather than for $70,000. Little changed in the relative positions of the different New England states' retirement benefits. Rhode Island's benefit was nearly 50 percent higher than the average of the remaining New England states, and was nearly 24 percent higher than the next highest annual benefit. The average annual benefit for the New England states, excluding Rhode Island, under this scenario is estimated at $25,195, which is only 67.0 percent of the Rhode Island benefit. It is interesting to note that the annual benefit for a FAS of $57,000 in Rhode Island ($37,620) exceed all the other New England states for an FAS of $70,000.

In Case II, it was assumed that an employee retired at age 60 with 30 years of service. For each of the states, including Rhode Island, the consultant used the retirement provisions that would apply to those employees that are applicable to those newly hired. In Rhode Island's case, this would be those that would fall under Schedule B.

Case II
Member Retiring at Age 60 with 30 Years of Service and $70,000 FAS

State	Annual Benefit	Benefit Rank	Benefit % of RI	Actuarial Present Value	Rank	Actuarial Value % of RI
Connecticut (Tier II)	$31,530	6	81.5%	$385,311	5	82.1%
Maine (Tier II)	36,960	3	95.6%	459,862	2	98.0%
Massachusetts	42,000	1	108.6%	432,849	3	92.2%
New Hampshire	35,070	4	90.7%	376,768	6	80.3%
Rhode Island (Sched B)	**38,675**	**2**	**100.0%**	**469,263**	**1**	**100.0%**
Vermont	35,070	4	90.7%	392,853	4	83.7%
Average (no RI)	**$36,126**		**93.4%**	**$409,528**		**87.3%**

Source: Gabriel, Roeder Smith & Company, Correspondence December 11, 2007 to Rhode Island General Treasurer

As the table above shows, the calculations under Case II show that the annual benefit among the New England states range from a low of $31,530 in Connecticut to a high of $42,000 in Massachusetts. Rhode Island's benefit was estimated to rank second highest among the New England states, and was nearly 7.0 percent above the New England average (excluding Rhode Island). One should note that both Maine and Massachusetts

do not provide their employees with Social Security benefits. As the table shows, the disparity among the states has narrowed when compared to the distribution of annual benefits in Case I.

The actuarial present value (APV) of the benefit ranged from a low of $376,768 in New Hampshire to a high of $469,263 in Rhode Island. Rhode Island's estimated APV under this scenario was only 2.0 percent higher than the next highest in Maine ($459,862). The average APV among the New England states excluding Rhode Island was estimated at $409,528 – Rhode Island's APV was approximately 15 percent more than the average.

The same calculations were made for a Final Average Salary of $57,000 rather than for $70,000. Rhode Island emerged as the second highest annual benefit at $31,493 behind Massachusetts ($34,200). Rhode Island's benefit was approximately 7 percent higher than the average of the remaining New England States ($29,161). Connecticut continued to offer the lowest annual benefit among the New England states, but the remaining states continued to be relatively close to each other.

In Case III, it was assumed that an employee retired at age 65 with 20 years of service. However, the provisions used in Case I were applied rather than those used in Case II. As the table below shows, the calculations under Case III show that the annual benefit among the New England states range from a low of $21,020 in Connecticut to a high of $35,000 in Massachusetts. Rhode Island's benefit was estimated to rank third highest among the New England states at $25,200, and was 2.0 percent less than the New England average of $25,722 (excluding Rhode Island). Again, it should be noted that employees in both Massachusetts and Maine do not participate in Social Security.

The actuarial present value (APV) of the benefit ranged from a low of $206,828 in New Hampshire to a high of $331,001 in Massachusetts. Rhode Island's estimated APV of $275,540 under this scenario ranked third highest and was slightly more than 4.0 percent above of the average for the New England states. Rhode Island's relative position among the New England states using the FAS of $57,000 did not change.

Case III
Member Retiring at Age 65 with 20 Years of Service and $70,000 FAS

State	Annual Benefit	Benefit Rank	Benefit % of RI	Actuarial Present Value	Rank	Actuarial Value % of RI
Connecticut (Tier II)	$21,020	6	83.4%	$229,716	5	83.4%
Maine (Tier I)	28,000	2	111.1%	318,413	2	115.6%
Massachusetts	35,000	1	138.9%	331,001	1	120.1%
New Hampshire	21,210	5	84.2%	206,828	6	75.1%
Rhode Island (Sched A)	**25,200**	**3**	**100.0%**	**275,540**	**3**	**100.0%**
Vermont	23,380	4	92.8%	236,609	4	85.9%
Average (no RI)	**$25,722**		**102.1%**	**$264,513**		**96.0%**

Source: Gabriel, Roeder Smith & Company, Correspondence December 11, 2007 to Rhode Island General Treasurer

As these case studies suggest, Rhode Island's Schedule A benefit appears to be significantly more generous due to the availability of early age retirement without penalty and the program's 3.0 percent multiplier applied to years of service in excess of 20 years. The analysis also suggests that the recent changes to Rhode Island's retirement system that created the Schedule B system have brought the benefits more in line with those provided in neighboring states. However, Rhode Island does provide for Social Security benefits whereas both Maine and Massachusetts do not. It also appears that because Maine and Massachusetts do not have their state employees covered by social security, their relative benefits are slightly more robust than others in New England, which might suggest why they emerged as higher in the analysis.

National Pension Comparison

The National Education Association's (NEA) publication, *Characteristics of 100 Large Public Pension Plans* (December 2006), shows a number of trends that are worth noting, especially with regard to how Rhode Island compares.

First, of the 100 plans surveyed, nearly 80 percent were pure defined benefit plans. The balance was made up primarily of hybrid plans, combining characteristics of both defined benefit and defined contribution plans. While private plans generally represent universal coverage for Social Security, state and local government employees are not universally covered. In fact, only 70.0 percent of the public plans surveyed indicated Social Security coverage for all or nearly all participants.

The majority of plans required attaining the age of 60-62 to receive normal full retirement from active public employment. The majority of plans permitted early retirement, but typically at a reduced benefit. Approximately 57 percent – 66 plans – had 5-year vesting requirements, which is similar to the private-sector Employee Retirement Income Security Act (ERISA) standard. Twenty one plans had 10-year vesting for their plans, including Rhode Island.

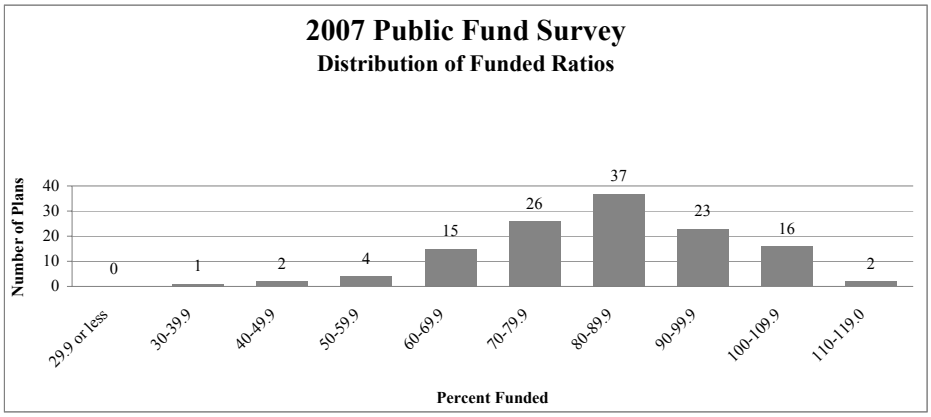
The most common formula multiplier was 2.0 to 2.2 percent of average final compensation per year of service. Rhode Island's multi-tiered rates tend to be back-loaded in that the value of service increases as years of service increase. Recent reforms to Rhode Island's pension system (Schedule B) have in part mitigated the "back-loaded" nature of the formula multipliers.

As with Social Security, the retirement benefits of most public pension programs have some adjustment in benefits to prevent erosion of the benefit due to inflation. However, the method to accomplish this goal varies by plan. Nearly half of the plans surveyed by the NEA had an automatic adjustment, either a fixed rate or an adjustment tied to the change in the Consumer Price Index (CPI) – usually with some kind of cap.

Employee and employer contribution rates vary among the surveyed plans, but the median employee contribution rate was approximately 6.0 percent, with the highest contribution rate at 12.0 percent. Employer contributions are typically dictated by actuarially determined funding requirements. Most programs defined the compensation base for calculating the retirement benefit as the average of three years.

Funding ratios varied widely in the survey, from a low of 24.6 percent to a high of 153.0 percent. The funding ratio is the value of the assets as a percentage of the accrued liability. Based on the data developed in the survey, approximately 36 percent of the pension systems had a funded ratio of at least 90 percent, and 18 percent of the plans had funding ratios of less than 70 percent. The median funding ratio in the study was 86.2 percent, and the average funding ratio was 85.2 percent. It should be noted that the funding ratio for the Employee's Retirement System of Rhode Island (ERSRI) was 57.5 percent.

Based on another survey by the National Association of State Retirement Administrators (*2007 Public Fund Survey*), over three-fifths of the 126 plans surveyed were at least 80.0 percent funded.[xxv] Only 48 of the 126 state and local defined benefit plans included in the *2007 Public Fund Survey* were below the 80.0 percent threshold. The following chart shows the distribution of the plans surveyed.



The majority of the large plans in the U.S. have 5-year vesting requirements, but there are a handful of plans that still use 10-year vesting for their plans. In order to be vested, or eligible to receive a pension benefit, Rhode Island State employees and teachers must serve a minimum of 10 years. This is relatively high compared to most systems around the country. In New England, Connecticut, Maine and Vermont have 5-year vesting requirements, while Massachusetts, New Hampshire and Rhode Island require 10 years.

New England State Employee Retirement Programs - Background

State	Program Tiers	Social Security	Vesting	Employee Contribution Rate	Final Average Salary	Cost of Living (COLA) Calculation
Connecticut	Tier I	Yes	5	0.00%	3 Year Average	
	Tier II	Yes	5	0.00%	3 Year Average	60% of CPI increase (Min 2.5%, max 6.0%)
	Tier IIA	Yes	5	2.00%	3 Year Average	60% of CPI increase (Min 2.5%, max 6.0%)
Maine	Tier I	No	5	7.65%	3 Year Average	100% of CPI, Max 4.0%
	Tier II	No	5	7.65%	3 Year Average	100% of CPI, Max 4.0%, deferred to age 62
Massachusetts		No	10	DOH & Pay	3 Year Average	100% of first $12,000, 3% cap, 2 year delay
New Hampshire		Yes	10	5.00%	3 Year Average	Ad hoc based on special fund
Rhode Island	Schedule A	Yes	10	8.75%	3 Year Average	3.0% fixed, 2.5 Year delay
	Schedule B	Yes	10	8.75%	3 Year Average	100% of CPI, 3.0% max, 3 year delay
Vermont		Yes	5	3.35%	3 Year Average	50% of CPI, 1.0% min, 5.0% max

Source: Gabriel, Roeder Smith & Company, Correspondence December 11, 2007 to Rhode Island General Treasurer

As the table on page 27 shows, there are a number of differences in pension programs among the New England states, including the yearly rates of accumulation, formulas, and early retirement provisions. For example, three states – Connecticut, Maine and Rhode

Island – have multiple tiers indicating changes in benefit levels depending on date of hire. In addition, the normal retirement age is generally 60, but Massachusetts is age 55 with 10 years. Massachusetts, Rhode Island and Vermont permit members to retire at any age if they meet a minimum number of years of service.

New England State Employee Retirement Programs - Benefit Calculations

State	Program Tiers	Normal Retirement Age	Formula	Early Retirement Age	Early Retirement Reduction
Connecticut	Tier I				
	Tier II	60/25; 62/5	1.33%+0.5% over breakpoint x svc	55/10	3.0% a year from 62
	Tier IIA	60/25; 62/5	1.33%+0.5% over breakpoint x svc	55/10	3.0% a year from 62
Maine	Tier I	60/5	.02*FAC*Svc	00/25	2.25% a year from 60
	Tier II	60/5	.02*FAC*Svc	00/25	6.0% a year from 62
Massachusetts		55/10; 00/20	(.005+.001*min(RetAge-45,20))*FAC*Svc, 80% max	None	None
New Hampshire		60/00	.0167*FAC*Svc	/10; 00/20/	Service related
Rhode Island	Schedule A	60/10; 00/28	.017(10), .019(10),.03(15), 80% max	None	None
	Schedule B	60/10; 59/29	.016(10),.018(10),.o2(5),.0225(5),.025, 75% max	55/20	Actuarial
Vermont		62/00; 00/30	.0167*FAC*Svc	55/05	6.0% a year from 62

Source: Gabriel, Roeder Smith & Company, Correspondence December 11, 2007 to Rhode Island General Treasurer

Most defined pension programs use a three-year average for the final base salary calculation. All New England states use essentially the same methodology for calculating the final base salary from which the pension benefit is derived. All use a three-year average to determine the final base salary.

Cost of living provisions (COLA) for pension benefits are designed to ensure that the benefit does not erode over time due to inflation costs. These provisions vary among the New England states, and differ if states have multiple tiers or schedules for their pension systems. Connecticut offers the highest possible COLA adjustment –a minimum COLA of 2.5 percent and a maximum of 6.0 percent. Maine has a maximum COLA of 4.0 percent, and in Rhode Island, Schedule A offers a flat rate of 3.0 percent, and Schedule B is based on CPI. Vermont has a COLA provision that represents 50.0 percent of the CPI, with a minimum of 1.0 percent and a maximum of 5.0 percent. The process is on an ad hoc basis in New Hampshire, while in Massachusetts, there are some COLA provisions, but they are contingent on funding.

All New England states, except for Maine and Massachusetts, participate in Social Security. When comparing relative pension benefits, one of the reasons both Maine and Massachusetts emerge as higher pension benefit states is due to adjustments made to account for not participating in Social Security. Generally speaking, employer and employee contribution rates tend to be higher in non-Social Security eligible states than those in Social Security states. See discussion under contribution rates above. The pension retirement multipliers also tend to be higher in non-Social Security eligible states than those in Social Security states.

Nationally, most plans are either partially or fully exempt from state taxation. However, New England represents a slightly different picture as the table below shows. Rhode Island's pension is taxable. New Hampshire does not have an income tax, and Massachusetts only taxes a limited portion of pension benefits.

State Income Tax Provisions for Pensions

State	Income Tax Provision
Connecticut	Taxable
Maine	First $6,000 (minus Social Security) Exempt
Massachusetts	Exempt
New Hampshire	No Income Tax
Rhode Island	Taxable
Vermont	Taxable

Source: Rhode Island Office of the Treasurer

As the table below shows, the funding level for the major public pension funds in New England and the Northeast vary from a low of 53.3 percent in Connecticut to a high of 109.2 percent in Maine. The ERSRI had a funded ratio of 55.8 percent at the time of this comparison, which was among the lowest in the region. One should note that the most recent actuarial valuation (June 30, 2007) shows a funded ratio of 57.5 percent.

New England and Mid-Atlantic State Pension Funding Levels

State	Funding Ratio	Assets	Actuarial Liabilities	Unfunded	Valuation Date
CT/Teachers	63.0%	$11.8	$18.7	$6.9	6/30/2006
CT/SERS	53.3%	8.5	16.0	7.5	6/30/2005
MA/SERS	85.1%	18.4	21.7	3.3	1/1/2007
MA/Teachers	69.6%	17.1	24.5	7.4	1/1/2002
ME/State and Teachers	69.7%	7.0	10.0	3.0	6/30/2005
ME/Local	109.2%	1.7	1.6	(0.1)	6/30/2005
NH/RS	63.4%	6.0	9.3	3.3	6/30/2007
RI/ERS*	55.8%	5.4	9.8	4.4	6/30/2004
RI Municipal	87.2%	0.9	1.0	0.1	6/30/2003
VT/Teachers	84.6%	1.4	1.7	0.3	6/30/2006
VT/State	99.3%	1.2	1.2	0.0	6/30/2006
DE/State	101.7%	6.0	5.9	(0.1)	6/30/2006
MD/PERS	80.4%	12.3	15.3	3.0	6/30/2006
MD/Teachers	84.2%	21.6	25.6	4.0	6/30/2006
NJ/Teachers	78.0%	35.4	45.4	10.0	6/30/2006
NJ/PERS	78.0%	27.4	35.1	7.7	6/30/2006
NY/State & Local	104.1%	112.2	107.8	(4.4)	4/1/2006
NY/Teachers	98.8%	74.1	75.0	0.9	6/30/2006
PA/State SERS	92.7%	28.1	30.4	2.3	12/31/2005

*The most recent actuarial valuation (June 30, 2007) shows a funded ratio of 57.5%.
Source: RIPEC Summary of Tables presented by Ronald Snell, NCSL to the Special House Commission to Study all Aspects of the State Pension and Retirement System

Notes

[i] GAO Employee Compensation: Employer Spending on Benefits Has Grown Faster Than Wages, Due Largely to Rising Costs for Health Insurance and Retirement Benefits, February 2006 (GAO-06-285).
[ii] Munnell, Alicia, Kelly Haverstick, et al, What do we Know about the Universe of State and Local Plans?, March 2008 Center for Retirement Research.
[iii] Workplace Economics, Inc. 2006 State Employee Benefit Survey, Washington D.C. 2006
[iv] Center for State & Local Government Excellence, Issue Brief – Why Have Some States Introduced Defined Contribution Plans?, January 2008
[v] GAO, State and Local Government Retiree Benefits – Current Funded Status of Pension and Health Benefits, January 2008 (GAO-08-223).
[vi] Data provided by the Rhode Island Office of the Treasurer.
[vii] Munnell, Alicia, Kelly Haverstick, et al, What do we Know about the Universe of State and Local Plans?, March 2008 Center for Retirement Research.
[viii] Center for State & Local Government Excellence, Issue Brief –State and Local Pensions Are Different From Private Plans, November 2007.
[ix] Munnell, Alicia, Kelly Haverstick, et al, What do we Know about the Universe of State and Local Plans?, March 2008 Center for Retirement Research.
[x] Munnell, Alicia, Kelly Haverstick, et al, What do we Know about the Universe of State and Local Plans?, March 2008 Center for Retirement Research.
[xi] Center for State & Local Government Excellence, Issue Brief –State and Local Pensions Are Different From Private Plans, November 2007.
[xii] CRS Report for Congress, Retirement Savings: How Much Will Workers Have When They Retire? Jan 2007.
[xiii] CRS Report for Congress, Retirement Savings: How Much Will Workers Have When They Retire? Jan 2007.
[xiv] GAO, Employer-Sponsored Health and Retirement Benefits: Efforts to Control Employer Costs and the Implications for Workers, March 2007 (GAO-07-355).
[xv] U.S. Census Bureau, State and Local Governments Employee Retirement Systems (2005).
[xvi] GAO, State and Local Government Retiree Benefits – Current Status of Benefit Structures, Protections, and Fiscal Outlook for Funding Future Costs, September 2007 (GAO – 07-1156).
[xvii] Employees' Retirement System of Rhode Island, Actuarial Valuation Report, as of June 30, 2007.
[xviii] Employees' Retirement System of Rhode Island, Actuarial Valuation Report, as of June 30, 2007.
[xix] Data provided by the Rhode Island Office of the Treasurer.
[xx] [xx] National Association of State Retirement Administrators (NASRA) 2007.
[xxi] Rhode Island Auditor General Testimony.
[xxii] 2004 State of Rhode Island Pension Review Team, ERSRI Evaluation Report, page 23, July 2004.
[xxiii] Workplace Economics, Inc. 2006 State Employee Benefits Survey (2007).
[xxiv] GAO, State and Local Government Retiree Benefits – Current Funded Status of Pension and Health. Benefits, January 2008 (GAO-08-223).
[xxv] National Association of State Retirement Administrators (NASRA), 2007 Public Fund Survey.