



# **State & Schools Actuarial Valuation**

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*As of June 30, 2011*

*Establishing Required Contributions*

*for the Fiscal Year*

*July 1, 2012 through June 30, 2013*



CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

**State & Schools  
Actuarial Valuation  
as of June 30, 2011**

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## Actuarial Certification

To the best of our knowledge, this report is complete and accurate and contains sufficient information to fully and fairly disclose the funded condition of the CalPERS' State and Schools plans. This valuation is based on the member and financial data as of June 30, 2011, provided by the various CalPERS databases and the benefit plans as outlined in Appendix B. It is our opinion that the valuation has been performed in accordance with generally accepted actuarial principles, in accordance with standards of practice prescribed by the Actuarial Standards Board, and that the assumptions and methods are internally consistent and reasonable for these plans, as prescribed by the CalPERS Board of Administration according to provisions set forth in the California Public Employees' Retirement Law.



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## HIGHLIGHTS AND EXECUTIVE SUMMARY

- INTRODUCTION
- PURPOSE OF THE REPORT
- EMPLOYER REQUIRED CONTRIBUTION RATES
- EXPECTED FUTURE CHANGES
- HISTORY OF THE EXPECTED CONTRIBUTION REQUIREMENTS
- FUNDED STATUS OF THE PLANS
- CHANGES SINCE THE PRIOR VALUATION
- SUBSEQUENT EVENTS



## Introduction

This is the actuarial valuation report as of June 30, 2011 for the State and Schools plans. This actuarial valuation was used to set the 2012-2013 required employer contribution rates. The rates set for the 2012-2013 fiscal year reflect a 21% investment return from 2010-2011 and the third year of the temporary smoothing set in place to phase in the -24% investment return from the 2008-2009 fiscal year.

This valuation also reflects the CalPERS Board's adoption of updated economic assumptions for all plans and a phase-in of the impact of the assumption change for the Schools pool. A phase-in of the impact of the assumption change for State plans also was adopted by the Board, but the legislature adopted rates that do not reflect the phase-in. For descriptions of the change in actuarial assumptions and the phase-in of the impact of that change on employer rates, see page 13 under the "Changes Since the Prior Valuation" section and in the "Methods" section.

Appendix C is a new addition to this report. It contains information showing the impact on contribution rates under different investment return scenarios, and also contains a sensitivity analysis showing the impact on current results of a plus or minus 1% change in discount rate, as well as additional information showing the impact on current results of a plus or minus 2% change in discount rate as required under Government Code Section 20229.

## Purpose of the Report

This actuarial valuation of the State and Schools plans of the California Public Employees' Retirement System (CalPERS) was performed by CalPERS staff actuaries using data as of June 30, 2011 in order to:

- set forth the actuarial assets and funding liabilities of these plans as of June 30, 2011;
- establish the actuarially required contribution rates of these plans for the fiscal year July 1, 2012 through June 30, 2013;
- provide actuarial information as of June 30, 2011 to the CalPERS Board of Administration and other interested parties; and
- provide pension information as of June 30, 2011 to be used in financial reports subject to Governmental Accounting Standards Board Statement Number 27.

Use of this report for other purposes may be inappropriate. Numbers in this report may not add up due to rounding.

## Employer Required Contribution Rates

The actuarially required employer contribution rates for the fiscal year July 1, 2012 through June 30, 2013 are shown below. The 2012-2013 rates shown below are the rates adopted by the CalPERS Board in May 2012 and reflect a phase-in of the impact of the assumption change. For comparison purposes,

the corresponding contributions for fiscal year July 1, 2011 through June 30, 2012 are also provided. The expected contribution amounts that these rates are/were expected to generate are also shown.

	2011-2012 Fiscal Year		2012-2013 Contribution based on New Assumptions with <i>phase-in</i> of impact of assumption change	
	Expected Employer Contribution	Required Employer Rate	Expected Employer Contribution	Required Employer Rate
State Miscellaneous Tier 1	\$1,841,648,485	18.175%	\$1,978,781,516	19.651%
State Miscellaneous Tier 2	65,054,003	17.025%	69,842,873	19.605%
State Industrial	91,966,115	14.934%	97,182,571	15.773%
State Safety	329,227,399	16.428%	338,320,571	17.052%
State Peace Officers & Firefighters	947,128,065	27.415%	990,397,248	29.186%
California Highway Patrol	239,927,089	31.264%	253,293,196	32.474%
<b>Subtotal State</b>	<b>\$3,514,951,156</b>		<b>\$3,727,817,975</b>	
Schools	1,232,486,937	10.923%	1,203,430,156	11.417%
<b>Total</b>	<b>\$4,747,438,093</b>		<b>\$4,931,248,131</b>	

Subsequent to the Board meeting, the California State legislature adopted higher contribution rates that do not reflect a phase-in of the impact of the assumption change. The next table illustrates the 2012-2013 contribution rates for the State plans without the phase-in of the impact of the assumption change.

	<b>2012-2013 Contribution based on New Assumptions <i>without phase-in</i> of impact of assumption change</b>	
	<b>Expected Employer Contribution</b>	<b>Required Employer Rate</b>
State Miscellaneous Tier 1	\$2,064,654,743	20.503%
State Miscellaneous Tier 2	72,880,957	20.457%
State Industrial	100,447,274	16.302%
State Safety	347,275,501	17.503%
State Peace Officers & Firefighters	1,028,095,419	30.297%
California Highway Patrol	263,068,361	33.728%
<b>Total State</b>	<b>\$3,876,422,255</b>	

Rates and figures used in the exhibits throughout the remainder of the report reflect the State plan rates *without the phase-in*.

The supporting exhibits in this report entitled “Reconciliation of Employer Contribution Rates” on page 37 and “Reconciliation of Employer Contributions” on page 39 provides explanations of the changes in required contribution rates and expected contribution amounts from the 2011-2012 fiscal year to the 2012-2013 fiscal year.

A history of the required contribution rates is included on page 41 of this report.

### **Reasons for Change in Employer Contributions for the State Plans**

Overall, the required contributions for the State plans have increased between fiscal year 2011-2012 and fiscal year 2012-2013. There are two main reasons for the increase: 1) the Plans’ experience in fiscal year 2010-2011 which includes demographic, contribution and asset gains/losses and 2) changes in actuarial assumptions.

**1) Plans' experience in fiscal year 2010-2011**

The reasons for the changes in employer contributions for the State between fiscal year 2011-2012 and fiscal year 2012-2013 are shown in the table below:

<b>Reason for Change</b>	<b>Change in Required Contribution (millions)</b>
Increase due to growth in payroll and normal progression of existing amortization bases	\$41.7
Actuarial gains and losses:	
<ul style="list-style-type: none"> <li>• Impact of the third year of smoothing the gains and losses (including the -24 percent investment return) from fiscal year 2008-2009</li> </ul>	50.1
<ul style="list-style-type: none"> <li>• Lower than expected individual salary increases and overall pay increases less than expected in fiscal year 2010-2011</li> </ul>	(125.3)
<ul style="list-style-type: none"> <li>• Greater than expected number of retirements in fiscal year 2010-2011</li> </ul>	72.4
<ul style="list-style-type: none"> <li>• Less than expected contributions received in fiscal year 2010-2011</li> </ul>	7.1
<ul style="list-style-type: none"> <li>• Other Gains and Losses</li> </ul>	31.4
<b>Total Change in Required Contributions due to plan experience</b>	<b>\$77.4</b>

## **2) Changes in Actuarial Assumptions/Adoption of Phase-in**

In March 2012, the CalPERS Board adopted updated economic assumptions to be used beginning with the June 30, 2011 valuation. In April 2012, the CalPERS Board adopted a two year phase-in of the impact of changing the actuarial assumptions. The phase-in resulted in amortizing over a 20-year period the increase in actuarial liabilities resulting from the change in assumptions, with the payment in year one equal to one-third of the payment that would have been required without the phase-in and the unpaid balance amortized over the remaining 19 years. As noted above, the legislature adopted higher contribution rates without the phase-in for the State plans.

The adoption of the new actuarial assumptions account for an approximately \$284 million total increase in contribution for the State plans. The phase-in would have reduced that amount in the first year by about \$149 million if the legislature had not adopted the higher contribution rates.

### **Reasons for Change in Employer Contributions for the Schools Pool**

There are two main reasons for the change in contribution levels for Schools. The first reason is due to the Plan's experience in fiscal year 2010-2011, which includes liability, contribution, and asset gains/losses. Plan experience during the 2010-2011 fiscal year indicates a decrease in contributions of approximately \$91.4 million mainly due to salary increases less than expected. The second reason for the change in contributions is due to the changes in actuarial assumptions adopted by the Board in March 2012, which accounted for a \$128.2 million increase. The phase-in reduced the employer contributions for the 2012-2013 fiscal year by about \$65.8 million.

## Expected Future Changes

In July 2012, the investment return for fiscal year 2011-2012 was announced to be 1.0%. This return does not reflect final investment return information for real estate and private equities. The final return information for these two asset classes will be available later in October. For purposes of projecting future employer rates, we are assuming a 0% investment return for fiscal year 2011-2012.

Below is a table showing the estimated 2013-2014 employer rates for the State plans and the Schools pool based on a 0% investment return for fiscal year 2011-2012. Note that the projected rates assume that all other actuarial assumptions will be realized and that no changes to either member contributions or benefits will occur between now and the beginning of fiscal year 2013-2014.

	<b>Estimated 2013-2014 Employer Rates Assuming an 0% Investment Return for 2011-2012</b>
State Miscellaneous Tier 1	21.2%
State Miscellaneous Tier 2	21.1%
State Industrial	16.6%
State Safety	17.6%
State Police Officers & Firefighters	30.7%
California Highway Patrol	34.3%
Schools	12.5%

A scenario analysis was performed to determine the effects of various investment returns on future employer contribution rates for three years beyond the estimated 2013-2014 employer rates shown above. That information is available in Appendix C.

## History of the Expected Contribution Requirements

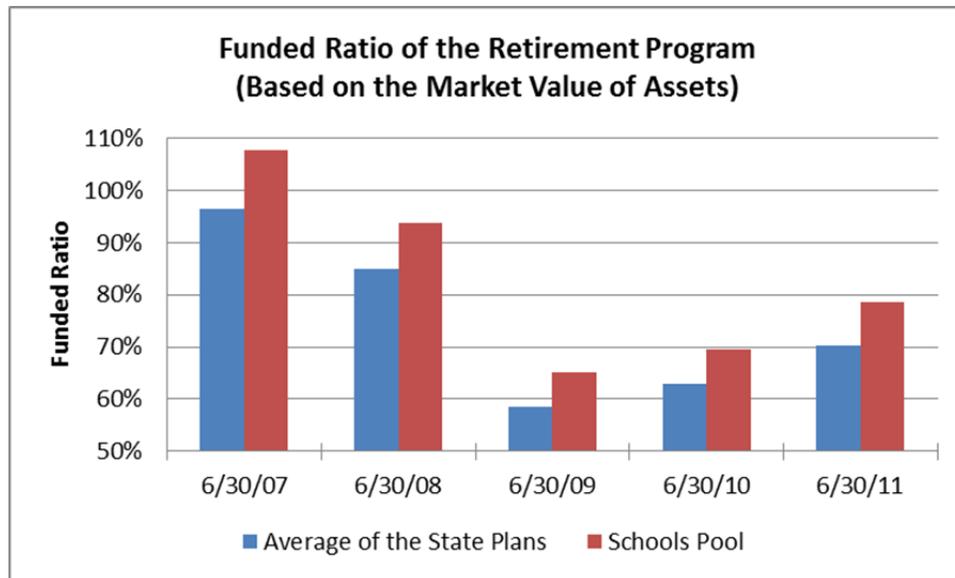
The following table shows the history of the employer contributions set by CalPERS based on projected payroll for the State plans and the Schools pool going back to fiscal year 1996-1997.

<b>Fiscal Year</b>	<b>Total State Contributions</b>	<b>Total School Contributions</b>
1996-97	\$1,236,447,373	\$ 416,694,314
1997-98	1,223,327,746	317,571,853
1998-99	766,067,149	0
1999-00	159,460,097	0
2000-01	156,722,747	0
2001-02	677,244,769	0
2002-03	1,189,559,722	228,972,653
2003-04	2,212,518,481	869,501,830
2004-05	2,547,364,178	903,570,002
2005-06	2,428,720,628	826,672,339
2006-07	2,665,262,125	841,504,282
2007-08	2,746,929,250	919,528,538
2008-09	3,025,181,372	966,316,743
2009-10	3,287,572,458	1,081,377,863
2010-11 <sup>1</sup>	3,684,715,103	1,189,482,769
2011-12	3,514,951,156	1,232,486,937
2012-13	\$3,876,422,255	\$1,203,430,156

## Funded Status of the Plans

As a result of the 21 percent investment return experienced by CalPERS in fiscal year 2010-2011 versus the assumed 7.75 percent, the funded status has increased by 6.9 percent to 9.4 percent for all plans. The graph on the next page shows the average funded status for all State plans and for the Schools pool, based on the market value of assets, for the last five years.

<sup>1</sup> The State employer contributions for 2010-11 differ from the expected employer contribution of \$3,888,278,401 determined by the June 30, 2009 annual valuation due to additional member contributions which resulted in lower expected employer contributions.



The table below shows the funded status of the plans using the market value of assets on June 30, 2011.

**Funded Status and Unfunded Liability on June 30, 2011**

<b>Plan</b>	<b>Entry Age Normal Accrued Liability</b>	<b>Market Value of Assets</b>	<b>Unfunded Liability</b>	<b>Funded Ratio</b>
State Miscellaneous	\$81,271,085,568	\$57,451,959,716	\$23,819,125,852	70.7%
State Industrial	2,831,498,651	2,179,954,931	651,543,720	77.0%
State Safety	7,224,281,258	5,389,522,934	1,834,758,324	74.6%
State Peace Officers and Firefighters	30,127,480,709	20,801,283,158	9,326,197,551	69.0%
California Highway Patrol	8,193,449,625	5,335,993,093	2,857,456,532	65.1%
<b>Total for the State</b>	<b>\$129,647,795,811</b>	<b>\$91,158,713,832</b>	<b>\$38,489,081,979</b>	<b>70.3%</b>
Schools	\$58,358,406,128	\$45,900,990,362	\$12,457,415,766	78.7%

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

<b>Funded Ratio of the Retirement Program (Based on the Market Value of Assets)</b>					
	<b>June 30, 2007</b>	<b>June 30, 2008</b>	<b>June 30, 2009</b>	<b>June 30, 2010</b>	<b>June 30, 2011</b>
State Miscellaneous	98.6%	86.1%	59.0%	63.2%	70.7%
State Industrial	103.7%	91.0%	63.1%	68.3%	77.0%
State Safety	97.2%	84.8%	58.5%	65.2%	74.6%
State Police Officers & Firefighters	92.3%	82.2%	57.4%	62.1%	69.0%
California Highway Patrol	88.8%	79.3%	53.9%	57.6%	65.1%
<b>Total State</b>	<b>96.6%</b>	<b>84.9%</b>	<b>58.4%</b>	<b>62.8%</b>	<b>70.3%</b>
Schools	107.8%	93.8%	65.0%	69.5%	78.7%

## Changes Since the Prior Valuation

### ACTUARIAL ASSUMPTIONS

The CalPERS Actuarial office conducted a study and hired an independent evaluator to assess current economic assumptions. Based on the information from both studies, the CalPERS Board has adopted updated economic assumptions to be used with the June 30, 2011 valuation. In particular, the recommendation based on both studies was to lower the price inflation assumption from 3.00 to 2.75 percent.

Lowering the price inflation assumption has a direct impact on the discount rate and the overall payroll growth assumptions. The discount rate assumption is calculated as the sum of the price inflation and the assumed real rate of return. The assumed real rate of return is 4.75 percent. When added to the new price inflation of 2.75 percent, the resulting discount rate is 7.50 percent. The overall payroll growth is calculated as the sum of the price inflation and real wage inflation. The assumed real wage inflation is 0.25 percent. When added to the new price inflation of 2.75 percent, the resulting overall payroll growth is 3.00 percent.

The new assumptions are described in Appendix A. The effect of the assumption changes on the unfunded liability is shown in the “(Gain)/Loss Analysis” and the effect on your employer contribution rate is included in the “Reconciliation of Employer Contribution Rates.”

### METHODS

There was one change in method since the prior valuation, which only applied to the Schools plan. As a result of the newly adopted economic actuarial assumptions in March 2012, the CalPERS Board adopted a two year phase-in of the impact of changing the economic actuarial assumptions. This two year phase-in is accomplished by having school employees pay one third of the amortization payment that would otherwise be required for the increase in actuarial liabilities resulting from the change in

assumptions. The remaining two thirds will be paid by Schools employers over the remaining 19 years so that at the end of 20 years the full increase in actuarial liabilities will have been paid.

## PLAN PROVISIONS

For all State plans, new state employees hired on or after January 15, 2011 (with no prior state service) are subject to lower retirement formulas and benefits based on highest average annual compensation during a consecutive 36 month period. This valuation is the first valuation where these lower benefits for new hires are reflected. A summary of benefits is available in Appendix B.

## Subsequent Events

AB 340 was signed by the Governor on September 12, 2012. AB 340 provides for changes in retirement benefits and member contributions for both current members and new hires. We have not reflected the impact of AB 340 in this valuation. AB 340 is not expected to have any impact on the accrued liability disclosed in the report and the contribution rate that the valuation is setting for 2012-2013. However, AB 340 will impact future contribution rates and the estimated projected rates provided in Appendix C will be impacted and have not been adjusted to reflect the impact of AB 340.

## California Actuarial Advisory Panel Recommendations

The report satisfies all basic disclosure requirements under the Model Disclosure Elements for Actuarial Valuation Reports recommended by the California Actuarial Advisory Panel, except for the following:

- Due to the various employee contribution rates within the majority of State plans, we have shown the total normal cost for the plans and shown the average employee portion as “Employee Contribution.” More specific employee normal costs are given in Appendix B.
- The unfunded liability amortization schedule does not give the amounts of each of the original bases; instead, the rolling 30-year gain/loss bases were all combined into a single base.

This report gives the following additional information classified as enhanced risk disclosures under the Model Disclosure Elements for Actuarial Valuation Reports recommended by the California Actuarial Advisory Panel:

- “Deterministic stress test” projecting future results under different investment return scenarios (see Appendix C Analysis of Future Investment Return Scenarios).
- “Sensitivity analysis” showing the impact on current valuation results of a plus or minus 1% change in the discount rate (see Appendix C Analysis of Discount Rate Sensitivity).

# LIABILITIES AND RATES

- COMPARISON OF CURRENT AND PRIOR YEAR
- DEVELOPMENT OF ACCRUED AND UNFUNDED LIABILITIES
- DEVELOPMENT OF EMPLOYER CONTRIBUTION RATES
- SCHEDULE OF AMORTIZATION BASES FOR THE RETIREMENT PROGRAM
- GAIN/LOSS ANALYSIS
- DEVELOPMENT OF GROUP TERM LIFE INSURANCE CONTRIBUTIONS
- RECONCILIATION OF EMPLOYER CONTRIBUTION RATES
- RECONCILIATION OF EMPLOYER CONTRIBUTIONS
- EMPLOYER CONTRIBUTION RATE HISTORY
- HISTORY OF FUNDED STATUS AND FUNDING PROGRESS



## Comparison of Current and Prior Year

Shown below are the key valuation results for the current valuation compared to the corresponding results from the prior valuation.

### STATE MISCELLANEOUS

#### Participant Information

	June 30, 2010	June 30, 2011
Members Included in the Valuation <sup>1</sup>		
Active Members Tier 1	151,631	150,826
Active Members Tier 2	7,674	7,204
Subtotal Active Members	159,305	158,030
Transfers from Tier 1	21,163	26,954
Transfers from Tier 2	11,881	11,460
Subtotal Transfers	33,044	38,414
Vested Terminations Tier 1	41,164	41,889
Vested Terminations Tier 2	1,694	1,635
Subtotal Vested Terminations <sup>2</sup>	42,858	43,524
Receiving Payments Tier 1	154,540	159,812
Receiving Payments Tier 2	4,362	4,531
Subtotal Receiving Payments	158,902	164,343
Subtotal Tier 1	368,498	379,481
Subtotal Tier 2	25,611	24,830
Grand Total	394,109	404,311
Average Entry Age of Active Members Tier 1	34.8	34.9
Average Entry Age of Active Members Tier 2	32.4	32.3
Average Age of Active Members Tier 1	48.0	48.0
Average Age of Active Members Tier 2	49.5	50.1
Average Pay Tier 1	\$ 62,322	\$ 62,566
Average Pay Tier 2	53,851	54,290
Average Pay Total	\$ 61,914	\$ 62,188
Covered Payroll Prior Fiscal Year		
Tier 1	\$ 9,449,935,700	\$ 9,436,518,971
Tier 2	413,255,995	391,102,267
Total	\$ 9,863,191,695	\$ 9,827,621,238
Projected Payroll for Contribution Rate		
Tier 1	\$ 10,132,613,023	\$ 10,069,864,485
Tier 2	382,104,128	356,258,886
Total	\$ 10,514,717,151	\$ 10,426,123,371

- Counts of members included in the valuation are counts of the records processed by the valuation. Multiple records may exist for those who have service in more than one coverage group. This does not result in double counting of liabilities.
- Includes non-vested terminated participants with employee contributions remaining in the plan.

## STATE MISCELLANEOUS (CONTINUED)

**Funded Status of the Retirement Program**

	June 30, 2010	June 30, 2011
Present Value of Benefits	\$ 88,081,227,732	\$ 92,738,298,297
Accrued Liability	\$ 76,980,432,507	\$ 81,271,085,568
Market Value of Assets	\$ 48,645,908,066	\$ 57,451,959,716
Unfunded Liability/(Surplus) on a Market Value of Assets Basis	\$ 28,334,524,441	\$ 23,819,125,852
Funded Status	63.2%	70.7%

**Employer Contribution**

	June 30, 2010	June 30, 2011
<b>Tier 1 Contribution Required in Dollars</b>		
Total Normal Cost	1,461,528,102	1,518,334,167
Employee Contribution	670,044,206	675,486,510
Employer Normal Cost	791,483,897	842,847,657
Amortization of Unfunded Liability <sup>3</sup>	1,046,820,826	1,214,153,989
Group Term Life Benefits	3,343,762	7,653,097
Total	\$ 1,841,648,485	\$ 2,064,654,743
<b>Tier 1 Contribution Required (Percent of Payroll)</b>		
Total Normal Cost	14.424%	15.078%
Employee Contribution	6.613%	6.708%
Employer Normal Cost	7.811%	8.370%
Amortization of Unfunded Liability <sup>3</sup>	10.331%	12.057%
Group Term Life Benefits	0.033%	0.076%
Total	18.175%	20.503%

<b>Tier 2 Contribution Required in Dollars</b>		
Total Normal Cost	\$ 25,451,956	\$ 29,654,990
Employee Contribution	-	-
Employer Normal Cost	25,451,956	29,654,990
Amortization of Unfunded Liability <sup>3</sup>	39,475,953	42,955,210
Group Term Life Benefits	126,094	270,757
Total	\$ 65,054,003	\$ 72,880,957
<b>Tier 2 Contribution Required (Percent of Payroll)</b>		
Total Normal Cost	6.610%	8.324%
Employee Contribution	0.000%	0.000%
Employer Normal Cost	6.661%	8.324%
Amortization of Unfunded Liability <sup>3</sup>	10.331%	12.057%
Group Term Life Benefits	0.033%	0.076%
Total	17.025%	20.457%

<sup>3</sup> For rate setting purposes, the unfunded liability is calculated based on the smoothed actuarial value of assets.

## STATE INDUSTRIAL

**Participant Information**

	June 30, 2010	June 30, 2011
Members Included in the Valuation <sup>1</sup>		
Active Members	11,637	11,532
Transfers from Industrial	7,601	8,247
Vested Terminations <sup>2</sup>	2,666	2,874
Receiving Payments	9,275	10,024
Total	31,179	32,677
Average Entry Age of Active Members	36.9	36.7
Average Age of Active Members	45.1	45.2
Average Pay	\$ 49,639	\$ 50,362
Covered Payroll Prior Fiscal Year	\$ 577,654,483	\$ 580,778,021
Projected Payroll for Contribution Rate	\$ 615,812,172	\$ 616,147,402

- Counts of members included in the valuation are counts of the records processed by the valuation. Multiple records may exist for those who have service in more than one coverage group. This does not result in double counting of liabilities.
- Includes non-vested terminated participants with employee contributions remaining in the plan.

**Funded Status of the Retirement Program**

	June 30, 2010	June 30, 2011
Present Value of Benefits	\$ 3,512,457,534	\$ 3,749,643,963
Accrued Liability	\$ 2,614,478,114	\$ 2,831,498,651
Market Value of Assets	\$ 1,784,901,351	\$ 2,179,954,931
Unfunded Liability/(Surplus) on a Market Value of Assets Basis	\$ 829,576,763	\$ 651,543,720
Funded Status	68.3%	77.0%

**Employer Contribution**

	June 30, 2010	June 30, 2011
Contribution Required in Dollars		
Total Normal Cost	\$ 108,327,519	\$ 110,573,813
Employee Contribution	43,412,472	41,442,074
Employer Normal Cost	64,915,047	69,131,739
Amortization of Unfunded Liability <sup>3</sup>	26,059,610	31,315,535
Group Term Life Benefits	991,458	-
Total	\$ 91,966,115	\$ 100,447,274
Contribution Required (Percent of Payroll)		
Total Normal Cost	17.591%	17.946%
Employee Contribution	7.050%	6.726%
Employer Normal Cost	10.541%	11.220%
Amortization of Unfunded Liability <sup>3</sup>	4.232%	5.082%
Group Term Life Benefits	0.161%	0.000%
Total	14.934%	16.302%

- For rate setting purposes, the unfunded liability is calculated based on the smoothed actuarial value of assets.

## STATE SAFETY

## Participant Information

	June 30, 2010	June 30, 2011
Members Included in the Valuation <sup>1</sup>		
Active Members	24,900	24,497
Transfers From State Safety	4,787	5,231
Vested Terminations <sup>2</sup>	4,694	5,022
Receiving Payments	16,749	18,152
Total	51,130	52,902
Average Entry Age of Active Members	40.3	39.9
Average Age of Active Members	47.4	47.4
Average Pay	\$ 75,497	\$ 76,344
Covered Payroll Prior Fiscal Year	\$ 1,879,876,274	\$ 1,870,201,361
Projected Payroll for Contribution Rate	\$ 2,004,053,851	\$ 1,984,096,624

- Counts of members included in the valuation are counts of the records processed by the valuation. Multiple records may exist for those who have service in more than one coverage group. This does not result in double counting of liabilities.
- Includes non-vested terminated participants with employee contributions remaining in the plan.

## Funded Status of the Retirement Program

	June 30, 2010	June 30, 2011
Present Value of Benefits	\$ 9,420,615,235	\$ 10,261,735,907
Accrued Liability	\$ 6,435,647,069	\$ 7,224,281,258
Market Value of Assets	\$ 4,196,169,119	\$ 5,389,522,934
Unfunded Liability/(Surplus) on a Market Value of Assets Basis	\$ 2,239,477,950	\$ 1,834,758,324
Funded Status	65.2%	74.6%

## Employer Contribution

	June 30, 2010	June 30, 2011
Contribution Required in Dollars		
Total Normal Cost	\$ 435,060,051	\$ 437,850,443
Employee Contribution	187,487,483	185,076,533
Employer Normal Cost	247,572,568	252,773,910
Amortization of Unfunded Liability <sup>3</sup>	79,550,574	94,005,567
Group Term Life Benefits	2,104,257	496,024
Total	\$ 329,227,399	\$ 347,275,501
Contribution Required (Percent of Payroll)		
Total Normal Cost	21.709%	22.068%
Employee Contribution	9.355%	9.328%
Employer Normal Cost	12.354%	12.740%
Amortization of Unfunded Liability <sup>3</sup>	3.969%	4.738%
Group Term Life Benefits	0.105%	0.025%
Total	16.428%	17.503%

- For rate setting purposes, the unfunded liability is calculated based on the smoothed actuarial value of assets.

## STATE PEACE OFFICERS AND FIREFIGHTERS

**Participant Information**

	June 30, 2010	June 30, 2011
Members Included in the Valuation <sup>1</sup>		
Active Members	45,018	43,428
Transfers from State POFF	5,200	5,192
Vested Terminations <sup>2</sup>	6,006	6,430
Receiving Payments	24,801	26,911
Total	81,025	81,961
Average Entry Age of Active Members	30.2	30.2
Average Age of Active Members	41.5	41.9
Average Pay	\$ 71,987	\$ 73,653
Covered Payroll Prior Fiscal Year	\$ 3,240,688,506	\$ 3,198,599,288
Projected Payroll for Contribution Rate	\$ 3,454,756,236	\$ 3,393,393,985

- Counts of members included in the valuation are counts of the records processed by the valuation. Multiple records may exist for those who have service in more than one coverage group. This does not result in double counting of liabilities.
- Includes non-vested terminated participants with employee contributions remaining in the plan.

**Funded Status of the Retirement Program**

	June 30, 2010	June 30, 2011
Present Value of Benefits	\$ 35,298,097,500	\$ 37,694,679,095
Accrued Liability	\$ 27,711,534,817	\$ 30,127,480,709
Market Value of Assets	\$ 17,199,098,812	\$ 20,801,283,158
Unfunded Liability/(Surplus) on a Market Value of Assets Basis	\$ 10,512,436,005	\$ 9,326,197,551
Funded Status	62.1%	69.0%

**Employer Contribution**

	June 30, 2010	June 30, 2011
Contribution Required in Dollars		
Total Normal Cost	\$ 879,028,177	\$ 882,757,511
Employee Contribution	322,449,802	324,272,729
Employer Normal Cost	556,578,374	558,484,782
Amortization of Unfunded Liability <sup>3</sup>	387,440,410	468,728,355
Group Term Life Benefits	3,109,281	882,282
Total	\$ 947,128,065	\$ 1,028,095,419
Contribution Required (Percent of Payroll)		
Total Normal Cost	25.444%	26.014%
Employee Contribution	9.334%	9.556%
Employer Normal Cost	16.110%	16.458%
Amortization of Unfunded Liability <sup>3</sup>	11.215%	13.813%
Group Term Life Benefits	0.090%	0.026%
Total	27.415%	30.297%

- For rate setting purposes, the unfunded liability is calculated based on the smoothed actuarial value of assets.

## CALIFORNIA HIGHWAY PATROL

**Participant Information**

	June 30, 2010	June 30, 2011
Members Included in the Valuation <sup>1</sup>		
Active Members	7,476	7,485
Transfers from CHP	321	300
Vested Terminations <sup>2</sup>	328	342
Receiving Payments	7,805	8,046
Total	15,930	16,173
Average Entry Age of Active Members	26.4	26.5
Average Age of Active Members	39.0	39.1
Average Pay	\$ 96,290	\$ 98,224
Covered Payroll Prior Fiscal Year	\$ 719,864,469	\$ 735,204,799
Projected Payroll for Contribution Rate	\$ 767,416,016	\$ 779,978,771

- Counts of members included in the valuation are counts of the records processed by the valuation. Multiple records may exist for those who have service in more than one coverage group. This does not result in double counting of liabilities.
- Includes non-vested terminated participants with employee contributions remaining in the plan.

**Funded Status of the Retirement Program**

	June 30, 2010	June 30, 2011
Present Value of Benefits	\$ 9,399,974,347	\$ 9,968,667,762
Accrued Liability	\$ 7,703,863,633	\$ 8,193,449,625
Market Value of Assets	\$ 4,439,496,887	\$ 5,335,993,093
Unfunded Liability/(Surplus) on a Market Value of Assets Basis	\$ 3,264,366,746	\$ 2,857,456,532
Funded Status	57.6%	65.1%

**Employer Contribution**

	June 30, 2010	June 30, 2011
Contribution Required in Dollars		
Total Normal Cost	\$ 172,852,784	\$ 180,440,289
Employee Contribution	68,997,363	69,979,695
Employer Normal Cost	103,855,420	110,460,594
Amortization of Unfunded Liability <sup>3</sup>	136,071,669	152,404,973
Group Term Life Benefits	-	202,794
Total	\$ 239,927,089	\$ 263,068,361
Contribution Required (Percent of Payroll)		
Total Normal Cost	22.524%	23.134%
Employee Contribution	8.991%	8.972%
Employer Normal Cost	13.533%	14.162%
Amortization of Unfunded Liability <sup>3</sup>	17.731%	19.540%
Group Term Life Benefits	0.000%	0.026%
Total	31.264%	33.728%

- For rate setting purposes, the unfunded liability is calculated based on the smoothed actuarial value of assets.

## SCHOOLS

**Participant Information**

	June 30, 2010	June 30, 2011
Members Included in the Valuation <sup>1</sup>		
Active Members	291,530	287,177
Transfers from Schools	23,101	25,910
Vested Terminations <sup>2</sup>	159,360	161,663
Receiving Payments	181,706	188,715
Total	655,697	663,465
Average Entry Age of Active Members	36.7	36.6
Average Age of Active Members	47.0	47.2
Average Pay	\$ 36,306	\$ 34,597
Covered Payroll Prior Fiscal Year	\$ 10,584,242,823	\$ 9,935,362,340
Projected Payroll for Contribution Rate	\$ 11,283,398,213	\$ 10,540,425,907

- 1 Counts of members included in the valuation are counts of the records processed by the valuation. Multiple records may exist for those who have service in more than one coverage group. This does not result in double counting of liabilities.
- 2 Includes non-vested terminated participants with employee contributions remaining in the plan.

**Funded Status of the Retirement Program**

	June 30, 2010	June 30, 2011
Present Value of Benefits	\$ 66,620,002,962	\$ 69,095,599,982
Accrued Liability	\$ 55,306,963,638	\$ 58,358,406,128
Market Value of Assets	\$ 38,435,174,651	\$ 45,900,990,362
Unfunded Liability/(Surplus) on a Market Value of Assets Basis	\$ 16,871,788,987	\$ 12,457,415,766
Funded Status	69.5%	78.7%

**Employer Contribution**

	June 30, 2010	June 30, 2011
Contribution Required in Dollars		
Total Normal Cost	\$ 1,594,457,001	\$ 1,519,402,394
Employee Contribution	789,725,041	737,829,813
Employer Normal Cost	804,731,961	781,572,581
Amortization of Unfunded Liability <sup>3</sup>	427,754,976	421,857,575
Total	\$ 1,232,486,937	\$ 1,203,430,156
Contribution Required (Percent of Payroll)		
Total Normal Cost	14.131%	14.415%
Employee Contribution	6.999%	7.000%
Employer Normal Cost	7.132%	7.415%
Amortization of Unfunded Liability <sup>3</sup>	3.791%	4.002%
Total	10.923%	11.417%

- 3 For rate setting purposes, the unfunded liability is calculated based on the smoothed actuarial value of assets.

## Development of Accrued and Unfunded Liabilities

The following table shows the development of the accrued liabilities and the unfunded liabilities based on the market value of assets and represent the true measure of the plan's ability to pay benefits.

	State Miscellaneous	State Industrial	State Safety	State Peace Officers and Firefighters	California Highway Patrol	Schools
1. Present Value of Benefits						
a. Actives and Inactives	\$ 47,383,654,424	\$ 2,411,802,751	\$ 6,609,363,907	\$ 20,516,639,992	\$ 4,729,453,993	\$ 41,796,846,167
b. Retired	45,354,643,873	1,337,841,212	3,652,372,000	17,178,039,103	5,239,213,769	27,298,753,815
c. Total	\$ 92,738,298,297	\$ 3,749,643,963	\$ 10,261,735,907	\$ 37,694,679,095	\$ 9,968,667,762	\$ 69,095,599,982
2. Present Value of Future Employee Contributions	\$ 5,118,654,693	\$ 362,229,513	\$ 1,354,541,601	\$ 2,843,694,943	\$ 689,691,730	\$ 5,407,808,030
3. Present Value of Future Employer Normal Costs	\$ 6,348,558,036	\$ 555,915,799	\$ 1,682,913,048	\$ 4,723,503,443	\$ 1,085,526,407	\$ 5,329,385,824
4. Accrued Liability [(1c) - (2) - (3)]	\$ 81,271,085,568	\$ 2,831,498,651	\$ 7,224,281,258	\$ 30,127,480,709	\$ 8,193,449,625	\$ 58,358,406,128
5. Market Value of Assets (MVA)	\$ 57,451,959,716	\$ 2,179,954,931	\$ 5,389,522,934	\$ 20,801,283,158	\$ 5,335,993,093	\$ 45,900,990,362
6. Unfunded Liability/(Surplus) MVA Basis [(4) - (5)]	\$ 23,819,125,852	\$ 651,543,720	\$ 1,834,758,324	\$ 9,326,197,551	\$ 2,857,456,532	\$ 12,457,415,766
7. Funded Status MVA Basis [(5)/(4)]	70.7%	77.0%	74.6%	69.0%	65.1%	78.7%

## Development of Employer Contribution Rates

The following table shows the development of the unfunded liabilities based on the smoothed actuarial value of assets. The unfunded liability on an actuarial value of assets basis is used only for purposes of setting the employer contribution and keeping the contribution rates as smooth as possible from year to year.

	State Miscellaneous	State Industrial	State Safety	State Peace Officers and Firefighters	California Highway Patrol	Schools
Accrued Liability	\$ 81,271,085,568	\$ 2,831,498,651	\$ 7,224,281,258	\$ 30,127,480,709	\$ 8,193,449,625	\$ 58,358,406,128
Actuarial Value of Assets (AVA)	\$ 64,792,922,278	\$ 2,435,530,361	\$ 5,914,941,212	\$ 23,317,993,416	\$ 5,990,968,539	\$ 51,547,418,456
Unfunded Liability/(Surplus) AVA Basis	\$ 16,478,163,290	\$ 395,968,290	\$ 1,309,340,046	\$ 6,809,487,293	\$ 2,202,481,086	\$ 6,810,987,672

The following table shows the development of the employer contribution rates which includes the amortization of the unfunded liability calculated on an actuarial value of assets basis.

	State Miscellaneous		State Industrial	State Safety	State Peace Officers and Firefighters	California Highway Patrol	Schools
	Tier 1	Tier 2					
Employer Contribution Amount							
Normal Cost	842,847,657	29,654,990	69,131,739	252,773,910	558,484,782	110,460,594	781,572,581
Payment on the Unfunded Liability	1,214,153,989	42,955,210	31,315,535	94,005,567	468,728,355	152,404,973	421,857,575
Payment for Term Life Benefits (Sec. 21600-21605)	7,653,097	270,757	-	496,024	882,282	202,794	N/A
Total Employer Contribution Amount	\$ 2,064,654,743	\$ 72,880,957	\$ 100,447,274	\$ 347,275,501	\$ 1,028,095,419	\$ 263,068,361	\$ 1,203,430,156
Projected Payroll	\$ 10,069,864,485	\$ 356,258,886	\$ 616,147,402	\$ 1,984,096,624	\$ 3,393,393,985	\$ 779,978,771	\$ 10,540,425,907
Employer Contribution (as a percent of payroll)							
Normal Cost	8.370%	8.324%	11.220%	12.740%	16.458%	14.162%	7.415%
Payment on the Unfunded Liability	12.057%	12.057%	5.082%	4.738%	13.813%	19.540%	4.002%
Payment for Term Life Benefits (Sec. 21600-21605)	0.076%	0.076%	0.000%	0.025%	0.026%	0.026%	N/A
Total Employer Contribution Rate	20.503%	20.457%	16.302%	17.503%	30.297%	33.728%	11.417%

## Schedule of Amortization Bases for the Retirement Program

The schedule below shows the development of the payment on the amortization bases used to determine the employer contribution rates. Each row of the schedule gives a brief description of a base (or portion of the Unfunded Actuarial Liability), the date the base was established, the balance of the base on the valuation date, and the number of years remaining in the amortization period. In addition, we show the expected payment for the year immediately following the valuation date, the balance on the date a year after the valuation date, and the scheduled payment for fiscal year 2012-2013. Please refer to Appendix A for an explanation of how amortization periods are determined.

### State Miscellaneous

Reason for Base	Date Established	Remaining Amortization Period	Balance on 6/30/2011	Expected Payment in 2011-2012	Amount Remaining on 6/30/2012	Scheduled Payment for Fiscal Year 2012-2013
Assumption Change	6/30/2011	20	\$ 1,607,489,621	\$ (36,912,386)	\$ 1,766,322,918	\$ 133,366,968
Assumption Change	6/30/2009	18	\$ 2,159,022,138	\$ 168,525,573	\$ 2,146,217,765	\$ 173,510,466
Reclass of BU 7 Members	6/30/2005	14	\$ (92,017,137)	\$ (8,439,658)	\$ (90,167,999)	\$ (8,687,775)
New Rate Stabilization Policies	6/30/2004	13	\$ (193,671,569)	\$ (18,671,131)	\$ (188,838,296)	\$ (19,219,130)
Actuarial Equivalent Reduction Benefits	6/30/2004	13	\$ 268,636,097	\$ 25,898,173	\$ 261,932,007	\$ 26,658,287
Benefit Change (SB 1801)	6/30/2003	12	\$ (2,507,881)	\$ (255,398)	\$ (2,431,170)	\$ (262,881)
Assumption Change	6/30/2003	12	\$ 859,197,267	\$ 87,498,986	\$ 832,916,182	\$ 90,062,658
(Gain)/Loss Prior to 2009	N/A	21	\$ 10,660,012,663	\$ 759,081,591	\$ 10,672,481,068	\$ 781,628,350
(Gain)/Loss in 2009	6/30/2009	28	\$ 1,094,837,156	\$ 66,868,692	\$ 1,107,619,007	\$ 68,871,976
(Gain)/Loss in 2010	6/30/2010	29	\$ (42,096,200)	\$ (2,527,918)	\$ (42,632,414)	\$ (2,603,735)
(Gain)/Loss in 2011	6/30/2011	30	\$ 20,747,662	\$ -	\$ 22,303,737	\$ 1,339,351
Payment (Gain)/Loss	N/A	30	\$ 138,513,473	\$ (56,262,870)	\$ 207,236,568	\$ 12,444,665
<b>Total</b>			\$ 16,478,163,290	\$ 984,803,655	\$ 16,692,959,375	\$ 1,257,109,200

## Schedule of Amortization Bases for the Retirement Program (Continued)

**State Industrial**

Reason for Base	Date Established	Remaining Amortization Period	Balance on 6/30/2011	Expected Payment in 2011-2012	Amount Remaining on 6/30/2012	Scheduled Payment for Fiscal Year 2012-2013
Assumption Change	6/30/2011	20	\$ 57,916,845	\$ (2,504,175)	\$ 64,856,992	\$ 4,897,055
Assumption Change	6/30/2009	18	\$ 71,491,143	\$ 5,580,344	\$ 71,067,155	\$ 5,745,407
New Rate Stabilization Policies	6/30/2004	13	\$ (6,648,669)	\$ (640,973)	\$ (6,482,744)	\$ (659,785)
Actuarial Equivalent Reduction Benefits	6/30/2004	13	\$ 12,076,420	\$ 1,164,241	\$ 11,775,041	\$ 1,198,412
Assumption Change	6/30/2003	12	\$ 92,036,559	\$ 9,372,825	\$ 89,221,349	\$ 9,647,444
(Gain)/Loss in 2009	6/30/2009	28	\$ 37,861,522	\$ 2,312,445	\$ 38,303,542	\$ 2,381,722
(Gain)/Loss in 2010	6/30/2010	29	\$ 5,143,403	\$ 308,866	\$ 5,208,919	\$ 318,130
(Gain)/Loss in 2011	6/30/2011	30	\$ (6,493,972)	\$ -	\$ (6,981,020)	\$ (419,214)
(Gain)/Loss Prior to 2009	N/A	30	\$ 137,724,072	\$ 8,270,465	\$ 139,478,377	\$ 8,375,750
Payment (Gain)/Loss	N/A	30	\$ (5,139,033)	\$ (2,607,723)	\$ (2,820,716)	\$ (169,385)
<b>Total</b>			<b>\$ 395,968,290</b>	<b>\$ 21,256,315</b>	<b>\$ 403,626,895</b>	<b>\$ 31,315,535</b>

**State Safety**

Reason for Base	Date Established	Remaining Amortization Period	Balance on 6/30/2011	Expected Payment in 2011-2012	Amount Remaining on 6/30/2012	Scheduled Payment for Fiscal Year 2012-2013
Assumption Change	6/30/2011	20	\$ 155,642,060	\$ (10,208,615)	\$ 177,899,732	\$ 13,432,395
Assumption Change	6/30/2009	18	\$ 276,410,559	\$ 21,575,623	\$ 274,771,269	\$ 22,213,818
New Rate Stabilization Policies	6/30/2004	13	\$ (7,501,161)	\$ (723,158)	\$ (7,313,962)	\$ (744,383)
Assumption Change	6/30/2003	12	\$ (3,337,251)	\$ (339,859)	\$ (3,235,172)	\$ (349,817)
Benefit Change (Arnett)	6/30/2002	11	\$ 104,191,562	\$ 11,273,548	\$ 100,317,266	\$ 11,603,262
(Gain)/Loss in 2009	6/30/2009	28	\$ 142,490,426	\$ 8,702,800	\$ 144,153,953	\$ 8,963,522
(Gain)/Loss in 2010	6/30/2010	29	\$ (105,850,040)	\$ (6,356,398)	\$ (107,198,339)	\$ (6,547,038)
(Gain)/Loss in 2011	6/30/2011	30	\$ (9,030,510)	\$ -	\$ (9,707,799)	\$ (582,958)
(Gain)/Loss Prior to 2009	N/A	30	\$ 788,301,656	\$ 47,338,284	\$ 798,342,903	\$ 47,940,913
Payment (Gain)/Loss	N/A	30	\$ (31,977,255)	\$ (2,250,556)	\$ (32,042,123)	\$ (1,924,146)
<b>Total</b>			<b>\$ 1,309,340,046</b>	<b>\$ 69,011,669</b>	<b>\$ 1,335,987,727</b>	<b>\$ 94,005,567</b>

## Schedule of Amortization Bases for the Retirement Program (Continued)

**State Peace Officers and Firefighters**

Reason for Base	Date Established	Remaining Amortization Period	Balance on 6/30/2011	Expected Payment in 2011-2012	Amount Remaining on 6/30/2012	Scheduled Payment for Fiscal Year 2012-2013
Assumption Change	6/30/2011	20	\$ 675,347,043	\$ (22,104,440)	\$ 748,916,442	\$ 56,547,256
Assumption Change	6/30/2009	18	\$ 716,925,403	\$ 55,960,642	\$ 712,673,580	\$ 57,615,926
Benefit Change (SB 65)	6/30/2006	15	\$ 287,790,631	\$ 25,220,526	\$ 283,225,730	\$ 25,963,171
New Rate Stabilization Policies	6/30/2004	13	\$ (55,483,044)	\$ (5,348,907)	\$ (54,098,408)	\$ (5,505,898)
Benefit Change (SB 183)	6/30/2004	13	\$ 18,106,031	\$ 1,745,533	\$ 17,654,176	\$ 1,796,764
Assumption Change	6/30/2003	12	\$ 360,489,847	\$ 36,711,588	\$ 349,463,201	\$ 37,787,217
(Gain)/Loss in 2009	6/30/2009	28	\$ 354,976,097	\$ 21,680,656	\$ 359,120,322	\$ 22,330,175
(Gain)/Loss in 2010	6/30/2010	29	\$ 41,765,213	\$ 2,508,042	\$ 42,297,211	\$ 2,583,263
(Gain)/Loss in 2011	6/30/2011	30	\$ 263,720,247	\$ -	\$ 283,499,265	\$ 17,024,280
(Gain)/Loss Prior to 2009	N/A	30	\$ 4,168,691,004	\$ 250,333,966	\$ 4,221,791,049	\$ 253,520,780
Payment (Gain)/Loss	N/A	30	\$ (22,841,177)	\$ (8,671,717)	\$ (15,563,237)	\$ (934,581)
<b>Total</b>			\$ 6,809,487,293	\$ 358,035,888	\$ 6,948,979,331	\$ 468,728,355

**California Highway Patrol**

Reason for Base	Date Established	Remaining Amortization Period	Balance on 6/30/2011	Expected Payment in 2011-2012	Amount Remaining on 6/30/2012	Scheduled Payment for Fiscal Year 2012-2013
Assumption Change	6/30/2011	20	\$ 176,235,659	\$ (4,572,887)	\$ 194,194,604	\$ 14,662,747
Assumption Change	6/30/2009	18	\$ 175,261,798	\$ 13,680,311	\$ 174,222,385	\$ 14,084,967
Benefit Change (AB 2936)	6/30/2008	17	\$ (210,562,394)	\$ (17,029,937)	\$ (208,697,559)	\$ (17,532,937)
Benefit Change (SB 439)	6/30/2005	14	\$ 173,544,964	\$ 15,917,255	\$ 170,057,475	\$ 16,385,204
New Rate Stabilization Policies	6/30/2004	13	\$ (18,920,589)	\$ (1,824,061)	\$ (18,448,406)	\$ (1,877,598)
Assumption Change	6/30/2003	12	\$ 59,210,289	\$ 6,029,861	\$ 57,399,168	\$ 6,206,533
Benefit Change (SB 1801)	6/30/2003	12	\$ 9,380,598	\$ 955,302	\$ 9,093,665	\$ 983,292
Benefit Change (Arnett)	6/30/2002	11	\$ 1,935,928	\$ 209,468	\$ 1,863,942	\$ 215,594
Benefit Change (AB 2621)	6/30/2001	10	\$ 2,672,983	\$ 309,388	\$ 2,552,676	\$ 318,420
(Gain)/Loss Prior to 2009	N/A	26	\$ 1,515,325,886	\$ 96,048,340	\$ 1,529,390,289	\$ 98,919,177
(Gain)/Loss in 2009	6/30/2009	28	\$ 287,387,801	\$ 17,552,607	\$ 290,742,956	\$ 18,078,456
(Gain)/Loss in 2010	6/30/2010	29	\$ 94,978,425	\$ 5,703,547	\$ 96,188,243	\$ 5,874,607
(Gain)/Loss in 2011	6/30/2011	30	\$ (39,317,670)	\$ -	\$ (42,266,495)	\$ (2,538,125)
Payment (Gain)/Loss	N/A	30	\$ (24,652,592)	\$ (3,470,310)	\$ (22,903,443)	\$ (1,375,364)
<b>Total</b>			\$ 2,202,481,086	\$ 129,508,884	\$ 2,233,389,498	\$ 152,404,973

## Schedule of Amortization Bases for the Retirement Program (Continued)

**Schools**

Reason for Base	Date Established	Remaining Amortization Period	Balance on 6/30/2011	Expected Payment in 2011-2012	Amount Remaining on 6/30/2012	Scheduled Payment for Fiscal Year 2012-2013
Assumption Change	6/30/2011	20	\$ 1,182,715,731	\$ (34,108,102)	\$ 1,306,783,444	\$ 32,889,748
Assumption Change	6/30/2009	18	\$ 1,061,650,778	\$ 82,868,676	\$ 1,055,354,514	\$ 85,319,885
Fresh Start	6/30/2004	23	\$ 2,787,880,788	\$ 188,608,567	\$ 2,801,418,323	\$ 194,225,332
(Gain)/Loss in 2009	6/30/2009	28	\$ 817,024,056	\$ 49,900,873	\$ 826,562,534	\$ 51,395,827
(Gain)/Loss in 2010	6/30/2010	29	\$ 394,794,181	\$ 23,707,776	\$ 399,822,999	\$ 24,418,816
(Gain)/Loss in 2011	6/30/2011	30	\$ (809,726,313)	\$ -	\$ (870,455,786)	\$ (52,271,329)
(Gain)/Loss Prior to 2009	N/A	30	\$ 1,373,847,585	\$ 82,500,889	\$ 1,391,347,412	\$ 83,551,146
Payment (Gain)/Loss	N/A	30	\$ 2,800,866	\$ (34,488,968)	\$ 38,769,854	\$ 2,328,150
Total			\$ 6,810,987,672	\$ 358,989,711	\$ 6,949,603,293	\$ 421,857,575

## Gain and Loss Analysis

## STATE MISCELLANEOUS

**A. Total (Gain)/Loss for the Year**

1. Unfunded Liability/(Surplus) as of 6/30/10	\$ 14,766,843,808
2. Expected Payment on the Unfunded Liability during 2010-2011	1,022,466,875
3. Interest through 6/30/11 $[0.0775 \times (A1) - ((1 + 0.0775)^{1/2} - 1) \times (A2)]$	1,105,549,073
4. Change in Unfunded Liability as of 6/30/11 due to New Assumptions	1,607,489,621
5. Expected Unfunded Liability as of 6/30/11 before all changes $[(A1)-(A2)+(A3)+(A4)]$	\$ 16,457,415,627
6. Actual Unfunded Liability as of 6/30/11	<u>16,478,163,290</u>
7. Total (Gain)/Loss for 2010-2011 $[(A6) - (A5)]$	\$ 20,747,663

**B. Contribution (Gain)/Loss for the Year**

1. Expected Contribution for 2010-2011	\$ 2,470,398,593
2. Actual Contribution for 2010-2011	<u>2,437,959,962</u>
3. Contribution (Gain)/Loss for 2010-2011 $[(B1) - (B2)]$	\$ 32,438,631

**C. Asset (Gain)/Loss for the Year**

1. Actuarial Value of Assets before receivables as of 6/30/10	\$ 61,679,923,719
2. Contributions Received during 2010-2011	2,437,959,962
3. Benefits and Refunds Paid during 2010-2011	(4,079,750,157)
4. Expected Interest for 2010-2011 $[0.0775 \times (C1) + ((1+0.0775)^{1/2} - 1) \times ((C2) + (C3))]$	4,717,761,774
5. Receivables for AER and Past Service Benefits	<u>533,664,980</u>
6. Expected Actuarial Value of Assets as of 6/30/11 $[(C1) + (C2) + (C3) + (C4) + (C5)]$	\$ 65,289,560,278
7. Actual Actuarial Value of Assets as of 6/30/11	<u>64,792,922,278</u>
8. Asset (Gain)/Loss for 2010-2011 $[(C6) - (C7)]$	\$ 496,638,000

**D. Liability (Gain)/Loss for the Year**

1. Total (Gain)/Loss for 2010-2011 (A7)	\$ 20,747,663
2. Contribution (Gain)/Loss for 2010-2011 (B3)	32,438,631
3. Asset (Gain)/Loss for 2010-2011 (C8)	<u>496,638,000</u>
4. Liability (Gain)/Loss for 2010-2011 $[(D1) - (D2) - (D3)]$	\$ (508,328,968)

**E. Development of the (Gain)/Loss Balance as of 6/30/11**

1. (Gain)/Loss Balance as of 6/30/10	\$ 11,640,951,480
2. Payment Made on the Balance during 2010-2011	799,951,848
3. Interest through 6/30/11 $[0.0775 \times (E1) - ((1 + 0.0775)^{1/2} - 1) \times (E2)]$	<u>871,753,991</u>
4. Scheduled (Gain)/Loss Balance as of 6/30/11 $[(E1) - (E2) + (E3)]$	\$ 11,712,753,623
5. (Gain)/Loss for 2010-2011 $[(A7) \text{ above}]$	<u>20,747,663</u>
6. Final (Gain)/Loss Balance as of 6/30/11 $[(E4) + (E5)]$	\$ 11,733,501,286

## Gain and Loss Analysis (Continued)

## STATE INDUSTRIAL

**A. Total (Gain)/Loss for the Year**

1. Unfunded Liability/(Surplus) as of 6/30/10	\$ 345,889,825
2. Expected Payment on the Unfunded Liability during 2010-2011	27,119,593
3. Interest through 6/30/11 $[0.0775 \times (A1) - ((1 + 0.0775)^{1/2} - 1) \times (A2)]$	25,775,185
4. Change in Unfunded Liability as of 6/30/11 due to New Assumptions	57,916,845
5. Expected Unfunded Liability as of 6/30/11 before all changes $[(A1) - (A2) + (A3) + (A4)]$	\$ 402,462,262
6. Actual Unfunded Liability as of 6/30/11	<u>395,968,290</u>
7. Total (Gain)/Loss for 2010-2011 $[(A6) - (A5)]$	\$ (6,493,972)

**B. Contribution (Gain)/Loss for the Year**

1. Expected Contribution for 2010-2011	\$ 131,804,680
2. Actual Contribution for 2010-2011	<u>123,731,374</u>
3. Contribution (Gain)/Loss for 2010-2011 $[(B1) - (B2)]$	\$ 8,073,306

**C. Asset (Gain)/Loss for the Year**

1. Actuarial Value of Assets before receivables as of 6/30/10	\$ 2,251,863,213
2. Contributions Received during 2010-2011	123,731,374
3. Benefits and Refunds Paid during 2010-2011	(114,687,504)
4. Expected Interest for 2010-2011 $[0.0775 \times (C1) + ((1 + 0.0775)^{1/2} - 1) \times ((C2) + (C3))]$	174,863,310
5. Receivables for AER and Past Service Benefits	<u>16,725,076</u>
6. Expected Actuarial Value of Assets as of 6/30/11 $[(C1) + (C2) + (C3) + (C4) + (C5)]$	\$ 2,452,495,469
7. Actual Actuarial Value of Assets as of 6/30/11	<u>2,435,530,361</u>
8. Asset (Gain)/Loss for 2010-2011 $[(C6) - (C7)]$	\$ 16,965,108

**D. Liability (Gain)/Loss for the Year**

1. Total (Gain)/Loss for 2010-2011 (A7)	\$ (6,493,972)
2. Contribution (Gain)/Loss for 2010-2011 (B3)	8,073,306
3. Asset (Gain)/Loss for 2010-2011 (C8)	<u>16,965,108</u>
4. Liability (Gain)/Loss for 2010-2011 $[(D1) - (D2) - (D3)]$	\$ (31,532,386)

**E. Development of the (Gain)/Loss Balance as of 6/30/11**

1. (Gain)/Loss Balance as of 6/30/10	\$ 177,736,001
2. Payment Made on the Balance during 2010-2011	10,386,568
3. Interest through 6/30/11 $[0.0775 \times (E1) - ((1 + 0.0775)^{1/2} - 1) \times (E2)]$	<u>13,379,570</u>
4. Scheduled (Gain)/Loss Balance as of 6/30/11 $[(E1) - (E2) + (E3)]$	\$ 180,729,003
5. (Gain)/Loss for 2010-2011 $[(A7) \text{ above}]$	<u>(6,493,972)</u>
6. Final (Gain)/Loss Balance as of 6/30/11 $[(E4) + (E5)]$	\$ 174,235,031

## Gain and Loss Analysis (Continued)

## STATE SAFETY

**A. Total (Gain)/Loss for the Year**

1. Unfunded Liability/(Surplus) as of 6/30/10	\$ 1,163,111,491
2. Expected Payment on the Unfunded Liability during 2010-2011	87,207,883
3. Interest through 6/30/11 $[0.0775 \times (A1) - ((1 + 0.0775)^{1/2} - 1) \times (A2)]$	86,824,889
4. Change in Unfunded Liability as of 6/30/11 due to New Assumptions	155,642,060
5. Expected Unfunded Liability as of 6/30/11 before all changes $[(A1)-(A2)+(A3)+(A4)]$	\$ 1,318,370,557
6. Actual Unfunded Liability as of 6/30/11	<u>1,309,340,046</u>
7. Total (Gain)/Loss for 2010-2011 $[(A6) - (A5)]$	\$ (9,030,511)

**B. Contribution (Gain)/Loss for the Year**

1. Expected Contribution for 2010-2011	\$ 508,709,418
2. Actual Contribution for 2010-2011	<u>539,960,649</u>
3. Contribution (Gain)/Loss for 2010-2011 $[(B1) - (B2)]$	\$ (31,251,231)

**C. Asset (Gain)/Loss for the Year**

1. Actuarial Value of Assets before receivables as of 6/30/10	\$ 5,259,649,805
2. Contributions Received during 2010-2011	539,960,649
3. Benefits and Refunds Paid during 2010-2011	(277,083,893)
4. Expected Interest for 2010-2011 $[0.0775 \times (C1) + ((1+0.0775)^{1/2} - 1) \times ((C2) + (C3))]$	417,619,268
5. Receivables for AER and Past Service Benefits	<u>12,885,773</u>
6. Expected Actuarial Value of Assets as of 6/30/11 $[(C1) + (C2) + (C3) + (C4) + (C5)]$	\$ 5,953,031,602
7. Actual Actuarial Value of Assets as of 6/30/11	<u>5,914,941,212</u>
8. Asset (Gain)/Loss for 2010-2011 $[(C6) - (C7)]$	\$ 38,090,390

**D. Liability (Gain)/Loss for the Year**

1. Total (Gain)/Loss for 2010-2011 (A7)	\$ (9,030,511)
2. Contribution (Gain)/Loss for 2010-2011 (B3)	(31,251,231)
3. Asset (Gain)/Loss for 2010-2011 (C8)	<u>38,090,390</u>
4. Liability (Gain)/Loss for 2010-2011 $[(D1) - (D2) - (D3)]$	\$ (15,869,669)

**E. Development of the (Gain)/Loss Balance as of 6/30/11**

1. (Gain)/Loss Balance as of 6/30/10	\$ 818,650,369
2. Payment Made on the Balance during 2010-2011	55,059,962
3. Interest through 6/30/11 $[0.0775 \times (E1) - ((1 + 0.0775)^{1/2} - 1) \times (E2)]$	<u>61,351,640</u>
4. Scheduled (Gain)/Loss Balance as of 6/30/11 $[(E1) - (E2) + (E3)]$	\$ 824,942,047
5. (Gain)/Loss for 2010-2011 $[(A7) \text{ above}]$	<u>(9,030,511)</u>
6. Final (Gain)/Loss Balance as of 6/30/11 $[(E4) + (E5)]$	\$ 815,911,536

## Gain and Loss Analysis (Continued)

## STATE PEACE OFFICERS AND FIREFIGHTERS

**A. Total (Gain)/Loss for the Year**

1. Unfunded Liability/(Surplus) as of 6/30/10	\$ 5,783,358,229
2. Expected Payment on the Unfunded Liability during 2010-2011	347,918,212
3. Interest through 6/30/11 $[0.0775 \times (A1) - ((1 + 0.0775)^{1/2} - 1) \times (A2)]$	434,979,986
4. Change in Unfunded Liability as of 6/30/11 due to New Assumptions	675,347,043
5. Expected Unfunded Liability as of 6/30/11 before all changes $[(A1) - (A2) + (A3) + (A4)]$	\$ 6,545,767,046
6. Actual Unfunded Liability as of 6/30/11	<u>6,809,487,293</u>
7. Total (Gain)/Loss for 2010-2011 $[(A6) - (A5)]$	\$ 263,720,247

**B. Contribution (Gain)/Loss for the Year**

1. Expected Contribution for 2010-2011	\$ 1,199,243,760
2. Actual Contribution for 2010-2011	<u>1,085,789,106</u>
3. Contribution (Gain)/Loss for 2010-2011 $[(B1) - (B2)]$	\$ 113,454,654

**C. Asset (Gain)/Loss for the Year**

1. Actuarial Value of Assets before receivables as of 6/30/10	\$ 21,887,486,497
2. Contributions Received during 2010-2011	1,085,789,106
3. Benefits and Refunds Paid during 2010-2011	(1,210,071,363)
4. Expected Interest for 2010-2011 $[0.0775 \times (C1) + ((1 + 0.0775)^{1/2} - 1) \times ((C2) + (C3))]$	1,691,554,125
5. Receivables for AER and Past Service Benefits	<u>40,690,091</u>
6. Expected Actuarial Value of Assets as of 6/30/11 $[(C1) + (C2) + (C3) + (C4) + (C5)]$	\$ 23,495,448,456
7. Actual Actuarial Value of Assets as of 6/30/11	<u>23,317,993,416</u>
8. Asset (Gain)/Loss for 2010-2011 $[(C6) - (C7)]$	\$ 177,455,040

**D. Liability (Gain)/Loss for the Year**

1. Total (Gain)/Loss for 2010-2011 (A7)	\$ 263,720,247
2. Contribution (Gain)/Loss for 2010-2011 (B3)	113,454,654
3. Asset (Gain)/Loss for 2010-2011 (C8)	<u>177,455,040</u>
4. Liability (Gain)/Loss for 2010-2011 $[(D1) - (D2) - (D3)]$	\$ (27,189,448)

**E. Development of the (Gain)/Loss Balance as of 6/30/11**

1. (Gain)/Loss Balance as of 6/30/10	\$ 4,494,849,655
2. Payment Made on the Balance during 2010-2011	267,592,463
3. Interest through 6/30/11 $[0.0775 \times (E1) - ((1 + 0.0775)^{1/2} - 1) \times (E2)]$	<u>338,175,116</u>
4. Scheduled (Gain)/Loss Balance as of 6/30/11 $[(E1) - (E2) + (E3)]$	\$ 4,565,432,308
5. (Gain)/Loss for 2010-2011 $[(A7) \text{ above}]$	<u>263,720,247</u>
6. Final (Gain)/Loss Balance as of 6/30/11 $[(E4) + (E5)]$	\$ 4,829,152,555

## Gain and Loss Analysis (Continued)

## CALIFORNIA HIGHWAY PATROL

**A. Total (Gain)/Loss for the Year**

1. Unfunded Liability/(Surplus) as of 6/30/10	\$ 2,040,611,602
2. Expected Payment on the Unfunded Liability during 2010-2011	128,316,417
3. Interest through 6/30/11 $[0.0775 \times (A1) - ((1 + 0.0775)^{\frac{1}{2}} - 1) \times (A2)]$	153,267,914
4. Change in Unfunded Liability as of 6/30/11 due to New Assumptions	176,235,659
5. Expected Unfunded Liability as of 6/30/11 before all changes $[(A1) - (A2) + (A3) + (A4)]$	\$ 2,241,798,758
6. Actual Unfunded Liability as of 6/30/11	<u>2,202,481,086</u>
7. Total (Gain)/Loss for 2010-2011 $[(A6) - (A5)]$	\$ (39,317,672)

**B. Contribution (Gain)/Loss for the Year**

1. Expected Contribution for 2010-2011	\$ 295,542,499
2. Actual Contribution for 2010-2011	<u>308,059,390</u>
3. Contribution (Gain)/Loss for 2010-2011 $[(B1) - (B2)]$	\$ (12,516,891)

**C. Asset (Gain)/Loss for the Year**

1. Actuarial Value of Assets before receivables as of 6/30/10	\$ 5,652,845,879
2. Contributions Received during 2010-2011	308,059,390
3. Benefits and Refunds Paid during 2010-2011	(370,360,089)
4. Expected Interest for 2010-2011 $[0.0775 \times (C1) + ((1 + 0.0775)^{\frac{1}{2}} - 1) \times ((C2) + (C3))]$	435,726,449
5. Receivables for AER and Past Service Benefits	<u>10,406,152</u>
6. Expected Actuarial Value of Assets as of 6/30/11 $[(C1) + (C2) + (C3) + (C4) + (C5)]$	\$ 6,036,677,781
7. Actual Actuarial Value of Assets as of 6/30/11	<u>5,990,968,539</u>
8. Asset (Gain)/Loss for 2010-2011 $[(C6) - (C7)]$	\$ 45,709,242

**D. Liability (Gain)/Loss for the Year**

1. Total (Gain)/Loss for 2010-2011 (A7)	\$ (39,317,672)
2. Contribution (Gain)/Loss for 2010-2011 (B3)	(12,516,891)
3. Asset (Gain)/Loss for 2010-2011 (C8)	<u>45,709,242</u>
4. Liability (Gain)/Loss for 2010-2011 $[(D1) - (D2) - (D3)]$	\$ (72,510,023)

**E. Development of the (Gain)/Loss Balance as of 6/30/11**

1. (Gain)/Loss Balance as of 6/30/10	\$ 1,867,193,660
2. Payment Made on the Balance during 2010-2011	110,025,131
3. Interest through 6/30/11 $[0.0775 \times (E1) - ((1 + 0.0775)^{\frac{1}{2}} - 1) \times (E2)]$	<u>140,523,586</u>
4. Scheduled (Gain)/Loss Balance as of 6/30/11 $[(E1) - (E2) + (E3)]$	\$ 1,897,692,115
5. (Gain)/Loss for 2010-2011 $[(A7) \text{ above}]$	<u>(39,317,672)</u>
6. Final (Gain)/Loss Balance as of 6/30/11 $[(E4) + (E5)]$	\$ 1,858,374,443

## Gain and Loss Analysis (Continued)

## SCHOOLS

**A. Total (Gain)/Loss for the Year**

1. Unfunded Liability/(Surplus) as of 6/30/10	\$ 6,351,312,336
2. Expected Payment on the Unfunded Liability during 2010-2011	390,684,248
3. Interest through 6/30/11 $[0.0775 \times (A1) - ((1 + 0.0775)^{\frac{1}{2}} - 1) \times (A2)]$	477,370,166
4. Change in Unfunded Liability as of 6/30/11 due to New Assumptions	1,182,715,731
5. Expected Unfunded Liability as of 6/30/11 before all changes $[(A1) - (A2) + (A3) + (A4)]$	\$ 7,620,713,985
6. Actual Unfunded Liability as of 6/30/11	<u>6,810,987,672</u>
7. Total (Gain)/Loss for 2010-2011 $[(A6) - (A5)]$	\$ (809,726,313)

**B. Contribution (Gain)/Loss for the Year**

1. Expected Contribution for 2010-2011	\$ 1,934,515,401
2. Actual Contribution for 2010-2011	<u>1,814,471,576</u>
3. Contribution (Gain)/Loss for 2010-2011 $[(B1) - (B2)]$	\$ 120,043,825

**C. Asset (Gain)/Loss for the Year**

1. Actuarial Value of Assets before receivables as of 6/30/10	\$ 48,927,982,221
2. Contributions Received during 2010-2011	1,814,471,576
3. Benefits and Refunds Paid during 2010-2011	(2,581,955,968)
4. Expected Interest for 2010-2011 $[0.0775 \times (C1) + ((1 + 0.0775)^{\frac{1}{2}} - 1) \times ((C2) + (C3))]$	3,762,733,513
5. Receivables for AER and Past Service Benefits	<u>27,669,081</u>
6. Expected Actuarial Value of Assets as of 6/30/11 $[(C1) + (C2) + (C3) + (C4) + (C5)]$	\$ 51,950,900,423
7. Actual Actuarial Value of Assets as of 6/30/11	<u>51,547,418,456</u>
8. Asset (Gain)/Loss for 2010-2011 $[(C6) - (C7)]$	\$ 403,481,967

**D. Liability (Gain)/Loss for the Year**

1. Total (Gain)/Loss for 2010-2011 (A7)	\$ (809,726,313)
2. Contribution (Gain)/Loss for 2010-2011 (B3)	120,043,825
3. Asset (Gain)/Loss for 2010-2011 (C8)	<u>403,481,967</u>
4. Liability (Gain)/Loss for 2010-2011 $[(D1) - (D2) - (D3)]$	\$ (1,333,252,105)

**E. Development of the (Gain)/Loss Balance as of 6/30/11**

1. (Gain)/Loss Balance as of 6/30/10	\$ 2,524,540,718
2. Payment Made on the Balance during 2010-2011	129,598,559
3. Interest through 6/30/11 $[0.0775 \times (E1) - ((1 + 0.0775)^{\frac{1}{2}} - 1) \times (E2)]$	<u>190,723,665</u>
4. Scheduled (Gain)/Loss Balance as of 6/30/11 $[(E1) - (E2) + (E3)]$	\$ 2,585,665,824
5. (Gain)/Loss for 2010-2011 $[(A7) \text{ above}]$	<u>(809,726,313)</u>
6. Final (Gain)/Loss Balance as of 6/30/11 $[(E4) + (E5)]$	\$ 1,775,939,511

## Development of Group Term Life Insurance Contributions

	State Miscellaneous	State Industrial	State Safety	State Peace Officers and Firefighters	California Highway Patrol
1. GTLI Market Value of Assets as of June 30, 2010	\$ 6,433,548	\$ (200,169)	\$ 754,335	\$ 172,799	\$ 459,320
2. Contributions Received for GTLI During Fiscal Year 2010-2011	-	928,132	1,561,543	2,206,977	29,505
3. Benefits Paid for GTLI During Fiscal Year 2010-2011	(3,515,666)	(248,665)	(478,025)	(591,213)	(285,828)
4. Investment Return During Fiscal Year 2010-2011	665,704	1,024,326	332,736	328,847	131,223
5. GTLI Market Value of Assets as of June 30, 2011	\$ 3,583,586	\$ 1,503,624	\$ 2,170,589	\$ 2,117,410	\$ 334,220
6. Plan's Actuarial Value of Assets As a Percentage of Market Value of Assets	112.904%	111.822%	109.771%	112.124%	112.301%
7. GTLI Actuarial Value of Assets as of June 30, 2011	\$ 4,046,012	\$ 1,681,382	\$ 2,382,677	\$ 2,374,125	\$ 375,332
8. Expected GTLI Benefit Payments for Fiscal Year 2011-2012	\$ 7,701,978	\$ 471,365	\$ 1,897,251	\$ 2,149,620	\$ 379,136
9. Closed Group Projected Payroll for Fiscal Year 2011-2012	\$ 9,878,980,031	\$ 593,349,326	\$ 1,869,913,189	\$ 3,269,986,382	\$ 754,625,828
10. Required GTLI Contribution Rate [ (1.5 x (8) - (7), but not less than zero) / (9) ]	0.076%	0.000%	0.025%	0.026%	0.026%
11. Projected Payroll for Contributions	\$ 10,426,123,371	\$ 616,147,402	\$ 1,984,096,624	\$ 3,393,393,985	\$ 779,978,771
12. Required GTLI Contribution for Fiscal Year 2012-2013* [ (10) x (11) ]	\$ 7,923,854	\$ -	\$ 496,024	\$ 882,282	\$ 202,794

\* The Required GTLI Contribution for Miscellaneous Tier 1 and Tier 2 is divided equally between the two groups as a percentage of payroll.

## Reconciliation of Employer Contribution Rates

## Change in Normal Cost Rate from 2011-2012 to 2012-2013 for the Retirement Program

	State Miscellaneous		State	State	State Peace	California	Schools
	Tier 1	Tier 2	Industrial	Safety	Officers and Firefighters	Highway Patrol	
2011-2012 Normal Cost Rate	7.811%	6.661%	10.541%	12.354%	16.110%	13.533%	7.132%
Effect of Change in Assumptions	0.351%	0.073%	0.409%	0.520%	0.643%	0.561%	0.324%
Effect of (Gain)/Loss	0.208%	1.590%	0.270%	-0.134%	-0.295%	0.068%	-0.041%
2012-2013 Normal Cost Rate	8.370%	8.324%	11.220%	12.740%	16.458%	14.162%	7.415%

## Change in Unfunded Liability Amortization Rate from 2011-2012 to 2012-2013 for the Retirement Program

	State Miscellaneous		State	State	State Peace	California	Schools
	Tier 1	Tier 2	Industrial	Safety	Officers and Firefighters	Highway Patrol	
2011-2012 Rate to Amortize the Unfunded Liability	10.331%	10.331%	4.232%	3.969%	11.215%	17.731%	3.791%
Effect of Change in Assumptions	1.302%	1.302%	0.803%	0.686%	1.694%	1.920%	0.944%
Effect of Phase-in of Impact of Change in Assumptions	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	-0.624%
Effect of (Gain)/Loss	0.424%	0.424%	0.047%	0.083%	0.904%	-0.111%	-0.109%
2012-2013 Rate to Amortize the Unfunded Liability	12.057%	12.057%	5.082%	4.738%	13.813%	19.540%	4.002%

## Reconciliation of Employer Contribution Rates (Continued)

Change in Group Term Life Rate from 2011-2012 to 2012-2013							
	State Miscellaneous		State	State	State Peace	California	Schools
	Tier 1	Tier 2	Industrial	Safety	Officers and Firefighters	Highway Patrol	
2011-2012 Group Term Life Rate	0.033%	0.033%	0.161%	0.105%	0.090%	0.000%	N/A
Effect of Change in Assumptions	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	N/A
Effect of (Gain)/Loss	0.043%	0.043%	-0.161%	-0.080%	-0.064%	0.026%	N/A
2012-2013 Group Term Life Rate	0.076%	0.076%	0.000%	0.025%	0.026%	0.026%	N/A

Change in Total Rate from 2011-2012 to 2012-2013							
	State Miscellaneous		State	State	State Peace	California	Schools
	Tier 1	Tier 2	Industrial	Safety	Officers and Firefighters	Highway Patrol	
2011-2012 Employer Rates	18.175%	17.025%	14.934%	16.428%	27.415%	31.264%	10.923%
Effect of Change in Assumptions	1.653%	1.375%	1.212%	1.206%	2.337%	2.481%	1.268%
Effect of Phase-in of Impact of Change in Assumptions	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	-0.624%
Effect of (Gain)/Loss	0.675%	2.057%	0.156%	-0.131%	0.545%	-0.017%	-0.150%
2012-2013 Employer Rates	20.503%	20.457%	16.302%	17.503%	30.297%	33.728%	11.417%

## Reconciliation of Employer Contributions

Change in Normal Cost Contribution from 2011-2012 to 2012-2013 for the Retirement Program							
	State Miscellaneous		State Industrial	State Safety	State Peace Officers and Firefighters	California Highway Patrol	Schools
	Tier 1	Tier 2					
2011-2012 Normal Cost Contribution	\$791,483,897	\$25,451,956	\$64,915,047	\$247,572,568	\$556,578,374	\$103,855,420	\$804,731,961
Effect of Change in Payroll	(1,077,419)	(1,607,096)	351,014	(1,274,149)	(7,228,695)	2,213,162	(49,335,118)
Effect of Change in Assumptions	31,419,493	118,292	2,196,293	9,138,900	19,211,191	3,860,081	30,518,317
Effect of (Gain)/Loss	<u>21,021,686</u>	<u>5,691,838</u>	<u>1,669,385</u>	<u>(2,663,409)</u>	<u>(10,076,088)</u>	<u>531,931</u>	<u>(4,342,579)</u>
2012-2013 Normal Cost Contribution	\$842,847,657	\$29,654,990	\$69,131,739	\$252,773,910	\$558,484,782	\$110,460,594	\$781,572,581

Change in Unfunded Liability Amortization Contribution from 2011-2012 to 2012-2013 for the Retirement Program							
	State Miscellaneous		State Industrial	State Safety	State Peace Officers and Firefighters	California Highway Patrol	Schools
	Tier 1	Tier 2					
2011-2012 Amortization of the Unfunded Liability	\$1,046,820,826	\$39,475,953	\$26,059,610	\$79,550,574	\$387,440,410	\$136,071,669	\$427,754,976
Effect of Progression of Amortization of Prior Unfunded Liability	36,317,821	(1,157,362)	708,921	1,798,093	8,276,167	4,447,991	12,469,007
Effect of Change in Assumptions	125,830,676	4,453,199	4,823,881	13,220,630	55,492,731	14,305,321	97,646,031
Effect of Phase-in of Impact of Change in Assumptions	0	0	0	0	0	0	(65,779,495)
Effect of (Gain)/Loss	<u>5,184,666</u>	<u>183,420</u>	<u>(276,877)</u>	<u>(563,730)</u>	<u>17,519,047</u>	<u>(2,420,008)</u>	<u>(50,232,944)</u>
2012-2013 Amortization of the Unfunded Liability	\$1,214,153,989	\$42,955,210	\$31,315,535	\$94,005,567	\$468,728,355	\$152,404,973	\$421,857,575

## Reconciliation of Employer Contributions (Continued)

Change in Group Term Life Contribution from 2011-2012 to 2012-2013							
	State Miscellaneous		State Industrial	State Safety	State Peace Officers and Firefighters	California Highway Patrol	Schools
	Tier 1	Tier 2					
2011-2012 Group Term Life Contribution	\$3,343,762	\$126,094	\$991,458	\$2,104,257	\$3,109,281	\$0	N/A
Effect of Change in Payroll	(4,552)	(7,962)	5,361	(10,830)	(40,383)	-	N/A
Effect of Change in Assumptions	(37,206)	(1,306)	0	(2,411)	(4,289)	(986)	N/A
Effect of (Gain)/Loss	<u>4,351,093</u>	<u>153,931</u>	<u>(996,819)</u>	<u>(1,594,992)</u>	<u>(2,182,327)</u>	<u>203,780</u>	<u>N/A</u>
2012-2013 Group Term Life Contribution	\$7,653,097	\$270,757	\$0	\$496,024	\$882,282	\$202,794	N/A

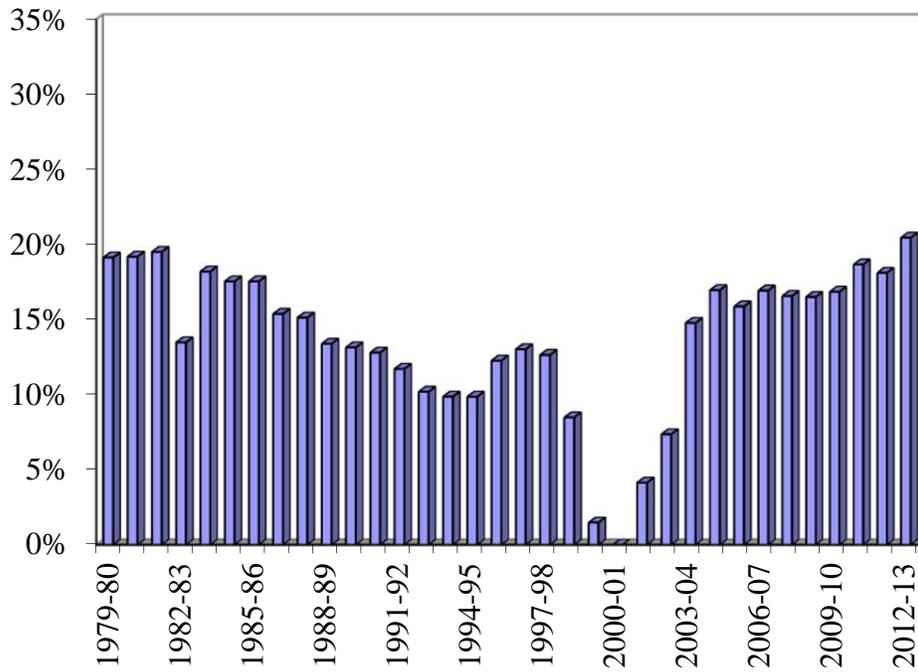
Change in Total Contribution from 2011-2012 to 2012-2013							
	State Miscellaneous		State Industrial	State Safety	State Peace Officers and Firefighters	California Highway Patrol	Schools
	Tier 1	Tier 2					
2011-2012 Employer Contribution	\$1,841,648,485	\$65,054,003	\$91,966,115	\$329,227,399	\$947,128,065	\$239,927,089	\$1,232,486,937
Effect of Change in Payroll and Progression of Amortization of Prior Unfunded Liability	35,235,850	(2,772,420)	1,065,296	513,114	1,007,089	6,661,153	(36,866,111)
Effect of Change in Assumptions	157,212,963	4,570,185	7,020,174	22,357,119	74,699,633	18,164,416	128,164,348
Effect of Phase-in of Impact of Change in Assumptions	0	0	0	0	0	0	(65,779,495)
Effect of (Gain)/Loss	<u>30,557,445</u>	<u>6,029,189</u>	<u>395,689</u>	<u>(4,822,131)</u>	<u>5,260,632</u>	<u>(1,684,297)</u>	<u>(54,575,523)</u>
2012-2013 Employer Contribution	\$2,064,654,743	\$72,880,957	\$100,447,274	\$347,275,501	\$1,028,095,419	\$263,068,361	\$1,203,430,156

## Employer Contribution Rate History

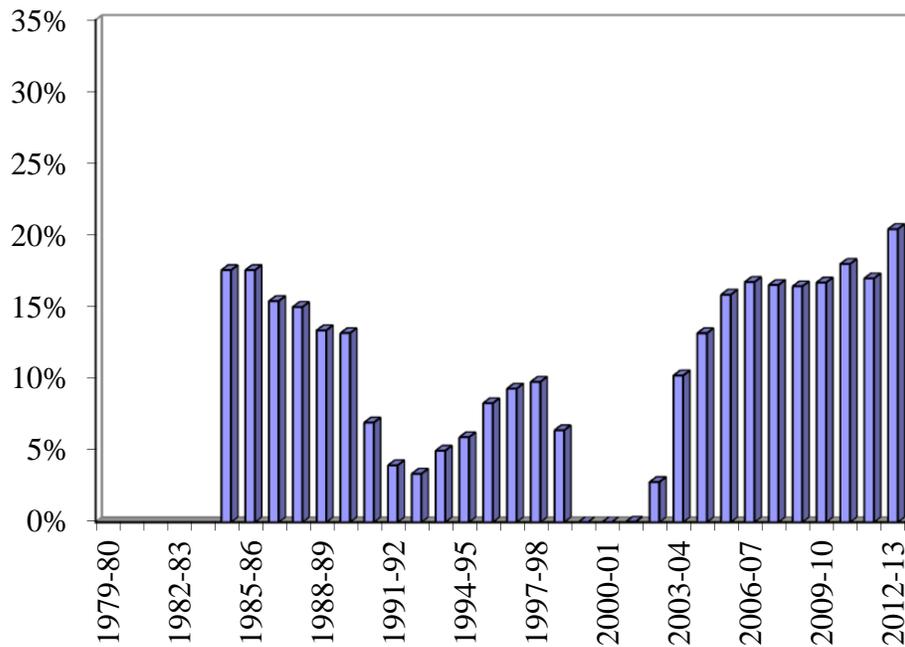
The table below provides a history of the contribution rates for the various State plans and the Schools plan. In cases where the contribution rate changed during the course of a fiscal year, the entry shown is the weighted average of the rates effective during the fiscal year.

Fiscal Year	State Miscellaneous		State Industrial	State Safety	State Peace Officers and Firefighters	California Highway Patrol	Schools
	Tier 1	Tier 2					
1979-80	19.188%		20.040%	20.106%		31.373%	12.515%
1980-81	19.247%		20.047%	20.145%		31.440%	13.119%
1981-82	19.563%		20.263%	20.409%		31.995%	13.020%
1982-83	13.559%		15.013%	16.381%		19.555%	12.045%
1983-84	18.262%		18.884%	20.615%		24.306%	12.378%
1984-85	17.604%	17.604%	19.976%	20.518%		25.292%	12.378%
1985-86	17.604%	17.604%	19.749%	20.518%	24.310%	24.868%	11.969%
1986-87	15.450%	15.450%	16.638%	22.522%	20.578%	22.150%	11.015%
1987-88	15.202%	15.038%	15.332%	19.229%	17.171%	20.859%	9.718%
1988-89	13.464%	13.413%	16.626%	17.296%	16.431%	18.453%	8.454%
1989-90	13.224%	13.218%	16.783%	17.424%	16.200%	18.318%	8.210%
1990-91	12.878%	6.975%	16.720%	17.916%	15.702%	18.090%	7.282%
1991-92	11.804%	3.986%	13.399%	17.376%	17.386%	21.721%	8.162%
1992-93	10.266%	3.391%	11.995%	15.698%	15.560%	17.074%	7.273%
1993-94	9.939%	5.005%	11.765%	15.485%	15.202%	16.940%	7.066%
1994-95	9.934%	5.947%	10.597%	13.927%	12.817%	15.552%	3.849%
1995-96	12.350%	8.326%	8.981%	14.228%	14.350%	14.778%	6.979%
1996-97	13.106%	9.345%	9.260%	14.656%	15.401%	15.851%	7.787%
1997-98	12.721%	9.822%	9.048%	13.754%	15.270%	15.515%	6.172%
1998-99	8.541%	6.437%	4.583%	9.440%	9.591%	13.541%	0.000%
1999-00	1.491%	0.000%	0.026%	7.487%	0.000%	13.345%	0.000%
2000-01	0.000%	0.000%	0.026%	6.808%	2.729%	13.711%	0.000%
2001-02	4.166%	0.036%	0.350%	12.923%	9.638%	16.897%	0.000%
2002-03	7.413%	2.813%	2.858%	17.055%	13.925%	23.076%	2.894%
2003-04	14.843%	10.265%	11.099%	21.930%	20.325%	32.653%	10.420%
2004-05	17.022%	13.216%	16.386%	20.773%	23.841%	33.434%	9.952%
2005-06	15.942%	15.890%	17.147%	19.026%	23.563%	26.396%	9.116%
2006-07	16.997%	16.778%	17.861%	19.294%	24.505%	31.463%	9.124%
2007-08	16.633%	16.565%	17.345%	18.835%	25.552%	32.212%	9.306%
2008-09	16.574%	16.470%	17.236%	18.411%	26.064%	32.149%	9.428%
2009-10	16.917%	16.737%	17.251%	18.099%	25.848%	28.438%	9.709%
2010-11	18.725%	18.032%	16.433%	18.187%	28.722%	31.291%	10.707%
2011-12	18.175%	17.025%	14.934%	16.428%	27.415%	31.264%	10.923%
2012-13	20.503%	20.457%	16.302%	17.503%	30.297%	33.728%	11.417%

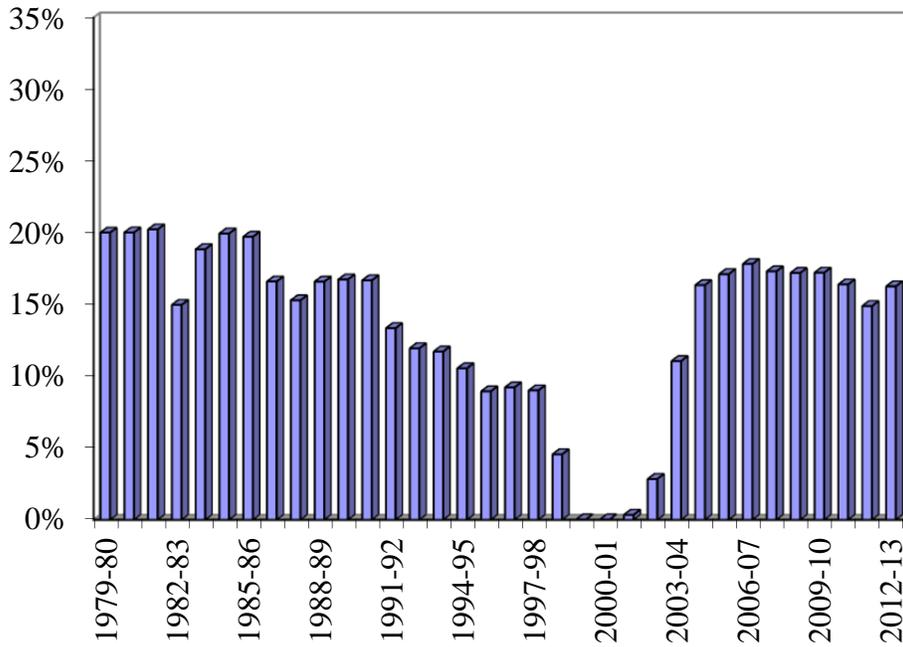
### State Miscellaneous Tier 1 Rates



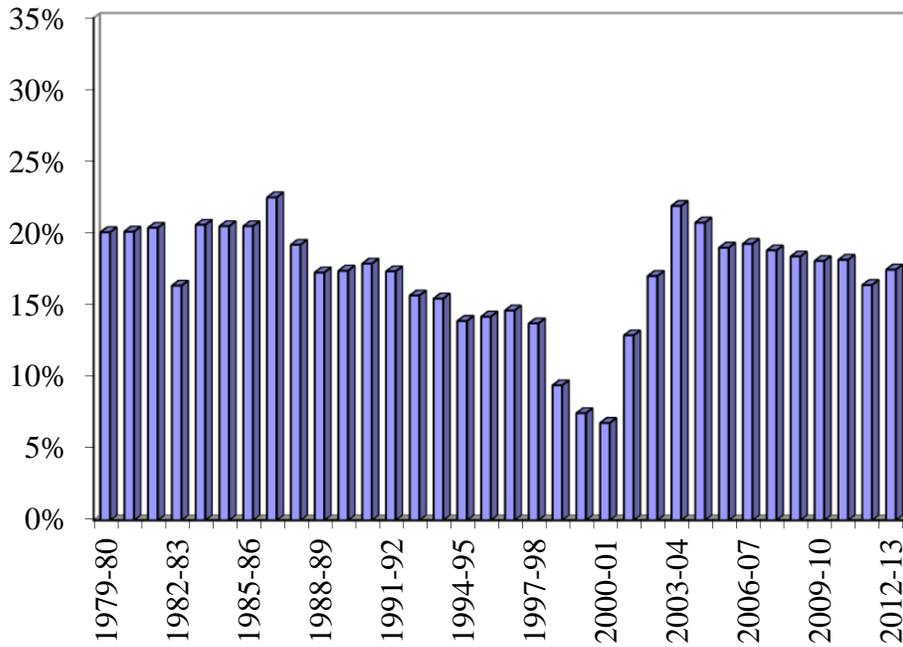
### State Miscellaneous Tier 2 Rates



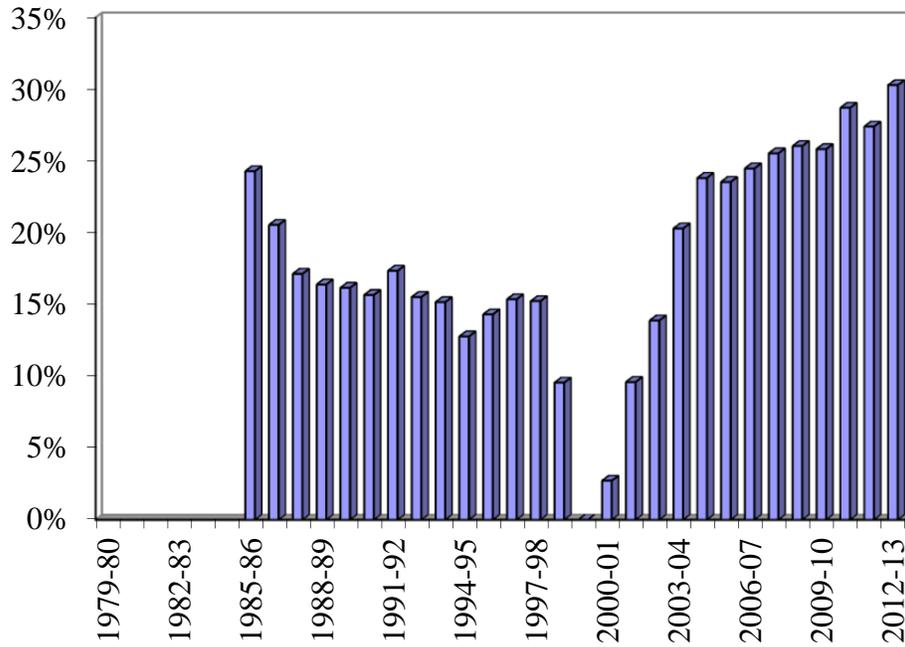
### State Industrial Rates



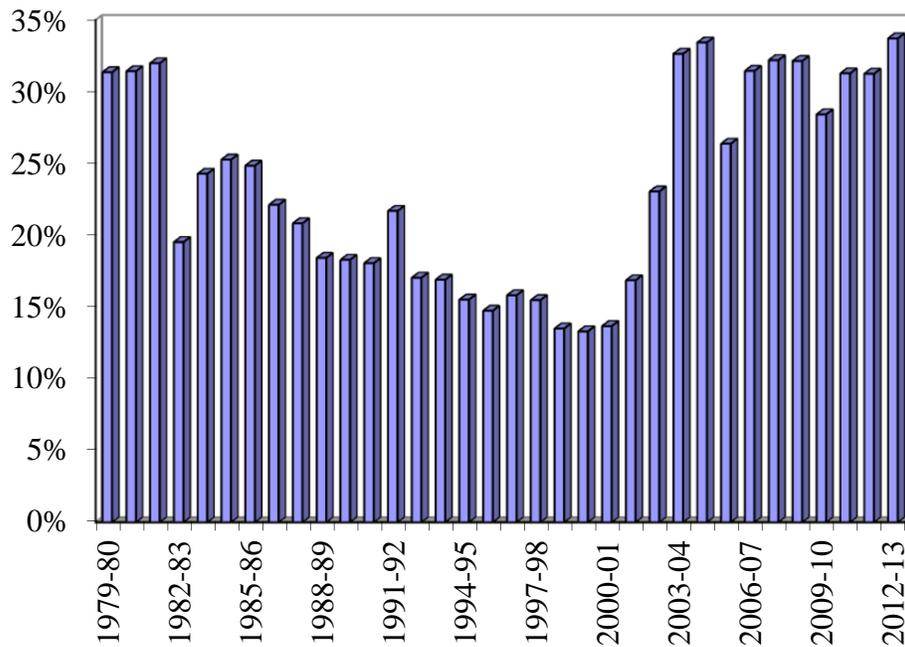
### State Safety Rates



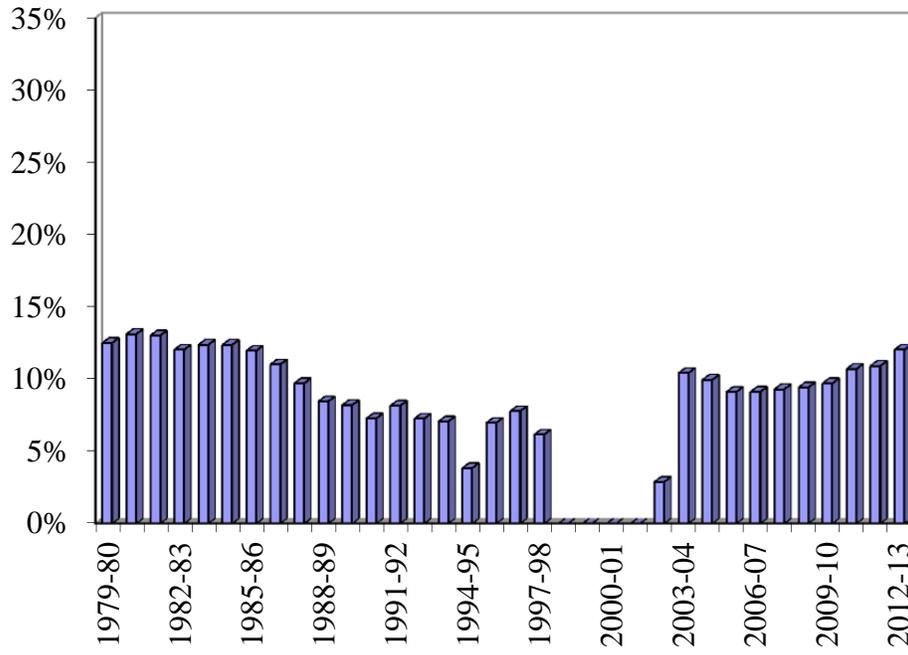
### State Peace Officers and Firefighters Rates



### California Highway Patrol Rates



### Schools Rates

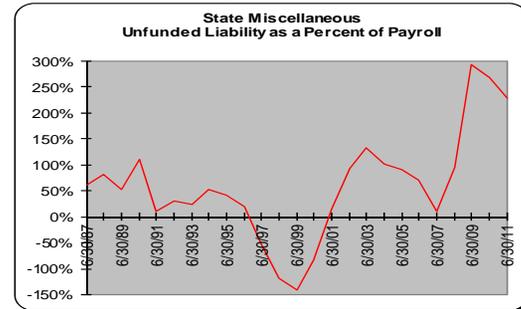
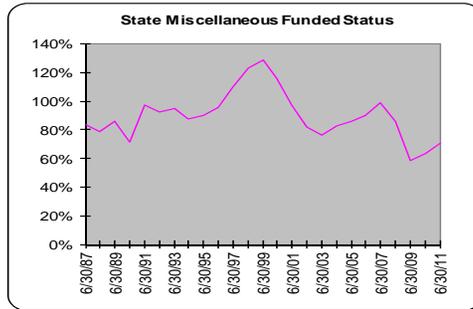
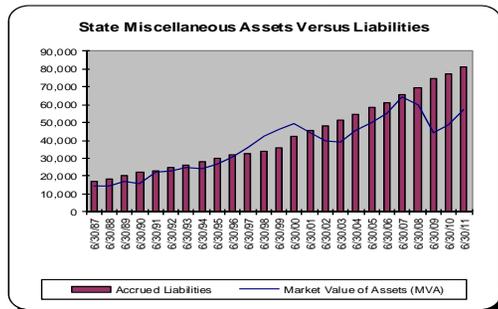


## History of Funded Status and Funding Progress

Shown below is the history of funding progress for the plans. One could view the trend in the ratio of the unfunded liability to covered payroll as a measure of the ability of the employer to address the unfunded liability.

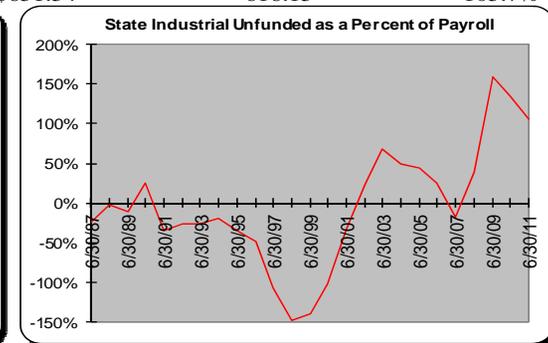
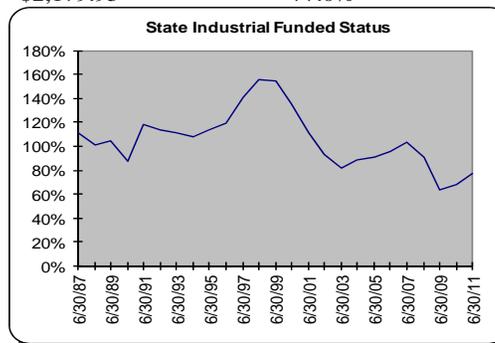
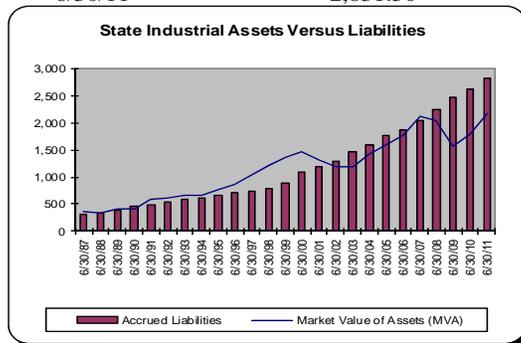
### State Miscellaneous (Dollars in Millions)

Valuation Date	Actuarial Accrued Liabilities	Market Value of Assets (MVA)	Funded Status (MVA)	Unfunded Liabilities/ (Surplus) (MVA)	Projected Payroll for Contribution	Unfunded/ (Surplus) as a % of Payroll
6/30/87	\$17,216.59	\$14,341.10	83.3%	\$2,875.49	\$4,632.96	62.1%
6/30/88	18,551.55	14,534.21	78.3%	\$4,017.34	4,912.26	81.8%
6/30/89	19,971.99	17,132.13	85.8%	\$2,839.87	5,348.02	53.1%
6/30/90	22,441.71	16,026.60	71.4%	\$6,415.10	5,815.86	110.3%
6/30/91	23,152.67	22,441.42	96.9%	\$711.24	6,302.82	11.3%
6/30/92	24,887.16	22,978.69	92.3%	\$1,908.47	6,242.74	30.6%
6/30/93	26,162.26	24,714.91	94.5%	\$1,447.35	6,310.21	22.9%
6/30/94	27,820.55	24,278.25	87.3%	\$3,542.30	6,826.52	51.9%
6/30/95	29,959.51	27,087.75	90.4%	\$2,871.76	7,009.46	41.0%
6/30/96	31,742.11	30,451.89	95.9%	\$1,290.22	6,881.12	18.8%
6/30/97	32,557.43	35,958.74	110.4%	(\$3,401.31)	6,623.62	-51.4%
6/30/98	34,169.38	42,011.09	122.9%	(\$7,841.72)	6,592.21	-119.0%
6/30/99	35,771.22	46,176.43	129.1%	(\$10,405.22)	7,332.11	-141.9%
6/30/00	42,386.05	49,207.61	116.1%	(\$6,821.57)	8,246.46	-82.7%
6/30/01	45,261.49	43,933.20	97.1%	\$1,328.30	8,815.88	15.1%
6/30/02	48,118.21	39,530.08	82.2%	\$8,588.13	9,238.43	93.0%
6/30/03	51,558.91	39,324.37	76.3%	\$12,234.54	9,207.49	132.9%
6/30/04	54,700.51	45,459.67	83.1%	\$9,240.84	9,078.96	101.8%
6/30/05	58,266.63	50,230.53	86.2%	\$8,036.10	8,896.91	90.3%
6/30/06	61,298.78	55,050.67	89.8%	\$6,248.11	8,956.47	69.8%
6/30/07	65,341.72	64,441.85	98.6%	\$899.87	9,529.56	9.4%
6/30/08	69,647.97	59,978.56	86.1%	\$9,669.41	10,241.26	94.4%
6/30/09	74,762.62	44,093.66	59.0%	\$30,668.96	10,464.95	293.1%
6/30/10	76,980.43	48,645.91	63.2%	\$28,334.52	10,514.72	269.5%
6/30/11	81,271.09	57,451.96	70.7%	\$23,819.13	10,426.12	228.5%



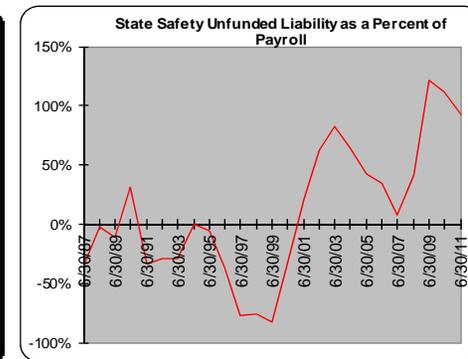
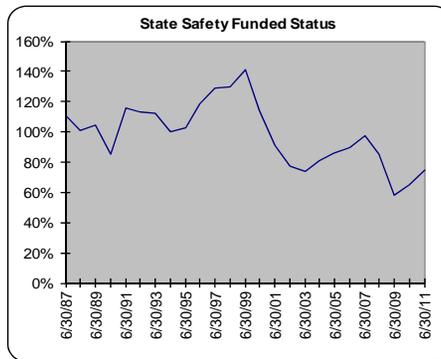
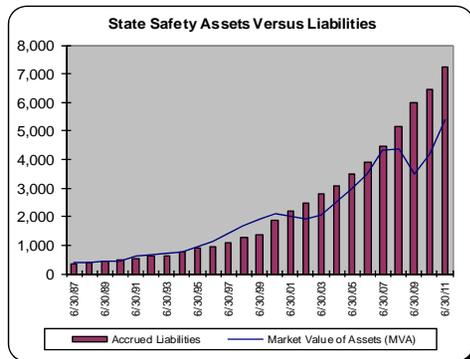
**State Industrial**  
(Dollars in Millions)

Valuation Date	Actuarial Accrued Liabilities	Market Value of Assets (MVA)	Funded Status (MVA)	Unfunded Liabilities/ (Surplus) (MVA)	Projected Payroll for Contribution	Unfunded/ (Surplus) as a % of Payroll
6/30/87	\$315.86	\$350.09	110.8%	(\$34.22)	\$146.17	-23.4%
6/30/88	344.81	\$347.47	100.8%	(\$2.66)	166.90	-1.6%
6/30/89	386.48	\$405.87	105.0%	(\$19.39)	191.17	-10.1%
6/30/90	459.94	\$401.13	87.2%	\$58.81	224.06	26.2%
6/30/91	492.36	\$579.06	117.6%	(\$86.71)	256.41	-33.8%
6/30/92	539.59	\$609.95	113.0%	(\$70.36)	268.41	-26.2%
6/30/93	596.89	\$667.52	111.8%	(\$70.63)	278.37	-25.4%
6/30/94	618.92	\$665.17	107.5%	(\$46.25)	235.06	-19.7%
6/30/95	659.45	\$750.80	113.9%	(\$91.35)	270.74	-33.7%
6/30/96	721.31	\$861.49	119.4%	(\$140.18)	293.77	-47.7%
6/30/97	740.68	\$1,042.38	140.7%	(\$301.69)	284.64	-106.0%
6/30/98	789.88	\$1,226.17	155.2%	(\$436.29)	296.55	-147.1%
6/30/99	880.05	\$1,359.58	154.5%	(\$479.53)	343.75	-139.5%
6/30/00	1,078.75	\$1,463.21	135.6%	(\$384.45)	379.44	-101.3%
6/30/01	1,196.07	\$1,325.06	110.8%	(\$128.99)	390.17	-33.1%
6/30/02	1,294.63	\$1,199.71	92.7%	\$94.92	389.72	24.4%
6/30/03	1,462.07	\$1,200.75	82.1%	\$261.32	381.30	68.5%
6/30/04	1,601.67	\$1,414.67	88.3%	\$187.01	377.65	49.5%
6/30/05	1,753.85	\$1,586.13	90.4%	\$167.72	379.50	44.2%
6/30/06	1,870.23	\$1,776.30	95.0%	\$93.93	381.08	24.6%
6/30/07	2,043.85	\$2,119.42	103.7%	(\$75.56)	440.39	-17.2%
6/30/08	2,234.92	\$2,033.97	91.0%	\$200.95	521.55	38.5%
6/30/09	2,467.30	\$1,555.77	63.1%	\$911.53	573.82	158.9%
6/30/10	2,614.48	\$1,784.90	68.3%	\$829.58	615.81	134.7%
6/30/11	2,831.50	\$2,179.95	77.0%	\$651.54	616.15	105.7%



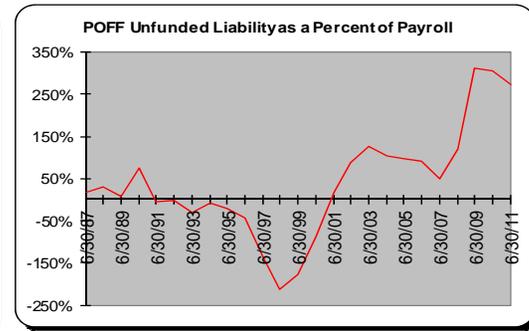
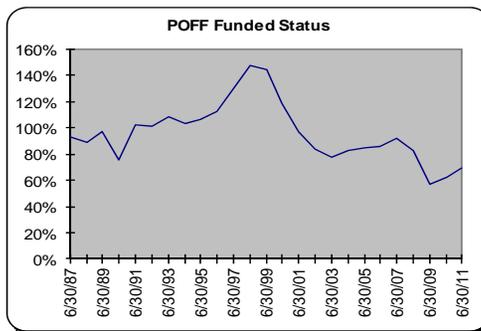
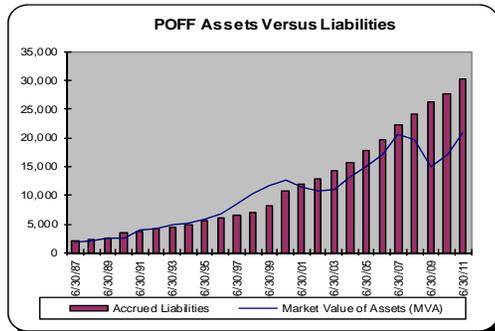
**State Safety**  
(Dollars in Millions)

Valuation Date	Actuarial Accrued Liabilities	Market Value of Assets (MVA)	Funded Status (MVA)	Unfunded Liabilities/ (Surplus) (MVA)	Projected Payroll for Contribution	Unfunded/ (Surplus) as a % of Payroll
6/30/87	\$349.50	\$387.09	110.8%	(\$37.59)	\$112.68	-33.4%
6/30/88	369.94	\$372.43	100.7%	(\$2.49)	133.51	-1.9%
6/30/89	420.00	\$440.28	104.8%	(\$20.28)	184.89	-11.0%
6/30/90	498.73	\$425.64	85.3%	\$73.09	231.79	31.5%
6/30/91	548.01	\$636.70	116.2%	(\$88.70)	262.42	-33.8%
6/30/92	602.36	\$679.63	112.8%	(\$77.27)	262.99	-29.4%
6/30/93	644.22	\$721.61	112.0%	(\$77.39)	265.34	-29.2%
6/30/94	761.10	\$761.74	100.1%	(\$0.64)	385.40	-0.2%
6/30/95	913.75	\$936.36	102.5%	(\$22.61)	408.03	-5.5%
6/30/96	946.58	\$1,122.60	118.6%	(\$176.02)	473.79	-37.2%
6/30/97	1,086.00	\$1,403.64	129.2%	(\$317.64)	413.78	-76.8%
6/30/98	1,285.33	\$1,671.77	130.1%	(\$386.45)	510.51	-75.7%
6/30/99	1,363.94	\$1,927.29	141.3%	(\$563.35)	681.63	-82.6%
6/30/00	1,864.69	\$2,121.78	113.8%	(\$257.09)	759.19	-33.9%
6/30/01	2,179.43	\$1,999.67	91.8%	\$179.76	850.00	21.1%
6/30/02	2,476.47	\$1,925.90	77.8%	\$550.56	875.83	62.9%
6/30/03	2,788.06	\$2,049.31	73.5%	\$738.75	890.67	82.9%
6/30/04	3,087.45	\$2,508.66	81.3%	\$578.79	889.30	65.1%
6/30/05	3,472.58	\$2,999.91	86.4%	\$472.67	1,106.95	42.7%
6/30/06	3,906.96	\$3,486.19	89.2%	\$420.77	1,225.72	34.3%
6/30/07	4,467.41	\$4,341.68	97.2%	\$125.73	1,530.40	8.2%
6/30/08	5,146.24	\$4,364.99	84.8%	\$781.25	1,913.63	40.8%
6/30/09	6,005.61	\$3,514.11	58.5%	\$2,491.50	2,047.94	121.7%
6/30/10	6,435.65	\$4,196.17	65.2%	\$2,239.48	2,004.05	111.7%
6/30/11	7,224.28	\$5,389.52	74.6%	\$1,834.76	1,984.10	92.5%



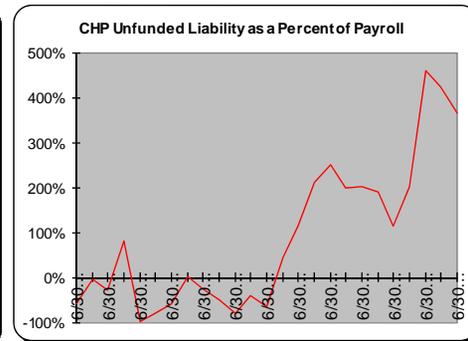
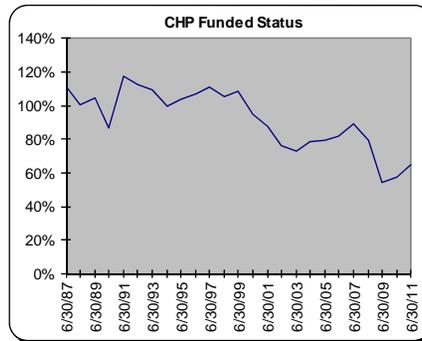
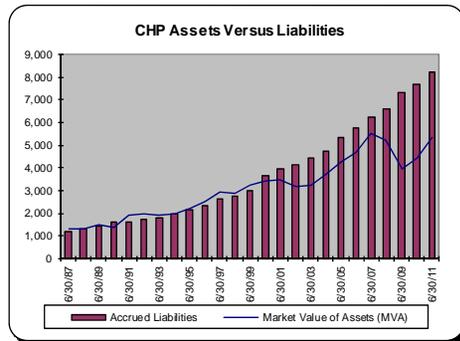
**State Peace Officers and Firefighters**  
(Dollars in Millions)

Valuation Date	Actuarial Accrued Liabilities	Market Value of Assets (MVA)	Funded Status (MVA)	Unfunded Liabilities/ (Surplus) (MVA)	Projected Payroll for Contribution	Unfunded/ (Surplus) as a % of Payroll
6/30/87	\$2,046.60	\$1,902.78	93.0%	\$143.82	\$791.32	18.2%
6/30/88	2,323.22	\$2,060.31	88.7%	\$262.91	892.79	29.4%
6/30/89	2,664.98	\$2,594.85	97.4%	\$70.13	1,001.85	7.0%
6/30/90	3,439.63	\$2,585.12	75.2%	\$854.51	1,150.54	74.3%
6/30/91	3,773.05	\$3,854.02	102.1%	(\$80.97)	1,319.96	-6.1%
6/30/92	4,193.43	\$4,232.07	100.9%	(\$38.63)	1,332.15	-2.9%
6/30/93	4,475.70	\$4,867.29	108.7%	(\$391.58)	1,347.85	-29.1%
6/30/94	4,883.90	\$5,031.67	103.0%	(\$147.77)	1,504.71	-9.8%
6/30/95	5,552.00	\$5,892.10	106.1%	(\$340.10)	1,592.42	-21.4%
6/30/96	6,128.81	\$6,860.00	111.9%	(\$731.19)	1,653.57	-44.2%
6/30/97	6,494.67	\$8,435.81	129.9%	(\$1,941.14)	1,409.62	-137.7%
6/30/98	7,015.67	\$10,321.52	147.1%	(\$3,305.85)	1,540.44	-214.6%
6/30/99	8,091.24	\$11,684.90	144.4%	(\$3,593.66)	2,017.76	-178.1%
6/30/00	10,720.41	\$12,667.55	118.2%	(\$1,947.13)	2,227.34	-87.4%
6/30/01	11,949.04	\$11,574.35	96.9%	\$374.70	2,303.58	16.3%
6/30/02	12,826.58	\$10,731.13	83.7%	\$2,095.45	2,406.97	87.1%
6/30/03	14,219.50	\$11,037.85	77.6%	\$3,181.65	2,506.75	126.9%
6/30/04	15,668.42	\$12,998.58	83.0%	\$2,669.85	2,603.55	102.5%
6/30/05	17,753.24	\$14,984.69	84.4%	\$2,768.54	2,860.33	96.8%
6/30/06	19,737.05	\$16,972.81	86.0%	\$2,764.24	3,057.73	90.4%
6/30/07	22,249.94	\$20,538.69	92.3%	\$1,711.25	3,420.18	50.0%
6/30/08	24,004.31	\$19,734.05	82.2%	\$4,270.26	3,588.76	119.0%
6/30/09	26,291.09	\$15,083.09	57.4%	\$11,208.00	3,591.82	312.0%
6/30/10	27,711.53	\$17,199.10	62.1%	\$10,512.44	3,454.76	304.3%
6/30/11	30,127.48	\$20,801.28	69.0%	\$9,326.20	3,393.39	274.8%



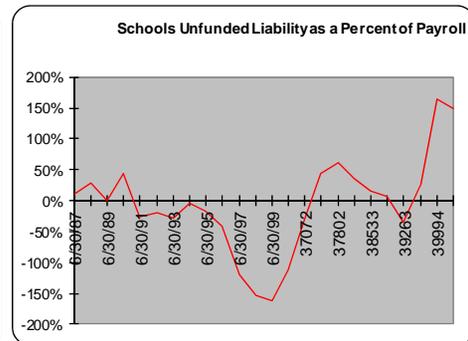
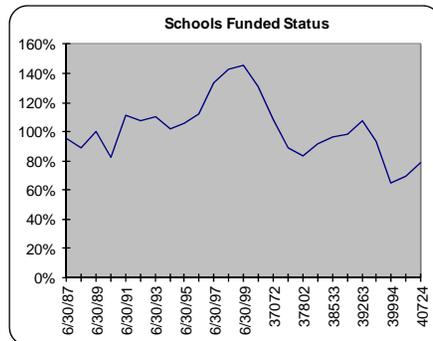
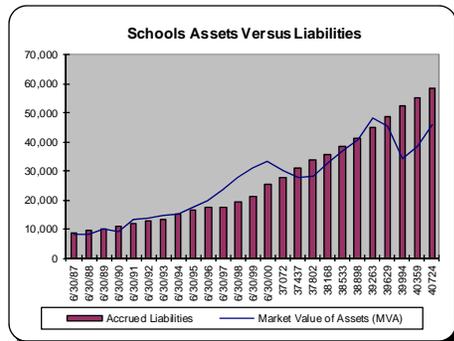
### California Highway Patrol (Dollars in Millions)

Valuation Date	Actuarial Accrued Liabilities	Market Value of Assets (MVA)	Funded Status (MVA)	Unfunded Liabilities/ (Surplus) (MVA)	Projected Payroll for Contribution	Unfunded/ (Surplus) as a % of Payroll
6/30/87	\$1,196.54	\$1,325.90	110.8%	(\$129.35)	\$216.42	-59.8%
6/30/88	1,290.70	\$1,300.19	100.7%	(\$9.49)	226.20	-4.2%
6/30/89	1,414.86	\$1,483.64	104.9%	(\$68.79)	249.06	-27.6%
6/30/90	1,612.80	\$1,395.26	86.5%	\$217.54	271.01	80.3%
6/30/91	1,628.94	\$1,915.61	117.6%	(\$286.67)	287.52	-99.7%
6/30/92	1,732.68	\$1,956.27	112.9%	(\$223.60)	282.14	-79.2%
6/30/93	1,772.76	\$1,940.50	109.5%	(\$167.74)	278.84	-60.2%
6/30/94	1,970.53	\$1,968.32	99.9%	\$2.21	288.04	0.8%
6/30/95	2,133.61	\$2,206.59	103.4%	(\$72.98)	301.83	-24.2%
6/30/96	2,328.09	\$2,496.33	107.2%	(\$168.24)	343.47	-49.0%
6/30/97	2,620.57	\$2,911.76	111.1%	(\$291.18)	370.66	-78.6%
6/30/98	2,756.37	\$2,901.44	105.3%	(\$145.07)	366.98	-39.5%
6/30/99	2,983.40	\$3,249.25	108.9%	(\$265.84)	402.37	-66.1%
6/30/00	3,635.32	\$3,443.17	94.7%	\$192.15	433.10	44.4%
6/30/01	3,980.87	\$3,465.65	87.1%	\$515.22	455.09	113.2%
6/30/02	4,137.94	\$3,159.30	76.3%	\$978.64	461.05	212.3%
6/30/03	4,421.26	\$3,230.38	73.1%	\$1,190.87	475.73	250.3%
6/30/04	4,741.67	\$3,733.81	78.7%	\$1,007.86	508.61	198.2%
6/30/05	5,348.62	\$4,248.85	79.4%	\$1,099.77	546.14	201.4%
6/30/06	5,743.98	\$4,681.57	81.5%	\$1,062.41	556.30	191.0%
6/30/07	6,248.79	\$5,546.16	88.8%	\$702.63	613.03	114.6%
6/30/08	6,608.65	\$5,237.58	79.3%	\$1,371.08	674.69	203.2%
6/30/09	7,300.11	\$3,932.22	53.9%	\$3,367.89	733.57	459.1%
6/30/10	7,703.86	\$4,439.50	57.6%	\$3,264.37	767.42	425.4%
6/30/11	8,193.45	\$5,335.99	65.1%	\$2,857.46	779.98	366.4%



**Schools**  
(Dollars in Millions)

Valuation Date	Actuarial Accrued Liabilities	Market Value of Assets (MVA)	Funded Status (MVA)	Unfunded Liabilities/ (Surplus) (MVA)	Projected Payroll for Contribution	Unfunded/ (Surplus) as a % of Payroll
6/30/87	\$8,582.66	\$8,173.59	95.2%	\$409.07	\$3,605.26	11.3%
6/30/88	9,395.40	\$8,341.39	88.8%	\$1,054.01	3,768.65	28.0%
6/30/89	9,941.35	\$9,925.64	99.8%	\$15.72	4,054.28	0.4%
6/30/90	11,249.14	\$9,297.76	82.7%	\$1,951.37	4,392.59	44.4%
6/30/91	12,002.48	\$13,300.78	110.8%	(\$1,298.30)	4,849.84	-26.8%
6/30/92	12,855.90	\$13,815.63	107.5%	(\$959.73)	4,882.78	-19.7%
6/30/93	13,575.13	\$14,955.70	110.2%	(\$1,380.57)	4,852.84	-28.4%
6/30/94	15,135.82	\$15,373.38	101.6%	(\$237.56)	5,140.41	-4.6%
6/30/95	16,421.90	\$17,314.37	105.4%	(\$892.46)	5,350.87	-16.7%
6/30/96	17,571.63	\$19,706.46	112.1%	(\$2,134.83)	5,145.78	-41.5%
6/30/97	17,583.43	\$23,499.15	133.6%	(\$5,915.72)	4,907.43	-120.5%
6/30/98	19,499.14	\$27,873.56	142.9%	(\$8,374.42)	5,444.66	-153.8%
6/30/99	21,216.00	\$30,917.57	145.7%	(\$9,701.57)	5,961.02	-162.8%
6/30/00	25,473.96	\$33,295.07	130.7%	(\$7,821.11)	7,052.94	-110.9%
6/30/01	27,946.43	\$30,307.55	108.4%	(\$2,361.12)	7,912.23	-29.8%
6/30/02	31,271.16	\$27,689.90	88.5%	\$3,581.27	8,344.24	42.9%
6/30/03	33,792.88	\$28,182.01	83.4%	\$5,610.86	9,079.11	61.8%
6/30/04	35,932.74	\$32,828.49	91.4%	\$3,104.24	9,068.75	34.2%
6/30/05	38,367.52	\$36,898.25	96.2%	\$1,469.27	9,222.78	15.9%
6/30/06	41,408.65	\$40,852.35	98.7%	\$556.31	9,880.89	5.6%
6/30/07	44,810.07	\$48,292.93	107.8%	(\$3,482.86)	10,249.83	-34.0%
6/30/08	48,537.68	\$45,547.90	93.8%	\$2,989.78	11,137.70	26.8%
6/30/09	52,493.08	\$34,146.45	65.0%	\$18,346.63	11,109.76	165.1%
6/30/10	55,306.96	\$38,435.17	69.5%	\$16,871.79	11,283.40	149.5%
6/30/11	58,358.41	\$45,900.99	78.7%	\$12,457.42	10,540.43	118.2%





# ASSETS

- RECONCILIATION OF THE MARKET VALUE OF ASSETS OVER THE PRIOR FISCAL YEAR
- DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS
- ASSET ALLOCATION
- CALPERS HISTORY OF INVESTMENT RETURNS



## Reconciliation of the Market Value of Assets Over the Prior Fiscal Year

	State Miscellaneous	State Industrial	State Safety	State Peace Officers and Firefighters	California Highway Patrol	Schools
1. Market Value of Assets as of June 30, 2010 Including Receivables for Tier 1 Conversion and Service Buybacks	\$ 48,645,908,066	\$ 1,784,901,351	\$ 4,196,169,119	\$ 17,199,098,812	\$ 4,439,496,887	\$ 38,435,174,651
2. Receivables for Tier 1 Conversion and Service Buybacks as of June 30, 2010	\$ 533,664,980	\$ 16,725,076	\$ 12,885,773	\$ 40,690,091	\$ 10,406,152	\$ 27,669,081
3. Market Value of Assets as of June 30, 2010	\$ 48,112,243,086	\$ 1,768,176,275	\$ 4,183,283,346	\$ 17,158,408,721	\$ 4,429,090,735	\$ 38,407,505,570
4. Contributions Received during fiscal year 2010-2011	2,437,959,962	123,731,374	539,960,649	1,085,789,106	308,059,390	1,814,471,576
5. Benefit Payments in 2010-2011	(4,061,211,240)	(114,017,056)	(271,253,582)	(1,200,696,141)	(369,905,994)	(2,496,887,904)
6. Refunds in 2010-2011	(18,538,917)	(670,448)	(5,830,311)	(9,375,222)	(454,095)	(85,068,064)
7. Investment Return	10,420,125,376	384,719,430	931,037,572	3,724,156,625	957,722,187	8,233,465,778
8. Market Value of Assets as of June 30, 2011 [(3) + (4) + (5) + (6) + (7)]	\$ 56,890,578,267	\$ 2,161,939,575	\$ 5,377,197,674	\$ 20,758,283,089	\$ 5,324,512,223	\$ 45,873,486,956
9. Receivables for Tier 1 Conversion and Service Buybacks as of June 30, 2011	\$ 561,381,449	\$ 18,015,356	\$ 12,325,260	\$ 43,000,069	\$ 11,480,870	\$ 27,503,406
10. Market Value of Assets as of June 30, 2011 Including Receivables for Tier 1 Conversion and Service Buybacks	\$ 57,451,959,716	\$ 2,179,954,931	\$ 5,389,522,934	\$ 20,801,283,158	\$ 5,335,993,093	\$ 45,900,990,362

## Development of the Actuarial Value of Assets

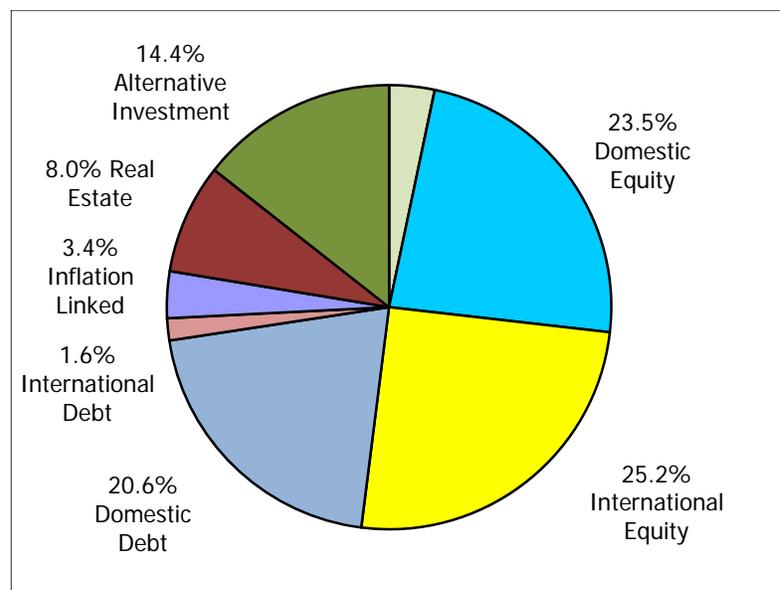
	State Miscellaneous	State Industrial	State Safety	State Peace Officers and Firefighters	California Highway Patrol	Schools
1. Actuarial Value of Assets as of June 30, 2010 Used for Rate Setting Purposes	\$ 62,213,588,699	\$ 2,268,588,289	\$ 5,272,535,578	\$ 21,928,176,588	\$ 5,663,252,031	\$ 48,955,651,302
2. Receivables for Tier 1 Conversion and Service Buybacks as of June 30, 2010	\$ 533,664,980	\$ 16,725,076	\$ 12,885,773	\$ 40,690,091	\$ 10,406,152	\$ 27,669,081
3. Actuarial Value of Assets as of 6/30/10 (Prior to adjustments for Receivables for Tier 1 Conversion and Service Buybacks) [(1)-(2)]	\$ 61,679,923,719	\$ 2,251,863,213	\$ 5,259,649,805	\$ 21,887,486,497	\$ 5,652,845,879	\$ 48,927,982,221
4. Contributions Received during fiscal year 2010-2011	2,437,959,962	123,731,374	539,960,649	1,085,789,106	308,059,390	1,814,471,576
5. Benefit Payments in 2010-2011	(4,061,211,240)	(114,017,056)	(271,253,582)	(1,200,696,141)	(369,905,994)	(2,496,887,904)
6. Refunds in 2010-2011	(18,538,917)	(670,448)	(5,830,311)	(9,375,222)	(454,095)	(85,068,064)
7. Expected Investment Return during fiscal 2010-2011 [(3) x 0.0775 + [(4) + (5) + (6)] x ((1 + 0.0775)^.5-1)]	4,717,761,774	174,863,310	417,619,268	1,691,554,125	435,726,449	3,762,733,513
8. Expected Actuarial Value of Assets as of June 30, 2011 (Prior to Adjustment for Receivables) [(3) + (4) + (5) + (6) + (7)]	\$ 64,755,895,298	\$ 2,435,770,393	\$ 5,940,145,829	\$ 23,454,758,365	\$ 6,026,271,629	\$ 51,923,231,342
9. Market Value of Assets as of 6/30/11 (Prior to Adjustment for Receivables for Tier 1 Conversion and Service Buybacks)	\$ 56,890,578,267	\$ 2,161,939,575	\$ 5,377,197,674	\$ 20,758,283,089	\$ 5,324,512,223	\$ 45,873,486,956
10. Actuarial Value of Assets as of 6/30/11 [(8) + [(9) - (8)]/15, but not less than 80% or more than 120% of (9)]	\$ 64,231,540,829	\$ 2,417,515,005	\$ 5,902,615,952	\$ 23,274,993,347	\$ 5,979,487,669	\$ 51,519,915,050
11. Receivables for Tier 1 Conversion and Service Buybacks as of June 30, 2011	\$ 561,381,449	\$ 18,015,356	\$ 12,325,260	\$ 43,000,069	\$ 11,480,870	\$ 27,503,406
12. Actuarial Value of Assets as of June 30, 2011 Used for Rate Setting Purposes Only [(10) + (11)], Including Receivables	\$ 64,792,922,278	\$ 2,435,530,361	\$ 5,914,941,212	\$ 23,317,993,416	\$ 5,990,968,539	\$ 51,547,418,456

## Asset Allocation

CalPERS follows a strategic allocation policy that identifies the percentage of funds to be invested in each asset class. The target allocation was changed by the Board in December 2010.

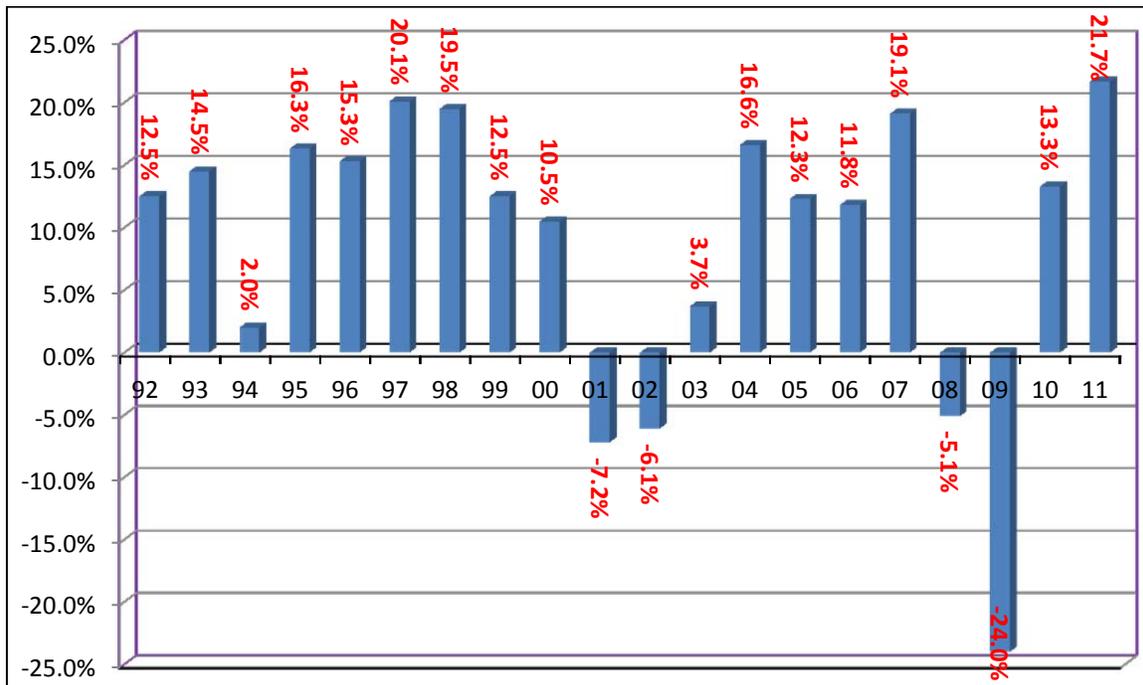
The asset allocation and market value of assets shown below are in respect of the Public Employees Retirement Fund (PERF) as a whole as of June 30, 2011. The assets of the State plans and Schools pool are part of the PERF and are invested accordingly.

(A) Asset Class	(B) Market Value (\$ Billion)	(C) Current Allocation
1) Short-Term Investments	7.9	3.3%
2) Domestic Equity	56.3	23.5%
3) International Equity	60.4	25.2%
4) Domestic Debt	49.2	20.6%
5) International Debt	3.9	1.6%
6) Inflation Linked	8.1	3.4%
7) Real Estate	19.1	8.0
8) Alternative Investment	34.4	14.4
<b>Total Fund</b>	<b>\$239.3</b>	<b>100.0%</b>



## CalPERS 20-Year History of Investment Returns

The following is a chart with historical annual returns of the Public Employees Retirement Fund for each fiscal year ending on June 30. Beginning with June 30, 2002 the figures are reported as gross of fees.



## PARTICIPANT DATA

- SOURCE OF THE PARTICIPANT DATA
- DATA VALIDATION TESTS AND ADJUSTMENTS
- DATA STATEMENT
- RECONCILIATION OF PARTICIPANTS
- DISTRIBUTION OF ACTIVE PARTICIPANTS AND AVERAGE MONTHLY SALARIES BY AGE AND SERVICE
- DISTRIBUTION BY AGE AND SERVICE OF TERMINATED PARTICIPANTS WITH FUNDS ON DEPOSIT AND TRANSFERS TO OTHER CALPERS PLANS
- RETIRED MEMBERS AND BENEFICIARIES



## Source of the Participant Data

The data was extracted from various databases within CalPERS and placed in a data warehouse by a series of extract programs. Included in this data is:

- individual member and beneficiary information,
- employment and payroll information,
- accumulated contributions with interest,
- service information,
- benefit payment information,
- information about the various organizations which contract with CalPERS, and
- detailed information about the plan provisions applicable to each group of members.

## Data Validation Tests and Adjustments

Once the information is extracted from the various computer systems into the data warehouse, update queries are then run against this data to correct for flaws found in the data. This part of the process is intended to validate the participant data for all CalPERS plans. It is not specific to the State and Schools plans.

The data for each of the State and Schools plans was then pulled into separate files. The data in these files was then checked for reasonableness and consistency with data from the prior valuation.

Checks on the data included:

- a reconciliation of the membership of the plans,
- comparisons of various member statistics (average attained age, average entry age, average salary, etc.) for each plan with those from the prior valuation
- pension amounts for each retiree and beneficiary receiving payments were compared with the pension amounts from the prior valuation
- checks for invalid ages and dates, and
- reasonableness checks on various key data elements such as service and salary.

As a result of the tests on the data, a number of adjustments were determined to be necessary. These included:

- dates of hire and dates of entry were adjusted where necessary to be consistent with the service fields, the date of birth and each other, and
- the annual earnings rate for most Schools members were overwritten with the annualized earnings based on their yearly contributions.

In addition, it is also known that records relating to pre-1984 State Safety retirees who were transferred to the State Peace Officers and Firefighters plan upon its creation have not had their records updated to reflect the transfer. In this valuation, as in prior valuations, this deficiency has been handled by adjusting the assets and liabilities rather than by trying to correct the data. The member counts and summary of retiree data have not been adjusted to correct for this deficiency.

## Data Statement

The data does not contain information about reciprocal systems and hence salary information for terminated participants covered by reciprocal systems may not be up to date. This situation is not expected to have a material impact on the employer contribution rates since the total present value for all terminated participants represents less than 2% of the present value of benefits for all members.

We are unaware of any other data issues that would have a material effect on the results of this valuation.

It is our opinion that, after the adjustments noted above, the participant data was sufficient and reliable for the purposes of the valuation.

## Reconciliation of Participants

For the Fiscal Year Ending June 30, 2011

### State Miscellaneous Tier 1

	Active	Transfer	Terminated	Receiving	Total
<b>As of June 30, 2010</b>	<b>151,631</b>	<b>21,163</b>	<b>41,164</b>	<b>154,540</b>	<b>368,498</b>
Retirements	(6,332)	(1,276)	(586)	8,194	-
Industrial Disabilities	(1)	(38)	(6)	45	-
Ordinary Disabilities	(253)	(24)	(68)	345	-
Deaths <sup>2</sup>	(259)	(33)	(102)	(5,083)	(5,477)
New Survivors	n/a	n/a	n/a	1,751	1,751
Non-vested Terminations <sup>1</sup>	(2,030)	(99)	2,129	-	-
Vested Terminations	(873)	(184)	1,059	(2)	-
Refunds of Contributions	(880)	(156)	(766)	-	(1,802)
Transfers	(990)	1,445	(426)	(29)	-
Redeposits/Rehires	1,381	(349)	(980)	(52)	-
First Year in Status	9,416	6,366	554	409	16,745
Moved from Tier 2	257	455	52	11	775
Data Corrections <sup>3</sup>	(241)	(316)	(135)	(317)	(1,009)
<b>As of June 30, 2011</b>	<b>150,826</b>	<b>26,954</b>	<b>41,889</b>	<b>159,812</b>	<b>379,481</b>

### State Miscellaneous Tier 2

	Active	Transfer	Terminated	Receiving	Total
<b>As of June 30, 2010</b>	<b>7,674</b>	<b>11,881</b>	<b>1,694</b>	<b>4,362</b>	<b>25,611</b>
Retirements	(33)	(109)	(62)	204	-
Industrial Disabilities	-	-	-	-	-
Ordinary Disabilities	(4)	(13)	(12)	29	-
Deaths <sup>2</sup>	(22)	(22)	(14)	(104)	(162)
New Survivors	n/a	n/a	n/a	55	55
Non-vested Terminations <sup>1</sup>	(25)	(30)	55	-	-
Vested Terminations	(78)	(145)	223	-	-
Refunds of Contributions	(4)	(30)	(9)	-	(43)
Transfers	(156)	350	(193)	(1)	-
Redeposits/Rehires	63	(13)	(49)	(1)	-
First Year in Status	57	68	62	10	197
Moved to Tier 1	(257)	(455)	(52)	(11)	(775)
Data Corrections <sup>3</sup>	(11)	(22)	(8)	(12)	(53)
<b>As of June 30, 2011</b>	<b>7,204</b>	<b>11,460</b>	<b>1,635</b>	<b>4,531</b>	<b>24,830</b>

<sup>1</sup> Includes non-vested terminated participants with employee contributions left in the plan.

<sup>2</sup> Includes both deaths without survivors and deaths with survivors receiving a benefit.

<sup>3</sup> May include the combining of data records into a single record.

## Reconciliation of Participants (Continued)

For the Fiscal Year Ending June 30, 2011

## State Industrial

	Active	Transfer	Terminated	Receiving	Total
<b>As of June 30, 2010</b>	<b>11,637</b>	<b>7,601</b>	<b>2,666</b>	<b>9,275</b>	<b>31,179</b>
Retirements	(353)	(404)	(43)	800	-
Industrial Disabilities	(3)	(7)	(1)	11	-
Ordinary Disabilities	(31)	(22)	(14)	67	-
Deaths <sup>2</sup>	(13)	(13)	(4)	(218)	(248)
New Survivors	n/a	n/a	n/a	81	81
Non-vested Terminations <sup>1</sup>	(167)	(15)	182	-	-
Vested Terminations	(128)	(67)	197	(2)	-
Refunds of Contributions	(73)	(27)	(73)	-	(173)
Transfers	(463)	536	(65)	(8)	-
Redeposits/Rehires	149	(91)	(55)	(3)	-
First Year in Status	985	834	91	23	1,933
Data Corrections <sup>3</sup>	(8)	(78)	(7)	(2)	(95)
<b>As of June 30, 2011</b>	<b>11,532</b>	<b>8,247</b>	<b>2,874</b>	<b>10,024</b>	<b>32,677</b>

## State Safety

	Active	Transfer	Terminated	Receiving	Total
<b>As of June 30, 2010</b>	<b>24,900</b>	<b>4,787</b>	<b>4,694</b>	<b>16,749</b>	<b>51,130</b>
Retirements	(930)	(298)	(76)	1,304	-
Industrial Disabilities	(123)	(24)	(22)	169	-
Ordinary Disabilities	(31)	(9)	(3)	43	-
Deaths <sup>2</sup>	(57)	(13)	(16)	(321)	(407)
New Survivors	n/a	n/a	n/a	241	241
Non-vested Terminations <sup>1</sup>	(511)	(35)	546	-	-
Vested Terminations	(175)	(32)	207	-	-
Refunds of Contributions	(330)	(32)	(57)	-	(419)
Transfers	(582)	655	(68)	(5)	-
Redeposits/Rehires	274	(107)	(150)	(17)	-
First Year in Status	2,082	81	138	92	2,393
Data Corrections <sup>3</sup>	(20)	258	(171)	(103)	(36)
<b>As of June 30, 2011</b>	<b>24,497</b>	<b>5,231</b>	<b>5,022</b>	<b>18,152</b>	<b>52,902</b>

<sup>1</sup> Includes non-vested terminated participants with employee contributions left in the plan.<sup>2</sup> Includes both deaths without survivors and deaths with survivors receiving a benefit.<sup>3</sup> May include the combining of data records into a single record.

## Reconciliation of Participants (Continued)

For the Fiscal Year Ending June 30, 2011

State Peace Officers and Firefighters

	<b>Active</b>	<b>Transfer</b>	<b>Terminated</b>	<b>Receiving</b>	<b>Total</b>
<b>As of June 30, 2010</b>	<b>45,018</b>	<b>5,200</b>	<b>6,006</b>	<b>24,801</b>	<b>81,025</b>
Retirements	(1,709)	(125)	(79)	1,913	-
Industrial Disabilities	(211)	(16)	(27)	254	-
Ordinary Disabilities	(22)	(2)	(6)	30	-
Deaths <sup>2</sup>	(37)	(3)	(7)	(284)	(331)
New Survivors	n/a	n/a	n/a	210	210
Non-vested Terminations <sup>1</sup>	(637)	(32)	669	-	-
Vested Terminations	(240)	(31)	272	(1)	-
Refunds of Contributions	(183)	(7)	(52)	-	(242)
Transfers	(180)	303	(113)	(10)	-
Redeposits/Rehires	292	(45)	(239)	(8)	-
First Year in Status	1,383	66	137	42	1,628
Data Corrections <sup>3</sup>	(46)	(116)	(131)	(36)	(329)
<b>As of June 30, 2011</b>	<b>43,428</b>	<b>5,192</b>	<b>6,430</b>	<b>26,911</b>	<b>81,961</b>

California Highway Patrol

	<b>Active</b>	<b>Transfer</b>	<b>Terminated</b>	<b>Receiving</b>	<b>Total</b>
<b>As of June 30, 2010</b>	<b>7,476</b>	<b>321</b>	<b>328</b>	<b>7,805</b>	<b>15,930</b>
Retirements	(238)	(22)	(15)	275	-
Industrial Disabilities	(37)	(1)	(1)	39	-
Ordinary Disabilities	-	-	-	-	-
Deaths <sup>2</sup>	(9)	-	-	(161)	(170)
New Survivors	n/a	n/a	n/a	88	88
Non-vested Terminations <sup>1</sup>	(12)	(1)	13	-	-
Vested Terminations	(20)	(1)	21	-	-
Refunds of Contributions	(6)	(2)	(6)	-	(14)
Transfers	(2)	6	(4)	-	-
Redeposits/Rehires	15	(4)	(10)	(1)	-
First Year in Status	318	6	17	1	342
Data Corrections <sup>3</sup>	-	(2)	(1)	-	(3)
<b>As of June 30, 2011</b>	<b>7,485</b>	<b>300</b>	<b>342</b>	<b>8,046</b>	<b>16,173</b>

<sup>1</sup> Includes non-vested terminated participants with employee contributions left in the plan.<sup>2</sup> Includes both deaths without survivors and deaths with survivors receiving a benefit.<sup>3</sup> May include the combining of data records into a single record.

## Reconciliation of Participants (Continued)

For the Fiscal Year Ending June 30, 2011

Schools

	<b>Active</b>	<b>Transfer</b>	<b>Terminated</b>	<b>Receiving</b>	<b>Total</b>
<b>As of June 30, 2010</b>	<b>291,530</b>	<b>23,101</b>	<b>159,360</b>	<b>181,706</b>	<b>655,697</b>
Retirements	(8,454)	(977)	(1,249)	10,680	-
Industrial Disabilities	-	(16)	(2)	18	-
Ordinary Disabilities	(234)	(20)	(81)	335	-
Deaths <sup>2</sup>	(396)	(14)	(362)	(4,924)	(5,696)
New Survivors	n/a	n/a	n/a	1,918	1,918
Non-vested Terminations <sup>1</sup>	(8,785)	(217)	9,002	-	-
Vested Terminations	(3,940)	(455)	4,395	-	-
Refunds of Contributions	(3,244)	(365)	(6,657)	(2)	(10,268)
Transfers	(529)	2,128	(1,577)	(22)	-
Redeposits/Rehires	3,398	(204)	(3,153)	(41)	-
First Year in Status	16,958	673	2,672	280	20,583
Data Corrections <sup>3</sup>	873	2,276	(685)	(1,233)	1,231
<b>As of June 30, 2011</b>	<b>287,177</b>	<b>25,910</b>	<b>161,663</b>	<b>188,715</b>	<b>663,465</b>

<sup>1</sup> Includes non-vested terminated participants with employee contributions left in the plan.

<sup>2</sup> Includes both deaths without survivors and deaths with survivors receiving a benefit.

<sup>3</sup> May include the combining of data records into a single record.

## Active Members

### Distribution of Active Members By Age and Service

As of June 30, 2011

State Miscellaneous Tier 1

Attained Age	Years of Service at Valuation Date						Total	Payroll
	0-4	5-9	10-14	15-19	20-24	25+		
15-24	1,377	18	0	0	0	0	1,395	46,233,918
25-29	6,664	1,160	51	0	0	0	7,875	348,176,828
30-34	6,931	4,026	1,425	53	0	0	12,435	647,302,612
35-39	5,538	4,595	4,024	671	54	0	14,882	880,032,988
40-44	5,141	5,049	5,455	2,398	1,251	72	19,366	1,213,709,199
45-49	4,573	4,508	5,734	3,114	4,153	1,557	23,639	1,540,704,497
50-54	4,117	4,162	5,617	3,147	4,798	5,939	27,780	1,827,288,251
55-59	3,162	3,467	4,497	2,636	3,985	6,543	24,290	1,625,992,429
60-64	1,914	2,200	2,634	1,702	2,174	3,352	13,976	947,465,907
65 and Over	778	946	1,151	601	679	1,033	5,188	359,612,344
<b>Total</b>	<b>40,195</b>	<b>30,131</b>	<b>30,588</b>	<b>14,322</b>	<b>17,094</b>	<b>18,496</b>	<b>150,826</b>	<b>\$ 9,436,518,971</b>

Counts of members included in the valuation are counts of the records processed by the valuation. Multiple records may exist for those who have service in more than one valuation group. This does not result in double counting of liabilities.

### Distribution of Average Annual Salaries By Age and Service

As of June 30, 2011

State Miscellaneous Tier 1

Attained Age	Years of Service at Valuation Date						Average Salary
	0-4	5-9	10-14	15-19	20-24	25+	
15-24	33,068	38,883	0	0	0	0	\$33,143
25-29	43,310	49,005	53,237	0	0	0	44,213
30-34	49,213	53,956	59,871	69,162	0	0	52,055
35-39	52,846	59,064	65,829	70,683	67,628	0	59,134
40-44	52,832	59,844	67,886	72,446	72,108	79,143	62,672
45-49	52,046	59,933	67,353	71,614	74,689	72,656	65,176
50-54	51,236	57,959	66,453	70,747	72,737	72,441	65,777
55-59	52,409	58,176	65,139	69,443	74,169	74,436	66,941
60-64	52,597	59,082	65,560	70,477	75,675	77,464	67,792
65 and Over	51,331	56,862	68,734	71,969	81,041	85,665	69,316
<b>Average</b>	<b>\$49,628</b>	<b>\$57,920</b>	<b>\$66,282</b>	<b>\$70,990</b>	<b>\$74,186</b>	<b>\$74,840</b>	<b>\$62,566</b>

## Distribution of Active Members By Age and Service

As of June 30, 2011

State Miscellaneous Tier 2

Attained Age	Years of Service at Valuation Date						Total	Payroll
	0-4	5-9	10-14	15-19	20-24	25+		
15-24	8	0	0	0	0	0	8	300,390
25-29	28	2	0	0	0	0	30	1,505,169
30-34	43	26	118	1	0	0	188	9,441,817
35-39	40	59	430	126	6	0	661	35,406,742
40-44	46	74	538	450	130	1	1,239	66,607,677
45-49	34	58	515	461	341	68	1,477	81,081,788
50-54	31	54	468	394	282	259	1,488	80,452,273
55-59	21	49	300	297	237	267	1,171	64,956,856
60-64	13	23	184	164	135	149	668	37,158,044
65 and Over	13	25	80	70	41	45	274	14,191,510
<b>Total</b>	<b>277</b>	<b>370</b>	<b>2,633</b>	<b>1,963</b>	<b>1,172</b>	<b>789</b>	<b>7,204</b>	<b>\$ 391,102,267</b>

Counts of members included in the valuation are counts of the records processed by the valuation. Multiple records may exist for those who have service in more than one valuation group. This does not result in double counting of liabilities.

## Distribution of Average Annual Salaries By Age and Service

As of June 30, 2011

State Miscellaneous Tier 2

Attained Age	Years of Service at Valuation Date						Average Salary
	0-4	5-9	10-14	15-19	20-24	25+	
15-24	37,549	0	0	0	0	0	\$37,549
25-29	49,442	60,393	0	0	0	0	50,172
30-34	57,582	46,646	48,086	78,792	0	0	50,222
35-39	43,602	46,443	55,213	54,116	60,409	0	53,565
40-44	44,830	48,557	51,855	57,280	55,691	38,508	53,759
45-49	43,876	50,377	51,124	57,361	58,849	56,297	54,896
50-54	45,210	41,577	51,611	55,021	55,353	59,319	54,067
55-59	41,820	37,148	53,768	55,010	56,704	61,241	55,471
60-64	48,296	34,043	52,652	56,266	55,612	62,577	55,626
65 and Over	21,127	39,628	52,443	55,156	59,104	54,368	51,794
<b>Average</b>	<b>\$45,636</b>	<b>\$44,400</b>	<b>\$52,340</b>	<b>\$56,150</b>	<b>\$56,868</b>	<b>\$60,016</b>	<b>\$54,290</b>

## Distribution of Active Members By Age and Service

As of June 30, 2011

State Industrial

Attained Age	Years of Service at Valuation Date						Total	Payroll
	0-4	5-9	10-14	15-19	20-24	25+		
15-24	312	0	0	0	0	0	312	10,799,662
25-29	905	85	3	0	0	0	993	39,480,099
30-34	854	249	91	1	0	0	1,195	51,978,991
35-39	692	289	221	43	2	0	1,247	60,151,579
40-44	773	365	332	144	60	1	1,675	85,303,329
45-49	707	376	378	215	143	47	1,866	97,339,351
50-54	623	359	398	225	179	99	1,883	102,938,437
55-59	448	222	291	168	127	80	1,336	73,986,885
60-64	224	156	201	90	60	40	771	43,788,064
65 and Over	87	48	61	41	13	4	254	15,011,624
<b>Total</b>	<b>5,625</b>	<b>2,149</b>	<b>1,976</b>	<b>927</b>	<b>584</b>	<b>271</b>	<b>11,532</b>	<b>\$ 580,778,021</b>

Counts of members included in the valuation are counts of the records processed by the valuation. Multiple records may exist for those who have service in more than one valuation group. This does not result in double counting of liabilities.

## Distribution of Average Annual Salaries By Age and Service

As of June 30, 2011

State Industrial

Attained Age	Years of Service at Valuation Date						Average Salary
	0-4	5-9	10-14	15-19	20-24	25+	
15-24	34,614	0	0	0	0	0	\$34,614
25-29	39,305	44,412	44,600	0	0	0	39,758
30-34	42,465	44,578	50,024	61,752	0	0	43,497
35-39	46,187	49,412	51,637	55,368	58,764	0	48,237
40-44	48,409	51,176	52,877	55,954	58,977	53,352	50,927
45-49	49,382	50,634	52,416	57,472	57,552	63,579	52,165
50-54	53,743	52,253	52,226	58,104	59,259	62,939	54,667
55-59	57,699	51,731	51,766	55,999	55,959	63,440	55,379
60-64	55,876	56,796	52,734	61,506	63,335	61,911	56,794
65 and Over	58,693	52,848	60,081	67,095	58,808	47,068	59,101
<b>Average</b>	<b>\$46,913</b>	<b>\$50,494</b>	<b>\$52,419</b>	<b>\$57,847</b>	<b>\$58,501</b>	<b>\$62,777</b>	<b>\$50,362</b>

## Distribution of Active Members By Age and Service

As of June 30, 2011

State Safety

Attained Age	Years of Service at Valuation Date						Total	Payroll
	0-4	5-9	10-14	15-19	20-24	25+		
15-24	302	5	0	0	0	0	307	14,702,319
25-29	1,221	181	0	0	0	0	1,402	77,122,775
30-34	1,636	566	55	0	0	0	2,257	146,643,396
35-39	1,660	843	221	15	0	0	2,739	209,395,557
40-44	1,641	987	436	134	12	1	3,211	241,374,890
45-49	1,564	1,096	557	257	110	7	3,591	264,396,223
50-54	1,559	1,232	800	377	244	65	4,277	330,815,543
55-59	1,195	1,021	745	351	200	57	3,569	294,369,117
60-64	676	657	507	244	120	32	2,236	197,402,746
65 and Over	215	271	237	114	59	12	908	93,978,795
<b>Total</b>	<b>11,669</b>	<b>6,859</b>	<b>3,558</b>	<b>1,492</b>	<b>745</b>	<b>174</b>	<b>24,497</b>	<b>\$ 1,870,201,360</b>

Counts of members included in the valuation are counts of the records processed by the valuation. Multiple records may exist for those who have service in more than one valuation group. This does not result in double counting of liabilities.

## Distribution of Average Annual Salaries By Age and Service

As of June 30, 2011

State Safety

Attained Age	Years of Service at Valuation Date						Average Salary
	0-4	5-9	10-14	15-19	20-24	25+	
15-24	47,904	47,066	0	0	0	0	\$47,890
25-29	54,925	55,577	0	0	0	0	55,009
30-34	65,721	63,680	56,010	0	0	0	64,973
35-39	79,334	72,518	71,071	57,521	0	0	76,450
40-44	76,307	73,342	74,946	75,950	67,612	101,561	75,171
45-49	75,340	70,551	75,469	73,354	71,106	75,835	73,627
50-54	79,249	72,442	82,110	77,406	73,392	80,616	77,348
55-59	86,978	77,224	81,868	83,563	82,462	83,684	82,479
60-64	93,292	81,441	90,541	89,195	86,597	86,591	88,284
65 and Over	105,403	96,619	118,297	97,871	86,712	68,656	103,501
<b>Average</b>	<b>\$75,157</b>	<b>\$73,621</b>	<b>\$82,665</b>	<b>\$81,317</b>	<b>\$78,578</b>	<b>\$81,823</b>	<b>\$76,344</b>

## Distribution of Active Members By Age and Service

As of June 30, 2011

State Peace Officers and Firefighters

Attained Age	Years of Service at Valuation Date						Total	Payroll
	0-4	5-9	10-14	15-19	20-24	25+		
15-24	666	1	0	0	0	0	667	22,007,112
25-29	3,422	786	3	0	0	0	4,211	232,459,249
30-34	2,669	2,806	776	2	0	0	6,253	412,234,699
35-39	1,813	2,356	2,541	650	4	0	7,364	535,163,743
40-44	1,318	1,690	2,292	2,271	560	5	8,136	625,587,505
45-49	848	1,176	1,487	1,791	2,182	921	8,405	685,235,440
50-54	420	674	925	1,076	1,175	706	4,976	408,849,707
55-59	220	331	471	523	489	327	2,361	191,346,318
60-64	49	115	195	214	177	96	846	68,696,650
65 and Over	20	24	49	50	36	30	209	17,018,867
<b>Total</b>	<b>11,445</b>	<b>9,959</b>	<b>8,739</b>	<b>6,577</b>	<b>4,623</b>	<b>2,085</b>	<b>43,428</b>	<b>\$ 3,198,599,289</b>

Counts of members included in the valuation are counts of the records processed by the valuation. Multiple records may exist for those who have service in more than one valuation group. This does not result in double counting of liabilities.

## Distribution of Average Annual Salaries By Age and Service

As of June 30, 2011

State Peace Officers and Firefighters

Attained Age	Years of Service at Valuation Date						Average Salary
	0-4	5-9	10-14	15-19	20-24	25+	
15-24	32,948	63,521	0	0	0	0	\$32,994
25-29	52,724	65,937	70,742	0	0	0	55,203
30-34	57,568	70,772	77,110	82,158	0	0	65,926
35-39	62,673	72,268	77,911	81,488	83,539	0	72,673
40-44	63,995	73,759	78,791	82,401	86,503	85,023	76,891
45-49	66,147	74,570	78,845	81,761	87,893	93,366	81,527
50-54	69,291	75,774	78,997	81,268	87,331	92,841	82,164
55-59	71,155	75,855	78,264	80,803	85,281	91,008	81,045
60-64	71,859	77,525	79,505	79,363	85,160	90,623	81,202
65 and Over	80,363	76,844	80,099	78,584	87,148	85,866	81,430
<b>Average</b>	<b>\$57,664</b>	<b>\$72,299</b>	<b>\$78,409</b>	<b>\$81,696</b>	<b>\$87,191</b>	<b>\$92,564</b>	<b>\$73,653</b>

## Distribution of Active Members By Age and Service

As of June 30, 2011

California Highway Patrol

Attained Age	Years of Service at Valuation Date						Total	Payroll
	0-4	5-9	10-14	15-19	20-24	25+		
15-24	151	0	0	0	0	0	151	12,344,872
25-29	802	106	0	0	0	0	908	78,350,518
30-34	634	444	270	0	0	0	1,348	122,961,433
35-39	340	410	697	274	3	0	1,724	164,986,761
40-44	31	197	521	531	238	5	1,523	152,812,705
45-49	0	5	69	309	548	274	1,205	131,714,634
50-54	0	0	4	61	182	265	512	58,922,921
55-59	0	0	1	17	25	71	114	13,110,955
60-64	0	0	0	0	0	0	0	0
65 and Over	0	0	0	0	0	0	0	0
<b>Total</b>	<b>1,958</b>	<b>1,162</b>	<b>1,562</b>	<b>1,192</b>	<b>996</b>	<b>615</b>	<b>7,485</b>	<b>\$ 735,204,799</b>

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## Distribution of Average Annual Salaries By Age and Service

As of June 30, 2011

California Highway Patrol

Attained Age	Years of Service at Valuation Date						Average Salary
	0-4	5-9	10-14	15-19	20-24	25+	
15-24	81,754	0	0	0	0	0	\$81,754
25-29	85,150	94,910	0	0	0	0	86,289
30-34	85,704	95,702	96,792	0	0	0	91,218
35-39	85,979	95,465	97,924	102,435	97,644	0	95,700
40-44	89,498	95,223	97,688	100,914	110,112	118,438	100,337
45-49	0	95,783	97,299	101,398	111,001	118,107	109,307
50-54	0	0	103,379	106,387	110,918	120,123	115,084
55-59	0	0	125,627	104,942	114,816	117,337	115,008
60-64	0	0	0	0	0	0	0
65 and Over	0	0	0	0	0	0	0
<b>Average</b>	<b>\$85,280</b>	<b>\$95,465</b>	<b>\$97,654</b>	<b>\$101,726</b>	<b>\$110,829</b>	<b>\$118,890</b>	<b>\$98,224</b>

## Distribution of Active Members By Age and Service

As of June 30, 2011

Schools

Attained Age	Years of Service at Valuation Date						Total	Payroll
	0-4	5-9	10-14	15-19	20-24	25+		
15-24	7,992	114	0	0	0	0	8,106	148,180,770
25-29	16,153	3,390	101	0	0	0	19,644	504,316,664
30-34	13,166	7,904	2,362	57	0	0	23,489	753,459,865
35-39	12,108	8,111	5,376	1,028	27	0	26,650	910,871,934
40-44	14,251	9,320	6,642	2,702	1,058	56	34,029	1,174,909,356
45-49	14,955	11,909	8,654	4,047	2,951	1,362	43,878	1,565,397,450
50-54	12,946	13,224	11,032	5,550	4,017	3,855	50,624	1,875,457,899
55-59	8,817	10,498	10,055	6,224	4,598	4,593	44,785	1,696,144,088
60-64	4,755	5,772	5,912	4,081	3,123	2,626	26,269	987,716,075
65 and Over	2,196	2,269	2,003	1,258	1,012	965	9,703	318,908,237
<b>Total</b>	<b>107,339</b>	<b>72,511</b>	<b>52,137</b>	<b>24,947</b>	<b>16,786</b>	<b>13,457</b>	<b>287,177</b>	<b>\$ 9,935,362,338</b>

Counts of members included in the valuation are counts of the records processed by the valuation. Multiple records may exist for those who have service in more than one valuation group. This does not result in double counting of liabilities.

## Distribution of Average Annual Salaries By Age and Service

As of June 30, 2011

Schools

Attained Age	Years of Service at Valuation Date						Average Salary
	0-4	5-9	10-14	15-19	20-24	25+	
15-24	18,042	34,992	0	0	0	0	\$18,280
25-29	23,383	35,999	45,250	0	0	0	25,673
30-34	26,395	37,435	45,399	49,453	0	0	32,077
35-39	25,640	37,768	44,981	49,318	58,117	0	34,179
40-44	24,261	36,001	45,103	49,777	53,402	54,646	34,527
45-49	23,643	33,957	43,027	48,466	54,749	56,802	35,676
50-54	23,730	32,495	41,117	45,850	52,315	57,151	37,047
55-59	23,324	31,577	39,475	43,711	49,576	57,059	37,873
60-64	23,119	31,657	38,778	42,055	47,755	55,234	37,600
65 and Over	19,243	27,874	37,100	38,547	43,184	48,598	32,867
<b>Average</b>	<b>\$23,703</b>	<b>\$34,138</b>	<b>\$41,806</b>	<b>\$45,328</b>	<b>\$50,672</b>	<b>\$56,086</b>	<b>\$34,597</b>

## Terminated and Transferred Participants

### Distributions By Age and Service

#### Transfers to Other CalPERS Plans

As of June 30, 2011

#### State Miscellaneous Tier 1

Attained Age	Years of Service at Valuation Date						Total	Average Salary
	0-4	5-9	10-14	15-19	20-24	25+		
15-24	851	0	0	0	0	0	851	35,950
25-29	1,968	32	0	0	0	0	2,000	45,397
30-34	2,359	271	8	0	0	0	2,638	54,642
35-39	2,186	440	76	4	0	0	2,706	61,083
40-44	2,313	651	267	71	13	0	3,315	64,828
45-49	2,465	800	428	261	108	20	4,082	69,561
50-54	2,587	856	506	396	215	103	4,663	71,194
55-59	2,137	707	381	264	162	130	3,781	72,002
60-64	1,268	416	219	119	68	42	2,132	72,322
65 and Over	519	145	64	37	15	6	786	71,636
<b>Total</b>	<b>18,653</b>	<b>4,318</b>	<b>1,949</b>	<b>1,152</b>	<b>581</b>	<b>301</b>	<b>26,954</b>	<b>64,717</b>

### Distributions By Age and Service

#### Terminated Participants With Funds on Deposit

As of June 30, 2011

#### State Miscellaneous Tier 1

Attained Age	Years of Service at Valuation Date						Total	Average Salary
	0-4	5-9	10-14	15-19	20-24	25+		
15-24	323	0	0	0	0	0	323	29,594
25-29	2,645	42	0	0	0	0	2,687	34,234
30-34	4,459	372	24	0	0	0	4,855	38,611
35-39	4,508	750	116	8	0	0	5,382	44,079
40-44	4,292	1,086	299	71	8	0	5,756	46,309
45-49	3,991	1,402	557	192	62	14	6,218	46,906
50-54	3,835	1,370	606	291	115	40	6,257	45,290
55-59	3,453	1,119	463	180	72	27	5,314	43,153
60-64	2,469	716	240	83	36	12	3,556	42,360
65 and Over	1,278	181	54	14	8	6	1,541	39,698
<b>Total</b>	<b>31,253</b>	<b>7,038</b>	<b>2,359</b>	<b>839</b>	<b>301</b>	<b>99</b>	<b>41,889</b>	<b>43,184</b>

## Distributions By Age and Service

## Transfers to Other CalPERS Plans

As of June 30, 2011

## State Miscellaneous Tier 2

Attained Age	Years of Service at Valuation Date						Total	Average Salary
	0-4	5-9	10-14	15-19	20-24	25+		
15-24	1	0	0	0	0	0	1	47,984
25-29	9	0	0	0	0	0	9	50,522
30-34	369	35	3	0	0	0	407	58,943
35-39	1,093	279	54	7	0	0	1,433	65,530
40-44	1,374	751	233	18	3	0	2,379	65,683
45-49	1,343	682	470	120	20	2	2,637	64,218
50-54	1,100	498	359	152	100	12	2,221	64,657
55-59	678	297	265	117	95	38	1,490	64,574
60-64	317	154	88	33	34	33	659	64,904
65 and Over	120	51	32	4	9	8	224	65,693
<b>Total</b>	<b>6,404</b>	<b>2,747</b>	<b>1,504</b>	<b>451</b>	<b>261</b>	<b>93</b>	<b>11,460</b>	<b>64,686</b>

## Distributions By Age and Service

## Terminated Participants With Funds on Deposit

As of June 30, 2011

## State Miscellaneous Tier 2

Attained Age	Years of Service at Valuation Date						Total	Average Salary
	0-4	5-9	10-14	15-19	20-24	25+		
15-24	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0
30-34	0	0	3	0	0	0	3	29,538
35-39	0	0	32	5	0	0	37	32,257
40-44	0	0	168	24	2	0	194	33,316
45-49	0	0	288	73	14	2	377	33,197
50-54	0	0	316	102	24	4	446	33,312
55-59	0	0	220	75	27	3	325	32,153
60-64	0	0	147	42	13	4	206	32,203
65 and Over	0	0	33	10	2	2	47	32,448
<b>Total</b>	<b>0</b>	<b>0</b>	<b>1,207</b>	<b>331</b>	<b>82</b>	<b>15</b>	<b>1,635</b>	<b>32,711</b>

## Distributions By Age and Service

## Transfers to Other CalPERS Plans

As of June 30, 2011

## State Industrial

Attained Age	Years of Service at Valuation Date						Total	Average Salary
	0-4	5-9	10-14	15-19	20-24	25+		
15-24	139	0	0	0	0	0	139	32,540
25-29	349	3	0	0	0	0	352	42,229
30-34	511	56	4	0	0	0	571	52,778
35-39	722	129	34	1	0	0	886	58,613
40-44	976	266	79	17	2	0	1,340	60,858
45-49	1,096	345	96	36	7	0	1,580	65,432
50-54	1,087	318	144	47	14	6	1,616	66,250
55-59	756	210	90	37	18	2	1,113	66,915
60-64	362	79	42	19	5	1	508	65,574
65 and Over	103	31	7	1	1	0	143	82,384
<b>Total</b>	<b>6,101</b>	<b>1,437</b>	<b>496</b>	<b>158</b>	<b>47</b>	<b>9</b>	<b>8,248</b>	<b>62,199</b>

## Distributions By Age and Service

## Terminated Participants With Funds on Deposit

As of June 30, 2011

## State Industrial

Attained Age	Years of Service at Valuation Date						Total	Average Salary
	0-4	5-9	10-14	15-19	20-24	25+		
15-24	24	0	0	0	0	0	24	28,422
25-29	115	4	0	0	0	0	119	33,060
30-34	227	21	0	0	0	0	248	32,958
35-39	294	57	12	0	0	0	363	35,329
40-44	394	68	25	3	0	0	490	38,041
45-49	352	91	35	11	3	0	492	38,905
50-54	307	85	23	11	6	0	432	38,810
55-59	236	55	10	3	2	1	307	38,644
60-64	173	32	2	2	1	0	210	39,819
65 and Over	165	21	3	0	0	0	189	38,293
<b>Total</b>	<b>2,287</b>	<b>434</b>	<b>110</b>	<b>30</b>	<b>12</b>	<b>1</b>	<b>2,874</b>	<b>37,448</b>

## Distributions By Age and Service

## Transfers to Other CalPERS Plans

As of June 30, 2011

## State Safety

Attained Age	Years of Service at Valuation Date						Total	Average Salary
	0-4	5-9	10-14	15-19	20-24	25+		
15-24	12	0	0	0	0	0	12	42,498
25-29	139	4	0	0	0	0	143	55,648
30-34	341	18	0	0	0	0	359	58,283
35-39	466	70	8	0	0	0	544	62,341
40-44	524	99	31	8	0	0	662	67,737
45-49	678	162	86	42	8	2	978	71,982
50-54	737	188	91	63	40	12	1,131	75,249
55-59	572	130	72	38	17	11	840	72,475
60-64	286	71	34	27	7	0	425	74,846
65 and Over	85	19	23	5	4	1	137	85,715
<b>Total</b>	<b>3,840</b>	<b>761</b>	<b>345</b>	<b>183</b>	<b>76</b>	<b>26</b>	<b>5,231</b>	<b>70,366</b>

## Distributions By Age and Service

## Terminated Participants With Funds on Deposit

As of June 30, 2011

## State Safety

Attained Age	Years of Service at Valuation Date						Total	Average Salary
	0-4	5-9	10-14	15-19	20-24	25+		
15-24	52	0	0	0	0	0	52	38,639
25-29	255	4	0	0	0	0	259	43,434
30-34	449	22	3	0	0	0	474	51,635
35-39	554	56	4	0	0	0	614	60,731
40-44	680	85	17	5	0	0	787	61,998
45-49	624	93	25	6	5	0	753	61,019
50-54	677	116	35	11	1	1	841	58,394
55-59	562	60	14	4	1	0	641	62,108
60-64	362	35	14	6	0	0	417	66,717
65 and Over	169	7	4	3	1	0	184	62,713
<b>Total</b>	<b>4,384</b>	<b>478</b>	<b>116</b>	<b>35</b>	<b>8</b>	<b>1</b>	<b>5,022</b>	<b>59,347</b>

## Distributions By Age and Service

## Transfers to Other CalPERS Plans

As of June 30, 2011

## State Peace Officers and Fire Fighters

Attained Age	Years of Service at Valuation Date						Total	Average Salary
	0-4	5-9	10-14	15-19	20-24	25+		
15-24	49	0	0	0	0	0	49	46,190
25-29	434	5	0	0	0	0	439	64,598
30-34	838	41	2	0	0	0	881	77,154
35-39	775	96	15	0	0	0	886	79,706
40-44	813	137	38	4	0	0	992	81,823
45-49	722	158	60	10	7	0	957	84,773
50-54	378	122	52	8	6	0	566	80,610
55-59	196	56	31	10	2	0	295	72,591
60-64	57	23	8	3	4	2	97	76,711
65 and Over	21	7	1	0	1	0	30	86,330
<b>Total</b>	<b>4,283</b>	<b>645</b>	<b>207</b>	<b>35</b>	<b>20</b>	<b>2</b>	<b>5,192</b>	<b>78,694</b>

## Distributions By Age and Service

## Terminated Participants With Funds on Deposit

As of June 30, 2011

## State Peace Officers and Firefighters

Attained Age	Years of Service at Valuation Date						Total	Average Salary
	0-4	5-9	10-14	15-19	20-24	25+		
15-24	428	0	0	0	0	0	428	34,086
25-29	987	6	0	0	0	0	993	36,835
30-34	1,017	75	1	0	0	0	1,093	38,464
35-39	859	106	42	1	0	0	1,008	39,370
40-44	792	152	65	26	7	0	1,042	40,877
45-49	600	173	97	50	31	2	953	44,705
50-54	343	86	50	13	5	1	498	39,405
55-59	201	46	14	5	5	0	271	38,771
60-64	86	16	8	2	0	0	112	39,661
65 and Over	25	3	4	0	0	0	32	38,064
<b>Total</b>	<b>5,338</b>	<b>663</b>	<b>281</b>	<b>97</b>	<b>48</b>	<b>3</b>	<b>6,430</b>	<b>39,484</b>

## Distributions By Age and Service

## Transfers to Other CalPERS Plans

As of June 30, 2011

## California Highway Patrol

Attained Age	Years of Service at Valuation Date						Total	Average Salary
	0-4	5-9	10-14	15-19	20-24	25+		
15-24	5	0	0	0	0	0	5	56,904
25-29	6	0	0	0	0	0	6	61,191
30-34	28	7	0	0	0	0	35	77,135
35-39	58	15	7	0	0	0	80	79,338
40-44	39	10	4	2	0	0	55	82,009
45-49	42	11	8	5	0	0	66	76,322
50-54	21	8	4	1	0	0	34	76,821
55-59	8	2	1	1	0	0	12	77,194
60-64	3	1	2	0	0	0	6	83,146
65 and Over	0	0	1	0	0	0	1	110,120
<b>Total</b>	<b>210</b>	<b>54</b>	<b>27</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>300</b>	<b>77,978</b>

## Distributions By Age and Service

## Terminated Participants With Funds on Deposit

As of June 30, 2011

## California Highway Patrol

Attained Age	Years of Service at Valuation Date						Total	Average Salary
	0-4	5-9	10-14	15-19	20-24	25+		
15-24	2	0	0	0	0	0	2	73,535
25-29	11	0	0	0	0	0	11	71,662
30-34	27	8	2	0	0	0	37	71,696
35-39	45	28	11	0	0	0	84	67,592
40-44	42	21	11	2	0	0	76	58,391
45-49	25	23	8	12	5	2	75	61,874
50-54	10	16	6	2	1	0	35	50,125
55-59	8	6	3	0	0	0	17	47,774
60-64	2	2	0	0	0	0	4	35,781
65 and Over	0	1	0	0	0	0	1	40,000
<b>Total</b>	<b>172</b>	<b>105</b>	<b>41</b>	<b>16</b>	<b>6</b>	<b>2</b>	<b>342</b>	<b>61,678</b>

## Distributions By Age and Service

## Transfers to Other CalPERS Plans

As of June 30, 2011

## Schools

Attained Age	Years of Service at Valuation Date						Total	Average Salary
	0-4	5-9	10-14	15-19	20-24	25+		
15-24	105	0	0	0	0	0	105	37,125
25-29	731	16	0	0	0	0	747	48,569
30-34	1,920	102	0	0	0	0	2,022	55,411
35-39	2,387	231	7	0	0	0	2,625	59,010
40-44	2,559	473	67	1	0	0	3,100	61,685
45-49	2,952	696	271	66	0	1	3,986	61,855
50-54	3,517	840	360	167	66	1	4,951	60,476
55-59	3,224	882	384	185	97	22	4,794	60,025
60-64	1,776	512	245	109	42	26	2,710	58,112
65 and Over	608	149	59	31	16	7	870	50,042
<b>Total</b>	<b>19,779</b>	<b>3,901</b>	<b>1,393</b>	<b>559</b>	<b>221</b>	<b>57</b>	<b>25,910</b>	<b>59,170</b>

## Distributions By Age and Service

## Terminated Participants With Funds on Deposit

As of June 30, 2011

## Schools

Attained Age	Years of Service at Valuation Date						Total	Average Salary
	0-4	5-9	10-14	15-19	20-24	25+		
15-24	3,141	1	0	0	0	0	3,142	27,064
25-29	13,529	137	0	0	0	0	13,666	29,853
30-34	21,063	773	9	0	0	0	21,845	31,381
35-39	19,639	1,210	22	1	0	0	20,872	32,171
40-44	18,056	1,791	155	4	1	0	20,007	32,368
45-49	18,266	2,348	452	75	5	1	21,147	31,893
50-54	19,542	2,873	594	218	59	3	23,289	32,268
55-59	16,802	2,399	589	162	42	8	20,002	31,219
60-64	10,422	1,417	306	80	28	6	12,259	30,545
65 and Over	4,783	519	92	23	11	6	5,434	28,825
<b>Total</b>	<b>145,243</b>	<b>13,468</b>	<b>2,219</b>	<b>563</b>	<b>146</b>	<b>24</b>	<b>161,663</b>	<b>31,418</b>

## Retired Members and Beneficiaries

Number of Retirees and Beneficiaries

By Age and Retirement Type

As of June 30, 2011

State Miscellaneous Tier 1

Attained Age	Service Retirement	Non-Industrial Disability	Industrial Disability	Non-Industrial Death	Industrial Death	Death After Retirement	Total
Under 30	0	1	1	10	4	188	204
30-34	1	11	8	1	2	128	151
35-39	0	33	10	8	3	126	180
40-44	1	160	45	14	6	198	424
45-49	3	464	173	45	9	322	1,016
50-54	1,873	1,280	347	96	9	536	4,141
55-59	11,533	1,836	424	199	4	843	14,839
60-64	24,332	2,138	484	273	6	1,414	28,647
65-69	23,819	1,715	288	259	8	1,904	27,993
70-74	19,148	1,326	236	269	9	2,459	23,447
75-79	15,371	831	142	228	6	3,291	19,869
80-84	12,323	578	71	209	4	4,090	17,275
85 and Over	13,637	570	39	238	6	7,066	21,556
<b>Total</b>	<b>122,041</b>	<b>10,943</b>	<b>2,268</b>	<b>1,849</b>	<b>76</b>	<b>22,565</b>	<b>159,742</b>

Counts of members do not include alternate payees receiving benefits while the member is still working. Multiple records may exist for those who have service in more than one coverage group. This does not result in double counting of liabilities.

Annual Allowance Amounts for

Retirees and Beneficiaries

By Age and Retirement Type

As of June 30, 2011

Annual Amounts not Including PPPA Payments

State Miscellaneous Tier 1

Attained Age	Service Retirement	Non-Industrial Disability	Industrial Disability	Non-Industrial Death	Industrial Death	Death After Retirement	Total
Under 30	\$0	\$2,208	\$20	\$96,565	\$318	\$1,377,323	\$1,476,434
30-34	33,332	70,957	20,084	15,563	103	1,089,848	1,229,887
35-39	0	223,274	23,959	168,560	25,607	1,147,368	1,588,768
40-44	21,990	1,559,161	98,811	191,837	618	2,374,735	4,247,152
45-49	25,141	5,589,058	406,087	922,304	122,848	3,766,055	10,831,493
50-54	22,580,495	17,497,355	989,971	1,917,779	123,115	7,112,497	50,221,212
55-59	311,636,839	27,073,417	1,195,333	4,152,684	3,138	13,475,443	357,536,854
60-64	749,152,334	30,774,680	1,793,167	6,554,222	76,162	25,388,138	813,738,703
65-69	747,395,968	25,980,614	1,219,289	5,922,000	23,034	39,089,043	819,629,948
70-74	592,822,401	19,949,410	934,527	6,919,661	15,373	54,049,051	674,690,423
75-79	451,841,593	11,706,332	509,312	5,752,186	6,282	74,847,758	544,663,463
80-84	346,547,845	7,445,806	168,884	4,817,569	4,729	84,279,485	443,264,318
85 and Over	302,985,953	7,060,669	77,435	5,742,547	54,195	116,165,307	432,086,106
<b>Total</b>	<b>\$3,525,043,891</b>	<b>\$154,932,941</b>	<b>\$7,436,879</b>	<b>\$43,173,477</b>	<b>\$455,522</b>	<b>\$424,162,051</b>	<b>\$4,155,204,761</b>

Counts of members do not include alternate payees receiving benefits while the member is still working. Multiple records may exist for those who have service in more than one coverage group. This does not result in double counting of liabilities.

Number of Retirees and Beneficiaries

By Years Retired and Retirement Type

As of June 30, 2011

State Miscellaneous Tier 1

<b>Years Retired</b>	<b>Service Retirement</b>	<b>Non-Industrial Disability</b>	<b>Industrial Disability</b>	<b>Non-Industrial Death</b>	<b>Industrial Death</b>	<b>Death After Retirement</b>	<b>Total</b>
Under 5 Yrs	35,309	1,523	276	346	12	732	38,198
5-9	29,520	2,126	476	299	4	1,676	34,101
10-14	19,751	2,568	468	299	13	2,256	25,355
15-19	16,280	1,891	446	237	10	3,719	22,583
20-24	9,465	1,141	309	240	11	3,781	14,947
25-29	7,463	789	161	244	10	4,784	13,451
30 and Over	4,314	905	132	184	16	5,617	11,168
<b>Total</b>	<b>122,102</b>	<b>10,943</b>	<b>2,268</b>	<b>1,849</b>	<b>76</b>	<b>22,565</b>	<b>159,803</b>

Counts of members do not include alternate payees receiving benefits while the member is still working. Multiple records may exist for those who have service in more than one coverage group. This does not result in double counting of liabilities.

Annual Allowance Amounts for Retirees and Beneficiaries

By Years Retired and Retirement Type

As of June 30, 2011

Annual Amounts not Including PPPA Payments

State Miscellaneous Tier 1

<b>Years Retired</b>	<b>Service Retirement</b>	<b>Non-Industrial Disability</b>	<b>Industrial Disability</b>	<b>Non-Industrial Death</b>	<b>Industrial Death</b>	<b>Death After Retirement</b>	<b>Total</b>
Under 5 Yrs	\$1,143,348,197	\$22,356,160	\$1,474,504	\$7,905,540	\$110,046	\$14,222,717	\$1,189,417,164
5-9	927,780,231	32,813,905	2,330,297	7,106,164	1,388	35,139,439	1,005,171,424
10-14	588,250,327	38,772,626	1,788,869	7,422,669	233,903	54,242,091	690,710,485
15-19	464,442,934	27,816,169	1,120,362	6,346,935	28,691	98,997,994	598,753,085
20-24	216,491,533	14,711,993	481,994	6,055,317	6,285	82,500,186	320,247,308
25-29	128,899,372	8,841,167	146,648	5,066,742	14,501	82,788,100	225,756,530
30 and Over	56,621,133	9,620,921	94,205	3,270,110	60,708	56,271,524	125,938,601
<b>Total</b>	<b>\$3,525,833,727</b>	<b>\$154,932,941</b>	<b>\$7,436,879</b>	<b>\$43,173,477</b>	<b>\$455,522</b>	<b>\$424,162,051</b>	<b>\$4,155,994,597</b>

Counts of members do not include alternate payees receiving benefits while the member is still working. Multiple records may exist for those who have service in more than one coverage group. This does not result in double counting of liabilities.

## Number of Retirees and Beneficiaries

## By Age and Retirement Type

As of June 30, 2011

## State Miscellaneous Tier 2

<b>Attained Age</b>	<b>Service Retirement</b>	<b>Non-Industrial Disability</b>	<b>Industrial Disability</b>	<b>Non-Industrial Death</b>	<b>Industrial Death</b>	<b>Death After Retirement</b>	<b>Total</b>
Under 30	0	1	0	2	0	31	34
30-34	0	0	0	0	0	12	12
35-39	0	6	1	0	0	13	20
40-44	0	29	6	1	0	23	59
45-49	0	89	8	3	0	23	123
50-54	41	215	16	15	0	51	338
55-59	272	298	5	24	2	73	674
60-64	531	339	16	16	0	104	1,006
65-69	511	200	5	13	0	91	820
70-74	437	120	3	10	0	79	649
75-79	357	49	1	5	0	72	484
80-84	166	10	1	2	0	46	225
85 and Over	59	1	0	3	0	18	81
<b>Total</b>	<b>2,374</b>	<b>1,357</b>	<b>62</b>	<b>94</b>	<b>2</b>	<b>636</b>	<b>4,525</b>

Counts of members do not include alternate payees receiving benefits while the member is still working. Multiple records may exist for those who have service in more than one coverage group. This does not result in double counting of liabilities.

Annual Allowance Amounts for

Retirees and Beneficiaries

By Age and Retirement Type

As of June 30, 2011

Annual Amounts not Including PPPA Payments

State Miscellaneous Tier 2

<b>Attained Age</b>	<b>Service Retirement</b>	<b>Non-Industrial Disability</b>	<b>Industrial Disability</b>	<b>Non-Industrial Death</b>	<b>Industrial Death</b>	<b>Death After Retirement</b>	<b>Total</b>
Under 30	\$0	\$1,991	\$0	\$8,878	\$0	\$137,750	\$148,619
30-34	0	0	0	0	0	69,803	69,803
35-39	0	86,804	24,436	0	0	91,464	202,704
40-44	0	284,932	143,337	11	0	131,611	559,891
45-49	0	981,387	191,604	16,919	0	273,466	1,463,376
50-54	99,930	2,629,952	320,621	112,148	0	434,791	3,597,442
55-59	1,020,391	4,048,984	70,765	246,855	45,811	747,366	6,180,172
60-64	2,856,117	4,713,608	321,211	95,158	0	1,160,853	9,146,947
65-69	3,282,544	2,830,434	77,097	170,874	0	966,464	7,327,413
70-74	3,457,970	1,854,361	44,767	96,045	0	743,791	6,196,934
75-79	3,581,690	697,075	23,147	91,736	0	896,876	5,290,524
80-84	1,797,113	134,262	30,542	69,426	0	493,768	2,525,111
85 and Over	637,792	21,986	0	105,824	0	169,062	934,664
<b>Total</b>	<b>\$16,733,547</b>	<b>\$18,285,776</b>	<b>\$1,247,527</b>	<b>\$1,013,874</b>	<b>\$45,811</b>	<b>\$6,317,065</b>	<b>\$43,643,600</b>

Counts of members do not include alternate payees receiving benefits while the member is still working. Multiple records may exist for those who have service in more than one coverage group. This does not result in double counting of liabilities.

Number of Retirees and Beneficiaries

By Years Retired and Retirement Type

As of June 30, 2011

State Miscellaneous Tier 2

<b>Years Retired</b>	<b>Service Retirement</b>	<b>Non-Industrial Disability</b>	<b>Industrial Disability</b>	<b>Non-Industrial Death</b>	<b>Industrial Death</b>	<b>Death After Retirement</b>	<b>Total</b>
Under 5 Yrs	673	112	1	25	0	29	840
5-9	397	239	13	29	0	77	755
10-14	801	516	30	18	1	211	1,577
15-19	370	306	13	14	1	199	903
20-24	122	164	5	7	0	105	403
25-29	17	20	0	1	0	15	53
30 and Over	0	0	0	0	0	0	0
<b>Total</b>	<b>2,380</b>	<b>1,357</b>	<b>62</b>	<b>94</b>	<b>2</b>	<b>636</b>	<b>4,531</b>

Counts of members do not include alternate payees receiving benefits while the member is still working. Multiple records may exist for those who have service in more than one coverage group. This does not result in double counting of liabilities.

Annual Allowance Amounts for Retirees and Beneficiaries

By Years Retired and Retirement Type

As of June 30, 2011

Annual Amounts not Including PPPA Payments

State Miscellaneous Tier 2

<b>Years Retired</b>	<b>Service Retirement</b>	<b>Non-Industrial Disability</b>	<b>Industrial Disability</b>	<b>Non-Industrial Death</b>	<b>Industrial Death</b>	<b>Death After Retirement</b>	<b>Total</b>
Under 5 Yrs	\$3,953,978	\$1,110,097	\$27,046	\$162,268	\$0	\$176,121	\$5,429,510
5-9	1,647,430	2,632,053	252,021	214,421	0	599,382	5,345,307
10-14	6,315,119	6,829,584	564,079	237,155	31,263	1,829,722	15,806,922
15-19	3,708,045	4,992,702	311,731	303,377	14,548	2,516,358	11,846,761
20-24	1,039,130	2,407,270	92,650	79,267	0	1,095,832	4,714,149
25-29	110,555	314,070	0	17,386	0	99,650	541,661
30 and Over	0	0	0	0	0	0	0
<b>Total</b>	<b>\$16,774,257</b>	<b>\$18,285,776</b>	<b>\$1,247,527</b>	<b>\$1,013,874</b>	<b>\$45,811</b>	<b>\$6,317,065</b>	<b>\$43,684,310</b>

Counts of members do not include alternate payees receiving benefits while the member is still working. Multiple records may exist for those who have service in more than one coverage group. This does not result in double counting of liabilities.

## Number of Retirees and Beneficiaries

## By Age and Retirement Type

As of June 30, 2011

## State Industrial

<b>Attained Age</b>	<b>Service Retirement</b>	<b>Non-Industrial Disability</b>	<b>Industrial Disability</b>	<b>Non-Industrial Death</b>	<b>Industrial Death</b>	<b>Death After Retirement</b>	<b>Total</b>
Under 30	0	0	0	2	0	10	12
30-34	0	1	1	0	0	13	15
35-39	0	4	2	0	0	9	15
40-44	0	41	11	0	0	9	61
45-49	0	82	34	3	0	21	140
50-54	264	179	69	7	0	33	552
55-59	1,317	227	88	8	0	67	1,707
60-64	1,907	242	80	12	0	80	2,321
65-69	1,583	160	56	17	1	100	1,917
70-74	973	107	27	12	3	105	1,227
75-79	666	49	23	8	1	107	854
80-84	423	28	7	3	3	119	583
85 and Over	362	15	10	4	7	221	619
<b>Total</b>	<b>7,495</b>	<b>1,135</b>	<b>408</b>	<b>76</b>	<b>15</b>	<b>894</b>	<b>10,023</b>

Counts of members do not include alternate payees receiving benefits while the member is still working. Multiple records may exist for those who have service in more than one coverage group. This does not result in double counting of liabilities.

Annual Allowance Amounts for

Retirees and Beneficiaries

By Age and Retirement Type

As of June 30, 2011

Annual Amounts not Including PPPA Payments

State Industrial

<b>Attained Age</b>	<b>Service Retirement</b>	<b>Non-Industrial Disability</b>	<b>Industrial Disability</b>	<b>Non-Industrial Death</b>	<b>Industrial Death</b>	<b>Death After Retirement</b>	<b>Total</b>
Under 30	\$0	\$0	\$0	\$5,719	\$0	\$34,365	\$40,084
30-34	0	3,465	64	0	0	37,450	40,979
35-39	0	10,873	20,353	0	0	33,037	64,263
40-44	0	267,713	79,161	0	0	34,493	381,367
45-49	0	745,551	110,899	32,307	0	72,527	961,284
50-54	1,570,853	1,432,644	302,768	30,444	0	281,043	3,617,752
55-59	14,720,981	1,759,497	515,542	41,127	0	432,952	17,470,099
60-64	22,803,161	2,080,563	511,969	80,727	0	618,045	26,094,465
65-69	20,467,459	1,394,395	356,978	214,518	17,365	726,241	23,176,956
70-74	13,928,613	975,950	138,447	173,473	21,710	854,834	16,093,027
75-79	9,671,125	600,444	185,554	223,418	28,390	1,131,858	11,840,789
80-84	6,553,701	356,876	66,686	28,814	62,603	1,511,594	8,580,274
85 and Over	6,030,235	218,719	296,759	130,225	205,757	3,277,330	10,159,025
<b>Total</b>	<b>\$95,746,128</b>	<b>\$9,846,690</b>	<b>\$2,585,180</b>	<b>\$960,772</b>	<b>\$335,825</b>	<b>\$9,045,769</b>	<b>\$118,520,364</b>

Counts of members do not include alternate payees receiving benefits while the member is still working. Multiple records may exist for those who have service in more than one coverage group. This does not result in double counting of liabilities.

Number of Retirees and Beneficiaries

By Years Retired and Retirement Type

As of June 30, 2011

State Industrial

<b>Years Retired</b>	<b>Service Retirement</b>	<b>Non-Industrial Disability</b>	<b>Industrial Disability</b>	<b>Non-Industrial Death</b>	<b>Industrial Death</b>	<b>Death After Retirement</b>	<b>Total</b>
Under 5 Yrs	3,118	222	65	20	0	54	3,479
5-9	2,071	326	130	17	0	118	2,662
10-14	1,116	298	90	16	1	152	1,673
15-19	618	162	64	12	0	159	1,015
20-24	280	77	32	7	0	125	521
25-29	206	31	17	4	1	126	385
30 and Over	87	19	10	0	13	160	289
<b>Total</b>	<b>7,496</b>	<b>1,135</b>	<b>408</b>	<b>76</b>	<b>15</b>	<b>894</b>	<b>10,024</b>

Counts of members do not include alternate payees receiving benefits while the member is still working. Multiple records may exist for those who have service in more than one coverage group. This does not result in double counting of liabilities.

Annual Allowance Amounts for Retirees and Beneficiaries

By Years Retired and Retirement Type

As of June 30, 2011

Annual Amounts not Including PPPA Payments

State Industrial

<b>Years Retired</b>	<b>Service Retirement</b>	<b>Non-Industrial Disability</b>	<b>Industrial Disability</b>	<b>Non-Industrial Death</b>	<b>Industrial Death</b>	<b>Death After Retirement</b>	<b>Total</b>
Under 5 Yrs	\$40,703,818	\$2,013,672	\$514,323	\$268,147	\$0	\$353,097	\$43,853,057
5-9	26,930,134	2,919,343	683,841	253,603	0	1,010,646	31,797,567
10-14	13,140,482	2,498,356	579,216	95,266	70	1,287,703	17,601,093
15-19	7,987,731	1,267,989	301,827	214,061	0	1,620,842	11,392,450
20-24	3,203,893	645,077	174,842	96,261	0	1,644,792	5,764,865
25-29	2,733,173	250,659	103,247	33,434	1,360	1,571,946	4,693,819
30 and Over	1,051,994	251,594	227,884	0	334,395	1,556,743	3,422,610
<b>Total</b>	<b>\$95,751,225</b>	<b>\$9,846,690</b>	<b>\$2,585,180</b>	<b>\$960,772</b>	<b>\$335,825</b>	<b>\$9,045,769</b>	<b>\$118,525,461</b>

Counts of members do not include alternate payees receiving benefits while the member is still working. Multiple records may exist for those who have service in more than one coverage group. This does not result in double counting of liabilities.

## Number of Retirees and Beneficiaries

## By Age and Retirement Type

As of June 30, 2011

State Safety

<b>Attained Age</b>	<b>Service Retirement</b>	<b>Non-Industrial Disability</b>	<b>Industrial Disability</b>	<b>Non-Industrial Death</b>	<b>Industrial Death</b>	<b>Death After Retirement</b>	<b>Total</b>
Under 30	0	0	3	3	2	20	28
30-34	0	0	16	0	0	11	27
35-39	0	3	29	0	1	17	50
40-44	0	11	71	2	2	18	104
45-49	2	27	170	5	0	28	232
50-54	456	75	374	23	7	77	1,012
55-59	1,863	118	646	38	14	107	2,786
60-64	2,960	149	844	48	10	200	4,211
65-69	2,461	105	598	27	8	258	3,457
70-74	1,576	63	390	30	15	254	2,328
75-79	902	41	276	17	18	324	1,578
80-84	582	20	174	5	16	423	1,220
85 and Over	426	19	121	12	14	527	1,119
<b>Total</b>	<b>11,228</b>	<b>631</b>	<b>3,712</b>	<b>210</b>	<b>107</b>	<b>2,264</b>	<b>18,152</b>

Counts of members do not include alternate payees receiving benefits while the member is still working. Multiple records may exist for those who have service in more than one coverage group. This does not result in double counting of liabilities.

Annual Allowance Amounts for

Retirees and Beneficiaries

By Age and Retirement Type

As of June 30, 2011

Annual Amounts not Including PPPA Payments

State Safety

<b>Attained Age</b>	<b>Service Retirement</b>	<b>Non-Industrial Disability</b>	<b>Industrial Disability</b>	<b>Non-Industrial Death</b>	<b>Industrial Death</b>	<b>Death After Retirement</b>	<b>Total</b>
Under 30	\$0	\$0	\$85,419	\$47,445	\$21,040	\$200,752	\$354,656
30-34	0	0	398,175	0	0	100,352	498,527
35-39	0	10,505	717,936	0	26,480	139,464	894,385
40-44	0	68,969	1,656,581	39,999	67,283	133,806	1,966,638
45-49	69,723	202,012	4,120,551	56,717	0	254,391	4,703,394
50-54	4,275,786	541,250	7,739,333	327,484	74,249	1,024,525	13,982,627
55-59	35,652,367	1,222,305	13,989,439	493,315	390,657	1,338,689	53,086,772
60-64	55,723,354	1,484,747	18,381,300	718,235	185,910	2,631,523	79,125,069
65-69	45,324,780	1,141,596	13,634,917	409,143	166,086	3,744,661	64,421,183
70-74	28,466,071	613,746	9,544,981	506,688	368,520	3,301,294	42,801,300
75-79	14,243,053	493,362	6,997,937	313,464	406,877	4,507,335	26,962,028
80-84	9,619,685	326,339	4,196,521	93,873	392,721	5,893,063	20,522,202
85 and Over	8,473,795	270,324	3,044,485	202,665	333,303	7,264,059	19,588,631
<b>Total</b>	<b>\$201,848,614</b>	<b>\$6,375,155</b>	<b>\$84,507,575</b>	<b>\$3,209,028</b>	<b>\$2,433,126</b>	<b>\$30,533,914</b>	<b>\$328,907,412</b>

Counts of members do not include alternate payees receiving benefits while the member is still working. Multiple records may exist for those who have service in more than one coverage group. This does not result in double counting of liabilities.

Number of Retirees and Beneficiaries

By Years Retired and Retirement Type

As of June 30, 2011

State Safety

<b>Years Retired</b>	<b>Service Retirement</b>	<b>Non-Industrial Disability</b>	<b>Industrial Disability</b>	<b>Non-Industrial Death</b>	<b>Industrial Death</b>	<b>Death After Retirement</b>	<b>Total</b>
Under 5 Yrs	5,107	173	617	62	8	106	6,073
5-9	3,152	160	869	60	4	266	4,511
10-14	1,477	142	614	36	12	255	2,536
15-19	683	74	380	19	0	210	1,366
20-24	245	29	260	11	7	178	730
25-29	318	20	499	12	18	463	1,330
30 and Over	246	33	473	10	58	786	1,606
<b>Total</b>	<b>11,228</b>	<b>631</b>	<b>3,712</b>	<b>210</b>	<b>107</b>	<b>2,264</b>	<b>18,152</b>

Counts of members do not include alternate payees receiving benefits while the member is still working. Multiple records may exist for those who have service in more than one coverage group. This does not result in double counting of liabilities.

Annual Allowance Amounts for Retirees and Beneficiaries

By Years Retired and Retirement Type

As of June 30, 2011

Annual Amounts not Including PPPA Payments

State Safety

<b>Years Retired</b>	<b>Service Retirement</b>	<b>Non-Industrial Disability</b>	<b>Industrial Disability</b>	<b>Non-Industrial Death</b>	<b>Industrial Death</b>	<b>Death After Retirement</b>	<b>Total</b>
Under 5 Yrs	\$112,910,212	\$2,577,183	\$17,322,852	\$942,753	\$116,955	\$1,674,282	\$135,544,237
5-9	48,990,904	1,531,614	20,411,714	855,548	100,572	3,913,681	75,804,033
10-14	18,219,811	1,113,934	13,580,666	525,551	228,391	3,219,664	36,888,017
15-19	7,776,510	483,009	8,030,175	342,881	0	2,394,224	19,026,799
20-24	3,286,515	124,824	4,880,274	137,006	135,843	2,352,187	10,916,649
25-29	5,644,755	228,887	10,053,656	189,150	394,454	6,868,176	23,379,078
30 and Over	5,019,907	315,704	10,228,238	216,139	1,456,911	10,111,700	27,348,599
<b>Total</b>	<b>\$201,848,614</b>	<b>\$6,375,155</b>	<b>\$84,507,575</b>	<b>\$3,209,028</b>	<b>\$2,433,126</b>	<b>\$30,533,914</b>	<b>\$328,907,412</b>

Counts of members do not include alternate payees receiving benefits while the member is still working. Multiple records may exist for those who have service in more than one coverage group. This does not result in double counting of liabilities.

## Number of Retirees and Beneficiaries

## By Age and Retirement Type

As of June 30, 2011

## State Peace Officers and Firefighters

<b>Attained Age</b>	<b>Service Retirement</b>	<b>Non-Industrial Disability</b>	<b>Industrial Disability</b>	<b>Non-Industrial Death</b>	<b>Industrial Death</b>	<b>Death After Retirement</b>	<b>Total</b>
Under 30	0	1	8	3	8	45	65
30-34	0	1	52	1	0	21	75
35-39	0	7	188	0	4	17	216
40-44	0	22	491	5	12	30	560
45-49	0	54	992	7	21	45	1,119
50-54	2,638	88	1,381	30	23	105	4,265
55-59	3,853	81	1,442	34	16	196	5,622
60-64	4,390	84	1,517	45	24	270	6,330
65-69	2,767	54	909	34	13	262	4,039
70-74	1,617	31	425	13	7	276	2,369
75-79	841	17	188	13	7	236	1,302
80-84	450	13	66	3	1	152	685
85 and Over	152	1	21	2	0	69	245
<b>Total</b>	<b>16,708</b>	<b>454</b>	<b>7,680</b>	<b>190</b>	<b>136</b>	<b>1,724</b>	<b>26,892</b>

Counts of members do not include alternate payees receiving benefits while the member is still working. Multiple records may exist for those who have service in more than one coverage group. This does not result in double counting of liabilities.

Annual Allowance Amounts for

Retirees and Beneficiaries

By Age and Retirement Type

As of June 30, 2011

Annual Amounts not Including PPPA Payments

State Peace Officers and Firefighters

<b>Attained Age</b>	<b>Service Retirement</b>	<b>Non-Industrial Disability</b>	<b>Industrial Disability</b>	<b>Non-Industrial Death</b>	<b>Industrial Death</b>	<b>Death After Retirement</b>	<b>Total</b>
Under 30	\$0	\$7,844	\$214,579	\$48,154	\$167,710	\$487,812	\$926,099
30-34	0	10,772	1,472,429	1,345	0	367,650	1,852,196
35-39	0	68,484	5,424,037	0	148,879	355,613	5,997,013
40-44	0	237,414	14,852,132	162,725	526,768	592,290	16,371,329
45-49	0	865,731	30,757,774	282,946	751,776	1,068,118	33,726,345
50-54	163,931,991	1,722,250	45,912,352	1,183,746	882,807	2,786,253	216,419,399
55-59	224,467,576	1,700,816	53,518,288	1,285,375	515,500	6,009,746	287,497,301
60-64	232,781,018	1,994,886	58,716,605	1,679,523	867,282	9,081,290	305,120,604
65-69	131,427,649	1,171,909	34,481,015	1,322,660	448,552	8,513,559	177,365,344
70-74	69,124,762	848,474	15,634,861	475,901	259,758	8,926,361	95,270,117
75-79	32,885,232	471,428	6,638,743	366,369	222,348	7,197,203	47,781,323
80-84	16,036,352	299,432	2,119,525	100,217	59,931	4,535,004	23,150,461
85 and Over	4,848,228	9,111	715,798	67,473	0	1,797,682	7,438,292
<b>Total</b>	<b>\$875,502,808</b>	<b>\$9,408,551</b>	<b>\$270,458,138</b>	<b>\$6,976,434</b>	<b>\$4,851,311</b>	<b>\$51,718,581</b>	<b>\$1,218,915,823</b>

Counts of members do not include alternate payees receiving benefits while the member is still working. Multiple records may exist for those who have service in more than one coverage group. This does not result in double counting of liabilities.

Number of Retirees and Beneficiaries

By Years Retired and Retirement Type

As of June 30, 2011

State Peace Officers and Firefighters

<b>Years Retired</b>	<b>Service Retirement</b>	<b>Non-Industrial Disability</b>	<b>Industrial Disability</b>	<b>Non-Industrial Death</b>	<b>Industrial Death</b>	<b>Death After Retirement</b>	<b>Total</b>
Under 5 Yrs	7,928	107	1,257	40	19	106	9,457
5-9	4,334	105	2,129	59	37	269	6,933
10-14	2,321	136	1,819	48	33	316	4,673
15-19	1,288	66	1,366	29	11	367	3,127
20-24	584	32	903	10	21	416	1,966
25-29	268	7	205	4	15	248	747
30 and Over	0	1	1	0	0	2	4
<b>Total</b>	<b>16,723</b>	<b>454</b>	<b>7,680</b>	<b>190</b>	<b>136</b>	<b>1,724</b>	<b>26,907</b>

Counts of members do not include alternate payees receiving benefits while the member is still working. Multiple records may exist for those who have service in more than one coverage group. This does not result in double counting of liabilities.

Annual Allowance Amounts for Retirees and Beneficiaries

By Years Retired and Retirement Type

As of June 30, 2011

Annual Amounts not Including PPPA Payments

State Peace Officers and Firefighters

<b>Years Retired</b>	<b>Service Retirement</b>	<b>Non-Industrial Disability</b>	<b>Industrial Disability</b>	<b>Non-Industrial Death</b>	<b>Industrial Death</b>	<b>Death After Retirement</b>	<b>Total</b>
Under 5 Yrs	\$466,364,985	\$2,923,097	\$55,867,928	\$1,610,517	\$978,328	\$3,582,242	\$531,327,097
5-9	222,585,303	2,030,051	80,003,636	2,210,602	1,229,766	9,142,492	317,201,850
10-14	102,175,340	2,528,328	60,967,538	1,670,046	1,081,878	9,178,289	177,601,419
15-19	54,087,063	1,193,857	44,846,395	1,070,808	463,419	12,059,388	113,720,930
20-24	21,657,839	610,350	23,913,435	252,567	710,653	11,392,749	58,537,593
25-29	8,921,727	122,154	4,859,132	161,894	387,267	6,350,097	20,802,271
30 and Over	0	714	74	0	0	13,324	14,112
<b>Total</b>	<b>\$875,792,257</b>	<b>\$9,408,551</b>	<b>\$270,458,138</b>	<b>\$6,976,434</b>	<b>\$4,851,311</b>	<b>\$51,718,581</b>	<b>\$1,219,205,272</b>

Counts of members do not include alternate payees receiving benefits while the member is still working. Multiple records may exist for those who have service in more than one coverage group. This does not result in double counting of liabilities.

## Number of Retirees and Beneficiaries

By Age and Retirement Type

As of June 30, 2011

California Highway Patrol

<b>Attained Age</b>	<b>Service Retirement</b>	<b>Non-Industrial Disability</b>	<b>Industrial Disability</b>	<b>Non-Industrial Death</b>	<b>Industrial Death</b>	<b>Death After Retirement</b>	<b>Total</b>
Under 30	0	0	1	0	10	8	19
30-34	0	0	5	0	2	2	9
35-39	0	1	17	0	5	6	29
40-44	0	0	58	1	11	2	72
45-49	0	1	148	0	13	9	171
50-54	578	6	329	5	15	22	955
55-59	588	6	384	5	6	38	1,027
60-64	509	7	575	8	19	93	1,211
65-69	614	5	837	4	12	161	1,633
70-74	364	9	634	3	21	192	1,223
75-79	188	3	391	1	13	166	762
80-84	145	2	189	2	5	177	520
85 and Over	104	1	77	0	6	216	404
<b>Total</b>	<b>3,090</b>	<b>41</b>	<b>3,645</b>	<b>29</b>	<b>138</b>	<b>1,092</b>	<b>8,035</b>

Counts of members do not include alternate payees receiving benefits while the member is still working. Multiple records may exist for those who have service in more than one coverage group. This does not result in double counting of liabilities.

Annual Allowance Amounts for

Retirees and Beneficiaries

By Age and Retirement Type

As of June 30, 2011

Annual Amounts not Including PPPA Payments

California Highway Patrol

<b>Attained Age</b>	<b>Service Retirement</b>	<b>Non-Industrial Disability</b>	<b>Industrial Disability</b>	<b>Non-Industrial Death</b>	<b>Industrial Death</b>	<b>Death After Retirement</b>	<b>Total</b>
Under 30	\$0	\$0	\$43,960	\$0	\$240,047	\$59,697	\$343,704
30-34	0	0	218,639	0	110,220	41,519	370,378
35-39	0	6,684	712,577	0	263,898	21,010	1,004,169
40-44	0	0	2,199,022	32,547	761,744	14,034	3,007,347
45-49	0	7,964	5,049,664	0	755,841	275,592	6,089,061
50-54	51,003,510	104,200	15,924,492	302,290	882,976	874,697	69,092,165
55-59	48,277,120	139,350	21,993,841	322,167	255,934	1,157,324	72,145,736
60-64	33,017,198	339,372	33,072,040	454,667	511,755	2,935,758	70,330,790
65-69	31,829,075	168,482	39,551,240	170,955	316,870	4,707,564	76,744,186
70-74	15,456,920	100,992	24,323,447	97,496	537,212	5,281,551	45,797,618
75-79	7,476,818	85,210	14,297,338	6,101	309,068	4,088,236	26,262,771
80-84	4,856,909	53,234	6,615,291	67,091	121,409	3,775,135	15,489,069
85 and Over	3,788,305	22,384	2,444,702	0	152,471	4,071,012	10,478,874
<b>Total</b>	<b>\$195,705,855</b>	<b>\$1,027,872</b>	<b>\$166,446,253</b>	<b>\$1,453,314</b>	<b>\$5,219,445</b>	<b>\$27,303,129</b>	<b>\$397,155,868</b>

Counts of members do not include alternate payees receiving benefits while the member is still working. Multiple records may exist for those who have service in more than one coverage group. This does not result in double counting of liabilities.

Number of Retirees and Beneficiaries

By Years Retired and Retirement Type

As of June 30, 2011

California Highway Patrol

<b>Years Retired</b>	<b>Service Retirement</b>	<b>Non-Industrial Disability</b>	<b>Industrial Disability</b>	<b>Non-Industrial Death</b>	<b>Industrial Death</b>	<b>Death After Retirement</b>	<b>Total</b>
Under 5 Yrs	1,128	2	300	4	13	7	1,454
5-9	628	7	651	6	19	39	1,350
10-14	628	7	566	9	13	84	1,307
15-19	318	8	641	3	13	108	1,091
20-24	147	5	501	3	10	141	807
25-29	136	3	454	3	13	223	832
30 and Over	116	9	532	1	57	490	1,205
<b>Total</b>	<b>3,101</b>	<b>41</b>	<b>3,645</b>	<b>29</b>	<b>138</b>	<b>1,092</b>	<b>8,046</b>

Counts of members do not include alternate payees receiving benefits while the member is still working. Multiple records may exist for those who have service in more than one coverage group. This does not result in double counting of liabilities.

Annual Allowance Amounts for Retirees and Beneficiaries

By Years Retired and Retirement Type

As of June 30, 2011

Annual Amounts not Including PPPA Payments

California Highway Patrol

<b>Years Retired</b>	<b>Service Retirement</b>	<b>Non-Industrial Disability</b>	<b>Industrial Disability</b>	<b>Non-Industrial Death</b>	<b>Industrial Death</b>	<b>Death After Retirement</b>	<b>Total</b>
Under 5 Yrs	\$95,862,689	\$238,279	\$23,578,847	\$243,320	\$735,008	\$450,428	\$121,108,571
5-9	40,734,222	287,147	44,778,967	437,708	1,101,355	1,951,479	89,290,878
10-14	31,976,811	145,089	29,975,093	458,703	603,847	3,334,968	66,494,511
15-19	13,342,315	93,957	26,469,116	135,803	552,667	3,867,435	44,461,293
20-24	5,615,903	97,990	17,020,610	97,496	423,630	4,389,145	27,644,774
25-29	4,487,151	54,871	12,051,905	50,025	416,652	5,228,426	22,289,030
30 and Over	3,912,455	110,539	12,571,715	30,259	1,386,286	8,081,248	26,092,502
<b>Total</b>	<b>\$195,931,546</b>	<b>\$1,027,872</b>	<b>\$166,446,253</b>	<b>\$1,453,314</b>	<b>\$5,219,445</b>	<b>\$27,303,129</b>	<b>\$397,381,559</b>

Counts of members do not include alternate payees receiving benefits while the member is still working. Multiple records may exist for those who have service in more than one coverage group. This does not result in double counting of liabilities.

## Number of Retirees and Beneficiaries

## By Age and Retirement Type

As of June 30, 2011

## Schools

<b>Attained Age</b>	<b>Service Retirement</b>	<b>Non-Industrial Disability</b>	<b>Industrial Disability</b>	<b>Non-Industrial Death</b>	<b>Industrial Death</b>	<b>Death After Retirement</b>	<b>Total</b>
Under 30	0	0	0	6	0	172	178
30-34	0	7	1	0	0	94	102
35-39	2	34	14	2	0	124	176
40-44	0	112	28	5	0	211	356
45-49	0	425	48	8	3	346	830
50-54	1,656	1,202	90	40	1	512	3,501
55-59	11,542	1,934	155	90	2	854	14,577
60-64	28,402	2,210	188	161	1	1,424	32,386
65-69	31,766	2,021	106	105	2	1,862	35,862
70-74	26,043	1,663	65	93	4	2,496	30,364
75-79	21,079	1,066	25	66	2	3,225	25,463
80-84	16,087	715	12	42	1	3,961	20,818
85 and Over	16,959	644	5	39	0	6,455	24,102
<b>Total</b>	<b>153,536</b>	<b>12,033</b>	<b>737</b>	<b>657</b>	<b>16</b>	<b>21,736</b>	<b>188,715</b>

Counts of members do not include alternate payees receiving benefits while the member is still working. Multiple records may exist for those who have service in more than one coverage group. This does not result in double counting of liabilities.

Annual Allowance Amounts for

Retirees and Beneficiaries

By Age and Retirement Type

As of June 30, 2011

Annual Amounts not Including PPPA Payments

Schools

<b>Attained Age</b>	<b>Service Retirement</b>	<b>Non-Industrial Disability</b>	<b>Industrial Disability</b>	<b>Non-Industrial Death</b>	<b>Industrial Death</b>	<b>Death After Retirement</b>	<b>Total</b>
Under 30	\$0	\$0	\$0	\$39,979	\$0	\$815,529	\$855,508
30-34	0	44,515	343	0	0	553,630	598,488
35-39	7,544	275,855	4,426	8,670	0	916,496	1,212,991
40-44	0	970,293	17,658	32,839	0	1,240,521	2,261,311
45-49	0	4,264,021	52,611	83,592	1,030	2,469,509	6,870,763
50-54	12,991,761	12,633,230	100,188	395,149	175	4,068,807	30,189,310
55-59	173,818,864	21,614,290	218,243	650,759	2,920	7,752,542	204,057,618
60-64	501,782,021	23,595,265	420,023	1,177,054	1,104	13,526,000	540,501,467
65-69	537,925,158	20,988,214	296,770	748,044	3,149	18,822,376	578,783,711
70-74	391,011,374	16,080,316	103,450	593,690	2,215	24,430,927	432,221,972
75-79	271,839,179	9,056,296	133,489	449,969	121	28,595,066	310,074,120
80-84	183,840,237	5,686,627	5,553	237,440	253	32,436,385	222,206,495
85 and Over	161,293,278	4,604,964	4,459	280,545	0	42,724,275	208,907,521
<b>Total</b>	<b>\$2,234,509,416</b>	<b>\$119,813,886</b>	<b>\$1,357,213</b>	<b>\$4,697,730</b>	<b>\$10,967</b>	<b>\$178,352,063</b>	<b>\$2,538,741,275</b>

Counts of members do not include alternate payees receiving benefits while the member is still working. Multiple records may exist for those who have service in more than one coverage group. This does not result in double counting of liabilities.

Number of Retirees and Beneficiaries

By Years Retired and Retirement Type

As of June 30, 2011

Schools

<b>Years Retired</b>	<b>Service Retirement</b>	<b>Non-Industrial Disability</b>	<b>Industrial Disability</b>	<b>Non-Industrial Death</b>	<b>Industrial Death</b>	<b>Death After Retirement</b>	<b>Total</b>
Under 5 Yrs	45,164	1,596	126	239	1	1,002	48,128
5-9	37,698	2,484	215	190	2	2,039	42,628
10-14	24,526	2,844	131	90	1	2,822	30,414
15-19	19,474	2,268	114	50	0	3,610	25,516
20-24	13,166	1,273	60	46	6	3,906	18,457
25-29	8,568	685	58	19	3	4,206	13,539
30 and Over	4,940	883	33	23	3	4,151	10,033
<b>Total</b>	<b>153,536</b>	<b>12,033</b>	<b>737</b>	<b>657</b>	<b>16</b>	<b>21,736</b>	<b>188,715</b>

Counts of members do not include alternate payees receiving benefits while the member is still working. Multiple records may exist for those who have service in more than one coverage group. This does not result in double counting of liabilities.

Annual Allowance Amounts for Retirees and Beneficiaries

By Years Retired and Retirement Type

As of June 30, 2011

Annual Amounts not Including PPPA Payments

Schools

<b>Years Retired</b>	<b>Service Retirement</b>	<b>Non-Industrial Disability</b>	<b>Industrial Disability</b>	<b>Non-Industrial Death</b>	<b>Industrial Death</b>	<b>Death After Retirement</b>	<b>Total</b>
Under 5 Yrs	\$818,808,829	\$18,519,800	\$369,013	\$1,942,633	\$98	\$11,818,905	\$851,459,278
5-9	628,368,200	29,107,159	556,183	1,319,475	671	22,363,617	681,715,305
10-14	327,307,275	28,489,931	166,757	577,618	3,144	26,266,379	382,811,104
15-19	230,474,572	21,866,381	173,011	289,987	0	32,906,678	285,710,629
20-24	132,385,752	11,311,408	64,222	321,848	4,907	34,389,579	178,477,716
25-29	66,421,106	4,654,630	20,773	64,915	1,773	30,891,165	102,054,362
30 and Over	30,890,316	5,864,577	7,254	181,254	374	19,715,740	56,659,515
<b>Total</b>	<b>\$2,234,656,050</b>	<b>\$119,813,886</b>	<b>\$1,357,213</b>	<b>\$4,697,730</b>	<b>\$10,967</b>	<b>\$178,352,063</b>	<b>\$2,538,887,909</b>

Counts of members do not include alternate payees receiving benefits while the member is still working. Multiple records may exist for those who have service in more than one coverage group. This does not result in double counting of liabilities.

## Retirees and Beneficiaries

## Number Counts and Benefits

## By Year of Retirement

As of June 30, 2011

## State Miscellaneous Tier 1

<b>Years Retired</b>	<b>Total Retirement</b>	<b>Total Benefits</b>	<b>Average Benefits</b>
2011	2,865 <sup>1</sup>	79,266,524	27,667
2010	9,344	298,783,513	31,976
2009	8,233	274,763,934	33,373
2008	6,949	220,796,191	31,774
2007	6,672	197,576,365	29,613
2006	6,465	175,436,985	27,136
2005	7,313	213,582,139	29,206
2004	8,652	266,947,112	30,854
2003	6,079	169,799,431	27,932
2002	6,003	173,392,200	28,884
2001	6,148	198,672,766	32,315
2000	8,234	267,297,439	32,463
1999	3,060	63,150,460	20,637
1998	4,474	106,665,544	23,841
1997	4,543	110,256,666	24,270
1996	4,319	107,662,313	24,928
1995	4,001	100,597,434	25,143
1994	4,026	100,086,433	24,860
1993	3,081	61,654,553	20,011
1992	4,927	132,877,913	26,969
1991	5,582	173,690,671	31,116
1990	3,106	71,982,149	23,175
1989	2,869	59,299,152	20,669
1988	3,173	72,063,874	22,712
1987	3,506	76,143,772	21,718
1986	2,872	57,363,735	19,973
1985	2,872	50,571,107	17,608
1984	2,459	40,596,361	16,509
1983	3,208	57,016,610	17,773
1982	2,265	34,824,993	15,375
1981	2,054	24,518,095	11,937
1980 and Earlier	10,458	118,735,560	11,354
Totals	159,812	4,156,071,994	26,006

Counts of members include alternate payees receiving benefits while the member is still working. Multiple records may exist for those who have service in more than one coverage group. This does not result in double counting of liabilities.

1 – The numbers for 2011 are for the first 6 months of the calendar year only.

Retirees and Beneficiaries

Number Counts and Benefits

By Year of Retirement

As of June 30, 2011

State Miscellaneous Tier 2

<b>Years Retired</b>	<b>Total Retirement</b>	<b>Total Benefits</b>	<b>Average Benefits</b>
2011	120 <sup>1</sup>	781,349	6,511
2010	196	1,151,279	5,874
2009	180	1,110,736	6,171
2008	148	1,100,017	7,433
2007	134	961,396	7,175
2006	128	755,242	5,900
2005	147	1,020,677	6,943
2004	126	872,075	6,921
2003	135	1,096,096	8,119
2002	171	1,277,596	7,471
2001	216	1,420,189	6,575
2000	263	2,101,247	7,990
1999	292	2,710,876	9,284
1998	380	3,925,210	10,330
1997	360	4,165,273	11,570
1996	293	3,469,318	11,841
1995	237	3,172,450	13,386
1994	162	2,287,700	14,122
1993	150	1,996,221	13,308
1992	138	1,663,557	12,055
1991	146	1,943,713	13,313
1990	80	995,094	12,439
1989	98	1,225,342	12,503
1988	93	1,082,796	11,643
1987	59	620,605	10,519
1986	49	494,338	10,089
1985	30	283,918	9,464
1984	0	0	0
1983	0	0	0
1982	0	0	0
1981	0	0	0
1980 and Earlier	0	0	0
<b>Totals</b>	<b>4,531</b>	<b>43,684,310</b>	<b>9,641</b>

Counts of members include alternate payees receiving benefits while the member is still working. Multiple records may exist for those who have service in more than one coverage group. This does not result in double counting of liabilities.

1 – The numbers for 2011 are for the first 6 months of the calendar year only.

## Retirees and Beneficiaries

## Number Counts and Benefits

## By Year of Retirement

As of June 30, 2011

## State Industrial

<b>Years Retired</b>	<b>Total Retirement</b>	<b>Total Benefits</b>	<b>Average Benefits</b>
2011	288 <sup>1</sup>	3,234,421	11,231
2010	953	12,821,672	13,454
2009	785	10,245,319	13,051
2008	616	7,468,875	12,125
2007	512	6,155,230	12,022
2006	565	6,345,431	11,231
2005	550	7,052,670	12,823
2004	666	8,113,566	12,183
2003	468	5,177,624	11,063
2002	457	5,186,252	11,348
2001	446	5,814,706	13,037
2000	574	7,191,790	12,529
1999	202	1,765,675	8,741
1998	306	2,709,869	8,856
1997	290	2,765,756	9,537
1996	231	1,994,869	8,636
1995	223	2,184,143	9,794
1994	186	1,818,207	9,775
1993	150	1,410,908	9,406
1992	202	2,701,273	13,373
1991	190	2,799,580	14,735
1990	121	1,122,360	9,276
1989	130	1,234,446	9,496
1988	85	979,666	11,525
1987	109	1,403,125	12,873
1986	69	980,781	14,214
1985	89	1,136,636	12,771
1984	65	684,137	10,525
1983	91	1,126,856	12,383
1982	71	941,805	13,265
1981	58	667,040	11,501
1980 and Earlier	276	3,290,773	11,923
<b>Totals</b>	<b>10,024</b>	<b>118,525,461</b>	<b>11,824</b>

Counts of members include alternate payees receiving benefits while the member is still working. Multiple records may exist for those who have service in more than one coverage group. This does not result in double counting of liabilities.

1 – The numbers for 2011 are for the first 6 months of the calendar year only.

## Retirees and Beneficiaries

## Number Counts and Benefits

## By Year of Retirement

As of June 30, 2011

## State Safety

<b>Years Retired</b>	<b>Total Retirement</b>	<b>Total Benefits</b>	<b>Average Benefits</b>
2011	519 <sup>1</sup>	12,076,100	23,268
2010	1,635	41,018,573	25,088
2009	1,365	32,768,202	24,006
2008	1,041	22,307,888	21,429
2007	965	18,484,123	19,155
2006	950	15,318,645	16,125
2005	1,024	17,565,144	17,153
2004	1,055	18,417,337	17,457
2003	807	13,568,437	16,813
2002	765	12,296,161	16,073
2001	718	11,717,569	16,320
2000	866	14,333,183	16,551
1999	394	5,013,898	12,726
1998	435	5,393,138	12,398
1997	391	5,418,990	13,859
1996	338	4,673,548	13,827
1995	277	3,367,247	12,156
1994	288	3,529,423	12,255
1993	194	2,877,055	14,830
1992	271	4,449,449	16,419
1991	252	3,466,803	13,757
1990	163	2,422,964	14,865
1989	177	2,694,247	15,222
1988	125	1,758,477	14,068
1987	149	2,437,533	16,359
1986	110	1,738,259	15,802
1985	164	2,459,788	14,999
1984	216	3,693,338	17,099
1983	366	6,938,308	18,957
1982	314	5,840,590	18,601
1981	345	5,712,493	16,558
1980 and Earlier	1,473	25,150,502	17,074
<b>Totals</b>	<b>18,152</b>	<b>328,907,412</b>	<b>18,120</b>

Counts of members include alternate payees receiving benefits while the member is still working. Multiple records may exist for those who have service in more than one coverage group. This does not result in double counting of liabilities.

1 – The numbers for 2011 are for the first 6 months of the calendar year only.

Retirees and Beneficiaries

Number Counts and Benefits

By Year of Retirement

As of June 30, 2011

State Peace Officers and Firefighters

<b>Years Retired</b>	<b>Total Retirement</b>	<b>Total Benefits</b>	<b>Average Benefits</b>
2011	748 <sup>1</sup>	36,764,799	49,151
2010	2,301	124,258,954	54,002
2009	2,088	122,136,896	58,495
2008	1,528	86,875,631	56,856
2007	1,722	100,534,595	58,382
2006	1,976	110,692,420	56,018
2005	1,234	58,490,236	47,399
2004	1,431	63,000,396	44,025
2003	1,212	51,685,745	42,645
2002	1,355	58,754,976	43,362
2001	1,263	53,716,271	42,531
2000	1,674	76,734,280	45,839
1999	628	18,794,650	29,928
1998	731	22,602,049	30,919
1997	763	25,553,191	33,490
1996	699	25,320,312	36,224
1995	613	22,232,322	36,268
1994	552	18,227,490	33,021
1993	513	17,346,547	33,814
1992	651	23,953,353	36,795
1991	634	25,250,123	39,827
1990	352	10,366,479	29,450
1989	391	11,503,927	29,422
1988	391	11,737,149	30,018
1987	488	15,064,811	30,871
1986	396	11,153,858	28,166
1985	310	8,696,053	28,052
1984	263	7,783,698	29,596
1983	0	0	0
1982	0	0	0
1981	1	74	74
1980 and Earlier	3	14,038	4,679
<b>Totals</b>	<b>26,911</b>	<b>1,219,245,323</b>	<b>45,307</b>

Counts of members include alternate payees receiving benefits while the member is still working. Multiple records may exist for those who have service in more than one coverage group. This does not result in double counting of liabilities.

1 – The numbers for 2011 are for the first 6 months of the calendar year only.

## Retirees and Beneficiaries

## Number Counts and Benefits

## By Year of Retirement

As of June 30, 2011

California Highway Patrol

<b>Years Retired</b>	<b>Total Retirement</b>	<b>Total Benefits</b>	<b>Average Benefits</b>
2011	191 <sup>1</sup>	17,623,878	92,272
2010	325	27,880,683	85,787
2009	298	26,710,443	89,632
2008	241	19,579,516	81,243
2007	241	17,776,195	73,760
2006	284	19,861,005	69,933
2005	319	23,702,290	74,302
2004	257	16,670,788	64,867
2003	181	10,162,590	56,147
2002	262	16,375,251	62,501
2001	303	19,438,501	64,153
2000	431	25,225,069	58,527
1999	146	6,412,461	43,921
1998	194	8,741,685	45,060
1997	242	10,782,202	44,555
1996	270	13,204,457	48,905
1995	238	10,489,783	44,075
1994	190	7,511,965	39,537
1993	243	9,844,763	40,513
1992	189	6,798,525	35,971
1991	213	8,364,735	39,271
1990	142	4,946,116	34,832
1989	179	6,030,087	33,688
1988	189	6,714,107	35,524
1987	149	4,959,287	33,284
1986	174	5,413,023	31,109
1985	142	4,305,483	30,320
1984	140	4,079,341	29,138
1983	169	4,413,617	26,116
1982	184	4,509,406	24,508
1981	170	3,897,259	22,925
1980 and Earlier	1,150	24,957,048	21,702
<b>Totals</b>	<b>8,046</b>	<b>397,381,559</b>	<b>49,389</b>

Counts of members include alternate payees receiving benefits while the member is still working. Multiple records may exist for those who have service in more than one coverage group. This does not result in double counting of liabilities.

1 – The numbers for 2011 are for the first 6 months of the calendar year only.

Retirees and Beneficiaries

Number Counts and Benefits

By Year of Retirement

As of June 30, 2011

Schools

<b>Years Retired</b>	<b>Total Retirement</b>	<b>Total Benefits</b>	<b>Average Benefits</b>
2011	4,278 <sup>1</sup>	66,024,668	15,434
2010	11,362	206,935,885	18,213
2009	10,497	194,159,037	18,497
2008	8,657	153,324,086	17,711
2007	8,309	141,540,368	17,035
2006	8,661	138,838,187	16,030
2005	8,850	138,338,133	15,631
2004	9,164	143,370,738	15,645
2003	9,634	161,274,004	16,740
2002	7,514	122,830,440	16,347
2001	6,685	106,170,084	15,882
2000	8,512	128,906,717	15,144
1999	4,916	54,977,100	11,183
1998	5,841	67,187,711	11,503
1997	5,469	59,640,280	10,905
1996	5,333	58,025,732	10,881
1995	5,481	60,016,842	10,950
1994	5,068	56,379,757	11,125
1993	5,102	59,565,960	11,675
1992	4,905	55,800,760	11,376
1991	4,589	51,232,803	11,164
1990	3,978	40,277,866	10,125
1989	3,826	37,459,634	9,791
1988	3,580	33,728,205	9,421
1987	3,268	29,075,368	8,897
1986	3,037	25,107,571	8,267
1985	2,731	19,973,325	7,314
1984	2,153	14,187,749	6,590
1983	3,984	35,340,179	8,871
1982	2,103	15,186,716	7,221
1981	2,011	11,541,074	5,739
1980 and Earlier	9,217	52,573,840	5,704
<b>Totals</b>	<b>188,715</b>	<b>2,538,990,819</b>	<b>13,454</b>

Counts of members include alternate payees receiving benefits while the member is still working. Multiple records may exist for those who have service in more than one coverage group. This does not result in double counting of liabilities.

1 – The numbers for 2011 are for the first 6 months of the calendar year only.

## APPENDIX A:

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### STATEMENT OF ACTUARIAL METHODS AND ASSUMPTIONS

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## Actuarial Methods

### FUNDING METHOD

The actuarial funding method used for this report is the Individual Entry Age Normal Cost Method. Under this method, projected benefits are determined for all members and the associated liabilities are spread in a manner that produces level annual cost as a percent of pay in each year from the age of hire (entry age) to the assumed retirement age. The cost allocated to the current fiscal year is called the normal cost.

The actuarial accrued liability for active members is then calculated as the portion of the total cost of the plan allocated to prior years. The actuarial accrued liability for members currently receiving benefits, for active members beyond the assumed retirement age, and for members entitled to deferred benefits, is equal to the present value of the benefits expected to be paid. No normal costs are applicable for these participants.

The excess of the total actuarial accrued liability over the actuarial value of plan assets is called the unfunded actuarial accrued liability. Funding requirements are determined by adding the normal cost and an amortization of the unfunded liability as a level percentage of assumed future payroll. Beginning July 1, 2000, all State and Schools plans became subject to the amortization methods prescribed in Actuarial Policy ACT-96-05E, described below.

Actuarial Policy ACT-96-05E specifies that all changes in liability due to plan amendments, changes in actuarial assumptions, or changes in actuarial methodology are amortized separately over a 20-year period. In addition, all gains or losses are tracked and the net unamortized gain or loss is amortized as a rolling 30-year amortization with the exception of gains and losses in fiscal years 2008-2009, 2009-2010 and 2010-2011 in which each year's gains or losses will be isolated and amortized over fixed and declining 30-year periods (as opposed to the current rolling 30-year amortization). Also, if a plan's accrued liability exceeds the actuarial value of assets, the annual contribution with respect to the total unfunded liability may not be less than the amount produced by a 30-year amortization of the unfunded liability. Finally, all plans are subject to a minimum employer contribution rate equal to the employer normal cost plus a 30-year amortization of surplus, if any.

In addition, 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 necessary additional contribution will be obtained by changing the amortization period of the gains and losses prior to 2009 to a period, which will suffice the above criteria. CalPERS actuaries will reassess the criteria above when performing each future valuation to determine whether or not the additional contributions are necessary for each plan.

An exception to the funding rules above is used whenever the application of such rules results in inconsistencies. In these cases, a "fresh start" approach is used. This simply means that the current total

unfunded actuarial liability/surplus is projected and amortized over a set number of years. This fresh start approach generally occurs when a total negative rate would result or a positive payment would be required on a negative unfunded actuarial liability (or conversely a negative payment on a positive unfunded actuarial liability). When the fresh start is being used to avoid a negative total rate and the surplus is sufficient to offset at least 30 years of normal cost payments, the amortization period equals the number of years that the rate is projected to be zero. In addition, a fresh start may be used whenever the Chief Actuary feels that it would better achieve the intent of the Board's funding policy.

By State statute for California Highway Patrol only, a portion of the assets in excess of the Entry Age Normal accrued liability can be applied as a direct offset to required employer and employee contributions.

The 1959 Survivor Program valuation is not provided in this report. A separate report for that program is available.

The Term Insurance Method is used for the State Group Term Life Insurance Program. The required contribution for the coming fiscal year is the difference between the reserves for that benefit and one and one-half times the expected benefit payments, but not less than zero.

## DATA EXTRACT

The June 30, 2011 actuarial valuation used the same data extract programs as used in the prior year.

## PURCHASING POWER PROTECTION ACT (PPPA) METHOD

PPPA benefits are cost-of-living adjustments intended to maintain the individual's current retirement benefit at 75% of the original benefit at retirement adjusted for inflation since retirement. The PPPA benefit is paid, if necessary, in addition to any other cost-of-living adjustment provided under the terms of the plan. Prior to January 1, 2001, there was a single PPPA pool covering all CalPERS employers. However, commencing January 1, 2001, separate PPPA pools were established. A pool was set up for all State plans and a separate pool for School employers. The public agencies were removed entirely from PPPA pooling resulting in each public agency plan paying for its own PPPA benefits. The creation of separate pools effectively eliminates the cross subsidization between the State, Schools and public agencies. Because there is a single PPPA pool for all State plans, cross subsidization between State plans still occurs.

For the State and Schools plans, the total annual outlay for PPPA benefits is limited by State statute to earnings of up to 1.1% of accumulated member contributions. If this annual outlay is insufficient to provide the PPPA benefits in a given fiscal year, the 75% maintenance target would be proportionately reduced. Since the inception of the PPPA benefit program, 1.1% has proved more than sufficient to provide the 75% maintenance. Under the inflation assumption of 3% compounded annually, the 1.1% appears to remain more than sufficient in the foreseeable future.

The actuarial model mimics the PPPA administrative procedure by deriving the employer contribution rate for the plan as the lesser of two separate actuarially computed rates:

- 1) The rate that results if a full 1.1% investment return on the actuarial value of each future year's employee assets in the plan is used for that plan's PPPA payments; or

2) The rate that results if the plan pays the full 75% purchasing power for itself.

In this way, those plans for which future PPPA costs equal or exceed a 1.1% return on current and future employee assets are charged an employer rate that replaces the 1.1% return on employee assets. Those plans that require less than the 1.1% return on current and future employee assets to maintain 75% purchasing power are charged the rate necessary to maintain the 75% purchasing power. It must be noted that nothing is charged in the rates for any cross-subsidization. That is, the model assumes that cross subsidization for PPPA for State plans will remain so small that it can be ignored.

## INTERNAL REVENUE CODE SECTION 415

The limitations on benefits imposed by Internal Revenue Code Section 415 were taken into account in this valuation.

## ASSET VALUATION METHOD

In order to dampen the effect of short-term market value fluctuations on employer contribution rates, the following asset smoothing technique is used. First an Expected Value of Assets would be computed by bringing forward the prior year's Actuarial Value of Assets and the contributions received and benefits paid during the year at the assumed actuarial rate of return. The Actuarial Value of Assets would then be computed as the Expected Value of Assets plus one-fifteenth of the difference between the actual Market Value of Assets and the Expected Value of Assets as of the valuation date. Finally, the Actuarial Value of Assets is restricted to no less than 80% and no more than 120% of the Market Value of Assets.

In December 2009, the CalPERS Board adopted changes to the asset smoothing method in order to phase in over a three year period the impact of the -24% investment loss experienced by CalPERS in fiscal year 2008-2009. The phase in was accomplished by temporarily increasing the corridor limits for the actuarial value of assets to 60% - 140% in the 2009 valuation and 70% - 130% in the 2010 valuation. In this valuation the corridor limits are back to 80% - 120%.

## ACCOUNTS RECEIVABLE

In preparing valuations and setting employer contribution rates, the asset figures used include accounts receivable. The CalPERS Actuarial Office assumes that all assets are accruing interest at the actuarially-assumed rate. Therefore, the rates depicted assume that all payments have been made and are accruing interest.

## Actuarial Assumptions Applicable to All Plans

### ECONOMIC ASSUMPTIONS:

#### *Investment Return*

- 7.5% compounded annually (net of administrative expenses).

#### *Salary Growth*

- Annual increases vary by entry age and service. See sample rates in table below.

Duration of Service	Annual Percentage Increase					
	State Miscellaneous Tier 1 & Tier 2			Industrial		
	Entry Age			Entry Age		
	20	30	40	20	30	40
0	13.10%	10.70%	8.00%	9.30%	8.60%	8.00%
3	8.70%	7.80%	6.30%	7.90%	7.50%	7.10%
5	7.00%	6.50%	5.60%	7.10%	6.90%	6.70%
10	4.70%	4.60%	4.20%	5.80%	5.60%	5.50%
15	4.00%	3.90%	3.70%	4.90%	4.80%	4.70%
20	3.60%	3.60%	3.50%	4.30%	4.20%	4.10%
25	3.50%	3.50%	3.40%	3.60%	3.60%	3.60%
30	3.50%	3.50%	3.40%	3.60%	3.60%	3.60%

Duration of Service	Safety			POFF		
	Entry Age			Entry Age		
	20	30	40	20	30	40
0	7.30%	7.10%	6.90%	19.70%	18.30%	16.6%
3	5.90%	5.40%	4.60%	8.80%	8.60%	8.00%
5	5.30%	4.80%	3.80%	6.60%	6.40%	5.80%
10	4.60%	4.10%	3.30%	4.40%	4.30%	4.10%
15	4.10%	3.80%	3.20%	3.90%	3.80%	3.80%
20	3.70%	3.50%	3.20%	3.60%	3.50%	3.50%
25	3.60%	3.50%	3.20%	3.40%	3.40%	3.40%
30	3.60%	3.50%	3.20%	3.40%	3.40%	3.40%

Duration of Service	CHP			Schools		
	Entry Age			Entry Age		
	20	30	40	20	30	40
0	8.80%	8.80%	8.80%	10.80%	9.60%	8.20%
3	6.00%	6.00%	6.00%	7.50%	7.00%	6.20%
5	4.90%	4.90%	4.90%	6.30%	6.00%	5.30%
10	3.70%	3.70%	3.70%	4.50%	4.40%	4.10%
15	3.50%	3.50%	3.50%	3.90%	3.80%	3.50%
20	3.40%	3.40%	3.40%	3.60%	3.50%	3.20%
25	3.40%	3.40%	3.40%	3.40%	3.40%	3.20%
30	3.40%	3.40%	3.40%	3.40%	3.40%	3.20%

### ***Overall Payroll Growth***

- 3% compounded annually (used in projecting the payroll over which the unfunded liability is amortized). For the State Miscellaneous plan, the payroll of the Second Tier members is assumed to decrease in accordance with actuarial assumptions based on the assumption that all new entrants will elect the State Miscellaneous First Tier. The payroll of the First Tier members is assumed to grow at the rate necessary for the overall payroll of the State Miscellaneous plan to grow annually at a rate of 3%.

### ***Inflation***

- 2.75% compounded annually.

## DEMOGRAPHIC ASSUMPTIONS:

*Postretirement Mortality*

- Rates vary by age and gender for healthy benefit recipients, for non-industrially disabled (disability not job related) retirees and for retirees who are industrially disabled (disability is job-related). See sample rates in table below.

Age	Healthy Recipients		Non-Industrially Disabled (Not Job-Related)		Industrially Disabled (Job-Related)	
	Male	Female	Male	Female	Male	Female
50	0.00239	0.00125	0.01632	0.01245	0.00443	0.00356
55	0.00474	0.00243	0.01936	0.01580	0.00563	0.00546
60	0.00720	0.00431	0.02293	0.01628	0.00777	0.00798
65	0.01069	0.00775	0.03174	0.01969	0.01388	0.01184
70	0.01675	0.01244	0.03870	0.03019	0.02236	0.01716
75	0.03080	0.02071	0.06001	0.03915	0.03585	0.02665
80	0.05270	0.03749	0.08388	0.05555	0.06926	0.04528
85	0.09775	0.07005	0.14035	0.09577	0.11799	0.08017
90	0.16747	0.12404	0.21554	0.14949	0.16575	0.13775
95	0.25659	0.21556	0.31025	0.23055	0.26108	0.23331
100	0.34551	0.31876	0.45905	0.37662	0.40918	0.35165

The mortality assumptions are based on mortality rates resulting from the most recent CalPERS Experience Study adopted by the CalPERS Board, first used in the June 30, 2009 valuation. For purposes of the post-retirement mortality rates, those revised rates include 5 years of projected on-going mortality improvement using Scale AA published by the Society of Actuaries until June 30, 2010. There is no margin for future mortality improvement beyond the valuation date. The mortality assumption will be reviewed with the next experience study expected to be completed for the June 30, 2013 valuation to determine an appropriate margin to be used.

*Marital Status*

- For active members, a percentage married upon Retirement is assumed according to the following table.

Plan	Percent Married
State Miscellaneous, Tier 1	85%
State Miscellaneous, Tier 2	85%
State Industrial	85%
State Safety	90%
State Police Officers/Firefighters	90%
California Highway Patrol	90%
Schools	85%

*Age of Spouse*

- It is assumed that female spouses are 3 years younger than male spouses.

***Service Retirement Assumption for Separated Vested Members***

- It is assumed that separated vested members will follow the same service retirement pattern as the active members but with a load to reflect the expected higher rates of retirement, especially at lower ages. The following table shows the load factors that are applied to the service retirement assumption for active members to obtain the service retirement pattern for separated vested members:

Age	Load Factor
50	450%
51	250%
52 through 56	200%
57 through 60	150%
61 through 64	125%
65 and above	100% (no change)

**MISCELLANEOUS LOADING FACTORS:*****Credit for Unused Sick Leave***

- Benefits are increased by 1% for all groups providing credit for unused sick leave.

***Norris Decision (Best Factors)***

- Employees hired prior to July 1, 1982 have projected benefit amounts increased in order to reflect the use of “Best Factors” for these employees in the calculation of optional benefit forms. This is due to a 1983 Supreme Court decision, known as the Norris decision, which required males and females to be treated equally in the determination of benefit amounts. Consequently, anyone already employed at that time is given the best possible conversion factor when optional benefits are determined. A unisex conversion table was developed for employees hired after July 1, 1982, which was a weighted average of the male and female tables. Therefore, no loading is necessary in this case.

**MISCELLANEOUS ASSUMPTIONS:*****Tier 2 Members electing Tier 1 benefits***

- Tier 2 members of both the State Miscellaneous and State Industrial plans have the right to convert their Tier 2 service to Tier 1 service provided that they make up the shortfall in their accumulated contributions with interest. In this valuation, we have assumed that all Tier 2 members will elect to convert their Tier 2 service to Tier 1 service.

## Plan Specific Actuarial Assumptions

### STATE MISCELLANEOUS TIER 1

#### *Service Retirement*

- Rates vary by age and service. See sample rates in table below.

<b>Attained Age</b>	<b>Years of Service</b>						
	<b>5</b>	<b>10</b>	<b>15</b>	<b>20</b>	<b>25</b>	<b>30</b>	<b>35</b>
50	0.004	0.011	0.016	0.019	0.023	0.027	0.032
52	0.004	0.012	0.016	0.020	0.025	0.029	0.033
54	0.008	0.022	0.030	0.037	0.046	0.054	0.062
56	0.014	0.038	0.054	0.066	0.081	0.095	0.109
58	0.019	0.050	0.071	0.087	0.106	0.124	0.144
60	0.026	0.070	0.098	0.121	0.148	0.173	0.200
62	0.047	0.125	0.176	0.217	0.266	0.311	0.359
65	0.054	0.145	0.204	0.250	0.307	0.359	0.415
70	0.050	0.134	0.188	0.231	0.284	0.331	0.383
75	1.000	1.000	1.000	1.000	1.000	1.000	1.000

#### *Termination with Refund*

- Rates vary by entry age and service. See sample rates in table below.

<b>Duration of Service</b>	<b>Entry Age</b>				
	<b>20</b>	<b>25</b>	<b>30</b>	<b>35</b>	<b>40</b>
0	0.1401	0.1340	0.1280	0.1220	0.1160
1	0.1249	0.1189	0.1128	0.1068	0.1009
2	0.1097	0.1037	0.0978	0.0917	0.0857
3	0.0945	0.0886	0.0826	0.0766	0.0705
4	0.0794	0.0734	0.0674	0.0614	0.0553
5	0.0104	0.0094	0.0084	0.0075	0.0065
10	0.0059	0.0051	0.0042	0.0034	0.0026
15	0.0040	0.0033	0.0025	0.0018	0.0011
20	0.0025	0.0019	0.0013	0.0007	0.0001
25	0.0013	0.0008	0.0003	0.0001	0.0001
30	0.0005	0.0001	0.0001	0.0001	0.0001

## STATE MISCELLANEOUS TIER 1 (CONTINUED)

**Terminations with Vested Deferred Benefits**

- Rates vary by entry age and service. See sample rates in table below.

Duration of Service	Entry Age				
	20	25	30	35	40
5	0.0556	0.0504	0.0452	0.0400	0.0349
6	0.0526	0.0472	0.0420	0.0368	0.0316
7	0.0495	0.0441	0.0389	0.0335	0.0280
8	0.0463	0.0409	0.0356	0.0299	0.0245
9	0.0430	0.0374	0.0321	0.0264	0.0209
10	0.0395	0.0340	0.0283	0.0226	-
14	0.0349	0.0289	0.0229	-	-
15	0.0335	0.0275	0.0216	-	-
19	0.0277	0.0213	-	-	-
20	0.0262	0.0198	-	-	-
24	0.0196	0.0130	-	-	-
25	0.0179	-	-	-	-
29	0.0103	-	-	-	-
30	-	-	-	-	-

**Non-Industrial Death**

- Rates vary by age and gender. See sample rates in table below.

**Non-Industrial Disability**

- Rates vary by age and gender. See sample rates in table below.

Attained Age	Male		Female	
	Non-Industrial Death	Non-Industrial Disability	Non-Industrial Death	Non-Industrial Disability
20	0.00047	0.0001	0.00016	0.0001
25	0.00050	0.0002	0.00026	0.0001
30	0.00053	0.0003	0.00036	0.0005
35	0.00067	0.0005	0.00046	0.0013
40	0.00087	0.0012	0.00065	0.0023
45	0.00120	0.0022	0.00093	0.0040
50	0.00176	0.0038	0.00126	0.0055
55	0.00260	0.0040	0.00176	0.0050
60	0.00395	0.0026	0.00266	0.0031

## STATE MISCELLANEOUS TIER 2

*Service Retirement*

- Rates vary by age and Service. See sample rates in table below.

Attained Age	Years of Service						
	5	10	15	20	25	30	35
50	0.004	0.011	0.016	0.019	0.023	0.027	0.032
52	0.004	0.012	0.016	0.020	0.025	0.029	0.033
54	0.008	0.022	0.003	0.037	0.046	0.054	0.062
56	0.014	0.038	0.054	0.066	0.081	0.095	0.109
58	0.019	0.050	0.071	0.087	0.106	0.124	0.144
60	0.026	0.070	0.098	0.121	0.148	0.173	0.200
62	0.047	0.125	0.176	0.217	0.266	0.311	0.359
65	0.054	0.145	0.204	0.250	0.307	0.359	0.415
70	0.050	0.134	0.188	0.231	0.284	0.331	0.383
75	1.000	1.000	1.000	1.000	1.000	1.000	1.000

*Non-vested Termination*

- Rates vary by entry age and service. See sample rates in table below.

Duration of Service	Entry Age				
	20	25	30	35	40
0	0.1496	0.1433	0.1370	0.1307	0.1244
1	0.1365	0.1302	0.1239	0.1176	0.1113
2	0.1234	0.1172	0.1109	0.1046	0.0983
3	0.1104	0.1041	0.0978	0.0915	0.0852
4	0.0973	0.0910	0.0848	0.0785	0.0722
5	0.0843	0.0780	0.0717	0.0654	0.0591
6	0.0792	0.0729	0.0666	0.0603	0.0540
7	0.0741	0.0678	0.0615	0.0553	0.0490
8	0.0691	0.0628	0.0565	0.0502	0.0439
9	0.0640	0.0577	0.0514	0.0451	0.0388

## STATE MISCELLANEOUS TIER 2 (Continued)

**Terminations with Vested Deferred Benefits**

- Rates vary by entry age and service. See sample rates in table below.

Duration of Service	Entry Age				
	20	25	30	35	40
10	0.0589	0.0526	0.0463	0.0400	-
14	0.0480	0.0417	0.0354	0.0291	-
15	0.0453	0.0390	0.0327	-	-
19	0.0344	0.0281	0.0218	-	-
20	0.0317	0.0254	-	-	-
24	0.0208	0.0145	-	-	-
25	0.0180	-	-	-	-
29	0.0071	-	-	-	-
30	-	-	-	-	-

**Non-Industrial Death**

- Rates vary by age and gender. See sample rates in table below.

**Non-Industrial Disability**

- Rates vary by age and gender. See sample rates in table below.

Attained Age	Male		Female	
	Non-Industrial Death	Non-Industrial Disability	Non-Industrial Death	Non-Industrial Disability
20	0.00047	0.0001	0.00016	0.0001
25	0.00050	0.0002	0.00026	0.0004
30	0.00053	0.0003	0.00036	0.0006
35	0.00067	0.0003	0.00046	0.0017
40	0.00087	0.0023	0.00065	0.0041
45	0.00120	0.0042	0.00093	0.0068
50	0.00176	0.0058	0.00126	0.0099
55	0.00260	0.0073	0.00176	0.0123
60	0.00395	0.0081	0.00266	0.0134

## STATE INDUSTRIAL TIER 1

**Service Retirement**

- Rates vary by age and service. See sample rates in table below.

Attained Age	Years of Service						
	5	10	15	20	25	30	35
50	0.006	0.011	0.018	0.026	0.031	0.033	0.039
52	0.006	0.011	0.018	0.026	0.031	0.033	0.039
54	0.016	0.029	0.045	0.067	0.079	0.084	0.100
56	0.020	0.037	0.057	0.085	0.100	0.106	0.126
58	0.025	0.046	0.071	0.106	0.125	0.132	0.157
60	0.038	0.070	0.109	0.162	0.191	0.202	0.240
62	0.076	0.139	0.217	0.321	0.378	0.402	0.476
65	0.083	0.153	0.238	0.353	0.416	0.442	0.523
70	0.089	0.163	0.254	0.376	0.444	0.472	0.559
75	1.000	1.000	1.000	1.000	1.000	1.000	1.000

**Termination with Refund**

- Rates vary by entry age and service. See sample rates in table below.

Duration of Service	Entry Age				
	20	25	30	35	40
0	0.0829	0.0794	0.0758	0.0723	0.0687
1	0.0740	0.0704	0.0669	0.0633	0.0598
2	0.0650	0.0615	0.0579	0.0544	0.0507
3	0.0560	0.0524	0.0489	0.0453	0.0418
4	0.0470	0.0435	0.0399	0.0364	0.0328
5	0.0095	0.0086	0.0077	0.0068	0.0059
10	0.0054	0.0046	0.0039	0.0031	0.0024
15	0.0036	0.0030	0.0023	0.0017	0.0010
20	0.0023	0.0017	0.0011	0.0006	0.0002
25	0.0011	0.0007	0.0003	0.0002	0.0002
30	0.0005	0.0002	0.0002	0.0002	0.0002

## STATE INDUSTRIAL TIER 1 (Continued)

**Terminations with Vested Deferred Benefits**

- Rates vary by entry age and service. See sample rates in table below.

Duration of Service	Entry Age				
	20	25	30	35	40
5	0.0496	0.0449	0.0405	0.0356	0.0311
6	0.0470	0.0421	0.0377	0.0328	0.0281
7	0.0442	0.0393	0.0346	0.0297	0.0250
8	0.0414	0.0365	0.0316	0.0267	0.0220
9	0.0384	0.0335	0.0285	0.0234	0.0187
10	0.0353	0.0302	0.0253	0.0201	-
14	0.0311	0.0257	0.0206	0.0152	-
15	0.0302	0.0246	0.0194	-	-
19	0.0248	0.0190	0.0136	-	-
20	0.0232	0.0176	-	-	-
24	0.0173	0.0115	-	-	-
25	0.0159	-	-	-	-
29	0.0091	-	-	-	-
30	-	-	-	-	-

**Non-Industrial Death**

- Rates vary by age and gender. See sample rates in table below.

**Industrial Disability, Non-Industrial Disability & Industrial Death**

- Rates vary by age. See sample rates in table below.

Attained Age	Non-Industrial Death		Non-Industrial Disability	Industrial Disability	Industrial Death
	Male	Female	Male and Female	Male and Female	Male and Female
			Female	Female	Female
20	0.00047	0.00016	0.00043	0.00015	0.00003
25	0.00050	0.00026	0.00085	0.00015	0.00007
30	0.00053	0.00036	0.00136	0.00015	0.00010
35	0.00067	0.00046	0.00204	0.00029	0.00012
40	0.00087	0.00065	0.00315	0.00029	0.00013
45	0.00120	0.00093	0.00468	0.00044	0.00014
50	0.00176	0.00126	0.00621	0.00044	0.00015
55	0.00260	0.00176	0.00791	0.00058	0.00016
60	0.00395	0.00266	0.00918	0.00058	0.00017

## STATE INDUSTRIAL TIER 2

**Service Retirement**

➤ Rates vary by age and service . See sample rates in table below.

<b>Attained Age</b>	<b>Years of Service</b>						
	<b>5</b>	<b>10</b>	<b>15</b>	<b>20</b>	<b>25</b>	<b>30</b>	<b>35</b>
50	0.006	0.011	0.018	0.026	0.031	0.033	0.039
52	0.006	0.011	0.018	0.026	0.031	0.033	0.039
54	0.016	0.029	0.045	0.067	0.079	0.084	0.100
56	0.020	0.037	0.057	0.085	0.100	0.106	0.126
58	0.025	0.046	0.071	0.106	0.125	0.132	0.157
60	0.038	0.070	0.109	0.162	0.191	0.202	0.240
62	0.076	0.139	0.217	0.321	0.378	0.402	0.476
65	0.083	0.153	0.238	0.353	0.416	0.442	0.523
70	0.089	0.163	0.254	0.376	0.444	0.472	0.559
75	1.000	1.000	1.000	1.000	1.000	1.000	1.000

**Termination with Refund**

➤ Rates vary by entry age and service. See sample rates in table below.

<b>Duration of Service</b>	<b>Entry Age</b>				
	<b>20</b>	<b>25</b>	<b>30</b>	<b>35</b>	<b>40</b>
0	0.0829	0.0794	0.0758	0.0723	0.0687
1	0.0740	0.0704	0.0669	0.0633	0.0598
2	0.0650	0.0615	0.0579	0.0544	0.0507
3	0.0560	0.0524	0.0489	0.0453	0.0418
4	0.0470	0.0435	0.0399	0.0364	0.0328
5	0.0095	0.0086	0.0077	0.0068	0.0059
10	0.0054	0.0046	0.0039	0.0031	0.0024
15	0.0036	0.0030	0.0023	0.0017	0.0010
20	0.0023	0.0017	0.0011	0.0006	0.0002
25	0.0011	0.0007	0.0003	0.0002	0.0002
30	0.0005	0.0002	0.0002	0.0002	0.0002

## STATE INDUSTRIAL TIER 2 (Continued)

**Terminations with Vested Deferred Benefits**

- Rates vary by entry age and service. See sample rates in table below.

Duration of Service	Entry Age				
	20	25	30	35	40
5	0.0496	0.0449	0.0405	0.0356	0.0311
6	0.0470	0.0421	0.0377	0.0328	0.0281
7	0.0442	0.0393	0.0346	0.0297	0.0250
8	0.0414	0.0365	0.0316	0.0267	0.0220
9	0.0384	0.0335	0.0285	0.0234	0.0187
10	0.0353	0.0302	0.0253	0.0201	-
14	0.0349	0.0289	0.0229	0.0171	-
15	0.0302	0.0246	0.0194	-	-
19	0.0277	0.0213	0.0150	-	-
20	0.0232	0.0176	-	-	-
24	0.0196	0.0130	-	-	-
25	0.0159	-	-	-	-
29	0.0103	-	-	-	-
30	-	-	-	-	-

**Non-Industrial Death**

- Rates vary by age and gender. See sample rates in table below.

**Non-Industrial Disability**

- Rates vary by age. See sample rates in table below.

**Industrial Disability**

- Rates vary by age. See sample rates in table below.

**Industrial Death**

- Rates vary by age. See sample rates in table below.

Attained Age	Non-Industrial Death		Non-Industrial Disability	Industrial Disability	Industrial Death
	Male	Female	Male and Female	Male and Female	Male and Female
			Female	Female	Female
20	0.00047	0.00016	0.00043	0.00015	0.00003
25	0.00050	0.00026	0.00085	0.00015	0.00007
30	0.00053	0.00036	0.00136	0.00015	0.00010
35	0.00067	0.00046	0.00204	0.00029	0.00012
40	0.00087	0.00065	0.00315	0.00029	0.00013
45	0.00120	0.00093	0.00468	0.00044	0.00014
50	0.00176	0.00126	0.00621	0.00044	0.00015
55	0.00260	0.00176	0.00791	0.00058	0.00016
60	0.00395	0.00266	0.00918	0.00058	0.00017

## STATE SAFETY

*Service Retirement*

- Rates vary by age and service. See sample rates in table below.

<b>Attained Age</b>	<b>Years of Service</b>						
	<b>5</b>	<b>10</b>	<b>15</b>	<b>20</b>	<b>25</b>	<b>30</b>	<b>35</b>
50	0.012	0.021	0.028	0.033	0.037	0.048	0.057
52	0.008	0.014	0.019	0.023	0.025	0.033	0.039
54	0.024	0.041	0.055	0.064	0.072	0.093	0.111
56	0.038	0.064	0.086	0.101	0.113	0.146	0.174
58	0.040	0.068	0.092	0.107	0.120	0.155	0.184
60	0.043	0.072	0.098	0.115	0.128	0.166	0.197
62	0.070	0.117	0.159	0.186	0.208	0.270	0.320
65	0.095	0.160	0.217	0.254	0.284	0.369	0.437
70	0.086	0.144	0.195	0.229	0.255	0.331	0.393
75	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

*Termination with Refund*

- Rates vary by service. See sample rates in table below.

<b>Duration of Service</b>										
<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>10</b>	<b>15</b>	<b>20</b>	<b>25</b>	<b>30</b>
0.1313	0.0967	0.0622	0.0461	0.0374	0.0080	0.0058	0.0039	0.0025	0.0013	0.0009

*Terminations with Vested Deferred Benefits*

- Rates vary by service. See sample rates in table below.

<b>Duration of Service</b>										
<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>15</b>	<b>20</b>	<b>25</b>	<b>30</b>	<b>35</b>
0.0369	0.0363	0.0357	0.0349	0.0341	0.0333	0.0286	0.0226	0.0159	0.0131	0.000

## STATE SAFETY (Continued)

***Non-Industrial Death***

- Rates vary by age and gender. See sample rates in table below.

***Industrial Disability, Non-Industrial Disability & Industrial Death***

- Rates vary by age. See sample rates in table below.

<b>Attained Age</b>	<b>Non-Industrial Death</b>		<b>Non-Industrial Disability</b>	<b>Industrial Disability</b>	<b>Industrial Death</b>
	<b>Male</b>	<b>Female</b>	<b>Male and Female</b>	<b>Male and Female</b>	<b>Male and Female</b>
20	0.00047	0.00016	0.00036	0.00024	0.00003
25	0.00050	0.00026	0.00054	0.00108	0.00007
30	0.00053	0.00036	0.00063	0.00216	0.00010
35	0.00067	0.00046	0.00072	0.00324	0.00012
40	0.00087	0.00065	0.00072	0.00432	0.00013
45	0.00120	0.00093	0.00108	0.00528	0.00014
50	0.00176	0.00126	0.00216	0.00636	0.00015
55	0.00260	0.00176	0.00306	0.00960	0.00016
60	0.00395	0.00266	0.00387	0.00960	0.00017

## STATE PEACE OFFICERS AND FIREFIGHTERS

*Service Retirement*

- Rates vary by age and service. See sample rates in table below.

Attained Age	Years of Service						
	5	10	15	20	25	30	35
50	0.006	0.020	0.027	0.031	0.052	0.082	0.095
52	0.008	0.026	0.035	0.041	0.067	0.106	0.123
54	0.016	0.054	0.073	0.084	0.139	0.219	0.254
56	0.021	0.070	0.094	0.109	0.181	0.284	0.330
58	0.020	0.066	0.089	0.103	0.170	0.267	0.310
60	0.020	0.067	0.091	0.105	0.174	0.273	0.317
62	0.035	0.116	0.157	0.181	0.301	0.472	0.549
65	0.039	0.132	0.178	0.206	0.341	0.536	0.623
70	1.000	1.000	1.000	1.000	1.000	1.000	1.000

*Termination with Refund*

- Rates vary by service. See sample rates in table below.

Duration of Service										
0	1	2	3	4	5	10	15	20	25	30
0.1217	0.0779	0.0431	0.0353	0.0275	0.0056	0.0039	0.0025	0.0015	0.0006	0.0003

*Terminations with Vested Deferred Benefits*

- Rates vary by service. See sample rates in table below.

Duration of Service										
5	6	7	8	9	10	15	20	25	30	35
0.0173	0.0168	0.0164	0.0159	0.0155	0.0149	0.0120	0.0086	0.0046	0.0030	0.0000

## STATE PEACE OFFICERS AND FIREFIGHTERS (Continued)

*Non-Industrial Death*

- Rates vary by age and gender. See sample rates in table below.

*Industrial Disability, Non-Industrial Disability & Industrial Death*

- Rates vary by age. See sample rates in table below.

<u>Attained Age</u>	<u>Non-Industrial Death</u>		<u>Non-Industrial Disability</u>	<u>Industrial Disability</u>	<u>Industrial Death</u>
	<u>Male</u>	<u>Female</u>	<u>Male and Female</u>	<u>Male and Female</u>	<u>Male and Female</u>
20	0.00047	0.00016	0.00010	0.00030	0.00003
25	0.00050	0.00026	0.00010	0.00150	0.00007
30	0.00053	0.00036	0.00010	0.00300	0.00010
35	0.00067	0.00046	0.00020	0.00450	0.00012
40	0.00087	0.00065	0.00040	0.00600	0.00013
45	0.00120	0.00093	0.00060	0.00750	0.00014
50	0.00176	0.00126	0.00098	0.00900	0.00015
55	0.00260	0.00176	0.00143	0.02080	0.00016
60	0.00395	0.00266	0.00188	0.02080	0.00017

## CALIFORNIA HIGHWAY PATROL

***Service Retirement***

- Rates vary by age and service. See sample rates in table below.

<b>Attained Age</b>	<b>Years of Service</b>						
	<b>5</b>	<b>10</b>	<b>15</b>	<b>20</b>	<b>25</b>	<b>30</b>	<b>35</b>
50	0.0044	0.0044	0.0044	0.0044	0.0132	0.0250	0.0288
52	0.0145	0.0145	0.0145	0.0145	0.0435	0.0825	0.0950
54	0.0303	0.0303	0.0303	0.0303	0.0909	0.1725	0.1988
56	0.0271	0.0271	0.0271	0.0271	0.0813	0.1542	0.1777
58	0.0229	0.0229	0.0229	0.0229	0.0686	0.1301	0.1499
60	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

***Termination with Refund***

- Rates vary by service. See sample rates in table below.

<b>Duration of Service</b>										
<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>10</b>	<b>15</b>	<b>20</b>	<b>25</b>	<b>30</b>
0.0129	0.0124	0.0121	0.0116	0.0113	0.0040	0.0029	0.0019	0.0011	0.0006	0.0003

***Terminations with Vested Deferred Benefits***

- Rates vary by service. See sample rates in table below.

<b>Duration of Service</b>										
<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>15</b>	<b>20</b>	<b>25</b>	<b>30</b>	<b>35</b>
0.0093	0.0091	0.0090	0.0087	0.0085	0.0082	0.0070	0.0053	0.0033	0.0026	0.0000

## CALIFORNIA HIGHWAY PATROL (Continued)

***Non-Industrial Death & Industrial Death***

- Rates vary by age and gender. See sample rates in table below.

***Industrial Disability & Non-Industrial Disability***

- Rates vary by age. See sample rates in table below.

<u>Attained Age</u>	<u>Non-Industrial Death</u>		<u>Non-Industrial Disability</u>	<u>Industrial Disability</u>	<u>Industrial Death</u>
	<u>Male</u>	<u>Female</u>	<u>Male and Female</u>	<u>Male and Female</u>	<u>Male and Female</u>
20	0.00047	0.00016	0.00014	0.00104	0.00003
25	0.00050	0.00026	0.00014	0.00196	0.00007
30	0.00053	0.00036	0.00014	0.00288	0.00010
35	0.00067	0.00046	0.00014	0.00380	0.00012
40	0.00087	0.00065	0.00014	0.00483	0.00013
45	0.00120	0.00093	0.00028	0.00575	0.00014
50	0.00176	0.00126	0.00028	0.00667	0.00015
55	0.00260	0.00176	0.00028	0.11890	0.00016
60	0.00395	0.00266	0.00028	0.11890	0.00017

## SCHOOLS

*Service Retirement*

- Rates vary by age and service. See sample rates in table below.

<b>Attained Age</b>	<b>Years of Service</b>						
	<b>5</b>	<b>10</b>	<b>15</b>	<b>20</b>	<b>25</b>	<b>30</b>	<b>35</b>
50	0.005	0.009	0.013	0.015	0.016	0.018	0.022
52	0.006	0.012	0.017	0.020	0.022	0.025	0.029
54	0.012	0.024	0.033	0.039	0.044	0.049	0.057
56	0.020	0.039	0.055	0.065	0.072	0.081	0.095
58	0.025	0.050	0.070	0.083	0.092	0.103	0.121
60	0.037	0.073	0.102	0.121	0.134	0.150	0.176
62	0.076	0.151	0.212	0.250	0.278	0.311	0.366
65	0.091	0.180	0.251	0.297	0.331	0.370	0.435
70	0.066	0.131	0.183	0.216	0.241	0.270	0.316
75	0.055	0.108	0.151	0.179	0.199	0.223	0.262

*Termination with Refund*

- Rates vary by entry age and service. See sample rates in table below.

<b>Duration of Service</b>	<b>Entry Age</b>				
	<b>20</b>	<b>25</b>	<b>30</b>	<b>35</b>	<b>40</b>
0	0.1730	0.1627	0.1525	0.1422	0.1319
1	0.1585	0.1482	0.1379	0.1277	0.1174
2	0.1440	0.1336	0.1234	0.1131	0.1028
3	0.1295	0.1192	0.1089	0.0987	0.0884
4	0.1149	0.1046	0.0944	0.0841	0.0738
5	0.0278	0.0249	0.0221	0.0192	0.0164
10	0.0172	0.0147	0.0122	0.0098	0.0074
15	0.0115	0.0094	0.0074	0.0053	0.0032
20	0.0073	0.0055	0.0038	0.0020	0.0002
25	0.0037	0.0023	0.0010	0.0002	0.0002
30	0.0015	0.0003	0.0002	0.0002	0.0002

## SCHOOLS (Continued)

**Termination with Vested Deferred Benefits**

- Rates vary by entry age and service. See sample rates in table below.

Duration of Service	Entry Age				
	20	25	30	35	40
5	0.0816	0.0733	0.0649	0.0566	0.0482
6	0.0782	0.0697	0.0613	0.0527	0.0443
7	0.0745	0.0660	0.0573	0.0487	0.0400
8	0.0708	0.0621	0.0534	0.0446	0.0359
9	0.0671	0.0582	0.0493	0.0404	0.0316
10	0.0629	0.0540	0.0450	0.0359	-
14	0.0558	0.0462	0.0367	0.0272	-
15	0.0537	0.0440	0.0344	-	-
19	0.0443	0.0344	0.0243	-	-
20	0.0420	0.0317	-	-	-
24	0.0319	0.0211	-	-	-
25	0.0291	-	-	-	-
29	0.0170	-	-	-	-
30	-	-	-	-	-

**Non-Industrial Death**

- Rates vary by age and gender. See sample rates in table below.

**Non-Industrial Disability**

- Rates vary by age and gender. See sample rates in table below.

Attained Age	Male		Female	
	Non-Industrial Death	Non-Industrial Disability	Non-Industrial Death	Non-Industrial Disability
20	0.00047	0.00010	0.00016	0.00010
25	0.00050	0.00010	0.00026	0.00010
30	0.00053	0.00018	0.00036	0.00010
35	0.00067	0.00064	0.00046	0.00038
40	0.00087	0.00136	0.00065	0.00094
45	0.00120	0.00283	0.00093	0.00171
50	0.00176	0.00439	0.00126	0.00299
55	0.00260	0.00489	0.00176	0.00335
60	0.00395	0.00425	0.00266	0.00239

## APPENDIX B:

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### SUMMARY OF PRINCIPAL PLAN PROVISIONS

STATE MISCELLANEOUS TIER 1	B-1
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STATE INDUSTRIAL TIER 1	B-14
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## Summary of Principal Plan Provisions

### STATE MISCELLANEOUS TIER 1

The following is a summary of the major plan provisions for the most representative group used in calculating the liabilities of this plan. Many of the statements in this summary are general in nature, and are intended to provide a summary of the complex Public Employees' Retirement Law. The law itself governs in all situations.

### RETIREMENT PROGRAM

#### Service Retirement

##### Eligibility

A CalPERS member becomes eligible for Service Retirement upon attainment of age 50 with at least 5 years of credited service (total service across all CalPERS employers, and with certain other Retirement Systems with which CalPERS has reciprocity agreements).

##### Benefit

The Service Retirement benefit calculated for service earned by this group of employees is a monthly allowance equal to the product of the *benefit factor*, *years of service*, and *final compensation*, where

- The *benefit factor* for this group of employees comes from the **2% at 55** benefit factor table. All new members hired on or after January 15, 2011 are subject to the **2% at 60** benefit factor table. The factor depends on the member's age at retirement. Listed below are the factors for retirement at whole year ages:

<b>Retirement</b>	<b>2% at 55</b>	<b>Retirement</b>	<b>2% at 60</b>
<u>Age</u>	<u>Factor</u>	<u>Age</u>	<u>Factor</u>
50	1.100%	50	1.092%
51	1.280%	51	1.156%
52	1.460%	52	1.224%
53	1.640%	53	1.296%
54	1.820%	54	1.376%
55	2.000%	55	1.460%
56	2.064%	56	1.552%
57	2.126%	57	1.650%
58	2.188%	58	1.758%
59	2.250%	59	1.874%
60	2.314%	60	2.000%
61	2.376%	61	2.134%
62	2.438%	62	2.272%
63 & Up	2.500%	63 & Up	2.418%

- The *years of service* is the amount credited by CalPERS to a member while he or she is employed in this group (or for other periods that are recognized under the employer's contract with CalPERS). For a member who has earned service with multiple CalPERS employers, the benefit from each employer is calculated separately according to each employer's contract, and then added together for the total allowance. Any unused sick leave accumulated at the time of retirement will be converted to credited service at the rate of 0.004 years of service for each day of sick leave.
- The *final compensation* is the monthly average of the member's highest 12 consecutive months' full-time equivalent monthly pay (no matter which CalPERS employer paid this compensation). For some new members hired after July 1, 2006 and for all new members hired on or after January 15, 2011, final compensation is based on the monthly average of the member's highest 36 consecutive months' full-time equivalent monthly pay. Employees may or may not be covered by Social Security. For employees covered by Social Security, the final compensation is offset by \$133.33 (or by one third if the final compensation is less than \$400).
- The Service Retirement benefit is not capped.

## **Vested Deferred Retirement**

### **Eligibility for Deferred Status**

A CalPERS member becomes eligible for a deferred vested retirement benefit when he or she leaves employment, keeps his or her contribution account balance on deposit with CalPERS, **and** has earned at least 5 years of credited service (total service across all CalPERS employers, and with certain other Retirement Systems with which CalPERS has reciprocity agreements).

### **Eligibility to Start Receiving Benefits**

The CalPERS member becomes eligible to receive the deferred retirement benefit upon satisfying the eligibility requirements for Deferred Status and upon attainment of age 50.

### **Benefit**

The vested deferred retirement benefit is the same as the Service Retirement benefit, where the benefit factor is based on the member's age at allowance commencement. For members who have earned service with multiple CalPERS employers, the benefit from each employer is calculated separately according to each employer's contract, and then added together for the total allowance.

## **Non-Industrial (Non-Job Related) Disability Retirement**

### **Eligibility**

A CalPERS member is eligible for Non-Industrial Disability Retirement if he or she becomes *disabled* and has at least 5 years of credited service (total service across all PERS employers, and with certain other Retirement Systems with which PERS has reciprocity agreements). There is no special age requirement. *Disabled* means the member is unable to perform his or her job because of an illness or injury which is expected to be permanent or to last indefinitely. The illness or injury does not have to

be job related. A CalPERS member must be actively working with any CalPERS employer at the time of disability in order to be eligible for this benefit.

### **Benefit**

The Non-Industrial Disability Retirement benefit is a monthly allowance equal to 1.8% of final compensation, multiplied by *service*, which is determined as follows:

- *service* is CalPERS credited service, for members with less than 10 years of service or greater than 18.518 years of service; or
- *service* is CalPERS credited service plus the additional number of years that the member would have worked until age 60, for members with at least 10 years but not more than 18.518 years of service. The maximum benefit in this case is 33 1/3% of Final Compensation.

Members who are eligible for a larger service retirement benefit may choose to receive that benefit in lieu of a disability benefit. Members eligible to retire, and who have attained the normal retirement age determined by their service retirement benefit formula, will receive the same dollar amount for disability retirement as that payable for service retirement. For members who have earned service with multiple CalPERS employers, the benefit attributed to each employer is the total disability allowance multiplied by the ratio of service with a particular employer to the total CalPERS service.

### **Post-Retirement Death Benefit**

#### **Lump Sum Payment**

Upon the death of a retiree, a one-time lump sum payment of \$2,000 will be made to the retiree's designated survivor(s), or to the retiree's estate.

### **Form of Payment for Retirement Allowance**

Generally, the retirement allowance is paid to the retiree in the form of an annuity for as long as he or she is alive. The retiree may choose to provide for a portion of his or her allowance to be paid to any designated beneficiary after the retiree's death. CalPERS provides for a variety of such benefit options, which the retiree pays for by taking a reduction in his or her retirement allowance. The larger the amount to be provided to the beneficiary is, and the younger the beneficiary is, the greater the reduction to the retiree's allowance.

For retirement allowances with respect to service earned by employment in this group, 25% of the retirement allowance will automatically be continued to certain statutory beneficiaries upon the death of the retiree, *without* a reduction in the retiree's allowance. This additional benefit is often referred to as *post retirement survivor allowance* (PRSA) or simply as *survivor continuance*.

In other words, 25% of the allowance, the *continuance portion*, is paid to the retiree for as long as he or she is alive, and that same amount is continued to the retiree's spouse (or if no eligible spouse, to unmarried children until they attain age 18; or, if no eligible children, to a qualifying dependent parent) for the rest of his or her lifetime.

The remaining 75% of the retirement allowance, which may be referred to as the *option portion* of the benefit, is paid to the retiree as an annuity for as long as he or she is alive. Or, the retiree may choose to provide for some of this *option portion* to be paid to **any** designated beneficiary after the retiree's death. CalPERS offers a variety of such benefit options, which the retiree pays for by taking a reduction to the option portion of his or her retirement allowance.

## **Pre-Retirement Death Benefits**

### **Group Term Life Insurance**

#### **Eligibility**

An employee's beneficiary (or estate) will receive the Group Term Life Insurance benefit if the member dies while actively employed. A CalPERS member who is no longer actively employed with **any** CalPERS employer is not eligible for this benefit. This benefit is in addition to other pre-retirement death benefits.

#### **Benefit**

The benefit is a lump sum payment of \$5,000 plus an additional amount equal to 50% of the annual compensation earned by the deceased member during the 12 months immediately preceding the member's death. The additional amount shall not be paid if the member is eligible for service retirement or the Alternate Death Benefit.

### **For members with less than 20 years of service credit and not age-eligible to retire:**

#### **Basic Death Benefit**

#### **Eligibility**

An employee's beneficiary (or estate) may receive the Basic Death benefit if the member dies while actively employed. A CalPERS member who is no longer actively employed with **any** CalPERS employer is not eligible for this benefit. A member's survivor who is eligible for any other pre-retirement death benefit described below may choose to receive that death benefit instead of this Basic Death benefit.

#### **Benefit**

The Basic Death Benefit is a lump sum in the amount of the member's accumulated contributions, where interest is currently credited at 7.5% per year. In addition, a lump sum in the amount of six months' salary shall be paid only if the member is eligible for service retirement or eligible for the Alternate Death Benefit. For purposes of this benefit, one month's salary is defined as the member's average monthly full-time rate of compensation during the 12 months preceding death.

### **For members with more than 20 years of service credit and not age-eligible to retire:**

In addition to the above pre-retirement death benefits, members are eligible for:

## **Alternate Death Benefit**

### **Eligibility**

This benefit may be received in lieu of the lump sum Basic Death Benefit if there is a surviving spouse or minor child of the member. The member must have died before reaching the minimum retirement age and must have been credited with at least 20 years of state service.

### **Benefit**

The Alternate Death Benefit is calculated as though the member were the minimum retirement age and elected an optional form of benefit that provided 100% continuance to the member's spouse. If the member did not have a spouse at the time of death, one-half of the formula benefit would be paid to the surviving child. If the benefit is payable to a surviving child, the benefit will be discontinued upon death or the attainment of age 18.

### **For members who are age-eligible to retire:**

In addition to the above pre-retirement death benefits, members are eligible for:

## **1957 Survivor Benefit**

### **Eligibility**

An employee's *eligible survivor(s)* may receive the 1957 Survivor benefit if the member dies while actively employed, has attained at least age 50, and has at least 5 years of credited service (total service across all CalPERS employers and with certain other Retirement Systems with which CalPERS has reciprocity agreements). A CalPERS member who is no longer actively employed with **any** CalPERS employer is not eligible for this benefit. An *eligible survivor* means the surviving spouse to whom the member was married at least one year before death or, if there is no eligible spouse, to the member's unmarried children under age 18. A member's survivor may choose this benefit in lieu of the Basic Death benefit or the Optional Settlement 2 Death benefit.

### **Benefit**

The 1957 Survivor benefit is a monthly allowance equal to one-half of the unmodified Service Retirement benefit that the member would have been entitled to receive if the member had retired on the date of his or her death. If the benefit is payable to the spouse, the benefit is discontinued upon the death of the spouse. If the benefit is payable to a dependent child, the benefit will be discontinued upon death or attainment of age 18, unless the child is disabled. There is a guarantee that the total amount paid will at least equal the Basic Death benefit.

## **Optional Settlement 2 Death Benefit**

### **Eligibility**

An employee's *eligible survivor* may receive the Optional Settlement 2 Death benefit if the member dies while actively employed, has attained at least age 50, and has at least 5 years of credited service (total service across all CalPERS employers and with certain other Retirement Systems with which CalPERS has reciprocity agreements). A CalPERS member who is no longer actively employed with **any** CalPERS employer is not eligible for this benefit. An *eligible survivor* means the surviving

spouse to whom the member was married at least one year before death. A member's survivor may choose this benefit in lieu of the Basic Death benefit or the 1957 Survivor benefit.

### **Benefit**

The Optional Settlement 2 Death benefit is a monthly allowance equal to the Service Retirement benefit that the member would have received had the member retired on the date of his or her death and elected Optional Settlement 2. (A retiree who elects Optional Settlement 2 receives an allowance that has been reduced so that it will continue to be paid after his or her death to a surviving beneficiary.) The allowance is payable as long as the surviving spouse lives. Upon the death of the surviving spouse, the benefit shall be continued to minor children. There is a guarantee that the total amount paid will at least equal the Basic Death Benefit.

### **Cost-of-Living Adjustments**

Beginning the second calendar year after the year of retirement, retirement and survivor allowances will be annually adjusted on a compound basis by 2%. However, the cumulative adjustment may not be greater than the cumulative change in the Consumer Price Index since the date of retirement.

### **Purchasing Power Protection Allowance (PPPA)**

Retirement and survivor allowances are protected against inflation by PPPA. PPPA benefits are cost-of-living adjustments that are intended to maintain an individual's allowance at 75% of the initial allowance at retirement adjusted for inflation since retirement. The PPPA benefit will be coordinated with other cost-of-living adjustments provided under the plan. The total annual outlay for PPPA is limited to 1.1% of accumulated member contributions. If this amount of member contributions were insufficient to provide for PPPA payments, the 75% target would be proportionately reduced.

### **Employee Contributions**

Each employee contributes toward his or her retirement based upon one of the following schedules. The employer may choose to "pick-up" these contributions for the employees.

For employees covered by Social Security, the monthly compensation breakpoint is \$513 and the contribution schedule is as follows:

Approximately 28% of the active population is subject to the following schedule:

- The percent contributed below the monthly compensation breakpoint is 0%.
- The percent contributed above the monthly compensation breakpoint is 5%.

Approximately 63% of the active population is subject to the following schedule:

- The percent contributed below the monthly compensation breakpoint is 0%.
- The percent contributed above the monthly compensation breakpoint is 8%.

Approximately 2% of the active population is subject to the following schedule:

The percent contributed below the monthly compensation breakpoint is 0%.  
The percent contributed above the monthly compensation breakpoint is 9%.

Approximately 7% of the active population is subject to the following schedule:

The percent contributed below the monthly compensation breakpoint is 0%.  
The percent contributed above the monthly compensation breakpoint is 10%.

There are a small number of employees not covered by Social Security in this plan. For those employees, the monthly compensation breakpoint is \$317 and contributions are as follows:

The percent contributed below the monthly compensation breakpoint is 0%.  
The percent contributed above the monthly compensation breakpoint is 1% greater than those covered by Social Security.

### **Refund of Employee Contributions**

If the member's service with the employer ends, and if the member does not satisfy the eligibility conditions for any of the retirement benefits above, the member may elect to receive a refund of his or her employee contributions, which are credited annually with 6% interest.

### **1959 SURVIVOR BENEFITS PROGRAM**

For these benefits, please refer to the 1959 Survivor Report.

## STATE MISCELLANEOUS TIER 2

The following is a summary of the major plan provisions applicable to State Miscellaneous Tier 2 members. Many of the statements in this summary are general in nature, and are intended to provide an easily understood summary of the complex Public Employees' Retirement Law. The law itself governs in all situations.

### RETIREMENT PROGRAM

#### Tier 2 Members electing Tier 1 benefits

State Miscellaneous Tier 2 members have the right to convert their Tier 2 service to Tier 1 service provided that they make up the shortfall in their accumulated contributions with interest. In this valuation, we have assumed that all State Miscellaneous Tier 2 members will elect to convert their Tier 2 service to Tier 1 service.

#### Service Retirement

##### Eligibility

A CalPERS member becomes eligible for Service Retirement upon attainment of age 55 with at least 10 years of credited service (total service across all CalPERS employers, and with certain other Retirement Systems with which CalPERS has reciprocity agreements).

##### Benefit

The Service Retirement benefit calculated for service earned by this group of employees is a monthly allowance equal to the product of the benefit factor, years of service, and final compensation, where

- The benefit factor for this group of employees comes from the 1.25% at 65 Tier 2 benefit factor table. The factor depends on the member's age at retirement. Listed below are the factors for retirement at whole year ages:

<b>Retirement Age</b>	<b>1.25% at 65 Tier 2 Factor</b>	<b>Retirement Age</b>	<b>1.25% at 65 Tier 2 Factor</b>
50	0.5000%	58	0.9000%
51	0.5500%	59	0.9500%
52	0.6000%	60	1.0000%
53	0.6500%	61	1.0500%
54	0.7000%	62	1.1000%
55	0.7500%	63	1.1500%
56	0.8000%	64	1.2000%
57	0.8500%	65 & Up	1.2500%

- The *years of service* is the amount credited by CalPERS to a member while he or she is employed in this group (or for other periods that are recognized under the employer's

contract with CalPERS). For a member who has earned service with multiple CalPERS employers, the benefit from each employer is calculated separately according to each employer's contract, and then added together for the total allowance. Any unused sick leave accumulated at the time of retirement will be converted to credited service at the rate of 0.004 years of service for each day of sick leave.

- The *final compensation* is the monthly average of the member's highest 12 consecutive months' full-time equivalent monthly pay (no matter which CalPERS employer paid this compensation). For some new members hired after July 1, 2006 and for all new members hired on or after January 15, 2011, final compensation is based on the monthly average of the member's highest 36 consecutive months' full-time equivalent monthly pay. Employees may or may not be covered by Social Security. The final compensation is not offset by a dollar amount.
- The Service Retirement benefit is not capped.

### **Vested Deferred Retirement**

#### **Eligibility for Deferred Status**

A CalPERS member becomes eligible for a deferred vested retirement benefit when he or she leaves employment, keeps his or her contribution account balance on deposit with CalPERS, and has earned at least 10 years of credited service (total service across all CalPERS employers, and with certain other Retirement Systems with which CalPERS has reciprocity agreements).

#### **Eligibility to Start Receiving Benefits**

The CalPERS member becomes eligible to receive the deferred retirement benefit upon satisfying the eligibility requirements for Deferred Status and upon attainment of age 55. Members with 5 years of service before January 1, 1985, are eligible at age 50.

#### **Benefit**

The vested deferred retirement benefit is the same as the Service Retirement benefit, where the benefit factor is based on the member's age at allowance commencement. For members who have earned service with multiple CalPERS employers, the benefit from each employer is calculated separately according to each employer's contract, and then added together for the total allowance.

### **Non-Industrial (Non-Job Related) Disability Retirement**

#### **Eligibility**

A CalPERS member is eligible for Non-Industrial Disability Retirement if he or she becomes disabled and has at least 10 years of credited service (total service across all PERS employers, and with certain other Retirement Systems with which PERS has reciprocity agreements). There is no special age requirement. Disabled means the member is unable to perform his or her job because of an illness or injury which is expected to be permanent or to last indefinitely. The illness or injury does not have to be job related. A CalPERS member must be actively working with any CalPERS employer at the time of disability in order to be eligible for this benefit. Members with 5 years of service before January 1, 1985 are also eligible.

**Benefit**

The Non-Industrial Disability Retirement benefit is a monthly allowance equal to 1.125% of final compensation, multiplied by service, which is determined as follows:

- service is CalPERS credited service, for members with less than 10 years of service or greater than 29.628 years of service; or
- service is CalPERS credited service plus the additional number of years that the member would have worked until age 65, for members with at least 10 years but not more than 29.628 years of service. The maximum benefit in this case is 33 1/3% of Final Compensation.

Members who are eligible for a larger service retirement benefit may choose to receive that benefit in lieu of a disability benefit. Members eligible to retire, and who have attained the normal retirement age determined by their service retirement benefit formula, will receive the same dollar amount for disability retirement as that payable for service retirement. For members who have earned service with multiple CalPERS employers, the benefit attributed to each employer is the total disability allowance multiplied by the ratio of service with a particular employer to the total CalPERS service.

**Post-Retirement Death Benefit****Lump Sum Payment**

Upon the death of a retiree, a one-time lump sum payment of \$2,000 will be made to the retiree's designated survivor(s), or to the retiree's estate.

**Form of Payment for Retirement Allowance**

Generally, the retirement allowance is paid to the retiree in the form of an annuity for as long as he or she is alive. The retiree may choose to provide for a portion of his or her allowance to be paid to any designated beneficiary after the retiree's death. CalPERS provides for a variety of such benefit options, which the retiree pays for by taking a reduction in his or her retirement allowance. The larger the amount to be provided to the beneficiary is, and the younger the beneficiary is, the greater the reduction to the retiree's allowance.

For retirement allowances with respect to service earned by employment in this group, 25% of the retirement allowance will automatically be continued to certain statutory beneficiaries upon the death of the retiree, without a reduction in the retiree's allowance. This additional benefit is often referred to as post retirement survivor allowance (PRSA) or simply as survivor continuance.

In other words, 25% of the allowance, the continuance portion, is paid to the retiree for as long as he or she is alive, and that same amount is continued to the retiree's spouse (or if no eligible spouse, to unmarried children until they attain age 18; or, if no eligible children, to a qualifying dependent parent) for the rest of his or her lifetime.

The remaining 75% of the retirement allowance, which may be referred to as the option portion of the benefit, is paid to the retiree as an annuity for as long as he or she is alive. Or, the retiree may choose to provide for some of this option portion to be paid to any designated beneficiary after the retiree's

death. CalPERS offers a variety of such benefit options, which the retiree pays for by taking a reduction to the option portion of his or her retirement allowance.

## **Pre-Retirement Death Benefits**

### **Group Term Life Insurance**

#### **Eligibility**

An employee's beneficiary (or estate) will receive the Group Term Life Insurance benefit if the member dies while actively employed. A CalPERS member who is no longer actively employed with **any** CalPERS employer is not eligible for this benefit. This benefit is in addition to other pre-retirement death benefits.

#### **Benefit**

The benefit is a lump sum payment of \$5,000 plus an additional amount equal to 50% of the annual compensation earned by the deceased member during the 12 months immediately preceding the member's death. The additional amount shall not be paid if the member is eligible for service retirement or the Alternate Death Benefit.

### **For members with less than 20 years of service credit and not age-eligible to retire:**

#### **Basic Death Benefit**

#### **Eligibility**

An employee's beneficiary (or estate) may receive the Basic Death benefit if the member dies while actively employed. A CalPERS member who is no longer actively employed with **any** CalPERS employer is not eligible for this benefit. A member's survivor who is eligible for any other pre-retirement death benefit described below may choose to receive that death benefit instead of this Basic Death benefit.

#### **Benefit**

The Basic Death Benefit is a lump sum in the amount of six months' salary which shall be paid only if the member is eligible for service retirement or eligible for the Alternate Death Benefit. For purposes of this benefit, one month's salary is defined as the member's average monthly full-time rate of compensation during the 12 months preceding death.

### **For members with more than 20 years of service credit and not age-eligible to retire:**

In addition to the above pre-retirement death benefits, members are eligible for:

#### **Alternate Death Benefit**

#### **Eligibility**

This benefit may be received in lieu of the lump sum Basic Death Benefit if there is a surviving spouse or minor child of the member. The member must have died before reaching the minimum retirement age and must have been credited with at least 20 years of state service.

**Benefit**

The Alternate Death Benefit is calculated as though the member were the minimum retirement age and elected an optional form of benefit that provided 100% continuance to the member's spouse. If the member did not have a spouse at the time of death, one-half of the formula benefit would be paid to the surviving child. If the benefit is payable to a surviving child, the benefit will be discontinued upon death or the attainment of age 18.

**For members who are age-eligible to retire:**

In addition to the above pre-retirement death benefits, members are eligible for:

**1957 Survivor Benefit****Eligibility**

An employee's *eligible survivor(s)* may receive the 1957 Survivor benefit if the member dies while actively employed, has attained at least age 50, and has at least 5 years of credited service (total service across all CalPERS employers and with certain other Retirement Systems with which CalPERS has reciprocity agreements). A CalPERS member who is no longer actively employed with **any** CalPERS employer is not eligible for this benefit. An *eligible survivor* means the surviving spouse to whom the member was married at least one year before death or, if there is no eligible spouse, to the member's unmarried children under age 18. A member's survivor may choose this benefit in lieu of the Basic Death benefit or the Optional Settlement 2 Death benefit.

**Benefit**

The 1957 Survivor benefit is a monthly allowance equal to one-half of the unmodified Service Retirement benefit that the member would have been entitled to receive if the member had retired on the date of his or her death. If the benefit is payable to the spouse, the benefit is discontinued upon the death of the spouse. If the benefit is payable to a dependent child, the benefit will be discontinued upon death or attainment of age 18, unless the child is disabled. There is a guarantee that the total amount paid will at least equal the Basic Death benefit.

**Optional Settlement 2 Death Benefit****Eligibility**

An employee's *eligible survivor* may receive the Optional Settlement 2 Death benefit if the member dies while actively employed and has attained retirement eligibility. A CalPERS member who is no longer actively employed with **any** CalPERS employer is not eligible for this benefit. An *eligible survivor* means the surviving spouse to whom the member was married at least one year before death. A member's survivor may choose this benefit in lieu of the Basic Death benefit or the 1957 Survivor benefit.

**Benefit**

The Optional Settlement 2 Death benefit is a monthly allowance equal to the Service Retirement benefit that the member would have received had the member retired on the date of his or her death and elected Optional Settlement 2. (A retiree who elects Optional Settlement 2 receives an allowance

that has been reduced so that it will continue to be paid after his or her death to a surviving beneficiary.) The allowance is payable as long as the surviving spouse lives. Upon the death of the surviving spouse, the benefit shall be continued to minor children. There is a guarantee that the total amount paid will at least equal the Basic Death Benefit.

### **Cost-of-Living Adjustments**

Beginning the second calendar year after the year of retirement, retirement and survivor allowances will be annually adjusted on a compound basis by 3%.

### **Purchasing Power Protection Allowance (PPPA)**

Retirement and survivor allowances are protected against inflation by PPPA. PPPA benefits are cost-of-living adjustments that are intended to maintain an individual's allowance at 75% of the initial allowance at retirement adjusted for inflation since retirement. The PPPA benefit will be coordinated with other cost-of-living adjustments provided under the plan. The total annual outlay for PPPA is limited to 1.1% of accumulated member contributions. If this amount of member contributions were insufficient to provide for PPPA payments, the 75% target would be proportionately reduced.

### **1959 SURVIVOR BENEFITS PROGRAM**

For these benefits, please refer to the 1959 Survivor Report.

## STATE INDUSTRIAL TIER 1

The following is a summary of the major plan provisions for the most representative group used in calculating the liabilities of the plan. Many of the statements in this summary are general in nature, and are intended to provide an easily understood summary of the complex Public Employees' Retirement Law. The law itself governs in all situations.

**RETIREMENT PROGRAM****Service Retirement****Eligibility**

A CalPERS member becomes eligible for Service Retirement upon attainment of age 50 with at least 5 years of credited service (total service across all CalPERS employers, and with certain other Retirement Systems with which CalPERS has reciprocity agreements).

**Benefit**

The Service Retirement benefit calculated for service earned by this group of employees is a monthly allowance equal to the product of the *benefit factor*, *years of service*, and *final compensation*, where

- The *benefit factor* for this group of employees comes from the **2% at 55** benefit factor table. All new members hired on or after January 15, 2011 are subject to the **2% at 60** benefit factor table. The factor depends on the member's age at retirement. Listed below are the factors for retirement at whole year ages:

<b>Retirement</b>	<b>2% at 55</b>	<b>Retirement</b>	<b>2% at 60</b>
<b><u>Age</u></b>	<b><u>Factor</u></b>	<b><u>Age</u></b>	<b><u>Factor</u></b>
50	1.100%	50	1.092%
51	1.280%	51	1.156%
52	1.460%	52	1.224%
53	1.640%	53	1.296%
54	1.820%	54	1.376%
55	2.000%	55	1.460%
56	2.064%	56	1.552%
57	2.126%	57	1.650%
58	2.188%	58	1.758%
59	2.250%	59	1.874%
60	2.314%	60	2.000%
61	2.376%	61	2.134%
62	2.438%	62	2.272%
63 & Up	2.500%	63 & Up	2.418%

- The years of service is the amount credited by CalPERS to a member while he or she is employed in this group (or for other periods that are recognized under the employer's contract with CalPERS). For a member who has earned service with multiple CalPERS employers, the benefit from each employer is calculated separately according to each

employer's contract, and then added together for the total allowance. Any unused sick leave accumulated at the time of retirement will be converted to credited service at the rate of 0.004 years of service for each day of sick leave.

- The *final compensation* is the monthly average of the member's highest 12 consecutive months' full-time equivalent monthly pay (no matter which CalPERS employer paid this compensation). For some new members hired after July 1, 2006 and for all new members hired on or after January 15, 2011, final compensation is based on the monthly average of the member's highest 36 consecutive months' full-time equivalent monthly pay. Employees may or may not be covered by Social Security. For employees covered by Social Security, the final compensation is offset by \$133.33 (or by one third if the final compensation is less than \$400).
- The Service Retirement benefit is not capped.

### **Vested Deferred Retirement**

#### **Eligibility for Deferred Status**

A CalPERS member becomes eligible for a deferred vested retirement benefit when he or she leaves employment, keeps his or her contribution account balance on deposit with CalPERS, and has earned at least 5 years of credited service (total service across all CalPERS employers, and with certain other Retirement Systems with which CalPERS has reciprocity agreements).

#### **Eligibility to Start Receiving Benefits**

The CalPERS member becomes eligible to receive the deferred retirement benefit upon satisfying the eligibility requirements for Deferred Status and upon attainment of age 50.

#### **Benefit**

The vested deferred retirement benefit is the same as the Service Retirement benefit, where the benefit factor is based on the member's age at allowance commencement. For members who have earned service with multiple CalPERS employers, the benefit from each employer is calculated separately according to each employer's contract, and then added together for the total allowance.

### **Non-Industrial (Non-Job Related) Disability Retirement**

#### **Eligibility**

A CalPERS member is eligible for Non-Industrial Disability Retirement if he or she becomes disabled and has at least 5 years of credited service (total service across all PERS employers, and with certain other Retirement Systems with which PERS has reciprocity agreements). There is no special age requirement. Disabled means the member is unable to perform his or her job because of an illness or injury which is expected to be permanent or to last indefinitely. The illness or injury does not have to be job related. A CalPERS member must be actively working with any CalPERS employer at the time of disability in order to be eligible for this benefit.

**Benefit**

The Non-Industrial Disability Retirement benefit is a monthly allowance equal to 1.8% of final compensation, multiplied by *service*, which is determined as follows:

- *service* is CalPERS credited service, for members with less than 10 years of service or greater than 18.518 years of service; or
- *service* is CalPERS credited service plus the additional number of years that the member would have worked until age 60, for members with at least 10 years but not more than 18.518 years of service. The maximum benefit in this case is 33 1/3% of Final Compensation.

Members who are eligible for a larger service retirement benefit may choose to receive that benefit in lieu of a disability benefit. Members eligible to retire, and who have attained the normal retirement age determined by their service retirement benefit formula, will receive the same dollar amount for disability retirement as that payable for service retirement. For members who have earned service with multiple CalPERS employers, the benefit attributed to each employer is the total disability allowance multiplied by the ratio of service with a particular employer to the total CalPERS service.

**Industrial (Job-Related) Disability Retirement****Eligibility**

An employee is eligible for Industrial Disability Retirement if he or she becomes *disabled* while working, where *disabled* means the member is unable to perform the duties of the job because of a work-related illness or injury which is expected to be permanent or to last indefinitely. A CalPERS member who has left active employment within this group is not eligible for this benefit, except to the extent described in the next paragraph.

**Benefit**

The Industrial Disability Retirement benefit is a monthly allowance equal to 50% of final compensation. However, if a member is eligible for Service Retirement and if the Service Retirement benefit is more than the Industrial Disability Retirement benefit, the member may choose to receive the larger benefit. For a CalPERS member not actively employed in this group who became disabled while employed by some other CalPERS employer, the benefit is a return or annuitization of the accumulated member contributions with respect to employment in this group.

**Post-Retirement Death Benefit****Lump Sum Payment**

Upon the death of a retiree, a one-time lump sum payment of \$2,000 will be made to the retiree's designated survivor(s), or to the retiree's estate.

**Form of Payment for Retirement Allowance**

Generally, the retirement allowance is paid to the retiree in the form of an annuity for as long as he or she is alive. The retiree may choose to provide for a portion of his or her allowance to be paid to any designated beneficiary after the retiree's death. CalPERS provides for a variety of such benefit options, which the retiree pays for by taking a reduction in his or her retirement allowance. The larger

the amount to be provided to the beneficiary is, and the younger the beneficiary is, the greater the reduction to the retiree's allowance.

For retirement allowances with respect to service earned by employment in this group, 25% of the retirement allowance will automatically be continued to certain statutory beneficiaries upon the death of the retiree, *without* a reduction in the retiree's allowance. This additional benefit is often referred to as *post retirement survivor allowance* (PRSA) or simply as *survivor continuance*.

In other words, 25% of the allowance, the *continuance portion*, is paid to the retiree for as long as he or she is alive, and that same amount is continued to the retiree's spouse (or if no eligible spouse, to unmarried children until they attain age 18; or, if no eligible children, to a qualifying dependent parent) for the rest of his or her lifetime.

The remaining 75% of the retirement allowance, which may be referred to as the *option portion* of the benefit, is paid to the retiree as an annuity for as long as he or she is alive. Or, the retiree may choose to provide for some of this *option portion* to be paid to **any** designated beneficiary after the retiree's death. CalPERS offers a variety of such benefit options, which the retiree pays for by taking a reduction to the option portion of his or her retirement allowance.

## **Pre-Retirement Death Benefits**

### **Group Term Life Insurance**

#### **Eligibility**

An employee's beneficiary (or estate) will receive the Group Term Life Insurance benefit if the member dies while actively employed. A CalPERS member who is no longer actively employed with **any** CalPERS employer is not eligible for this benefit. This benefit is in addition to other pre-retirement death benefits.

#### **Benefit**

The benefit is a lump sum payment of \$5,000 plus an additional amount equal to 50% of the annual compensation earned by the deceased member during the 12 months immediately preceding the member's death. The additional amount shall not be paid if the member is eligible for service retirement or the Alternate Death Benefit.

**For members with less than 20 years of service credit and not age-eligible to retire:**

### **Basic Death Benefit**

#### **Eligibility**

An employee's beneficiary (or estate) may receive the Basic Death benefit if the member dies while actively employed. A CalPERS member who is no longer actively employed with **any** CalPERS employer is not eligible for this benefit. A member's survivor who is eligible for any other pre-retirement death benefit described below may choose to receive that death benefit instead of this Basic Death benefit.

**Benefit**

The Basic Death Benefit is a lump sum in the amount of the member's accumulated contributions, where interest is currently credited at 7.5% per year. In addition, a lump sum in the amount of six months' salary shall be paid only if the member is eligible for service retirement or eligible for the Alternate Death Benefit. For purposes of this benefit, one month's salary is defined as the member's average monthly full-time rate of compensation during the 12 months preceding death.

**Special Death Benefit****Eligibility**

An employee's *eligible survivor(s)* may receive the Special Death benefit if the member dies while actively employed and the death is job-related. A CalPERS member who is no longer actively employed with **any** CalPERS employer is not eligible for this benefit. An *eligible survivor* means the surviving spouse to whom the member was married prior to the onset of the injury or illness that resulted in death. If there is no eligible spouse, an eligible survivor means the member's unmarried children under age 22. An eligible survivor who chooses to receive this benefit will not receive any other death benefit.

**Benefit**

The Special Death benefit is a monthly allowance equal to 50% of final compensation, and will be increased whenever the compensation paid to active employees is increased but ceasing to increase when the member would have attained age 50. The allowance is payable to the surviving spouse until death, at which time the allowance is continued to any unmarried children under age 22. There is a guarantee that the total amount paid will at least equal the Basic Death Benefit.

If the member's death is the result of an accident or injury caused by external violence or physical force incurred in the performance of the member's duty, and there are *eligible* surviving children (*eligible* means unmarried children under age 22) in addition to an eligible spouse, then an **additional monthly allowance** is paid equal to the following:

- if 1 eligible child: 12.5% of final compensation
- if 2 eligible children: 20.0% of final compensation
- if 3 or more eligible children: 25.0% of final compensation

**For members with more than 20 years of service credit and not age-eligible to retire:**

In addition to the above pre-retirement death benefits, members are eligible for:

**Alternate Death Benefit****Eligibility**

This benefit may be received in lieu of the lump sum Basic Death Benefit if there is a surviving spouse or minor child of the member. The member must have died before reaching the minimum retirement age and must have been credited with at least 20 years of state service.

**Benefit**

The Alternate Death Benefit is calculated as though the member were the minimum retirement age and elected an optional form of benefit that provided 100% continuance to the member's spouse. If the member did not have a spouse at the time of death, one-half of the formula benefit would be paid to the surviving child. If the benefit is payable to a surviving child, the benefit will be discontinued upon death or the attainment of age 18.

**For members who are age-eligible to retire:**

In addition to the above pre-retirement death benefits, members are eligible for:

**1957 Survivor Benefit****Eligibility**

An employee's *eligible survivor(s)* may receive the 1957 Survivor benefit if the member dies while actively employed, has attained at least age 50, and has at least 5 years of credited service (total service across all CalPERS employers and with certain other Retirement Systems with which CalPERS has reciprocity agreements). A CalPERS member who is no longer actively employed with **any** CalPERS employer is not eligible for this benefit. An *eligible survivor* means the surviving spouse to whom the member was married at least one year before death or, if there is no eligible spouse, to the member's unmarried children under age 18. A member's survivor may choose this benefit in lieu of the Basic Death benefit or the Special Death benefit.

**Benefit**

The 1957 Survivor benefit is a monthly allowance equal to one-half of the unmodified Service Retirement benefit that the member would have been entitled to receive if the member had retired on the date of his or her death. If the benefit is payable to the spouse, the benefit is discontinued upon the death of the spouse. If the benefit is payable to a dependent child, the benefit will be discontinued upon death or attainment of age 18, unless the child is disabled. There is a guarantee that the total amount paid will at least equal the Basic Death benefit.

**Optional Settlement 2 Death Benefit****Eligibility**

An employee's *eligible survivor* may receive the Optional Settlement 2 Death benefit if the member dies while actively employed, has attained at least age 50, and has at least 5 years of credited service (total service across all CalPERS employers and with certain other Retirement Systems with which CalPERS has reciprocity agreements). A CalPERS member who is no longer actively employed with **any** CalPERS employer is not eligible for this benefit. An *eligible survivor* means the surviving spouse to whom the member was married at least one year before death. A member's survivor may choose this benefit in lieu of the Basic Death benefit or the 1957 Survivor benefit.

**Benefit**

The Optional Settlement 2 Death benefit is a monthly allowance equal to the Service Retirement benefit that the member would have received had the member retired on the date of his or her death and elected Optional Settlement 2. (A retiree who elects Optional Settlement 2 receives an allowance

that has been reduced so that it will continue to be paid after his or her death to a surviving beneficiary.) The allowance is payable as long as the surviving spouse lives. Upon the death of the surviving spouse, the benefit shall be continued to minor children. There is a guarantee that the total amount paid will at least equal the Basic Death Benefit.

### **Cost-of-Living Adjustments**

Beginning the second calendar year after the year of retirement, retirement and survivor allowances will be annually adjusted on a compound basis by 2%. However, the cumulative adjustment may not be greater than the cumulative change in the Consumer Price Index since the date of retirement.

### **Purchasing Power Protection Allowance (PPPA)**

Retirement and survivor allowances are protected against inflation by PPPA. PPPA benefits are cost-of-living adjustments that are intended to maintain an individual's allowance at 75% of the initial allowance at retirement adjusted for inflation since retirement. The PPPA benefit will be coordinated with other cost-of-living adjustments provided under the plan. The total annual outlay for PPPA is limited to 1.1% of accumulated member contributions. If this amount of member contributions were insufficient to provide for PPPA payments, the 75% target would be proportionately reduced.

### **Employee Contributions**

Each employee contributes toward his or her retirement based upon one of the following schedules. The employer may choose to “pick-up” these contributions for the employees.

For employees covered by Social Security, the monthly compensation breakpoint is \$513 and the contribution schedule is as follows:

Approximately 97% of the active population is subject to the following schedule:

The percent contributed below the monthly compensation breakpoint is 0%.  
The percent contributed above the monthly compensation breakpoint is 8%.

Approximately 1% of the active population is subject to the following schedule:

The percent contributed below the monthly compensation breakpoint is 0%.  
The percent contributed above the monthly compensation breakpoint is 9%.

Approximately 2% of the active population is subject to the following schedule:

The percent contributed below the monthly compensation breakpoint is 0%.  
The percent contributed above the monthly compensation breakpoint is 10%.

There are a small number of employees not covered by Social Security in this plan. For those employees, the monthly compensation breakpoint is \$317 and contributions are as follows:

The percent contributed below the monthly compensation breakpoint is 0%.

The percent contributed above the monthly compensation breakpoint is 1% greater than those covered by Social Security.

### **Refund of Employee Contributions**

If the member's service with the employer ends, and if the member does not satisfy the eligibility conditions for any of the retirement benefits above, the member may elect to receive a refund of his or her employee contributions, which are credited annually with 6% interest.

### **1959 SURVIVOR BENEFITS PROGRAM**

For these benefits, please refer to the 1959 Survivor Report

## STATE INDUSTRIAL TIER 2

The following is a summary of the major plan provisions applicable to State Industrial Tier 2 Members. Many of the statements in this summary are general in nature, and are intended to provide an easily understood summary of the complex Public Employees' Retirement Law. The law itself governs in all situations.

### RETIREMENT PROGRAM

#### Tier 2 Members electing Tier 1 benefits

State Industrial Tier 2 members have the right to convert their Tier 2 service to Tier 1 service provided that they make up the shortfall in their accumulated contributions with interest. In this valuation, we have assumed that all State Industrial Tier 2 members will elect to convert their Tier 2 service to Tier 1 service.

#### Service Retirement

##### Eligibility

A CalPERS member becomes eligible for Service Retirement upon attainment of age 55 with at least 10 years of credited service (total service across all CalPERS employers, and with certain other Retirement Systems with which CalPERS has reciprocity agreements). Members with 5 years of service before January 1, 1985 are also eligible.

##### Benefit

The Service Retirement benefit calculated for service earned by this group of employees is a monthly allowance equal to the product of the *benefit factor*, *years of service*, and *final compensation*, where

- The *benefit factor* for this group of employees comes from the **1.25% at 65 Tier 2** benefit factor table. The factor depends on the member's age at retirement. Listed below are the factors for retirement at whole year ages:

<b>1.25% at 65</b>		<b>1.25% at 65</b>	
<b>Retirement</b>	<b>Tier 2</b>	<b>Retirement</b>	<b>Tier 2</b>
<b><u>Age</u></b>	<b><u>Factor</u></b>	<b><u>Age</u></b>	<b><u>Factor</u></b>
50	0.5000%	58	0.9000%
51	0.5500%	59	0.9500%
52	0.6000%	60	1.0000%
53	0.6500%	61	1.0500%
54	0.7000%	62	1.1000%
55	0.7500%	63	1.1500%
56	0.8000%	64	1.2000%
57	0.8500%	65 & Up	1.2500%

- The *years of service* is the amount credited by CalPERS to a member while he or she is employed in this group (or for other periods that are recognized under the employer's

contract with CalPERS). For a member who has earned service with multiple CalPERS employers, the benefit from each employer is calculated separately according to each employer's contract, and then added together for the total allowance. Any unused sick leave accumulated at the time of retirement will be converted to credited service at the rate of 0.004 years of service for each day of sick leave.

- The *final compensation* is the monthly average of the member's highest 12 consecutive months' full-time equivalent monthly pay (no matter which CalPERS employer paid this compensation). For some new members hired after July 1, 2006 and for all new members hired on or after January 15, 2011, final compensation is based on the monthly average of the member's highest 36 consecutive months' full-time equivalent monthly pay. The employees in this group may or may not be covered by Social Security. The final compensation is not offset by a dollar amount.
- The Service Retirement benefit is not capped.

### **Vested Deferred Retirement**

#### **Eligibility for Deferred Status**

A CalPERS member becomes eligible for a deferred vested retirement benefit when he or she leaves employment, keeps his or her contribution account balance on deposit with CalPERS, **and** has earned at least 10 years of credited service (total service across all CalPERS employers, and with certain other Retirement Systems with which CalPERS has reciprocity agreements). Members with 5 years of service before January 1, 1985 are also eligible.

#### **Eligibility to Start Receiving Benefits**

The CalPERS member becomes eligible to receive the deferred retirement benefit upon satisfying the eligibility requirements for Deferred Status and upon attainment of age 55.

#### **Benefit**

The vested deferred retirement benefit is the same as the Service Retirement benefit, where the benefit factor is based on the member's age at allowance commencement. For members who have earned service with multiple CalPERS employers, the benefit from each employer is calculated separately according to each employer's contract, and then added together for the total allowance.

### **Non-Industrial (Non-Job Related) Disability Retirement**

#### **Eligibility**

A CalPERS member is eligible for Non-Industrial Disability Retirement if he or she becomes *disabled* and has at least 10 years of credited service (total service across all PERS employers, and with certain other Retirement Systems with which PERS has reciprocity agreements). There is no special age requirement. *Disabled* means the member is unable to perform his or her job because of an illness or injury which is expected to be permanent or to last indefinitely. The illness or injury does not have to be job related. A CalPERS member must be actively working with any CalPERS employer at the time of disability in order to be eligible for this benefit. Members with 5 years of service before January 1, 1985 are also eligible.

**Benefit**

The Non-Industrial Disability Retirement benefit is a monthly allowance equal to 1.125% of final compensation, multiplied by *service*, which is determined as follows:

- *service* is CalPERS credited service, for members with less than 10 years of service or greater than 29.628 years of service; or
- *service* is CalPERS credited service plus the additional number of years that the member would have worked until age 65, for members with at least 10 years but not more than 29.628 years of service. The maximum benefit in this case is 33 1/3% of Final Compensation.

Members who are eligible for a larger service retirement benefit may choose to receive that benefit in lieu of a disability benefit. Members eligible to retire, and who have attained the normal retirement age determined by their service retirement benefit formula, will receive the same dollar amount for disability retirement as that payable for service retirement. For members who have earned service with multiple CalPERS employers, the benefit attributed to each employer is the total disability allowance multiplied by the ratio of service with a particular employer to the total CalPERS service.

**Industrial (Job-Related) Disability Retirement****Eligibility**

An employee is eligible for Industrial Disability Retirement if he or she becomes *disabled* while working, where *disabled* means the member is unable to perform the duties of the job because of a work-related illness or injury which is expected to be permanent or to last indefinitely. A CalPERS member who has left active employment within this group is not eligible for this benefit, except to the extent described in the next paragraph.

**Benefit**

The Industrial Disability Retirement benefit is a monthly allowance equal to 50% of final compensation. However, if a member is eligible for Service Retirement and if the Service Retirement benefit is more than the Industrial Disability Retirement benefit, the member may choose to receive the larger benefit. For a CalPERS member not actively employed in this group who became disabled while employed by some other CalPERS employer, the benefit is a return or annuitization of the accumulated member contributions with respect to employment in this group.

**Post-Retirement Death Benefit****Lump Sum Payment**

Upon the death of a retiree, a one-time lump sum payment of \$2,000 will be made to the retiree's designated survivor(s), or to the retiree's estate.

**Form of Payment for Retirement Allowance**

Generally, the retirement allowance is paid to the retiree in the form of an annuity for as long as he or she is alive. The retiree may choose to provide for a portion of his or her allowance to be paid to any designated beneficiary after the retiree's death. CalPERS provides for a variety of such benefit options, which the retiree pays for by taking a reduction in his or her retirement allowance. The larger

the amount to be provided to the beneficiary is, and the younger the beneficiary is, the greater the reduction to the retiree's allowance.

For retirement allowances with respect to service earned by employment in this group, 25% of the retirement allowance will automatically be continued to certain statutory beneficiaries upon the death of the retiree, *without* a reduction in the retiree's allowance. This additional benefit is often referred to as *post retirement survivor allowance* (PRSA) or simply as *survivor continuance*.

In other words, 25% of the allowance, the *continuance portion*, is paid to the retiree for as long as he or she is alive, and that same amount is continued to the retiree's spouse (or if no eligible spouse, to unmarried children until they attain age 18; or, if no eligible children, to a qualifying dependent parent) for the rest of his or her lifetime.

The remaining 75% of the retirement allowance, which may be referred to as the *option portion* of the benefit, is paid to the retiree as an annuity for as long as he or she is alive. Or, the retiree may choose to provide for some of this *option portion* to be paid to **any** designated beneficiary after the retiree's death. CalPERS offers a variety of such benefit options, which the retiree pays for by taking a reduction to the option portion of his or her retirement allowance.

## **Pre-Retirement Death Benefits**

### **Group Term Life Insurance**

#### **Eligibility**

An employee's beneficiary (or estate) will receive the Group Term Life Insurance benefit if the member dies while actively employed. A CalPERS member who is no longer actively employed with **any** CalPERS employer is not eligible for this benefit. This benefit is in addition to other pre-retirement death benefits.

#### **Benefit**

The benefit is a lump sum payment of \$5,000 plus an additional amount equal to 50% of the annual compensation earned by the deceased member during the 12 months immediately preceding the member's death. The additional amount shall not be paid if the member is eligible for service retirement or the Alternate Death Benefit.

**For members with less than 20 years of service credit and not age-eligible to retire:**

### **Basic Death Benefit**

#### **Eligibility**

An employee's beneficiary (or estate) may receive the Basic Death benefit if the member dies while actively employed. A CalPERS member who is no longer actively employed with **any** CalPERS employer is not eligible for this benefit. A member's survivor who is eligible for any other pre-retirement death benefit described below may choose to receive that death benefit instead of this Basic Death benefit.

**Benefit**

The Basic Death Benefit is a lump sum in the amount of six months' salary which shall be paid only if the member is eligible for service retirement or eligible for the Alternate Death Benefit. For purposes of this benefit, one month's salary is defined as the member's average monthly full-time rate of compensation during the 12 months preceding death.

**Special Death Benefit****Eligibility**

An employee's *eligible survivor(s)* may receive the Special Death benefit if the member dies while actively employed and the death is job-related. A CalPERS member who is no longer actively employed with **any** CalPERS employer is not eligible for this benefit. An *eligible survivor* means the surviving spouse to whom the member was married prior to the onset of the injury or illness that resulted in death. If there is no eligible spouse, an eligible survivor means the member's unmarried children under age 22. An eligible survivor who chooses to receive this benefit will not receive any other death benefit.

**Benefit**

The Special Death benefit is a monthly allowance equal to 50% of final compensation, and will be increased whenever the compensation paid to active employees is increased but ceasing to increase when the member would have attained age 50. The allowance is payable to the surviving spouse until death, at which time the allowance is continued to any unmarried children under age 22. There is a guarantee that the total amount paid will at least equal the Basic Death Benefit.

If the member's death is the result of an accident or injury caused by external violence or physical force incurred in the performance of the member's duty, and there are *eligible* surviving children (*eligible* means unmarried children under age 22) in addition to an eligible spouse, then an **additional monthly allowance** is paid equal to the following:

- if 1 eligible child: 12.5% of final compensation
- if 2 eligible children: 20.0% of final compensation
- if 3 or more eligible children: 25.0% of final compensation

**For members with more than 20 years of service credit and not age-eligible to retire:**

In addition to the above pre-retirement death benefits, members are eligible for:

**Alternate Death Benefit****Eligibility**

This benefit may be received in lieu of the lump sum Basic Death Benefit if there is a surviving spouse or minor child of the member. The member must have died before reaching the minimum retirement age and must have been credited with at least 20 years of state service.

**Benefit**

The Alternate Death Benefit is calculated as though the member were the minimum retirement age and elected an optional form of benefit that provided 100% continuance to the member's spouse. If the member did not have a spouse at the time of death, one-half of the formula benefit would be paid to the surviving child. If the benefit is payable to a surviving child, the benefit will be discontinued upon death or the attainment of age 18.

**For members who are age-eligible to retire:**

In addition to the above pre-retirement death benefits, members are eligible for:

**1957 Survivor Benefit****Eligibility**

An employee's *eligible survivor(s)* may receive the 1957 Survivor benefit if the member dies while actively employed, has attained at least age 50, and has at least 5 years of credited service (total service across all CalPERS employers and with certain other Retirement Systems with which CalPERS has reciprocity agreements). A CalPERS member who is no longer actively employed with **any** CalPERS employer is not eligible for this benefit. An *eligible survivor* means the surviving spouse to whom the member was married at least one year before death or, if there is no eligible spouse, to the member's unmarried children under age 18. A member's survivor may choose this benefit in lieu of the Basic Death benefit or the Special Death benefit.

**Benefit**

The 1957 Survivor benefit is a monthly allowance equal to one-half of the unmodified Service Retirement benefit that the member would have been entitled to receive if the member had retired on the date of his or her death. If the benefit is payable to the spouse, the benefit is discontinued upon the death of the spouse. If the benefit is payable to a dependent child, the benefit will be discontinued upon death or attainment of age 18, unless the child is disabled. There is a guarantee that the total amount paid will at least equal the Basic Death benefit.

**Optional Settlement 2 Death Benefit****Eligibility**

An employee's *eligible survivor* may receive the Optional Settlement 2 Death benefit if the member dies while actively employed and has attained retirement eligibility. A CalPERS member who is no longer actively employed with **any** CalPERS employer is not eligible for this benefit. An *eligible survivor* means the surviving spouse to whom the member was married at least one year before death. A member's survivor may choose this benefit in lieu of the Basic Death benefit or the 1957 Survivor benefit.

**Benefit**

The Optional Settlement 2 Death benefit is a monthly allowance equal to the Service Retirement benefit that the member would have received had the member retired on the date of his or her death and elected Optional Settlement 2. (A retiree who elects Optional Settlement 2 receives an allowance that has been reduced so that it will continue to be paid after his or her death to a surviving

beneficiary.) The allowance is payable as long as the surviving spouse lives. Upon the death of the surviving spouse, the benefit shall be continued to minor children. There is a guarantee that the total amount paid will at least equal the Basic Death Benefit.

### **Cost-of-Living Adjustments**

Beginning the second calendar year after the year of retirement, retirement and survivor allowances will be annually adjusted on a compound basis by 3%.

### **Purchasing Power Protection Allowance (PPPA)**

Retirement and survivor allowances are protected against inflation by PPPA. PPPA benefits are cost-of-living adjustments that are intended to maintain an individual's allowance at 75% of the initial allowance at retirement adjusted for inflation since retirement. The PPPA benefit will be coordinated with other cost-of-living adjustments provided under the plan. The total annual outlay for PPPA is limited to 1.1% of accumulated member contributions. If this amount of member contributions were insufficient to provide for PPPA payments, the 75% target would be proportionately reduced.

### **1959 SURVIVOR BENEFITS PROGRAM**

For these benefits, please refer to the 1959 Survivor Report

## STATE SAFETY

The following is a summary of the major plan provisions for the most representative group used in calculating the liabilities of the plan. Many of the statements in this summary are general in nature, and are intended to provide an easily understood summary of the complex Public Employees' Retirement Law. The law itself governs in all situations.

### RETIREMENT PROGRAM

#### Service Retirement

##### Eligibility

A CalPERS member becomes eligible for Service Retirement upon attainment of age 50 with at least 5 years of credited service (total service across all CalPERS employers, and with certain other Retirement Systems with which CalPERS has reciprocity agreements).

##### Benefit

The Service Retirement benefit calculated for service earned by this group of employees is a monthly allowance equal to the product of the *benefit factor*, *years of service*, and *final compensation*, where

- The *benefit factor* for this group of employees comes from the **2.5% at 55 Safety** benefit factor table. All new members hired on or after January 15, 2011 are subject to either the **2% at 55 Safety** or the **2.5% at 60 Safety** benefit factor table. The factor depends on the member's age at retirement. Listed below are the factors for retirement at whole year ages:

<b>Retirement Age</b>	<b>2.5% at 55 Safety Factor</b>	<b>Retirement Age</b>	<b>2% at 55 Safety Factor</b>	<b>Retirement Age</b>	<b>2.5% at 60 Safety Factor</b>
50	1.700%	50	1.426%	50	1.426%
51	1.800%	51	1.522%	51	1.522%
52	1.900%	52	1.628%	52	1.628%
53	2.000%	53	1.742%	53	1.742%
54	2.250%	54	1.866%	54	1.866%
55 & Up	2.500%	55 & Up	2.000%	55	2.000%
				56	2.100%
				57	2.200%
				58	2.300%
				59	2.400%
				60 & Up	2.500%

- The *years of service* is the amount credited by CalPERS to a member while he or she is employed in this group (or for other periods that are recognized under the employer's contract with CalPERS). For a member who has earned service with multiple CalPERS employers, the benefit from each employer is calculated separately according to each employer's contract, and then added together for the total allowance. Any unused sick

leave accumulated at the time of retirement will be converted to credited service at the rate of 0.004 years of service for each day of sick leave.

- The *final compensation* is the monthly average of the member's highest 12 consecutive months' full-time equivalent monthly pay (no matter which CalPERS employer paid this compensation). For some new members hired after July 1, 2006 and for all new members hired on or after January 15, 2011, final compensation is based on the monthly average of the member's highest 36 consecutive months' full-time equivalent monthly pay. The employees in this group are not covered by Social Security. The final compensation is not offset by a dollar amount.
- The Service Retirement benefit is capped at 80% of final compensation.

### **Vested Deferred Retirement**

#### **Eligibility for Deferred Status**

A CalPERS member becomes eligible for a deferred vested retirement benefit when he or she leaves employment, keeps his or her contribution account balance on deposit with CalPERS, **and** has earned at least 5 years of credited service (total service across all CalPERS employers, and with certain other Retirement Systems with which CalPERS has reciprocity agreements).

#### **Eligibility to Start Receiving Benefits**

The CalPERS member becomes eligible to receive the deferred retirement benefit upon satisfying the eligibility requirements for Deferred Status and upon attainment of age 50.

#### **Benefit**

The vested deferred retirement benefit is the same as the Service Retirement benefit, where the benefit factor is based on the member's age at allowance commencement. For members who have earned service with multiple CalPERS employers, the benefit from each employer is calculated separately according to each employer's contract, and then added together for the total allowance.

### **Non-Industrial (Non-Job Related) Disability Retirement**

#### **Eligibility**

A CalPERS member is eligible for Non-Industrial Disability Retirement if he or she becomes *disabled* and has at least 5 years of credited service (total service across all PERS employers, and with certain other Retirement Systems with which PERS has reciprocity agreements). There is no special age requirement. *Disabled* means the member is unable to perform his or her job because of an illness or injury which is expected to be permanent or to last indefinitely. The illness or injury does not have to be job related. A CalPERS member must be actively working with any CalPERS employer at the time of disability in order to be eligible for this benefit.

#### **Benefit**

The Non-Industrial Disability Retirement benefit is a monthly allowance equal to 1.8% of final compensation, multiplied by *service*, which is determined as follows:

- *service* is CalPERS credited service, for members with less than 10 years of service or greater than 18.518 years of service; or
- *service* is CalPERS credited service plus the additional number of years that the member would have worked until age 60, for members with at least 10 years but not more than 18.518 years of service. The maximum benefit in this case is 33 1/3% of Final Compensation.

Members who are eligible for a larger service retirement benefit may choose to receive that benefit in lieu of a disability benefit. Members eligible to retire, and who have attained the normal retirement age determined by their service retirement benefit formula, will receive the same dollar amount for disability retirement as that payable for service retirement. For members who have earned service with multiple CalPERS employers, the benefit attributed to each employer is the total disability allowance multiplied by the ratio of service with a particular employer to the total CalPERS service.

### **Industrial (Job-Related) Disability Retirement**

#### **Eligibility**

An employee is eligible for Industrial Disability Retirement if he or she becomes *disabled* while working, where *disabled* means the member is unable to perform the duties of the job because of a work-related illness or injury which is expected to be permanent or to last indefinitely. A CalPERS member who has left active employment within this group is not eligible for this benefit, except to the extent described in the next paragraph.

#### **Benefit**

The Industrial Disability Retirement benefit is a monthly allowance equal to 50% of final compensation. However, if a member is eligible for Service Retirement and if the Service Retirement benefit is more than the Industrial Disability Retirement benefit, the member may choose to receive the larger benefit. For a CalPERS member not actively employed in this group who became disabled while employed by some other CalPERS employer, the benefit is a return or annuitization of the accumulated member contributions with respect to employment in this group.

### **Post-Retirement Death Benefit**

#### **Lump Sum Payment**

Upon the death of a retiree, a one-time lump sum payment of \$2,000 will be made to the retiree's designated survivor(s), or to the retiree's estate.

### **Form of Payment for Retirement Allowance**

Generally, the retirement allowance is paid to the retiree in the form of an annuity for as long as he or she is alive. The retiree may choose to provide for a portion of his or her allowance to be paid to any designated beneficiary after the retiree's death. CalPERS provides for a variety of such benefit options, which the retiree pays for by taking a reduction in his or her retirement allowance. The larger the amount to be provided to the beneficiary is, and the younger the beneficiary is, the greater the reduction to the retiree's allowance.

For retirement allowances with respect to service earned by employment in this group, 50% of the retirement allowance will automatically be continued to certain statutory beneficiaries upon the death of the retiree, *without* a reduction in the retiree's allowance. This additional benefit is often referred to as *post retirement survivor allowance* (PRSA) or simply as *survivor continuance*.

In other words, 50% of the allowance, the *continuance portion*, is paid to the retiree for as long as he or she is alive, and that same amount is continued to the retiree's spouse (or if no eligible spouse, to unmarried children until they attain age 18; or, if no eligible children, to a qualifying dependent parent) for the rest of his or her lifetime.

The remaining 50% of the retirement allowance, which may be referred to as the *option portion* of the benefit, is paid to the retiree as an annuity for as long as he or she is alive. Or, the retiree may choose to provide for some of this *option portion* to be paid to **any** designated beneficiary after the retiree's death. CalPERS offers a variety of such benefit options, which the retiree pays for by taking a reduction to the option portion of his or her retirement allowance.

## **Pre-Retirement Death Benefits**

### **Group Term Life Insurance**

#### **Eligibility**

An employee's beneficiary (or estate) will receive the Group Term Life Insurance benefit if the member dies while actively employed. A CalPERS member who is no longer actively employed with **any** CalPERS employer is not eligible for this benefit. This benefit is in addition to other pre-retirement death benefits.

#### **Benefit**

The benefit is a lump sum payment of \$5,000 plus an additional amount equal to 50% of the annual compensation earned by the deceased member during the 12 months immediately preceding the member's death. The additional amount shall not be paid if the member is eligible for service retirement or the Alternate Death Benefit.

**For members with less than 20 years of service credit and not age-eligible to retire:**

### **Basic Death Benefit**

#### **Eligibility**

An employee's beneficiary (or estate) may receive the Basic Death benefit if the member dies while actively employed. A CalPERS member who is no longer actively employed with **any** CalPERS employer is not eligible for this benefit. A member's survivor who is eligible for any other pre-retirement death benefit described below may choose to receive that death benefit instead of this Basic Death benefit.

#### **Benefit**

The Basic Death Benefit is a lump sum in the amount of the member's accumulated contributions, where interest is currently credited at 7.5% per year. In addition, a lump sum in the amount of six months' salary shall be paid only if the member is eligible for service retirement or eligible for the

Alternate Death Benefit. For purposes of this benefit, one month's salary is defined as the member's average monthly full-time rate of compensation during the 12 months preceding death.

### Special Death Benefit

#### Eligibility

An employee's *eligible survivor(s)* may receive the Special Death benefit if the member dies while actively employed and the death is job-related. A CalPERS member who is no longer actively employed with **any** CalPERS employer is not eligible for this benefit. An *eligible survivor* means the surviving spouse to whom the member was married prior to the onset of the injury or illness that resulted in death. If there is no eligible spouse, an eligible survivor means the member's unmarried children under age 22. An eligible survivor who chooses to receive this benefit will not receive any other death benefit.

#### Benefit

The Special Death benefit is a monthly allowance equal to 50% of final compensation, and will be increased whenever the compensation paid to active employees is increased but ceasing to increase when the member would have attained age 50. The allowance is payable to the surviving spouse until death, at which time the allowance is continued to any unmarried children under age 22. There is a guarantee that the total amount paid will at least equal the Basic Death Benefit.

If the member's death is the result of an accident or injury caused by external violence or physical force incurred in the performance of the member's duty, and there are *eligible* surviving children (*eligible* means unmarried children under age 22) in addition to an eligible spouse, then an **additional monthly allowance** is paid equal to the following:

- if 1 eligible child: 12.5% of final compensation
- if 2 eligible children: 20.0% of final compensation
- if 3 or more eligible children: 25.0% of final compensation

### For members with more than 20 years of service credit and not age-eligible to retire:

In addition to the above pre-retirement death benefits, members are eligible for:

### Alternate Death Benefit

#### Eligibility

This benefit may be received in lieu of the lump sum Basic Death Benefit if there is a surviving spouse or minor child of the member. The member must have died before reaching the minimum retirement age and must have been credited with at least 20 years of state service.

#### Benefit

The Alternate Death Benefit is calculated as though the member were the minimum retirement age and elected an optional form of benefit that provided 100% continuance to the member's spouse. If the member did not have a spouse at the time of death, one-half of the formula benefit would be paid

to the surviving child. If the benefit is payable to a surviving child, the benefit will be discontinued upon death or the attainment of age 18.

**For members who are age-eligible to retire:**

In addition to the above pre-retirement death benefits, members are eligible for:

**1957 Survivor Benefit**

**Eligibility**

An employee's *eligible survivor(s)* may receive the 1957 Survivor benefit if the member dies while actively employed, has attained at least age 50, and has at least 5 years of credited service (total service across all CalPERS employers and with certain other Retirement Systems with which CalPERS has reciprocity agreements). A CalPERS member who is no longer actively employed with **any** CalPERS employer is not eligible for this benefit. An *eligible survivor* means the surviving spouse to whom the member was married at least one year before death or, if there is no eligible spouse, to the member's unmarried children under age 18. A member's survivor may choose this benefit in lieu of the Basic Death benefit or the Special Death benefit.

**Benefit**

The 1957 Survivor benefit is a monthly allowance equal to one-half of the unmodified Service Retirement benefit that the member would have been entitled to receive if the member had retired on the date of his or her death. If the benefit is payable to the spouse, the benefit is discontinued upon the death of the spouse. If the benefit is payable to a dependent child, the benefit will be discontinued upon death or attainment of age 18, unless the child is disabled. There is a guarantee that the total amount paid will at least equal the Basic Death benefit.

**Optional Settlement 2 Death Benefit**

**Eligibility**

An employee's *eligible survivor* may receive the Optional Settlement 2 Death benefit if the member dies while actively employed, has attained at least age 50, and has at least 5 years of credited service (total service across all CalPERS employers and with certain other Retirement Systems with which CalPERS has reciprocity agreements). A CalPERS member who is no longer actively employed with **any** CalPERS employer is not eligible for this benefit. An *eligible survivor* means the surviving spouse to whom the member was married at least one year before death. A member's survivor may choose this benefit in lieu of the Basic Death benefit or the 1957 Survivor benefit.

**Benefit**

The Optional Settlement 2 Death benefit is a monthly allowance equal to the Service Retirement benefit that the member would have received had the member retired on the date of his or her death and elected Optional Settlement 2. (A retiree who elects Optional Settlement 2 receives an allowance that has been reduced so that it will continue to be paid after his or her death to a surviving beneficiary.) The allowance is payable as long as the surviving spouse lives. Upon the death of the surviving spouse, the benefit shall be continued to minor children. There is a guarantee that the total amount paid will at least equal the Basic Death Benefit.

### **Cost-of-Living Adjustments**

Beginning the second calendar year after the year of retirement, retirement and survivor allowances will be annually adjusted on a compound basis by 2%. However, the cumulative adjustment may not be greater than the cumulative change in the Consumer Price Index since the date of retirement.

### **Purchasing Power Protection Allowance (PPPA)**

Retirement and survivor allowances are protected against inflation by PPPA. PPPA benefits are cost-of-living adjustments that are intended to maintain an individual's allowance at 75% of the initial allowance at retirement adjusted for inflation since retirement. The PPPA benefit will be coordinated with other cost-of-living adjustments provided under the plan. The total annual outlay for PPPA is limited to 1.1% of accumulated member contributions. If this amount of member contributions were insufficient to provide for PPPA payments, the 75% target would be proportionately reduced.

### **Employee Contributions**

Each employee contributes toward his or her retirement based upon the following schedule. The employer may choose to “pick-up” these contributions for the employees. For all active members, the monthly compensation breakpoint is \$317.

Approximately 57% of the active population is subject to the following schedule:

- The percent contributed below the monthly compensation breakpoint is 0%.
- The percent contributed above the monthly compensation breakpoint is 9%.

Less than 1% of the active population is subject to the following schedule:

- The percent contributed below the monthly compensation breakpoint is 0%.
- The percent contributed above the monthly compensation breakpoint is 10%.

Approximately 42% of the active population is subject to the following schedule:

- The percent contributed below the monthly compensation breakpoint is 0%.
- The percent contributed above the monthly compensation breakpoint is 11%.

### **Refund of Employee Contributions**

If the member's service with the employer ends, and if the member does not satisfy the eligibility conditions for any of the retirement benefits above, the member may elect to receive a refund of his or her employee contributions, which are credited annually with 6% interest.

### **1959 SURVIVOR BENEFITS PROGRAM**

For these benefits, please refer to the 1959 Survivor Report

## STATE PEACE OFFICERS AND FIREFIGHTERS

The following is a summary of the major plan provisions for the most representative group used in calculating the liabilities of this plan. Many of the statements in this summary are general in nature, and are intended to provide an easily understood summary of the complex Public Employees' Retirement Law. The law itself governs in all situations.

### RETIREMENT PROGRAM

#### Service Retirement

##### Eligibility

A CalPERS member becomes eligible for Service Retirement upon attainment of age 50 with at least 5 years of credited service (total service across all CalPERS employers, and with certain other Retirement Systems with which CalPERS has reciprocity agreements).

##### Benefit

The Service Retirement benefit calculated for service earned by this group of employees is a monthly allowance equal to the product of the *benefit factor*, *years of service*, and *final compensation*, where

- The *benefit factor* for this group of employees comes from either the **3% at 55** or the **3% at 50** benefit factor table. All new members, except firefighters, hired on or after January 15, 2011 are subject to the **2.5% at 55 Safety** benefit factor table. All new firefighters hired on or after October 31, 2010 are subject to the **3% at 55** benefit factor table. The factor depends on the member's age at retirement. Listed below are the factors for retirement at whole year ages:

<u>Retirement Age</u>	<u>3% at 55 Factor</u>	<u>Retirement Age</u>	<u>3% at 50 Factor</u>	<u>Retirement Age</u>	<u>2.5% at 55 Factor</u>
50	2.400%	50 & Up	3.000%	50	2.000%
51	2.520%			51	2.100%
52	2.640%			52	2.200%
53	2.760%			53	2.300%
54	2.880%			54	2.400%
55 & Up	3.000%			55 & Up	2.500%

- The *years of service* is the amount credited by CalPERS to a member while he or she is employed in this group (or for other periods that are recognized under the employer's contract with CalPERS). For a member who has earned service with multiple CalPERS employers, the benefit from each employer is calculated separately according to each employer's contract, and then added together for the total allowance. Any unused sick leave accumulated at the time of retirement will be converted to credited service at the rate of 0.004 years of service for each day of sick leave.
- The *final compensation* is the monthly average of the member's highest 12 consecutive months' full-time equivalent monthly pay (no matter which CalPERS employer paid this

compensation). For some new members hired after January 1, 2007 and for all new members hired on or after January 15, 2011, final compensation is based on the monthly average of the member's highest 36 consecutive months' full-time equivalent monthly pay. The employees in this group are not covered by Social Security. The final compensation is not offset by a dollar amount.

- The Service Retirement benefit is capped at 90% of final compensation.

### **Vested Deferred Retirement**

#### **Eligibility for Deferred Status**

A CalPERS member becomes eligible for a deferred vested retirement benefit when he or she leaves employment, keeps his or her contribution account balance on deposit with CalPERS, **and** has earned at least 5 years of credited service (total service across all CalPERS employers, and with certain other Retirement Systems with which CalPERS has reciprocity agreements).

#### **Eligibility to Start Receiving Benefits**

The CalPERS member becomes eligible to receive the deferred retirement benefit upon satisfying the eligibility requirements for Deferred Status and upon attainment of age 50.

#### **Benefit**

The vested deferred retirement benefit is the same as the Service Retirement benefit, where the benefit factor is based on the member's age at allowance commencement. For members who have earned service with multiple CalPERS employers, the benefit from each employer is calculated separately according to each employer's contract, and then added together for the total allowance.

### **Non-Industrial (Non-Job Related) Disability Retirement**

#### **Eligibility**

A CalPERS member is eligible for Non-Industrial Disability Retirement if he or she becomes *disabled* and has at least 5 years of credited service (total service across all PERS employers, and with certain other Retirement Systems with which PERS has reciprocity agreements). There is no special age requirement. *Disabled* means the member is unable to perform his or her job because of an illness or injury which is expected to be permanent or to last indefinitely. The illness or injury does not have to be job related. A CalPERS member must be actively working with any CalPERS employer at the time of disability in order to be eligible for this benefit.

#### **Benefit**

The Non-Industrial Disability Retirement benefit is a monthly allowance equal to 1.8% of final compensation, multiplied by *service*, which is determined as follows:

- *service* is CalPERS credited service, for members with less than 10 years of service or greater than 18.518 years of service; or
- *service* is CalPERS credited service plus the additional number of years that the member would have worked until age 60, for members with at least 10 years but not more than 18.518 years of service. The maximum benefit in this case is 33 1/3% of Final Compensation.

Members who are eligible for a larger service retirement benefit may choose to receive that benefit in lieu of a disability benefit. Members eligible to retire, and who have attained the normal retirement age determined by their service retirement benefit formula, will receive the same dollar amount for disability retirement as that payable for service retirement. For members who have earned service with multiple CalPERS employers, the benefit attributed to each employer is the total disability allowance multiplied by the ratio of service with a particular employer to the total CalPERS service.

### **Industrial (Job-Related) Disability Retirement**

#### **Eligibility**

An employee is eligible for Industrial Disability Retirement if he or she becomes *disabled* while working, where *disabled* means the member is unable to perform the duties of the job because of a work-related illness or injury which is expected to be permanent or to last indefinitely. A CalPERS member who has left active employment within this group is not eligible for this benefit, except to the extent described in the next paragraph.

#### **Benefit**

The Industrial Disability Retirement benefit is a monthly allowance equal to 50% of final compensation. However, if a member is eligible for Service Retirement and if the Service Retirement benefit is more than the Industrial Disability Retirement benefit, the member may choose to receive the larger benefit. For a CalPERS member not actively employed in this group who became disabled while employed by some other CalPERS employer, the benefit is a return or annuitization of the accumulated member contributions with respect to employment in this group.

### **Post-Retirement Death Benefit**

#### **Lump Sum Payment**

Upon the death of a retiree, a one-time lump sum payment of \$2,000 will be made to the retiree's designated survivor(s), or to the retiree's estate.

### **Form of Payment for Retirement Allowance**

Generally, the retirement allowance is paid to the retiree in the form of an annuity for as long as he or she is alive. The retiree may choose to provide for a portion of his or her allowance to be paid to any designated beneficiary after the retiree's death. CalPERS provides for a variety of such benefit options, which the retiree pays for by taking a reduction in his or her retirement allowance. The larger the amount to be provided to the beneficiary is, and the younger the beneficiary is, the greater the reduction to the retiree's allowance.

For retirement allowances with respect to service earned by employment in this group, 50% of the retirement allowance will automatically be continued to certain statutory beneficiaries upon the death of the retiree, *without* a reduction in the retiree's allowance. This additional benefit is often referred to as *post retirement survivor allowance* (PRSA) or simply as *survivor continuance*.

In other words, 50% of the allowance, the *continuance portion*, is paid to the retiree for as long as he or she is alive, and that same amount is continued to the retiree's spouse (or if no eligible spouse, to

unmarried children until they attain age 18; or, if no eligible children, to a qualifying dependent parent) for the rest of his or her lifetime.

The remaining 50% of the retirement allowance, which may be referred to as the *option portion* of the benefit, is paid to the retiree as an annuity for as long as he or she is alive. Or, the retiree may choose to provide for some of this *option portion* to be paid to **any** designated beneficiary after the retiree's death. CalPERS offers a variety of such benefit options, which the retiree pays for by taking a reduction to the option portion of his or her retirement allowance.

## **Pre-Retirement Death Benefits**

### **Group Term Life Insurance**

#### **Eligibility**

An employee's beneficiary (or estate) will receive the Group Term Life Insurance benefit if the member dies while actively employed. A CalPERS member who is no longer actively employed with **any** CalPERS employer is not eligible for this benefit. This benefit is in addition to other pre-retirement death benefits.

#### **Benefit**

The benefit is a lump sum payment of \$5,000 plus an additional amount equal to 50% of the annual compensation earned by the deceased member during the 12 months immediately preceding the member's death. The additional amount shall not be paid if the member is eligible for service retirement or the Alternate Death Benefit.

### **For members with less than 20 years of service credit and not age-eligible to retire:**

#### **Basic Death Benefit**

#### **Eligibility**

An employee's beneficiary (or estate) may receive the Basic Death benefit if the member dies while actively employed. A CalPERS member who is no longer actively employed with **any** CalPERS employer is not eligible for this benefit. A member's survivor who is eligible for any other pre-retirement death benefit described below may choose to receive that death benefit instead of this Basic Death benefit.

#### **Benefit**

The Basic Death Benefit is a lump sum in the amount of the member's accumulated contributions, where interest is currently credited at 7.5% per year. In addition, a lump sum in the amount of six months' salary shall be paid only if the member is eligible for service retirement or eligible for the Alternate Death Benefit. For purposes of this benefit, one month's salary is defined as the member's average monthly full-time rate of compensation during the 12 months preceding death.

#### **Special Death Benefit**

#### **Eligibility**

An employee's *eligible survivor(s)* may receive the Special Death benefit if the member dies while actively employed and the death is job-related. A CalPERS member who is no longer actively employed with **any** CalPERS employer is not eligible for this benefit. An *eligible survivor* means the surviving spouse to whom the member was married prior to the onset of the injury or illness that resulted in death. If there is no eligible spouse, an eligible survivor means the member's unmarried children under age 22. An eligible survivor who chooses to receive this benefit will not receive any other death benefit.

### **Benefit**

The Special Death benefit is a monthly allowance equal to 50% of final compensation, and will be increased whenever the compensation paid to active employees is increased but ceasing to increase when the member would have attained age 50. The allowance is payable to the surviving spouse until death, at which time the allowance is continued to any unmarried children under age 22. There is a guarantee that the total amount paid will at least equal the Basic Death Benefit.

If the member's death is the result of an accident or injury caused by external violence or physical force incurred in the performance of the member's duty, and there are *eligible* surviving children (*eligible* means unmarried children under age 22) in addition to an eligible spouse, then an **additional monthly allowance** is paid equal to the following:

- if 1 eligible child: 12.5% of final compensation
- if 2 eligible children: 20.0% of final compensation
- if 3 or more eligible children: 25.0% of final compensation

### **For members with more than 20 years of service credit and not age-eligible to retire:**

In addition to the above pre-retirement death benefits, members are eligible for:

#### **Alternate Death Benefit**

### **Eligibility**

This benefit may be received in lieu of the lump sum Basic Death Benefit if there is a surviving spouse or minor child of the member. The member must have died before reaching the minimum retirement age and must have been credited with at least 20 years of state service.

### **Benefit**

The Alternate Death Benefit is calculated as though the member were the minimum retirement age and elected an optional form of benefit that provided 100% continuance to the member's spouse. If the member did not have a spouse at the time of death, one-half of the formula benefit would be paid to the surviving child. If the benefit is payable to a surviving child, the benefit will be discontinued upon death or the attainment of age 18.

### **For members who are age-eligible to retire:**

In addition to the above pre-retirement death benefits, members are eligible for:

## **1957 Survivor Benefit**

### **Eligibility**

An employee's *eligible survivor(s)* may receive the 1957 Survivor benefit if the member dies while actively employed, has attained at least age 50, and has at least 5 years of credited service (total service across all CalPERS employers and with certain other Retirement Systems with which CalPERS has reciprocity agreements). A CalPERS member who is no longer actively employed with **any** CalPERS employer is not eligible for this benefit. An *eligible survivor* means the surviving spouse to whom the member was married at least one year before death or, if there is no eligible spouse, to the member's unmarried children under age 18. A member's survivor may choose this benefit in lieu of the Basic Death benefit or the Special Death benefit.

### **Benefit**

The 1957 Survivor benefit is a monthly allowance equal to one-half of the unmodified Service Retirement benefit that the member would have been entitled to receive if the member had retired on the date of his or her death. If the benefit is payable to the spouse, the benefit is discontinued upon the death of the spouse. If the benefit is payable to a dependent child, the benefit will be discontinued upon death or attainment of age 18, unless the child is disabled. There is a guarantee that the total amount paid will at least equal the Basic Death benefit.

## **Optional Settlement 2 Death Benefit**

### **Eligibility**

An employee's *eligible survivor* may receive the Optional Settlement 2 Death benefit if the member dies while actively employed, has attained at least age 50, and has at least 5 years of credited service (total service across all CalPERS employers and with certain other Retirement Systems with which CalPERS has reciprocity agreements). A CalPERS member who is no longer actively employed with **any** CalPERS employer is not eligible for this benefit. An *eligible survivor* means the surviving spouse to whom the member was married at least one year before death. A member's survivor may choose this benefit in lieu of the Basic Death benefit or the 1957 Survivor benefit.

### **Benefit**

The Optional Settlement 2 Death benefit is a monthly allowance equal to the Service Retirement benefit that the member would have received had the member retired on the date of his or her death and elected Optional Settlement 2. (A retiree who elects Optional Settlement 2 receives an allowance that has been reduced so that it will continue to be paid after his or her death to a surviving beneficiary.) The allowance is payable as long as the surviving spouse lives. Upon the death of the surviving spouse, the benefit shall be continued to minor children. There is a guarantee that the total amount paid will at least equal the Basic Death Benefit.

### **Cost-of-Living Adjustments**

Beginning the second calendar year after the year of retirement, retirement and survivor allowances will be annually adjusted on a compound basis by 2%. However, the cumulative adjustment may not be greater than the cumulative change in the Consumer Price Index since the date of retirement.

## **Purchasing Power Protection Allowance (PPPA)**

Retirement and survivor allowances are protected against inflation by PPPA. PPPA benefits are cost-of-living adjustments that are intended to maintain an individual's allowance at 75% of the initial allowance at retirement adjusted for inflation since retirement. The PPPA benefit will be coordinated with other cost-of-living adjustments provided under the plan. The total annual outlay for PPPA is limited to 1.1% of accumulated member contributions. If this amount of member contributions were insufficient to provide for PPPA payments, the 75% target would be proportionately reduced.

### **Employee Contributions**

Each employee contributes toward his or her retirement based upon one of the following schedules. The employer may choose to “pick-up” these contributions for the employees.

Approximately 80% of the active population has a monthly compensation breakpoint of \$863 and is subject to the following schedule:

- The percent contributed below the monthly compensation breakpoint is 0%.
- The percent contributed above the monthly compensation breakpoint is 11%.

Approximately 14% of the active population has a monthly compensation breakpoint of \$238 and is subject to the following schedule:

Approximately one third of the 14% is subject to the following schedule:

- The percent contributed below the monthly compensation breakpoint is 0%.
- The percent contributed above the monthly compensation breakpoint is 8%.

Approximately two thirds of the 14% is subject to the following schedule:

- The percent contributed below the monthly compensation breakpoint is 0%.
- The percent contributed above the monthly compensation breakpoint is 10%.

Approximately 6% of the active population has a monthly compensation breakpoint of \$513 and is subject to the following schedule:

- The percent contributed below the monthly compensation breakpoint is 0%.
- The percent contributed above the monthly compensation breakpoint is 10%.

### **Refund of Employee Contributions**

If the member's service with the employer ends, and if the member does not satisfy the eligibility conditions for any of the retirement benefits above, the member may elect to receive a refund of his or her employee contributions, which are credited annually with 6% interest.

**1959 SURVIVOR BENEFITS PROGRAM**

For these benefits, please refer to the 1959 Survivor Report

## CALIFORNIA HIGHWAY PATROL

The following is a summary of the major plan provisions used in calculating the liabilities of the plan. Many of the statements in this summary are general in nature, and are intended to provide an easily understood summary of the complex Public Employees' Retirement Law. The law itself governs in all situations.

### RETIREMENT PROGRAM

#### Service Retirement

##### Eligibility

A CalPERS member becomes eligible for Service Retirement upon attainment of age 50 with at least 5 years of credited service (total service across all CalPERS employers, and with certain other Retirement Systems with which CalPERS has reciprocity agreements).

##### Benefit

The Service Retirement benefit calculated for service earned by this group of employees is a monthly allowance equal to the product of the *benefit factor*, *years of service*, and *final compensation*, where

- The *benefit factor* for this group of employees is **3% at all ages**, it does not depend on the member's age at retirement. All new members hired on or after October 31, 2010 are subject to the **3% at 55** benefit factor table.

<u>Retirement Age</u>	<u>3% at 55 Factor</u>
50	2.400%
51	2.520%
52	2.640%
53	2.760%
54	2.880%
55	3.000%

- The *years of service* is the amount credited by CalPERS to a member while he or she is employed in this group (or for other periods that are recognized under the employer's contract with CalPERS including service at the CHP Academy for graduating members). For a member who has earned service with multiple CalPERS employers, the benefit from each employer is calculated separately according to each employer's contract, and then added together for the total allowance. Any unused sick leave accumulated at the time of retirement will be converted to credited service at the rate of 0.004 years of service for each day of sick leave.
- The *final compensation* is the monthly average of the member's highest 12 consecutive months' full-time equivalent monthly pay (no matter which CalPERS employer paid this compensation). In addition, the final compensation used for calculating retirement benefits will be increased according to the following schedule:

- 8% for members who retire or die on or after July 1, 2004, and prior to July 1, 2008
- 6% for members who retire or die on or after July 1, 2008, and prior to July 1, 2009
- 4% for members who retire or die on or after July 1, 2009, and prior to July 1, 2010
- 2% for members who retire or die on or after July 1, 2010, and prior to July 1, 2011
- No increase for members who retire or die on or after July 1, 2011

The *final compensation* for an employee hired on or after **October 31, 2010** is the monthly average of the member's highest **36 consecutive months'** full-time equivalent monthly pay.

- The employees in this group are not covered by Social Security. The final compensation is not offset by a dollar amount.
- The Service Retirement benefit is capped at 90% of final compensation.

### **Vested Deferred Retirement**

#### **Eligibility for Deferred Status**

A CalPERS member becomes eligible for a deferred vested retirement benefit when he or she leaves employment, keeps his or her contribution account balance on deposit with CalPERS, **and** has earned at least 5 years of credited service (total service across all CalPERS employers, and with certain other Retirement Systems with which CalPERS has reciprocity agreements).

#### **Eligibility to Start Receiving Benefits**

The CalPERS member becomes eligible to receive the deferred retirement benefit upon satisfying the eligibility requirements for Deferred Status and upon attainment of age 50.

#### **Benefit**

The vested deferred retirement benefit is the same as the Service Retirement benefit, where the benefit factor is based on the member's age at allowance commencement. For members who have earned service with multiple CalPERS employers, the benefit from each employer is calculated separately according to each employer's contract, and then added together for the total allowance.

### **Non-Industrial (Non-Job Related) Disability Retirement**

#### **Eligibility**

A CalPERS member is eligible for Non-Industrial Disability Retirement if he or she becomes *disabled* and has at least 5 years of credited service (total service across all PERS employers, and with certain other Retirement Systems with which PERS has reciprocity agreements). There is no special age requirement. *Disabled* means the member is unable to perform his or her job because of an illness or injury which is expected to be permanent or to last indefinitely. The illness or injury does not have to

be job related. A CalPERS member must be actively working with any CalPERS employer at the time of disability in order to be eligible for this benefit.

### **Benefit**

The Non-Industrial Disability Retirement benefit is a monthly allowance equal to 1.8% of final compensation, multiplied by *service*, which is determined as follows:

- *service* is CalPERS credited service, for members with less than 10 years of service or greater than 18.518 years of service; or
- *service* is CalPERS credited service plus the additional number of years that the member would have worked until age 60, for members with at least 10 years but not more than 18.518 years of service. The maximum benefit in this case is 33 1/3% of Final Compensation.

Members who are eligible for a larger service retirement benefit may choose to receive that benefit in lieu of a disability benefit. Members eligible to retire, and who have attained the normal retirement age determined by their service retirement benefit formula, will receive the same dollar amount for disability retirement as that payable for service retirement. For members who have earned service with multiple CalPERS employers, the benefit attributed to each employer is the total disability allowance multiplied by the ratio of service with a particular employer to the total CalPERS service.

## **Industrial (Job-Related) Disability Retirement**

### **Eligibility**

An employee is eligible for Industrial Disability Retirement if he or she becomes *disabled* while working, where *disabled* means the member is unable to perform the duties of the job because of a work-related illness or injury which is expected to be permanent or to last indefinitely. A CalPERS member who has left active employment within this group is not eligible for this benefit, except to the extent described in the next paragraph.

### **Benefit**

The Industrial Disability Retirement benefit is a monthly allowance equal to 50% of final compensation. For members who, as a result of a single event, incur serious bodily injury, the benefit provided is equal to the greater of 50% of final compensation, or, three percent of final compensation multiplied by the number of years of service credited to the member, plus an annuity purchased with the accumulated additional contributions, if any. However, if a member is eligible for Service Retirement and if the Service Retirement benefit is more than the Industrial Disability Retirement benefit, the member may choose to receive the larger benefit, plus an annuity purchased with the accumulated additional contributions, if any. For a CalPERS member not actively employed in this group who became disabled while employed by some other CalPERS employer, the benefit is a return or annuitization of the accumulated member contributions with respect to employment in this group.

## **Post-Retirement Death Benefit**

### **Lump Sum Payment**

Upon the death of a retiree, a one-time lump sum payment of \$2,000 will be made to the retiree's designated survivor(s), or to the retiree's estate.

## **Form of Payment for Retirement Allowance**

Generally, the retirement allowance is paid to the retiree in the form of an annuity for as long as he or she is alive. The retiree may choose to provide for a portion of his or her allowance to be paid to any designated beneficiary after the retiree's death. CalPERS provides for a variety of such benefit options, which the retiree pays for by taking a reduction in his or her retirement allowance. The larger the amount to be provided to the beneficiary is, and the younger the beneficiary is, the greater the reduction to the retiree's allowance.

For retirement allowances with respect to service earned by employment in this group, 50% of the retirement allowance will automatically be continued to certain statutory beneficiaries upon the death of the retiree, *without* a reduction in the retiree's allowance. This additional benefit is often referred to as *post retirement survivor allowance (PRSA)* or simply as *survivor continuance*.

In other words, 50% of the allowance, the *continuance portion*, is paid to the retiree for as long as he or she is alive, and that same amount is continued to the retiree's spouse (or if no eligible spouse, to unmarried children until they attain age 18; or, if no eligible children, to a qualifying dependent parent) for the rest of his or her lifetime.

The remaining 50% of the retirement allowance, which may be referred to as the *option portion* of the benefit, is paid to the retiree as an annuity for as long as he or she is alive. Or, the retiree may choose to provide for some of this *option portion* to be paid to **any** designated beneficiary after the retiree's death. CalPERS offers a variety of such benefit options, which the retiree pays for by taking a reduction to the option portion of his or her retirement allowance.

## **Pre-Retirement Death Benefits**

### **Group Term Life Insurance**

#### **Eligibility**

An employee's beneficiary (or estate) will receive the Group Term Life Insurance benefit if the member dies while actively employed. A CalPERS member who is no longer actively employed with **any** CalPERS employer is not eligible for this benefit. This benefit is in addition to other pre-retirement death benefits.

#### **Benefit**

The benefit is a lump sum payment of \$5,000 plus an additional amount equal to 50% of the annual compensation earned by the deceased member during the 12 months immediately preceding the member's death. The additional amount shall not be paid if the member is eligible for service retirement or the Alternate Death Benefit.

**For members with less than 20 years of service credit and not age-eligible to retire:**

### **Basic Death Benefit**

**Eligibility**

An employee's beneficiary (or estate) may receive the Basic Death benefit if the member dies while actively employed. A CalPERS member who is no longer actively employed with **any** CalPERS employer is not eligible for this benefit. A member's survivor who is eligible for any other pre-retirement death benefit described below may choose to receive that death benefit instead of this Basic Death benefit.

**Benefit**

The Basic Death Benefit is a lump sum in the amount of the member's accumulated contributions, where interest is currently credited at 7.5% per year. In addition, a lump sum in the amount of six months' salary shall be paid only if the member is eligible for service retirement or eligible for the Alternate Death Benefit. For purposes of this benefit, one month's salary is defined as the member's average monthly full-time rate of compensation during the 12 months preceding death.

**Special Death Benefit****Eligibility**

An employee's *eligible survivor(s)* may receive the Special Death benefit if the member dies while actively employed and the death is job-related. A CalPERS member who is no longer actively employed with **any** CalPERS employer is not eligible for this benefit. An *eligible survivor* means the surviving spouse to whom the member was married prior to the onset of the injury or illness that resulted in death. If there is no eligible spouse, an eligible survivor means the member's unmarried children under age 22. An eligible survivor who chooses to receive this benefit will not receive any other death benefit.

**Benefit**

The Special Death benefit is a monthly allowance equal to 50% of final compensation, and will be increased whenever the compensation paid to active employees is increased but ceasing to increase when the member would have attained age 50. The allowance is payable to the surviving spouse until death, at which time the allowance is continued to any unmarried children under age 22. There is a guarantee that the total amount paid will at least equal the Basic Death Benefit.

If the member's death is the result of an accident or injury caused by external violence or physical force incurred in the performance of the member's duty, and there are *eligible* surviving children (*eligible* means unmarried children under age 22) in addition to an eligible spouse, then an **additional monthly allowance** is paid equal to the following:

- if 1 eligible child: 12.5% of final compensation
- if 2 eligible children: 20.0% of final compensation
- if 3 or more eligible children: 25.0% of final compensation

**For members with more than 20 years of service credit and not age-eligible to retire:**

In addition to the above pre-retirement death benefits, members are eligible for:

## **Alternate Death Benefit**

### **Eligibility**

This benefit may be received in lieu of the lump sum Basic Death Benefit if there is a surviving spouse or minor child of the member. The member must have died before reaching the minimum retirement age and must have been credited with at least 20 years of state service.

### **Benefit**

The Alternate Death Benefit is calculated as though the member were the minimum retirement age and elected an optional form of benefit that provided 100% continuance to the member's spouse. If the member did not have a spouse at the time of death, one-half of the formula benefit would be paid to the surviving child. If the benefit is payable to a surviving child, the benefit will be discontinued upon death or the attainment of age 18.

### **For members who are age-eligible to retire:**

In addition to the above pre-retirement death benefits, members are eligible for:

## **1957 Survivor Benefit**

### **Eligibility**

An employee's *eligible survivor(s)* may receive the 1957 Survivor benefit if the member dies while actively employed, has attained at least age 50, and has at least 5 years of credited service (total service across all CalPERS employers and with certain other Retirement Systems with which CalPERS has reciprocity agreements). A CalPERS member who is no longer actively employed with **any** CalPERS employer is not eligible for this benefit. An *eligible survivor* means the surviving spouse to whom the member was married at least one year before death or, if there is no eligible spouse, to the member's unmarried children under age 18. A member's survivor may choose this benefit in lieu of the Basic Death benefit or the Special Death benefit.

### **Benefit**

The 1957 Survivor benefit is a monthly allowance equal to one-half of the unmodified Service Retirement benefit that the member would have been entitled to receive if the member had retired on the date of his or her death. If the benefit is payable to the spouse, the benefit is discontinued upon the death of the spouse. If the benefit is payable to a dependent child, the benefit will be discontinued upon death or attainment of age 18, unless the child is disabled. There is a guarantee that the total amount paid will at least equal the Basic Death benefit.

## **Optional Settlement 2 Death Benefit**

### **Eligibility**

An employee's *eligible survivor* may receive the Optional Settlement 2 Death benefit if the member dies while actively employed, has attained at least age 50, and has at least 5 years of credited service (total service across all CalPERS employers and with certain other Retirement Systems with which CalPERS has reciprocity agreements). A CalPERS member who is no longer actively employed with

**any** CalPERS employer is not eligible for this benefit. An *eligible survivor* means the surviving spouse to whom the member was married at least one year before death. A member's survivor may choose this benefit in lieu of the Basic Death benefit or the 1957 Survivor benefit.

### **Benefit**

The Optional Settlement 2 Death benefit is a monthly allowance equal to the Service Retirement benefit that the member would have received had the member retired on the date of his or her death and elected Optional Settlement 2. (A retiree who elects Optional Settlement 2 receives an allowance that has been reduced so that it will continue to be paid after his or her death to a surviving beneficiary.) The allowance is payable as long as the surviving spouse lives. Upon the death of the surviving spouse, the benefit shall be continued to minor children. There is a guarantee that the total amount paid will at least equal the Basic Death Benefit.

### **Cost-of-Living Adjustments**

Beginning the second calendar year after the year of retirement, retirement and survivor allowances will be annually adjusted on a compound basis by 2%. However, the cumulative adjustment may not be greater than the cumulative change in the Consumer Price Index since the date of retirement.

### **Purchasing Power Protection Allowance (PPPA)**

Retirement and survivor allowances are protected against inflation by PPPA. PPPA benefits are cost-of-living adjustments that are intended to maintain an individual's allowance at 75% of the initial allowance at retirement adjusted for inflation since retirement. The PPPA benefit will be coordinated with other cost-of-living adjustments provided under the plan. The total annual outlay for PPPA is limited to 1.1% of accumulated member contributions. If this amount of member contributions were insufficient to provide for PPPA payments, the 75% target would be proportionately reduced.

### **Employee Contributions**

Each employee contributes toward his or her retirement based upon the following schedule. The employer may choose to "pick-up" these contributions for the employees.

Approximately 85% of the active population has a monthly compensation breakpoint of \$863 and is subject to the following schedule:

The percent contributed below the monthly compensation breakpoint is 0%.

The percent contributed above the monthly compensation breakpoint is 10%.

Approximately 15% of the active population has a monthly compensation breakpoint of \$513 and is subject to the following schedule:

The percent contributed below the monthly compensation breakpoint is 0%.

The percent contributed above the monthly compensation breakpoint is 10%.

**Refund of Employee Contributions**

If the member's service with the employer ends, and if the member does not satisfy the eligibility conditions for any of the retirement benefits above, the member may elect to receive a refund of his or her employee contributions, which are credited annually with 6% interest.

**1959 SURVIVOR BENEFITS PROGRAM**

For these benefits, please refer to the 1959 Survivor Report

## SCHOOLS

The following is a summary of the major plan provisions for the most representative group used in calculating the liabilities of this plan. Many of the statements in this summary are general in nature, and are intended to provide an easily understood summary of the complex Public Employees' Retirement Law. The law itself governs in all situations.

### RETIREMENT PROGRAM

#### Service Retirement

##### Eligibility

A CalPERS member becomes eligible for Service Retirement upon attainment of age 50 with at least 5 years of credited service (total service across all CalPERS employers, and with certain other Retirement Systems with which CalPERS has reciprocity agreements).

##### Benefit

The Service Retirement benefit calculated for service earned by this group of employees is a monthly allowance equal to the product of the *benefit factor*, *years of service*, and *final compensation*, where

- The *benefit factor* for this group of employees comes from the **2% at 55** benefit factor table. The factor depends on the member's age at retirement. Listed below are the factors for retirement at whole year ages:

<u>Retirement Age</u>	<u>2% at 55 Factor</u>
50	1.100%
51	1.280%
52	1.460%
53	1.640%
54	1.820%
55	2.000%
56	2.064%
57	2.126%
58	2.188%
59	2.250%
60	2.314%
61	2.376%
62	2.438%
63 & Up	2.500%

- The *years of service* is the amount credited by CalPERS to a member while he or she is employed in this group (or for other periods that are recognized under the employer's contract with CalPERS). For a member who has earned service with multiple CalPERS employers, the benefit from each employer is calculated separately according to each

employer's contract, and then added together for the total allowance. Any unused sick leave accumulated at the time of retirement will be converted to credited service at the rate of 0.004 years of service for each day of sick leave.

- The *final compensation* is the monthly average of the member's highest 12 consecutive months' full-time equivalent monthly pay (no matter which CalPERS employer paid this compensation). The employees in this plan may or may not be covered by Social Security. For employees with service prior to January 1, 2001 covered by Social Security, the final compensation is offset by \$133.33 (or by one-third if the final compensation is less than \$400).
- The Service Retirement benefit is not capped.

### **Vested Deferred Retirement**

#### **Eligibility for Deferred Status**

A CalPERS member becomes eligible for a deferred vested retirement benefit when he or she leaves employment, keeps his or her contribution account balance on deposit with CalPERS, **and** has earned at least 5 years of credited service (total service across all CalPERS employers, and with certain other Retirement Systems with which CalPERS has reciprocity agreements).

#### **Eligibility to Start Receiving Benefits**

The CalPERS member becomes eligible to receive the deferred retirement benefit upon satisfying the eligibility requirements for Deferred Status and upon attainment of age 50.

#### **Benefit**

The vested deferred retirement benefit is the same as the Service Retirement benefit, where the benefit factor is based on the member's age at allowance commencement. For members who have earned service with multiple CalPERS employers, the benefit from each employer is calculated separately according to each employer's contract, and then added together for the total allowance.

### **Non-Industrial (Non-Job Related) Disability Retirement**

#### **Eligibility**

A CalPERS member is eligible for Non-Industrial Disability Retirement if he or she becomes *disabled* and has at least 5 years of credited service (total service across all PERS employers, and with certain other Retirement Systems with which PERS has reciprocity agreements). There is no special age requirement. *Disabled* means the member is unable to perform his or her job because of an illness or injury which is expected to be permanent or to last indefinitely. The illness or injury does not have to be job related. A CalPERS member must be actively working with any CalPERS employer at the time of disability in order to be eligible for this benefit.

#### **Benefit**

The Non-Industrial Disability Retirement benefit is a monthly allowance equal to 1.8% of final compensation, multiplied by *service*, which is determined as follows:

- *service* is CalPERS credited service, for members with less than 10 years of service or greater than 18.518 years of service; or
- *service* is CalPERS credited service plus the additional number of years that the member would have worked until age 60, for members with at least 10 years but not more than 18.518 years of service. The maximum benefit in this case is 33 1/3% of Final Compensation.

Members who are eligible for a larger service retirement benefit may choose to receive that benefit in lieu of a disability benefit. Members eligible to retire, and who have attained the normal retirement age determined by their service retirement benefit formula, will receive the same dollar amount for disability retirement as that payable for service retirement. For members who have earned service with multiple CalPERS employers, the benefit attributed to each employer is the total disability allowance multiplied by the ratio of service with a particular employer to the total CalPERS service.

### **Post-Retirement Death Benefit**

#### **Lump Sum Payment**

Upon the death of a retiree, a one-time lump sum payment of \$2,000 will be made to the retiree's designated survivor(s), or to the retiree's estate.

### **Form of Payment for Retirement Allowance**

Generally, the retirement allowance is paid to the retiree in the form of an annuity for as long as he or she is alive. The retiree may choose to provide for a portion of his or her allowance to be paid to any designated beneficiary after the retiree's death. CalPERS provides for a variety of such benefit options, which the retiree pays for by taking a reduction in his or her retirement allowance. The larger the amount to be provided to the beneficiary is, and the younger the beneficiary is, the greater the reduction to the retiree's allowance.

For retirement allowances with respect to service earned by employment in this group, 25% of the retirement allowance will automatically be continued to certain statutory beneficiaries upon the death of the retiree, *without* a reduction in the retiree's allowance (50% for service not covered by Social Security). This additional benefit is often referred to as *post retirement survivor allowance* (PRSA) or simply as *survivor continuance*.

In other words, 25% of the allowance (or 50% for service not covered by Social Security), the *continuance portion*, is paid to the retiree for as long as he or she is alive, and that same amount is continued to the retiree's spouse (or if no eligible spouse, to unmarried children until they attain age 18; or, if no eligible children, to a qualifying dependent parent) for the rest of his or her lifetime.

The remaining 75% of the retirement allowance (or 50% for service not covered by Social Security), which may be referred to as the *option portion* of the benefit, is paid to the retiree as an annuity for as long as he or she is alive. Or, the retiree may choose to provide for some of this *option portion* to be paid to **any** designated beneficiary after the retiree's death. CalPERS offers a variety of such benefit options, which the retiree pays for by taking a reduction to the option portion of his or her retirement allowance.

## **Pre-Retirement Death Benefits**

### **Basic Death Benefit**

#### **Eligibility**

An employee's beneficiary (or estate) may receive the Basic Death benefit if the member dies while actively employed. A CalPERS member who is no longer actively employed with **any** CalPERS employer is not eligible for this benefit. A member's survivor who is eligible for any other pre-retirement death benefit described below may choose to receive that death benefit instead of this Basic Death benefit.

#### **Benefit**

The Basic Death Benefit is a lump sum in the amount of the member's accumulated contributions, where interest is currently credited at 7.5% per year. In addition, a lump sum in the amount of six months' salary is paid. For purposes of this benefit, one month's salary is defined as the member's average monthly full-time rate of compensation during the 12 months preceding death.

### **1957 Survivor Benefit**

#### **Eligibility**

An employee's *eligible survivor(s)* may receive the 1957 Survivor benefit if the member dies while actively employed, has attained at least age 50, and has at least 5 years of credited service (total service across all CalPERS employers and with certain other Retirement Systems with which CalPERS has reciprocity agreements). A CalPERS member who is no longer actively employed with **any** CalPERS employer is not eligible for this benefit. An *eligible survivor* means the surviving spouse to whom the member was married at least one year before death or, if there is no eligible spouse, to the member's unmarried children under age 18. A member's survivor may choose this benefit in lieu of the Basic Death benefit or the Special Death benefit.

#### **Benefit**

The 1957 Survivor benefit is a monthly allowance equal to one-half of the unmodified Service Retirement benefit that the member would have been entitled to receive if the member had retired on the date of his or her death. If the benefit is payable to the spouse, the benefit is discontinued upon the death of the spouse. If the benefit is payable to a dependent child, the benefit will be discontinued upon death or attainment of age 18, unless the child is disabled. There is a guarantee that the total amount paid will at least equal the Basic Death benefit.

### **Cost-of-Living Adjustments**

Beginning the second calendar year after the year of retirement, retirement and survivor allowances will be annually adjusted on a compound basis by 2%. However, the cumulative adjustment may not be greater than the cumulative change in the Consumer Price Index since the date of retirement.

### **Purchasing Power Protection Allowance (PPPA)**

Retirement and survivor allowances are protected against inflation by PPPA. PPPA benefits are cost-of-living adjustments that are intended to maintain an individual's allowance at 75% of the initial allowance at retirement adjusted for inflation since retirement. The PPPA benefit will be coordinated with other cost-of-living adjustments provided under the plan. The total annual outlay for PPPA is limited to 1.1% of accumulated member contributions. If this amount of member contributions were insufficient to provide for PPPA payments, the 75% target would be proportionately reduced.

### **Employee Contributions**

Each employee contributes toward his or her retirement based upon one of the following schedules. The employer may choose to “pick-up” these contributions for the employees.

The contribution schedule is as follows:

The percent contributed below the monthly compensation breakpoint is 0%.

The monthly compensation breakpoint is \$0.

The percent contributed above the monthly compensation breakpoint is 7%.

### **Refund of Employee Contributions**

If the member's service with the employer ends, and if the member does not satisfy the eligibility conditions for any of the retirement benefits above, the member may elect to receive a refund of his or her employee contributions, which are credited annually with 6% interest.

### **1959 SURVIVOR BENEFITS PROGRAM**

For these benefits, please refer to the 1959 Survivor Report

## APPENDIX C:

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### RISK ANALYSIS

INTRODUCTION	C-1
VOLATILITY RATIOS	C-1
ANALYSIS OF FUTURE INVESTMENT RETURN SCENARIOS	C-2
ANALYSIS OF DISCOUNT RATE SENSITIVITY & GOVERNMENT CODE SECTION 20229	C-4

## Introduction

The results presented in the main body of the report are based on a deterministic projection of an uncertain future. As such, they may not adequately communicate the risk or uncertainty inherent in the plans. In this appendix are some additional disclosures intended to provide the reader with additional information about this uncertainty.

The Volatility Ratios section is intended to provide information about the relative short term and long term contribution rate volatility due to investment return volatility.

The Analysis of Investment Return Scenarios section is intended to provide information about potential short term contribution rate changes due to investment returns. This information can be used to estimate the impact of actual investment returns on the required contribution rates.

The Analysis of Discount Rate Sensitivity is intended to give the reader an understanding of the impact that would result from changing the discount rate. This also provides an indication of the impact on contributions due to a change in the way the assets are invested if the change impacts the expected long term return on assets.

## Volatility Ratios

The actuarial calculations supplied in this report are based on a number of assumptions about very long term demographic and economic behavior. Unless these assumptions (terminations, deaths, disabilities, retirements, salary growth, and investment return) are exactly realized each year, there will be differences on a year-to-year basis. The year-to-year differences between actual experience and the assumptions are called actuarial gains and losses and serve to lower or raise the employer's rates from one year to the next. Therefore, the rates will inevitably fluctuate, especially due to the ups and downs of investment returns.

### **Asset Volatility Ratio**

The asset volatility ratio shown in the table below is a measure of the plan's current rate volatility. It should be noted that this ratio is a measure of the current situation. Plans that have higher asset to payroll ratios produce more volatile employer rates due to volatility of investment return. For example, a plan with an asset to payroll ratio of 8 may experience twice the contribution volatility due to investment return volatility than a plan with an asset to payroll ratio of 4.

### **Liability Volatility Ratio**

The liability volatility ratio is also included in the table below. It should be noted that this ratio indicates a long-term potential for contribution volatility. The asset volatility ratio, described above, should tend to move closer to this ratio as the actuarial funding method targets the assets toward 100% of liabilities over time.

Plans that have higher liability to payroll ratios produce more volatile employer rates due to investment return and changes in liability. For example, a plan with a liability to payroll ratio of 8 is expected to have twice the contribution volatility of a plan with a liability to payroll ratio of 4.

### Rate Volatility

	Market Value of Assets without Receivables	Annual Covered Payroll	Asset Volatility Ratio	Accrued Liability	Liability Volatility Ratio
	(1)	(2)	(1)/(2)	(3)	(3)/(2)
State Miscellaneous	56,890,578,267	9,827,621,238	5.8	81,271,085,568	8.3
State Industrial	2,161,939,575	580,778,021	3.7	2,831,498,651	4.9
State Safety	5,377,197,674	1,870,201,361	2.9	7,224,281,258	3.9
POFF	20,758,283,089	3,198,599,288	6.5	30,127,480,709	9.4
CHP	5,324,512,223	735,204,799	7.2	8,193,449,625	11.1
Schools	45,873,486,956	9,935,362,340	4.6	58,358,406,128	5.9

The above analysis shows that the CHP, POFF and Miscellaneous plans are expected to have more volatile contributions than the Schools pool, Industrial and Safety plans. It also shows that the contribution volatility is expected to increase as the plans become better funded. The contribution volatility would be 28% to 54% greater if the plans were 100% funded.

## Analysis of Future Investment Return Scenarios

As part of this report, different scenarios were performed to determine the effects of various investment returns during fiscal years 2012-2013, 2013-2014 and 2014-2015 on the 2014-2015, 2015-2016 and 2016-2017 employer rates. The projected rate increases assume that all other actuarial assumptions will be realized and that no further changes to assumptions, contributions, benefits, or funding will occur.

Five different investment return scenarios were selected.

- The first scenario is what one would expect if the markets were to give us a 5<sup>th</sup> percentile return from July 1, 2012 through June 30, 2015. The 5<sup>th</sup> percentile return corresponds to a -4.10% return for each of the 2012-2013, 2013-2014 and 2014-2015 fiscal years.
- The second scenario is what one would expect if the markets were to give us a 25<sup>th</sup> percentile return from July 1, 2012 through June 30, 2015. The 25<sup>th</sup> percentile return corresponds to a 2.60% return for each of the 2012-2013, 2013-2014 and 2014-2015 fiscal years.
- The third scenario assumed the return for 2012-2013, 2013-2014, and 2014-2015 would be our assumed 7.50% investment return which represents about a 49<sup>th</sup> percentile event.

- The fourth scenario is what one would expect if the markets were to give us a 75<sup>th</sup> percentile return from July 1, 2012 through June 30, 2015. The 75<sup>th</sup> percentile return corresponds to a 11.90% return for each of the 2012-2013, 2013-2014 and 2014-2015 fiscal years.
- Finally, the last scenario is what one would expect if the markets were to give us a 95<sup>th</sup> percentile return from July 1, 2012 through June 30, 2015. The 95<sup>th</sup> percentile return corresponds to a 18.50% return for each of the 2012-2013, 2013-2014 and 2014-2015 fiscal years.

The tables below show the projected contribution rates for 2014-2015 through 2016-2017 for the various State Plans under the five different scenarios.

**Estimated: 2014-2015 Rates as a % of Payroll**

	Investment Scenario				
	1 <sup>st</sup> Scenario	2 <sup>nd</sup> Scenario	3 <sup>rd</sup> Scenario	4 <sup>th</sup> Scenario	5 <sup>th</sup> Scenario
	-4.10%	2.60%	7.50%	11.90%	18.50%
State Miscellaneous Tier 1	25.8%	23.2%	21.6%	21.5%	21.4%
State Miscellaneous Tier 2	25.7%	23.1%	21.5%	21.4%	21.3%
State Industrial	19.2%	17.5%	16.8%	16.8%	16.7%
State Safety	19.2%	17.9%	17.8%	17.7%	17.7%
POFF	35.4%	32.5%	31.1%	31.0%	30.8%
CHP	39.9%	36.7%	34.9%	34.7%	34.6%
Schools	16.1%	14.0%	12.8%	12.7%	12.6%

**Estimated: 2015-2016 Rates as a % of Payroll**

	Investment Scenario				
	1 <sup>st</sup> Scenario	2 <sup>nd</sup> Scenario	3 <sup>rd</sup> Scenario	4 <sup>th</sup> Scenario	5 <sup>th</sup> Scenario
	-4.10%	2.60%	7.50%	11.90%	18.50%
State Miscellaneous Tier 1	29.9%	25.2%	22.0%	21.7%	21.3%
State Miscellaneous Tier 2	29.8%	25.1%	21.9%	21.6%	21.2%
State Industrial	22.0%	18.7%	17.1%	16.9%	16.6%
State Safety	21.4%	18.8%	18.0%	17.8%	17.6%
POFF	40.0%	34.5%	31.4%	31.1%	30.6%
CHP	45.1%	39.1%	35.4%	35.0%	34.5%
Schools	19.3%	15.5%	13.1%	12.9%	12.6%

**Estimated: 2016-2017 Rates as a % of Payroll**

	<b>Investment Scenario</b>				
	<b>1<sup>st</sup> Scenario</b>	<b>2nd Scenario</b>	<b>3rd Scenario</b>	<b>4th Scenario</b>	<b>5th Scenario</b>
	<b>-4.10%</b>	<b>2.60%</b>	<b>7.50%</b>	<b>11.90%</b>	<b>18.50%</b>
State Miscellaneous Tier 1	33.5%	27.1%	22.4%	21.9%	21.0%
State Miscellaneous Tier 2	33.4%	27.0%	22.3%	21.8%	20.9%
State Industrial	24.4%	19.9%	17.3%	16.9%	16.3%
State Safety	23.4%	19.7%	18.1%	17.8%	17.3%
POFF	44.2%	36.5%	31.8%	31.1%	30.0%
CHP	49.7%	41.4%	35.9%	35.2%	34.0%
Schools	22.2%	17.0%	13.4%	13.0%	12.3%

## Analysis of Discount Rate Sensitivity & Government Code Section 20229

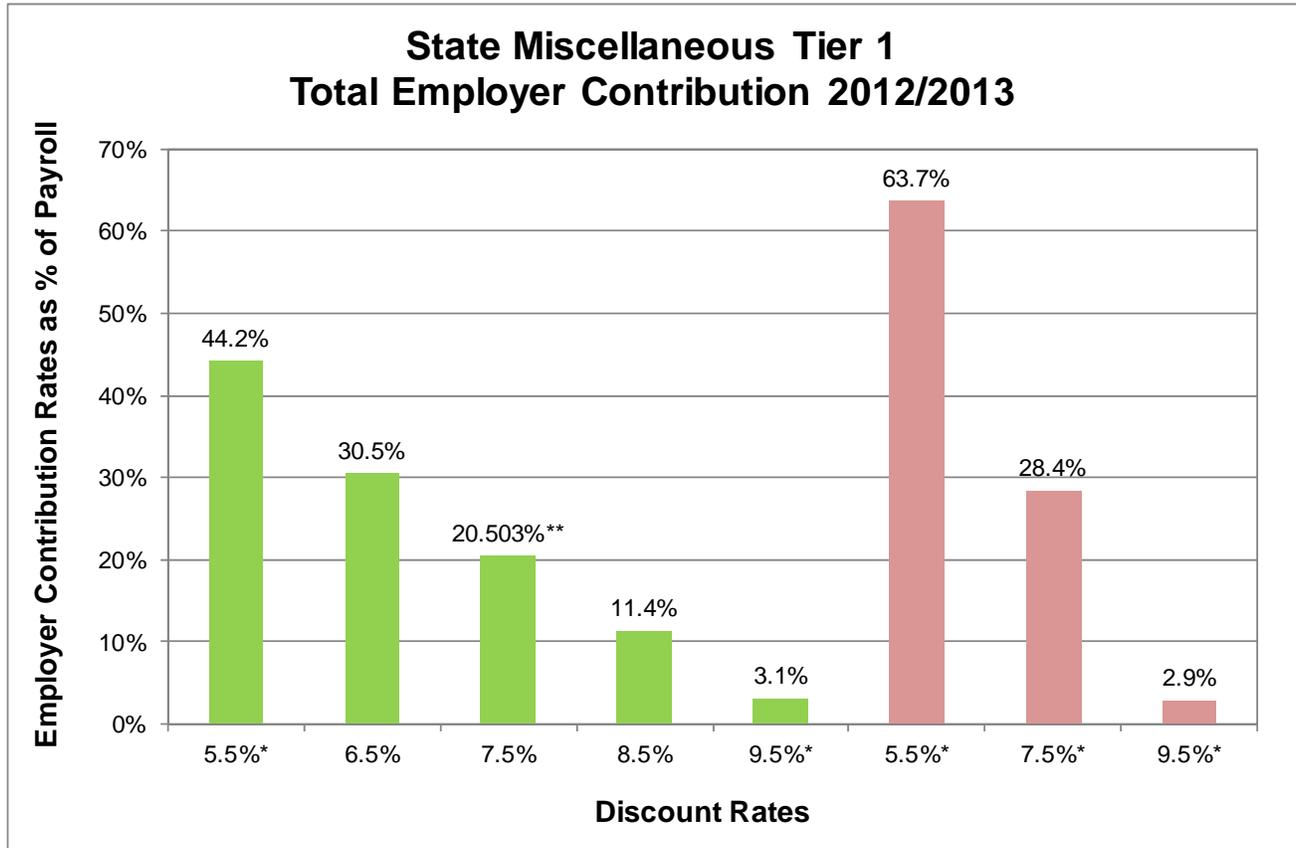
The discount rate reflects expectations of what the markets will deliver in the future and it is calculated based on two components: expected price inflation and real rate of return. A change in either of those components over the long term would necessitate further evaluation of the discount rate.

This section includes an analysis of discount rate sensitivity on employer contribution rates under two different discount rate scenarios. This type of analysis gives the reader a sense of the long-term risk to the employer contribution rates and changes to the funded status on a Market Value of Assets basis.

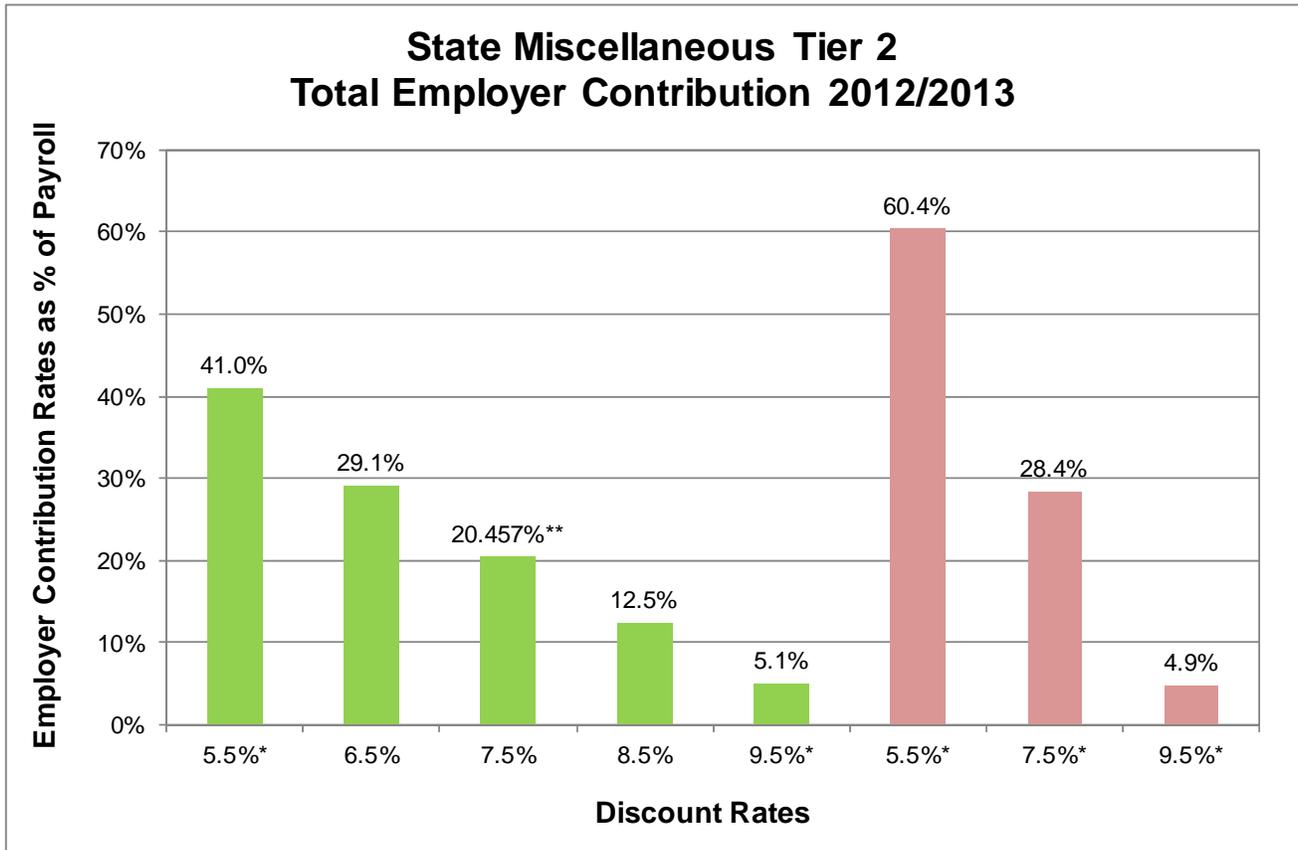
The first section shows the impact on employer contribution rates assuming discount rates that are 1 percentage point above and 1 percentage point below the current valuation discount rate and under current unfunded liability amortization methods. This analysis gives an indication of the potential required employer contribution rates if the discount rate was changed to 6.50% or 8.50% over the long-term.

The second section is in response to Government Code section 20229 which requires the CalPERS Board to provide an annual report which includes a calculation of the contribution rates and liabilities utilizing investment return and discount rate assumptions which are 2 percentage points above and 2 percentage points below the current investment return and discount rate assumptions utilized by the board, and a calculation of the rates based on an amortization period equal to the estimated average remaining service periods (EARSP) of the employees covered by the contributions. The results are presented for three different investment return assumptions (5.50%, 7.50% and 9.50%) for all the State plans. For comparison, contribution rates for the current fiscal year have been calculated using both the current amortization method and amortization over the estimated average remaining service periods of the employees covered by the contributions.

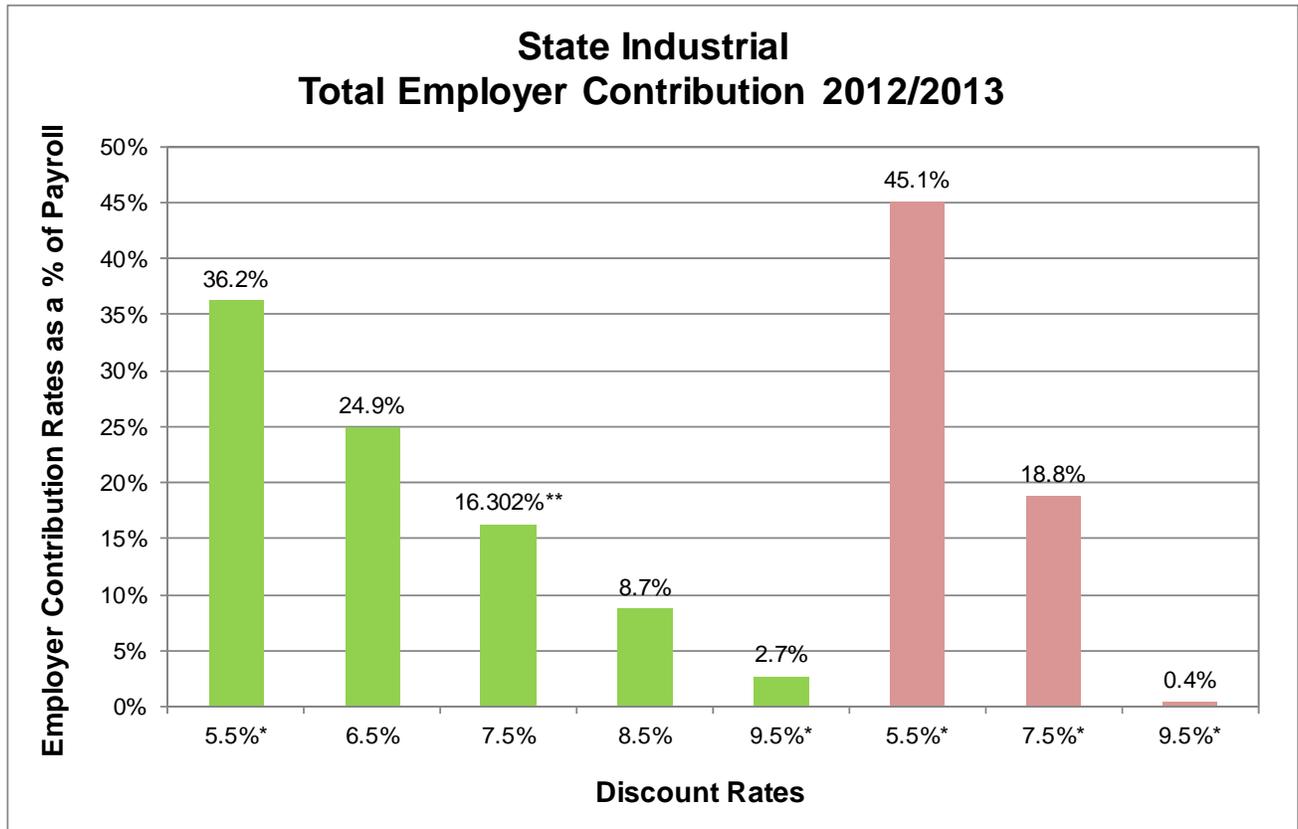
The results of the analysis are presented in three sections. The first section is a graphical representation of the impact on employer rates for both +/- 1% change in discount rate, and +/- 2% change in discount rate due to G.C. 20229. The second and third sections are the numeric representations. The reader may use the data points presented in the graph to estimate data points of interest using interpolation.



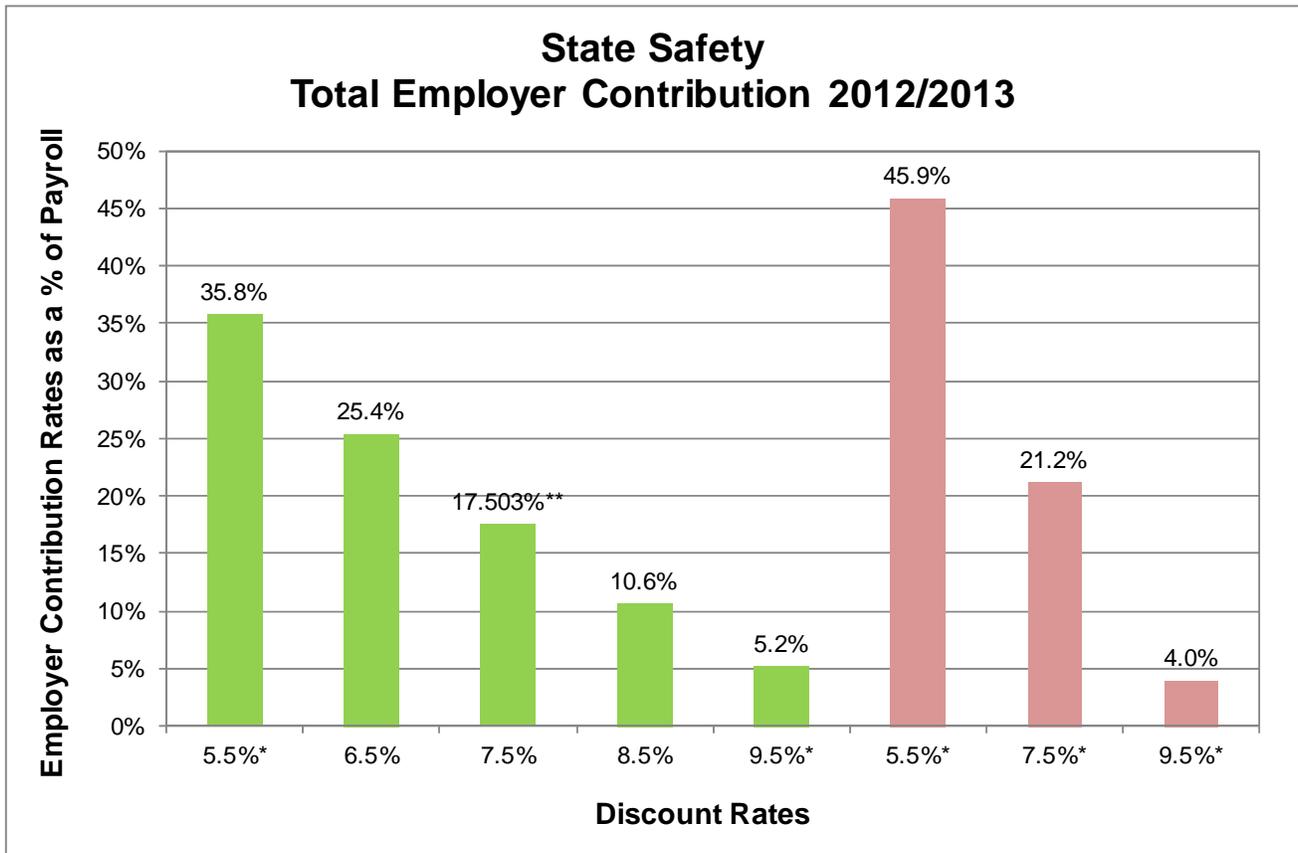
- Analysis of discount rate sensitivity based on current amortization method (varies from 20 to 30 years)
- Analysis of discount rate sensitivity based on amortization of UL over EARSP (10 years)
- \* Required by Government Code Section 20229
- \*\* Adopted by the legislature



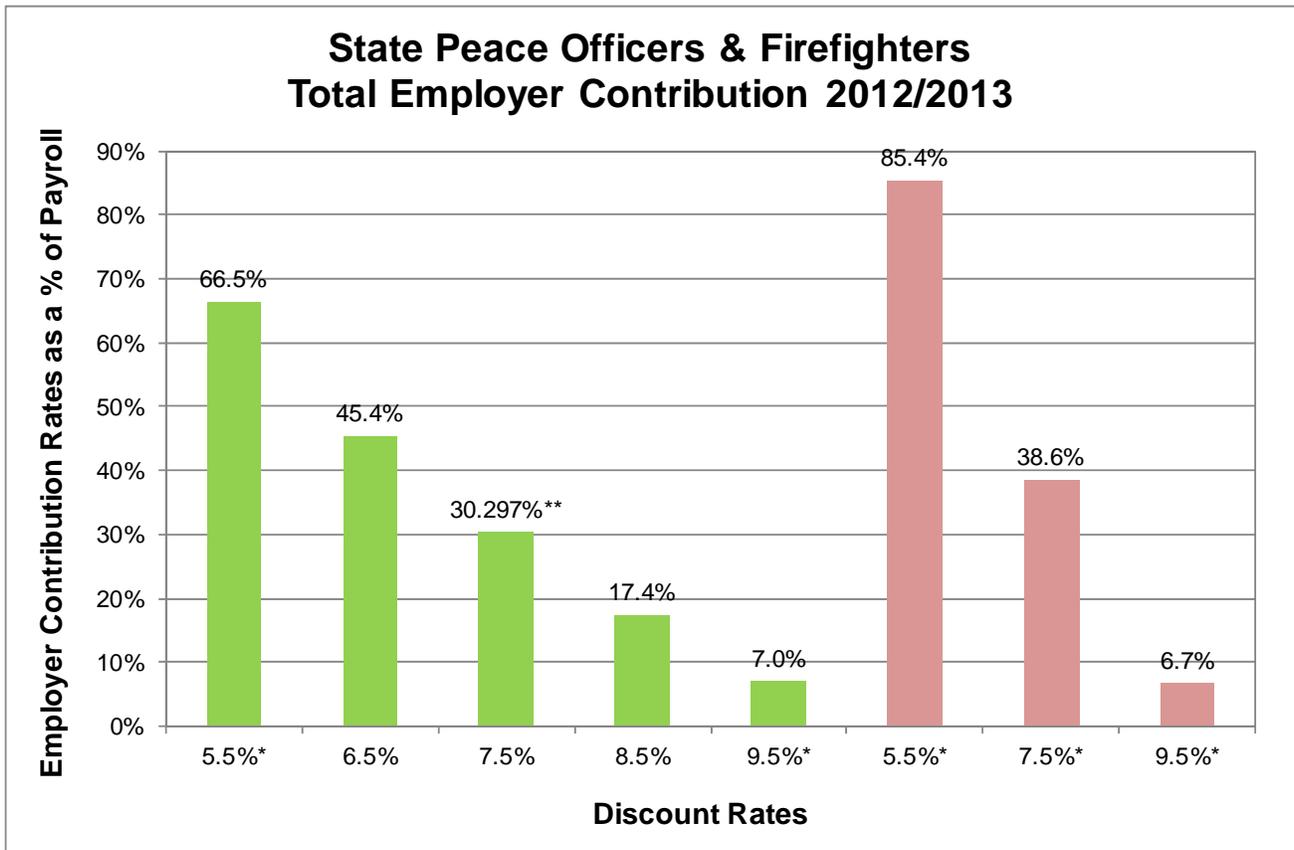
- Analysis of discount rate sensitivity based on current amortization method (varies from 20 to 30 years)
- Analysis of discount rate sensitivity based on amortization of UL over EARSP (10 years)
- \* Required by Government Code Section 20229
- \*\* Adopted by the legislature



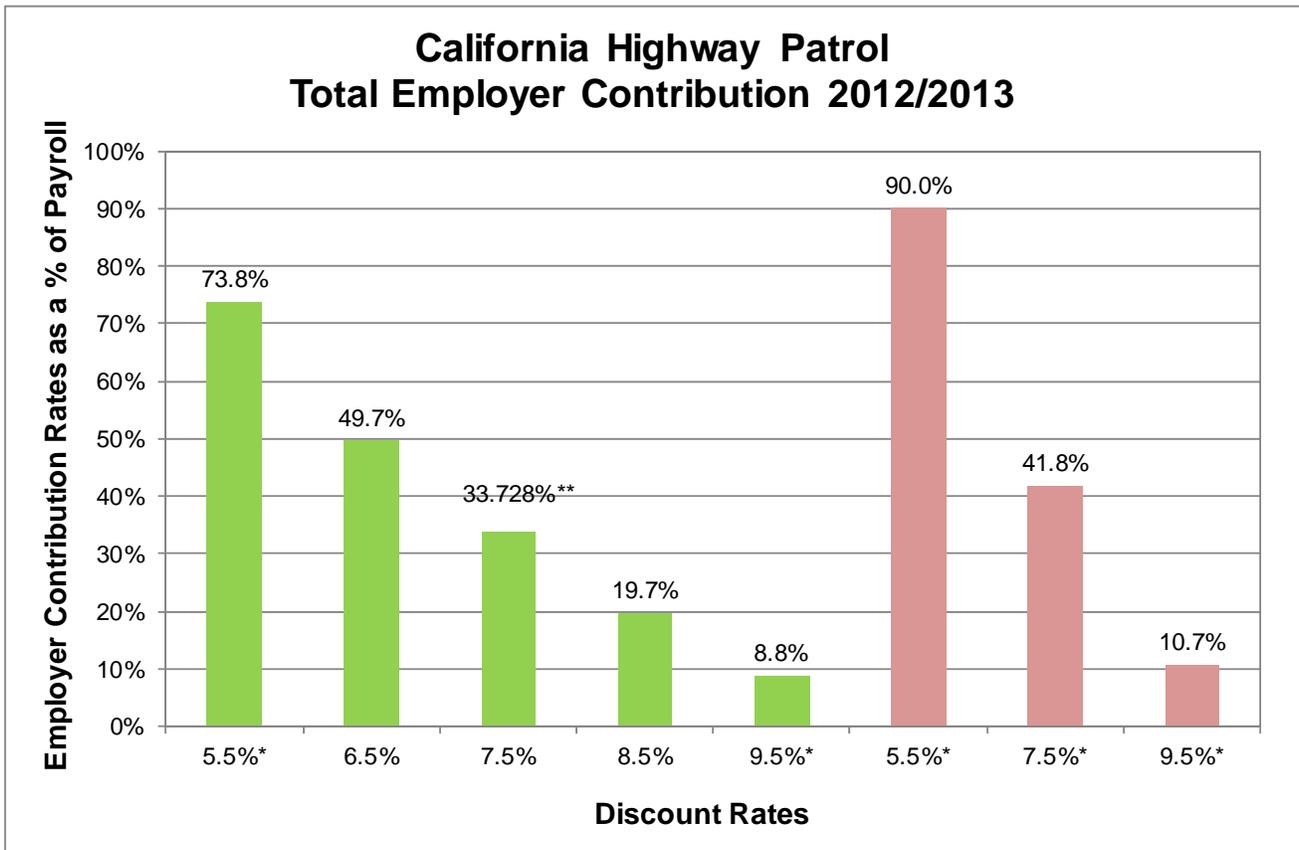
- Analysis of discount rate sensitivity based on current amortization method (varies from 14 to 30 years)
- Analysis of discount rate sensitivity based on amortization of UL over EARSP (11 years)
- \* Required by Government Code Section 20229
- \*\* Adopted by the legislature



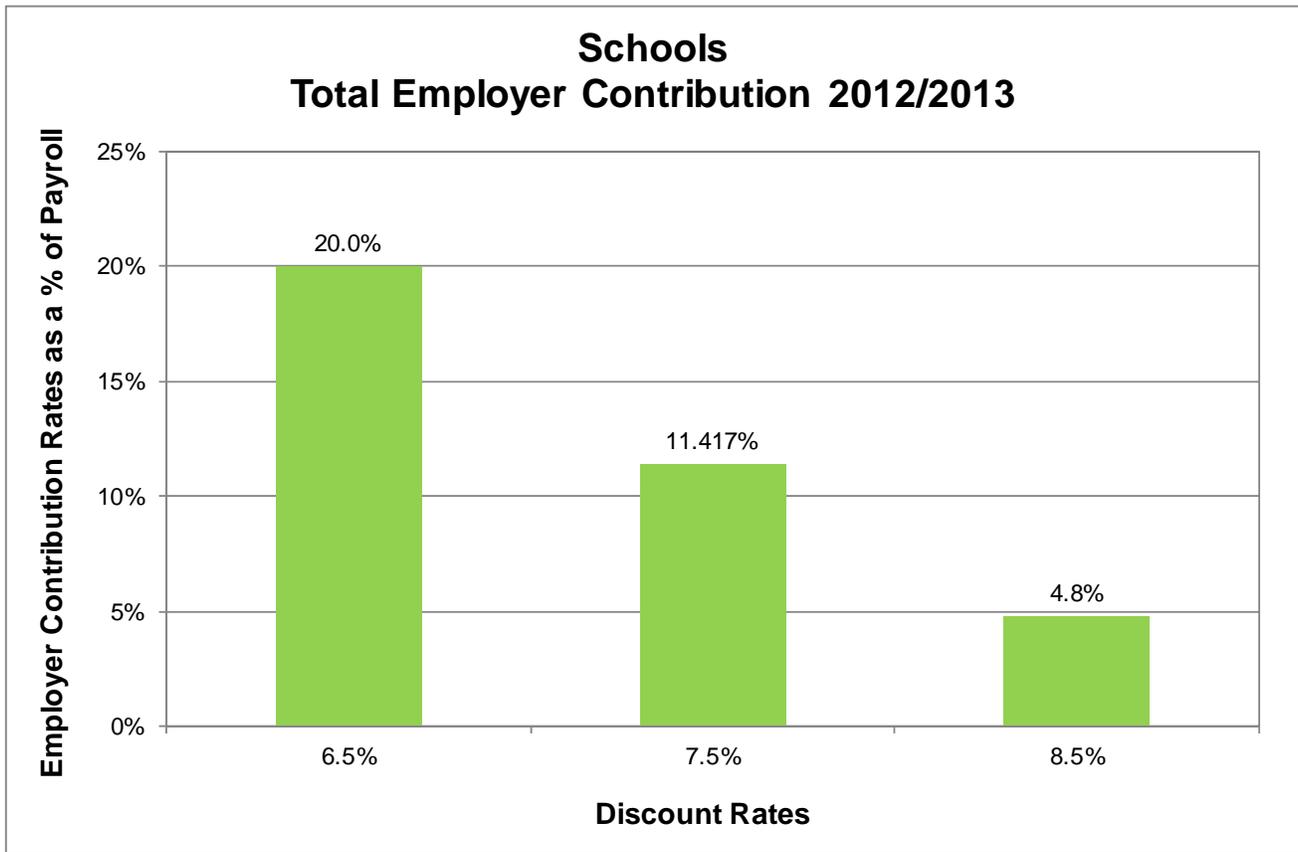
- Analysis of discount rate sensitivity based on current amortization method (varies from 21 to 30 years)
- Analysis of discount rate sensitivity based on amortization of UL over EARSP (10 years)
- \* Required by Government Code Section 20229
- \*\* Adopted by the legislature



- Analysis of discount rate sensitivity based on current amortization method (varies from 21 to 30 years)
- Analysis of discount rate sensitivity based on amortization of UL over EARSP (12 years)
- \* Required by Government Code Section 20229
- \*\* Adopted by the legislature



- Analysis of discount rate sensitivity based on current amortization method (varies from 21 to 30 years)
- Analysis of discount rate sensitivity based on amortization of UL over EARSP (14 years)
- \* Required by Government Code Section 20229
- \*\* Adopted by the legislature



Analysis of discount rate sensitivity based on current amortization method (varies from 23 to 30 years)

**Analysis of Discount Rate Sensitivity (+/- 1% change in discount rate)**

Discount Rate		6.50%	7.50%	8.50%
State Miscellaneous Tier 1	Normal Cost	12.2%	8.370%	5.5%
	UAL Payment	18.3%	12.057%	5.9%
	GTLI	<u>0.1%</u>	<u>0.076%</u>	<u>0.1%</u>
	Total	30.5%	20.503%	11.4%
	Funded Status	63.0%	70.7%	78.7%
State Miscellaneous Tier 2	Normal Cost	10.7%	8.324%	6.5%
	UAL Payment	18.3%	12.057%	5.9%
	GTLI	<u>0.1%</u>	<u>0.076%</u>	<u>0.1%</u>
	Total	29.1%	20.457%	12.5%
	Funded Status	63.0%	70.7%	78.7%
State Industrial	Normal Cost	15.3%	11.220%	8.0%
	UAL Payment	9.5%	5.082%	0.7%
	GTLI	<u>0.0%</u>	<u>0.000%</u>	<u>0.0%</u>
	Total	24.9%	16.302%	8.7%
	Funded Status	67.8%	77.0%	86.7%
State Safety	Normal Cost	17.1%	12.740%	9.3%
	UAL Payment	8.2%	4.738%	1.3%
	GTLI	<u>0.0%</u>	<u>0.025%</u>	<u>0.0%</u>
	Total	25.4%	17.503%	10.6%
	Funded Status	65.7%	74.6%	84.1%
POFF	Normal Cost	23.1%	16.458%	11.4%
	UAL Payment	22.2%	13.813%	6.0%
	GTLI	<u>0.0%</u>	<u>0.026%</u>	<u>0.0%</u>
	Total	45.4%	30.297%	17.4%
	Funded Status	60.5%	69.0%	78.2%
CHP	Normal Cost	20.8%	14.162%	9.2%
	UAL Payment	28.9%	19.540%	10.6%
	GTLI	<u>0.0%</u>	<u>0.026%</u>	<u>0.0%</u>
	Total	49.7%	33.728%	19.7%
	Funded Status	57.2%	65.1%	73.5%
Schools	Normal Cost	10.8%	7.415%	4.8%
	UAL Payment	9.2%	4.002%	-0.1%
	GTLI	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
	Total	20.0%	11.417%	4.8%
	Funded Status	69.6%	78.7%	88.2%

\*Rates assume phase-in of impact of economic assumption change for June 30, 2011 valuation for Schools only

\*\* Rates were also calculated with a 30-year Fresh Start to the amortization bases in the case of an average amortization period greater than 30 or a surplus with an average amortization period less than 30 years.

\*\*\*Numbers may not add due to rounding.

**Government Code Section 20229 (+/-2% change in discount rate based on current amortization method and amortization over EARSP)**

<b>State Miscellaneous Tier 1 &amp; Tier 2</b>			
<b>Discount Rate</b>	<b>5.50%</b>	<b>7.50%</b>	<b>9.50%</b>
Accrued Liability	103,016,602,885	81,271,085,568	65,971,634,057
Market Value of Assets (MVA)	57,451,959,716	57,451,959,716	57,451,959,716
Funded Status MVA basis	55.8%	70.7%	87.1%
Unfunded Liability MVA basis	45,564,643,169	23,819,125,852	8,519,674,341
<b><u>State Miscellaneous Tier 1</u></b>			
<b><i>Current Amortization Method</i></b>			
Payment on Normal Cost	17.1%	8.370%	3.2%
Payment on UL	27.1%	12.057%	-0.2%
<u>Group Term Life Insurance</u>	<u>0.1%</u>	<u>0.076%</u>	<u>0.1%</u>
Total ER Contribution 2012/13	44.2%	20.503%	3.1%
<b><u>State Miscellaneous Tier 1</u></b>			
<b><i>Amortization of UL over EARSP</i></b>			
Payment on Normal Cost	17.1%	8.4%	3.2%
Payment on UL (over EARSP=10 yrs)	46.5%	20.0%	-0.4%
<u>Group Term Life Insurance</u>	<u>0.1%</u>	<u>0.1%</u>	<u>0.1%</u>
Total ER Contribution 2012/13	63.7%	28.4%	2.9%
<b><u>State Miscellaneous Tier 2</u></b>			
<b><i>Current Amortization Method</i></b>			
Payment on Normal Cost	13.9%	8.324%	5.2%
Payment on UL	27.1%	12.057%	-0.2%
<u>Group Term Life Insurance</u>	<u>0.1%</u>	<u>0.076%</u>	<u>0.1%</u>
Total ER Contribution 2012/13	41.0%	20.457%	5.1%
<b><u>State Miscellaneous Tier 2</u></b>			
<b><i>Amortization of UL over EARSP</i></b>			
Payment on Normal Cost	13.9%	8.3%	5.2%
Payment on UL (over EARSP=10 yrs)	46.5%	20.0%	-0.4%
<u>Group Term Life Insurance</u>	<u>0.1%</u>	<u>0.1%</u>	<u>0.1%</u>
Total ER Contribution 2012/13	60.4%	28.4%	4.9%

<b>State Industrial</b>			
<b>Discount Rate</b>	<b>5.50%</b>	<b>7.50%</b>	<b>9.50%</b>
Accrued Liability	3,685,697,766	2,831,498,651	2,251,071,663
Market Value of Assets (MVA)	2,179,954,931	2,179,954,931	2,179,954,931
Funded Status MVA basis	59.1%	77.0%	96.8%
Unfunded Liability MVA basis	1,505,742,835	651,543,720	71,116,732
<b><i>Current Amortization Method</i></b>			
Payment on Normal Cost	20.6%	11.220%	5.5%
Payment on UL	15.6%	5.082%	-2.8%
<u>Group Term Life Insurance</u>	<u>0.0%</u>	<u>0.000%</u>	<u>0.0%</u>
Total ER Contribution 2012/13	36.2%	16.302%	2.7%
<b><i>Amortization of UL over EARSP</i></b>			
Payment on Normal Cost	20.6%	11.2%	5.5%
Payment on UL (over EARSP=11 yrs)	24.5%	7.6%	-5.1%
<u>Group Term Life Insurance</u>	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>
Total ER Contribution 2012/13	45.1%	18.8%	0.4%

<b>State Safety</b>			
<b>Discount Rate</b>	<b>5.50%</b>	<b>7.50%</b>	<b>9.50%</b>
Accrued Liability	9,404,906,802	7,224,281,258	5,735,707,305
Market Value of Assets (MVA)	5,389,522,934	5,389,522,934	5,389,522,934
Funded Status MVA basis	57.3%	74.6%	94.0%
Unfunded Liability MVA basis	4,015,383,868	1,834,758,324	346,184,371
<b><i>Current Amortization Method</i></b>			
Payment on Normal Cost	22.7%	12.740%	6.5%
Payment on UL	13.1%	4.738%	-1.3%
<u>Group Term Life Insurance</u>	<u>0.0%</u>	<u>0.025%</u>	<u>0.0%</u>
Total ER Contribution 2012/13	35.8%	17.503%	5.2%
<b><i>Amortization of UL over EARSP</i></b>			
Payment on Normal Cost	22.7%	12.7%	6.5%
Payment on UL (over EARSP=10 yrs)	23.1%	8.4%	-2.6%
<u>Group Term Life Insurance</u>	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>
Total ER Contribution 2012/13	45.9%	21.2%	4.0%

<b>State Peace Officers and Firefighters</b>			
<b>Discount Rate</b>	<b>5.50%</b>	<b>7.50%</b>	<b>9.50%</b>
Accrued Liability	39,732,775,110	30,127,480,709	23,727,901,123
Market Value of Assets (MVA)	20,801,283,158	20,801,283,158	20,801,283,158
Funded Status MVA basis	52.4%	69.0%	87.7%
Unfunded Liability MVA basis	18,931,491,952	9,326,197,551	2,926,617,965
<b><i>Current Amortization Method</i></b>			
Payment on Normal Cost	32.0%	16.458%	7.4%
Payment on UL	34.5%	13.813%	-0.5%
<u>Group Term Life Insurance</u>	<u>0.0%</u>	<u>0.026%</u>	<u>0.0%</u>
Total ER Contribution 2012/13	66.5%	30.297%	7.0%
<b><i>Amortization of UL over EARSP</i></b>			
Payment on Normal Cost	32.0%	16.5%	7.4%
Payment on UL (over EARSP=12 yrs)	53.4%	22.1%	-0.8%
<u>Group Term Life Insurance</u>	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>
Total ER Contribution 2012/13	85.4%	38.6%	6.7%

<b>California Highway Patrol</b>			
<b>Discount Rate</b>	<b>5.50%</b>	<b>7.50%</b>	<b>9.50%</b>
Accrued Liability	10,866,817,206	8,193,449,625	6,548,697,930
Market Value of Assets (MVA)	5,335,993,093	5,335,993,093	5,335,993,093
Funded Status MVA basis	49.1%	65.1%	81.5%
Unfunded Liability MVA basis	5,530,824,113	2,857,456,532	1,212,704,837
<b><i>Current Amortization Method</i></b>			
Payment on Normal Cost	29.7%	14.162%	5.4%
Payment on UL	44.1%	19.540%	3.4%
<u>Group Term Life Insurance</u>	<u>0.0%</u>	<u>0.026%</u>	<u>0.0%</u>
Total ER Contribution 2012/13	73.8%	33.728%	8.8%
<b><i>Amortization of UL over EARSP</i></b>			
Payment on Normal Cost	29.7%	14.2%	5.4%
Payment on UL (over EARSP=14 yrs)	60.3%	27.6%	5.2%
<u>Group Term Life Insurance</u>	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>
Total ER Contribution 2012/13	90.0%	41.8%	10.7%

\* Rates calculated using current amortization methods were calculated with a 30-year Fresh Start to the amortization bases in the case of an average amortization period greater than 30 or a surplus with an average amortization period less than 30 years.

\*\*Numbers may not add due to rounding.