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October 19, 2006

**MISCELLANEOUS PLAN OF THE CITY OF CHICO (EMPLOYER # 533)  
Annual Valuation Report as of June 30, 2005**

Dear Employer,

Enclosed please find a copy of the June 30, 2005 actuarial valuation report of your pension plan. This report contains important actuarial information about your pension plan at CalPERS. Your CalPERS staff actuary is available to discuss the report with you.

**Changes Since Prior Year's Valuation**

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

In lieu of sending employer contributions on a reportable payroll cycle, Public Agencies can now prepay their annual required contributions. With this report, we have added a line entitled "Annual Prepayment Option". The discounted amounts payable under this option are shown on Page 5 for the 2006/2007 and 2007/2008 fiscal years.

**Future Contribution Rates**

The exhibit below displays the required employer contribution rate and Superfunded status for 2007/2008 along with an estimate of the contribution rate and the probable Superfunded status for 2008/2009. The estimated rate for 2008/2009 is based solely on a projection of the investment return for fiscal 2005/2006, namely 11%. Please disregard any projections that we may have provided to you in the past.

Fiscal Year	Employer Contribution Rate	Superfunded?
2007/2008	20.307%	NO
2008/2009	20.1% (projected)	NO

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

The estimate for 2008/2009 also assumes that there are no future 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 often cause a change in the employer's contribution rate by one or two percent, even larger in some less common instances. These gains and losses cannot be predicted in advance so the projected employer contribution rate for 2008/2009 is just an estimate. Your actual rate for 2008/2009 will be provided in next year's report.

We are very busy preparing actuarial valuations for other public agencies and expect to complete all such valuations by the end of October. We understand that you might have a number of questions about these results. While we are very interested in discussing these results with your agency, 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. If you have questions, please call (888) CalPERS (225-7377).

Sincerely,

Ronald L. Seeling, Ph.D., F.C.A., A.S.A., M.A.A.A.  
Enrolled Actuary  
Chief Actuary, CalPERS

# **ACTUARIAL VALUATION**

as of June 30, 2005

**for the  
MISCELLANEOUS PLAN  
of the  
CITY OF CHICO  
(EMPLOYER # 533)**

**REQUIRED CONTRIBUTIONS  
FOR FISCAL YEAR  
July 1, 2007 - June 30, 2008**



California Public Employees' Retirement System  
P.O. Box 942709  
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# TABLE OF CONTENTS

<b>ACTUARIAL CERTIFICATION</b>	1
<b>HIGHLIGHTS AND EXECUTIVE SUMMARY</b>	
Purpose of the Report	5
Required Contributions	5
Funded Status	5
Cost and Volatility	6
Changes Since the Prior Valuation	7
Subsequent Events	7
<b>SUMMARY OF LIABILITIES AND RATES</b>	
Development of Accrued and Unfunded Liabilities	11
Roll Forward of Unfunded Liabilities	12
Schedule of Amortization Bases	13
(Gain)/Loss Analysis	14
Development of Required Employer Contributions	15
Reconciliation of Required Employer Contributions	15
Employer Contribution Rate History	16
Funding History	16
<b>SUMMARY OF ASSETS</b>	
Reconciliation of the Market Value of Assets	19
Development of the Actuarial Value of Assets	19
Asset Allocation	20
<b>SUMMARY OF PARTICIPANT DATA</b>	
Summary of Valuation Data	23
Distribution of Active Members	24
Distribution of Retired Members and Beneficiaries	25
<b>APPENDIX A</b>	
Statement Of Actuarial Data, Methods And Assumptions	
<b>APPENDIX B</b>	
Summary Of Principal Plan Provisions	
<b>APPENDIX C</b>	
GASB Statement No. 27 for a Single Employer Defined Benefit Pension Plan	
<b>APPENDIX D</b>	
Glossary of Actuarial Terms	

## 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 MISCELLANEOUS PLAN OF THE CITY OF CHICO. This valuation is based on the member and financial data as of June 30, 2005 provided by the various CalPERS databases and the benefits under this plan 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 plan, as prescribed by the CalPERS Board of Administration according to provisions set forth in the California Public Employees' Retirement Law.

The below listed are actuaries for CalPERS. All 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.



Barbara J. Ware, F.S.A., M.A.A.A.  
Enrolled Actuary  
Senior Pension Actuary, CalPERS



Ron Seeling, Ph.D., F.C.A., A.S.A., M.A.A.A.  
Enrolled Actuary  
Chief Actuary, CalPERS

## **HIGHLIGHTS AND EXECUTIVE SUMMARY**

- **PURPOSE OF THE REPORT**
- **REQUIRED CONTRIBUTIONS**
- **FUNDED STATUS**
- **COST AND VOLATILITY**
- **CHANGES SINCE THE PRIOR VALUATION**
- **SUBSEQUENT EVENTS**

## Purpose of the Report

This report presents the results of the June 30, 2005 actuarial valuation of the MISCELLANEOUS PLAN OF THE CITY OF CHICO of the California Public Employees' Retirement System (CalPERS). The valuation was performed by CalPERS staff actuaries in order to:

- set forth the actuarial assets and funding liabilities of this plan as of June 30, 2005;
- certify the actuarially required employer contribution rate of this plan for the fiscal year July 1, 2007 through June 30, 2008 is 20.307%;
- provide actuarial information as of June 30, 2005 to the CalPERS Board of Administration and other interested parties; and
- provide pension information as of June 30, 2005 to be used in financial reports subject to Governmental Accounting Standards Board (GASB) Statement Number 27 for a Single Employer Defined Benefit Pension Plan.

Use of this report for other purposes may be inappropriate.

## Required Contributions

	<b>Fiscal Year 2006/2007</b>	<b>Fiscal Year 2007/2008</b>
<b>Required Employer Contributions</b>		
Employer Contribution Required (in Projected Dollars)		
Payment for Normal Cost	\$ 1,774,511	\$ 1,831,370
Payment on the Amortization Bases	1,049,212	1,215,027
Total (not less than zero)	\$ 2,823,723	\$ 3,046,397
Annual Prepayment Option*	\$ 2,720,279	\$ 2,934,796
Employer Contribution Required (Percentage of Payroll)		
Payment for Normal Cost	12.369%	12.208%
Payment on the Amortization Bases	7.313%	8.099%
Total (not less than zero)	19.682%	20.307%
<b>Required Employee Contributions (Percentage)</b>	8.000%	8.000%

## Funded Status

	<b>June 30, 2004</b>	<b>June 30, 2005</b>
Present Value of Projected Benefits	95,069,243	105,070,482
Entry Age Normal Accrued Liability	74,370,533	83,548,394
Actuarial Value of Assets (AVA)	58,082,900	64,567,789
Unfunded Liability	\$ 16,287,633	\$ 18,980,605
Funded Status (on an AVA basis)	78.1%	77.3%
Market Value of Assets (MVA)	\$ 57,197,659	\$ 66,532,892
Funded Status (on an MVA basis)	76.9%	79.6%
<b>Superfunded Status</b>	No	No

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

## 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 the ones 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 to reflect 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 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 9.7%.

Second, the very nature of actuarial funding produces the answer to the question of plan 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.
- 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 employer 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 raise or lower the employer's rates from year to year. Therefore, the rates will inevitably fluctuate, especially due to the ups and downs of investment returns.

Plans that have higher asset to payroll ratios produce more volatile employer rates. On the following page we have shown your volatility index, 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 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 matures.

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%.

	<b>As of June 30, 2005</b>
Accrued Liability	83,548,394
Payroll	13,628,915
Volatility Index	6.1
Average Volatility Index for All Plans with 3.0% @ 60 Miscellaneous Retirement Formula*	4.8

\* Includes pooled and non-pooled plans

## Changes Since Prior Valuation

### Actuarial Assumptions

There were no changes made to the actuarial assumptions since the prior year's actuarial valuation. The only exception would be changes necessary to reflect a benefit amendment.

### Actuarial Methods

There were no 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 plan amendment are generally included in the first valuation whose report is dated after the amendment becomes effective.

This valuation generally reflects plan changes by amendments effective before the date of the report. Please refer to Appendix B for a summary of the plan provisions used in the valuation. The effect of any plan amendments on the unfunded liability is shown in the GAIN/LOSS ANALYSIS section and the effect on your employer contribution rate is shown in the RECONCILIATION OF REQUIRED EMPLOYER CONTRIBUTIONS section of this report. It should be noted that no change in liability or rate is shown for any plan changes which were already included in the prior year's valuation.

## Subsequent Events

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



## **SUMMARY OF LIABILITIES AND RATES**

- **DEVELOPMENT OF ACCRUED AND UNFUNDED LIABILITIES**
- **ROLL FORWARD OF UNFUNDED LIABILITIES**
- **SCHEDULE OF AMORTIZATION BASES**
- **(GAIN) / LOSS ANALYSIS**
- **DEVELOPMENT OF REQUIRED EMPLOYER CONTRIBUTIONS**
- **RECONCILIATION OF REQUIRED EMPLOYER CONTRIBUTIONS**
- **EMPLOYER CONTRIBUTION RATE HISTORY**
- **FUNDING HISTORY**

## Development of Accrued and Unfunded Liabilities

1 Present Value of Projected Benefits		
a) Active Members	\$	68,727,068
b) Transferred Members		3,652,520
c) Terminated Members		2,369,810
d) Members and Beneficiaries Receiving Payments		30,321,084
e) Total		<u>105,070,482</u>
2 Present Value of Future Employer Normal Costs		12,703,435
3 Present Value of Future Employee Contributions		8,818,653
4 Entry Age Normal Accrued Liability		
a) Active Members [(1a) - (2) - (3)]		47,204,980
b) Transferred Members		3,652,520
c) Terminated Members		2,369,810
d) Members and Beneficiaries Receiving Payments		30,321,084
e) Total		<u>83,548,394</u>
5 Actuarial Value of Assets		64,567,789
6 Unfunded Accrued Liability/(Excess Assets) [(4e) - (5)]		18,980,605

## Roll Forward of Unfunded Liabilities

There is a two year lag between the Valuation Date and the Contribution Fiscal Year.

- The assets, liabilities and funded status of the plan are measured as of the valuation date (June 30, 2005).
- The employer contribution rate determined by the valuation is for the fiscal year beginning two years after the valuation date (fiscal year 2007-2008).

This two year lag is necessary due to the amount of time needed to extract and test the membership and financial data, and due to the need to provide public agencies with their employer contribution rates well in advance of the start of the fiscal year.

The Unfunded Liability is used to determine the employer contribution and therefore must be rolled forward two years from the valuation date to the first day of the fiscal year for which the contribution is being determined. The Unfunded Liability is rolled forward each year by subtracting the expected Payment on the Unfunded Liability for the fiscal year and adjusting for interest. The Expected Payment on the Unfunded Liability for a fiscal year is equal to the Expected Employer Contribution for the fiscal year minus the Expected Normal Cost for the year. The Employer Contribution Rate for the first fiscal year is determined by the actuarial valuation two years ago and the rate for the second year is from the actuarial valuation one year ago. The Normal Cost Rate for each of the two fiscal years is assumed to be the same as the rate determined by the current valuation. All expected dollar amounts are determined by multiplying the rate by the expected payroll for the applicable fiscal year.

### Retirement Program

1. Employer Contribution Rate for 2005/2006 from 6/30/2003 Valuation <sup>1</sup>		21.214%
2. Projected Annual Payroll for 2005/2006 from 6/30/2005 Valuation <sup>2</sup>	\$	14,071,855
3. Employer Contribution Rate for 2006/2007 from 6/30/2004 Valuation <sup>1</sup>		19.682%
4. Projected Annual Payroll for 2006/2007 from 6/30/2005 Valuation <sup>2</sup>	\$	14,529,190
5. Projected Annual Payroll for 2007/2008 from 6/30/2005 Valuation <sup>2</sup>	\$	15,001,389
6. Employer Normal Cost Rate from 6/30/2005 Valuation		12.208%
7. 6/30/2005 Unfunded Liability	\$	18,980,605
8. Expected Employer Normal Cost for 2005/2006 = (6) x (2)		1,717,892
9. Expected Employer Contribution = (1) x (2)		2,985,203
10. Expected Payment on Unfunded Liability = (9) - (8)		1,267,311
11. Expected Interest on (7) and (10) at 7.75% assuming mid-year payments of contributions		1,422,804
12. 6/30/2006 Expected Unfunded Liability = (7) - (10) + (11)		19,136,098
13. Expected Employer Normal Cost for 2006-2007 = (6) x (4)	\$	1,773,724
14. Expected Employer Contribution = (3) x (4)		2,859,635
15. Expected Payment on Unfunded Liability = (14) - (13)		1,085,912
16. Expected Interest on (12) and (15) at 7.75%		1,441,753
17. 6/30/2007 Rolled Forward Unfunded Liability = (12) - (15) + (16)		19,491,939

<sup>1</sup>An adjustment has been made in cases where there was an amendment during the year to reflect the partial year's payment for the amendment.

<sup>2</sup>Annual payroll is assumed to increase by 3.25% each year.

## Schedule of Amortization Bases

The schedule below shows the development of the "Payment on the Amortization Bases" shown in the REQUIRED CONTRIBUTIONS and DEVELOPMENT OF REQUIRED EMPLOYER CONTRIBUTIONS section of this report. This payment represents the employer contribution toward the Unfunded Liability. Each row of the schedule gives a brief description of a base (or portion of the Unfunded Liability), the date the base was established, the original amount, and the number of years from June 30, 2007 to the final payment (Amortization Period). The balance of the base is then shown for the year immediately following the valuation date and the expected payment and projected base are shown for the next two fiscal years. The last year shown is the one for which rates are established in this report. The total expected payments for the fiscal years 2005/2006 and 2006/2007 are the fiscal years' expected payrolls multiplied by the difference between the fiscal years' total employer rate percentage and the June 30, 2005 employer normal cost percentage. The total payroll is expected to grow by 3.25% annually. Please see previous page and Appendix A for more detail, particularly for an explanation of how amortization periods are determined.

Reason for Base	Date Established	Amortization Period	Balance 6/30/05	Expected Payment 2005/2006	Balance 6/30/06	Expected Payment 2006/2007	Amounts for Fiscal 2007/2008		
							Balance 6/30/07	Scheduled Payment for 2007/2008	Payment as Percent- age of Payroll
(GAIN)/LOSS	06/30/05	30	\$16,965,333	\$1,032,444	\$17,208,441	\$892,409	\$17,615,751	\$1,057,843	7.051%
PAYMENT (GAIN)/LOSS	06/30/05	30	\$(113,866)	\$53,467	\$(178,191)	\$28,387	\$(221,468)	\$(13,300)	(0.089%)
ASSETS CHANGE	06/30/03	18	\$(125,599)	\$(9,487)	\$(125,485)	\$(9,795)	\$(125,043)	\$(10,113)	(0.067%)
ASSUMPTION CHANGE	06/30/03	18	\$2,527,265	\$190,887	\$2,524,982	\$197,091	\$2,516,082	\$203,497	1.357%
METHOD CHANGE	06/30/04	19	\$(272,528)	\$0	\$(293,649)	\$(22,180)	\$(293,383)	\$(22,900)	(0.153%)
<b>TOTAL</b>			<b>\$18,980,605</b>	<b>\$1,267,311</b>	<b>\$19,136,098</b>	<b>\$1,085,912</b>	<b>\$19,491,939</b>	<b>\$1,215,027</b>	<b>8.099%</b>

## (Gain)/Loss Analysis 6/30/04 - 6/30/05

To calculate the cost requirements of the plan, assumptions are made about future events that affect the amount and timing of benefits to be paid and assets to be accumulated. Each year actual experience is compared to the expected experience based on the actuarial assumptions. This results in actuarial gains or losses, as shown below.

### A Total (Gain)/Loss for the Year

1. Unfunded Liability/(Excess Assets) as of 6/30/04	\$	16,287,633
2. Expected Payment on the Unfunded Liability (UL) during 2004/2005		720,649
3. Interest through 6/30/05 $ [.0775 \times (A1) - ((1.0775)^{1/2} - 1) \times (A2)]$		1,234,887
4. Expected UL before all other changes $ [(A1) - (A2) + (A3)]$		16,801,871
5. Change in UL due to new plan changes		0
6. Change in UL due to change in actuarial methods		0
7. Change in UL due to additional contributions		0
8. Expected UL after all other changes $ [(A4) + (A5) + (A6) + (A7)]$		16,801,871
9. Actual UL as of 6/30/05		18,980,605
10. Total (Gain)/Loss for 2004/2005 $ [(A9) - (A8)]$	\$	2,178,734

### B Contribution (Gain)/Loss for the Year

1. Expected Contribution	\$	3,461,805
2. Expected Interest on Expected Contributions		131,642
3. Actual Contributions		4,128,695
4. Expected Interest on Actual Contributions		157,002
5. Contribution (Gain)/Loss $ [(B1) + (B2) - (B3) - (B4)]$	\$	(692,250)

### C Asset (Gain)/Loss for the Year

1. Actuarial Value of Assets as of 6/30/04	\$	58,082,900
2. Contributions Received during 2004/2005		4,128,695
3. Benefits and Refunds Paid during 2004/2005		(2,343,940)
4. Transfers/Misc. Adjustments paid during fiscal 2004/2005		(9,176)
5. Expected Int. $ [.0775 \times (C1) + ((1.0775)^{1/2} - 1) \times ((C2) + (C3) + (C4))]$		4,568,945
6. Expected Assets as of 6/30/05 $ [(C1) + (C2) + (C3) + (C4) + (C5)]$		64,427,424
7. Actual Actuarial Value of Assets as of 6/30/05		64,567,789
8. Asset (Gain)/Loss for 2004/2005 $ [(C6) - (C7)]$	\$	(140,365)

### D Liability (Gain)/Loss for the Year

1. Total (Gain)/Loss (A10)	\$	2,178,734
2. Contribution (Gain)/Loss (B5)		(692,250)
3. Asset (Gain)/Loss (C8)		(140,365)
4. Liability (Gain)/Loss $ [(D1) - (D2) - (D3)]$	\$	3,011,349

### Development of the (Gain)/Loss Balance as of 6/30/05

1. (Gain)/Loss Balance as of 6/30/04	\$	14,364,532
2. Payment Made on the Balance during 2004/2005		665,864
3. Interest through 6/30/05 $ [.0775 \times (1) - ((1.0775)^{1/2} - 1) \times (2)]$		1,087,931
4. Scheduled (Gain)/Loss Balance as of 6/30/05 $ [(1) - (2) + (3)]$	\$	14,786,599
5. (Gain)/Loss for Fiscal Year ending 6/30/05 [(A10) above]		2,178,734
6. Final (Gain)/Loss Balance as of 6/30/05 $ [(4) + (5)]$	\$	16,965,333

## Development of Required Employer Contributions

### Fiscal Year 2007/2008

	Percentage of Projected Payroll		Estimated \$ Based On Projected Payroll
Employer Contribution Required			
Payment for Normal Cost	12.208%	\$	1,831,370
Payment on Amortization Bases	8.099%		1,215,027
Total (not less than zero)	20.307%		3,046,397
Annual Lump Sum Prepayment Option*			2,934,796

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

## Reconciliation of Required Employer Contributions

	Percentage of Projected Payroll		Estimated \$ Based on Projected Payroll
1 Contribution for 7/1/06 - 6/30/07	19.682%	\$	2,823,723
2 Effect of changes since the prior valuation			
a) Effect of unexpected changes in demographics and financial results	0.625%		93,767
b) Effect of plan changes	0.000%		0
c) Effect of elimination of amortization base	0.000%		0
d) Effect of change in payroll	N/A		128,907
e) Effect of changes in Actuarial Methods or Assumptions	0.000%		0
f) Effect of changes due to additional contributions	0.000%		0
g) Effect of changes due to Fresh Start	0.000%		0
h) Net effect of the changes above [Sum of (a) through (g)]	0.625%		222,674
3 Contribution for 7/1/07 - 6/30/08 [(1)+(2h)]	20.307%		3,046,397

The contribution actually paid (item 1) may be different if a prepayment of unfunded actuarial liability is made or a plan change became effective after the prior year's actuarial valuation was performed.

## Employer Contribution Rate History

The table below provides a history of the employer contribution rates for your plan since July 1, 2005, as determined by the annual actuarial valuation. It does not account for prepayments or benefit changes made in the middle of the year.

### Required By Valuation

<u>Fiscal Year</u>	<u>Employer Normal Cost</u>	<u>Unfunded Rate</u>	<u>Total Employer Contribution Rate</u>
2005 – 2006	12.272%	8.942%	21.214%
2006 – 2007	12.369%	7.313%	19.682%
2007 – 2008	12.208%	8.099%	20.307%

## Funding History

The Funding History below shows the recent history of the actuarial value of assets, actuarial accrued liability, their relationship, and the relationship of the unfunded actuarial accrued liability to payroll.

<u>Valuation Date</u>	<u>Accrued Liability (a)</u>	<u>Actuarial Value of Assets (b)</u>	<u>Unfunded Liability (a)-(b)</u>	<u>Funded Status (b)/(a)</u>	<u>Annual Covered Payroll (c)</u>	<u>UL As a % of Payroll [(a)-(b)]/(c)</u>
06/30/03	\$ 66,228,526	\$ 53,279,657	\$ 12,948,869	80.4%	\$ 12,223,941	105.9%
06/30/04	74,370,533	58,082,900	16,287,633	78.1%	13,033,889	125.0%
06/30/05	83,548,394	64,567,789	18,980,605	77.3%	13,628,915	139.3%

## **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, 2004	\$	57,197,659
2	Employer Contributions		2,198,599
3	Employee Contributions		1,930,096
4	Benefit Payments to Retirees and Beneficiaries		(2,341,639)
5	Refunds		(2,301)
6	Lump Sum Payments		0
7	Transfers and Miscellaneous Adjustments		(9,176)
8	Investment Return		7,559,654
9	Market Value of Assets as of June 30, 2005	\$	66,532,892
	[(1)+(2)+(3)+(4)+(5)+(6)+(7)+(8)]		

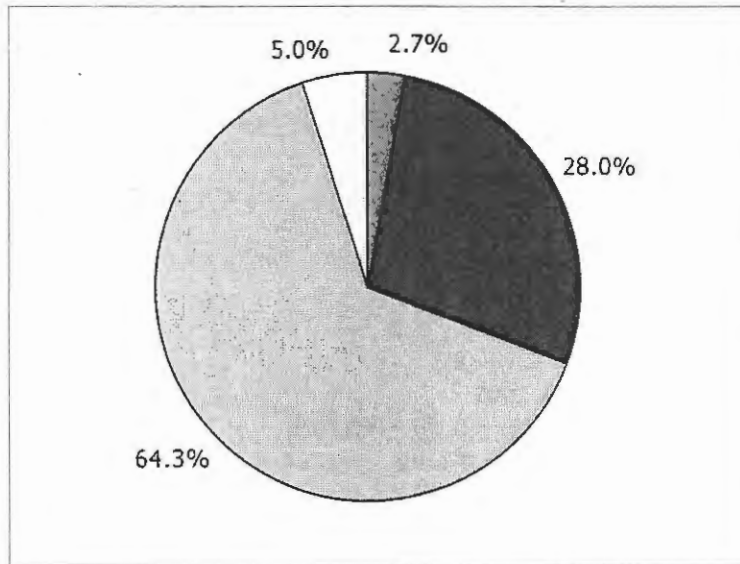
### Development of the Actuarial Value of Assets

1.	Actuarial Value of Assets as of June 30, 2004	\$	58,082,900
2.	Employer Contributions		2,198,599
3.	Employee Contributions		1,930,096
4.	Benefit Payments to Retirees and Beneficiaries		(2,341,639)
5.	Refunds		(2,301)
6.	Lump Sum Payments		0
7.	Transfers and Miscellaneous Adjustments		(9,176)
8.	Expected Investment Income at 7.75%		4,568,945
9.	Expected Actuarial Value of Assets	\$	64,427,424
	[(1) + (2) + (3) + (4) + (5) + (6) + (7) + (8)]		
10.	Market Value of Assets as of June 30, 2005	\$	66,532,892
11.	Preliminary Actuarial Value of Assets [(9) + ((10) - (9)) / 15]		64,567,789
12.	Maximum Actuarial Value of Assets (120% of (10))		79,839,470
13.	Minimum Actuarial Value of Assets (80% of (10))		53,226,314
14.	Final Actuarial Value of Assets {Lesser of [(12), Greater of ((11), (13))]} \$		64,567,789
15.	Actuarial Value to Market Value Ratio		97.0%

## Asset Allocation\*

The asset allocation and market value of assets shown below reflect the values of the Public Employees Retirement Fund (PERF) in its entirety as of June 30, 2005. The assets for CITY OF CHICO MISCELLANEOUS PLAN 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	5.3	2.7%	0.0%
2) Total Global Fixed Income	54.3	28.0%	26.0%
3) Total Equities	124.6	64.3%	66.0%
4) Total Real Estate	9.6	5.0%	8.0%
Total Fund	193.8	100.0%	100.0%



\* 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.

## **SUMMARY OF PARTICIPANT DATA**

- **SUMMARY OF VALUATION DATA**
- **DISTRIBUTION OF ACTIVE MEMBERS**
- **DISTRIBUTION OF RETIRED MEMBERS AND BENEFICIARIES**

## Summary of Valuation Data

	<b>June 30, 2004</b>	<b>June 30, 2005</b>
<b>1. Active Members</b>		
a) Counts	240	242
b) Average Attained Age	46.50	46.71
c) Average Entry Age to Rate Plan	36.15	36.08
d) Average Years of Service	10.35	10.63
e) Average Annual Covered Pay	\$ 54,308	\$ 56,318
f) Annual Covered Payroll	13,033,889	13,628,915
g) Projected Annual Payroll for Contribution Year	14,346,442	15,001,389
h) Present Value of Future Payroll	105,590,194	110,233,130
<b>2. Transferred Members</b>		
a) Counts	86	79
b) Average Attained Age	48.49	48.93
c) Average Years of Service	3.18	3.41
d) Average Annual Covered Pay	63,871	\$ 68,638
<b>3. Terminated Members</b>		
a) Counts	36	41
b) Average Attained Age	44.66	45.31
c) Average Years of Service	4.70	4.86
d) Average Annual Covered Pay	44,343	\$ 47,007
<b>4. Retired Members and Beneficiaries</b>		
a) Counts	219	231
b) Average Attained Age	69.19	68.85
c) Average Annual Benefits	\$ 9,670	\$ 10,772
<b>5. Active to Retired Ratio [1(a)/4(a)]</b>	1.1	1.0

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.

## Active Members

**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	2	0	0	0	0	0	2
25-29	7	2	0	0	0	0	9
30-34	10	7	1	0	0	0	18
35-39	14	9	3	1	0	0	27
40-44	12	9	6	5	0	0	32
45-49	18	15	9	12	1	2	57
50-54	10	10	7	9	5	3	44
55-59	2	5	6	12	6	7	38
60-64	1	0	2	4	2	2	11
65 and over	1	0	1	0	1	1	4
<b>All Ages</b>	77	57	35	43	15	15	242

**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	\$35,357	\$0	\$0	\$0	\$0	\$0	\$35,357
25-29	38,134	42,193	0	0	0	0	39,036
30-34	40,508	57,892	44,637	0	0	0	47,498
35-39	46,897	46,625	46,704	79,819	0	0	48,004
40-44	59,399	48,051	51,615	52,361	0	0	53,648
45-49	46,427	56,582	61,098	69,683	58,420	49,689	56,637
50-54	39,020	63,971	56,676	71,182	75,759	105,875	62,811
55-59	61,480	85,422	70,198	65,047	72,453	69,984	70,433
60-64	33,322	0	42,495	50,386	47,507	55,746	47,851
65 and over	13,322	0	40,696	0	40,560	49,712	36,073
<b>Average</b>	\$45,553	\$57,145	\$56,798	\$65,129	\$67,167	\$71,206	\$56,318

## 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	0	0	0	0	0
30-34	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0
40-44	0	0	0	0	0	1	1
45-49	0	2	0	0	0	0	2
50-54	10	1	0	0	0	2	13
55-59	32	2	0	0	0	2	36
60-64	28	3	0	0	0	3	34
65-69	30	7	0	1	0	2	40
70-74	32	1	0	0	0	5	38
75-79	16	3	0	0	0	2	21
80-84	17	0	0	0	0	12	29
85 and Over	11	0	0	0	0	5	16
<b>All Ages</b>	176	19	0	1	0	34	230

### 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	\$0	\$0	\$0	\$0	\$0
30-34	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0
40-44	0	0	0	0	0	6,057	6,057
45-49	0	7,776	0	0	0	0	7,776
50-54	12,669	11,315	0	0	0	3,533	11,159
55-59	14,705	1,651	0	0	0	7,815	13,597
60-64	17,509	7,466	0	0	0	2,861	15,331
65-69	10,592	2,894	0	2,793	0	4,823	8,761
70-74	12,193	3,204	0	0	0	6,356	11,188
75-79	8,514	10,284	0	0	0	4,663	8,400
80-84	13,453	0	0	0	0	4,934	9,928
85 and Over	4,329	0	0	0	0	2,538	3,770
<b>Average</b>	\$12,545	\$5,625	\$0	\$2,793	\$0	\$4,705	\$10,772

## Retired Members and Beneficiaries

### 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	62	2	0	0	0	1	65
5-9	45	4	0	0	0	4	53
10-14	19	1	0	1	0	2	23
15-19	25	3	0	0	0	9	37
20-24	15	8	0	0	0	7	30
25-29	7	0	0	0	0	9	16
30 and Over	3	1	0	0	0	2	6
<b>All Years</b>	176	19	0	1	0	34	230

### 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	\$17,021	\$1,651	\$0	\$0	\$0	\$4,917	\$16,362
5-9	11,785	10,329	0	0	0	6,242	11,257
10-14	13,201	4,924	0	2,793	0	4,091	11,596
15-19	7,923	6,037	0	0	0	7,916	7,769
20-24	9,020	2,911	0	0	0	3,087	6,006
25-29	4,598	0	0	0	0	2,831	3,604
30 and Over	1,997	15,946	0	0	0	1,791	4,253
<b>Average</b>	\$12,545	\$5,625	\$0	\$2,793	\$0	\$4,705	\$10,772

## **APPENDICES**

- **APPENDIX A - STATEMENT OF ACTUARIAL DATA, METHODS AND ASSUMPTIONS**
- **APPENDIX B - SUMMARY OF PRINCIPAL PLAN PROVISIONS**
- **APPENDIX C - GASB STATEMENT NO. 27**
- **APPENDIX D - GLOSSARY OF ACTUARIAL TERMS**



## **APPENDIX A**

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

## Actuarial 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 contain information about reciprocal systems. Therefore, salary information in these cases may not be accurate. This situation is relatively infrequent, however, and when it does occur, generally does 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 years. Finally, if a plan's accrued liability exceeds the actuarial value of assets, the annual contribution with respect to the total unfunded liability may not be less than the amount produced by a 30-year amortization of the unfunded liability.

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. As mentioned above, 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. However, in the case of a 30-year fresh start, just the unfunded liability not already in the (gain)/loss base (which already is amortized over 30 years) will go into the new fresh start base. 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. Beginning with the June 30, 2004 valuation a 30-year fresh start is used in this situation.

It should be noted that the actuary may choose to use a fresh start under other circumstances. In all cases, the the fresh start period is set by the actuary at what he deems appropriate, 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% or greater than 120% of the actual Market Value of Assets.

### **Other 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.

#### **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.

## 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**

<u>Duration of Service</u>	<u>Entry Age 20</u>	<u>Entry Age 30</u>	<u>Entry Age 40</u>
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**

<u>Duration of Service</u>	<u>Entry Age 20</u>	<u>Entry Age 30</u>	<u>Entry Age 40</u>
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**

<u>Duration of Service</u>	<u>Entry Age 20</u>	<u>Entry Age 30</u>	<u>Entry Age 40</u>
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

- 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.

***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" 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.

**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).

Age	Non-Industrial Death (Not Job-Related)		Industrial Death (Job-Related)
	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.

Age	Healthy Recipients		Non-Industrially Disabled (Not Job-Related)		Industrially Disabled (Job-Related)	
	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%

**Age of Spouse**

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

**Terminated 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.

**Termination with Vested Benefits**

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

<b>Public Agency Miscellaneous</b>					
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

<b>Public Agency Safety</b>			
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.



**Non-Industrial (Not Job-Related) Disability**

Rates vary by age and gender for Miscellaneous Plans.

Rates vary by age for Safety Plans.

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

- 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.

**Service Retirement**

**Public Agency Miscellaneous 2% @ 60**

Age	Duration of Service					
	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
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	Duration of Service					
	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
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**

Age	2.5% @ 55		2.7% @ 55		3% @ 60	
	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 1/2 @ 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 1/2 @ 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	Duration of Service					
	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
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	Duration of Service					
	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
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**

Age	Duration of Service					
	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**

Age	Duration of Service					
	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

## **APPENDIX B**

- **SUMMARY OF PRINCIPAL PLAN PROVISIONS**

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**SUMMARY OF BENEFITS: COVERAGE GROUP 70001**

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

**RETIREMENT PROGRAM**

**Service Retirement**

**Eligibility**

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

**Benefit**

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

- The *benefit factor* for this group of employees comes from the **2% at 55 Miscellaneous** benefit factor table. The factor depends on the member's age at retirement. Listed below are the factors for retirement at whole year ages:

<u>Retirement Age</u>	<u>2% at 55 Miscellaneous Factor</u>
50	1.426%
51	1.522%
52	1.628%
53	1.742%
54	1.866%
55	2.000%
56	2.052%
57	2.104%
58	2.156%
59	2.210%
60	2.262%
61	2.314%
62	2.366%
63 & Up	2.418%

- The *years of service* is the amount credited by CalPERS to a member while he or she is employed in this group (or for other periods that are recognized under the employer's contract with CalPERS). For a member who has earned service with multiple CalPERS employers, the benefit from each employer is calculated separately according to each employer's contract, and then added together for the total allowance. Any unused sick leave accumulated at the time of retirement will be converted to credited service at the rate of 0.004 years of service for each day of sick leave.
- The *final compensation* is the monthly average of the member's highest 12 consecutive months' full-time equivalent monthly pay (no matter which CalPERS employer paid this compensation). The employees in this group are not covered by Social Security. The final compensation is not offset by a dollar amount.
- The Service Retirement benefit is not capped.



## **Vested Deferred Retirement**

### **Eligibility for Deferred Status**

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

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

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

### **Benefit**

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

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

### **Eligibility**

A CalPERS member is eligible for Non-Industrial Disability Retirement if he or she becomes *disabled* and has at least 5 years of credited service (total service across all 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.

### **Benefit**

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

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

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

## **Post-Retirement Death Benefit**

### **Lump Sum Payment**

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

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

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

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

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

The remaining portion 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.

#### ***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.

#### ***Benefit***

The 1957 Survivor benefit is a monthly allowance equal to one-half of the unmodified Service Retirement benefit that the member would have been entitled to receive if the member had retired

on the date of his or her death. If the benefit is payable to the spouse, the benefit is discontinued upon the death of the spouse. If the benefit is payable to a dependent child, the benefit will be discontinued upon death or attainment of age 18, unless the child is disabled. There is a guarantee that the total amount paid will at least equal the Basic Death benefit.

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

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

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

Retirement and survivor allowances are protected against inflation by PPPA. PPPA benefits are cost-of-living adjustments that are intended to maintain an individual's allowance at 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.

The percent contributed above the monthly compensation breakpoint is 7%.

### **Refund of Employee Contributions**

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

### **1959 Survivor Benefit Fourth Level**

This benefit is not included in the results presented earlier in this valuation. For more information on this benefit go to the CalPERS website at [www.calpers.ca.gov](http://www.calpers.ca.gov).

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**SUMMARY OF BENEFITS: COVERAGE GROUP 70002**

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

**RETIREMENT PROGRAM**

**Service Retirement**

**Eligibility**

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

**Benefit**

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

- The *benefit factor* for this group of employees comes from the **2% at 55 Miscellaneous** benefit factor table. The factor depends on the member's age at retirement. Listed below are the factors for retirement at whole year ages:

<u>Retirement Age</u>	<u>2% at 55 Miscellaneous Factor</u>
50	1.426%
51	1.522%
52	1.628%
53	1.742%
54	1.866%
55	2.000%
56	2.052%
57	2.104%
58	2.156%
59	2.210%
60	2.262%
61	2.314%
62	2.366%
63 & Up	2.418%

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

## **Vested Deferred Retirement**

### **Eligibility for Deferred Status**

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

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

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

### **Benefit**

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

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

### **Eligibility**

A CalPERS member is eligible for Non-Industrial Disability Retirement if he or she becomes *disabled* and has at least 5 years of credited service (total service across all 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.

### **Benefit**

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

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

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

## **Post-Retirement Death Benefit**

### **Lump Sum Payment**

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

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

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

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

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

The remaining portion 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.

#### ***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.

#### ***Benefit***

The 1957 Survivor benefit is a monthly allowance equal to one-half of the unmodified Service Retirement benefit that the member would have been entitled to receive if the member had retired

on the date of his or her death. If the benefit is payable to the spouse, the benefit is discontinued upon the death of the spouse. If the benefit is payable to a dependent child, the benefit will be discontinued upon death or attainment of age 18, unless the child is disabled. There is a guarantee that the total amount paid will at least equal the Basic Death benefit.

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

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

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

Retirement and survivor allowances are protected against inflation by PPPA. PPPA benefits are cost-of-living adjustments that are intended to maintain an individual's allowance at 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 \$133.33.

The percent contributed above the monthly compensation breakpoint is 7%.

### **Refund of Employee Contributions**

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

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## SUMMARY OF BENEFITS: COVERAGE GROUP 70003

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

### RETIREMENT PROGRAM

#### Service Retirement

##### Eligibility

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

##### Benefit

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

- The *benefit factor* for this group of employees comes from the **3% at 60 Miscellaneous** benefit factor table. The factor depends on the member's age at retirement. Listed below are the factors for retirement at whole year ages:

<u>Retirement Age</u>	<u>3 % at 60 Miscellaneous Factor</u>
50	2.000%
51	2.100%
52	2.200%
53	2.300%
54	2.400%
55	2.500%
56	2.600%
57	2.700%
58	2.800%
59	2.900%
60 & Up	3.000%

- The *years of service* is the amount credited by CalPERS to a member while he or she is employed in this group (or for other periods that are recognized under the employer's contract with CalPERS). For a member who has earned service with multiple CalPERS employers, the benefit from each employer is calculated separately according to each employer's contract, and then added together for the total allowance. Any unused sick leave accumulated at the time of retirement will be converted to credited service at the rate of 0.004 years of service for each day of sick leave.
- The *final compensation* is the monthly average of the member's highest 12 consecutive months' full-time equivalent monthly pay (no matter which CalPERS employer paid this compensation). The employees in this group are not covered by Social Security. The final compensation is not offset by a dollar amount.
- The Service Retirement benefit is not capped.

#### Vested Deferred Retirement

##### Eligibility for Deferred Status



A CalPERS member becomes eligible for a deferred vested retirement benefit when he or she leaves employment, keeps his or her contribution account balance on deposit with CalPERS, **and** has earned at least 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.

**Benefit**

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

- *service* is CalPERS credited service, for members with less than 10 years of service or greater than 18.518 years of service; or
- *service* is CalPERS credited service plus the additional number of years that the member would have worked until age 60, for members with at least 10 years but not more than 18.518 years of service.

The maximum benefit in this case is 33 1/3% of Final Compensation.

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

**Post-Retirement Death Benefit**

**Lump Sum Payment**

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

**Form of Payment for Retirement Allowance**

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

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

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

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

The remaining portion 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.

#### **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.

#### **Benefit**

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

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

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

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

Retirement and survivor allowances are protected against inflation by PPPA. PPPA benefits are cost-of-living adjustments that are intended to maintain an individual's allowance at 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.

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

### **Refund of Employee Contributions**

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

### **1959 Survivor Benefit Fourth Level**

This benefit is not included in the results presented earlier in this valuation. For more information on this benefit go to the CalPERS website at [www.calpers.ca.gov](http://www.calpers.ca.gov).

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## SUMMARY OF BENEFITS: COVERAGE GROUP 70004

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

### RETIREMENT PROGRAM

#### Service Retirement

##### Eligibility

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

##### Benefit

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

- The *benefit factor* for this group of employees comes from the **3% at 60 Miscellaneous** benefit factor table. The factor depends on the member's age at retirement. Listed below are the factors for retirement at whole year ages:

<u>Retirement Age</u>	<u>3 % at 60 Miscellaneous Factor</u>
50	2.000%
51	2.100%
52	2.200%
53	2.300%
54	2.400%
55	2.500%
56	2.600%
57	2.700%
58	2.800%
59	2.900%
60 & Up	3.000%

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

#### Vested Deferred Retirement

**Eligibility for Deferred Status**

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

**Eligibility to Start Receiving Benefits**

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

**Benefit**

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

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

**Eligibility**

A CalPERS member is eligible for Non-Industrial Disability Retirement if he or she becomes *disabled* and has at least 5 years of credited service (total service across all 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.

**Benefit**

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

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

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

**Post-Retirement Death Benefit**

**Lump Sum Payment**

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

**Form of Payment for Retirement Allowance**

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

which the retiree pays for by taking a reduction in his or her retirement allowance. The larger the amount to be provided to the beneficiary is, and the younger the beneficiary is, the greater the reduction to the retiree's allowance.

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

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

The remaining portion 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.

#### ***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.

#### ***Benefit***

The 1957 Survivor benefit is a monthly allowance equal to one-half of the unmodified Service Retirement benefit that the member would have been entitled to receive if the member had retired on the date of his or her death. If the benefit is payable to the spouse, the benefit is discontinued upon the death of the spouse. If the benefit is payable to a dependent child, the benefit will be

discontinued upon death or attainment of age 18, unless the child is disabled. There is a guarantee that the total amount paid will at least equal the Basic Death benefit.

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

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

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

Retirement and survivor allowances are protected against inflation by PPPA. PPPA benefits are cost-of-living adjustments that are intended to maintain an individual's allowance at 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 \$133.33.

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

### **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**

- **GASB STATEMENT NO. 27**



**MISCELLANEOUS PLAN of the CITY OF CHICO**  
**Information for Compliance with GASB Statement**  
**No. 27**

Under GASB 27, an employer reports an annual pension cost (APC) equal to the annual required contribution (ARC) plus an adjustment for the cumulative difference between the APC and the employer's actual plan contributions for the year. The cumulative difference is called the net pension obligation (NPO). The ARC for the period July 1, 2007 to June 30, 2008 has been determined by an actuarial valuation of the plan as of June 30, 2005. The contribution rate for the indicated period is 20.307% of payroll. In order to calculate the dollar value of the ARC for inclusion in financial statements prepared as of June 30, 2008, this contribution rate, as modified by any amendments for the year, would be multiplied by the payroll of covered employees that was actually paid during the period July 1, 2007 to June 30, 2008. The employer and the employer's auditor are responsible for determining the NPO and the APC.

Note: If an agency elects the Annual Lump Sum Prepayment Option, the ARC for the period July 1, 2007 through June 30, 2008 is \$2,934,796 plus the contribution, if any, for the 1959 Survivor Program.

A summary of principal assumptions and methods used to determine the ARC is shown below.

<b><u>Retirement Program</u></b>	
Valuation Date	June 30, 2005
Actuarial Cost Method	Entry Age Actuarial Cost Method
Amortization Method	Level Percent of Payroll
Average Remaining Period	30 Years as of the Valuation Date
Asset Valuation Method	15 Year Smoothed Market
<b>Actuarial Assumptions</b>	
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%.

Initial unfunded liabilities are amortized over a closed period that depends on the plan's date of entry into CalPERS. Subsequent plan amendments are amortized as a level percentage of pay over a closed 20-year period. Gains and losses that occur in the operation of the plan are amortized over a 30 year rolling period, which results in an amortization of about 6% of unamortized gains and losses each year. If the plan's accrued liability exceeds the actuarial value of plan assets, then the amortization payment on the total unfunded liability may not be lower than the payment calculated over a 30 year amortization period. More complete information on assumptions and methods is provided in Appendix A of this report. Appendix B contains a description of benefits included in the valuation.

The Schedule of Funding Progress below shows the recent history of the actuarial value of assets, actuarial accrued liability, their relationship, and the relationship of the unfunded actuarial accrued liability to payroll.

Valuation Date	Accrued Liability (a)	Actuarial Value of Assets (b)	Unfunded Liability (UL) (a)-(b)	Funded Status (b)/(a)	Annual Covered Payroll (c)	UL As a % of Payroll [(a)-(b)]/(c)
06/30/03	\$ 66,228,526	\$ 53,279,657	\$ 12,948,869	80.4%	\$ 12,223,941	105.9%
06/30/04	74,370,533	58,082,900	16,287,633	78.1%	13,033,889	125.0%
06/30/05	83,548,394	64,567,789	18,980,605	77.3%	13,628,915	139.3%

## APPENDIX D

- **GLOSSARY OF ACTUARIAL TERMS**

## 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, actuarial 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.

### **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 age of the member on their date of hire.

### **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 yield a rate expressed as a level percentage of payroll.

(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 on the date of 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's actuarial value of assets is greater than its accrued liability, the difference is the plan's excess assets. A plan with excess assets is said to be overfunded. The result of having excess assets is that the plan may temporarily reduce future contributions.

**Fresh Start**

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

**Funded Status**

A measure of how well funded a plan is. Or equivalently, how "on track" a plan is with respect to assets vs. accrued liabilities. We calculate a funded ratio by dividing the actuarial 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.

**Lump Sum Contribution**

A payment made by the employer to reduce or eliminate the unfunded liability.

**Normal Cost**

The annual cost of service accrual for the upcoming fiscal year for active employees. The normal cost 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.

**Rolling Amortization Period**

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

**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**

A plan with an actuarial value of assets below the accrued liability is said to have an unfunded liability and must temporarily increase contributions to get back on schedule.