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Actuarial Office
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October 2008

SAFETY PLAN OF THE CITY OF LA HABRA (EMPLOYER # 405)
Annual Valuation Report as of June 30, 2007

Dear Employer,

Enclosed please find a copy of the June 30, 2007 actuarial valuation report of your pension plan. Since your plan had less than 100 active members in at least one valuation since June 30, 2003, it is required to participate in a risk pool. The following valuation report has been separated into two Sections:

- Section 1 contains specific information for your plan, including the development of your pooled employer contribution rate, and
- Section 2 contains the Risk Pool Actuarial Valuation appropriate to your plan, as of June 30, 2007.

This report contains important actuarial information about your pension plan at CalPERS. Your CalPERS staff actuary is available to discuss the actuarial report with you.

Changes Since the Prior Valuation

There may be changes specific to your plan such as contract amendments and funding changes.

Future Contribution Rates

The exhibit below displays the required employer contribution rate and Superfunded status for 2009/2010 along with an estimate of the contribution rate and Superfunded status for 2010/2011. The estimated rate for 2010/2011 is based on a projection of the most recent information we have available, including an estimate of the investment return for fiscal 2007/2008, namely -2.5%. Please disregard any projections that we may have provided to you in the past.

Fiscal Year	Employer Contribution Rate	Superfunded?
2009/2010	26.521%	No
2010/2011	26.5% (projected)	No

Member contributions (whether paid by the employer or the employee) are in addition to the above rates.

The estimate for 2010/2011 assumes that there are no amendments and no liability gains or losses (such as larger than expected pay increases, more retirements than expected, etc.). **This is a very important assumption because these gains and losses do occur and can have a significant effect on your contribution rate.** Even for the largest plans, such gains and losses can impact the employer's contribution rate by one or two percent or even more in some less common instances. These gains and losses cannot be predicted in advance so the projected employer contribution rate for 2010/2011 is just an estimate. Your actual rate for 2010/2011 will be provided in next year's report.

If you have questions, please call (888) CalPERS (225-7377). In the interest of allowing us to give every public agency their result, we ask that, if at all possible, you wait until after October 31 to contact us with questions.

Sincerely,

Ronald L. Seeling, Ph.D., FCA, ASA, MAAA
Enrolled Actuary
Chief Actuary, CalPERS

Actuarial Valuation
as of June 30, 2007

The SAFETY PLAN
of the CITY OF LA HABRA
(Employer # 405)

Required Contributions
For Fiscal Year
July 1, 2009 - June 30, 2010

CalPERS
California Public Employees' Retirement System
P.O. Box 942709
Sacramento, CA 94229-2709
1-888-CalPERS (225-7377)

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Section 1

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Plan Specific Information for The SAFETY PLAN of the CITY OF LA HABRA

(Employer # 405)

(Rate Plan # 413)

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Actuarial Certification

Section 1 of this report is based on the member and financial data as of June 30, 2007 provided by the agency, and benefits under this contract with CalPERS. Section 2 of this report is based on the member and financial data as of June 30, 2007 provided by employers participating in the risk pool and contained in our records.

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 this plan, as prescribed by the CalPERS Board of Administration according to provisions set forth in the California Public Employees' Retirement Law.

The undersigned are actuaries for CalPERS. Both are members of the American Academy of Actuaries and Society of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Richard L. Santos

Richard Santos, ASA, MAAA
Senior Pension Actuary, CalPERS
Plan Actuary

Fritzie Archuleta

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Associate Pension Actuary, CalPERS
Pool Actuary

Barbara J. Ware

Barbara J. Ware, FSA, MAAA
Enrolled Actuary
Senior Pension Actuary, CalPERS
Pool Actuary

Purpose of Section 1

Section 1 of this report was prepared by the Plan Actuary in order to:

- Certify that the actuarially required employer contribution rate of the SAFETY PLAN of the CITY OF LA HABRA for the fiscal year July 1, 2009 through June 30, 2010 is 26.521%;
- Set forth the plan's Employer Side Fund as of June 30, 2007;
- Provide pension information as of June 30, 2007 to be used in financial reports subject to Governmental Accounting Standards Board (GASB) Statement Number 27.

This section was prepared in order to provide actuarial information as of June 30, 2007 to the CalPERS Board of Administration and other interested parties

Use of this report for other purposes may be inappropriate.

Required Employer Contributions

	Fiscal Year 2008/2009	Fiscal Year 2009/2010
Employer Contribution Required (in Projected Dollars)		
Risk Pool's Net Employer Normal Cost	$ 873,075	$ 855,732
Risk Pool's Payment on Amortization Bases	94,257	94,496
Surcharge for Class 1 Benefits		
a) FAC 1	51,265	50,102
b) PRSA	99,997	97,514
Phase out of Normal Cost Difference	(38,491)	(28,151)
Amortization of Side Fund	373,509	385,648
Total Employer Contribution	$ 1,453,612	$ 1,455,341
Annual Lump Sum Prepayment Option*	$ 1,400,361	$ 1,402,026
Projected Payroll for the Contribution Fiscal Year	$ 5,627,296	$ 5,487,571
Employer Contribution Required (Percentage of Payroll)		
Risk Pool's Net Employer Normal Cost	15.515%	15.594%
Risk Pool's Payment on Amortization Bases	1.675%	1.722%
Surcharge for Class 1 Benefits		
a) FAC 1	0.911%	0.913%
b) PRSA	1.777%	1.777%
Phase out of Normal Cost Difference	(0.684%)	(0.513%)
Amortization of Side Fund	6.637%	7.028%
Total Employer Contribution	25.831%	26.521%

Appendix C of Section 2 of this report contains a list of Class 1 benefits and corresponding surcharges for each benefit.

Risk pooling was implemented as of June 30, 2003. The normal cost difference was scheduled to be phased out over a five year period. The phase out of normal cost difference began at 100% for the first year, and was incrementally reduced by 20% of the original normal cost difference for each subsequent year.

*Payment must be received by CalPERS between July 1 and July 15.

Projected Contributions

The rate shown below is an estimate for the employer contribution for Fiscal Year 2010/2011. The estimated rate is based on a projection of the most recent information we have available, including an estimate of the investment return for fiscal year 2007/2008, namely -2.5%:

Projected Employer Contribution Rate:	26.5%

The estimate also assumes that there are no liability gains or losses among the plans in your risk pool, that your plan has no new amendments in the next year, and that your plan's and your risk pool's payrolls both increase exactly 3.25% in the 2007/2008 fiscal year. Therefore, the projected employer contribution rate for 2010/2011 is just an estimate. Your actual rate for 2010/2011 will be provided in next year's report.

Rate Volatility

Your plan's employer contribution rate will inevitably fluctuate, for many reasons. However, the biggest fluctuations are generally due to changes in the side fund rate resulting from unexpected changes in payroll. The following figure shows how much ***your*** 2010/2011 rate would change for each 1% deviation between our 3.25% payroll growth assumption and your actual 2007/2008 payroll growth.

POTENTIAL 2010/2011 RATE IMPACT
FROM 2007/2008 PAYROLL DEVIATION

% Rate Change per 1% Deviation from Assumed 3.25% Payroll Growth:	(0.067%)

Examples: To see how your employer contribution rate might be affected by unexpected payroll change, suppose the following:

- *The **% Rate Change per 1% Deviation** figure given above is -0.400%*
- *Your plan's payroll increased 10% in 2007/2008 (6.75% more than our 3.25% assumption).*

Then your 2010/2011 rate would decrease -0.400% x (10 – 3.25) = -2.70% from that cause alone.

*Or conversely, using the same **% Rate Change per 1% Deviation** figure given above, suppose your plan's payroll remained the same in 2007/2008 (3.25% less than our 3.25% assumption).*

*Then your 2010/2011 rate would **increase** -0.400% x (0 – 3.25%) = 1.3% from that cause alone.*

Note that if your plan had a negative side fund, an unexpected payroll increase would spread the payback of the negative side fund over a bigger payroll, which would decrease your plan's side fund percentage rate and the total employer contribution rate. On the other hand, if your plan had a positive side fund, an unexpected payroll increase would spread the payback of the positive side fund over a smaller payroll, which would increase your plan's side fund percentage rate and the total employer contribution rate. In either case, the Side Fund dollar amount would not change.

Employer Side Fund

At the time of joining a risk pool, a side fund was created to account for the difference between the funded status of the pool and the funded status of your plan. The side fund for your plan as of the June 30, 2007 valuation is shown in the following table.

Your side fund will be credited, on an annual basis, with the actuarial investment return assumption. This assumption is currently 7.75%. A positive side fund will cause your required employer contribution rate to be reduced by the Amortization of Side Fund shown above in Required Employer Contributions. A negative side fund will cause your required employer contribution rate to be increased by the Amortization of Side Fund. In the absence of subsequent contract amendments or funding changes, the side fund will disappear at the end of the amortization period shown below.

Employer Side Fund Reconciliation

	June 30, 2006	June 30, 2007
Side Fund as of valuation date*	$ (5,895,076)	$ (5,922,947)
Adjustments	0	0
Side Fund Payment	413,282	361,752
Side Fund one year later	$ (5,922,947)	$ (6,006,467)
Adjustments	0	0
Side Fund Payment	361,752	373,509
Side Fund two years later	$ (6,006,467)	$ (6,084,256)
Amortization Period	28	27
Side Fund Payment during last year	$ 373,509	$ 385,648

* If your agency employed vouchers in fiscal year 2006/2007 to pay employee contributions, the June 30, 2007 Side Fund amount has been adjusted by a like amount without any further adjustment to the Side Fund's amortization period. Similarly, the Side Fund has been adjusted for the increase in liability from any recently adopted Class 1 or Class 2 contract amendments. Also, the Side Fund may be adjusted or eliminated due to recent lump sum payments. Contract amendments and lump sum payments may result in an adjustment to the Side Fund amortization period.

Superfunded Status

	June 30, 2006	June 30, 2007
Is the plan Superfunded? [Yes if Assets exceed PVB, No otherwise]	No	No

Summary of Participant Data

Below is a table showing a summary of the active member data for your plan upon which this valuation is based:

	June 30, 2006	June 30, 2007
Projected Payroll for Contribution Purposes	$ 5,627,296	$ 5,487,571
Number of Members		
Active	68	64
Transferred	75	78
Separated	14	15
Retired	136	138

List of Class 1 Benefit Provisions

- One Year Final Compensation
- Post-Retirement Survivor Allowance

Information for Compliance with GASB Statement No. 27 for Cost-Sharing Multiple-Employer Defined Benefit Plan

Your plan is part of the Safety 3.0% at 50 Risk Pool, a cost-sharing multiple-employer defined benefit plan. Under GASB 27, an employer should recognize annual pension expenditures/expense equal to its contractually required contributions to the plan. Pension liabilities and assets result from the difference between contributions required and contributions made. The contractually required contribution for the period July 1, 2009 to June 30, 2010 has been determined by an actuarial valuation of the plan as of June 30, 2007. Your contribution rate for the indicated period is 26.521% of payroll. In order to calculate the dollar value of the contractually required contributions for inclusion in financial statements prepared as of June 30, 2010, this contribution rate, as modified by any subsequent financing changes or contract amendments for the year, would be multiplied by the payroll of covered employees that was actually paid during the period July 1, 2009 to June 30, 2010. However, if this contribution is fully prepaid in a lump sum, then the dollar value of contractually required contributions is equal to the lump sum prepayment. The employer and the employer's auditor are responsible for determining the contractually required contributions. Further, the required contributions in dollars and the percentage of that amount contributed for the current year and each of the two preceding years is to be disclosed under GASB 27.

A summary of principal assumptions and methods used to determine the contractually required contributions is shown below for the cost-sharing multiple-employer defined benefit plan.

Valuation Date	June 30, 2007
Actuarial Cost Method	Entry Age Actuarial Cost Method
Amortization Method	Level Percent of Payroll
Average Remaining Period	16 Years as of the Valuation Date
Asset Valuation Method	15 Year Smoothed Market
Actuarial Assumptions	
Investment Rate of Return	7.75% (net of administrative expenses)
Projected Salary Increases	3.25% to 14.45% depending on Age, Service, and type of employment
Inflation	3.00%
Payroll Growth	3.25%
Individual Salary Growth	A merit scale varying by duration of employment coupled with an assumed annual inflation growth of 3.00% and an annual production growth of 0.25%.

Complete information on assumptions and methods is provided in Appendix A of Section 2 of the report. Appendix B of Section 2 of the report contains a description of benefits included in the Risk Pool Actuarial Valuation.

A Schedule of Funding for the Risk Pool's actuarial value of assets, accrued liability, their relationship, and the relationship of the unfunded liability (UL) to payroll for the risk pool(s) to which your plan belongs can be found in Section 2 of the report.

Summary of Major Benefit Options

Shown below is a summary of the major optional benefits for which your agency has contracted. A description of principal standard and optional plan provisions is in Appendix B within Section 2 of this report.

	Coverage Group	
	75001	74001*
Benefit Provision		
Benefit Formula	3.0% @ 50	3.0% @ 50
Social Security Coverage	no	no
Full/Modified	full	full
Final Average Compensation Period	12 mos.	12 mos.
Sick Leave Credit	yes	yes
Non-Industrial Disability	standard	standard
Industrial Disability	yes	yes
Pre-Retirement Death Benefits		
Optional Settlement 2W	yes	yes
1959 Survivor Benefit Level	level 4	level 4
Special	yes	yes
Alternate (firefighters)	no	no
Post-Retirement Death Benefits		
Lump Sum	$500	$500
Survivor Allowance (PRSA)	yes	yes
COLA	2%	2%
Employee Contributions		
Contractual employer paid	no	no
Contractual Employee Cost sharing	0%	0%

*Inactive Coverage Group

Section 2

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Safety 3.0% at 50 Risk Pool as of June 30, 2007

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Actuarial Certification

To the best of our knowledge, this report is complete and accurate and contains sufficient information to disclose, fully and fairly, the funded condition of the Safety 3.0% at 50 Risk Pool. This valuation is based on the member and financial data as of June 30, 2007 provided by the various CalPERS databases and the benefits under this Risk Pool with CalPERS as of the date this report was produced. 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 this risk pool, as prescribed by the CalPERS Board of Administration according to provisions set forth in the California Public Employees' Retirement Law.

The undersigned are actuaries for CalPERS. Both are members of the American Academy of Actuaries and Society of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Fritzie Archuleta

Barbara J. Ware

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HIGHLIGHTS AND EXECUTIVE SUMMARY

- **PURPOSE OF SECTION 2**
- **RISK POOL'S REQUIRED EMPLOYER CONTRIBUTION**
- **RISK POOL'S REQUIRED BASE EMPLOYER RATE**
- **FUNDED STATUS OF THE RISK POOL**
- **COST AND VOLATILITY**
- **CHANGES SINCE THE PRIOR VALUATION**
- **SUBSEQUENT EVENTS**

Purpose of Section 2

This Actuarial Valuation for the Safety 3.0% at 50 Risk Pool of the California Public Employee's Retirement System (CalPERS) was performed by CalPERS' staff actuaries using data as of June 30, 2007 in order to:

- set forth the actuarial assets and accrued liabilities of this risk pool as of June 30, 2007
- establish the actuarially required contribution rate of the pool for the period July 1, 2009 through June 30, 2010
- provide actuarial information as of June 30, 2007 to the CalPERS Board and other interested Parties

Use of this report for other purposes may be inappropriate.

Risk Pool's Required Employer Contribution

(figures net of employee contributions)

	Fiscal Year 2008/2009	Fiscal Year 2009/2010
Contribution in Projected Dollars		
1. Pool's Gross Employer Normal Cost	$ 143,285,020	$ 158,813,764
2. Payment on Pool's Amortization Base	13,916,025	15,761,688
3. Payment on Employer Side Funds	83,958,372	86,567,945
4. Total Required Employer Contribution*	$ 241,162,114	$ 261,141,088
* Total may not add up due to rounding		
Contribution as a % of Projected Pay		
5. Pool's Gross Employer Normal Cost	17.248%	17.350%
6. Payment on Pool's Amortization Base	1.675%	1.722%
7. Payment on Employer Side Funds	10.107%	9.457%
8. Total Required Employer Contribution	29.030%	28.529%

These rates are the total required employer contributions by the pool for fiscal years 2008/2009 and 2009/2010. The Pool's Gross Employer Normal Cost includes the Class 1 surcharges for all employers that actually contract for the Class 1 type benefits. The payment on the pool's amortization base is the payment on the ongoing cumulative gains and losses experienced by the pool since its June 30, 2003 inception. The payment on employer side funds is the combination of all expected individual amortization payments on every side fund in the pool.

Risk Pool's Required Base Employer Rate

	Fiscal Year 2008/2009	Fiscal Year 2009/2010
1. Pool's Gross Employer Normal Cost	17.248%	17.350%
Less: Surcharges for Class 1 Benefits	1.733%	1.756%
2. Pool's Net Employer Normal Cost	15.515%	15.594%
3. Payment on Pool's Amortization Base	1.675%	1.722%
4. Pool's Base Employer Rate	17.190%	17.316%

The base employer contribution rate is the rate that each plan within the pool starts with and pays before any adjustments are made. It represents the pool funding for basic benefits (no Class 1 surcharges) for the fiscal year shown. To arrive at a plan's total contribution rate, several components must be added to this base rate.

These components are Class 1 benefit surcharges, normal cost phase-out and any side-fund payment. More information about those additional components can be found in Section 1 of this report.

Funded Status of the Risk Pool

		June 30, 2006	June 30, 2007
1.	Entry Age Normal Accrued Liability	$ 7,278,049,834	$ 7,986,055,176
2.	Market Value of Assets Including Side Funds (MVA)	$ 6,469,775,316	$ 7,903,684,460
3.	Funded Ratio (MVA) [(2) / (1)]	88.9%	99.0%

Cost and Volatility

Actuarial Cost Estimates in General

What will this pension plan cost? Unfortunately, there is no simple answer. There are two major reasons for the complexity of the answer:

First, all actuarial calculations, including those in this report, are based on a number of assumptions about the future.

- There are demographic assumptions about the percentage of employees that will terminate, die, become disabled, and retire in each future year.
- There are economic assumptions about future salary increases for each active employee, and the assumption with the greatest impact, future asset returns at CalPERS for each year into the future until the last dollar is paid to current members of your plan.

While CalPERS has set these assumptions as our best estimate of the real future of your plan, it must be understood that these assumptions are very long term predictors and will surely not be realized in each year as we go forward. For example, the assumption for investment return is 7.75% per year. The actual asset earnings for the past 15 years at CalPERS have ranged from -7.2% to 20.1% while the 15-year compound return has been 10.4%.

Second, the very nature of actuarial funding produces the answer to the question of plan or pool cost as the sum of two separate pieces:

- The Normal Cost (i.e., the future annual premiums in the absence of surplus or unfunded liability) expressed as a percentage of total active payroll, and
- The Past Service Cost (i.e., Accrued Liability – representing the current value of the benefit for all credited past service of current members) which is expressed as a lump sum dollar amount.

The cost is the sum of a percent of future pay and a lump sum dollar amount (the sum of an apple and an orange if you will). To communicate the total cost, either the Normal Cost (i.e., future percent of payroll) must be converted to a lump sum dollar amount (in which case the total cost is the present value of benefits), or the Past Service Cost (i.e., the lump sum) must be converted to a percent of payroll (in which case the total cost is expressed as the employer's rate part of which is permanent and part temporary). Converting the Past Service Cost lump sum to a percent of payroll requires a specific amortization period. So, the plan or pool rate can be computed in many different ways depending on how long one will take to pay for it. And as the first point above states; all of these results depend on all assumptions being exactly realized.

Rate Volatility

As is stated above, the actuarial calculations supplied in this communication 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 plan or pool's rates from year to year. Therefore, the rates will inevitably fluctuate, especially due to the ups and downs of investment returns. Plans or pools that have higher asset to payroll ratios produce more volatile employer rates. In the table below we have shown your volatility index, based on your retirement formula, a measure of the plan's potential future rate volatility. We are disclosing the ratio of accrued liability to payroll, rather than assets to payroll because the desired state for any plan or pool is to be 100% funded (i.e., with assets equal to accrued liability). It should be noted that this ratio increases over time but generally tends to stabilize as the plan or pool matures. For purposes of comparison, we have also included the average volatility index for all plans with the same retirement plan as yours.

Beginning with the June 30, 2004 actuarial valuation, rate stabilization methodologies were implemented. Although there is no method that can provide perfectly stable rates, the new methods have been shown to be very effective in mitigating rate volatility. It continues to be true that a plan that has a volatility index that is three times the index of a second plan will have three times the volatility in rates as compared to the second plan. However, the amount of change has been dramatically reduced through the rate stabilization process. In most situations, the new rate stabilization policies will reduce rate volatility due to actual gains and losses by about 50%.

	As of June 30, 2007
Accrued Liability	$ 7,986,055,176
Payroll	831,607,658
Volatility Index	9.6
Average Volatility Index for All Plans With 3.0% @ 50 Safety Retirement Formula (includes Pooled and non-pooled plans)	9.3

Changes since the Prior Valuation

Actuarial Assumptions

There were no changes in actuarial assumptions since the prior year's actuarial valuation with the possible exception of changes due to reflect a change in benefits.

Actuarial Methods

There were no material changes in actuarial methods since the prior year's actuarial valuation.

Benefits

The standard actuarial practice at CalPERS is to recognize mandated legislative benefit changes in the first annual valuation whose valuation date follows the effective date of the legislation. Voluntary benefit changes by employers within the risk pool are generally included in the first valuation whose report is dated after the amendment becomes effective. These voluntary changes are included in the liabilities reported in this valuation.

The valuation generally reflects plan changes by amendments effective prior to August 1, 2008. Please refer to Appendix B for a summary of the plan provisions used in this valuation report. The provisions in Appendix B do not indicate the class of benefits voluntarily contracted for by individual employers within the risk pool. Refer to Section 1 of the valuation report for a list of your specific contracted benefits. The increase in the pool's unfunded liabilities due to Class 1 or 2 amendments by individual employers within the pool is embedded in the Liability (Gain) / Loss shown in the Gain / Loss section of this report. This amount, however, is offset by additional contributions through a surcharge for employers who voluntarily contract for those benefits.

Subsequent Events

There were no significant subsequent events to report in this valuation.

SUMMARY OF LIABILITIES AND RATES

- **DEVELOPMENT OF ACCRUED AND UNFUNDED LIABILITIES**
- **(GAIN)/LOSS ANALYSIS 06/30/06 - 06/30/07**
- **SCHEDULE OF AMORTIZATION BASES FOR THE RISK POOL**
- **DEVELOPMENT OF RISK POOL'S ANNUAL REQUIRED BASE CONTRIBUTION**
- **POOL'S EMPLOYER CONTRIBUTION RATE HISTORY**
- **FUNDING HISTORY**

Development of Accrued and Unfunded Liabilities

		June 30, 2006	June 30, 2007
1.	Present Value of Projected Benefits		
	a) Active Members	$ 4,542,149,494	$ 4,947,025,428
	b) Transferred Members	527,549,668	594,223,923
	c) Separated Members	89,031,034	96,097,848
	d) Members and Beneficiaries Receiving Payments	3,907,400,279	4,337,142,282
	e) Total	$ 9,066,130,475	$ 9,974,489,481
2.	Present Value of Future Employer Normal Costs	$ 1,157,918,908	$ 1,289,883,636
3.	Present Value of Future Employee Contributions	$ 630,161,733	$ 698,550,669
4.	Entry Age Normal Accrued Liability		
	a) Active Members (1a - 2 - 3)	$ 2,754,068,853	$ 2,958,591,123
	b) Transferred Members (1b)	527,549,668	594,223,923
	c) Separated Members (1c)	89,031,034	96,097,848
	d) Members and Beneficiaries Receiving Payments (1d)	3,907,400,279	4,337,142,282
	e) Total	$ 7,278,049,834	$ 7,986,055,176
5.	Actuarial Value of Assets (AVA)	$ 6,102,615,567	$ 6,826,599,459
6.	Unfunded Accrued Liability (4e - 5)	1,175,434,267	1,159,455,717
7.	Side Funds (AVA)	$ (958,400,635)	$ (902,869,157)
8.	Actuarial Value of Assets excluding Side Funds (5 – 7)	7,061,016,202	7,729,468,616
9.	Unfunded Liability excluding Side Funds (4e – 8)	217,033,632	256,586,560
10.	Market Value of Assets (MVA)	$ 6,469,775,316	$ 7,903,684,460
11.	Funded Ratio (MVA) (10 / 4e)	88.9%	99.0%

(Gain)/Loss Analysis 06/30/06 - 06/30/07

We introduced the concepts of Actuarial Gains and Losses in the Cost and Volatility Section of this report. To reiterate, when we calculate the cost requirements of your plan, we use assumptions about future events that affect the amount and timing of benefits to be paid and assets to be accumulated. Each year actual experience is contrasted against the expected experience based on the actuarial assumptions. The differences are reflected below as your pool's actuarial gains or losses.

1. Total (Gain)/Loss		
a) Unfunded Liability/(Surplus) as of June 30, 2006	$	217,033,632
b) Expected payment on the unfunded liability		7,741,207
c) Interest accumulation [.0775 X (1a) + ((1.0775)^.5 - 1) X (1b)]		16,525,731
d) Expected Unfunded Liability before other changes [(1a) - (1b) + (1c)]		225,818,156
e) Change due to change in actuarial methods		0
f) Expected Unfunded Liability after changes [(1d) + (1e)]		225,818,156
g) Actual Unfunded Liability/(Surplus) as of June 30, 2007		256,586,560
h) Total (Gain)/Loss [(1g) - (1f)]	$	30,768,404
2. Contribution (Gain)/Loss		
a) Expected contribution	$	353,628,003
b) Expected interest on contributions		13,447,403
c) Total expected contributions with interest [(2a) + (2b)]	$	367,075,406
d) Actual contributions		377,397,340
e) Expected interest on actual contributions		14,351,279
f) Total actual contributions with interest [(2d) + (2e)]	$	391,748,619
g) Contribution (Gain)/Loss [(2c) - (2f)]		(24,673,213)
3. Asset (Gain)/Loss		
a) Actuarial value of assets June 30, 2006	$	6,102,615,567
b) Contributions received		377,397,340
c) Benefits and refunds paid		(314,533,294)
d) Other transfers, miscellaneous adjustments and lump sums		(23,241)
e) Expected interest [(3a) X .0775 + {(3b) + (3c) + (3d)} X (1.0775^.5 – 1)]		475,342,352
f) Transfers into the pool (AVA Basis)		184,527,363
g) Transfers out of the pool (AVA Basis)		(83,434,649)
h) Expected actuarial value of assets June 30, 2007 [Sum (3a) through (3g)]	$	6,741,891,438
i) Actual actuarial value of assets June 30, 2007		6,826,599,459
j) Asset (Gain)/Loss [(3h) - (3i)]		(84,708,021)
4. Liability (Gain)/Loss		
a) Total (Gain)/Loss (1h)	$	30,768,404
b) Contribution (Gain)/Loss (2g)		(24,673,213)
c) Asset (Gain)/Loss excluding side fund (3j)		(84,708,021)
d) Liability (Gain)/Loss [(4a) - (4b) - (4c)]*	$	140,149,638

* Includes (Gain)/Loss on plans transferring into the pool.

Schedule of Amortization Bases for the Risk Pool

The schedule below shows the development of the payment on the Pool's amortization bases used to determine the Total Required Employer Contributions. Each row of the schedule gives a brief description of a base (or portion of the Unfunded Actuarial Liability), 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 payments for the two years immediately following the valuation date, the balances on the dates a year and two years after the valuation date, and the scheduled payment for fiscal year 2009-2010. Please refer to Appendix A for an explanation of how amortization periods are determined.

Reason for Base	Amortization Period	Balance on June 30, 2007	Expected Payment 07-08	Balance June, 30 2008	Expected Payment 08-09	Balance June, 30 2009	Scheduled Payment for 2009-2010	Payment as a percentage of payroll
(GAIN)/LOSS	30	$158,533,820	$3,598,509	$167,084,842	$8,042,741	$171,685,335	$10,309,872	1.126%
PAYMENT (GAIN)/LOSS	30	$(7,268,211)	$11,949,362	$(20,235,257)	$1,546,508	$(23,408,807)	$(1,405,722)	(0.153%)
FRESH START	27	$105,320,951	$6,432,623	$106,806,089	$6,641,683	$108,189,315	$6,857,538	0.749%
Total		**$256,586,560**	**$21,980,494**	**$253,655,674**	**$16,230,932**	**$256,465,843**	**$15,761,688**	**1.722%**

Development of Risk Pool's Annual Required Base Contribution

		Fiscal Year 2008/2009	Fiscal Year 2009/2010
1.	**Contribution in Projected Dollars**		
a)	Total Normal Cost	$ 218,541,224	$ 241,744,756
b)	Employee Contribution	75,256,204	82,930,992
c)	Pool's Gross Employer Normal Cost (1a – 1b)	143,285,020	158,813,764
d)	Total Surcharges for Class 1 Benefits	14,396,622	16,073,601
e)	Net Employer Normal Cost (1c – 1d)	128,888,398	142,740,164
f)	Payment on Pool's Amortization Base	$ 13,916,025	$ 15,761,688
g)	Total Required Employer Contributions (1e + 1f)	142,804,423	158,501,852
2.	**Annual Covered Payroll as of Valuation Date**	$ 754,730,438	$ 831,607,658
3.	**Projected Payroll for Contribution Fiscal Year**	$ 830,734,116	$ 915,353,109
4.	**Contribution as a % of Projected Pay**		
a)	Total Normal Cost (1a / 3)	26.307%	26.410%
b)	Employee Contribution (1b / 3)	9.059%	9.060%
c)	Pool's Gross Employer Normal Cost (1c / 3)	17.248%	17.350%
d)	Total Surcharges for Class 1 Benefits (1d / 3)	1.733%	1.756%
e)	Net Employer Normal Cost (1e / 3)	15.515%	15.594%
f)	Payment on Pool's Amortization Base (1f / 3)	1.675%	1.722%
g)	Total Required Employer Contributions (1g / 3)	17.190%	17.316%

Pool's Employer Contribution Rate History

Valuation Date	Net Employer Normal Cost	Total Surcharges for Class 1 Benefits	Gross Employer Normal Cost	Payment on Pool's Amortization Bases	Total Payment On Employer Side Funds	Total Employer Contribution
06/30/2003	15.333%	1.708%	17.041%	0.000%	13.242%	30.283%
06/30/2004	15.362%	1.756%	17.118%	0.984%	12.618%	30.720%
06/30/2005	15.407%	1.712%	17.119%	1.306%	11.519%	29.944%
06/30/2006	15.515%	1.733%	17.248%	1.675%	10.107%	29.030%
06/30/2007	15.594%	1.756%	17.350%	1.722%	9.457%	28.529%

Funding History

Valuation Date	Accrued Liabilities (AL)	Market Value of Assets (MVA)	Funded Ratio (MVA/AL)
06/30/2003	$4,270,573,982	$3,252,492,864	76.2%
06/30/2004	$5,383,921,942	$4,367,765,127	81.1%
06/30/2005	$6,367,049,264	$5,449,784,537	85.6%
06/30/2006	$7,278,049,834	$6,469,775,316	88.9%
06/30/2007	$7,986,055,176	$7,903,684,460	99.0%

Valuation Date	Accrued Liabilities (AL)	Actuarial Value of Assets (AVA)	Unfunded Liabilities (UL)	Funded Ratio (AVA/AL)	Annual Covered Payroll	UL As a % of Payroll
06/30/2003	$4,270,573,982	$3,577,742,166	$692,831,816	83.8%	$476,089,674	145.5%
06/30/2004	$5,383,921,942	$4,424,586,846	$959,335,096	82.2%	$575,296,434	166.8%
06/30/2005	$6,367,049,264	$5,295,150,375	$1,071,898,889	83.2%	$664,147,796	161.4%
06/30/2006	$7,278,049,834	$6,102,615,567	$1,175,434,267	83.9%	$754,730,438	155.7%
06/30/2007	$7,986,055,176	$6,826,599,459	$1,159,455,717	85.5%	$831,607,658	139.4%

Information shown here is for compliance with GASB No. 27 for a cost-sharing multiple-employer defined benefit plan.

SUMMARY OF ASSETS

- **RECONCILIATION OF THE MARKET VALUE OF ASSETS**
- **DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS**
- **ASSET ALLOCATION**

Reconciliation of the Market Value of Assets

1.	Market Value of Assets as of June 30, 2006	$ 6,469,775,316
2.	Employer Contributions	294,860,854
3.	Employee Contributions	82,536,486
4.	Benefit Payments to Retirees and Beneficiaries	(312,347,267)
5.	Refunds	(1,792,218)
6.	Lump Sum Payments	(393,809)
7.	Transfers and Miscellaneous Adjustments	(23,241)
8.	Investment Return	1,245,101,376
9.	Transfers into and out of the Risk Pool	117,063,717
10.	Market Value of Assets as of June 30, 2007 (1 + 2 + 3 + 4 + 5 + 6 + 7 + 8 + 9)	$ 7,894,781,214
11.	Receivables for Service Buybacks as of June 30, 2007	$ 8,903,246
12.	Market Value of Assets as of June 30, 2007 Including Receivables for Service Buyback	7,903,684,460

Development of the Actuarial Value of Assets

1.	Actuarial Value of Assets as of June 30, 2006	6,102,615,567
2.	Employer Contributions	294,860,854
3.	Employee Contributions	82,536,486
4.	Benefit Payments to Retirees and Beneficiaries	(312,347,267)
5.	Refunds	(1,792,218)
6.	Lump Sum Payments	(393,809)
7.	Transfers and Miscellaneous Adjustments	(23,241)
8.	Expected Investment Income at 7.75%	475,342,352
9.	Expected Actuarial Value of Assets (w/o Pool Transfers) (1 + 2 + 3 + 4 + 5 + 6 + 7 + 8)	$ 6,640,798,724
10.	Market Value of Assets June 30, 2007 (w/o Pool Transfers)	$ 7,777,717,497
11.	Preliminary Actuarial Value of Assets (w/o Pool Transfers) (9 + (10 - 9) / 15)	6,716,593,309
12.	Preliminary Actuarial Value to Market Value Ratio	86.4%
13.	Final Actuarial Value to Market Value Ratio (minimum 80%, maximum 120%)	86.4%
14.	Market Value of Assets June 30, 2007	7,894,781,214
15.	Actuarial Value of Assets as of June 30, 2007	6,817,696,213
16.	Receivables for Service Buybacks as of June 30, 2007	8,903,246
17.	Actuarial Value of Assets as of June 30, 2007 Used for Rate Setting Purposes	6,826,599,459

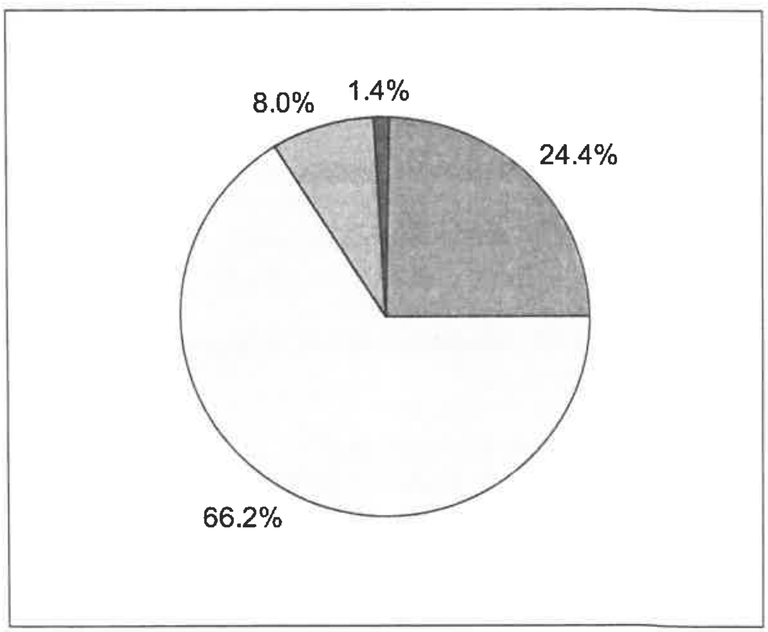
Asset Allocation

The starting point and most important element of CalPERS' successful return on investment is the asset allocation or diversification among stocks, bonds, cash and other investments. Asset allocation is not an asset-only or liability-only decision. All factors, including liabilities, benefit payments, operating expenses, and employer and member contributions are taken into account in determining the appropriate asset allocation mix. The goal is to maximize returns at a prudent level of risk which presents an ever-changing balancing act between market volatility and long-term goals.

CalPERS follows a strategic asset allocation policy that identifies the percentage of funds to be invested in each asset class.

The asset allocation and market value of assets shown below reflect the values of the Public Employees Retirement Fund (PERF) in its entirely as of June 30, 2007. The assets for Safety 3.0% at 50 Risk Pool are part of the Public Employees Retirement Fund (PERF) and are invested accordingly.

(A) Asset Class	(B) Market Value ($ Billion)	(C) Current Allocation	(D) Target
1) Total Cash Equivalents	3.6	1.4%	0.0%
2) Total Global Fixed Income	61.2	24.4%	26.0%
3) Total Equities	166.5	66.2%	66.0%
4) Total Real Estate	20.1	8.0%	8.0%
Total Fund	251.4	100.0%	100.0%



SUMMARY OF PARTICIPANT DATA

- SOURCE OF THE PARTICIPANT DATA
- DATA VALIDATION TESTS AND ADJUSTMENTS
- SUMMARY OF VALUATION DATA
- ACTIVE MEMBERS
- TRANSFERRED AND TERMINATED MEMBERS
- RETIRED MEMBERS AND BENEFICIARIES

Source of the Participant Data

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

- 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 database, 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. The data is then checked for reasonableness and consistency with data from the prior valuation.

Checks on the data include:

- 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,
- comparisons of pension amounts for each retiree and beneficiary receiving payments with those 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.

Summary of Valuation Data

		June 30, 2006	June 30, 2007
1.	**Number of Plans in the Risk Pool**	240	253
2.	**Active Members**		
	a) Counts	9,752	10,257
	b) Average Attained Age	39.33	39.13
	c) Average Entry Age to Rate Plan	29.02	29.11
	d) Average Years of Service	10.31	10.02
	e) Average Annual Covered Pay	$ 77,392	$ 81,077
	f) Annual Covered Payroll	754,730,438	831,607,658
	g) Projected Annual Payroll for Contribution Year	830,734,116	915,353,109
	h) Present Value of Future Payroll	6,952,102,106	7,706,207,732
3.	**Transferred Members**		
	a) Counts	4,966	5,289
	b) Average Attained Age	42.43	42.49
	c) Average Years of Service	4.53	4.56
	d) Average Annual Covered Pay	$ 81,020	$ 85,238
4.	**Terminated Members**		
	a) Counts	1,540	1,665
	b) Average Attained Age	40.17	40.33
	c) Average Years of Service	3.61	3.54
	d) Average Annual Covered Pay	$ 50,589	$ 51,288
5.	**Retired Members and Beneficiaries**		
	a) Counts*	11,200	11,891
	b) Average Attained Age	62.80	62.97
	c) Average Annual Benefits*	$ 26,527	$ 27,752
6.	**Active to Retired Ratio** (2a/5a)	0.87	0.86

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.

* Values may not match those on pages 27 and 28 due to inclusion of community property settlements.

Active Members

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 Active Members by Age and Service
Years of Service at Valuation Date

Attained Age	0-4	5-9	10-14	15-19	20-25	25+	Total
15-24	460	4	0	0	0	0	464
25-29	1191	219	1	0	0	0	1,411
30-34	958	717	108	0	0	0	1,783
35-39	628	719	483	171	0	0	2,001
40-44	315	337	302	533	193	2	1,682
45-49	146	186	186	386	436	245	1,585
50-54	73	86	78	152	196	338	923
55-59	26	38	28	47	52	131	322
60-64	14	10	6	12	10	25	77
65 and over	2	3	3	1	0	0	9
All Ages	3813	2319	1195	1302	887	741	10,257

Distribution of Average Annual Salaries by Age and Service
Years of Service at Valuation Date

Attained Age	0-4	5-9	10-14	15-19	20-25	25+	Average
15-24	$53,271	$63,770	$0	$0	$0	$0	$53,362
25-29	62,866	74,492	55,220	0	0	0	64,665
30-34	67,312	77,595	85,474	0	0	0	72,547
35-39	69,711	80,975	86,781	95,189	0	0	80,056
40-44	75,085	80,932	87,700	94,975	101,447	109,088	87,889
45-49	82,263	82,535	87,605	92,753	99,449	107,559	94,114
50-54	91,049	92,853	85,932	93,125	98,745	109,133	99,383
55-59	88,107	84,563	74,588	86,559	91,011	101,052	92,023
60-64	106,773	83,376	90,994	74,445	92,129	90,263	90,205
65 and over	68,795	83,898	101,962	57,999	0	0	83,685
Average	66,581	79,920	86,715	93,607	99,151	106,547	81,077

Transferred and Terminated Members

Distribution of Transfers to Other CalPERS Plans by Age and Service
Years of Service at Valuation Date

Attained Age	0-4	5-9	10-14	15-19	20-25	25+	Total	Average Salary
15-24	33	0	0	0	0	0	33	$58,087
25-29	317	12	0	0	0	0	329	69,887
30-34	578	102	11	0	0	0	691	74,060
35-39	777	237	60	7	0	0	1,081	79,872
40-44	605	272	114	36	4	0	1,031	87,452
45-49	631	266	107	45	18	3	1,070	93,150
50-54	415	150	61	47	21	15	709	96,794
55-59	165	54	22	16	6	1	264	88,242
60-64	35	16	4	6	1	2	64	84,780
65 and over	12	3	1	1	0	0	17	71,396
All Ages	3568	1112	380	158	50	21	5,289	85,238

Distribution of Terminated Participants with Funds on Deposit by Age and Service
Years of Service at Valuation Date

Attained Age	0-4	5-9	10-14	15-19	20-25	25+	Total	Average Salary
15-24	46	0	0	0	0	0	46	$47,794
25-29	159	8	0	0	0	0	167	49,408
30-34	252	27	2	0	0	0	281	49,150
35-39	273	66	11	3	0	0	353	51,578
40-44	184	62	33	15	1	0	295	52,638
45-49	157	69	34	22	5	1	288	53,684
50-54	92	34	15	6	0	1	148	54,534
55-59	41	8	2	2	0	0	53	45,964
60-64	19	3	3	1	0	0	26	44,433
65 and over	5	0	2	0	1	0	8	34,256
All Ages	1228	277	102	49	7	2	1,665	51,288

Retired Members and Beneficiaries

Distribution of Retirees and Beneficiaries by Age and Retirement Type*

Attained Age	Service Retirement	Non-Industrial Disability	Industrial Disability	Non-Industrial Death	Industrial Death	Death After Retirement	Total
Under 30	0	0	4	0	0	11	15
30-34	0	0	26	0	1	2	29
35-39	0	3	130	0	6	9	148
40-44	0	6	260	2	8	6	282
45-49	0	16	396	2	8	32	454
50-54	733	28	645	6	18	63	1,493
55-59	1299	32	913	7	19	93	2,363
60-64	1320	31	994	5	12	134	2,496
65-69	940	13	599	4	12	201	1,769
70-74	652	24	357	1	18	193	1,245
75-79	423	10	185	3	13	191	825
80-84	233	10	85	2	4	139	473
85 and Over	98	1	23	1	3	141	267
All Ages	5698	174	4617	33	122	1215	11,859

Distribution of Average Annual Amounts for Retirees and Beneficiaries by Age and Retirement Type*

Attained Age	Service Retirement	Non-Industrial Disability	Industrial Disability	Non-Industrial Death	Industrial Death	Death After Retirement	Average
Under 30	$0	$0	$13,288	$0	$0	$11,732	$12,147
30-34	0	0	30,060	0	31,455	13,348	28,955
35-39	0	11,785	25,768	0	40,429	18,073	25,611
40-44	0	8,936	24,946	35,076	30,982	8,768	24,504
45-49	0	11,483	23,547	59,973	20,169	17,169	22,773
50-54	40,793	8,686	25,928	15,518	34,013	21,885	32,788
55-59	38,666	16,441	28,731	15,867	22,209	20,370	33,606
60-64	34,954	11,605	27,394	19,627	23,622	17,153	30,612
65-69	28,466	16,597	21,866	27,600	16,844	18,519	24,933
70-74	26,349	5,326	21,758	34,412	18,357	18,788	23,346
75-79	22,067	8,078	21,065	8,353	20,035	15,183	19,997
80-84	19,794	9,168	19,169	1,784	21,620	14,869	17,949
85 and Over	22,181	3,290	21,718	2,826	21,352	12,619	16,939
All Ages	32,700	11,041	25,357	20,263	24,135	16,944	27,786

Retired Members and Beneficiaries (continued)

Distribution of Retirees and Beneficiaries by Years Retired and Retirement Type*

Years Retired	Service Retirement	Non-Industrial Disability	Industrial Disability	Non-Industrial Death	Industrial Death	Death After Retirement	Total
Under 5 Yrs	2147	24	978	9	18	453	3,629
5-9	1329	33	922	7	10	287	2,588
10-14	917	38	815	11	18	189	1,988
15-19	588	30	634	1	18	33	1,304
20-24	422	23	535	1	18	59	1,058
25-29	235	20	459	3	18	73	808
30 and Over	60	6	274	1	22	121	484
All Years	5698	174	4617	33	122	1215	11,859

Distribution of Average Annual Amounts for Retirees and Beneficiaries by Years Retired and Retirement Type*

Years Retired	Service Retirement	Non-Industrial Disability	Industrial Disability	Non-Industrial Death	Industrial Death	Death After Retirement	Average
Under 5 Yrs	$39,929	$18,932	$35,276	$20,929	$36,209	$18,891	$35,845
5-9	32,589	14,755	29,555	21,143	29,767	18,044	29,626
10-14	28,769	7,483	23,339	24,668	23,066	15,844	24,833
15-19	27,307	10,472	21,233	32,779	22,488	14,033	23,568
20-24	21,446	7,595	17,840	979	24,675	18,821	19,211
25-29	19,423	7,825	17,963	1,150	18,418	12,531	17,593
30 and Over	20,587	8,355	18,426	23,756	18,153	11,301	16,786
All Years	32,700	11,041	25,357	20,263	24,135	16,944	27,786

* Counts of members do not include alternate payees receiving benefits while the member is still working. Therefore, the total counts may not match information on page 24 of the report. Multiple records may exist for those who have service in more than one coverage group. This does not result in double counting of liabilities.

APPENDIX A

- **STATEMENT OF ACTUARIAL DATA, METHODS AND ASSUMPTIONS**

APPENDIX A

Data

As stated in the Actuarial Certification, the data which serves as the basis of this valuation has been obtained from the various CalPERS databases. We have reviewed the valuation data and believe that it is reasonable and appropriate in aggregate. We are unaware of any potential data issues that would have a material effect on the results of this valuation, except that data does not always contain the latest salary information for former members now in reciprocal systems and does not recognize the potential for usually large salary deviation in certain cases such as elected officials. Therefore, salary information in these cases may not be accurate. These situations are relatively infrequent, however, and when they do occur, they generally do not have a material impact on the employer contribution rates.

Actuarial Methods

Funding Method

The actuarial funding method used for the Retirement Program is the 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 payrolls. 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 amortized over a rolling 30 year period. Finally, if a pool'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.

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 unfunded actuarial liability is projected and amortized over a set number of years. For instance, if the annual contribution on the total unfunded liability was less than the amount produced by a 30-year amortization of the unfunded liability, the plan actuary would implement a 30-year fresh start. In addition, a fresh start is needed in the following situations:

1) when a positive payment would be required on a negative unfunded actuarial liability (or conversely a negative payment on a positive unfunded actuarial liability); or

2) when there are excess assets, rather than an unfunded liability. In this situation a 30-year fresh start is used, unless a larger fresh start is needed to avoid a negative total rate.

It should be noted that the actuary may choose to use a fresh start under other circumstances. In all cases, the period of the fresh start is chosen by the actuary according to his or her best judgement, and will not be less than five years nor greater than 30 years.

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 is 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 is then 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. However in no case will the Actuarial Value of Assets be less than 80% nor greater than 120% of the actual Market Value of Assets.

Accounts Receivable

In preparing valuations on and after June 30, 2007, 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.

This change generally had minimal impact on the employer rates and no special amortization base has been created.

Miscellaneous

Superfunded Status

If a rate plan is superfunded (actuarial value of assets exceeds the present value of benefits), as of the most recently completed annual valuation, the employer may cover their employees' member contributions (both taxed and tax-deferred) using their employer assets during the fiscal year for which this valuation applies. This would entail transferring assets within the Public Employees' Retirement Fund (PERF) from the employer account to the member accumulated contribution accounts. This change was implemented effective January 1, 1999 pursuant to Chapter 231 (Assembly Bill 2099) which added Government Code Section 20816.

Superfunded status applies only to individual plans, not risk pools. For rate plans within a risk pool, actuarial value of assets is the sum of the rate plan's side fund plus the rate plan's pro-rata share of non-side fund assets. Superfunded status is determined only on annual valuation dates.

Internal Revenue Code Section 415

The limitations on benefits imposed by Internal Revenue Code Section 415 were not taken into account in this valuation. The effect of these limitations has been deemed immaterial on the overall results of this valuation.

Internal Revenue Code Section 401(a)(17)

The limitations on compensation imposed by Internal Revenue Code Section 401(a)(17) were taken into account in this valuation. It was determined that this change generally had minimal impact on the employer rates and no special amortization base has been created.

APPENDIX A

ACTUARIAL ASSUMPTIONS

Economic Assumptions

Investment Return

7.75% compounded annually (net of expenses). This assumption is used for all plans.

Salary Growth

Annual increases vary by category, entry age, and duration of service. The assumed increases are shown below.

Public Agency Miscellaneous

Duration of Service	Entry Age 20	Entry Age 30	Entry Age 40
0	0.1445	0.1265	0.1005
1	0.1215	0.1075	0.0875
2	0.1035	0.0935	0.0775
3	0.0905	0.0825	0.0695
4	0.0805	0.0735	0.0635
5	0.0725	0.0675	0.0585
10	0.0505	0.0485	0.0435
15	0.0455	0.0435	0.0385
20	0.0415	0.0395	0.0355
25	0.0365	0.0365	0.0345
30	0.0325	0.0325	0.0325

Public Agency Fire

Duration of Service	Entry Age 20	Entry Age 30	Entry Age 40
0	0.1075	0.1075	0.1045
1	0.0975	0.0965	0.0875
2	0.0895	0.0855	0.0725
3	0.0825	0.0775	0.0625
4	0.0765	0.0705	0.0535
5	0.0715	0.0645	0.0475
10	0.0535	0.0485	0.0375
15	0.0435	0.0415	0.0365
20	0.0395	0.0385	0.0345
25	0.0355	0.0355	0.0335
30	0.0325	0.0325	0.0325

Public Agency Police

Duration of Service	Entry Age 20	Entry Age 30	Entry Age 40
0	0.1115	0.1115	0.1115
1	0.0955	0.0955	0.0955
2	0.0835	0.0835	0.0805
3	0.0745	0.0725	0.0665
4	0.0675	0.0635	0.0575
5	0.0615	0.0575	0.0505
10	0.0475	0.0445	0.0365
15	0.0435	0.0415	0.0355
20	0.0395	0.0385	0.0345
25	0.0365	0.0355	0.0335
30	0.0325	0.0325	0.0325

Public Agency County Peace Officers

Duration of Service	Entry Age 20	Entry Age 30	Entry Age 40
0	0.1315	0.1315	0.1315
1	0.1115	0.1085	0.1055
2	0.0965	0.0915	0.0865
3	0.0845	0.0795	0.0735
4	0.0755	0.0695	0.0635
5	0.0685	0.0625	0.0555
10	0.0485	0.0445	0.0405
15	0.0435	0.0405	0.0385
20	0.0395	0.0385	0.0365
25	0.0365	0.0355	0.0345
30	0.0325	0.0325	0.0325

Schools

Duration of Service	Entry Age 20	Entry Age 30	Entry Age 40
0	0.1105	0.0985	0.0845
3	0.0775	0.0725	0.0645
5	0.0655	0.0625	0.0555
10	0.0475	0.0465	0.0435
15	0.0415	0.0405	0.0375
20	0.0385	0.0375	0.0345
25	0.0355	0.0355	0.0335
30	0.0325	0.0325	0.0325

- The Miscellaneous salary scale is used for Local Prosecutors.
- The Police salary scale is used for Other Safety, Local Sheriff, and School Police.

Overall Payroll Growth

3.25% compounded annually (used in projecting the payroll over which the unfunded liability is amortized). This assumption is used for all plans.

Inflation

3.00% compounded annually. This assumption is used for all plans.

Non-valued Potential Additional Liabilities

The potential liability loss for a cost-of-living increase exceeding the 3% inflation assumption, and any potential liability loss from future member service purchases are not reflected in the valuation.

Miscellaneous Loading Factors

Credit for Unused Sick Leave

Final Average Salary is increased by 1% for those agencies that have accepted the provision providing Credit for Unused Sick Leave.

Conversion of Employer Paid Member Contributions (EPMC)

Final Average Salary is increased by the Employee Contribution Rate for those agencies that have contracted for the provision providing for the Conversion of Employer Paid Member Contributions (EPMC) during the final compensation period.

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. No loading is necessary for employees hired after July 1, 1982.

APPENDIX A

Demographic Assumptions

Pre-Retirement Mortality

Non-Industrial Death Rates vary by age and gender. Industrial Death rates vary by age. See sample rates in table below. The non-industrial death rates are used for all plans. The industrial death rates are used for Safety Plans (except for Local Prosecutor safety members where the corresponding Miscellaneous Plan does not have the Industrial Death Benefit).

	Non-Industrial Death (Not Job-Related)		Industrial Death (Job-Related)
Age	Male	Female	Male and Female
20	0.00019	0.00009	0.00003
25	0.00027	0.00014	0.00007
30	0.00038	0.00021	0.00010
35	0.00054	0.00031	0.00013
40	0.00077	0.00046	0.00017
45	0.00110	0.00068	0.00020
50	0.00156	0.00102	0.00023
55	0.00221	0.00151	0.00027
60	0.00314	0.00226	0.00030

Miscellaneous Plans usually have Industrial Death rates set to zero unless the agency has specifically contracted for Industrial Death benefits. If so, each Non-Industrial Death rate shown above will be split into two components: 99% will become the Non-Industrial Death rate and 1% will become the Industrial Death rate.

Post-Retirement Mortality

Rates vary by age, type of retirement and gender. See sample rates in table below. These rates are used for all plans.

	Healthy Recipients		Non-Industrially Disabled (Not Job-Related)		Industrially Disabled (Job-Related)	
Age	Male	Female	Male	Female	Male	Female
50	0.00245	0.00136	0.01459	0.01129	0.00546	0.00388
55	0.00429	0.00253	0.02115	0.01481	0.00616	0.00568
60	0.00721	0.00442	0.02870	0.01884	0.01016	0.00818
65	0.01302	0.00795	0.03617	0.02356	0.01853	0.01214
70	0.02135	0.01276	0.04673	0.03020	0.03369	0.01760
75	0.03716	0.02156	0.06552	0.04298	0.05768	0.02774
80	0.06256	0.03883	0.09481	0.06514	0.08670	0.04690
85	0.10195	0.07219	0.14041	0.10269	0.13032	0.08262
90	0.17379	0.12592	0.20793	0.16189	0.19588	0.13984
95	0.25917	0.21773	0.30792	0.25522	0.29444	0.23566
100	0.34724	0.32036	0.45599	0.40236	0.44259	0.35341

Marital Status

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

Member Category	Percent Married
Miscellaneous Member	85%
Local Police	90%
Local Fire	90%
Other Local Safety	90%
School Police	90%
Schools	85%

Age of Spouse

It is assumed that female spouses are 3 years younger than male spouses. This assumption is used for all plans.

Separated Members

It is assumed that members refund immediately if non-vested, retire immediately if eligible, or retire at the earliest retirement age if not eligible.

Termination with Refund

Rates vary by entry age and service for Miscellaneous Plans. Rates vary by service for Safety Plans. See sample rates in tables below.

Public Agency Miscellaneous

Duration of Service	Entry Age 20	Entry Age 25	Entry Age 30	Entry Age 35	Entry Age 40	Entry Age 45
0	0.1760	0.1691	0.1622	0.1553	0.1483	0.1414
1	0.1561	0.1492	0.1423	0.1353	0.1284	0.1215
2	0.1362	0.1293	0.1224	0.1154	0.1085	0.1016
3	0.1163	0.1094	0.1025	0.0955	0.0886	0.0817
4	0.0964	0.0895	0.0826	0.0756	0.0687	0.0618
5	0.0283	0.0257	0.0232	0.0206	0.0181	0.0155
10	0.0184	0.0161	0.0139	0.0117	0.0095	0.0073
15	0.0120	0.0102	0.0083	0.0064	0.0046	0.0027
20	0.0073	0.0057	0.0041	0.0025	0.0009	0.0002
25	0.0034	0.0022	0.0009	0.0002	0.0002	0.0002
30	0.0010	0.0002	0.0002	0.0002	0.0002	0.0002

Public Agency Safety

Duration of Service	Fire	Police	County Peace Officer
0	0.0947	0.1299	0.1072
1	0.0739	0.0816	0.0841
2	0.0531	0.0348	0.0609
3	0.0323	0.0331	0.0470
4	0.0290	0.0314	0.0445
5	0.0095	0.0110	0.0156
10	0.0029	0.0068	0.0096
15	0.0021	0.0035	0.0048
20	0.0016	0.0022	0.0022
25	0.0010	0.0015	0.0010
30	0.0009	0.0012	0.0006

The Police Termination and Refund rates are used for Public Agency Local Prosecutors, Other Safety, Local Sheriff, and School Police.

Schools

Duration of Service	Entry Age 20	Entry Age 25	Entry Age 30	Entry Age 35	Entry Age 40
0	0.1617	0.1521	0.1425	0.1329	0.1233
1	0.1481	0.1385	0.1289	0.1193	0.1097
2	0.1346	0.1249	0.1153	0.1057	0.0961
3	0.1210	0.1114	0.1018	0.0922	0.0826
4	0.1074	0.0978	0.0882	0.0786	0.0690
5	0.0347	0.0311	0.0276	0.0240	0.0205
10	0.0215	0.0184	0.0153	0.0123	0.0092
15	0.0144	0.0118	0.0092	0.0066	0.0040
20	0.0091	0.0069	0.0047	0.0025	0.0003
25	0.0046	0.0029	0.0012	0.0002	0.0002
30	0.0019	0.0004	0.0002	0.0002	0.0002

Termination with Vested Benefits

Rate vary by entry age and service for Miscellaneous Plans. Rates vary by service for Safety Plans. See sample rates in tables below.

Public Agency Miscellaneous

Duration of Service	Entry Age 20	Entry Age 25	Entry Age 30	Entry Age 35	Entry Age 40
5	0.0482	0.0439	0.0395	0.0351	0.0307
10	0.0390	0.0343	0.0296	0.0249	0.0000
15	0.0326	0.0274	0.0224	0.0000	0.0000
20	0.0245	0.0192	0.0000	0.0000	0.0000
25	0.0156	0.0000	0.0000	0.0000	0.0000
30	0.0000	0.0000	0.0000	0.0000	0.0000

Public Agency Safety

Duration of Service	Fire	Police	County Peace Officer
5	0.0162	0.0187	0.0265
10	0.0061	0.0145	0.0204
15	0.0058	0.0094	0.0130
20	0.0053	0.0075	0.0074
25	0.0047	0.0067	0.0043
30	0.0045	0.0064	0.0030
35	0.0000	0.0000	0.0000

- When a member is eligible to retire, the termination with vested benefits probability is set to zero.
- The Police Termination with vested benefits rates are used for Public Agency Local Prosecutors, Other Safety, Local Sheriff, and School Police.

Schools

Duration of Service	Entry Age 20	Entry Age 25	Entry Age 30	Entry Age 35	Entry Age 40
5	0.0591	0.0531	0.0470	0.0410	0.0349
6	0.0567	0.0505	0.0444	0.0382	0.0321
7	0.0540	0.0478	0.0415	0.0353	0.0290
8	0.0513	0.0450	0.0387	0.0323	0.0260
9	0.0486	0.0422	0.0357	0.0293	0.0229
10	0.0456	0.0391	0.0326	0.0260	0.0000
14	0.0404	0.0335	0.0266	0.0197	0.0000
15	0.0389	0.0319	0.0249	0.0000	0.0000
19	0.0321	0.0249	0.0176	0.0000	0.0000
20	0.0304	0.0230	0.0000	0.0000	0.0000
24	0.0231	0.0153	0.0000	0.0000	0.0000
25	0.0211	0.0000	0.0000	0.0000	0.0000
29	0.0123	0.0000	0.0000	0.0000	0.0000
30	0.0000	0.0000	0.0000	0.0000	0.0000

Non-Industrial (Not Job-Related) Disability

Rates vary by age and gender for Miscellaneous Plans.
Rates vary by age for Safety Plans

	Miscellaneous		Fire	Police	County Peace Officer	Schools	
Age	Male	Female	Male and Female	Male and Female	Male and Female	Male	Female
20	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
25	0.0002	0.0002	0.0001	0.0001	0.0001	0.0002	0.0001
30	0.0002	0.0004	0.0001	0.0002	0.0001	0.0004	0.0003
35	0.0008	0.0010	0.0001	0.0003	0.0002	0.0008	0.0005
40	0.0015	0.0016	0.0001	0.0004	0.0003	0.0014	0.0010
45	0.0024	0.0023	0.0002	0.0005	0.0004	0.0028	0.0016
50	0.0037	0.0035	0.0005	0.0008	0.0007	0.0050	0.0030
55	0.0049	0.0041	0.0010	0.0013	0.0012	0.0072	0.0047
60	0.0055	0.0039	0.0015	0.0020	0.0019	0.0071	0.0037

- The Miscellaneous Non-Industrial Disability rates are used for Local Prosecutors.
- The Police Non-Industrial Disability rates are used for Other Safety, Local Sheriff, and School Police.

Industrial (Job-Related) Disability

Rates vary by age and category.

Age	Fire	Police	County Peace Officer
20	0.0002	0.0006	0.0002
25	0.0010	0.0028	0.0012
30	0.0021	0.0056	0.0025
35	0.0031	0.0084	0.0037
40	0.0041	0.0112	0.0050
45	0.0051	0.0140	0.0062
50	0.0062	0.0167	0.0075
55	0.0601	0.0581	0.0128
60	0.0601	0.0581	0.0128

- The Police Industrial Disability rates are used for Local Sheriff and Other Safety.
- Fifty Percent of the Police Industrial Disability rates are used for School Police.
- One Percent of the Police Industrial Disability rates are used for Local Prosecutors.
- Normally, rates are zero for Miscellaneous Plans unless the agency has specifically contracted for Industrial Disability benefits. If so, each Miscellaneous Non-Industrial Disability rate will be split into two components: 50% will become the Non-Industrial Disability rate and 50% will become the Industrial Disability rate.

APPENDIX A

Service Retirement

Public Agency Miscellaneous 2% @ 60

Age	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
	Duration of Service					
50	0.0085	0.0120	0.0146	0.0165	0.0184	0.0206
51	0.0059	0.0082	0.0100	0.0113	0.0126	0.0142
52	0.0092	0.0129	0.0157	0.0178	0.0198	0.0222
53	0.0104	0.0146	0.0177	0.0200	0.0224	0.0251
54	0.0109	0.0154	0.0187	0.0211	0.0236	0.0264
55	0.0198	0.0279	0.0339	0.0383	0.0427	0.0479
56	0.0181	0.0254	0.0308	0.0348	0.0389	0.0436
57	0.0208	0.0292	0.0354	0.0400	0.0447	0.0501
58	0.0262	0.0368	0.0447	0.0505	0.0564	0.0632
59	0.0335	0.0471	0.0572	0.0646	0.0721	0.0809
60	0.0615	0.0865	0.1051	0.1187	0.1325	0.1485
61	0.0628	0.0883	0.1073	0.1212	0.1353	0.1517
62	0.1258	0.1767	0.2147	0.2426	0.2708	0.3036
63	0.1263	0.1775	0.2156	0.2436	0.2720	0.3049
64	0.0972	0.1366	0.1659	0.1875	0.2093	0.2346
65	0.1731	0.2432	0.2955	0.3339	0.3727	0.4178
66	0.0946	0.1330	0.1616	0.1825	0.2038	0.2284
67	0.1272	0.1787	0.2171	0.2453	0.2738	0.3069

Public Agency Miscellaneous 2% @ 55

Age	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
	Duration of Service					
50	0.0145	0.0184	0.0224	0.0269	0.0307	0.0366
51	0.0106	0.0135	0.0164	0.0198	0.0226	0.0269
52	0.0114	0.0145	0.0176	0.0212	0.0241	0.0287
53	0.0150	0.0190	0.0231	0.0278	0.0318	0.0378
54	0.0199	0.0252	0.0307	0.0369	0.0421	0.0502
55	0.0475	0.0604	0.0734	0.0883	0.1008	0.1200
56	0.0395	0.0502	0.0611	0.0735	0.0838	0.0998
57	0.0427	0.0542	0.0659	0.0793	0.0905	0.1078
58	0.0473	0.0601	0.0730	0.0879	0.1003	0.1194
59	0.0510	0.0648	0.0788	0.0948	0.1082	0.1287
60	0.0715	0.0908	0.1104	0.1328	0.1516	0.1804
61	0.0715	0.0908	0.1104	0.1328	0.1516	0.1805
62	0.1275	0.1620	0.1969	0.2369	0.2704	0.3219
63	0.1287	0.1636	0.1988	0.2392	0.2731	0.3250
64	0.0931	0.1182	0.1438	0.1729	0.1974	0.2350
65	0.1738	0.2209	0.2686	0.3231	0.3688	0.4390
66	0.1085	0.1378	0.1675	0.2016	0.2301	0.2739
67	0.1109	0.1409	0.1713	0.2061	0.2353	0.2801

Public Agency Miscellaneous 2.5% @ 55, 2.7% @ 55, 3% @ 60

	2.5% @ 55		2.7% @ 55		3% @ 60	
Age	Male	Female	Male	Female	Male	Female
50	0.05000	0.07000	0.05000	0.07000	0.05000	0.07000
51	0.02000	0.05000	0.02000	0.05000	0.02000	0.05000
52	0.03000	0.05000	0.03000	0.05000	0.03000	0.05000
53	0.03000	0.05000	0.03000	0.06000	0.03000	0.05000
54	0.04000	0.05000	0.04000	0.06000	0.04000	0.05000
55	0.08000	0.09000	0.09000	0.10000	0.08000	0.09000
56	0.06000	0.07000	0.07000	0.08000	0.07000	0.08000
57	0.07000	0.06000	0.08000	0.07000	0.08000	0.07000
58	0.08000	0.10000	0.08000	0.10000	0.09000	0.11000
59	0.09000	0.09000	0.10000	0.09000	0.11000	0.10000
60	0.16000	0.12000	0.17000	0.13000	0.19000	0.15000
61	0.15000	0.10000	0.16000	0.11000	0.17000	0.12000
62	0.26000	0.21000	0.28000	0.23000	0.31000	0.25000
63	0.22000	0.18000	0.23000	0.20000	0.26000	0.22000
64	0.15000	0.13000	0.16000	0.14000	0.18000	0.16000
65	0.25000	0.25000	0.27000	0.27000	0.30000	0.30000
66	0.14000	0.15000	0.15000	0.16000	0.17000	0.18000
67	0.12000	0.14000	0.13000	0.16000	0.14000	0.17000
68	0.12000	0.11000	0.13000	0.12000	0.15000	0.13000
69	0.09000	0.13000	0.10000	0.14000	0.11000	0.15000
70	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000

Public Agency Fire ½ @ 55 and 2% @ 55

Age	Rate	Age	Rate
50	0.01588	56	0.11079
51	0.00000	57	0.00000
52	0.03442	58	0.09499
53	0.01990	59	0.04409
54	0.04132	60	1.00000
55	0.07513		

Public Agency Police ½ @ 55 and 2% @ 55

Age	Rate	Age	Rate
50	0.02552	56	0.06921
51	0.00000	57	0.05113
52	0.01637	58	0.07241
53	0.02717	59	0.07043
54	0.00949	60	1.00000
55	0.16674		

Public Agency Police 2%@ 50

Age	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
	Duration of Service					
50	0.0138	0.0138	0.0138	0.0138	0.0253	0.0451
51	0.0123	0.0123	0.0123	0.0123	0.0226	0.0402
52	0.0262	0.0262	0.0262	0.0262	0.0480	0.0855
53	0.0523	0.0523	0.0523	0.0523	0.0957	0.1706
54	0.0697	0.0697	0.0697	0.0697	0.1275	0.2274
55	0.0899	0.0899	0.0899	0.0899	0.1645	0.2932
56	0.0638	0.0638	0.0638	0.0638	0.1166	0.2079
57	0.0711	0.0711	0.0711	0.0711	0.1300	0.2318
58	0.0628	0.0628	0.0628	0.0628	0.1149	0.2049
59	0.1396	0.1396	0.1396	0.1396	0.1735	0.2544
60	0.1396	0.1396	0.1396	0.1396	0.1719	0.2506
61	0.1396	0.1396	0.1396	0.1396	0.1719	0.2506
62	0.1396	0.1396	0.1396	0.1396	0.1719	0.2506
63	0.1396	0.1396	0.1396	0.1396	0.1719	0.2506
64	0.1396	0.1396	0.1396	0.1396	0.1719	0.2506
65	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

- These rates also apply to Local Prosecutors, Local Sheriff, School Police, and Other Safety.

Public Agency Fire 2%@50

Age	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
	Duration of Service					
50	0.0065	0.0065	0.0065	0.0065	0.0101	0.0151
51	0.0081	0.0081	0.0081	0.0081	0.0125	0.0187
52	0.0173	0.0173	0.0173	0.0173	0.0267	0.0400
53	0.0465	0.0465	0.0465	0.0465	0.0716	0.1072
54	0.0638	0.0638	0.0638	0.0638	0.0983	0.1471
55	0.0868	0.0868	0.0868	0.0868	0.1336	0.2000
56	0.0779	0.0779	0.0779	0.0779	0.1200	0.1796
57	0.0901	0.0901	0.0901	0.0901	0.1387	0.2077
58	0.0790	0.0790	0.0790	0.0790	0.1217	0.1821
59	0.0729	0.0729	0.0729	0.0729	0.1123	0.1681
60	0.1135	0.1135	0.1135	0.1135	0.1747	0.2615
61	0.1136	0.1136	0.1136	0.1136	0.1749	0.2618
62	0.1136	0.1136	0.1136	0.1136	0.1749	0.2618
63	0.1136	0.1136	0.1136	0.1136	0.1749	0.2618
64	0.1136	0.1136	0.1136	0.1136	0.1749	0.2618
65	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

Public Agency Police 3% @ 55

	Duration of Service					
Age	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.0193	0.0193	0.0193	0.0193	0.0397	0.0600
51	0.0157	0.0157	0.0157	0.0157	0.0324	0.0491
52	0.0163	0.0163	0.0163	0.0163	0.0337	0.0510
53	0.0587	0.0587	0.0587	0.0587	0.1208	0.1829
54	0.0691	0.0691	0.0691	0.0691	0.1422	0.2154
55	0.1164	0.1164	0.1164	0.1164	0.2397	0.3630
56	0.0756	0.0756	0.0756	0.0756	0.1556	0.2357
57	0.0581	0.0581	0.0581	0.0581	0.1196	0.1812
58	0.0508	0.0508	0.0508	0.0508	0.1045	0.1583
59	0.0625	0.0625	0.0625	0.0625	0.1287	0.1949
60	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

- These rates also apply to Local Prosecutors, Local Sheriff, School Police, and Other Safety.

Public Agency Fire 3% @ 55

	Duration of Service					
Age	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.0024	0.0024	0.0024	0.0035	0.0055	0.0065
51	0.0048	0.0048	0.0048	0.0070	0.0110	0.0128
52	0.0147	0.0147	0.0147	0.0215	0.0339	0.0396
53	0.0425	0.0425	0.0425	0.0621	0.0979	0.1142
54	0.0567	0.0567	0.0567	0.0828	0.1306	0.1523
55	0.0915	0.0915	0.0915	0.1337	0.2109	0.2459
56	0.0811	0.0811	0.0811	0.1184	0.1868	0.2178
57	0.0996	0.0996	0.0996	0.1455	0.2295	0.2676
58	0.0814	0.0814	0.0814	0.1189	0.1874	0.2185
59	0.0775	0.0775	0.0775	0.1131	0.1784	0.2080
60	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

Public Agency Police 3% @ 50

Age	Duration of Service					
	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.0435	0.0435	0.0435	0.0821	0.1208	0.1559
51	0.0385	0.0385	0.0385	0.0728	0.1071	0.1382
52	0.0614	0.0614	0.0614	0.1159	0.1705	0.2200
53	0.0689	0.0689	0.0689	0.1303	0.1916	0.2472
54	0.0710	0.0710	0.0710	0.1342	0.1974	0.2547
55	0.0898	0.0898	0.0898	0.1698	0.2497	0.3222
56	0.0687	0.0687	0.0687	0.1299	0.1910	0.2465
57	0.0803	0.0803	0.0803	0.1518	0.2232	0.2880
58	0.0791	0.0791	0.0791	0.1495	0.2198	0.2837
59	0.0820	0.0820	0.0820	0.1549	0.2279	0.2940
60	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

- These rates also apply to Local Prosecutors, Local Sheriff, School Police, and Other Safety.

Public Agency Fire 3% @ 50

Age	Duration of Service					
	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.0341	0.0341	0.0341	0.0477	0.0679	0.0804
51	0.0463	0.0463	0.0463	0.0647	0.0922	0.1091
52	0.0693	0.0693	0.0693	0.0967	0.1377	0.1630
53	0.0835	0.0835	0.0835	0.1166	0.1661	0.1965
54	0.1025	0.1025	0.1025	0.1431	0.2038	0.2412
55	0.1265	0.1265	0.1265	0.1766	0.2516	0.2977
56	0.1210	0.1210	0.1210	0.1690	0.2407	0.2848
57	0.1010	0.1010	0.1010	0.1411	0.2010	0.2378
58	0.1184	0.1184	0.1184	0.1652	0.2354	0.2786
59	0.1002	0.1002	0.1002	0.1399	0.1993	0.2358
60	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

Schools 2% @ 55

Age	Duration of Service						
	5 Years	10 Years	15 Years	20 Years	25 Years	30Years	35 Years
50	0.0036	0.0071	0.0100	0.0118	0.0131	0.0147	0.0172
52	0.0035	0.0069	0.0096	0.0114	0.0127	0.0142	0.0167
54	0.0060	0.0118	0.0165	0.0196	0.0218	0.0244	0.0286
56	0.0158	0.0314	0.0439	0.0519	0.0578	0.0647	0.0760
58	0.0202	0.0402	0.0562	0.0663	0.0739	0.0827	0.0971
60	0.0368	0.0729	0.1020	0.1205	0.1342	0.1502	0.1763
62	0.0762	0.1512	0.2115	0.2498	0.2784	0.3114	0.3657
65	0.0906	0.1797	0.2513	0.2969	0.3308	0.3701	0.4345
70	0.0660	0.1308	0.1830	0.2162	0.2408	0.2695	0.3164
75	0.0546	0.1082	0.1513	0.1788	0.1992	0.2229	0.2617

APPENDIX B

- **DESCRIPTION OF PRINCIPAL PLAN PROVISIONS**

APPENDIX B

The following is a description of the principal plan provisions used in calculating the liabilities of the Safety 3.0% at 50 Risk Pool. Plan provisions are divided based on whether they are standard, Class 1, Class 2 or Class 3 benefits. Standard benefits are applicable to all members of the risk pool while Class 1, 2 or 3 benefits vary among employers. Provided at the end of the listing is a table providing the percentage of members participating in the pool that are subject to each benefit.

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.

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 **3% at 50 Safety** benefit formula factor table. The factor depends on the member's age at retirement. Listed below are the factors for retirement at whole year ages:

Retirement Age	3% at 50 Safety Factor
50 & Up	3%

- 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 a 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 36 or 12 consecutive months' full-time equivalent monthly pay (no matter which CalPERS employer paid this compensation). The standard benefit available to all members is 36 months. Employers have the option of providing a final compensation equal to the highest 12 consecutive months by contracting for this class 1 optional benefit.

- For employees covered by the modified formula, the final compensation is offset by $133.33 (or by one third if the final compensation is less than $400). Employers have the option to contract for the class 3 benefit that will eliminate the offset applicable to the final compensation of employees covered by a modified formula.

- The Miscellaneous Service Retirement benefit is not capped. The Safety Service Retirement benefit is capped at 90% of final compensation.

APPENDIX B

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 CalPERS employers, and with certain other Retirement Systems with which CalPERS 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.

Standard Benefit
The standard 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.

Improved Benefit
Employers have the option of providing this improved benefit by contracting for this class 3 optional benefit.

The improved Non-Industrial Disability Retirement benefit is a monthly allowance equal to 30% of final compensation for the first 5 years of service, plus 1% for each additional year of service to a maximum of 50% 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

All safety members have this benefit.

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.

Standard Benefit
The standard Industrial Disability Retirement benefit is a monthly allowance equal to 50% of final compensation. 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 of or annuitization of the accumulated member contributions with respect to employment in this group. 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.

Increased Benefit (75% of Final Compensation)
The increased Industrial Disability Retirement benefit is a monthly allowance equal to 75% of final compensation for total disability. 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 of or annuitization of the accumulated member contributions with respect to employment in this group. 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.

Improved Benefit (50% to 90% of Final Compensation)
The improved Industrial Disability Retirement benefit is a monthly allowance equal to the Workman's Compensation Appeals Board permanent disability rate percentage (if 50% or greater, with a maximum of 90%) times the 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 of the accumulated member contributions with respect to employment in this group.

Post-Retirement Death Benefit

Standard Lump Sum Payment
Upon the death of a retiree, a one-time lump sum payment of $500 will be made to the retiree's designated survivor(s), or to the retiree's estate.

Improved Lump Sum Payment
Employers have the option of providing any of these improved lump sum death benefit by contracting for any of these class 3 optional benefits.

Upon the death of a retiree, a one-time lump sum payment of $600, $2,000, $3,000, $4,000 or $5,000 will be made to the retiree's designated survivor(s), or to the retiree's estate.

Form of Payment for Retirement Allowance

Standard Form of Payment
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.

Improved Form of Payment (Post Retirement Survivor Allowance)
Employers have the option to contract for this class 1 benefit providing an improved post retirement survivor allowance.

For retirement allowances with respect to service subject to the modified formula, 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. For retirement allowances with respect to service subject to the full formula, 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, 25% or 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. This benefit will not be discontinued in the event the spouse remarries.

The remaining 75% or 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

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 must be actively employed with the CalPERS employer providing this benefit to be 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.

Standard Benefit
The Basic Death Benefit is a lump sum in the amount of the member's accumulated contributions, where interest is currently credited at 7.75% per year, plus a lump sum in the amount of one month's salary for each completed year of current service, up to a maximum of six months' salary. 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 must be actively employed with the CalPERS employer providing this benefit to be 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.

Standard 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 2W Death Benefit

Eligibility
An employee's *eligible survivor* may receive the Optional Settlement 2W 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.

Standard Benefit
The Optional Settlement 2W 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 2W. (A retiree who elects Optional Settlement 2W 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, at which time it is continued to any unmarried children under age 18, if applicable. There is a guarantee that the total amount paid will at least equal the Basic Death Benefit.

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.

Improved 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

Cost-of-Living Adjustments

Standard Benefit
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.

Improved Benefit
Employers have the option of providing any of these improved cost-of-living adjustments by contracting for any one of these class 1 optional benefits.

Beginning the second calendar year after the year of retirement, retirement and survivor allowances will be annually adjusted on a compound basis by either 3%, 4% or 5%. 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 80% 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.

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.

The percent contributed below the monthly compensation breakpoint is 0%.
The monthly compensation breakpoint is $0 for full and supplemental formula members.
The monthly compensation breakpoint is $133.33 for employees covered by the modified formula.
The percent contributed above the monthly compensation breakpoint is 9%.

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.

APPENDIX C

- CLASSIFICATION OF OPTIONAL BENEFITS
- EXAMPLE OF INDIVIDUAL AGENCY'S RATE CALCULATION
- DISTRIBUTION OF CLASS 1 BENEFITS

Classification of Optional Benefits

Below is the list of the available optional benefit provisions and their initial classification upon establishment of risk pools. When new benefits become available as a result of legislation, the Chief actuary will determine their classification in accordance with the criteria established in the board policy.

Class 1

Class 1 benefits have been identified to be the more expensive ancillary benefits. These benefits vary by employer across the risk pool. Agencies contracting for a Class 1 benefit will be responsible for the past service liability associated with such benefit and will be required to pay a surcharge established by the actuary to cover the ongoing cost (normal cost) of the Class 1 benefit.

The table below shows the list of Class 1 benefits and their applicable surcharge for the Safety 3.0% at 50 Risk Pool. Last year's surcharges are shown for comparison.

	June 30, 2006	June 30, 2007
• One Year Final Compensation	0.911%	0.913%
• EPMC 7%	N/A	N/A
• EPMC 8%	1.905%	1.914%
• EPMC 9%	2.144%	2.153%
• 25% PRSA	1.777%	1.777%
• 50% PRSA	1.777%	1.777%
• 3% Annual COLA	2.411%	2.419%
• 4% Annual COLA	2.411%	2.419%
• 5% Annual COLA	2.411%	2.419%
• IDR For Local Miscellaneous Members	N/A	N/A
• Increased IDR Allowance to 75% of Compensation	2.809%	2.869%
• Improved Industrial Disability Allowance for Local Safety Members	2.809%	2.869%
• 1% EE Cost Sharing	(1.000%)	(1.000%)
• 2% EE Cost Sharing	(2.000%)	(2.000%)
• .75% EE Cost Sharing	(0.750%)	(0.750%)
• 7% Employees Contribution Reduction	7.000%	7.000%
• 3.50% Employees Contribution Reduction	3.500%	3.500%
• Employee Contribution Rate for CSUC Auxiliary Organizations Reduced to State Member Level - Covered by Social Security	N/A	N/A
• Employee Contribution Rate for CSUC Auxiliary Organizations Reduced to State Member Level - Not Covered by Social Security	N/A	N/A
• 1.25% @ 65 Miscellaneous	N/A	N/A
• 2.5% @ 55 Safety	N/A	N/A
• 1/2 @ 55 Safety	N/A	N/A

For employers contracting for more than one Class 1 benefit, the surcharges listed in this table will be added together.

Class 2

Class 2 benefits have been identified to be the ancillary benefits providing one-time increases in benefits. These benefits vary by employer across the risk pool. Agencies contracting for a Class 2 benefit will be responsible for the past service liability associated with such benefit.

The following benefits shall be classified as Class 2:

- One-time 1% to 6% Ad Hoc COLA Increases for members who retired or died prior to January 1, 1998 (Section 21328)

- "Golden Handshakes" – Section 20903 Two Years Additional Service Credit
- Credit for Prior Service Paid for by the Employer
- Military Service Credit (Section 20996)
- Credit for Local Retirement System Service for Employees of Agencies Contracted on a Prospective basis (Section 20530.1)
- Prior Service Credit for Employees of an Assumed Agency Function (Section 20936)
- Limit Prior Service to Members Employed on Contract Date (Section 20938)
- Public Service Credit for Limited Prior Service (Section 21031)
- Public Service Credit for Employees of an Assumed Agency or Function (Section 21025)

Class 3

Class 3 benefits have been identified to be the less expensive ancillary benefits. Class 3 benefits may vary by rate plan within each risk pool. However, the employer contribution rate will not vary within the risk pool due to the Class 3 benefits.

The following benefits shall be classified as Class 3:

- Full formula plus social security
- Post Retirement Lump Sum Death Benefit
- $600 lump sum retired death benefit (Section 21622)
- $2,000 lump sum retired death benefit (Section 21623.5)
- $3,000 lump sum retired death benefit (Section 21623.5)
- $4,000 lump sum retired death benefit (Section 21623.5)
- $5,000 lump sum retired death benefit (Section 21623.5)
- Improved non-industrial disability allowance (Section 21427)
- Special death benefit for local miscellaneous members (Section 21540.5)
- Service Credit Purchased by Member
- Partial Service Retirement (Section 21118)
- Optional Membership for Part Time Employees (Section 20325)
- Extension of Reciprocity Rights for Elective Officers (Section 20356)
- Removal of Contract Exclusions Prospectively Only (Section 20503)
- Alternate Death Benefit for Local Fire Members credited with 20 or more years of service (Section 21547.7)

Example Of Individual Agency's Rate Calculation

An individual employer rate is comprised of several components. These include the pool's net employer normal cost, payment on the pool's unfunded liability, additional surcharge payments for contracted Class 1 benefits, the normal cost phase-out and an agency's payment for their own side fund. An example of the total rate for an employer might look something like this:

Net Pool's Employer Normal Cost	15.594%
Rate Plan Surcharges	0.913%
Total Employer Normal Cost	16.507%
Plus: Pool's Payment on the Amortization Bases	1.722%
Normal Cost Phase Out	0.400%
Side Fund Amortization Payment	2.600%
Total Employer Rate for fiscal year 2009-2010	21.229%

Details regarding your individual agency's normal cost phase out, side fund and surcharges can be found in Section 1.

Distribution of Class 1 Benefits

	% of members in the pool with contracted benefit
Final Compensation	
One Year Final Compensation	89.0%
Three Years Final Compensation	11.1%
Post Retirement Survivor Continuance (PRSA)	
No PRSA	57.5%
With PRSA	42.5%
Cost-of-Living Adjustments (COLA)	
2% COLA	95.3%
3% COLA	2.9%
4% COLA	0.1%
5% COLA	1.7%
Industrial Disability Benefit	
None	0.0%
Standard Industrial Disability Benefit (50% of Final Compensation)	99.3%
Improved Industrial Disability Benefit (75% of Final Compensation)	0.5%
Improved Industrial Disability Benefit (50% - 90% of Final Compensation)	0.2%

APPENDIX D

- **LIST OF PARTICIPATING EMPLOYERS**

APPENDIX D

Employer Name

ALPINE FIRE PROTECTION DISTRICT
AMERICAN CANYON FIRE DISTRICT
ARBUCKLE-COLLEGE CITY FIRE PROTECTION DISTRICT
ARCATA FIRE PROTECTION DISTRICT
BELMONT SAN CARLOS FIRE DEPARTMENT
BIG BEAR CITY COMMUNITY SERVICES DISTRICT
BONITA-SUNNYSIDE FIRE PROTECTION DISTRICT
BROADMOOR POLICE PROTECTION DISTRICT
CAMBRIA COMMUNITY HEALTHCARE DISTRICT
CAMBRIA COMMUNITY SERVICES DISTRICT
CARMEL VALLEY FIRE PROTECTION DISTRICT
CENTRAL FIRE PROTECTION DISTRICT OF SANTA CRUZ COUNTY
CITY OF ANDERSON
CITY OF ANGELS
CITY OF ARCATA
CITY OF ARROYO GRANDE
CITY OF ATASCADERO
CITY OF AUBURN
CITY OF AZUSA
CITY OF BALDWIN PARK
CITY OF BANNING
CITY OF BARSTOW
CITY OF BEAUMONT
CITY OF BELL
CITY OF BELL GARDENS
CITY OF BELMONT
CITY OF BENICIA
CITY OF BISHOP
CITY OF BLYTHE
CITY OF BRAWLEY
CITY OF BRENTWOOD
CITY OF BUENA PARK
CITY OF BURLINGAME
CITY OF CALIFORNIA CITY
CITY OF CAMPBELL
CITY OF CAPITOLA
CITY OF CARMEL-BY-THE-SEA
CITY OF CHINO
CITY OF CITRUS HEIGHTS
CITY OF CLAREMONT
CITY OF CLEARLAKE
CITY OF CLOVERDALE
CITY OF COLTON
CITY OF COMPTON
CITY OF CORNING
CITY OF CORONA
CITY OF CORONADO
CITY OF COTATI
CITY OF COVINA
CITY OF CYPRESS
CITY OF DEL MAR
CITY OF DESERT HOT SPRINGS
CITY OF DIXON
CITY OF DOS PALOS
CITY OF EL CENTRO
CITY OF EL CERRITO
CITY OF ELK GROVE

APPENDIX D

CITY OF EMERYVILLE
CITY OF ESCALON
CITY OF EUREKA
CITY OF FORTUNA
CITY OF GALT
CITY OF GARDENA
CITY OF GLENDORA
CITY OF GRASS VALLEY
CITY OF GRIDLEY
CITY OF HALF MOON BAY
CITY OF HAWTHORNE
CITY OF HEALDSBURG
CITY OF HERMOSA BEACH
CITY OF HOLLISTER
CITY OF HUNTINGTON PARK
CITY OF IMPERIAL BEACH
CITY OF INDIO
CITY OF IONE
CITY OF IRWINDALE
CITY OF JACKSON
CITY OF LA HABRA
CITY OF LA PALMA
CITY OF LA VERNE
CITY OF LAGUNA BEACH
CITY OF LINCOLN
CITY OF LIVERMORE
CITY OF LOMPOC
CITY OF LOS ALAMITOS
CITY OF LOS ALTOS
CITY OF LOS BANOS
CITY OF MADERA
CITY OF MANHATTAN BEACH
CITY OF MARINA
CITY OF MARTINEZ
CITY OF MAYWOOD
CITY OF MENLO PARK
CITY OF MONROVIA
CITY OF MONTCLAIR
CITY OF MONTEREY
CITY OF MORGAN HILL
CITY OF MORRO BAY
CITY OF MURRIETA
CITY OF NEVADA CITY
CITY OF NEWARK
CITY OF NEWMAN
CITY OF OAKDALE
CITY OF ORLAND
CITY OF OXNARD
CITY OF PACIFIC GROVE
CITY OF PACIFICA
CITY OF PALOS VERDES ESTATES
CITY OF PASO ROBLES
CITY OF PATTERSON
CITY OF PIEDMONT
CITY OF PISMO BEACH
CITY OF PITTSBURG
CITY OF PLACENTIA
CITY OF PLACERVILLE
CITY OF PLEASANT HILL

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CITY OF PLEASANTON
CITY OF POWAY
CITY OF RED BLUFF
CITY OF REDLANDS
CITY OF RIPON
CITY OF ROCKLIN
CITY OF ROHNERT PARK
CITY OF SALINAS
CITY OF SAN BRUNO
CITY OF SAN CARLOS
CITY OF SAN FERNANDO
CITY OF SAN GABRIEL
CITY OF SAN LEANDRO
CITY OF SAN LUIS OBISPO
CITY OF SAN MARCOS
CITY OF SAN MARINO
CITY OF SAN PABLO
CITY OF SAN RAMON
CITY OF SANTA CRUZ
CITY OF SANTA FE SPRINGS
CITY OF SANTA PAULA
CITY OF SANTEE
CITY OF SCOTTS VALLEY
CITY OF SEAL BEACH
CITY OF SEASIDE
CITY OF SEBASTOPOL
CITY OF SIGNAL HILL
CITY OF SOLANA BEACH
CITY OF SONOMA
CITY OF SONORA
CITY OF SOUTH GATE
CITY OF SOUTH LAKE TAHOE
CITY OF ST. HELENA
CITY OF SUISUN CITY
CITY OF SUSANVILLE
CITY OF SUTTER CREEK
CITY OF TEHACHAPI
CITY OF TULARE
CITY OF TURLOCK
CITY OF TUSTIN
CITY OF UKIAH
CITY OF VISTA
CITY OF WALNUT CREEK
CITY OF WATSONVILLE
CITY OF WEST SACRAMENTO
CITY OF WESTMINSTER
CITY OF WILLIAMS
CITY OF WILLITS
CITY OF WILLOWS
CITY OF YUBA CITY
CLOVERDALE FIRE PROTECTION DISTRICT
COTTONWOOD FIRE PROTECTION DISTRICT
COUNTY OF ALPINE
COUNTY OF AMADOR
COUNTY OF CALAVERAS
COUNTY OF COLUSA
COUNTY OF GLENN
COUNTY OF INYO
COUNTY OF LASSEN

APPENDIX D

COUNTY OF MARIPOSA
COUNTY OF MODOC
COUNTY OF MONO
COUNTY OF NAPA
COUNTY OF NEVADA
COUNTY OF TRINITY
COUNTY OF TUOLUMNE
DIAMOND SPRINGS/EL DORADO FIRE PROTECTION DISTRICT
EAST BAY REGIONAL PARK DISTRICT
EL DORADO COUNTY FIRE PROTECTION DISTRICT
EL DORADO HILLS COUNTY WATER DISTRICT
ESTERO MUNICIPAL IMPROVEMENT DISTRICT
FONTANA UNIFIED SCHOOL DISTRICT
FOUNTAIN VALLEY CITY
GARDEN VALLEY FIRE PROTECTION DISTRICT
GEORGETOWN FIRE PROTECTION DISTRICT
GLENDALE COMMUNITY COLLEGE DISTRICT
GOLD RIDGE FIRE PROTECTION DISTRICT
GRANT JOINT UNION HIGH SCHOOL DISTRICT
HACIENDA LA PUENTE UNIFIED SCHOOL DISTRICT
KENSINGTON COMMUNITY SERVICE DISTRICT
LAKESIDE FIRE PROTECTION DISTRICT
LINDEN-PETERS RURAL COUNTY FIRE PROTECTION DISTRICT
MARINWOOD COMMUNITY SERVICES DISTRICT
MARYSVILLE CITY
MENLO PARK FIRE PROTECTION DISTRICT
MONTEREY PENINSULA AIRPORT DISTRICT
MURRIETA FIRE PROTECTION DISTRICT
NORTH TAHOE FIRE PROTECTION DISTRICT
NORTHSTAR COMMUNITY SERVICES DISTRICT
PORT SAN LUIS HARBOR DISTRICT
RANCHO CUCAMONGA FIRE PROTECTION DISTRICT
RANCHO SANTA FE FIRE PROTECTION DISTRICT
RUNNING SPRINGS WATER DISTRICT
SALIDA FIRE PROTECTION DISTRICT
SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT
SAN DIEGO UNIFIED SCHOOL DISTRICT
SANTA ANA UNIFIED SCHOOL DISTRICT
SQUAW VALLEY PUBLIC SERVICE DISTRICT
STANISLAUS CONSOLIDATED FIRE PROTECTION DISTRICT
STOCKTON UNIFIED SCHOOL DISTRICT
TEMPLETON COMMUNITY SERVICES DISTRICT
TOWN OF ATHERTON
TOWN OF COLMA
TOWN OF CORTE MADERA
TOWN OF FAIRFAX
TOWN OF HILLSBOROUGH
TOWN OF LOS GATOS
TOWN OF MAMMOTH LAKES
TOWN OF PARADISE
TOWN OF SAN ANSELMO
TOWN OF TRUCKEE
WINTERS FIRE PROTECTION DISTRICT
WOODSIDE FIRE PROTECTION DISTRICT

APPENDIX E

- **GLOSSARY OF ACTUARIAL TERMS**

APPENDIX E

Glossary of Actuarial Terms

Accrued Liability

The total dollars needed as of the valuation date to fund all benefits earned in the past for *current* members.

Actuarial Assumptions

Assumptions made about certain events that will affect pension costs. Assumptions generally can be broken down into two categories: demographic and economic. Demographic assumptions include such things as mortality, disability and retirement rates. Economic assumptions include investment return, salary growth and inflation.

Actuarial Methods

Procedures employed by actuaries to achieve certain goals of a pension plan. These may include things such as funding method, setting the length of time to fund the past service liability and determining the actuarial value of assets.

Actuarial Valuation

The determination, as of a valuation date of the normal cost, actuarial accrued liability, actuarial value of assets and related actuarial present values for a pension plan. These valuations are performed annually or when an employer is contemplating a change to their plan provisions.

Actuarial Value of Assets

The actuarial value of assets used for funding purposes is obtained through an asset smoothing technique where investment gains and losses are partially recognized in the year they are incurred, with the remainder recognized in subsequent years.

This method helps to dampen large fluctuations in the employer contribution rate.

Amortization Bases

Separate payment schedules for different portions of the unfunded liability. The total unfunded liability (or side fund) can be segregated by "cause", creating "bases" and each such base will be separately amortized and paid for over a specific period of time. This can be likened to a home mortgage that has 24 years of remaining payments and a second on that mortgage that has 10 years left. Each base or each mortgage note has its own terms (payment period, principal, etc.)

Generally in an actuarial valuation, the separate bases consist of changes in liability (principal) due to amendments, actuarial assumption changes, or methodology changes and gains and losses. Payment periods are determined by Board policy and vary based on the cause of the change.

Amortization Period

The number of years required to pay off an amortization base.

Annual Required Contributions (ARC)

The employer's periodic required annual contributions to a defined benefit pension plan, calculated in accordance with the plan assumptions. The ARC is determined by multiplying the employer contribution rate by the payroll reported to CalPERS for the applicable fiscal year. However, if this contribution is fully prepaid in a lump sum, then the dollar value of the ARC is equal to the Lump Sum Prepayment.

Class 1 Benefits

Class 1 benefits have been identified to be the more expensive ancillary benefits. These benefits vary by employer across the risk pool. Agencies contracting for a Class 1 benefit will be responsible for the past service liability associated with such benefit and will be required to pay a surcharge established by the actuary to cover the ongoing cost (normal cost) of the Class 1 benefit.

Class 2 Benefits

Class 2 benefits have been identified to be the ancillary benefits providing one-time increases in benefits. These benefits vary by employer across the risk pool. Agencies contracting for a Class 2 benefit will be responsible for the past service liability associated with such benefit.

Class 3 Benefits

Class 3 benefits have been identified to be the less expensive ancillary benefits. Class 3 benefits may vary by rate plan within each risk pool. However, the employer contribution rate will not vary within the risk pool due to the Class 3 benefits.

Entry Age

The earliest age at which a plan member begins to accrue benefits under a defined benefit pension Plan or risk pool. In most cases, this is the same as the date of hire.

(The assumed retirement age less the entry age is the amount of time required to fund a member's total benefit. Generally, the older a member is at hire, the greater the entry age normal cost. This is mainly because there is less time to earn investment income to fund the future benefits.)

Excess Assets

When a plan or pool's actuarial value of assets is greater than its accrued liability, the difference is the plan or pool's excess assets. A plan with excess assets is said to be overfunded. The result is that the plan or pool can temporarily reduce future contributions.

Entry Age Normal Cost Method

An actuarial cost method designed to fund a member's total plan benefit over the course of his or her career. This method is designed to produce stable employer contributions in amounts that increase at the same rate as the employer's payroll (i.e. level % of payroll).

Fresh Start

When multiple amortization bases are collapsed into one base and amortized over a new funding period. At CalPERS, fresh starts are used to avoid inconsistencies that would otherwise occur.

Funded Status

A measure of how well funded a plan or risk pool is. Or equivalently, how "on track" a plan or risk pool is with respect to assets vs. accrued liabilities. We calculate a funded ratio by dividing the market value of assets by the accrued liabilities. A ratio greater than 100% means the plan or risk pool has more assets than liabilities and a ratio less than 100% means liabilities are greater than assets.

Normal Cost

The annual cost of service accrual for the upcoming fiscal year for active employees. The normal cost plus surcharges should be viewed as the long term contribution rate.

Pension Actuary

A person who is responsible for the calculations necessary to properly fund a pension plan.

Prepayment Contribution

A payment made by the employer to reduce or eliminate the year's required employer contribution.

Present Value of Benefits

The total dollars needed as of the valuation date to fund all benefits earned in the past or expected to be earned in the future for current members.

Risk Pools

Using the benefit of the law of large numbers, it is a collection of employers for the purpose of sharing risk.

Rolling Amortization Period

An amortization period that remains the same each year or does not decline.

Side Fund

At the time of joining a risk pool, a side fund was created to account for the difference between the funded status of the pool and the funded status of your plan. Your side fund will be amortized on an annual basis, with the actuarial investment return assumption. This assumption is currently 7.75%. A positive side fund will cause your required employer contribution rate to be reduced by the Amortization of the Side Fund shown in REQUIRED CONTRIBUTIONS. A negative side fund will cause your required employer contribution rate to be increased by the Amortization of the Side Fund. In the absence of subsequent contract amendments or funding changes, the Side Fund will disappear at the end of the amortization period.

Superfunded

A condition existing when the actuarial value of assets exceeds the present value of benefits. When this condition exists on a given valuation date for a given plan, employee contributions for the rate year covered by that valuation may be waived.

Unfunded Liability

When a plan or pool's actuarial value of assets is less than its accrued liability, the difference is the plan or pool's unfunded liability. The plan or pool will have to temporarily increase contributions.