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Report on Pension Costs to the Legislature of the State of Maine

Submitted to

Joint Standing Committee on Appropriations and Financial Affairs

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Maine Public Employees Retirement System

February 16, 2011

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EXECUTIVE SUMMARY

The Maine Public Employees Retirement System (MainePERS) presented the Fiscal Year (FY) 2012-2013 costs for the State Employee and Teacher Retirement Program (the "State/Teacher Plan" or "Plan") to the Joint Standing Committee on Appropriations (the "Committee") and Financial Affairs and the Joint Standing Committee on Labor on July 27, 2010. These costs are increasing in the next biennium to $916M: $448M for FY 2012 and $468M for FY 2013. This compares to total biennial costs for FY 2010-2011 of $629M. This information resulted in a request for additional information about actions that could affect these costs. (See Attachment 1)

This report is a response to that request and includes descriptions of the technical aspects of potential actions. The information is presented in sections in which similar actions are grouped. Any omission is unintentional. MainePERS staff does not recommend or advocate for any specific action described in this report and refers the Committee to other resources such as the Office of the Attorney General where appropriate.

State/Teacher Plan

The State/Teacher Plan is a defined benefit retirement plan in which members receive a defined monthly annuity benefit upon retiring. The costs of defined benefit pension plans, including those of the State/Teacher Plan, generally consist of two elements:

> ***Normal Costs*** - the present value of future pension benefits earned by employees in the current year. Normal costs are based on each year's projected annual collective employee earnings.
>
> ***Unfunded Actuarial Liability (UAL)*** - the amount by which the actuarial liability for current and former employees is greater than pension assets. The actuarial liability is the present value of prospective pensions owed to members when they retire based on service as of the calculation date.

State/Teacher Plan annual and/or biennial costs are defined as those normal and UAL costs required by state law and the Maine Constitution to fund the Plan. The State is required by the Maine Constitution to fully fund the State/Teacher Plan by 2028. (See Attachment 2) The Constitution addresses both the normal and UAL costs.

The Plan covers approximately 75,000 active, inactive and retired members. The normal costs of the State/Teacher Plan are 5.5% of active member payroll. UAL amortization costs were approximately 15% of payroll until FY2012 when they begin increasing for the impact of the 2008 market downturn.

The State/Teacher Plan is provided to employees in lieu of participation in Social Security. The Internal Revenue Service (IRS) requires qualified replacement plan status to be maintained in order for covered employees and employers to remain exempt from Social Security participation. The IRS provides "safe harbor" guidelines within which plans will qualify. The State/Teacher Plan is a qualified replacement plan.

Response to the Committee Request

This report responds to the Committee's request on what actions affect the normal and UAL costs of the Plan, and how these changes impact members. A wide range of cost impacts can occur when components of the Plan or actions that affect components of the Plan change.

Plan Design - The Legislature is responsible for the design of the Plan and the effect the design has on cost and human resource management.

Changes in Plan design have the most direct impact on costs. IRS guidelines restrict changes that can occur in how the basic benefit and the retirement age is determined if the Legislature wants the Plan to remain a qualified replacement plan in lieu of Social Security.

Sample changes to Plan components in the report demonstrate the range of cost impacts that can occur. The magnitude of cost impact to changes in Plan components is generally proportional to a combination of how many members the change affects and how that component can change for a member over time. For example, changing the inflation factor in the Cost-of-Living-Adjustment (COLA) will have a greater cost impact than changing the retirement age because the COLA changes every year for many members and the retirement age changes once for fewer members.

Sample cost impacts in this report cannot be added together to determine a total cost impact. Components interact and each combination of changes will result in a unique total cost impact.

Unfunded Actuarial Liability – The UAL currently is amortized in a manner to retire it by 2028 compliant with the Constitution of the State of Maine. Lengthening the date and schedule requires a Constitutional amendment.

Changing the date through which the UAL is retired can have a significant impact on costs. Extending the final amortization date decreases the annual costs while increasing the cumulative costs of retiring the UAL.

Other Sources of Revenue – Pension Obligation Bonds (POBs) can affect total Plan cost if used to create revenue to fund either normal or UAL costs. This is because investment returns on these contributions may exceed or fall short of projected plan earnings, providing either future relief or requiring additional contributions from the State.

New Plans – The State/Teacher Plan is provided in lieu of Social Security. Consideration of a new plan involves the choice of adopting another plan in lieu of Social Security or participating in Social Security and adopting a retirement plan that supplements a member's retirement savings. Retirement plans should be compared on the basis of normal cost. The UAL must be paid regardless of the plan offered to current and future members.

Related Actions Affecting Plan Costs – Contributions are determined in part using actuarial assumptions about the future such as inflation or trust fund investment performance. The development of these assumptions is commonly governed by generally accepted actuarial standards to support consistent, fair representation of anticipated costs. Departure from these standards results in the inability to obtain an actuarial opinion that the annual valuation fairly represents the costs of the Plan.

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INTRODUCTION

The Maine Public Employees Retirement System (MainePERS) presented the Fiscal Year (FY) 2012-2013 costs for the State Employee and Teacher Retirement Program (the "State/Teacher Plan" or "Plan") to the Joint Standing Committee on Appropriations and Financial Affairs (the "Committee") and the Joint Standing Committee on Labor on July 27, 2010. This information resulted in a request for additional information about actions that could affect these costs. (See Attachment 1) This report is a response to that request.

Background

The State/Teacher Plan is a defined benefit retirement plan in which members receive a defined monthly annuity benefit upon retiring. MainePERS is designated by law to administer the State/Teacher Plan, which includes engaging actuarial services to calculate the annual costs to meet all provisions of state law and the Maine Constitution. The costs of defined benefit pension plans, including those of the State/Teacher Plan, generally consist of two elements:

> ***Normal Costs*** - the present value of future pension benefits earned by employees in the current year. Normal costs are based on each year's projected annual collective employee earnings.
>
> ***Unfunded Actuarial Liability (UAL)*** - the amount by which the actuarial liability for current and former employees is greater than pension assets. The actuarial liability is the present value of prospective pensions owed to members when they retire based on service as of the calculation date.

State/Teacher Plan annual and/or biennial costs are defined as those normal and UAL costs required by state law and the Maine Constitution to fund the Plan. The MainePERS Board of Trustees ("Trustees") certifies these costs as part of its statutory and fiduciary obligations and submits them to the State of Maine ("State") every two years consistent with the State biennial budget process.

The State is required by the Maine Constitution to fully fund the State/Teacher Plan by 2028. (See Attachment 2) The Constitution addresses both the normal and UAL costs.

MainePERS submitted the FY 2012-2013 State/Teacher Plan normal and UAL costs to the Department of Administrative and Financial Services on July 8, 2010. The costs are increasing in the next biennium to $916M: $448M for FY 2012 and $468M for FY 2013. This compares to total biennial costs for FY 2010-2011 of $629M.

State/Teacher Plan Roles and Responsibilities

State/Teacher Plan pension responsibilities are assigned to and performed by three entities:

- **Legislature:** Responsible for plan design, cost, and the legality of actions it takes regarding pension plans. The Joint Standing Committee on Appropriations and Financial Affairs is responsible for recommending pension policy to the full Legislature.
- **Executive Branch:** Responsible for employee recruitment and retention, preparing a budget which includes the cost to fund the State/Teacher Plan, and for submitting appropriated payments to MainePERS.
- **Maine Public Employees Retirement System (MainePERS):** Responsible for Plan administration, including investing member and State contributions, determining the assumptions used to calculate pension costs and to properly fund the Plan in conjunction with the actuary, and administering the benefits. MainePERS trustees and/or staff have expertise in actuarial, administrative, and investment matters.

Other entities with an interest in the State/Teacher Plan include employees, organizations representing employees, public employers, organizations representing public employers, taxpayers and business, civic and policy organizations.

Scope of This Report

MainePERS staff approached this request by identifying a comprehensive list of drivers of Plan cost on which actions to affect cost can be taken. MainePERS staff does not recommend or advocate for any specific action described in this report.

This report includes descriptions of the technical aspects of potential actions and refers the Committee to other resources such as the Office of the Attorney General where appropriate. The information is presented in sections in which similar actions are grouped. Any omission is unintentional.

> ***Important Note***
>
> *Retirement plans are employer-driven recruitment and retention tools. This report describes and demonstrates the cost impacts of changes to the State/Teacher Plan, not the human resource impacts.*

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Organization of This Report

Plan design is the responsibility of the Legislature with input from the Executive Branch, employers, employees and other stakeholders.

Section I of the report provides a brief primer on the State/Teacher Plan. This section includes a description of how a defined benefit plan works in general, and specifically how the State/Teacher Plan is designed and how costs are paid. A brief history of some significant actions affecting this Plan is also included.

Section II describes the drivers of plan costs and how they can be changed. Costs of the plan are largely driven by the Legislature as the policy authority and secondarily by the Executive Branch as the employer for budget and human resource purposes. Potential actions that can change the cost have been grouped into categories of similar actions:

1. State/Teacher Retirement Plan Modification
2. UAL Amortization
3. Other Sources of Revenue
4. New Retirement Benefit Plan Options

Section III of the report describes the other actions affecting Plan costs, including a discussion of actuarial assumptions and methods used by the MainePERS Board of Trustees as the administrator and fiduciary of the Plan. Section III includes information about the experience study which impacts costs and which is currently underway and scheduled to be completed in March, 2011.

MainePERS makes no assertions or conclusions in this report about the feasibility or legality of any actions that could result in a change to the design of the State/Teacher Plan. The Committee is referred to other resources such as the Office of the Attorney General or Legislative staff throughout the report where appropriate.

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SECTION I - UNDERSTANDING THE STATE/TEACHER PLAN

The Maine State Legislature established a defined benefit retirement plan for state employees and teachers (the "State /Teacher Plan") with the intent to encourage qualified persons to seek and to remain in public employment and to assist employees in providing for their retirement. This Plan offers a lifetime retirement annuity to state employees and teachers and their survivors if applicable. This annuity benefit is determined by a formula based on a percentage of the employee's salary and the number of years worked. State employees and teachers who meet the Plan's vesting and age/service eligibility criteria can apply for and receive a benefit.

PLAN PROVISIONS

The State/Teacher Plan has been in place for several decades. Some of the provisions have changed during the Plan's lifetime, including the adoption of special plans for certain state employee groups. (See Attachment 3) Current Plan provisions for most employees include:

- Age 62 retirement (the normal retirement age is 60 for members with 10 years or more of service as of July 1, 1993 and 62 for members with less than 10 years of service as of July 1, 1993)
- Retirement after 25 years of service (vested members with less than 25 years of service may receive a benefit upon attaining normal retirement age)
    - Members with 25 years of service retiring before normal retirement age receive a 6% per year benefit reduction

Section I Summary

- The State/Teacher Plan is provided in lieu of Social Security participation to 40,000 active and 28,000 retirees
- The normal, or current, cost of the Plan is 5.5% compared to 6.2% for Social Security
- Normal cost is a current payroll cost for active members
- UAL amortization costs are based on past payroll costs and are increasing for FY 2012 going forward from the effects of the 2008 market downturn
- Pension plan design affects human resource management
- Approximately 50% of the workforce leave employment before vesting and do not take employer Plan contributions when they leave
- The Attorney General should be consulted for all changes considered

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- Retirement benefit based on 2% of average final compensation (AFC), which is the average of the highest 3 years' earnings for each year worked
  - Cap on earnings used to calculate AFC
  - AFC based on earnings at date of termination unadjusted for inflation to date of retirement
- 5 year vesting (the point at which a member earns the right to a future benefit, even if the member stops working for the employer before becoming eligible to retire)
- Member contributions withdrawn (with interest) when membership is terminated may be rolled over into other IRS qualified plans
  - Employer contributions always remain with the Plan
- Service credits transferable between employers covered by the Plan
- Disability retirement and death benefits for eligible members
- Post-retirement Cost-of-Living Adjustment (COLA) up to 4% per year
- Members eligible to participate in a group term life insurance program administered by MainePERS

<u>The State/Teacher Plan is Provided in Lieu of Social Security</u>

All employers are required to participate in Social Security or offer a ***qualified replacement plan***. The State/Teacher Plan is an IRS qualified replacement plan provided to employees <u>*in lieu*</u> of Social Security participation.

Maine is one of 14 states that do not participate in Social Security for state employees or teachers while they are active members of the State/Teacher Plan. Neither the State nor covered plan members contribute 6.2% of payroll to Social Security as do most employers and employees.[1] This means that covered members do not earn Social Security credits while employed by the State or other State/Teacher Plan employers. These members are also subject to Social Security offsets. (See Section II Chapter 4)

Current law provides that the State pays 5.5% of payroll and the employee pays 7.65% of salary in the State/Teacher Plan. In addition, both the employee and the employer pay an additional 1.45% Medicare payroll tax for employees hired after 1986.

[1] Employee share of Social Security is reduced to 4.2% of payroll (the employer rate remains 6.2%) as a result of recent federal legislation, for calendar year 2011.

Internal Revenue Service Qualified Replacement Plan Requirements

IRS qualified replacement plan status is required to be maintained in order for covered employees and employers to remain exempt from Social Security participation. MainePERS applies for qualified replacement plan status as the plan administrator and informs the Legislature if changes are needed to retain qualification.

> ***The Choice to Remain a Non-Social Security State***
>
> *A plan provided in lieu of Social Security must meet certain minimum criteria reflective of the benefits of the Old Age, Survivors, and Disability Insurance (OASDI) program. These can be met in either a defined benefit plan or a defined contribution plan.*

The Internal Revenue Service (IRS) maintains requirements for a qualified replacement plan that must be met for states like Maine to continue non-participation in Social Security for state employees and teachers. These IRS requirements are based on the criteria of the Old Age, Survivors, and Disability Insurance (OASDI) program. These IRS requirements can be met in either a defined benefit plan or a defined contribution plan. A "defined benefit" plan is a traditional type of pension plan in which the employer promises a defined monthly benefit at retirement, usually based on salary, years of work, age and a percent of earnings for each year of service. In these plans, the employer/sponsor bears the investment risk. A "defined contribution" plan is becoming more prevalent in the private sector. In these plans, the employee elects to make tax-deferred contributions and bears the investment risk. Employer contributions are not required. (See Section II Chapter 4)

Multiple Employers

Multiple employers cover the active members and retirees participating in the plan in which the State is the employer and pays part of the costs for employees.

Table I.1 – State Employees

Fund Participant	Number of Employers	Active Employees	Inactive Vested Employees	Non-vested Employees	Disability Retirees	Retirees
State of Maine	1	13,862	1,756	3,652	1,009	12,093
Average Age		47.4	51.2	40.9	62.1	71.2
Average Plan Entry Age		34.3	N/A	38.5	N/A	N/A
Average Years at Retirement					52.9	58.7
FY 2010 Retirements					43	498
5 Years to Retirement		5,099	573	0	N/A	N/A
10 Years to Retirement		7,480	946	779	N/A	N/A

* Based on 6/30/2010 Valuation

Teachers are employed by Regional School Units (RSUs). (See Attachment 4) State/Teacher Plan costs are budgeted and paid for by the State of Maine. RSUs do not pay these costs.

The Employer Remits Social Security Payments

State/Teacher Plan costs are paid by the State of Maine. RSUs do not pay this cost. RSUs would be required by federal law to report and pay the cost of Social Security for their employees who are not members of a qualified replacement plan, and obtain funding for this cost from the State.

Table I.2 – Teachers

Fund Participant	Number of Employers	Active Employees	Inactive Vested Employees	Nov-vested Employees	Disability Retirees	Retirees
Regional School Units	222	26,022	4,993	4,497	711	14,435
Average Age		46.8	50.2	37.6	63.6	71.1
Average Plan Entry Age		31.1	N/A	34.8	N/A	N/A
Average Years at Retirement					55.1	59.1
FY 2010 Retirements					16	593
5 Years to Retirement		10,190	1,658	0	N/A	N/A
10 Years to Retirement		15,096	2,479	609	N/A	N/A

* Based on 6/30/2010 Valuation

STATE/TEACHER PLAN COSTS

State/Teacher Plan annual contributions are actuarially determined using assumptions established by the MainePERS Board of Trustees about retirement age, mortality, projected salary increases from merit and inflation, retiree cost-of-living adjustments, investment returns on assets held in trust, and other factors. These budgeted costs are estimates of amounts needed to pay future retirement benefits to eligible employees and are composed of two elements:

Normal Cost - the present value of future pension benefits earned by employees in the current year. Normal costs are calculated based on each year's projected annual collective employee earnings. The current normal costs are approximately 13.15% of payroll shared by employees who pay 7.65% by statute and the State of Maine who pays the remainder.

Unfunded Actuarial Liability (UAL) Cost - Unfunded Actuarial Liability (UAL) - the amount by which the actuarial liability for current and former employees is greater than pension assets. The actuarial liability is the present value of prospective pensions owed to members when they retire based on service as of the calculation date.

UAL costs are amortized over a specified period to bring the plan to full funding. The State of Maine pays these costs. Until FY 2012-2013, UAL amortization costs were approximately 15% of payroll. These costs will increase in FY 2012 and beyond to recover the market losses from 2008.

Normal Cost

Comparing the normal cost of retirement plans provides the best understanding of the cost of a plan. This is because these are the current, or annual, costs to maintain plan funding.

Most employers and employees nationally participate in Social Security. This federal program provides a "safety net" for workers who are either low income earners, have been unable to fully save for retirement, or have lost their retirement savings. It is not intended to be a full retirement program, but does function as an important part of retirement savings for many workers. Workers contribute 6.2% (4.2% in 2011) of their salary to this program subject to earnings limitations.

In addition to Social Security, most large and many smaller employers offer separate retirement plans to their employees. These are often called "supplemental retirement plans" because they supplement Social Security.

Supplemental plans offered by employers have traditionally been defined benefit plans or, more recently, defined contribution plans, commonly referred to as 401(k) plans.

The primary difference between these types of plans is who bears or benefits from the investment risk. New types of hybrid plans where the employer and employee share the investment risk are being discussed to overcome the one-sided investment risk of both the defined benefit and defined contribution plan.

A second important distinction between defined benefit and defined contribution plans is portability. Defined contribution plans do not limit employee mobility. Defined

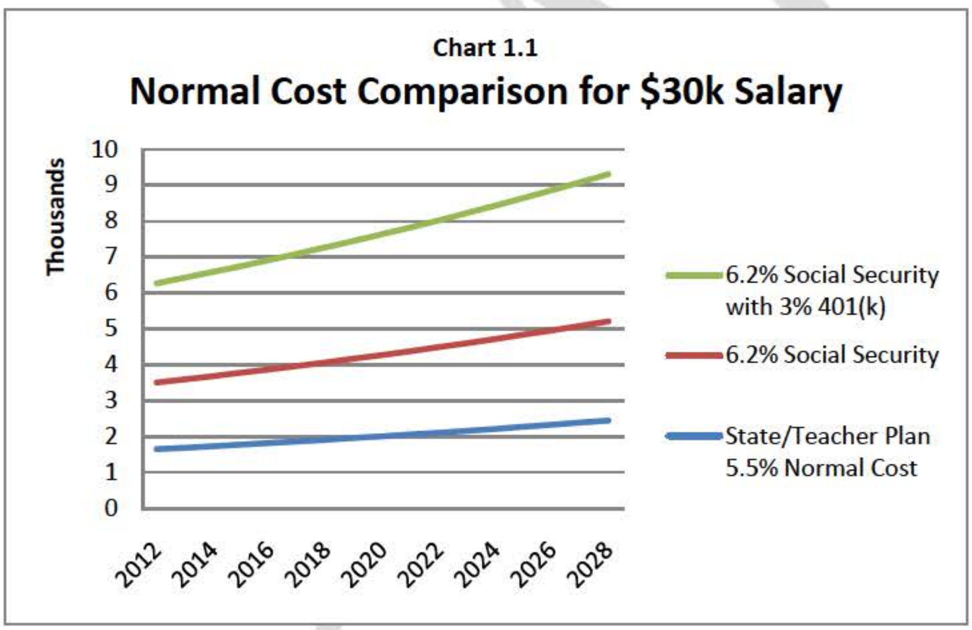
> ***The State/Teacher Plan is not a Supplemental Plan***
>
> *The State/Teacher Plan is provided in lieu of, not supplemental to, Social Security. Neither the State nor covered plan members contribute to Social Security as do most employers. This means that covered members do not earn Social Security credits while employed by the State or other State/Teacher Plan employers. These members are also subject to Social Security offsets. (See Section II Chapter 4)*

benefit plans provide an incentive to remain with an employer because the benefit increases with longevity.

Normal costs of any retirement plan will generally increase over time. This occurs primarily because salaries increase with inflation. A flat percentage applied to salaries that increase over time results in a larger contribution into the plan proportionate to the inflationary effects on salaries. The same effect also occurs if turnover is low and employees are promoted into higher paying jobs. Defined benefit plans are impacted by retirement age and mortality experience, which do not affect defined contribution plans.

The charts below demonstrate how the normal costs of the State/Teacher Plan compare to Social Security and to an employer participating in Social Security and offering a supplemental 401(k) plan with a 3% employer contribution. The chart is based on an employee earning $30,000 in 2011 and receiving a 2.5% average salary increase for inflation and merit.

The costs of the State/Teacher Plan increase less in total dollars than either Social Security or Social Security with a supplemental 401(k) because it has a lower normal cost percentage.



UAL Cost

Employers assume the investment risk in defined benefit plans because they promise a fixed benefit at retirement, regardless of what investments and other experience factors yield. The present value of these fixed benefits for all employees at any given time is the liability of the plan. Comparing the assets of the plan to the liabilities at that same point in time derives the funding ratio of the plan. If there are more assets than liabilities, the plan is "overfunded." If there are less assets than liabilities, the plan is "underfunded."

Defined benefit plans will always be technically over- or underfunded because it is not possible to constantly match the liabilities to the assets. The question is how far over- or underfunded the plan is. There is no standard for determining when a plan is "underfunded", but 80% is often considered a funding level that places a plan in a healthy funding range.

The State/Teacher Plan has been underfunded for most, if not all, of the life of the Plan. The State's actions to reverse this situation in the early 1990s was solidified with a 1995 Constitutional Amendment to fully, or 100%, fund the Plan by 2028. The funding ratio grew from 35% in 1991 to 74% in 2007 before dropping to the 2010 funding level of 66%:

$ 8.3B Assets / $12.6B Liabilities = 66% Funding Ratio (or a $4.3B UAL)

> ***UAL Costs are Past Unpaid Costs***
>
> *The UAL is a current cost that is paid for past plan activity. For this reason it can also be viewed as a debt. While normal costs can be changed by changing plans because they are prospective, UAL costs have already been incurred, and are unpaid costs. They must be paid to retire the liabilities incurred regardless of what type of plan is implemented for future benefits.*

The actuary recalculates the liabilities owed each biennium based on the actual experience of the Plan to date and future expectations of factors such as market return, inflation, and mortality. The estimated liability is used to create a new amortization schedule each biennium that calculates payments through 2028 consistent with the Constitutional requirement to eliminate the historical UAL. If predictions for factors such as inflation or market performance change from the past, the amount of the UAL can also change.

UAL costs increase each year for a similar reason to normal costs increases, i.e. because salaries increase. In addition UAL costs increase each year as the asset losses of 2008 are recognized in the Actuarial Value of Assets. The UAL amortization schedule is recalculated every two years when the UAL is recalculated. Each year's amortization is calculated to be a steady percentage of anticipated payroll. If payroll is anticipated to increase, the UAL payment will also increase. This method allows for budget stability and predictability. For example, prior to the 2008 market downturn, UAL costs were anticipated to be approximately 15% of payroll through 2028.

The amortization schedule was recalculated as of June 30, 2010 as follows to include the constitutionally required recovery of market losses over ten years. Table I.3 illustrates the change in future dollars and current dollars. Using future dollars is the generally accepted method of accounting for pension costs, and includes factors such as salary growth and inflation. This can be confusing because it is difficult to compare it to future budgets which are unknown. Current dollars presents the costs in terms of what those same dollars would be today so that the scale of the year-to-year change can be viewed against today's costs. Current dollars are calculated from future dollars using a 4.5% inflation factor.

Table I.3 – UAL Amortization Schedule
(in millions)

Year	UAL	Annual Payment	
		Future Dollars	Current Dollars
2011	$4,304	$223	
2012	$4,792	$344	$344
2013	$5,083	$361	$345
2014	$5,302	$448	$410
2015	$5,390	$470	$411
2016	$5,423	$548	$459
2017	$5,349	$574	$460
2018	$5,221	$632	$486
2019	$5,007	$662	$487
2020	$4,735	$710	$500
2021	$4,385	$744	$501
2022	$3,966	$738	$475
2023	$3,517	$716	$441
2024	$3,053	$705	$416
2025	$2,564	$706	$398
2026	$2,034	$712	$385
2027	$1,454	$729	$377
2028	$812	$749	$371

* Based on 6/30/2010 Valuation

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Historical Funding Problem

The State/Teacher Plan has a historical underfunding problem which is entirely encompassed in the UAL. It is not the result of current cost for active employees, i.e. the normal cost which is constitutionally required to be paid every year to keep the Plan funded on an on-going basis. However, the most logical basis to spread past costs to employers is on current payroll.

The UAL Is Not a Current Payroll Cost

Retirement plans must be compared on the basis of normal cost without the UAL. The UAL is a past cost separate from the normal cost. If the UAL is 20% of payroll and the State continues the State/Teacher Plan with a normal cost of 5.5%, total retirement plan costs would be 25.5%. If the State enters Social Security at 6.2% with a supplemental 3% 401(k), total retirement costs would be 29.2%.

Therefore, the total (normal plus UAL) cost of the Plan is expressed in terms of percentage of current payroll even though the cost was not incurred for current employees.

When compared on this basis, total costs per employee appear high for the State/Teacher Plan. However, this distorts the true cost of the plan which is closer to the normal costs of 5.5%.

Employment Patterns Affect on Plan Cost

Employee turnover and retention have a substantial effect on the cost of a defined benefit plan. This is because of vesting provisions. Employees who work 5 years or more in the State/Teacher Plan are eligible for a benefit at retirement age. Employees who leave before completing 5 years are not eligible for an employer provided benefit, but may withdraw the contributions they made plus interest. The contributions the State made for employees who do not vest remain in the Plan, acting as a subsidy to reduce total costs. Higher turnover results in a higher subsidy and lower costs.

The following table demonstrates employee retention patterns of members still working after 1 year and the impact on benefits received. The table demonstrates that approximately 50% of these employees leave State service before vesting, and approximately 20% receive a full retirement benefit of 25 or more years of service.

Table I.4 – State/Teacher Plan Impact of Turnover on Benefits Paid

State/Teacher Plan Length of Service	% Working after 5 Years *	Average Annual Benefit
State employees working after 5 years	35%	$3,750
State employees working after 25 years	27%	$24,000
Teachers working after 5 years	39%	$2,900
Teachers working after 25 years	13%	$26,000

* Based on employees who work 1 year or longer

The average annual benefit for all retirees is approximately $18,500. The average annual benefit for state employees with 25 years of service is $24,000, and the average annual benefit for teachers with 25 years of service is $26,000.

SECTION II - LEGISLATIVE AND/OR EXECUTIVE BRANCH ACTIONS AFFECTING STATE/TEACHER PLAN COSTS

The Legislature is the Plan policy maker responsible for plan design and therefore the primary body that can affect State/Teacher Plan costs. The Executive Branch has the responsibility for human resource and budget management and may suggest policy changes through the budget it submits to the Legislature.

Potential Legislative and/or Executive Branch actions have been grouped into categories of similar actions as follows:

Chapter 1 - State/Teacher Retirement Plan Modification

Chapter 2 - UAL Amortization

Chapter 3 - Other Sources of Revenue

Chapter 4 - New Retirement Benefit Plan Options

How Costs for this Section are Calculated

MainePERS completes an actuarial valuation each year 4-5 months after the close of the fiscal year. This length of time is required for two reasons. The first is each employer covered by the Plan must complete their fiscal year end accounting in order to submit their final payroll information. Once this information is received, the actuary performs a complex set of calculations and verifies these numbers before submitting the final valuation to MainePERS. This is the final and official valuation.

MainePERS also provides the State with normal and UAL costs every two years so that the State can budget for the upcoming biennium. If MainePERS waits for the official valuation, the State will not receive the pension costs until after the initial budget process closes. Therefore MainePERS uses an actuarially accepted method for estimating the payroll to calculate

Section II Summary

- IRS qualified replacement Plan status is required for the State/Teacher Plan because it is provided in lieu of Social Security participation and is governed by IRS "safe harbor" rules
- Post-retirement Plan costs such as COLAs are not subject to safe harbor guidelines
- Cost impacts are not additive but unique to each combination of changes
- Extending the UAL amortization schedule requires a Constitutional amendment
- New plans must be compared on the basis of normal costs. The UAL is owed regardless of the current plan offered to employees
- Cost impacts of changes to Plan provisions are cumulative, not additive
- The Attorney General should be consulted for all changes considered

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the liabilities and biennial costs in time for the State budget process. For example, MainePERS provided the State with normal and UAL costs for FY 2012-2013 in July, 2010. These costs will differ slightly from the official valuation, and that difference will be absorbed in the following biennial budget cost calculations.

Ordinarily this process will not result in data timing differences. However, MainePERS has been requested to provide cost information throughout the last fiscal year. Data based on the costs submitted to the State for the biennial budget may be different than data in this report based on the final valuation. This discrepancy ***does not*** reflect inaccurate data, but does require an understanding that estimates of changes to the Plan may differ depending in which timeframe they were prepared. If changes are made to Plan elements that affect cost, the cost impacts of such changes will be made on the official valuation completed in November, 2010.

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Chapter 1 - State/Teacher Retirement Plan Modification

Modifying the State/Teacher Plan will generally result in changes to the cost of the Plan. Increasing the benefits will generally increase the cost of the Plan and decreasing the benefits will generally decrease Plan costs.

The Constitution prohibits the creation of any new unfunded liabilities except through experience such as market losses. Therefore, any benefit changes that result in increased cost must be fully funded when the change is approved by the Legislature. MainePERS presents the costs associated with changes in benefits in this report, but refers all questions about the feasibility or legality of changing benefits to the Office of the Attorney General (Attorney General).

The State/Teacher Plan is an IRS Qualified Replacement Plan

The State of Maine provides the State/Teacher Plan ***in lieu*** *of Social Security to employees. In order to maintain its status as a non-Social Security employer, the State is required to offer a* ***qualified replacement plan*** *to employees that must meet certain requirements.*

Considerations

Important factors in understanding possible changes to this Plan are:

- Specific legal analysis of the sample Plan element changes in this report is not provided. This is because legal analysis is applicable only to specific Plan changes. Generalizations are not reliable. MainePERS pension counsel and the Attorney General can provide analyses for specific Plan element changes.
- Employers use pension benefits as recruitment and retention tools. Individuals considering employment as a State employee or teacher consider these benefits when evaluating their employment decision. Changes to the Plan structure affect the total compensation package of employees who are members of the State/Teacher Plan. Plan members consider other Plan attributes such as retirement eligibility in planning for their retirement or how long to remain in employment.
- In order to maintain its status as a non-Social Security employer, the State is required to offer a ***qualified replacement plan*** to employees in lieu of paying Social Security payroll taxes. This means that a defined benefit plan like the State/Teacher Plan must meet certain minimum benefits requirements.
- Whether a particular plan design qualifies under IRS law as a qualified replacement plan requires specific analysis of the Plan provisions by MainePERS pension counsel and the Attorney General.

- Substantive changes to Plan elements or to the overall Plan must be submitted to the IRS for approval to remain a ***qualified replacement plan*** exempt from Social Security participation. This is not required if the Plan falls within a safe harbor. In addition, substantive changes to Plan elements must be submitted to the IRS for approval and requalification to maintain federal tax-deferred status of employee contributions and all other member benefits of a qualified plan. The typical timeline for IRS review of substantive plan modifications is 18 months.
- One of the fundamental characteristics of a defined benefit plan under Internal Revenue Code section 401(a) is that the plan provides "definitely determinable benefits" upon retirement. This has generally been understood to apply to the basic benefit formula of years of service, retirement age, and final average salary (or average final compensation). Prior IRS guidance has provided that post-retirement adjustments to benefits such as CPI-based COLAs, etc., do not violate the requirement for definitely determinable benefits.
- Distribution options, or how pension benefits are paid to members in retirement, in a defined benefit plan (regardless of whether the plan is supplemental to Social Security or provided in lieu of Social Security) must be designed primarily to provide systematic (annuity) payments over a period of years, usually life. Employer costs must be able to be determined actuarially on the basis of these definitely determinable benefits. Changes in refund of employee contributions or withdrawal options, as well as improving various early retirement options, requires specific legal analysis which has not been performed for this report.

Understanding Cost Impacts of Changes to Eligibility and Benefits

The State/Teacher Plan provisions are described in State law. The Maine State Legislature is the only body that can change the benefit or cost structure of the Plan.

> ***Cumulative not Additive***
>
> *Costs in the report are estimates and cannot be added to determine budget impacts. More precise budget estimates for changes can only be made when considering unique combinations of changes.*

The cost estimates in this report of changes to the Plan are guidelines only and will not be precise for several reasons. First, estimates of cost impacts for changing one Plan element in isolation can be significantly different from the cost impact of changing that same element in conjunction with changes in other elements. Cost impacts are cumulative, not additive. Second, the structure of the State/Teacher Plan is highly complex. The Legislature has historically created benefits unique to specific groups of members, as opposed to all members. This makes precise estimates impossible when demonstrating the broad range of changes included in this report.

Finally, changes to the basic Plan structure have legal implications which are generally complex. Since Plan benefits may constitute contractual rights under Maine's Constitution, an Attorney General's opinion is required for proposed changes. This is true regardless of generalized assumptions that may exist based on previous changes made to the Plan in the 1990s, specifically those indicating there may be a difference when changing plan benefits for vested and non-vested members.

Notwithstanding the complexity of determining the cost impacts of Plan changes, the information included in this report is intended to provide a basic understanding of the varying cost magnitude of changing common Plan elements.

How Cost Impacts Are Demonstrated in This Section

MainePERS has identified elements of the Plan structure that can affect costs if changed. Any omission is unintentional. MainePERS has determined it was not viable to demonstrate the cost impacts of all changes in some Plan elements. These are discussed in Chapter 1.C, Other Changes that Affect Plan Cost.

Changes to Plan elements are grouped into five (5) categories and are briefly described in the following sections:

A. Basic Defined Benefit Formula
B. Basic Benefit Eligibility
C. Other Changes that Affect Plan Cost
D. Normal Cost Contribution Rate Distribution
E. Post-Retirement Benefits (COLA)

Changes to normal and UAL costs associated with the sample Plan structure changes in this report are demonstrated for:

- all members retrospectively and prospectively
- all members prospectively only (starting at July 1, 2011)
- non-vested members retrospectively and prospectively
- non-vested members prospectively only (starting at July 1, 2011)
- new hires only (starting at July 1, 2011)

Costs or other impacts to members or retirees are identified where possible. Characterization of these impacts on members is not included because changes will impact each member differently based on their personal circumstances.

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There are four sets of tables in each of Parts 1.A, 1.B and 1.C. The first table in each of these parts (for example Table 1.A.1) demonstrates how the sample changes affect the total $4.3 billion UAL at 6/30/2010. The second table (for example Table 1.A.2) demonstrates how the sample changes affect the $706 million FY2012-FY 2013 UAL amortization cost. The third table (for example Table 1.A.3) demonstrates how the sample changes affect the $210 million FY2012-2013 normal cost. The fourth table (for example Table 1.A.4) demonstrates how the sample changes affect the combined $916 million normal and UAL amortization cost. In addition, tables demonstrating the impact on member benefits are included if possible.

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1.A - BASIC DEFINED BENEFIT FORMULA

The basic defined benefit formula is the foundation of the State/Teacher Plan retirement benefit.

Defined benefit plans provide a fixed, or definitely determinable, life annuity benefit in retirement. This is made possible through the use of a formula within which benefits can be estimated during a member's career. The basic benefit formula is:

> ***Comparison to Social Security***
>
> *A comparable Social Security benefit for this individual can be reasonably estimated at $1,150 assuming they received an average 2.85% increase in salary for each year worked.*
>
> *State Teacher Plan members contribute 7.65% of their salary to the Plan. An individual in Social Security employment contributing 7.65% would contribute 6.2% (4.2% in 2011) to Social Security and 1.45% to a supplemental plan such as a 401(a), supplementing his or her Social Security with additional contributions.*

Years of service (X) Average Final Compensation (X) Accrual rate

For a State/Teacher Plan member retiring at age 62 with 20 years of service and a $45,000 final average salary, this formula would result in an annual basic retirement benefit of:

20 X $45,000 X 2% = $18,000

The monthly benefit for this individual would be:

$18,000 / 12 = $1,500

<u>Understanding the Cost Impacts of Changes to the State/Teacher Plan Basic Benefit Formula</u>

The basic benefit formula is a straightforward calculation by which an employee's retirement benefit can be estimated. Plan members preparing for their retirement or the employer (State) in budgeting current and future costs can rely on this formula to project benefits or costs.

<u>Average Final Compensation</u> – (AFC) the basic benefit formula provides a retirement benefit commensurate with salary level, i.e. members with higher salaries will earn a higher retirement benefit for the same number of years worked than a member with a lower salary will earn. The formula is based on the higher earning years of an employee's career in order to provide some level of replacement income in retirement. Initial salary levels and the amount of subsequent increases affect the pace at which normal costs and retirement benefits based on a final average salary increase.

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Costs will be higher if benefit level floors exist and lower if benefit level caps exist. The State/Teacher Plan caps the amount of the increase in the second and third highest three years salary that can be included in the AFC at 5% per year or 10% overall.

Length of service - the basic benefit formula encourages retention by allowing employees to earn benefits for each year of service. This component can increase or decrease the retirement benefit and employer costs depending on the structure of the accrual rate.

Accrual rate - the accrual rate, or benefit multiplier, is the most flexible cost component of the formula because it is not influenced by employer hiring practices as are salary and length of service. A step accrual rate- one that varies with years of service - will increase or decrease costs relative to a flat accrual rate depending on whether the step accrual rate is progressive or regressive over time. Progressive step accrual rates increase the additional benefits employees earn and will generally increase costs over time because salaries generally increase over time and the progression encourages longer service. Regressive step accrual rates reduce the additional benefits employees earn for each additional year worked and reduce costs in comparison to a flat accrual rate because it does not encourage longer service.

Average final compensation, years of service, and the accrual rate are the same components the IRS uses to determine "safe harbor" formulas under which a plan is determined to be a qualified replacement plan for purposes of the employee's exemption from Social Security. These three components are interdependent for purposes of IRS safe harbor rules (See Section I – Understanding the State/Teacher Plan or Section III – New Retirement Plan Options).

Important Note

Sample changes have been selected to provide an understanding of materiality. These sample changes are not comprehensive or inclusive, ***and are not recommendations.*** *Some of these changes may not be permissible based on Attorney General advice or opinion. The information in this report does not differentiate what may or may not be permissible under State law unless the Attorney General has approved the statement.*

A broader discussion of the costs of qualified replacement plans for members participating in Social Security is included in Section II Chapter 4 - New Plan Options.

Tables 1.A.1 – 1.A.4 demonstrate the materiality of sample cost and benefit changes to the State/Teacher Plan basic benefit formula. Tables 1.A.5 and 1.A.6 calculate impacts to the member benefit. Costs have been calculated for all, non-vested only or new hire members where applicable.

Table 1.A.1 - Sample State/Teacher Plan Basic Benefit Formula Changes
UAL $4.3B Base Impacts
(in millions)

	All Members		Non-Vested Only		New Hires
	All Years	From 7/1/11	All Years	From 7/1/11	
Flat Accrual Rate					
• *2% Current Accrual Rate	$0	$0	$0	$0	N/A
• 1.5% Accrual Rate	($ 1,269)	($324)	($ 46)	($35)	N/A
Graduated Accrual Rate					
• 2% up to 25 years, 1.0% after 25 years	($ 582)	($332)	($ 10)	($10)	N/A
• 2% up to 25 years, 1.5% after 25 years	($ 292)	($167)	($ 5)	($ 5)	N/A
• ** 1% up to 10 years, 1.5% for 10 to 20 years, 2% for 20 or more years	($1,231)	($117)	($ 59)	($38)	N/A
Early Retirement Reduction Factor					
• 6% before age 60 for Age 60 plan	($ 106)	N/A	N/A	N/A	N/A
• 8% before age 62 for Age 62 plan	($ 42)	N/A	($ 2)	N/A	N/A
Average Final Compensation					
• Five years average	($ 241)	N/A	($ 11)	N/A	N/A
• Ten years average	($ 781)	N/A	($ 33)	N/A	N/A

Changing any of these provisions requires ***Attorney General Advice or Opinion****.*

The changes reflected in the table above are estimates based on the June 30, 2010 valuation data and assumptions. The actual impact of changes will be affected by the demographics of the plans when changes are implemented.

**The current 2% accrual rate is shown for comparison purpose.*

***See Chapter 4 for IRS safe harbor standards. An accrual rate below 1.5% does not meet IRS safe harbor standards. A plan may provide for a graduated accrual rate and still constitute a qualified replacement plan if the accrual rate does not fall below 1.5% provided the plan meets the other minimum standards set forth in IRS guidance. Thorough legal analysis of any graduated option would be required before making a determination that a particular step accrual rate meets IRS safe harbor standards.*

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Table 1.A.2 - Sample State/Teacher Plan Basic Benefit Formula Changes
FY 2012-2013 $706M UAL Cost Budget Impacts
(in millions)

	All Members		Non-Vested Only		New Hires
	All Years	From 7/1/11	All Years	From 7/1/11	
Active Members Accrual Rate					
• *2% Current Accrual Rate	$0	$0	$0	$0	
• 1.5% Accrual Rate	($ 195)	($ 50)	($ 7)	($ 5)	N/A
Graduated Accrual Rate					
• 2% up to 25 years, 1.0% after 25 years	($ 90)	($ 51)	($ 2)	($ 2)	N/A
• 2% up to 25 years, 1.5% after 25 years	($ 45)	($ 26)	($ 1)	($ 1)	N/A
• 1% up to 10 years, 1.5% for 10 to 20 years, 2% for 20 or more years *	($ 189)	($ 18)	($ 9)	($ 6)	N/A
Early Retirement Reduction Factor					
• 6% before age 60 for Age 60 plan	($ 16)	N/A	N/A	N/A	N/A
• 8% before age 62 for Age 62 plan	($ 6)	N/A	$0	N/A	N/A
Average Final Compensation					
• Five years average	($ 37)	N/A	($ 2)	N/A	N/A
• Ten years average	($ 120)	N/A	($ 5)	N/A	N/A

Changing any of these provisions requires ***Attorney General Advice or Opinion****.*

The changes reflected in the table above are estimates based on the June 30, 2010 valuation data and assumptions. The actual impact of changes will be affected by the demographics of the plans when changes are implemented.

**The current 2% accrual rate is shown for comparison purpose.*

***See Chapter 4 for IRS safe harbor standards. An accrual rate below 1.5% does not meet IRS safe harbor standards. A plan may provide for a graduated accrual rate and still constitute a qualified replacement plan if the accrual rate does not fall below 1.5% provided the plan meets the other minimum standards set forth in IRS guidance. Thorough legal analysis of any graduated option would be required before making a determination that a particular step accrual rate meets IRS safe harbor standards.*

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Table 1.A.3 - Sample State/Teacher Plan Basic Benefit Formula Changes FY 2012-2013 $210M Normal Cost Budget Impacts
(in millions)

	All Members		Non-Vested Only		New Hires
	All Years	From 7/1/11	All Years	From 7/1/11	
Active Members Accrual Rate					
• *2% Current Accrual Rate	$0	$0	$0	$0	
• 1.5% Accrual Rate	($ 107)	($ 28)	($ 4)	($ 3)	N/A
Graduated Accrual Rate					
• 2% up to 25 years, 1.0% after 25 years	($ 49)	($ 28)	($ 1)	($ 1)	N/A
• 2% up to 25 years, 1.5% after 25 years	($ 24)	($ 14)	($0)	($0)	N/A
• 1% up to 10 years, 1.5% for 10 to 20 years, 2% for 20 or more years *	($ 104)	($ 10)	($ 6)	($ 3)	N/A
Early Retirement Reduction Factor					
• 6% before age 60 for Age 60 plan	$0	N/A	N/A	N/A	N/A
• 8% before age 62 for Age 62 plan	($ 3)	N/A	($ 0)	N/A	N/A
Average Final Compensation					
• Five years average	($ 20)	N/A	($ 1)	N/A	N/A
• Ten years average	($ 32)	N/A	($ 1)	N/A	N/A

*Changing any of these provisions requires **Attorney General Advice or Opinion**.*

The changes reflected in the table above are estimates based on the June 30, 2010 valuation data and assumptions. The actual impact of changes will be affected by the demographics of the plans when changes are implemented.

**The current 2% accrual rate is shown for comparison purpose.*

***See Chapter 4 for IRS safe harbor standards. An accrual rate below 1.5% does not meet IRS safe harbor standards. A plan may provide for a graduated accrual rate and still constitute a qualified replacement plan if the accrual rate does not fall below 1.5% provided the plan meets the other minimum standards set forth in IRS guidance. Thorough legal analysis of any graduated option would be required before making a determination that a particular step accrual rate meets IRS safe harbor standards.*

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Table 1.A.4 - Sample State/Teacher Plan Basic Benefit Formula Changes
FY 2012-2013 $916M UAL and Normal Cost Budget Impacts
(in millions)

	All Members		Non-Vested Only		New Hires
	All Years	From 7/1/11	All Years	From 7/1/11	
Active Members Accrual Rate					
• *2% Current Accrual Rate	$0	$0	$0	$0	
• 1.5% Accrual Rate	($302)	($ 78)	($ 11)	($ 8)	N/A
Graduated Accrual Rate					
• 2% up to 25 years, 1.0% after 25 years	($139)	($ 79)	($ 3)	($ 3)	N/A
• 2% up to 25 years, 1.5% after 25 years	($ 69)	($ 40)	($ 1)	($ 1)	N/A
• 1% up to 10 years, 1.5% for 10 to 20 years, 2% for 20 or more years *	($293)	($ 28)	($ 15)	($ 9)	N/A
Early Retirement Reduction Factor					
• 6% before age 60 for Age 60 plan	($ 16)	N/A	N/A	N/A	N/A
• 8% before age 62 for Age 62 plan	($ 9)	N/A	$ 0	N/A	N/A
Average Final Compensation					
• Five years average	($ 57)	N/A	($ 3)	N/A	N/A
• Ten years average	($152)	N/A	($ 6)	N/A	N/A

*Changing any of these provisions requires **Attorney General Advice or Opinion**.*

The changes reflected in the table above are estimates based on the June 30, 2010 valuation data and assumptions. The actual impact of changes will be affected by the demographics of the plans when changes are implemented.

These estimates are based on stable earnings and 2.85% annual COLA.

**The current 2% accrual rate is shown for comparison purpose.*

***See Chapter 4 for IRS safe harbor standards. An accrual rate below 1.5% does not meet IRS safe harbor standards. A plan may provide for a graduated accrual rate and still constitute a qualified replacement plan if the accrual rate does not fall below 1.5% provided the plan meets the other minimum standards set forth in IRS guidance. Thorough legal analysis of any graduated option would be required before making a determination that a particular step accrual rate meets IRS safe harbor standards.*

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Member Impacts

Tables 1.A.5 and 1.A.6 demonstrate the impacts of the sample changes in the basic benefit formula for an individual member with 25 years of service and final average compensation of $45,000.

Table 1.A.5 - Sample State/Teacher Plan Basic Benefit Formula Changes Member Retirement Benefit Impacts

Based on an individual with a $45,000 Final Average Compensation in the current State/Teacher Plan	Benefit
Active Members Accrual Rate	
• *2% Current Accrual Rate (20 year State/Teacher career)	*$18,000
• *2% Current Accrual Rate (30 year State/Teacher career)	$27,000
• 1.5% Accrual Rate (20 year State/Teacher career)	$13,500
• 1.5% Accrual Rate (30 year State/Teacher career)	$20,250
Graduated Accrual Rate	
• 2% up to 25 years, 1.0% after 25 years (30 year State/Teacher career)	$24,750
• 2% up to 25 years, 1.5% after 25 years (30 year State/Teacher career)	$25,875
• 1% up to 10 years, 1.5% for 10 to 20 years, 2% for 20 or more years * (20 year State/Teacher career)	$11,250
• 1% up to 10 years, 1.5% for 10 to 20 years, 2% for 20 or more years * (30 year State/Teacher career)	$20,250
Average Final Compensation (using 2% current accrual rate for 20 years)	
• 3 years current Plan Average Final Compensation $45,000	$18,000
• 5 years Average Final Compensation $43.776	$17,510
• 10 years Average Final Compensation $40,907	$16,363

Changing any of these provisions requires ***Attorney General Advice or Opinion****.*

The changes reflected in the table above are estimates based on the June 30, 2010 valuation data and assumptions. The actual impact of changes will be affected by the demographics of the plans when changes are implemented.

**The current 2% accrual rate is shown for comparison purpose.*

***See Chapter 4 for IRS safe harbor standards. An accrual rate below 1.5% does not meet IRS safe harbor standards. A plan may provide for a graduated accrual rate and still constitute a qualified replacement plan if the accrual rate does not fall below 1.5% provided the plan meets the other minimum standards set forth in IRS guidance. Thorough legal analysis of any graduated option would be required before making a determination that a particular step accrual rate meets IRS safe harbor standards.*

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Table 1.A.6 - Sample State/Teacher Plan Early Retirement Reduction Factor Member Retirement Benefit Impacts

Age at Retirement	6% Reduction Factor	Annual Benefit	Monthly Benefit	8% Reduction Factor	Annual Benefit	Monthly Benefit
50	72%	$6,350	$ 535	96%	$ 900	$ 75
51	66%	$7,650	$ 638	88%	$2,700	$ 225
52	60%	$9,000	$ 750	80%	$4,500	$ 375
53	54%	$10,350	$ 864	72%	$6,300	$ 525
54	48%	$11,700	$ 975	64%	$8,100	$ 675
55	42%	$13,050	$1,088	56%	$9,900	$ 825
56	36%	$14,400	$1,200	48%	$11,700	$ 975
57	30%	$15,750	$1,313	40%	$13,500	$1,125
58	24%	$17,100	$1,425	32%	$15,300	$1,275
59	18%	$18,450	$1,538	24%	$17,100	$1,425
60	12%	$19,800	$1,650	16%	$18,900	$1,575
61	6%	$21,150	$1,783	8%	$20,700	$1,725
62	0%	$22,500	$1,875	0%	$22,500	$1,875

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1.B - Basic Benefit Eligibility

Eligibility to receive a benefit is straightforward for most members. Eligibility depends on whether or not a member has vested and if so, whether or not that member is eligible for a benefit based on age or service to receive a benefit.

Vesting - the amount of time required to earn a right to a benefit at retirement eligibility without continuing work under a plan. This is currently five (5) years for most members in the State/Teacher Plan. The vesting requirement was ten (10) years until 1999 when it was changed to the current five (5) years (P.L. 1999, c.489). Increasing the vesting requirement will result in a decrease in employer costs if the current pattern of approximately 50% retention continues. If enough employees begin to stay to achieve 10 year vesting, total Plan costs may begin to increase again.

Normal Retirement age - the age at which a member can draw a benefit without early retirement reduction. This is age 62 for most State/Teacher Plan members. (The normal retirement age is 60 for members with 10 years or more of service as of July 1, 1993 and 62 for members with less than 10 years of service as of July 1, 1993 [P.L. 1993, c.410].)

Service eligibility - the number of years, regardless of age, at which a member qualifies for a full benefit which can be drawn when the employee reaches normal retirement age. This is currently 25 years for most State/Teacher Plan members.

Understanding the Cost Impacts of Changes to the State/Teacher Plan Basic Eligibility

Tables 1.B.1 -1.B.4 demonstrate the cost impacts of sample changes to the basic benefit eligibility.

Cost impacts to members are not included in this section because the impacts of eligibility changes are generally life style impacts.

An increase in vesting, however, may result in the loss of a retirement benefit for members who leave service after 5 years but have not met the increased vesting requirement. This is not possible to quantify because the change in the retention pattern from increasing the vesting requirement cannot be predicted.

> ***Important Note***
>
> *Sample changes have been selected to provide an understanding of materiality. These sample changes are not comprehensive or inclusive,* ***and are not recommendations.*** *Some of these changes may not be permissible based on Attorney General advice or opinion. The information in this report does not differentiate what may or may not be permissible under State law unless the Attorney General has approved the statement.*

Table 1.B.1 - Sample State/Teacher Plan Basic Benefit Eligibility Changes
UAL $4.3B Base Impacts
(in millions)

	All Members		Non-Vested Only		New Hires
	All Years	From 7/1/11	All Years	From 7/1/11	
Vesting*					
• Increase to 10 years	$ 0	N/A	($ 8)	N/A	N/A
Retirement Age - Age 60 group**					
• Increase to Age 65	($ 194)	N/A	$ 0	N/A	N/A
Retirement Age – Age 62 group**					
• Increase to Age 65	($ 491)	N/A	($ 32)	N/A	N/A
Eliminate 25 Year Service Eligibility					
• Increase minimum Retirement Age to 60	($ 128)	N/A	($1)	N/A	N/A
Create Service/Age Eligibility					
• Service + Age ≥ 90	($ 63)	N/A	$ 0	N/A	N/A
Close Special Plans					
• 1998 Special Plan	($ 11)	N/A	($ 5)	N/A	N/A
• '25 No Age' Special Plan	($ 31)	N/A	($ 3)	N/A	N/A

Changing any of these provisions requires ***Attorney General Advice or Opinion****.*

The changes reflected in the table above are estimates based on the June 30, 2010 valuation data and assumptions. The actual impact of changes will be affected by the demographics of the plans when changes are implemented.

** Increasing from 5 to 10 years vesting for a member who already has 5 years would raise IRS issues. The IRS could also take the position that there is a vested benefit at 25 years.*

*** Increasing the normal retirement age for someone who has already reached normal retirement age would raise IRS issues.*

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Table 1.B.2 - Sample State/Teacher Plan Basic Benefit Eligibility Changes
FY 2012-2013 $706M UAL Cost Budget Impacts
(in millions)

	All Members		Non-Vested Only		
	All Years	From 7/1/11	All Years	From 7/1/11	New Hires
Vesting*					
• Increase to 10 years	$0	N/A	($ 1)	N/A	N/A
Retirement Age - Age 60 group**					
• Increase to Age 65	($ 30)	N/A	$ 0	N/A	N/A
Retirement Age – Age 62 group**					
• Increase to Age 65	($ 75)	N/A	($ 5)	N/A	N/A
Eliminate 25 Year Service Eligibility					
• Increase minimum Retirement Age to 60	($ 10)	N/A	$ 0	N/A	N/A
Create Service/Age Eligibility					
• Service + Age ≥ 90	($ 20)	N/A	$ 0	N/A	N/A
Close Special Plans					
• 1998 Special Plan	($ 2)	N/A	($ 1)	N/A	N/A
• '25 No Age' Special Plan	($ 5)	N/A	$ 0	N/A	N/A

*Changing any of these provisions requires **Attorney General Advice or Opinion**.*

The changes reflected in the table above are estimates based on the June 30, 2010 valuation data and assumptions. The actual impact of changes will be affected by the demographics of the plans when changes are implemented.

** Increasing from 5 to 10 years vesting for a member who already has 5 years would raise IRS issues. The IRS could also take the position that there is a vested benefit at 25 years.*

*** Increasing the normal retirement age for someone who has already reached normal retirement age would raise IRS issues.*

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Table 1.B.3 - Sample State/Teacher Plan Basic Benefit Eligibility Changes FY 2012-2013 $210M Normal Cost Budget Impacts

(in millions)

	All Members		Non-Vested Only		New Hires
	All Years	From 7/1/11	All Years	From 7/1/11	
Vesting*					
• Increase to 10 years	($ 1)	N/A	$ 0	N/A	N/A
Retirement Age - Age 60 group**					
• Increase to Age 65	$ 0	N/A	$ 0	N/A	N/A
Retirement Age – Age 62 group**					
• Increase to Age 65	($ 39)	N/A	($ 2)	N/A	N/A
Eliminate 25 Year Service Eligibility					
• Increase minimum Retirement Age to 60	($ 3)	N/A	$ 0	N/A	N/A
Create Service/Age Eligibility					
• Service + Age ≥ 90	($ 1)	N/A	$ 0	N/A	N/A
Close Special Plans					
• 1998 Special Plan	($ 9)	N/A	$ 0	N/A	N/A
• '25 No Age' Special Plan	($ 5)	N/A	$ 0	N/A	N/A

Changing any of these provisions requires ***Attorney General Advice or Opinion****.*

The changes reflected in the table above are estimates based on the June 30, 2010 valuation data and assumptions. The actual impact of changes will be affected by the demographics of the plans when changes are implemented.

** Increasing from 5 to 10 years vesting for a member who already has 5 years would raise IRS issues. The IRS could also take the position that there is a vested benefit at 25 years.*

*** Increasing the normal retirement age for someone who has already reached normal retirement age would raise IRS issues.*

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Table 1.B.4 - Sample State/Teacher Plan Basic Benefit Eligibility Changes
FY 2012-2013 $916M UAL and Normal Cost Budget Impacts
(in millions)

	All Members		Non-Vested Only		New Hires
	All Years	From 7/1/11	All Years	From 7/1/11	
Vesting*					
• Increase to 10 years	($ 1)	N/A	($ 1)	N/A	N/A
Retirement Age - Age 60 group**					
• Increase to Age 65	($ 30)	N/A	$ 0	N/A	N/A
Retirement Age – Age 62 group**					
• Increase to Age 65	($114)	N/A	($ 7)	N/A	N/A
Eliminate 25 Year Service Eligibility					
• Increase minimum Retirement Age to 60	($ 13)	N/A	$ 0	N/A	N/A
Create Service/Age Eligibility					
• Service + Age ≥ 90	($ 21)	N/A	$ 0	N/A	N/A
Close Special Plans					
• 1998 Special Plan	($ 11)	N/A	($ 1)	N/A	N/A
• '25 No Age' Special Plan	($ 10)	N/A	$ 0	N/A	N/A

Changing any of these provisions requires ***Attorney General Advice or Opinion****.*

The changes reflected in the table above are estimates based on the June 30, 2010 valuation data and assumptions. The actual impact of changes will be affected by the demographics of the plans when changes are implemented.

** Increasing from 5 to 10 years vesting for a member who already has 5 years would raise IRS issues. The IRS could also take the position that there is a vested benefit at 25 years.*

*** Increasing the normal retirement age for someone who has already reached normal retirement age would raise IRS issues.*

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1.C - Other Changes that Affect Plan Cost

Cost inputs and ancillary benefits also change plan costs. Cost inputs are experience factors over which the employer has some control. The primary example of a cost input is base salary and subsequent salary increases.

Ancillary benefits are any benefit provided by a pension plan other than the life annuity beginning at the normal retirement age of the plan. For example, disability benefits, survivor benefits and other death benefits are viewed as ancillary to the plan.

Understanding the Cost Impact of Changes to State/Teacher Plan Other Costs

Cost inputs such as salary levels affect plan costs because they are the basis for determining a member's average final compensation. Salaries are an input to the basic benefit formula in Section II - Chapter 1.

Tables 1.C.1 - 1.C.4 demonstrate the cost impacts of other changes that can affect plan cost.

Other potential changes to the State/Teacher Plan that may result in savings, but for which costs have not yet been calculated include the following:

> **Important Note**
>
> *Sample changes have been selected to provide an understanding of materiality. These sample changes are not comprehensive or inclusive,* ***and are not recommendations.*** *Some of these changes may not be permissible based on Attorney General advice or opinion. The information in this report does not differentiate what may or may not be permissible under State law unless the Attorney General has approved the statement.*

1. Redefining earnable compensation to exclude payments currently included. Examples include:

    - Overtime pay
    - Longevity pay
    - Accrued vacation pay at retirement
    - Extracurricular activity earnings

2. Redefining creditable service to no longer grant certain types of credit. Examples include:

    - Accrued, unpaid vacation and sick leave at retirement
    - Extracurricular activities
    - Unpaid leaves of absence

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3. Modifying the Disability Retirement Program. Examples include:
   - Reduce benefit level
   - Change eligibility requirements
   - Change post-disability retirement provisions

4. Changing how interest accrues on member accounts. Examples include:
   - Cessation of interest accrual after some period of inactivity
   - Cessation of interest on accounts of deceased members

5. Changing how service credit purchases are calculated and applied. Examples include:
   - Actuarial cost charged for all service credit purchases
   - Exclude service credit purchases from benefit eligibility requirements

6. Changing retire/rehire policies. Examples include:
   - Suspend service retirement benefits of Plan retirees who return to work for the same employer
   - Reduce the number of days a retiree can work before a suspension of benefits occurs
   - Post-retirement earnings limitations

MainePERS determined it was not feasible to identify sample changes and calculate costs for these elements because they are either Human Resource policy driven or apply to limited group within the Plan. Without calculating these costs, it is not possible to estimate the materiality of changes in these elements on the total cost of the Plan.

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Table 1.C.1 - Sample State/Teacher Plan Ancillary Changes
$4.3B UAL Base Impacts
(in millions)

	All Members		Non-Vested Only		New Hires
	All Years	From 7/1/11	All Years	From 7/1/11	
Interest on Withdrawals					
• Reduce Interest on contributions withdrawn to 2% from current 5%	($ 6)	N/A	($ 1)	N/A	N/A
Death Benefits					
• Eliminate Death Benefits	($ 123)	N/A	($ 6)	N/A	N/A
Accidental Death Benefits					
• Eliminate Accidental Death Benefits	($ 16)	N/A	($ 2)	N/A	N/A
Wage Freeze					
• 1 Year	$ 0	N/A	$ 0	N/A	N/A
• 2 Years	$ 0	N/A	$ 0	N/A	N/A

Changing any of these provisions requires ***<u>Attorney General Advice or Opinion</u>***.

The changes reflected in the table above are estimates based on the June 30, 2010 valuation data and assumptions. The actual impact of changes will be affected by the demographics of the plans when changes are implemented.

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Table 1.C.2 - Sample State/Teacher Plan Ancillary Changes
FY 2012-2013 $706M UAL Cost Budget Impacts
(in millions)

	All Members		Non-Vested Only		New Hires
	All Years	From 7/1/11	All Years	From 7/1/11	
Interest on Withdrawals					
• Reduce Interest on contributions withdrawn to 2% from current 5%	($ 1)	N/A	$ 0	N/A	N/A
Death Benefits					
• Eliminate Death Benefits	($ 19)	N/A	($ 1)	N/A	N/A
Accidental Death Benefits					
• Eliminate Accidental Death Benefits	($ 2)	N/A	$ 0	N/A	N/A
Wage Freeze					
• 1 Year	$ 0	N/A	$ 0	N/A	N/A
• 2 Years	$ 0	N/A	$ 0	N/A	N/A

Changing any of these provisions requires ***Attorney General Advice or Opinion****.*

The changes reflected in the table above are estimates based on the June 30, 2010 valuation data and assumptions. The actual impact of changes will be affected by the demographics of the plans when changes are implemented.

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Table 1.C.3 - Sample State/Teacher Plan Ancillary Changes FY 2012-2013 $210M Normal Cost Budget Impacts

(in millions)

	All Members		Non-Vested Only		New Hires
	All Years	From 7/1/11	All Years	From 7/1/11	
Interest on Withdrawals					
• Reduce Interest on contributions withdrawn to 2% from current 5%	$ 0	N/A	$ 0	N/A	N/A
Death Benefits					
• Eliminate Death Benefits	($ 11)	N/A	($ 1)	N/A	N/A
Accidental Death Benefits					
• Eliminate Accidental Death Benefits	($ 2)	N/A	$ 0	N/A	N/A
Wage Freeze					
• 1 Year	($ 3)	N/A	$ 0	N/A	N/A
• 2 Years	($ 10)	N/A	($ 1)	N/A	N/A

*Changing any of these provisions requires **Attorney General Advice or Opinion**.*

The changes reflected in the table above are estimates based on the June 30, 2010 valuation data and assumptions. The actual impact of changes will be affected by the demographics of the plans when changes are implemented.

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Table 1.C.4 - Sample State/Teacher Plan Ancillary Changes FY 2012-2013 $916M UAL and Normal Cost Budget Impacts
(in millions)

	All Members		Non-Vested Only		New Hires
	All Years	From 7/1/11	All Years	From 7/1/11	
Interest on Withdrawals					
• Reduce Interest on contributions withdrawn to 2% from current 5%	($ 1)	N/A	$ 0	N/A	N/A
Death Benefits					
• Eliminate Death Benefits	($ 30)	N/A	($ 2)	N/A	N/A
Accidental Death Benefits					
• Eliminate Accidental Death Benefits	($ 4)	N/A	$ 0	N/A	N/A
Wage Freeze					
• 1 Year	($ 3)	N/A	$ 0	N/A	N/A
• 2 Years	($ 10)	N/A	($ 1)	N/A	N/A

Changing any of these provisions requires ***Attorney General Advice or Opinion****.*

The changes reflected in the table above are estimates based on the June 30, 2010 valuation data and assumptions. The actual impact of changes will be affected by the demographics of the plans when changes are implemented.

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1.D - NORMAL COST CONTRIBUTION RATE DISTRIBUTION

Normal costs are the costs of benefits earned by active members in the current year under the terms of the Plan. These costs are actuarially determined based on the experience of the Plan as well as projections about the future. (See Section I - Understanding the State/Teacher Plan.)

Normal costs in governmental defined benefit plans have traditionally been shared by the employer and the employee, although many governmental plans are entirely funded by the employer.

Normal cost in sharing between State/Teacher Plan members and the State is governed by state law. The Plan shared these costs on a 50/50 basis until 1993 when P.L. 1993, c. 410 changed the cost sharing formula.

Normal costs for the State/Teacher Plan have been approximately 13.15%. The State has contributed approximately 5.5% of total payroll and employees contribute the statutory 7.65%.

Table 1.D.1 demonstrates the cost impacts on the normal cost of the FY2012-2013 biennium of sample changes to the employee contribution rate.

This cost sharing distribution formula only affects normal costs. There is no cost impact to the UAL amortization.

Table 1.D.1 – State/Teacher Plan Normal Cost Sharing Formula Cost Impact

Employee % of Payroll	(Decrease) / Increase to *Employee* Annual Contribution based on $45,000 Salary	Increase/(Decrease) to FY 2012-2013 *State* Budget	
		Applied to All Members	Applied to New and Non-Vested Only
-0-%	($3,443)	$233.1M	$40.0M
.5%	($3,218)	$217.8M	$37.4M
1.0%	($2,993)	$202.6M	$34.8M
1.5%	($2,768)	$187.4M	$32.2M
2.0%	($2,543)	$172.1M	$29.6M
2.5%	($2,318)	$156.9M	$26.9M
3.0%	($2,093)	$141.7M	$24.3M
3.5%	($1,868)	$126.4M	$21.7M
4.0%	($1,643)	$111.2M	$19.1M
4.5%	($1,418)	$96.0M	$16.5M
5.0%	($1,193)	$80.7M	$13.9M
5.5%	($968)	$65.5M	$11.3M
6.0%	($743)	$50.3M	$8.6M
6.5%	($518)	$35.0M	$6.0 M
7.0%	($293)	$19.8M	$3.4 M
7.65%	$0	$0.0	$0.0
8.0%	$158	($10.7M)	($1.8M)
8.5%	$383	($25.9M)	($4.4M)
9.0%	$608	($41.1M)	($7.1M)
9.5%	$833	($56.4M)	($9.7M)
10.0%	$1,058	($71.6M)	($12.3M)
10.5%	$1,283	($86.8M)	($14.9M)
11.0%	$1,508	($102.1M)	($17.5M)
11.5%	$1,733	($117.3M)	($20.1M)
12.0%	$1,958	($132.5M)	($22.8M)
12.5%	$2,183	($147.8M)	($25.4M)
13.15%	$2,475	($167.6M)	($28.8M)

1.E POST RETIREMENT BENEFITS

Post-retirement benefits are those benefits that are awarded after the member has retired and the defined benefit lifetime annuity has been determined. The cost-of-living-adjustment, or COLA, is the only post-retirement benefit in the State/Teacher Plan.

The MainePERS Board of Trustees sets a COLA each year based on law. Retiree COLAs are calculated for the Board's approval annually by law based on the Consumer Price Index for All Urban Consumers (CPI-U) as of the end of each fiscal year ending June 30th. P.L. 2009, c. 433 (4 M.R.S.A. § 1358, 5 M.R.S.A. §17806, 5 M.R.S.A. §18407) adjusts the percentage change to -0-% if there is a percentage decrease in the CPI-U for the applicable fiscal year. The adjustment for the following year(s) is set based on the actuarially compounded CPI-U for both years in a cost-neutral manner.

The COLA is implemented by MainePERS each September. A member is generally eligible for a COLA in the September following a 12-month period of having received benefits. The State/Teacher Plan COLA compounds each year. This means that a member's first COLA is applied to her/his earned benefit at retirement. The second COLA is applied to the benefit earned at retirement plus the first year's COLA. Each year thereafter similarly compounds.

Understanding the Cost Impacts of Changes to the State/Teacher Plan COLA

Table 1.E.1 demonstrates the cost impacts to the State of sample changes to the COLA for the State/Teacher Plan. Costs are shown for all members/retirees because the changes for only non-vested members are small relative to all members/retirees. Permanently eliminating the COLA for non-vested members only, for example, results in a reduction in the UAL of $71M compared to a reduction of $3.3 billion for all members and retirees.

Table 1.E.2 provides the history of the COLA over the last 28 years. The CPI-U averaged 2.94% for this period while the COLAs that were awarded averaged 2.85%. The difference is due to the cap in years the CPI-U exceeded 4%. Table 1.E.2 also demonstrates the impact on the average State/Teacher Plan COLA if the cap were a different rate during this 28-year period, and what impact this would have had on a member retiring in 1982 with an $8,500 initial annual benefit. Table 1.E.3 demonstrates the impact for a State/Teacher Plan member retiring in 1982 with an $8,500 initial benefit if the COLA were not compounded. This means the CPI-U based COLA would be calculated each year based on the initial retirement benefit, not the initial retirement benefit increased by prior COLAs. These COLAS would be additive, meaning the benefit would increase year after year by the sum of the COLAs.

Table 1.E.1 - Sample State/Teacher Plan
Post-Retirement COLA Changes for All Members/Retirees
(in millions)

	$4.3 Base	UAL Costs ($706M Base)		Normal Costs ($210M base)	
	UAL	FY2012	FY2013	FY2012	FY2013
• Permanently Eliminate	($ 3,300)			($ 67)	
• Eliminate Compounding	($ 2,100)			($ 52)	
• No COLA before Age 65	($ 1,100)			($ 16)	
• Cap at 1%	($ 2,600)			($ 29)	
• Cap at 1% after suspending					
• for 1 year	($2,748)	($206)	($216)	($50)	($52)
• for 2 years	($2,791)	($210)	($220)	($50)	($52)
• for 3 years	($2,832)	($213)	($223)	($50)	($52)
• for 4 years	($2,870)	($216)	($226)	($50)	($52)
• for 5 years	($2,906)	($218)	($229)	($50)	($52)
• for 6 years	($2,940)	($221)	($231)	($50)	($52)
• for 7 years	($2,972)	($223)	($234)	($50)	($52)
• for 8 years	($3,002)	($226)	($236)	($50)	($52)
• for 9 years	($3,029)	($228)	($238)	($50)	($52)
• for 10 years	($3,054)	($229)	($240)	($50)	($52)
• Cap at 2%					
• Cap at 2% after suspending					
• for 1 year	($2,079)	($156)	($164)	($34)	($36)
• for 2 years	($2,171)	($163)	($171)	($34)	($36)
• for 3 years	($2,259)	($170)	($178)	($34)	($36)
• for 4 years	($2,341)	($176)	($184)	($34)	($36)
• for 5 years	($2,419)	($182)	($190)	($34)	($36)
• for 6 years	($2,492)	($187)	($196)	($34)	($36)
• for 7 years	($2,560)	($192)	($201)	($34)	($36)
• for 8 years	($2,623)	($197)	($206)	($34)	($36)
• for 9 years	($2,682)	($201)	($211)	($34)	($36)
• for 10 years	($2,736)	($206)	($215)	($34)	($36)

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Table 1.E.1 Cont'd - Sample State/Teacher Plan
Post-Retirement COLA Changes for All Members/Retirees
(in millions)

	$4.3 Base	UAL Costs ($706M Base)		Normal Costs ($210M base)	
	UAL	**FY2012**	**FY2013**	**FY2012**	**FY2013**
• Cap at 3%					
• Cap at 3% after suspending					
• for 1 year	($1,314)	($99)	($103)	($16)	($16)
• for 2 years	($1,464)	($110)	($115)	($16)	($16)
• for 3 years	($1,606)	($121)	($126)	($16)	($16)
• for 4 years	($1,739)	($131)	($137)	($16)	($16)
• for 5 years	($1,864)	($140)	($147)	($16)	($16)
• for 6 years	($1,983)	($149)	($156)	($16)	($16)
• for 7 years	($2,092)	($157)	($165)	($16)	($16)
• for 8 years	($2,193)	($165)	($173)	($16)	($16)
• for 9 years	($2,288)	($172)	($180)	($16)	($16)
• for 10 years	($2,375)	($178)	($187)	($16)	($16)
• Cap at 4%					
• Cap at 4% after suspending					
• for 1 year	($435)	($33)	($34)	0	0
• for 2 years	($652)	($49)	($51)	0	0
• for 3 years	($857)	($64)	($67)	0	0
• for 4 years	($1,050)	($79)	($83)	0	0
• for 5 years	($1,231)	($92)	($97)	0	0
• for 6 years	($1,400)	($105)	($110)	0	0
• for 7 years	($1,558)	($117)	($123)	0	0
• for 8 years	($1,704)	($128)	($134)	0	0
• for 9 years	($1,839)	($138)	($145)	0	0
• for 10 years	($1,965)	($148)	($155)	0	0

*Changing any of these provisions requires **Attorney General Advice**.*

The changes reflected in the table above are estimates based on the June 30, 2010 valuation data and assumptions. The actual impact of changes will be affected by the demographics of the plans when changes are implemented.

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COLAs can be calculated in many ways. A sample method that differs from the State/Teacher Plan is a non-cumulative COLA. This method is calculated by applying an inflation factor (for example the current year's CPI-U) to the original benefit instead of to the prior year's benefit with cumulative COLAs.

Member Impacts

Table 1.E.2 demonstrates the impact of changing the COLA CPI-U based cap but otherwise using the current State/Teacher Plan COLA methodology; and the impact of using the current CPI-U based cap of 4% but using a non-cumulative methodology. Other COLA methodologies exist but are not demonstrated as samples in this report.

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Table 1.E.2 - Effects of Differing COLA Options for Individuals with $8,500 Retirement Benefit in 1982

Year Ending 6/30	CPI-U	Actual 4% COLA Cap	$8,500 Benefit Actual 4% Cap	3% COLA Cap	$8,500 Benefit 3% Cap COLA	2% COLA Cap	$8,500 Benefit 2% Cap COLA	1% COLA Cap	$8,500 Benefit 1% Cap COLA	Non-Cum 4% Cap COLA
2010	1.1%	0.0%	$18,636	0.00%	$16,241	0.00%	$13,797	0.00%	$11,010	$15,283
2009	-1.4%	0.0%	$18,636	0.00%	$16,241	0.00%	$13,797	0.00%	$11,010	$15,283
2008	5.0%	4.0%	$18,636	3.00%	$16,241	2.00%	$13,797	1.00%	$11,010	$15,283
2007	2.7%	2.7%	$17,919	2.70%	$15,768	2.00%	$13,527	1.00%	$10,901	$14,943
2006	4.3%	4.0%*	$17,448	3.00%	$15,354	2.00%	$13,262	1.00%	$10,793	$14,714
2005	2.5%	2.5%	$16,777	2.50%	$14,906	2.00%	$13,002	1.00%	$10,686	$14,374
2004	3.3%	3.3%	$16,368	3.00%	$14,543	2.00%	$12,747	1.00%	$10,580	$14,161
2003	2.1%	2.1%	$15,845	2.10%	$14,119	2.00%	$12,497	1.00%	$10,475	$13,881
2002	1.1%	1.1%	$15,519	1.10%	$13,829	1.10%	$12,252	1.00%	$10,372	$13,702
2001	3.2%	3.2%	$15,350	3.00%	$13,678	2.00%	$12,118	1.00%	$10,269	$13,609
2000	3.9%	3.9%	$14,874	3.00%	$13,280	2.00%	$11,881	1.00%	$10,167	$13,337
1999	1.9%	1.9%	$14,316	1.90%	$12,893	1.90%	$11,648	1.00%	$10,067	$13,005
1998	1.5%	1.5%	$14,049	1.50%	$12,653	1.50%	$11,431	1.00%	$9,967	$12,844
1997	2.1%	2.1%	$13,841	2.10%	$12,466	2.00%	$11,262	1.00%	$9,868	$12,716
1996	2.8%	2.8%	$13,556	2.80%	$12,209	2.00%	$11,041	1.00%	$9,771	$12,538
1995	3.1%	3.1%	$13,187	0.03%	$11,877	2.00%	$10,824	1.00%	$9,674	$12,300
1994	2.4%	2.4%	$12,791	2.40%	$11,873	2.00%	$10,612	1.00%	$9,578	$12,036
1993	3.0%	3.0%	$12,491	3.00%	$11,595	2.00%	$10,404	1.00%	$9,483	$11,832
1992	3.1%	3.1%	$12,127	3.10%	$11,257	2.00%	$10,200	1.00%	$9,389	$11,577
1991	4.7%	4.0%	$11,762	3.00%	$10,919	2.00%	$10,000	1.00%	$9,296	$11,314
1990	4.7%	4.0%	$11,310	3.00%	$10,601	2.00%	$9,804	1.00%	$9,204	$10,974
1989	5.2%	4.0%	$10,875	3.00%	$10,292	2.00%	$9,612	1.00%	$9,113	$10,634
1988	4.0%	4.0%	$10,457	3.00%	$9,992	2.00%	$9,423	1.00%	$9,023	$10,294
1987	3.7%	3.7%	$10,055	3.00%	$9,701	0.02%	$9,238	1.00%	$8,934	$9,954
1986	1.8%	1.7%	$9,696	1.80%	$9,419	1.80%	$9,237	1.00%	$8,845	$9,639
1985	3.8%	3.7%	$9,534	3.00%	$9,252	2.00%	$9,073	1.00%	$8,758	$9,495
1984	4.2%	4.0%	$9,194	3.00%	$8,983	2.00%	$8,895	1.00%	$8,671	$9,180
1983	2.6%	4.0%	$8,840	2.60%	$8,721	2.60%	$8,721	1.00%	$8,585	$8,840
Average	**2.94%**	**2.85%**		**2.34%**		**1.75%**		**0.93%**		

COLA increase to reflect CPI-U (P.L. 2001, c. 181) for August 2002 forward. Maximum increase is 4%.

**CPI-U exceeded 4.0%. Legislative approval required for PLDs and Judges; Governor's approval required for State/teacher and Legislative plan retirees to receive increase in excess of the 4% cap.*

Chapter 2 - UAL Amortization

Action

Change the UAL amortization schedule under which the UAL must be retired.

Considerations

Important factors in understanding possible changes to the UAL retirement schedule are:

- Attorney General consultation is recommended for lengthening the UAL amortization schedule because provisions set forth in Article IX Section 18-B of the Constitution of the State of Maine state that "Each fiscal year beginning with the fiscal year starting July 1, 1997, the Legislature shall appropriate funds that will retire in 31 years or less the unfunded liabilities of the Maine State Retirement System that are attributable to state employees and teachers."
- Attorney General consultation is recommended for changing experience loss amortization, including investment losses, because provisions set forth in Article IX Section 18-A state that "Unfunded liabilities may not be created except those resulting from experience losses. Unfunded liability resulting from experience losses must be retired over a period not exceeding 10 years."
- Attorney General consultation is recommended for shortening either the UAL or experience loss amortization schedules because this is accomplished through accelerated payments and does not violate constitutional provisions.

Understanding How the UAL is Calculated

The UAL amortization schedule is calculated every two years based on the total UAL and the number of years remaining until the 2028 constitutional full funding target. The UAL and the corresponding amortization schedule are calculated using generally accepted actuarial standards.

The UAL is the difference between the pension liabilities at a date in time and the value of the assets at that same date. In general, the liabilities in the State/Teacher Plan are the prospective pensions owed to members when they retire based on service as of the calculation date. This number is calculated in current dollars.

Assets are calculated using two methods. The first method is called the actuarial value of assets where investment gains and losses are "smoothed in" over a three year time period. (Some plans use 5, 8, and up to 10 year or higher smoothing). This method reduces the volatility of the difference between assets and liabilities over time. The second method is using the actual market value of the assets on the date the liabilities are calculated. The market value reflects the full volatility of the markets.

The UAL for the State/Teacher Plan is calculated under the assumption the plan will continue. Therefore, the UAL is based on subtracting actuarial value of assets from the liabilities of the plan. This results in a UAL of $4.3 billion at June 30, 2010:

$12,617,144,005 - $8,313,459,810 = $4,303,684,195

<u>How the UAL Amortization Schedule is Developed</u>

MainePERS' actuary calculates an amortization schedule for the UAL every two years based on generally accepted actuarial principles and the Maine Constitution.

The amortization schedule is developed in a way the State can pay a level percentage of total payroll every year, i.e. payments are scaled to the budget instead of being calculated as a flat amount. This assists the State with biennium to biennium budgeting by aligning the future value of State payments with the future value of budgets.

Chart 2.1 demonstrates how UAL payments going forward increase in current dollars in relation to FY 2011 cost while normal costs remain level. Both UAL and normal costs increase over time when economic considerations such as inflation are factored in.

Chart 2.1 – Projected State/Teacher Plan Normal and UAL Cost through 2030

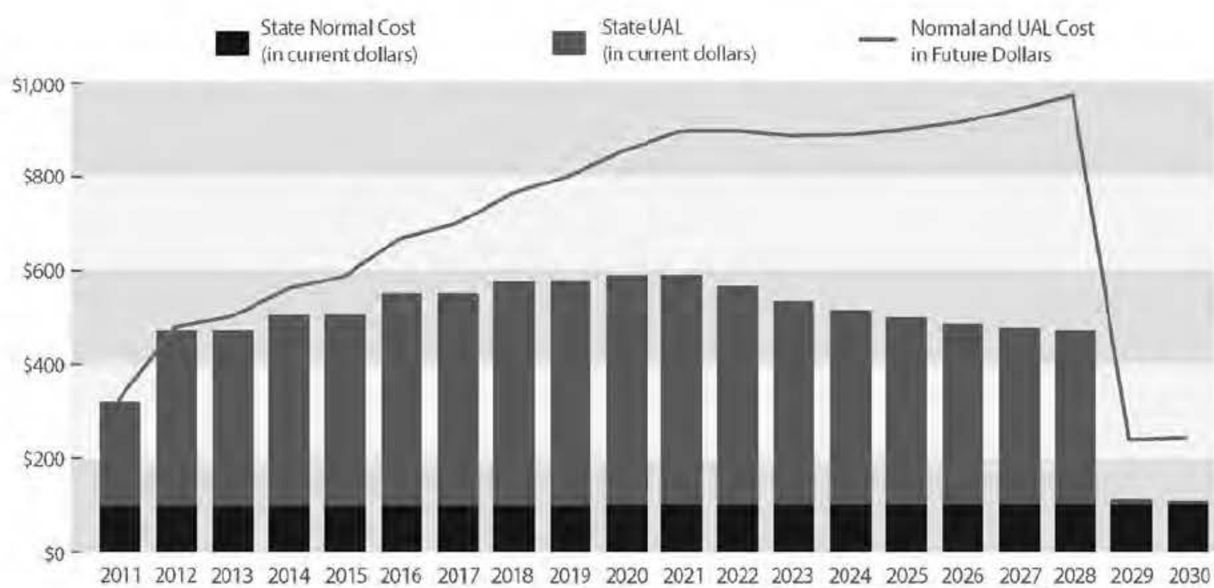
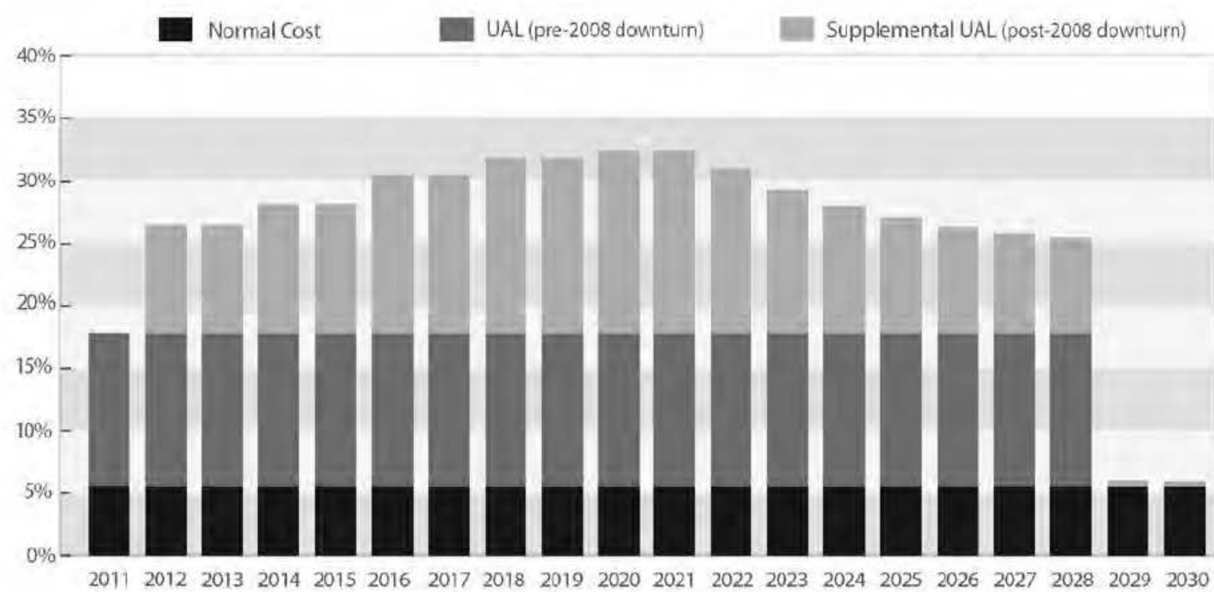


Chart 2.2 demonstrates how Plan cost percentage of payroll before the 2008 market downturn was anticipated to remain level. The additional payments now required to amortize the 2008 market downturn add a shorter-term increase and decrease as these market losses are recovered over a ten year period.

Chart 2.2 – Projected State/Teacher Plan

Normal and UAL Cost as a Percentage of Payroll through 2030



Understanding Cost Impacts of Changes to the State/Teacher Plan UAL Schedule

Shortening the timeframes in which the UAL must be retired or market losses must be recovered can be accomplished at any time through increased annual contributions to the Plan. This action will result in lower cumulative UAL costs if other factors remain relatively constant.

Lengthening the timeframe in which the UAL must be retired will result in increased cumulative UAL costs unless the State elects not to use the increased time available. This concept assumes that the Constitution would be amended.

2.A - EXTENDING THE FULL FUNDING TARGET DATE

Examples demonstrating the impacts of extending the full funding target date assumes the Constitution would be amended.

Understanding the Cost Impacts of Extending the State/Teacher Plan UAL Amortization

Lengthening the timeframe in which the UAL must be retired will result in increased cumulative UAL costs similar to the way a mortgage works unless the State elects not to use the increased time available. Two examples, assuming the Constitution would be amended, demonstrate the short and long-term cost impacts of lengthening the timeframe in which the UAL must be retired:

1. Establish a new amortization schedule based on a fixed date beyond 2028 for retiring the UAL. For example, the full funding deadline could be moved out 5, 10, 15 or some other increment of years into the future.
2. Implement a "rolling" amortization where the remaining balance is amortized every year over the same fixed term. Using a 20 year rolling amortization method as an example, and ignoring interest, if $100 is owed then the first year's amortization is $100/20 = $5, leaving a remaining balance of $100 - $5 = $95. The second year's amortization is $95/20 = $4.75, and so on. The result of a rolling amortization method is that, eventually, the balance is small enough to be retired in one year.

Table 2.A.1 compares the cost impacts of extending the date for retiring the UAL by 10 years to 2038 compared to the current 6/30/2010 amortization schedule. The small residual amounts remaining in the current schedule after 2028 are for market losses which are smoothed in on a rolling 3 year schedule. Table 2.A.2 compares these same costs in terms of current dollars to demonstrate the year-to-year difference in terms of FY 2011 costs.

> ***Important Note***
>
> *Each method is compared to the current amortization schedule required by the Constitution so that the cost of extension can be understood in terms of both future and current dollars. The current dollar schedules demonstrate the size of each annual payment and the total payments in relation to today's budget or economic environment.*

Table 2.A.3 compares the cost impacts of a 20 year rolling amortization schedule to the current 6/30/2010 amortization schedule. These costs are presented through 2040 to demonstrate the annual differences in cost. Table 2.A.4 compares these same costs in terms of current dollars to demonstrate the

year-to-year difference in terms of FY2011 costs. A rolling amortization schedule assumes experience losses such as market losses are amortized on the same basis as the UAL.

Total costs increase in both methods because the length of time to pay the UAL is increasing. Which method creates higher long-term costs depends on the length of the fixed extension date or the number of years in which rolling is calculated. These are examples only and can be calculated for any length of extension or rolling period.

These examples are also graphically compared to the current amortization schedule. (Charts 2.A.1 and 2.A.2)

Member Impact

There is no direct impact on members.

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FIXED 2038 UAL AMORTIZATION SCHEDULE

Table 2.A.1 - Sample State/Teacher Plan FIXED 2038 UAL Amortization with Future Losses Amortized Over 10 Years (in future dollars)

Fiscal Year Ending	Current UAL Payment Schedule (in future dollars)	Extend 6/30/10 UAL Payments to 2038 (in future dollars)	Difference (in future dollars)
2012	$344	$249	($95)
2013	$361	$261	($99)
2014	$448	$334	($114)
2015	$470	$350	($119)
2016	$548	$422	($126)
2017	$574	$442	($132)
2018	$632	$494	($138)
2019	$662	$517	($145)
2020	$710	$559	($152)
2021	$744	$585	($159)
2022	$738	$588	($151)
2023	$716	$559	($157)
2024	$705	$542	($163)
2025	$706	$535	($170)
2026	$712	$534	($178)
2027	$729	$542	($187)
2028	$749	$554	($196)
2029	$21	$572	$550
2030	$15	$591	$576
2031	$11	$614	$603
2032	$8	$640	$632
2033	$6	$668	$662
2034	$4	$697	$693
2035	$3	$729	$726
2036	$2	$763	$761
2037	$2	$798	$797
2038	$1	$836	$835
Total Cost	**$10,622**	**$14,976**	**$4,354**

Changing the UAL amortization schedule requires a Constitutional amendment.

The changes reflected in the table above are estimates based on the June 30, 2010 valuation data and assumptions. The actual impact to the amortization will be affected any other changes adopted.

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Table 2.A.2 - Sample State/Teacher Plan FIXED 2038 UAL Amortization with Future Losses Amortized Over 10 Years (in current dollars)

Fiscal Year Ending	Current UAL Payment Schedule (in current dollars)	Extend 6/30/10 UAL Payments to 2038 (in current dollars)	Difference (in current dollars)
2012	$344	$249	($95)
2013	$345	$250	($95)
2014	$410	$306	($104)
2015	$411	$307	($105)
2016	$459	$353	($106)
2017	$460	$354	($106)
2018	$486	$379	($106)
2019	$487	$380	($107)
2020	$500	$393	($107)
2021	$501	$394	($107)
2022	$475	$378	($97)
2023	$441	$345	($97)
2024	$416	$320	($96)
2025	$398	$302	($96)
2026	$385	$288	($96)
2027	$377	$280	($96)
2028	$371	$274	($97)
2029	$10	$271	$260
2030	$7	$268	$261
2031	$5	$266	$261
2032	$3	$265	$262
2033	$2	$265	$263
2034	$2	$265	$263
2035	$1	$265	$264
2036	$1	$265	$265
2037	$1	$266	$265
2038	$0	$266	$266
Total Cost	**$7,297**	**$8,215**	**$918**

Changing the UAL amortization schedule requires a Constitutional amendment.

The changes reflected in the table above are estimates based on the June 30, 2010 valuation data and assumptions. The actual impact to the amortization will be affected any other changes adopted.

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20 YEAR ROLLING UAL AMORTIZATION SCHEDULE

Table 2.A.3 - Sample State/Teacher Plan ROLLING 20 Year UAL Amortization (in future dollars)

Fiscal Year Ending	Current UAL Payment Schedule (in future dollars)	20 Year Rolling Amortization (in future dollars)	Difference (in future dollars)
2012	$344	$296	($49)
2013	$361	$298	($63)
2014	$448	$348	($100)
2015	$470	$351	($119)
2016	$548	$382	($165)
2017	$574	$385	($188)
2018	$632	$403	($229)
2019	$662	$406	($256)
2020	$710	$417	($294)
2021	$744	$420	($324)
2022	$738	$428	($311)
2023	$716	$428	($288)
2024	$705	$430	($275)
2025	$706	$433	($273)
2026	$712	$437	($276)
2027	$729	$440	($289)
2028	$749	$444	($305)
2029	$21	$448	$427
2030	$15	$452	$437
2031	$11	$439	$428
2032	$8	$424	$416
2033	$6	$405	$399
2034	$4	$391	$387
2035	$3	$382	$379
2036	$2	$375	$373
2037	$2	$372	$370
2038	$1	$369	$368
2039	$1	$369	$368
2040	$1	$369	$369

Changing the UAL amortization schedule requires a Constitutional amendment.

The changes reflected in the table above are estimates based on the June 30, 2010 valuation data and assumptions. The actual impact to the amortization will be affected any other changes adopted.

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Table 2.A.4 - Sample State/Teacher Plan ROLLING 20 Year UAL Amortization (in current dollars)

Fiscal Year Ending	Current UAL Payment Schedule (in current dollars)	20 Year Rolling Amortization (in current dollars)	Difference (in current dollars)
2012	$344	$296	($49)
2013	$345	$285	($60)
2014	$410	$319	($92)
2015	$411	$307	($104)
2016	$459	$321	($139)
2017	$460	$309	($151)
2018	$486	$309	($176)
2019	$487	$298	($188)
2020	$500	$293	($206)
2021	$501	$283	($218)
2022	$475	$275	($200)
2023	$441	$264	($177)
2024	$416	$254	($162)
2025	$398	$244	($154)
2026	$385	$236	($149)
2027	$377	$227	($149)
2028	$371	$220	($151)
2029	$10	$212	$202
2030	$7	$204	$198
2031	$5	$190	$185
2032	$3	$176	$172
2033	$2	$161	$158
2034	$2	$149	$147
2035	$1	$139	$138
2036	$1	$130	$130
2037	$1	$124	$123
2038	$0	$118	$117
2039	$0	$112	$112
2040	$0	$108	$107

Changing the UAL amortization schedule requires a Constitutional amendment.

The changes reflected in the table above are estimates based on the June 30, 2010 valuation data and assumptions. The actual impact to the amortization will be affected any other changes adopted.

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These two examples of a fixed UAL deadline extension to 2038 and a rolling 20 year UAL amortization are graphically compared to the current fixed UAL amortization schedule ending in 2028.

Chart 2.3 – Projected State/Teacher Plan

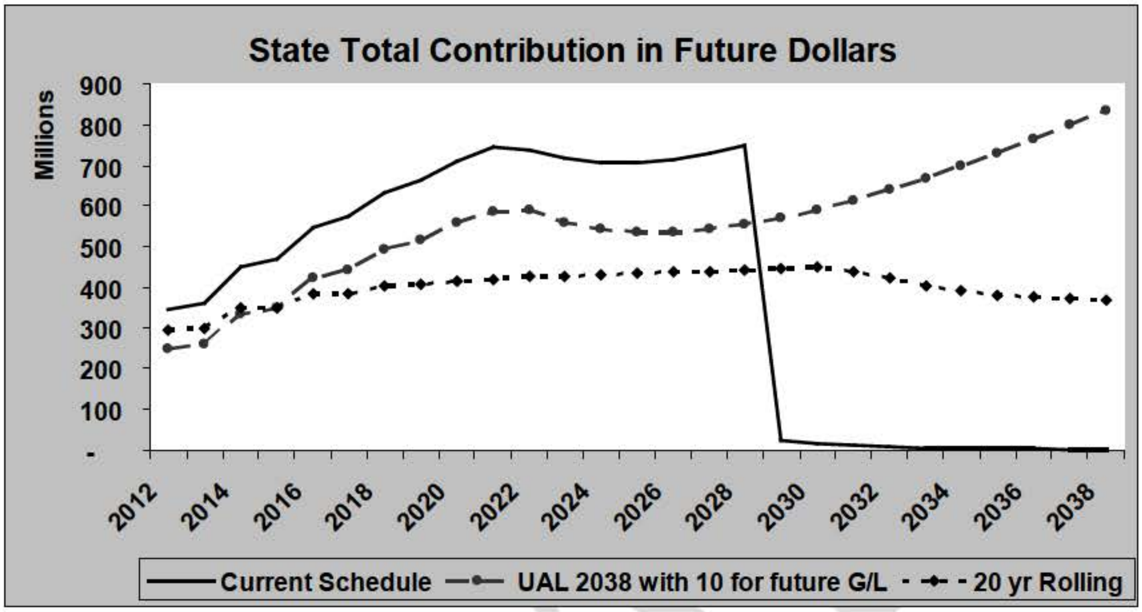
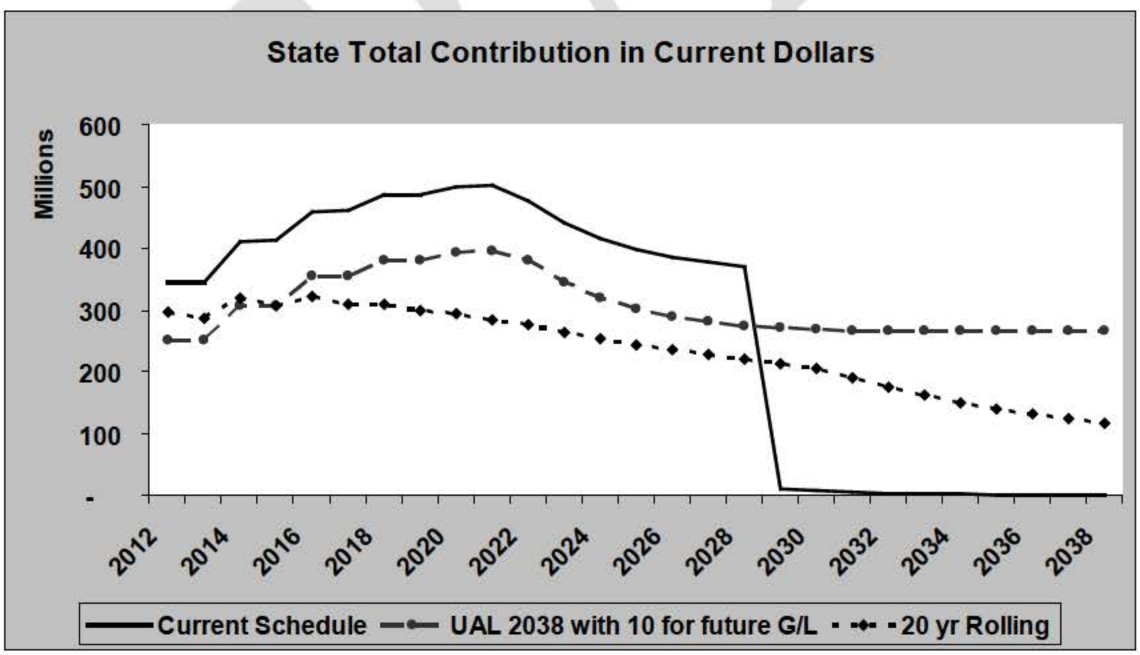


Chart 2.4 – Projected State/Teacher Plan



Chapter 3 - Other Sources of Revenue

Action

Use other sources of revenue to bring the UAL to full funding.

Considerations

Other sources of revenue generally include dedicated tax revenues or pension obligation bonds (POBs). This report briefly addresses POBs only.

- POBs historically have proved challenging to do successfully in many instances. They have been used successfully and unsuccessfully by various organizations. Some Maine local governments used POBs successfully in the last decade to bring their plans to full funding.
- POBs require participation from the Office of the State Treasurer, Office of the Attorney General, and retained bond counsel.

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3.A - Pension Obligation Bonds

What are Pension Obligation Bonds?

A POB is a debt instrument of a government entity, backed by tax revenues, and issued to fund the payment of its obligation to a pension plan. In order for the employer to achieve long-term budgetary relief, the interest rate paid on the bonds needs to be less than the rate of return earned on proceeds placed in the pension plan.

Prior to the Tax Reform Act of 1986 ["TRA"], state governments could issue bonds on a tax exempt basis and turn around and invest the proceeds in higher-yielding taxable securities through the pension fund (a non-taxable entity) and "lock-in" a greater rate of return for the life of the bond. The ability of government entities to engage in this "interest rate arbitrage" was eliminated by the TRA by elimination of the tax exemption for POBs. However, the use of POBs entails the use of "financial risk arbitrage", where in order to achieve a positive return on its overall investment, the issuer needs to invest in securities, which are generally riskier investments than bonds.

Achieving an overall positive return may be possible because: 1) pension funds generally may invest in a much broader range of investments than the state or local governments, and the size and diversity of the pension fund's portfolio allows for a higher risk profile than the state or local government could prudently sustain with its own investments; and 2) the actual investment performance of most pension systems (at least in most years) has historically exceeded the assumed investment return rate.

Contributing bond proceeds to the pension fund may result in reduced UAL or reduced normal annual contributions, or both.

Some commentators have argued that the use of POBs is better than the alternatives facing plan sponsors: 1) raising employer contribution rates; 2) raising employee contribution rates; 3) reducing benefits; or 4) betting that gains on pension fund investments will substantially exceed the assumed rate of investment return. On the other hand, the issuer of a POB needs to recognize that it is assuming the additional risks of market volatility and investment losses.

Considerations

- There are several types of POBs. State Treasurer and Attorney General Advice are required before determining the feasibility and legality of POBs.
- State and local governments have had varying levels of success with POBs. Several local governments in Maine successfully funded their pension obligation in the last decade with POBs.

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- Notable POB failures have also occurred, where market volatility and investment losses were greater than expected.
- POBs can be issued on a biennial basis as needed for pension costs, for part of the UAL, or for all of the UAL.

Understanding the Cost Impact to the State/Teacher Plan of Issuing POBs

The direct cost impact depends upon the type of bond used, the amount and length of the issuance, and the interest rate required at the time of issuance. The indirect cost impact depends upon investment returns on bond proceeds paid to MainePERS and whether or not reduced contributions would be required in the future due to market gains or additional contributions would be required to cover market losses.

Table 3.A.1 demonstrates the sample cost of 30 year fixed, level debt service POBs for $4.3 billion, or the amount of the UAL at 6/30/2010, and $287 million, the difference in total pension costs from FY2010-2011 to FY2012-2013. This data was obtained through the Maine State Office of the Treasurer, and prepared by Public Financial Management, Inc. Attachment 7 includes expanded schedules for each sample POB issuance.

Impact to Members

There is generally no impact to members. If the pension fund becomes overfunded due to a combination of POB proceeds and market gains, the potential exists to provide members with new benefits based on a funding level at a point in time.

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Table 3.A.1 - Sample State/Teacher Plan
30 Year, Fixed, Level Debt Service POB Scenarios

	Scenario 1 – $4.3 billion	Scenario 2 – $287 million
Dated Date	04/01/2011	04/01/2011
Delivery Date	04/01/2011	04/01/2011
First Coupon	12/01/2009	12/01/2009
Last Maturity	06/01/2041	06/01/2041
Arbitrage Yield	6.660916%	6.660916%
True Interest Cost (TIC)	6.728686%	6.728686%
Net Interest Cost (NIC)	6.713073%	6.713072%
All-in TIC	6.729818%	6.745671%
Average Coupon	6.678360%	6.678360%
Average Life (years)	20.165	20.165
Duration of Issue (years)	10.692	10.692
Par Amount	$4,300,000,000	287,000,000
Bond Proceeds	$4,300,000,000	287,000,000
Total Interest	$5,790,879,191	386,509,949
Net Interest	$5,820,979,191	388,518,949
Total Debt Service	$10,090,879,191	673,509,949
Maximum Annual Debt Service	$334,781,213	22,347,608
Average Annual Debt Service	334,504,283	22,326,297
Underwriter's Fees (per $1,000)		
Average Takedown		
Other Fee	7.000000	7.000000
Total Underwriter's Discount	7.000000	7.000000
Bid Price	99.300000	99.300000

Consideration of pension obligation bonds requires opinion and consultation from the Maine State Office of the Treasurer.

This data was obtained through the Maine State Office of the Treasurer, and prepared by Public Financial Management, Inc. Attachment 7 includes expanded schedules for each sample POB issuance.

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Chapter 4 - New Retirement Plan Options

Action

Implement a new retirement plan for some or all State employees and teachers or for new hires.

Considerations

- A separate retirement plan for new hires was studied under Maine State Resolve 111, "To Reform Public Retirement Benefits and Eliminate Social Security Offsets." The Unified Retirement Plan (URP) task force appointed under Resolve 111 studied new plan design and presented its findings to the Joint Standing Committee on Appropriations and Financial Affairs and the Joint Standing Committee on Labor on March 8, 2010. No action was taken on the report during the 124th Legislative session.
- Implementing a new retirement plan ***will not*** eliminate the State/Teacher Plan UAL. The UAL is a debt reflecting past normal costs that were not paid or experience losses that must be recovered.
- The cost of retirement plans should be compared on the basis of the normal cost of each plan. The State/Teacher Plan UAL should not be considered when comparing plans because it must be paid in addition to the normal cost of whatever plan is offered.
- The State of Maine is one of 14 states that do not participate in Social Security for one or more plans. The State/Teacher Plan is not supplemental to Social Security – it is ***in lieu*** of Social Security. This means the Plan provides for different benefits than many plans found in the private sector. The primary differences are:
    - The State does not contribute 6.2% of payroll to Social Security for employees. Employees do not contribute 6.2% of their salary to Social Security (4.2% for 2011) nor do they earn Social Security credits while employed by the State or certain other MainePERS-covered employers.
    - All eligible Maine State employees and teachers are covered by the State/Teacher Plan and are not covered by Social Security for their public employment. If they have Social Security coverage from other employment, they will be affected by Social Security offsets. All private sector employees participate in and benefit from Social Security. Many private sector employers have employer-sponsored retirement plans that supplement their employees' Social Security.

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  - Many private sector employers are shifting from a supplemental defined benefit plan to a supplemental defined contribution plan. One reason for this is related to cost. The employer in a defined benefit plan bears 100% of the investment risk, while employees bear 100% of the investment risk in defined contribution plans. Private sector defined benefit or defined contribution plans are *supplemental* to Social Security, not in lieu of Social Security.
  - Social Security is a federal program under which the federal government bears 100% of the risk.
- All members receiving benefits from the Plan are potentially subject to two separate Social Security offsets if they have also worked in Social Security covered employment.
  - The GPO impacts members who are eligible for Social Security as a spouse. Under the GPO rules, 2/3 of the benefit payable under the State/Teacher Plan is used to offset any spousal Social Security benefit. GPO does not apply to state and local government employees who are covered by Social Security during the last 60 months of their employment with the governmental entity.
  - The WEP applies to reduce the Social Security retirement or disability benefit to which a member would have otherwise been entitled had the member not earned a benefit under the State/Teacher Plan. WEP does not apply to certain groups of employees, including employees who have 30 or more years of substantial earnings under Social Security.
- The normal cost of the State/Teacher Plan is approximately 13.15% of total salary. Employees pay 7.65% of their total salary by statute and the State pays the remaining approximately 5.5%. In addition employees and employers pay 1.45% for Medicare coverage. Employees and employers participating in Social Security each pay 6.2% of salary up to federal earnings limitations (employees participating in Social Security pay 4.2% in 2011). There is no earnings limitation for the 1.45% of Medicare coverage.
- The current State/Teacher Plan is portable within participating public employers and provides a lifetime benefit to those who meet eligibility standards.
- Employees may terminate membership in the Plan when they leave employment and withdraw their contributions plus interest. This is true whether the employee has vested or not. Withdrawn employee contributions can be rolled over to another qualified retirement plan. Contributions made by the State on behalf of employees who terminate membership remain in the Plan and "subsidize" or reduce the overall cost of the Plan.

Internal Revenue Service Considerations and Requirements

The State of Maine qualifies the State/Teacher Plan with the IRS for two separate reasons:

- to provide employees with a plan in which their contributions are tax-deferred until retirement;
- to maintain exemption from participation in Social Security

A plan which qualifies only for tax-deferred status under IRS requirements is a "qualified plan." A plan which qualifies for tax-deferred status and exemption from Social Security is a "***qualified replacement plan.***"

The State-Teacher Plan was reviewed and was again deemed a qualified plan by the IRS in 2010. It is also a qualified replacement plan.

The IRS maintains requirements for a qualified replacement plan that must be met for states like Maine to continue non-participation in Social Security for state employees and teachers. These IRS requirements are based on the criteria of the Old Age, Survivors, and Disability Insurance (OASDI) program.

Distinction Between "Qualified Plans" and "Qualified Replacement Plans"

*A **qualified plan** is a plan that meets the requirements under Internal Revenue Code section 401(a), which permits contributions to be made on a tax-deferred basis. Private and public employers maintain qualified plans.*

*A **qualified replacement plan** is a plan that meets IRS requirements established for plans that are offered in lieu of (or as a replacement for) Social Security coverage for participating members. Only public employers may offer qualified replacement plans.*

These IRS requirements can be met in either a defined benefit plan or a defined contribution plan. A "qualified defined benefit" plan is a traditional type of pension plan in which the employer promises a defined monthly benefit at retirement, usually based on salary, years of service, age and a percent of earnings for each year of service. In these plans, the employer/sponsor bears the investment risk. A "qualified defined contribution" plan is one in which the employee and/or employer make tax-deferred contributions to an individual account in which the employee bears the investment risk.

IRS Qualified Replacement Plan "Safe Harbor" Guidelines for Defined Benefit Plans

The IRS provides "safe harbor" guidelines for qualified replacement defined benefit plans, which maintain a state's exemption from Social Security for employees that participate in the plan. In general, a defined benefit plan must meet the following requirements to satisfy "safe harbor" guidelines:

- A single life annuity payment must equal at least 1 ½% of an employee's compensation during the employee's final or highest average compensation period multiplied by each year of creditable service.
- The final or highest average compensation period must generally be based on an employee's compensation over one of the following periods:

  (i) the last 36 (or fewer) months of service;

  (ii) the 36 (or fewer) consecutive or nonconsecutive months of service that provide the highest average; or

  (iii) the high consecutive or nonconsecutive or the final 3 (or fewer) calendar or plan years of service.

- If a plan uses an average period of compensation that exceeds 36 months, the percentage multiplier used to calculate a single life annuity payment must be greater than 1 ½% according to the following schedule:
  - 37-48 months: 1.55%
  - 49-60 months: 1.60%
  - 61-120 months: 1.75%
  - Over 120 months: 2.00%
- A plan must define a normal retirement age that is no higher than age 65.
- Creditable service must include all years worked with a permissible maximum of 30 years. If a plan limits creditable service to fewer than 30 years, the percentage multiplier used to calculate a single life annuity payment must be increased by a ratio of 30 to the plan's lower limit.
- Compensation must generally be no less inclusive than the definition of the employee's base pay as designated by the employer or the retirement system, provided the designation is reasonable under all the facts and circumstances.

Plans which don't meet these guidelines will generally not receive qualified replacement status and the employer will automatically become a participating Social Security employer. The State/Teacher Plan is a qualified replacement plan because it currently provides 2% of the highest consecutive 36 months of salary for each year of creditable service, or fraction of a year, beginning at age 62.

Note: If a public defined benefit plan does not fall within a safe harbor, the state or governmental employer can still "make the case" that the plan is a qualified replacement plan if it can demonstrate that an employee's accrued benefit under the plan is at least as great as the accrued benefit the employee would receive if the benefit were calculated under a safe harbor formula.

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IRS Qualified Replacement Plan "Safe Harbor" Guidelines for Defined Contribution Plans

The State can also design a defined contribution plan to maintain the State's employees' exemption from Social Security if the plan meets the following minimum requirements:

- The total employee and employer contribution to the plan must be 7.5% or greater;
- The employee's account must either be credited with earnings based on a reasonable interest rate, or the employee's account must be held in a separate trust that is subject to general fiduciary standards and credited with actual earnings on the trust.
- The IRS regulations provide the following example of a plan design that provides a reasonable interest rate:
  - A political subdivision maintains a defined contribution plan described in section 457(b). Under the plan, the accounts of participants are credited annually on the basis of a variable interest rate formula determined as of the beginning of the plan year. The formula requires an interest rate (after adjustment for administrative expense payments) equal to 100 percent of the Applicable Federal Rate for long-term debt instruments. This interest rate constitutes a reasonable rate of interest. Treas. Reg. § 31.3121(b)(7)-2(e)(2)(iii)(C).
- Compensation must generally be no less inclusive than the definition of the employee's base pay as designed by the employer or the retirement system, provided the designation is reasonable under all the facts and circumstances.

A defined contribution plan will generally qualify as a replacement plan under safe harbor guidelines if the total contribution is no less than 7.5% regardless of whether the employee, employer, or both contribute. These plans do not require that the employer bear any portion of the investment risk.

Important Note

The Unfunded Actuarial Liability (UAL) for past costs of the current State/Teacher Plan not timely funded was removed from analysis of new plans. Only the normal, or on-going cost, of the State/Teacher Plan was compared to the normal cost of new options to examine comparability. The UAL must be paid down regardless of underlying plan design. A new plan will not reduce or eliminate the UAL.

Understanding Cost Impacts of Plan Design Changes

Cost impacts of new plans have to be viewed in terms of each plan's normal costs. This is because the State/Teacher Plan UAL cannot be eliminated by ending the State/Teacher Plan. It is owed by the State regardless of what new plan is in place. The UAL annual amortization must be paid, along with the normal costs of whatever retirement plan is put into place going forward.

Current normal costs of the State/Teacher Plan are approximately $105M per year, or 5.5% of payroll. In general, the cost impact on normal costs of changing plans can be viewed as follows:

Table 4.1 -
Comparison of State/Teacher Plan Normal Costs to Social Security Costs Paid by the Employer

Plan Type	Non-Participation in Social Security		Participation in Social Security	
	Current Defined Benefit Plan	**New Defined Benefit Plan**	**Social Security Only**	**Social Security and Supplemental Plan**
Social Security	0%	0%	6.2%	6.2%
Defined Benefit Retirement Plan Employer Contribution	5.5%	3 - 5.5%	0%	
Defined Contribution Retirement Plan Employer Contribution			0%	0-4%
Total Normal/Annual Cost	**5.5%**	**3 - 5.5%**	**6.2%**	**6.2 - 10.2%**

The State/Teacher Plan normal costs have been less than Social Security for 15 years because employees pay approximately 60% of normal costs and the State pays approximately 40%. Prior to 1995, normal costs were split approximately equally between the State and employees, making employer normal costs and employee contributions roughly equivalent to the Social Security, Old-Age, Survivors, and Disability Insurance (OASDI) program.

How Cost Impacts are Demonstrated in this Chapter

Four plan change options are described in this section – two exempt from Social Security and two based on Social Security participation. These are:

A. New Retirement Plan for New Hires
B. New Retirement Plan for All Employees
C. New Supplemental Plan for New Hires with Social Security Participation
D. New Supplemental Plan for All Employees with Social Security Participation

For each option, the potential impact to plan costs and to members is provided, as are considerations specific to the option.

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4.A - New Retirement Plan for New Hires

Action

Close the current State/Teacher Plan to new hires after a selected date in the future and enroll new hires in a new plan that meets IRS requirements for Plan employees to remain exempt from Social Security.

Considerations

- The plan design must meet requirements under Internal Revenue Code section 401(a) to be a qualified plan, and it should obtain an IRS determination letter on its qualified status.
- The plan design must also meet requirements established by the IRS to be a qualified replacement plan – either by meeting the safe harbor or by actuarial demonstration. A defined contribution plan can be a qualified replacement plan and can shift the risk to employees. An Attorney General opinion is needed.
- Economic conditions are not static. Changes in experience factors (economic and demographic) can decrease or increase the employer cost of a defined benefit or defined contribution plan as compared to plans where individual employees invest their own money and assume the total risk of loss, or Social Security, which is a pay-as-you-go program where the employer and employee cost is fixed.
- Implementing a new plan for new employees does not eliminate the current Plan's UAL.

Cost Impact

- Leaving current employees in the State/Teacher Plan and creating a new pension plan only for new hires by itself does not have a material effect on the UAL. The employer's obligation for normal cost for its employees would depend on the design of the new plan. Although the normal cost for the State/Teacher Plan would decrease because no new employees would be enrolled, normal costs of a new plan would be determined based on the provisions of that plan.
- The cost impact of two plans with different provisions can be to either increase or decrease the total cost to the State, depending on the benefit structures of each plan.
- Costs to the employer will increase or decrease if provisions of the plan that are ***not*** affected by the IRS safe harbor rules for a qualified replacement are changed. These include vesting, the cost-of-living adjustment and other ancillary benefit provisions.

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Member Impact

- There would be no impact on current employees. Costs to current employees will remain the same unless the 7.65% contribution of payroll rate is changed.
- New hires would receive a benefit that is less or more than that of current employees depending on the final design of the plan.

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4.B - New Retirement Plan for All Employees

Action

Close the State/Teacher Plan after a selected date in the future and enroll current and future employees in a new plan (which might take the form of a new tier of benefits within the Plan) that meets IRS requirements for State/Teacher Plan members to remain exempt from Social Security.

Considerations

- The plan design must meet requirements under Internal Revenue Code section 401(a) to be a qualified plan, and it should obtain an IRS determination letter on its qualified status.
- The plan design must also meet requirements established by the IRS to be a qualified replacement plan – either by meeting the safe harbor or by actuarial demonstration. A defined contribution plan can be a qualified replacement plan and can shift the risk to employees. An Attorney General opinion is needed.
- Economic conditions are not static. Changes in experience factors (economic and demographic) can decrease or increase the employer cost of a defined benefit as compared to plans where individual employees invest their own money and assume the total risk of loss, or Social Security, which is a pay-as-you-go program where the employer and employee cost is fixed.
- Implementing a new plan for new employees does not eliminate the current Plan's UAL.
- The Attorney General would have to advise on the legality of enrolling current employees in a new plan.

Cost Impact

- Closing the State/Teacher Plan and creating a new plan for all current and future employees reduces the UAL of the current plan. This is because the liabilities take into consideration assumptions about future salary increases, service earned and contributions to the Plan.
- The total cost impact of a change depends on the new benefit structure.
- Costs to the employer will increase or decrease if provisions of the plan that are not affected by the IRS safe harbor rules are changed. These include vesting, the cost-of-living adjustment and other ancillary benefit provisions.

Member Impact

- Vested active members would experience a change in their retirement plan benefits. They would receive two benefits in retirement; one benefit would be from the closed Plan and the second from the new plan.
- The plan provisions and the value of benefits earned under the new plan could be significantly different than those earned under the existing Plan.

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4.C - SOCIAL SECURITY PARTICIPATION WITH/WITHOUT NEW SUPPLEMENTAL PLAN FOR NEW HIRES

Action

Close the current State/Teacher Plan to new hires after a selected date in the future. New hires would be covered by Social Security with or without a supplemental retirement plan provided by the State. This supplemental plan could be a defined benefit plan or a defined contribution plan.

Background

If new employees are enrolled in Social Security, the State of Maine is not required to but may offer any type of supplemental retirement plan including a defined benefit plan, a hybrid defined benefit or defined contribution plan, or a defined contribution plan such as a 401(a) and/or a 457(b) plan, the public sector equivalents of a 401(k) in the private sector. However, if the new plan meets the criteria for a qualified replacement plan, Social Security coverage would only be available after a referendum. The State of Maine is not required to provide an employer contribution when offering a supplemental retirement plan.

Considerations

- Implementing a new plan for new hires and enrolling them in Social Security does not eliminate the current State/Teacher Plan UAL which must still be retired by 2028.
- A significant number of employers offer supplemental plans that qualify under IRS rules for favorable tax treatment, (i.e. qualified plan), meaning that employee and employer contributions are exempt from federal income taxes until withdrawn.
- Different supplemental plan types create different cost risks for employees and employers.
- The State of Maine currently pays the State/Teacher Plan contribution for teachers. Regional School Unit employers would be required to report and remit Social Security payments and negotiate cost-sharing with the State.

Cost Impact

- The rate that the State pays as a percentage of payroll will change from the current 5.5% of payroll to 6.2%, the current Social Security rate for employers. Future employee contribution rates will decrease from 7.65% of payroll to 6.2% (4.2% in 2011) of payroll, the current Social Security rate for employees. Costs of employee and employer contributions to any supplemental plan would be in addition to the Social Security costs.

- The UAL is not eliminated and is required to be retired by 2028. This is an employer cost.
- Investment risk of any supplemental plan can be borne by the employer (defined benefit), the employee (defined contribution), or both (hybrid plan that shares risk). Costs to the employee and the employer will change depending upon how investment risk is shared.

Member Impact

- This option adds another form of retirement savings to the mix of retirement plans that now cover State and Regional School Unit employees.
- Participating in Social Security is portable because Social Security is provided by virtually all private sector and most public sector employers. Maximum portability occurs if any supplemental plan is portable. Additional portability creates additional costs.
- More employees will receive Social Security, without an offset, if they maintain lifetime employment with employers that participate in Social Security. Social Security may be subject to changes in benefits and/or increases in employer and employee rates as the federal government addresses the increasing costs of this federal plan.

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4.D - Social Security Participation with/without New Supplemental Plan for All Employees

Action

Close the current State/Teacher Plan after a selected date in the future. All employees would participate in Social Security with or without a supplemental retirement plan sponsored by the State. This could be a defined benefit or defined contribution plan.

Background

- If the current plan is terminated, current and future employees would be automatically enrolled in Social Security, unless a plan was offered that allowed active Plan members to remain exempt from Social Security participation.
- If all employees are enrolled in Social Security, the State of Maine is not required to but may offer any type of supplemental retirement plan including a defined benefit plan, a hybrid defined benefit or defined contribution plan, or a defined contribution plan such as a 401(a) and/or a 457(b) plan, the public sector equivalents of a 401(k) in the private sector. The State of Maine is not required to provide an employer contribution when offering a supplemental retirement plan.

Considerations

- Implementing a supplemental plan for all employees and enrolling them in Social Security does not eliminate the current State/Teacher Plan UAL which must still be retired by 2028.
- A significant number of employers offer supplemental plans that qualify under IRS rules for favorable tax treatment, meaning that employee contributions are exempt from federal income taxes until withdrawn.
- Various supplemental defined benefit and defined contribution plans as well as hybrid plans, can receive a determination from the IRS that the plan is a qualified plan, meaning that employee contributions are exempt from federal income taxes until withdrawn.
- Different supplemental plan types create different cost risks for employees and employers.
- The State of Maine currently pays the State/Teacher Plan contribution for teachers. Regional School Unit employers would be required to report and remit Social Security payments and negotiate cost-sharing with the State.

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Cost Impact

- The rate that the State pays as a percentage of payroll will change from the current 5.5% of payroll to 6.2%, the current Social Security rate for employers. Future employee contribution rates will decrease from 7.65% of payroll to 6.2% (4.2% in 2011) of payroll, the current Social Security rate for employees. Costs of employee and employer contributions to any supplemental plan would be in addition to the Social Security costs.
- The UAL will continue to be required to be retired by 2028. This is an employer cost.
- Investment risk can be borne by the employer (defined benefit), the employee (defined contribution), or both (hybrid plan that shares risk). Costs to the employee and the employer will change depending upon how investment risk is shared.

Member Impact

- Participating in Social Security is portable because Social Security is provided by all private sector and most public sector employers. Maximum portability occurs if the supplemental plan is also portable. Additional portability creates additional costs.
- Current members would experience a change in the retirement plan by which they are covered. Members who are vested in the Plan would receive two benefits in retirement; one benefit would be from the closed Plan and the second from the new plan.
- The plan provisions and the value of benefits earned under the new plan could be significantly different than those earned under the existing Plan.
- Current employees who worked under a plan exempt from Social Security will continue to experience the impacts of the federal WEP and GPO offsets unless they work long enough in Social Security positions to be exempt from their application (employees must have at least 30 years of substantial earnings under Social Security to be exempt from WEP and their final 60 months of employment with a governmental entity must be in a Social Security position to be exempt from GPO). New employees might also experience offsets depending on their work history at the point of retirement.

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SECTION III – OTHER CHARACTERISTICS OF PLAN COSTS

Plan cost is influenced by actuarial assumptions and market behavior. The MainePERS Board of Trustees sets the actuarial assumptions. Financial market performance is a primary factor in the accumulation of assets to achieve full funding.

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Chapter 5 - Actuarial Assumptions and Methods

MainePERS administers the State/Teacher Plan, including determining actuarial methods and factors used in calculating plan costs.

Actuarial Method - MainePERS uses the Aggregate Entry Age Normal cost method in determining the State's cost. Under this method one determines the level contribution rate (as a percent of pay) that would be needed for a typical new hire to fund all future pension benefits over that member's full career. The primary reason that an Entry Age Normal method is and was employed by MainePERS for decades is because this method produces the most stable employer costs overtime, and has no tendency to increase overtime.

Assets - MainePERS invests employee and State contributions to the Plan using the prudent investor standard - the highest fiduciary standard to which investors are held. MainePERS reports assets on both an actuarial basis and a market basis. The actuarial basis is used to calculate the UAL and cost amortization schedule. MainePERS uses a three-year smoothing which is a standard technique used by actuaries to lessen the volatility on plan costs resulting from market investment gains and losses. This means that 1/3 of any year's investment gains or investment losses are recognized that year, 1/3 the next, and the remaining in the third year. This is a conservative schedule that moderates volatility without creating a long-term distortion. Longer smoothing schedules increase costs when there are exceptionally high market losses.

Experience Study - MainePERS periodically conducts an experience study to compare the actual to actuarially expected Plan experience for both economic and demographic assumptions. The purpose is to ensure that actuarial assumptions used in the valuation of the Plan remain sound and relevant to current conditions.

Considerations

All actuarial assumptions are looked at simultaneously consistent with generally accepted actuarial standards. If the study demonstrates that actual plan experience has been significantly different than what had been assumed, there could be a material change in assumptions which can affect Plan costs.

Understanding the Cost Impacts of an Experience Study

An experience study compares the current demographic and economic actuarial assumptions about the amount and timing of benefits with actual experience to determine if the actuarial assumptions appropriately model the contingency being measured and to determine whether the assumptions should be changed. Actuarial assumptions are used to calculate the levels of contributions and of expected benefits. These benefits will be paid in the future for most active employees, but the amount of the benefit and the date at which they will begin is uncertain.

There are two primary types of actuarial assumptions used to calculate benefits and plan costs:

- Economic assumptions
  - Investment returns
  - Salary increases (inflation and merit)
  - Inflation (for retiree cost of living increases)
- Demographic assumptions
  - Employee turnover (pre-retirement)
  - Mortality
  - Age at retirement
  - Rate of disability for members

The 2008 market downturn and economic environment prompted MainePERS to update its 2006 Plan experience study on which current costs are calculated. MainePERS is scheduled to complete a new experience study in March, 2011. The Legislature also requested MainePERS to update the experience study to determine if experience factors upon which costs are calculated result in a change in the UAL.

This report is being issued in draft form in advance of the completion of the experience study. The MainePERS Board of Trustees further needs adequate time to determine if the results merit changes in assumptions currently used in calculating pension costs due to the complexity of the current economic environment. Even if Trustees adopt assumption changes, changes may offset one another and result in no material impact to Plan costs going forward.

Impact to Members

There is no direct impact on members.

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Chapter 6 - Financial Markets

6.A - Revised Rates Using Investment Gains from Market Rebounds

Action

Recalculate the UAL costs and rates submitted by MainePERS for an upcoming biennium prior to the date the Legislature adopts the biennial budget by recognizing investment gains occurring between annual June 30th actuarial valuations.

Considerations

- Generally accepted actuarial standards and practices require that a consistent date and interval be set to value plan assets to avoid misrepresenting Plan costs.
- Re-calculating the UAL based on a date inconsistent with the current biennial interval selected solely on the basis of market values is contrary to generally accepted actuarial standards.
- The MainePERS Board of Trustees is responsible for the decision to recalculate the costs they certify, and would do so based on generally accepted actuarial standards.
- The next scheduled date at which market gains or losses will be recognized and impact future plan costs is June 30, 2012 for the FY 2014-2015 biennium.
- The UAL can be calculated annually, and new budgeted amounts submitted to the State of Maine annually. This higher frequency schedule will tend to increase the volatility of budgeted payments. Changing from a biennial to an annual pension cost calculation cycle would only meet generally accepted actuarial principles if it is a permanent change going forward.
- Higher actuarial values of the trust fund increase the funding ratio, decreasing the UAL and the UAL amortization schedule payments. Lower actuarial values of the trust fund decrease the funding ratio, increasing the UAL and scheduled amortization payments.

Understanding Cost Impacts of Changes to the Pension Cost Rates Submitted by MainePERS

The State of Maine determines the biennial frequency in which MainePERS provides Plan costs to coordinate with the budget cycle.

MainePERS calculates the State's biennial cost based on the actuarial value of the trust fund on the last day of the fiscal year ending one year prior to the start of the next biennium. For example, the actuarial value of the trust on June 30, 2010 was used to calculate the $916 million ($448 million in FY 2012 and $468 million in FY 2013) costs for the FY 2012-2013 biennium which begins on July 1, 2011.

The global stock markets were at the end of a two month setback on June 30, 2010, the date on which the fund was valued and rates set for FY 2012-2013. The global stock markets have experienced a strong recovery since June 30, 2010, with an approximate increase in the trust funds of $1.6 billion at February 10, 2011.

The impact of changes in the value of the fund can be demonstrated by using a common financial market indicator - the Dow Jones Industrial Average (DJIA). While the MainePERS trust fund does not reflect the DJIA on a day-to-day basis, the DJIA can be used as a proxy to demonstrate how market changes can affect the fund balance and consequently the UAL. (See Section I - Understanding the State/Teacher Plan)

Table 6.1 demonstrates how the UAL would change if the DJIA ended at various values on 6/30/2010, assuming DJIA changes reflect relative changes in the trust fund portfolio. The DJIA ended at 9,732, so Table 6.1 serves as a general indicator of change for the portfolio.

Table 6.1 Impact of Market Change on FY 2012 Total State/Teacher Plan Cost ($ millions)

If the DJIA ended 6/30/2010	Normal Cost would be	UAL Cost would be	Total Cost would be	Actual FY2012 Cost
9,000	$99	$373	$472	$448
9,500	$99	$364	$463	$448
10,000	$99	$356	$454	$448
10,500	$99	$347	$446	$448
11,000	$99	$339	$437	$448
11,500	$99	$330	$429	$448
12,000	$99	$321	$420	$448
12,500	$99	$314	$413	$448
13,000	$99	$308	$407	$448
13,500	$99	$303	$402	$448

This table demonstrates that FY 2012 UAL costs which begin to include 2008 market losses still substantially exceed FY 2011 UAL costs of $223 million even as the market and trust fund value begin to move back to where it was in 2008. This is because 1) liabilities continue to increase for cost-of-living and salary increases, 2) assets not only have to recover to 2008 levels, but also have to reflect anticipated earnings at the assumed actuarial rate of 7.75% that did not occur from the end of 2008 to June 30, 2010, and 3) three year market actuarial gain or loss smoothing delays immediate recognition of cumulative market gains and losses.

This table further demonstrates the impact financial market volatility has on the trust fund. The only actuarially sound method for reflecting a fair value of the UAL is to determine an unbiased valuation schedule. As with most other accounting functions, a 12 month period ending at a fiscal or calendar year provides a year-end date that complements budget requirements.

UAL costs can be calculated on an annual or biennial basis depending upon the needs of the State. Calculating costs on a biennial basis helps to reduce UAL volatility resulting from volatile financial markets.

Member Impact

There is no direct impact to members.

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ATTACHMENT 1 - JOINT COMMITTEE REQUEST

September 24, 2010 Legislative Request

Following is the September 24, 2010, request from the Joint Standing Committee on Appropriations and Financial Affairs and the Joint Standing Committee on Labor to the MainePERS Executive Director, Sandy Matheson:

"This letter is a follow-up to your initial presentation to both the Joint Standing Committee on Labor and the Join Standing Committee on Appropriations and Financial Affairs dated 27 July 2010 and to your subsequent presentation to the Joint Standing Committee on Appropriations and Financial Affairs dated 16 September 2010 in order to formalize the requests that were made by our committees for further information.

Please, as soon as possible, complete a new experience study that focuses on the following three economic factors: investment returns, COLA, and salaries. These factors should be reviewed because the assumptions used by MainePERS in the past need updating, and this information is necessary in preparation for the biennial budget.

In addition, we request a comprehensive examination of other options available, within the limits of Maine's Constitution (Art IX §§ 18, 18-A and 18-B), that could affect retirement system costs. Please include, but do not limit your examination to portability, and options that address the costs of Social Security, such as changing contribution levels, increasing retirement age, establishing income criteria, etc. For each option, please provide all cost impacts and which aspects of system costs could be affected (e.g. normal cost, UAL payments, state share contributions, employee contributions, etc.). Please specifically identify the impacts on employees and/or retirees under each option, in particular the number of employees/retirees affected and the positive or negative financial impacts on them. Please break out the General Fund portion of all figures.

Please provide this information in writing to all members of both our committees at your earliest convenience. If you have any questions, please do not hesitate to contact us. We look forward to receiving your report."

ATTACHMENT 2 – CONSTITUTIONAL PROVISIONS AND STATE LAW

Article IX

Section 18. Limitation on use of funds of Maine State Retirement System. All of the assets, and proceeds or income there from, of the Maine State Retirement System or any successor system and all contributions and payments made to the system to provide for retirement and related benefits shall be held, invested or disbursed as in trust for the exclusive purpose of providing for such benefits and shall not be encumbered for, or diverted to, other purposes. Funds appropriated by the Legislature for the Maine State Retirement System are assets of the system and may not be diverted or deappropriated by any subsequent action.

Section 18-A. Funding of retirement benefits under the Maine State Retirement System. Beginning with the fiscal year starting July 1, 1997, the normal cost of all retirement and ancillary benefits provided to participants under the Maine State Retirement System must be funded annually on an actuarially sound basis. Unfunded liabilities may not be created except those resulting from experience losses. Unfunded liability resulting from experience losses must be retired over a period not exceeding 10 years.

Section 18-B. Payment of unfunded liabilities of the Maine State Retirement System. Each fiscal year beginning with the fiscal year starting July 1, 1997, the Legislature shall appropriate funds that will retire in 31 years or less the unfunded liabilities of the Maine State Retirement System that are attributable to state employees and teachers. The unfunded liabilities referred to in this section are those determined by the Maine State Retirement System's actuaries and certified by the Board of Trustees of the Maine State Retirement System as of June 30, 1996.

Article X

Section 4. Amendments to Constitution. The Legislature, whenever 2/3 of both Houses shall deem it necessary, may propose amendments to this Constitution; and when any amendments shall be so agreed upon, a resolution shall be passed and sent to the selectmen of the several towns, and the assessors of the several plantations, empowering and directing them to notify the inhabitants of their respective towns and plantations, in the manner prescribed by law, at the next biennial meetings in the month of November, or to meet in the manner prescribed by law for calling and holding biennial meetings of said inhabitants for the election of Senators and Representatives, on the Tuesday following the first Monday of November following the passage of said resolve, to give in their votes on the question, whether such amendment shall be made; and if it shall appear that a majority of the inhabitants voting on the question are in favor of such amendment, it shall become a part of this Constitution.

Article IX

Section 14. Authority and procedure for issuance of bonds. The credit of the State shall not be directly or indirectly loaned in any case, except as provided in sections 14-A, 14-B, 14-C and 14-D. The Legislature shall not create any debt or debts, liability or liabilities, on behalf of the State, which shall singly, or in the aggregate, with previous debts and liabilities hereafter incurred at any one time, exceed $2,000,000, except to suppress insurrection, to repel invasion, or for purposes of war, and except for temporary loans to be paid out of money raised by taxation during the fiscal year in which they are made, and except for loans to be repaid within 12 months with federal transportation funds in amounts not to exceed 50% of transportation funds appropriated by the Federal Government in the prior federal fiscal year; and excepting also that whenever 2/3 of both Houses shall deem it necessary, by proper enactment ratified by a majority of the electors voting thereon at a general or special election, the Legislature may authorize the issuance of bonds on behalf of the State at such times and in such amounts and for such purposes as approved by such action; but this shall not be construed to refer to any money that has been, or may be deposited with this State by the Government of the United States, or to any fund which the State shall hold in trust for any Indian tribe. Whenever ratification by the electors is essential to the validity of bonds to be issued on behalf of the State, the question submitted to the electors shall be accompanied by a statement setting forth the total amount of bonds of the State outstanding and unpaid, the total amount of bonds of the State authorized and unissued, and the total amount of bonds of the State contemplated to be issued if the enactment submitted to the electors be ratified. For any bond authorization requiring ratification of the electors pursuant to this section, if any bonds have not been issued within 5 years of the date of ratification, then those bonds may not be issued after that date. Within 2 years after expiration of that 5-year period, the Legislature may extend, by a majority vote, the 5-year period for an additional 5 years or may deauthorize the bonds. If the Legislature fails to take action within those 2 years, the bond issue shall be considered to be deauthorized and no further bonds may be issued. For any bond authorization in existence on November 6, 1984, and for which the 5-year period following ratification has expired, no further bonds may be issued unless the Legislature, by November 6, 1986, reauthorizes those bonds by a majority vote, for an additional 5-year period, failing which all bonds unissued under those authorizations shall be considered to be deauthorized. Temporary loans to be paid out of moneys raised by taxation during any fiscal year shall not exceed in the aggregate during the fiscal year in question an amount greater than 10% of all the moneys appropriated, authorized and allocated by the Legislature from undedicated revenues to the General Fund and dedicated revenues to the Highway Fund for that fiscal year, exclusive of proceeds or expenditures from the sale of bonds, or greater than 1% of the total valuation of the State of Maine, whichever is the lesser.

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5 M.R.S.A. §§ 17801, 17151, 17153

5 §17151. LEGISLATIVE FINDINGS AND INTENT

1. Findings. The Legislature finds that the State owes a great debt to its retired employees for their years of faithful and productive service.

A. Part of that debt is repaid by the benefits provided to retirees through the State Employee and Teacher Retirement Program.

B. Retirees, who depend heavily on these benefits, and current employees, who will one day retire and receive benefits, are concerned about the financial viability of the retirement program.

2. Intent. It is the intent of the Legislature that there must be appropriated and transferred annually to the retirement system the funds necessary to meet the State Employee and Teacher Retirement Program's long-term and short-term financial obligations based on the actuarial assumptions established by the board upon the advice of the actuary. The amount of the unfunded liability attributable to state employees and teachers as of July 1, 2004, as certified by the board or as that amount may be revised in accordance with the terms of the certification, must be retired in no more than 23 years from June 30, 2005. For fiscal year 2004-05, the Legislature must appropriate or allocate and there must be transferred to the retirement system funds necessary to institute, as of July 1, 2005, the 23-year amortization schedule. For each fiscal year starting with the fiscal year that begins July 1, 2005, the Legislature shall appropriate or allocate and transfer to the retirement system the funds necessary to meet the 23-year requirement set forth in this subsection, unless the Legislature establishes a different amortization period. Funds that have been appropriated must be considered assets of the retirement system.

A. The goal of the actuarial assumptions is to achieve a fully funded retirement program.

B. The State Employee and Teacher Retirement Program's unfunded liability for persons formerly subject to the Maine Revised Statutes of 1944, chapter 37, sections 212 to 220 must be repaid to the system from annual appropriations over the funding period of the program.

C. This section may not be construed to require the State to appropriate and transfer funds to meet the obligations of participating local districts to the retirement system.

5 §17153. BOARD OF TRUSTEES

1. Actuarially sound basis.

1-A. Actuarially sound basis. The board shall calculate the funds necessary to maintain all programs of the retirement system on an actuarially sound basis, including the unfunded liability arising from payment of benefits for which contributions were not received and shall transmit those calculations to the State Budget Officer as required by chapter 149.

A. For benefits applicable to state employees, teachers or participating local district employees that are established through collective bargaining, the board shall apply the funding methods and assumptions adopted by the board pursuant to this subsection.

B. The Legislature shall appropriate and transfer annually those funds the board determines to be necessary under this subsection to maintain the programs of the retirement system on an actuarially sound basis, except that for fiscal year 1991-92 the annual appropriation must be $73,500,000 less than the amount that would otherwise be applied toward the repayment of the unfunded liability of the State Employee and Teacher Retirement Program.

C. This subsection may not be construed to require the State to appropriate and transfer funds to meet the obligations of participating local districts to the retirement system.

2. Trustee of funds. The members of the board shall be the trustees of the several funds created by this Part.

3. Investment of funds. The board may cause the funds created by this Part to be invested and reinvested in accordance with the standards defined in Title 18-B, sections 802 to 807 and chapter 9, subject to periodic approval of the investment program by the board.

4. Prohibitions. In addition to the limitations of section 18 and except as otherwise provided, no trustee and no employee of the board of trustees may:

A. Have any direct interest in the gains or profits of any investment made by the board;

B. Directly or indirectly, for himself or as an agent, in any manner, use the gains or profits of any investment made by the board except to make whatever current and necessary payments are authorized by the board; or

C. Become an endorser, surety or obligor for money loaned to or borrowed from the board.

5 §17801. COMMITMENT TO MEMBERS AND LIMITATIONS

1. Commitment as to certain provisions and limitations. The following provisions govern the commitment as to certain provisions and limitations.

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A. The commitment set out in paragraph B is effective October 1, 1999, for members who, on October 1, 1999 or thereafter, meet the creditable service requirement for eligibility to receive a service retirement benefit, at the applicable age if so required, under section 17851 or section 17851-A, subsection 2.

B. The protections established under the provisions listed in subparagraph (1) constitute solemn contractual commitments of the State protected under the contract clauses of the Constitution of Maine, Article I, Section 11 and the United States Constitution, Article I, Section 10, under the terms and conditions set out in subparagraph (2).

(1) The commitment provided by this section applies to the protections established under the specific following provisions:

(a) Section 17001, subsection 4; and subsection 13, paragraph B, subparagraph (1) and paragraph C, subparagraph (2);

(b) Section 17806, subsection 4;

(c) The subsection of section 17851, that is applicable to each member;

(d) The paragraph of subsection 2 of section 17851-A, that is applicable to each member;

(e) The paragraph of subsection 4 of section 17851-A, that is applicable to each member; and

(f) The subsection of section 17852, that is applicable to each member.

(2) The commitment established in this paragraph attaches to a given provision of those specified in subparagraph (1) when the member in question has met the creditable service requirement set out in the given provision, on the basis of which the protection established by the provision becomes effective.

2. **Provisions not covered by subsection 1.** Subsection 1 does not apply to any provision of this Part not specifically identified in subsection 1. Any provision not specifically identified in subsection 1 may be increased, decreased, otherwise changed or eliminated by the Legislature as to any member regardless of whether the member has or has not met any creditable service requirement for eligibility to receive a service retirement benefit.

3. **Employee contribution rate.** Effective October 1, 1999, for members who, on October 1, 1999 or thereafter, meet the creditable service requirement for eligibility to receive a service retirement benefit under section 17851 or section 17851-A, subsection 2, the employee contribution rate required to be paid at the time the service was rendered under the provision of section 17851 or 17851-A that is applicable to each member may be increased for members who have met the requirements only to:

A. Pay the cost, in whole or in part, of an improvement to a benefit that exists at the time the increase becomes effective and that is then or may in the future be applicable to members to whom the increase applies or provide a new benefit that is then or may in the future be applicable to members to whom the increase applies, and only to the extent of the cost of the improved or new benefit, provided that nothing in this paragraph may be construed to require that the employee contribution rate must be increased to pay the cost, in whole or part, of the improved or new benefit; or

B. Maintain actuarial soundness as required by the Constitution of Maine, Article IX, Section 18-A and this Part, as determined to be necessary by the board on recommendation of the system's actuary.

For members to whom section 17851-A applies, the phrase "the employee contribution rate required to be paid" includes contribution rates as made applicable under section 17851-A, subsections 5 and 6.

4. Limitations on subsections 1 and 3. Subsections 1 and 3 do not apply to any member until the member has met the creditable service requirement for eligibility to receive a service retirement benefit under section 17851 or 17851-A, subsection 2. For members to whom subsections 1 and 3 do not apply as provided in this subsection, the Legislature may increase, decrease, otherwise change or eliminate any provisions of this Part.

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ATTACHMENT 3 – STATE EMPLOYEE SPECIAL PLANS

State/Teacher Plan
State Employee Special Plans

Special Plan	Members	Normal Retirement Age	Service Eligibility	Accrual Rate	Early Retirement Reduction Factor
25 Year No-Age Plan	445	Any	25 years of covered service	2%	N/A
1998 Special Plan	1340	55	10 years under the plan if at least age 55 or 25 years in a covered position	2%	2.25% or 6% per year based on years of service on 7/1/93
Closed Special Plans*	36	Varies	Varies	2.5% or 2%	N/A

Based on June 30, 2010 actuarial valuation

***Closed plans do not accept new members and include Forest Rangers (8), Game Wardens (5), Prison employees (9), State Police (12) Marine Wardens (2)**

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ATTACHMENT 4 – STATE/TEACHER PLAN COVERED EMPLOYERS

State of Maine
Isle Au Haut School Department
Monhegan Plantation
Dedham School Department
CSD #8 – Airline CSD
CSD #9 – South Aroostook
CSD #13 – Deer Isle-Stonington
CSD #17 – Moosabec
CSD #18 – Wells-Ogunquit
CSD #19 – Five Town CSD
Erskine Academy
Foxcroft Academy
Fryeburg Academy
George Stevens Academy
Gould Academy
Lee Academy
Lincoln Academy
Maine Central Institute
Thornton Academy
Washington Academy
Acton School Department
Auburn School Department
Augusta School Department
Bangor School Department
Biddeford School Department
Brewer School Department
Brunswick School Department
Caswell School Department
Cape Elisabeth School Department
Chebeague Island School Department
Easton School Department
Falmouth School Department
Gorham School Department
Hermon School Department
Islesboro School Department
Jay School Department
Kittery School Department
Lewiston School Department
Lincolnville School Department
Lisbon School Department
Long Island School Department
Madawaska School Department
Maine Education Association
Millinocket School Department
Maine School of Science & Mathematics
Orrington School Department
Portland School Department
Sanford School Department
Scarborough School Department
So. Portland School Department
Westbrook School Department
Yarmouth School Department
York School Department
RSU #79 –MSAD 1 Presque Isle
RSU #3 – MSAD 3 Unity
MSAD 4 - Guilford
RSU #6 – MSAD 6 Bar Mills
MSAD 7 – North Haven
MSAD 8 – Vinalhaven
RSU #9 – MSAD 9 Farmington
RSU #11 – MSAD 11 Gardiner
MSAD 12 – Jackman
MSAD 13 – Bingham
MSAD 14 – Danforth
RSU #15 – MSAD 15 Gray
RSU #17 – MSAD 17 South Paris
RSU #22 – MSAD 22 Hampden
MSAD 23 – Carmel
MSAD 24 – Van Buren
MSAD 25 – Sherman Station
MSAD 28 – Camden
RSU #29 – MSAD 29 Houlton
MSAD 31 – Howland
MSAD 32 – Ashland
MSAD 33 – St. Agatha
RSU #35 – MSAD 35 Eliot
RSU #36 – MSAD 36 Livermore Falls
MSAD 37 – Harrington
RSU #40 – MSAD 40 Waldoboro
MSAD 41 – Milo
RSU #44 – MSAD 44 Bethel
MSAD 45 – Washburn
RSU #49 – MSAD 49 Fairfield
RSU #51 – MSAD 51 Cumberland Center
RSU #52 – MSAD 52 Turner
MSAD 53 – Pittsfield
RSU #54 – MSAD 54 Skowhegan
RSU #55 – MSAD 55 Cornish

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RSU #57 – MSAD 57 Waterboro
MSAD 58 – Kingfield
MSAD 59 – Madison
RSU #60 – MSAD 60 North Berwick
RSU #61 – MSAD 61 Bridgton
MSAD 63 – East Holden
RSU #64 – MSAD 64 East Corinth
MSAD 65 – Matinicus
RSU #67 – MSAD 67 Lincoln
MSAD 68 – Dover-Foxcroft
MSAD 70 – Hodgdon
RSU #72 – MSAD 72 Fryeburg
MSAD 74 – North Anson
RSU #75 – MSAD 75 Topsham
Pleasant Point School
Indian Township
Indian Island
Maine Indian Education
Region 2 – Southern Aroostook County
Region 3 – Northern Penobscot County
Region 4 – Southern Penobscot County
Region 7 – Waldo County Technical Center
Region 8 – Knox County Vocational School
Region 9 – School of Applied Technology
Region 10 – Cumberland Sagadahoc County
Oxford Hills Technical School 11
RSU #1 – Bath Area
RSU # 2 – K.I.D.S.
RSU #4
RSU #5
RSU #10
RSU #12
RSU #13
RSU #14
RSU #16
RSU #18
RSU #19
RSU #20
RSU #21
RSU #23
RSU #24
RSU #25
RSU #26
RSU #34
RSU #38
RSU #39 – Eastern Aroostook
RSU #78 – Rangeley
School Agent – Carrabasset Valley
School Agent – Coplin Plnt
School Agent – Pleasant Ridge Plnt
AOS #77 – Central Office
AOS # 77 – Lubec
AOS #77 – Charlotte
AOS #77 – Eastport
AOS #77 – Pembroke
AOS #77 – Perry
AOS #77 – Alexander
AOS #77 – Calais
AOS #77 – Robbinston
AOS #90 – Central Office
AOS #90 – Lee
AOS #90 – East Range
AOS #90 – Baileyville
AOS #90 – Princeton
AOS #91 – Central Office
AOS #91 – Mount Desert Island High School
AOS #91 – Bar Harbor
AOS #91 – Cranberry Isle
AOS #91 – Frenchboro
AOS #91 – Mt. Desert
AOS #91 – Southwest Harbor
AOS #91 – Tremont
AOS #91 – Swans Island
AOS #91 – Trenton
AOS #92 – Central Office
AOS #92 – Waterville
AOS #92 – Vassalboro
AOS #92 – Winslow
AOS #93 – Central Office
AOS #93 – Great Salt Bay
AOS #93 – Nobleboro
AOS #93 – Bristol
AOS #93 – South Bristol
AOS #93 – Jefferson
AOS #94 – Central Office
AOS #94 – MSAD 46
AOS #94 – Harmony
AOS #95 – Central Ofice
AOS #95 – Fort Kent
AOS #95 – Allagash
AOS #96 – Central Office
AOS #96 – East Machias
AOS #96 – Jonesboro
AOS #96 – Machias

AOS #96 – Marshfield
AOS #96 – Northfield
AOS #96 – Rogue Bluffs
AOS #96 – Wesley
AOS #96 – Whitneyville
AOS #96 - Cutler
AOS #96 – Machiasport
AOS #96 – Whiting
AOS #97 – Central Office
AOS #97 – Fayette
AOS #97 – Winthrop
AOS # 98 – Central Office
AOS #98 – Boothbay Harbor
AOS #98 – Edgecomb
AOS #98 – Southport
AOS #99 – Central Office
AOS #99 – Fort Fairfield
AOS #99 – Mars Hill
AOS #99 – Bridgewater
Union 47 – Georgetown
Union 60 – Greenville
Union 60 – Shirley
Union 69 – Appleton
Union 69 – Hope
Union 76 – Brooklin
Union 76 – Sedgewick
Union 90 – Greenbush
Union 90 – Milford
Union 92 – Surry
Union 93 – Blue Hill
Union 93 – Brooksville
Union 93 – Castine
Union 93 – Penobscot
Union 103 – Beals
Union 103 – Jonesport
Union 108 – Vanceboro
Union 113 – East Millinocket
Union 113 – Medway
Union 122 – New Sweden
Union 122 – Westmanland
Union 122 - Woodland

ATTACHMENT 5 – COMPARISON OF STATE/TEACHER PLAN TO OTHER NON-SOCIAL SECURITY STATE PLANS

The following table demonstrates the terms of various IRS qualified replacement plans for employers not participating in Social Security.

The sources for this information are:

- Wisconsin Legislative Council, *2008 Comparative Study of Major Public Employee Retirement Systems*, December 2009
- NASRA, Public Fund Survey

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Attachment 5 Table 1.A – Comparison of Benefits to Other States with Plans not Participating in Social Security

State	Covered Group	Normal Retirement (Age/Years)	Early Retirement (Age/Years)	Reduction for Early Retirement	Employee Share	Vesting Period	Final Average Salary (FAS) Period	Formula Multiplier	Limits	COLA	State Taxation of PERS Benefits	Funding @ 6/30/2009
AK	PERS	60/5; any/30	55/5	% per month below NRA	8%	5 yrs	3 HC	2% for first 10 yrs; 2.25% for yrs 11-20; 2.5% thereafter	None	CPI - must reside in-state to receive	No income tax law	78.8%
AK	TRS	60/8; any/20	55/8	% per month below NRA	8%	5 yrs	3 H	2% for first 20 yrs; 2.5% thereafter	None	% of CPI depending on age	No income tax law	70.2%
CA	TRS	60/5	55/5; 50/30	3% to 6% a yr	8%	5 yrs	1 H	2% at 60; 2.4% at 63	100% FAS	2%	Benefits taxable	78.2%
CO	PERS & TRS	65/5; 50/30; 55/R85; any/35	50/25; 55/20; 60/5	varies	8%	5 yrs	3 H	2.50%	100% FAS	3% or actual CPI	Exempt to $20,000 / $24,000	67%
CT	TRS	60/20; any/35	any/25; 55/20; 60/10	3% a yr	6%	10 yrs	3 H	2%	75% FAS	Excess earnings - 1.5% or 6% cap	Benefits taxable	70.0%
IL	TRS	62/5; 60/10; 55/35	55/20	6% a yr	9.4%	5 yrs	4 HC /10 (cap)	2.20%	75% FAS	3%	Benefits exempt	52.1%
KY	TRS	60/5; any/27	55/5	5% a yr	9.86%	5 yrs	3 H	2.5% up to 30 yr; 3% thereafter	100% FAS	1.5%	Exempt to $41,110	63.6%
LA	SERS	60/10	any/20	varies	7.8%	10 yrs	3 HC	3.33%	100% FAS	Excess earnings; CPI; 3% cap	Benefits exempt	60.8%

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Attachment 5 Table 1.A – Comparison of Benefits to Other States with Plans not Participating in Social Security

State	Covered Group	Normal Retirement (Age/Years)	Early Retirement (Age/Years)	Reduction for Early Retirement	Employee Share	Vesting Period	Final Average Salary (FAS) Period	Formula Multiplier	Limits	COLA	State Taxation of PERS Benefits	Funding @ 6/30/2009
LA	TRS	60/5; 55/25; any/30	any/20	varies	8%	5 yrs	3 HC + (cap)	2.50%	100% FAS	CPI - 3% cap	Benefits exempt	59.1%
ME	PERS & TRS	62/5	any/25	6% a yr	7.65%	5 yrs	3 H	2%	None	CPI - 4% cap	Exempt to $6,000	74.0%
MA	SERS	55/10; any/20	None	NA	9%	10 yrs	3 HC	.5% to 2.5% (age-related)	80% FAS	CPI - on 1st $12,000 - conditional, 3% cap	Benefits exempt	76.5%
MA	TRS	55/10; any/20	None	NA	11%	10 yrs	3 HC	.1% to 2.5% (age-related) + 2% for yrs over 24	80% FAS	CPI - on 1st $12,000 - conditional, 3% cap	Benefits exempt	63.0%
MO	TRS	60/5; R80; any/30	55/5; any/25	varies	10.86%	5 yrs	3 HC	2.5%; 2.55% w/ 31 +yrs of service	100% FAS	CPI - 5% cap; 80% of original bene lifetime cap	Exempt to $6,000/$12,000	79.9%
NV	PERS & TRS	65/5; 60/10; any/30	any/5	4% a yr	11.25%	5 yrs	3 HC	2.67%	75% FAS	2% to 5% (varies)	No income tax law	73.4%
OH	PERS	60/5; any/30	55/25	3% a yr	10%	5 yrs	3 H	2.2% (1st 30 yrs); 2.5% (added yrs)	100% FAS	3% cap	Benefits taxable	75.3%
OH	TRS	65; any/30	60/5; 55/25	3% a yr	10%	5 yrs	3 H	2.2% (1st 35 yrs); 2.5% (35 or more yrs)	100% FAS	3% cap	Benefits taxable	60.0%
TX	TRS	65/5; 60/20; R80	55/5; any/30	varies	6.40%	5 yrs	5 H	2.30%	None	Ad hoc	No income tax law	86.2%

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Attachment 5 Table 1.A – Comparison of Benefits to Other States with Plans not Participating in Social Security

State	Covered Group	Normal Retirement (Age/Years)	Early Retirement (Age/Years)	Reduction for Early Retirement	Employee Share	Vesting Period	Final Average Salary (FAS) Period	Formula Multiplier	Limits	COLA	State Taxation of PERS Benefits	Funding @ 6/30/2009
WA DC	TRS	62/5; 60/20; 55/30	Any/25; 50/20	% per month below NRA	8%	5 yrs	Washington, DC	1.5% for 1st 5 yrs; 1.75% for yrs 6-10; 2% thereafter	None	CPI- 3% max for post-1996 hires	Exempt to $3,000	92.2%

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Attachment 5 Table 1.B – Comparison of Pending Legislative Actions in Other States with Plans not Participating in Social Security

State	Pending Action
Alaska**	2010 legislative action with none identified for 2011.
California**	2010 legislative action with none identified for 2011.
Colorado*	2010 legislative action with none identified for 2011.
Connecticut**	Governor's budget to be released February 16, 2011. No details available.
Illinois*	➢ Possible reduction of future retirement benefits for existing employees. ➢ Allow employees to select from three different plans: 1. Maintain current benefits and contribute 28% of salary. 2. Participate in the second-tier pension plan originally created for new hires and receive a reduced benefit and retirement age of 67. 3. Establish a defined contribution plan with a 6% contribution rate for the employer and employee ➢ Employees participating in either option 2 or 3 above would receive split benefits based on years of participation in the current plan and future participation in either the second or third tiers.
Kentucky*	➢ Close current defined benefit plan to new employees as of June 30, 2012. ➢ New hires post June 30, 2012 would participate in a defined contribution plan with contribution rates of 5% of pay for non-hazardous duty employment and 8% for hazardous duty employment. The state would contribute an amount equal to the employee's contribution rate. ➢ Creation of a new retirement system for the defined contribution plan to be administered by the Kentucky Retirement System.
Louisiana	2010 legislative action with none identified for 2011.
Maine	Pending
Massachusetts*	➢ Increase the retirement age for all employees. 1. Group 1 – elected officials and most general employees increases the retirement age from 55-65 to 60-67. 2. Group 2 – employees with titles reflecting hazardous duties increases the retirement age from 55-60 to 55-62. 3. Group 3 – state police increases the service credit needed to receive a maximum benefit from 25 to 30 years and lowers the benefit factor after 20 years of

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Attachment 5 Table 1.B – Comparison of Pending Legislative Actions in Other States with Plans not Participating in Social Security

State	Pending Action
	service from 3% to 2.5% per year of service. 4. Group 4 – firefighters, police officers, and some corrections officers increases the retirement age from 45-55 to 50-57. ➢ Eliminate early retirement subsidies. ➢ Increase the highest three years used in benefit calculations to the highest five years. ➢ Eliminate Section 10 early retirements for all employees. This provision currently allows employees with 20 years of service who are terminated at no fault of their own to receive an early retirement benefit equal to one third of their high three earning years, plus an annuity from contributions. ➢ Proration of benefits based on employment history for those employees who have served in more than one group (see 1-4 above). ➢ Establish anti-spiking to limit the annual increase in pensionable earnings to no more than 6% of the average pensionable earnings over the last two years plus inflation. The provision would not apply to bona fide promotions or job changes. ➢ Eliminate double-dipping where a retiree receives both a pension and compensation as an elected official.
Missouri**	2010 legislative action with none identified for 2011.
Nevada*	➢ Consideration of shifting from a defined benefit plan to a defined contribution plan. A study shows that the action would require substantially increased contributions in order to amortize the unfunded liability of the closed defined benefit plans. Contribution rates would rise from 24% of compensation to 34% for regular plan employees and from 40% to 51 or 52% of salary in order to meet the needs of the defined benefit plan.
Ohio*	➢ Public Employees Retirement System 1. Set minimum retirement age for general members to receive full benefits at 55 if they have 32 years of service *or* age 67 after establishing five years. 2. Increase retirement age for full benefits by two years for law enforcement officers: age 50 with 25 years or age 64 with 15 years. 3. Increase retirement age for full benefits for court bailiffs and other public safety employees by two years: age 54 with 25 years or 64 with 15 years. 4. Modify current cost-of-living adjustment of 3% flat rate to federal inflation index capped at 3%. 5. Increase the number of years included in the average

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Attachment 5 Table 1.B – Comparison of Pending Legislative Actions in Other States with Plans not Participating in Social Security

State	Pending Action
	salary calculation from three to five. ➢ State Teachers Retirement System 1. Increase the contribution rate from 10% to a rate to be determined. 2. Increase minimum retirement age: 60 after 30 years of service. 3. Increase the number of years included in the average salary calculation from three to five. 4. Reduce future cost-of-living adjustments for current retires and reduce and defer these payments for future retirees. ➢ Police and Fire Pension Fund 1. Raise member contribution rate from 10% to 12.25% of pay. 2. Increase minimum retirement age from 48 to 52 for new hires. 3. Increase the number of years included in the average salary calculation from three to five. 4. Delay cost-of-living adjustments until age 55 for future retirees. 5. Eliminate cost-of-living adjustments for the Deferred Retirement Option Program. ➢ School Employees Retirement System 1. Increase minimum retirement age for full benefits for retirements after August 1, 2015 to 67 with 10 years or 57 with 30 years. 2. Increase early retirement age with reduced benefits to 62 with 10 years or 60 with 25 years. 3. Establish an actuarial reduction in benefits for every year below age 67 and 30 years of service. ➢ Highway Patrol Retirement System 1. Increase member contribution rate from 10% to 11%. 2. Reduce cost-of-living adjustments from 3% to 2%. 3. Increase the number of years included in the average salary calculation from three to five.
Texas**	None identified.

* Source: Snell, R. (2011). *State pension reform proposals for 2011.* National Conference of State Legislatures.

**Source: Pension system web site reviews and media coverage.

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ATTACHMENT 6 - COMBINED TABLES FOR SAMPLE CHANGES TO 6/30/2010

Combined Sample State/Teacher Plan Changes
UAL $4.3B Base Impact
(in millions)

	All Members		Non-Vested Only		New Hires
	All Years	From 7/1/11	All Years	From 7/1/11	
Flat Accrual Rate					
• *2% Current Accrual Rate	$0	$0	$0	$0	N/A
• 1.5% Accrual Rate	($ 1,269)	($324)	($ 46)	($35)	N/A
Graduated Accrual Rate					
• 2% up to 25 years, 1.0% after 25 years	($ 582)	($332)	($ 10)	($10)	N/A
• 2% up to 25 years, 1.5% after 25 years	($ 292)	($167)	($ 5)	($ 5)	N/A
• ** 1% up to 10 years, 1.5% for 10 to 20 years, 2% for 20 or more years	($1,231)	($117)	($ 59)	($38)	N/A
Early Retirement Reduction Factor					
• 6% before age 60 - Age 60 plan	($ 106)	N/A	N/A	N/A	N/A
• 8% before age 62 - Age 62 plan	($ 42)	N/A	($ 2)	N/A	N/A
Final Average Compensation					
• Five years average	($ 241)	N/A	($ 11)	N/A	N/A
• Ten years average	($ 781)	N/A	($ 33)	N/A	N/A
Vesting					
• Increase to 10 years	($ 0)	N/A	($ 8)	N/A	N/A
Retirement Age - Age 60 group					
• Increase to Age 65	($ 194)	N/A	$ 0	N/A	N/A
Retirement Age – Age 62 group					
• Increase to Age 65	($ 491)	N/A	($ 32)	N/A	N/A
Eliminate 25 Year Service Eligibility					
• Increase minimum Retirement Age to 60	($ 128)	N/A	($1)	N/A	N/A
Create Service/Age Eligibility					
• Service + Age ≥ 90	($ 63)	N/A	($ 0)	N/A	N/A
Close All Special Plans					
• 1998 Special Plan	($ 11)	N/A	($ 5)	N/A	N/A
• '25 No Age' Special Plan	($ 31)	N/A	($ 3)	N/A	N/A

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Combined Sample State/Teacher Plan Changes (Cont'd)
UAL $4.3B Base Impact
(in millions)

	All Members		Non-Vested Only		New Hires
	All Years	From 7/1/11	All Years	From 7/1/11	
Interest on Withdrawals					
• Reduce Interest on contributions withdrawn to 2% from current 5%	($ 6)	N/A	($ 1)	N/A	N/A
Death Benefits					
• Eliminate Death Benefits	($ 123)	N/A	($ 6)	N/A	N/A
Accidental Death Benefits					
• Eliminate Accidental Death Benefits	($ 16)	N/A	($ 2)	N/A	N/A
Wage Freeze					
• 1 Year	$ 0	N/A	$ 0	N/A	N/A
• 2 Years	$ 0	N/A	$ 0	N/A	N/A

Changing any of these provisions requires ***Attorney General Advice or Opinion****.*

The changes reflected in the table above are estimates based on the June 301, 2010 valuation data and assumptions. The actual impact of changes will be affected by the demographics of the plans when changes are implemented.

**The current 2% accrual rate is shown for comparison purpose.*

*** See Chapter 4 for IRS safe harbor standards. A graduated accrual rate does not meet IRS safe harbor standards. A plan may provide for a graduated accrual rate and still constitute a qualified replacement plan depending on whether the plan meets the other minimum standards set forth in IRS regulations. Thorough legal analysis of any graduated option would be required before determination that particular step accrual rate might meet IRS safe harbor standards.*

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Combined Sample State/Teacher Plan Changes
FY 2012-2013 $706M UAL Cost Impact
(in millions)

	All Members		Non-Vested Only		New Hires
	All Years	From 7/1/11	All Years	From 7/1/11	
Flat Accrual Rate					
• *2% Current Accrual Rate	$0	$0	$0	$0	N/A
• 1.5% Accrual Rate	($ 195)	($ 50)	($ 7)	($ 5)	N/A
Graduated Accrual Rate					
• 2% up to 25 years, 1.0% after 25 years	($ 90)	($ 51)	($ 2)	($ 2)	N/A
• 2% up to 25 years, 1.5% after 25 years	($ 45)	($ 26)	($ 1)	($ 1)	N/A
• ** 1% up to 10 years, 1.5% for 10 to 20 years, 2% for 20 or more years	($ 189)	($ 18)	($ 9)	($ 6)	N/A
Early Retirement Reduction Factor					
• 6% before age 60 - Age 60 plan	($ 16)	N/A	N/A	N/A	N/A
• 8% before age 62 - Age 62 plan	($ 6)	N/A	$0	N/A	N/A
Final Average Compensation					
• Five years average	($ 37)	N/A	($ 2)	N/A	N/A
• Ten years average	($ 120)	N/A	($ 5)	N/A	N/A
Vesting					
• Increase to 10 years	$0	N/A	($ 1)	N/A	N/A
Retirement Age - Age 60 group					
• Increase to Age 65	($ 30)	N/A	$ 0	N/A	N/A
Retirement Age – Age 62 group					
• Increase to Age 65	($ 75)	N/A	($ 5)	N/A	N/A
Eliminate 25 Year Service Eligibility					
• Increase minimum Retirement Age to 60	($ 10)	N/A	$ 0	N/A	N/A
Create Service/Age Eligibility					
• Service + Age ≥ 90	($ 20)	N/A	$ 0	N/A	N/A
Close All Special Plans					
• 1998 Special Plan	($ 2)	N/A	($ 1)	N/A	N/A
• '25 No Age' Special Plan	($ 5)	N/A	$ 0	N/A	N/A

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Combined Sample State/Teacher Plan Changes (Cont'd)
FY 2012-2013 $706M UAL Cost Impact
(in millions)

	All Members		Non-Vested Only		New Hires
	All Years	From 7/1/11	All Years	From 7/1/11	
Interest on Withdrawals					
• Reduce Interest on contributions withdrawn to 2% from current 5%	($ 1)	N/A	$ 0	N/A	N/A
Death Benefits					
• Eliminate Death Benefits	($ 19)	N/A	($ 1)	N/A	N/A
Accidental Death Benefits					
• Eliminate Accidental Death Benefits	($ 2)	N/A	$ 0	N/A	N/A
Wage Freeze					
• 1 Year	$ 0	N/A	$ 0	N/A	N/A
• 2 Years	$ 0	N/A	$ 0	N/A	N/A

*Changing any of these provisions requires **Attorney General Advice or Opinion**.*

The changes reflected in the table above are estimates based on the June 301, 2010 valuation data and assumptions. The actual impact of changes will be affected by the demographics of the plans when changes are implemented.

**The current 2% accrual rate is shown for comparison purpose.*

*** See Chapter 4 for IRS safe harbor standards. A graduated accrual rate does not meet IRS safe harbor standards. A plan may provide for a graduated accrual rate and still constitute a qualified replacement plan depending on whether the plan meets the other minimum standards set forth in IRS regulations. Thorough legal analysis of any graduated option would be required before determination that particular step accrual rate might meet IRS safe harbor standards.*

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Combined Sample State/Teacher Plan Changes
FY 2012-2013 $210 Normal Cost Impact
(in millions)

	All Members		Non-Vested Only		New Hires
	All Years	From 7/1/11	All Years	From 7/1/11	
Flat Accrual Rate					
• *2% Current Accrual Rate	$0	$0	$0	$0	
• 1.5% Accrual Rate	($ 107)	($ 28)	($ 4)	($ 3)	N/A
Graduated Accrual Rate					
• 2% up to 25 years, 1.0% after 25 years	($ 49)	($ 28)	($ 1)	($ 1)	N/A
• 2% up to 25 years, 1.5% after 25 years	($ 24)	($ 14)	($0)	($0)	N/A
• ** 1% up to 10 years, 1.5% for 10 to 20 years, 2% for 20 or more years	($ 104)	($ 10)	($ 6)	($ 3)	N/A
Early Retirement Reduction Factor					
• 6% before age 60 - Age 60 plan	$0	N/A	N/A	N/A	N/A
• 8% before age 62 - Age 62 plan	($ 3)	N/A	($ 0)	N/A	N/A
Final Average Compensation					
• Five years average	($ 20)	N/A	($ 1)	N/A	N/A
• Ten years average	($ 32)	N/A	($ 1)	N/A	N/A
Vesting					
• Increase to 10 years	($ 1)	N/A	$ 0	N/A	N/A
Retirement Age - Age 60 group					
• Increase to Age 65	$ 0	N/A	$ 0	N/A	N/A
Retirement Age – Age 62 group					
• Increase to Age 65	($ 39)	N/A	($ 2)	N/A	N/A
Eliminate 25 Year Service Eligibility					
• Increase minimum Retirement Age to 60	($ 3)	N/A	$ 0	N/A	N/A
Create Service/Age Eligibility					
• Service + Age ≥ 90	($ 1)	N/A	$ 0	N/A	N/A
Close All Special Plans					
• 1998 Special Plan	($ 9)	N/A	$ 0	N/A	N/A
• '25 No Age' Special Plan	($ 5)	N/A	$ 0	N/A	N/A

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Combined Sample State/Teacher Plan Changes (Cont'd)
FY 2012-2013 $210 Normal Cost Impact
(in millions)

	All Members		Non-Vested Only		New Hires
	All Years	**From 7/1/11**	**All Years**	**From 7/1/11**	
Interest on Withdrawals					
• Reduce Interest on contributions withdrawn to 2% from current 5%	$ 0	N/A	$ 0	N/A	N/A
Death Benefits					
• Eliminate Death Benefits	($ 11)	N/A	($ 1)	N/A	N/A
Accidental Death Benefits					
• Eliminate Accidental Death Benefits	($ 2)	N/A	$ 0	N/A	N/A
Wage Freeze					
• 1 Year	($ 3)	N/A	$ 0	N/A	N/A
• 2 Years	($10)	N/A	($ 1)	N/A	N/A

*Changing any of these provisions requires **Attorney General Advice or Opinion**.*

The changes reflected in the table above are estimates based on the June 301, 2010 valuation data and assumptions. The actual impact of changes will be affected by the demographics of the plans when changes are implemented.

**The current 2% accrual rate is shown for comparison purpose.*

*** See Chapter 4 for IRS safe harbor standards. A graduated accrual rate does not meet IRS safe harbor standards. A plan may provide for a graduated accrual rate and still constitute a qualified replacement plan depending on whether the plan meets the other minimum standards set forth in IRS regulations. Thorough legal analysis of any graduated option would be required before determination that particular step accrual rate might meet IRS safe harbor standards.*

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Combined Sample State/Teacher Plan Changes
FY 2012-2013 $916 Normal and UAL Cost Impact
(in millions)

	All Members		Non-Vested Only		New Hires
	All Years	From 7/1/11	All Years	From 7/1/11	
Flat Accrual Rate					
• *2% Current Accrual Rate	$0	$0	$0	$0	
• 1.5% Accrual Rate	($302)	($ 78)	($ 11)	($ 8)	N/A
Graduated Accrual Rate					
• 2% up to 25 years, 1.0% after 25 years	($139)	($ 79)	($ 3)	($ 3)	N/A
• 2% up to 25 years, 1.5% after 25 years	($ 69)	($ 40)	($ 1)	($ 1)	N/A
• ** 1% up to 10 years, 1.5% for 10 to 20 years, 2% for 20 or more years	($293)	($ 28)	($ 15)	($ 9)	N/A
Early Retirement Reduction Factor					
• 6% before age 60 - Age 60 plan	($ 16)	N/A	N/A	N/A	N/A
• 8% before age 62 - Age 62 plan	($ 9)	N/A	$ 0	N/A	N/A
Final Average Compensation					
• Five years average	($ 57)	N/A	($ 3)	N/A	N/A
• Ten years average	($152)	N/A	($ 6)	N/A	N/A
Vesting					
• Increase to 10 years	($ 1)	N/A	($ 1)	N/A	N/A
Retirement Age - Age 60 group					
• Increase to Age 65	($ 30)	N/A	$ 0	N/A	N/A
Retirement Age – Age 62 group					
• Increase to Age 65	($114)	N/A	($ 7)	N/A	N/A
Eliminate 25 Year Service Eligibility					
• Increase minimum Retirement Age to 60	($ 13)	N/A	$ 0	N/A	N/A
Create Service/Age Eligibility					
• Service + Age ≥ 90	($ 21)	N/A	$ 0	N/A	N/A
Close All Special Plans					
• 1998 Special Plan	($ 11)	N/A	($ 1)	N/A	N/A
• '25 No Age' Special Plan	($ 10)	N/A	$ 0	N/A	N/A

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Combined Sample State/Teacher Plan Changes (Cont'd)
FY 2012-2013 $916 Normal and UAL Cost Impact
(in millions)

	All Members		Non-Vested Only		New Hires
	All Years	From 7/1/11	All Years	From 7/1/11	
Interest on Withdrawals					
• Reduce Interest on contributions withdrawn to 2% from current 5%	($ 1)	N/A	$ 0	N/A	N/A
Death Benefits					
• Eliminate Death Benefits	($ 30)	N/A	($ 2)	N/A	N/A
Accidental Death Benefits					
• Eliminate Accidental Death Benefits	($ 4)	N/A	$ 0	N/A	N/A
Wage Freeze					
• 1 Year	($ 3)	N/A	$ 0	N/A	N/A
• 2 Years	($10)	N/A	($ 1)	N/A	N/A

Changing any of these provisions requires ***Attorney General Advice or Opinion****.*

The changes reflected in the table above are estimates based on the June 301, 2010 valuation data and assumptions. The actual impact of changes will be affected by the demographics of the plans when changes are implemented.

**The current 2% accrual rate is shown for comparison purpose.*

*** See Chapter 4 for IRS safe harbor standards. A graduated accrual rate does not meet IRS safe harbor standards. A plan may provide for a graduated accrual rate and still constitute a qualified replacement plan depending on whether the plan meets the other minimum standards set forth in IRS regulations. Thorough legal analysis of any graduated option would be required before determination that particular step accrual rate might meet IRS safe harbor standards.*

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ATTACHMENT 7 – PENSION OBLIGATION BONDS

Jan 26, 2011 1:05 pm Prepared by Public Financial Management, Inc. (Finance 6.019 Maine, State of:MAINE-2011POB2) Page 1

SOURCES AND USES OF FUNDS

State of Maine
Pension Obligation Bond - 30 yrs
30 year, Fixed, Levl Debt Service
Scenario 2 - $287 Million

Dated Date	04/01/2011
Delivery Date	04/01/2011

Sources:		
Bond Proceeds:		
Par Amount		287,000,000.00
		287,000,000.00
Uses:		
Project Fund Deposits:		
Project Fund		284,491,000.00
Delivery Date Expenses:		
Cost of Issuance		500,000.00
Underwriter's Discount		2,009,000.00
		2,509,000.00
		287,000,000.00

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BOND SUMMARY STATISTICS

State of Maine
Pension Obligation Bond - 30 yrs
30 year, Fixed, Levl Debt Service
Scenario 2 - $287 Million

Dated Date	04/01/2011
Delivery Date	04/01/2011
First Coupon	12/01/2009
Last Maturity	06/01/2041
Arbitrage Yield	6.660916%
True Interest Cost (TIC)	6.728686%
Net Interest Cost (NIC)	6.713072%
All-In TIC	6.745671%
Average Coupon	6.678360%
Average Life (years)	20.165
Duration of Issue (years)	10.692
Par Amount	287,000,000.00
Bond Proceeds	287,000,000.00
Total Interest	386,509,948.75
Net Interest	388,518,948.75
Total Debt Service	673,509,948.75
Maximum Annual Debt Service	22,347,608.00
Average Annual Debt Service	22,326,296.64
Underwriter's Fees (per $1000)	
Average Takedown	
Other Fee	7.000000
Total Underwriter's Discount	7.000000
Bid Price	99.300000

Bond Component	Par Value	Price	Average Coupon	Average Life	PV of 1 bp change
Term due 2031	128,305,000.00	100.000	6.470%	12.699	104,127.60
Term due 2041	158,695,000.00	100.000	6.760%	26.203	192,923.40
	287,000,000.00			20.165	297,051.00

	TIC	All-In TIC	Arbitrage Yield
Par Value	287,000,000.00	287,000,000.00	287,000,000.00
+ Accrued Interest			
+ Premium (Discount)			
- Underwriter's Discount	-2,009,000.00	-2,009,000.00	
- Cost of Issuance Expense		-500,000.00	
- Other Amounts			
Target Value	284,991,000.00	284,491,000.00	287,000,000.00
Target Date	04/01/2011	04/01/2011	04/01/2011
Yield	6.728686%	6.745671%	6.660916%

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BOND DEBT SERVICE

State of Maine
Pension Obligation Bond - 30 yrs
30 year, Fixed, Levl Debt Service
Scenario 2 - $287 Million

Period Ending	Principal	Coupon	Interest	Debt Service
06/30/2011			3,171,519.25	3,171,519.25
06/30/2012	3,315,000	6.470%	19,029,115.50	22,344,115.50
06/30/2013	3,530,000	6.470%	18,814,635.00	22,344,635.00
06/30/2014	3,760,000	6.470%	18,586,244.00	22,346,244.00
06/30/2015	4,000,000	6.470%	18,342,972.00	22,342,972.00
06/30/2016	4,260,000	6.470%	18,084,172.00	22,344,172.00
06/30/2017	4,535,000	6.470%	17,808,550.00	22,343,550.00
06/30/2018	4,830,000	6.470%	17,515,135.50	22,345,135.50
06/30/2019	5,140,000	6.470%	17,202,634.50	22,342,634.50
06/30/2020	5,475,000	6.470%	16,870,076.50	22,345,076.50
06/30/2021	5,830,000	6.470%	16,515,844.00	22,345,844.00
06/30/2022	6,205,000	6.470%	16,138,643.00	22,343,643.00
06/30/2023	6,610,000	6.470%	15,737,179.50	22,347,179.50
06/30/2024	7,035,000	6.470%	15,309,512.50	22,344,512.50
06/30/2025	7,490,000	6.470%	14,854,348.00	22,344,348.00
06/30/2026	7,975,000	6.470%	14,369,745.00	22,344,745.00
06/30/2027	8,490,000	6.470%	13,853,762.50	22,343,762.50
06/30/2028	9,040,000	6.470%	13,304,459.50	22,344,459.50
06/30/2029	9,625,000	6.470%	12,719,571.50	22,344,571.50
06/30/2030	10,250,000	6.470%	12,096,834.00	22,346,834.00
06/30/2031	10,910,000	6.470%	11,433,659.00	22,343,659.00
06/30/2032	11,615,000	6.760%	10,727,782.00	22,342,782.00
06/30/2033	12,405,000	6.760%	9,942,608.00	22,347,608.00
06/30/2034	13,240,000	6.760%	9,104,030.00	22,344,030.00
06/30/2035	14,135,000	6.760%	8,209,006.00	22,344,006.00
06/30/2036	15,090,000	6.760%	7,253,480.00	22,343,480.00
06/30/2037	16,110,000	6.760%	6,233,396.00	22,343,396.00
06/30/2038	17,200,000	6.760%	5,144,360.00	22,344,360.00
06/30/2039	18,365,000	6.760%	3,981,640.00	22,346,640.00
06/30/2040	19,605,000	6.760%	2,740,166.00	22,345,166.00
06/30/2041	20,930,000	6.760%	1,414,868.00	22,344,868.00
	287,000,000		386,509,948.75	673,509,948.75

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FORM 8038 STATISTICS

State of Maine
Pension Obligation Bond - 30 yrs
30 year, Fixed, Levl Debt Service
Scenario 2 - $287 Million

Dated Date	04/01/2011
Delivery Date	04/01/2011

Bond Component	Date	Principal	Coupon	Price	Issue Price	Redemption at Maturity
Term due 2031:						
	06/01/2012	3,315,000.00	6.470%	100.000	3,315,000.00	3,315,000.00
	06/01/2013	3,530,000.00	6.470%	100.000	3,530,000.00	3,530,000.00
	06/01/2014	3,760,000.00	6.470%	100.000	3,760,000.00	3,760,000.00
	06/01/2015	4,000,000.00	6.470%	100.000	4,000,000.00	4,000,000.00
	06/01/2016	4,260,000.00	6.470%	100.000	4,260,000.00	4,260,000.00
	06/01/2017	4,535,000.00	6.470%	100.000	4,535,000.00	4,535,000.00
	06/01/2018	4,830,000.00	6.470%	100.000	4,830,000.00	4,830,000.00
	06/01/2019	5,140,000.00	6.470%	100.000	5,140,000.00	5,140,000.00
	06/01/2020	5,475,000.00	6.470%	100.000	5,475,000.00	5,475,000.00
	06/01/2021	5,830,000.00	6.470%	100.000	5,830,000.00	5,830,000.00
	06/01/2022	6,205,000.00	6.470%	100.000	6,205,000.00	6,205,000.00
	06/01/2023	6,610,000.00	6.470%	100.000	6,610,000.00	6,610,000.00
	06/01/2024	7,035,000.00	6.470%	100.000	7,035,000.00	7,035,000.00
	06/01/2025	7,490,000.00	6.470%	100.000	7,490,000.00	7,490,000.00
	06/01/2026	7,975,000.00	6.470%	100.000	7,975,000.00	7,975,000.00
	06/01/2027	8,490,000.00	6.470%	100.000	8,490,000.00	8,490,000.00
	06/01/2028	9,040,000.00	6.470%	100.000	9,040,000.00	9,040,000.00
	06/01/2029	9,625,000.00	6.470%	100.000	9,625,000.00	9,625,000.00
	06/01/2030	10,250,000.00	6.470%	100.000	10,250,000.00	10,250,000.00
	06/01/2031	10,910,000.00	6.470%	100.000	10,910,000.00	10,910,000.00
Term due 2041:						
	06/01/2032	11,615,000.00	6.760%	100.000	11,615,000.00	11,615,000.00
	06/01/2033	12,405,000.00	6.760%	100.000	12,405,000.00	12,405,000.00
	06/01/2034	13,240,000.00	6.760%	100.000	13,240,000.00	13,240,000.00
	06/01/2035	14,135,000.00	6.760%	100.000	14,135,000.00	14,135,000.00
	06/01/2036	15,090,000.00	6.760%	100.000	15,090,000.00	15,090,000.00
	06/01/2037	16,110,000.00	6.760%	100.000	16,110,000.00	16,110,000.00
	06/01/2038	17,200,000.00	6.760%	100.000	17,200,000.00	17,200,000.00
	06/01/2039	18,365,000.00	6.760%	100.000	18,365,000.00	18,365,000.00
	06/01/2040	19,605,000.00	6.760%	100.000	19,605,000.00	19,605,000.00
	06/01/2041	20,930,000.00	6.760%	100.000	20,930,000.00	20,930,000.00
		287,000,000.00			287,000,000.00	287,000,000.00

	Maturity Date	Interest Rate	Issue Price	Stated Redemption at Maturity	Weighted Average Maturity	Yield
Final Maturity	06/01/2041	6.760%	20,930,000.00	20,930,000.00		
Entire Issue			287,000,000.00	287,000,000.00	20.1655	6.6609%

Proceeds used for accrued interest	0.00
Proceeds used for bond issuance costs (including underwriters' discount)	2,509,000.00
Proceeds used for credit enhancement	0.00
Proceeds allocated to reasonably required reserve or replacement fund	0.00

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SOURCES AND USES OF FUNDS

State of Maine
Pension Obligation Bond - 30 yrs
30 year, Fixed, Levl Debt Service
Scenario 1 - $4.3 Billion

Dated Date	04/01/2011
Delivery Date	04/01/2011

Sources:	
Bond Proceeds:	
Par Amount	4,300,000,000.00
	4,300,000,000.00

Uses:		
Project Fund Deposits:		
Project Fund		4,269,400,000.00
Delivery Date Expenses:		
Cost of Issuance	500,000.00	
Underwriter's Discount	30,100,000.00	
		30,600,000.00
		4,300,000,000.00

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BOND SUMMARY STATISTICS

State of Maine
Pension Obligation Bond - 30 yrs
30 year, Fixed, Levl Debt Service
Scenario 1 - $4.3 Billion

Dated Date	04/01/2011
Delivery Date	04/01/2011
First Coupon	12/01/2009
Last Maturity	06/01/2041
Arbitrage Yield	6.660916%
True Interest Cost (TIC)	6.728686%
Net Interest Cost (NIC)	6.713073%
All-In TIC	6.729818%
Average Coupon	6.678360%
Average Life (years)	20.165
Duration of Issue (years)	10.692
Par Amount	4,300,000,000.00
Bond Proceeds	4,300,000,000.00
Total Interest	5,790,879,191.33
Net Interest	5,820,979,191.33
Total Debt Service	10,090,879,191.33
Maximum Annual Debt Service	334,781,212.50
Average Annual Debt Service	334,504,282.59
Underwriter's Fees (per $1000)	
Average Takedown	
Other Fee	7.000000
Total Underwriter's Discount	7.000000
Bid Price	99.300000

Bond Component	Par Value	Price	Average Coupon	Average Life	PV of 1 bp change
Term due 2031	1,922,350,000.00	100.000	6.470%	12.698	1,560,093.35
Term due 2041	2,377,650,000.00	100.000	6.760%	26.202	2,890,475.70
	4,300,000,000.00			20.165	4,450,569.05

	TIC	All-In TIC	Arbitrage Yield
Par Value	4,300,000,000.00	4,300,000,000.00	4,300,000,000.00
+ Accrued Interest			
+ Premium (Discount)			
- Underwriter's Discount	-30,100,000.00	-30,100,000.00	
- Cost of Issuance Expense		-500,000.00	
- Other Amounts			
Target Value	4,269,900,000.00	4,269,400,000.00	4,300,000,000.00
Target Date	04/01/2011	04/01/2011	04/01/2011
Yield	6.728686%	6.729818%	6.660916%

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BOND DEBT SERVICE

State of Maine
Pension Obligation Bond - 30 yrs
30 year, Fixed, Levl Debt Service
Scenario 1 - $4.3 Billion

Period Ending	Principal	Coupon	Interest	Debt Service
06/30/2011			47,517,530.83	47,517,530.83
06/30/2012	49,675,000	6.470%	285,105,185.00	334,780,185.00
06/30/2013	52,890,000	6.470%	281,891,212.50	334,781,212.50
06/30/2014	56,310,000	6.470%	278,469,229.50	334,779,229.50
06/30/2015	59,955,000	6.470%	274,825,972.50	334,780,972.50
06/30/2016	63,830,000	6.470%	270,946,884.00	334,776,884.00
06/30/2017	67,960,000	6.470%	266,817,083.00	334,777,083.00
06/30/2018	72,360,000	6.470%	262,420,071.00	334,780,071.00
06/30/2019	77,040,000	6.470%	257,738,379.00	334,778,379.00
06/30/2020	82,025,000	6.470%	252,753,891.00	334,778,891.00
06/30/2021	87,330,000	6.470%	247,446,873.50	334,776,873.50
06/30/2022	92,980,000	6.470%	241,796,622.50	334,776,622.50
06/30/2023	99,000,000	6.470%	235,780,816.50	334,780,816.50
06/30/2024	105,405,000	6.470%	229,375,516.50	334,780,516.50
06/30/2025	112,225,000	6.470%	222,555,813.00	334,780,813.00
06/30/2026	119,485,000	6.470%	215,294,855.50	334,779,855.50
06/30/2027	127,215,000	6.470%	207,564,176.00	334,779,176.00
06/30/2028	135,445,000	6.470%	199,333,365.50	334,778,365.50
06/30/2029	144,210,000	6.470%	190,570,074.00	334,780,074.00
06/30/2030	153,540,000	6.470%	181,239,687.00	334,779,687.00
06/30/2031	163,470,000	6.470%	171,305,649.00	334,775,649.00
06/30/2032	174,050,000	6.760%	160,729,140.00	334,779,140.00
06/30/2033	185,815,000	6.760%	148,963,360.00	334,778,360.00
06/30/2034	198,375,000	6.760%	136,402,266.00	334,777,266.00
06/30/2035	211,785,000	6.760%	122,992,116.00	334,777,116.00
06/30/2036	226,105,000	6.760%	108,675,450.00	334,780,450.00
06/30/2037	241,385,000	6.760%	93,390,752.00	334,775,752.00
06/30/2038	257,705,000	6.760%	77,073,126.00	334,778,126.00
06/30/2039	275,125,000	6.760%	59,652,268.00	334,777,268.00
06/30/2040	293,725,000	6.760%	41,053,818.00	334,778,818.00
06/30/2041	313,580,000	6.760%	21,198,008.00	334,778,008.00
	4,300,000,000		5,790,879,191.33	10,090,879,191.33

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FORM 8038 STATISTICS

State of Maine
Pension Obligation Bond - 30 yrs
30 year, Fixed, Levl Debt Service
Scenario 1 - $4.3 Billion

Dated Date 04/01/2011
Delivery Date 04/01/2011

Bond Component	Date	Principal	Coupon	Price	Issue Price	Redemption at Maturity
Term due 2031:						
	06/01/2012	49,675,000.00	6.470%	100.000	49,675,000.00	49,675,000.00
	06/01/2013	52,890,000.00	6.470%	100.000	52,890,000.00	52,890,000.00
	06/01/2014	56,310,000.00	6.470%	100.000	56,310,000.00	56,310,000.00
	06/01/2015	59,955,000.00	6.470%	100.000	59,955,000.00	59,955,000.00
	06/01/2016	63,830,000.00	6.470%	100.000	63,830,000.00	63,830,000.00
	06/01/2017	67,960,000.00	6.470%	100.000	67,960,000.00	67,960,000.00
	06/01/2018	72,360,000.00	6.470%	100.000	72,360,000.00	72,360,000.00
	06/01/2019	77,040,000.00	6.470%	100.000	77,040,000.00	77,040,000.00
	06/01/2020	82,025,000.00	6.470%	100.000	82,025,000.00	82,025,000.00
	06/01/2021	87,330,000.00	6.470%	100.000	87,330,000.00	87,330,000.00
	06/01/2022	92,980,000.00	6.470%	100.000	92,980,000.00	92,980,000.00
	06/01/2023	99,000,000.00	6.470%	100.000	99,000,000.00	99,000,000.00
	06/01/2024	105,405,000.00	6.470%	100.000	105,405,000.00	105,405,000.00
	06/01/2025	112,225,000.00	6.470%	100.000	112,225,000.00	112,225,000.00
	06/01/2026	119,485,000.00	6.470%	100.000	119,485,000.00	119,485,000.00
	06/01/2027	127,215,000.00	6.470%	100.000	127,215,000.00	127,215,000.00
	06/01/2028	135,445,000.00	6.470%	100.000	135,445,000.00	135,445,000.00
	06/01/2029	144,210,000.00	6.470%	100.000	144,210,000.00	144,210,000.00
	06/01/2030	153,540,000.00	6.470%	100.000	153,540,000.00	153,540,000.00
	06/01/2031	163,470,000.00	6.470%	100.000	163,470,000.00	163,470,000.00
Term due 2041:						
	06/01/2032	174,050,000.00	6.760%	100.000	174,050,000.00	174,050,000.00
	06/01/2033	185,815,000.00	6.760%	100.000	185,815,000.00	185,815,000.00
	06/01/2034	198,375,000.00	6.760%	100.000	198,375,000.00	198,375,000.00
	06/01/2035	211,785,000.00	6.760%	100.000	211,785,000.00	211,785,000.00
	06/01/2036	226,105,000.00	6.760%	100.000	226,105,000.00	226,105,000.00
	06/01/2037	241,385,000.00	6.760%	100.000	241,385,000.00	241,385,000.00
	06/01/2038	257,705,000.00	6.760%	100.000	257,705,000.00	257,705,000.00
	06/01/2039	275,125,000.00	6.760%	100.000	275,125,000.00	275,125,000.00
	06/01/2040	293,725,000.00	6.760%	100.000	293,725,000.00	293,725,000.00
	06/01/2041	313,580,000.00	6.760%	100.000	313,580,000.00	313,580,000.00
		4,300,000,000.00			4,300,000,000.00	4,300,000,000.00

	Maturity Date	Interest Rate	Issue Price	Stated Redemption at Maturity	Weighted Average Maturity	Yield
Final Maturity	06/01/2041	6.760%	313,580,000.00	313,580,000.00		
Entire Issue			4,300,000,000.00	4,300,000,000.00	20.1654	6.6609%

Proceeds used for accrued interest	0.00
Proceeds used for bond issuance costs (including underwriters' discount)	30,600,000.00
Proceeds used for credit enhancement	0.00
Proceeds allocated to reasonably required reserve or replacement fund	0.00

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