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AGENDA ITEM 4D

**TO: MEMBERS OF THE BENEFITS AND PROGRAM ADMINISTRATION
COMMITTEE**

- I. SUBJECT:** State and Schools Employer Contribution Rates for
the Fiscal Year July 1, 2010 through June 30, 2011
- II. PROGRAM:** Actuarial & Employer Services
- III. RECOMMENDATION:**

That the Committee recommends to the full Board the adoption of the employer contribution rates for the State and Schools for the period July 1, 2010 to June 30, 2011 as set forth in the table on the following page.

IV. ANALYSIS:

State and Schools Employer Contribution Rates for 2010-2011

The Actuarial Office has completed the calculation of the employer contribution rates for the State and Schools for the fiscal year July 1, 2010 through June 30, 2011. A full actuarial report will be mailed under separate cover.

The table on the following page compares the fiscal year 2010-2011 contribution rates and the dollar amounts these rates are anticipated to generate with rates and contributions for the current fiscal year July 1, 2009 through June 30, 2010.

	2009-2010 Fiscal Year		2010-2011 Fiscal Year	
	Employer Contribution	Employer Rate	Employer Contribution	Employer Rate
State Miscellaneous Tier 1	\$1,659,842,332	16.917%	\$2,005,386,799	19.922%
State Miscellaneous Tier 2	71,927,813	16.737%	78,295,146	19.622%
State Industrial	89,971,498	17.251%	104,337,234	18.183%
State Safety	346,351,430	18.099%	423,342,840	20.672%
State Peace Officers & Firefighters	927,608,857	25.848%	1,037,586,121	28.887%
California Highway Patrol	191,870,528	28.438%	239,330,261	32.625%
Total for the State	\$3,287,572,458		\$3,888,278,401	
Schools	1,081,377,863	9.709%	1,189,482,769	10.707%

Please refer to Attachment 1 for the development of the employer rate for each plan and attachment 5 for a history of expected contribution requirements for each plan.

Reasons for Changes in Employer Contributions for the State Plans

The contribution rates presented in this agenda item reflect the -24% return experienced by CalPERS in fiscal year 2008-2009. As a result of the new rate smoothing methods adopted by the Board in December of 2009, the impact of this negative return is being greatly mitigated. However, the employer rate is increasing for all State plans and the Schools pool.

Overall, the required contributions for the State plans have increased by \$600.7 million between fiscal year 2009-2010 and fiscal year 2010-2011. There are three main reasons for the increase: 1) the Plans' experience in fiscal year 2008-2009 which includes demographic, contribution and asset gains/losses, 2) changes in actuarial assumptions and 3) the additional contribution requirement for plans that have heavy negative cash flows.

1). Plans' experience in fiscal year 2008-2009

The contribution increase due to the State plans experience was mainly driven by the large asset loss. The total increase in contribution due to plan experience was \$199.9 million of which \$115.2 million was due to the asset loss. The reasons for the changes in employer contributions for the State between fiscal year 2009-2010 and fiscal year 2010-2011 are as follows:

Reason for Change	Change in Required Contribution (millions)
Increase due to growth in payroll and normal progression of existing amortization bases	\$79.9
First installment of the 30 year amortization of the following actuarial gains and losses:	
<ul style="list-style-type: none"> • Impact of the -24% investment return in fiscal year 2008-2009 • Lower than expected individual salary increases in fiscal year 2008-2009 • Greater than expected number of retirements in fiscal year 2008-2009 • Greater than expected contributions received in fiscal year 2008-2009 (higher than expected payroll) • Fewer deaths than expected on Retirees in fiscal year 2008-2009 • Other Gains and Losses 	115.2 (55.2) 57.5 (3.1) 2.9 2.7
Total Change in Required Contributions	\$199.9

2). Changes in Actuarial Assumptions

The CalPERS Board adopted in April 2010 new demographic actuarial assumptions to be used in the June 30, 2009 actuarial valuations of all plans at CalPERS. The adoption of these new actuarial assumptions accounted for \$299.1 million of the total increase in contribution for the State Plans. The table below outlines the change in rates and total dollar amount for the various State Plans as a result of the new actuarial assumptions. Note that this table does not reflect the impact of additional contributions as explained in the next section.

	Increase in Contribution Amounts due to New Assumptions	Increase in Contribution Rates due to New Assumptions
State Miscellaneous Tier 1	\$144,428,076	1.422%
State Miscellaneous Tier 2	4,349,367	1.416%
State Industrial	4,595,606	0.985%
State Safety	48,687,057	2.350%
State Peace Officers & Firefighters	79,701,084	2.205%
California Highway Patrol	17,306,350	2.359%

Subtotal State	\$299,067,540	
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The assumption causing the biggest impact on employer rates for all plans is the assumption for post-retirement mortality. Since the change in actuarial assumption resulted in a bigger increase in the life expectancy of male members than female members, safety plans, which tend to have a much higher proportion of male members, are affected more by this change than miscellaneous plans. Other than the change in life expectancy, the rates are also increasing as a result of changes to the assumption for service retirement and the salary increases assumption.

3). Additional Contributions

Back in February 2010, the CalPERS Board adopted a resolution requiring additional contributions for any State plans or the Schools pool if their cash flows hampered adequate funding progress by preventing the expected funded status on a market value of assets basis of the plan to either:

- Increase by at least 15% by June 30, 2042; or
- Reach a level of 75% funded by June 30, 2042

The table below shows how the criteria for additional contributions impacts the State plans and the schools pool. The table indicates whether or not an increase in contribution is needed and, if so, how much as a percentage of payroll the increase has to be to meet the criteria.

Plan Name	Funded Status on June 30, 2009	Estimated Funded Status on June 30, 2042	Required Additional Contribution as a Percentage of Payroll	Estimated Funded Status on June 30, 2042 (With Additional Contributions)
State Miscellaneous	59.0%	65.3%	About 1% of Payroll	76%
State Industrial	63.1%	82.5%	None	N/A
State Safety	58.5%	87.5%	None	N/A
POFF	57.4%	79.8%	None	N/A
CHP	53.9%	72.6%	About 0.5% of Payroll	75%
Schools	65.0%	78.5%	N/A	N/A

As can be seen, as a result of the additional contribution criteria adopted by the Board in February 2010, State Miscellaneous and CHP have been identified as being as two plans where additional contribution are required to improve their funded status over the next 30 years. As a result, the total State contribution is increasing by about \$101.7 million for fiscal year 2010-2011. CalPERS actuaries

will reassess when performing the June 30, 2010 valuation as to whether or not the additional contributions are still necessary.

Reasons for Changes in Employer Contributions for the Schools Pool

The required contributions for the Schools pool are also increasing. Overall, the required contributions for the Schools pool have increased by \$108.1 million between fiscal year 2009-2010 and fiscal year 2010-2011. There are two main reasons for the increase. First, the Plan's experience in fiscal year 2008-2009 which includes liability, contribution and asset gains/losses. The total increase in contribution due to plan experience was \$61.2 million of which \$57.8 million was due to the asset loss. The second main reason for the change in contribution was due to the changes in actuarial assumptions which accounted for the remaining \$46.9 million increase (which represents an increase in employer rate of 0.423% of payroll).

Funded Status

We are monitoring the funded status of the State plans and Schools pool using the market value of assets since this is a better measure of the plans ability to pay benefits.

As a result of the -24% investment return experienced by CalPERS in fiscal year 2008-2009 versus the assumed 7.75%, the funded status has declined by about 25% to 28% for all plans. The table below shows the funded status of the plans using the market value of assets on June 30, 2009.

Funded Status and Unfunded Liability on June 30, 2009

Plan	Entry Age Normal Accrued Liability	Market Value of Assets	Unfunded Liability	Funded Ratio
State Miscellaneous	\$74,762,618,379	\$44,093,662,038	\$ 30,668,956,341	59.0%
State Industrial	2,467,298,792	1,555,771,235	911,527,557	63.1%
State Safety	6,005,613,098	3,514,114,682	2,491,498,416	58.5%
State Peace Officers and Firefighters	26,291,087,859	15,083,085,214	11,208,002,645	57.4%
California Highway Patrol	7,300,111,305	3,932,218,884	3,367,892,421	53.9%
Total for the State	\$116,826,729,433	\$68,178,852,053	\$48,647,877,380	58.4%
Schools	\$52,493,079,524	\$34,146,446,650	\$18,346,632,874	65.0%

The table below shows the funded status for each of the plans for the last five years.

Funded Ratio of the Retirement Program (Based on the Market Value of Assets)					
	June 30, 2005	June 30, 2006	June 30, 2007	June 30, 2008	June 30, 2009
State Miscellaneous	86.2%	89.8%	98.6%	86.1%	59.0%
State Industrial	90.4%	95.0%	103.7%	91.0%	63.1%
State Safety	86.4%	89.2%	97.2%	84.8%	58.5%
State Police Officers & Firefighters	84.4%	86.0%	92.3%	82.2%	57.4%
California Highway Patrol	79.4%	81.5%	88.8%	79.3%	53.9%
Total State	85.5%	88.6%	96.6%	84.9%	58.4%
Schools	96.2%	98.7%	107.8%	93.8%	65.0%

Refer to Attachment 3 for the development of the accrued and unfunded liabilities as well as the funded ratio for each plan based on the market value of assets. The actuarial value of assets is only used for setting employer rates and keeping them as stable as possible.

Please refer to Attachment 4 for the development of the actuarial value of assets for each plan.

Investment Return Sensitivity Analysis

At the time of writing this agenda item, the fiscal year to date investment return was between slightly above 17%. If the return were to stay in that range for the whole 2009-2010 fiscal year, it would help reduce the impact of the -24% return in 2008-2009 and the impact of the three year phase in adopted by the Board in December 2009.

As part of this agenda item, an investment return sensitivity analysis was performed for each plan to display the potential risk to the contribution rates. The investment return sensitivity analysis is included in Attachment 6.

V. STRATEGIC PLAN:

This item is not a specific product of the Strategic or Annual Plans but is part of the regular and ongoing workload of the Actuarial Office.

VI. RESULTS/COSTS:

See attachments.



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