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October 2007

**SAFETY PLAN OF THE CITY OF NEWPORT BEACH (EMPLOYER # 60)
 Annual Valuation Report as of June 30, 2006**

Dear Employer,

Enclosed please find a copy of the June 30, 2006 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 the Prior Year's Valuation

There may be changes specific to your plan such as contract amendments and funding changes. There are no other material changes since the prior valuation.

Future Contribution Rates

The exhibit below displays the required employer contribution rate and Superfunded status for 2008/2009 along with an estimate of the contribution rate and the probable Superfunded status for 2009/2010. The estimated rate for 2009/2010 is based solely on a projection of the investment return for fiscal 2006/2007, namely 18.5%. Please disregard any projections that we may have provided to you in the past.

| Fiscal Year | Employer Contribution Rate | Superfunded? |
|-------------|----------------------------|--------------|
| 2008/2009 | 29.670% | NO |
| 2009/2010 | 28.8% (projected) | NO |

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

The estimate for 2009/2010 also assumes that there are no future amendments and no liability gains or losses (such as from 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 2009/2010 is just an estimate. Your actual rate for 2009/2010 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., FCA, ASA, MAAA
 Enrolled Actuary
 Chief Actuary, CalPERS

ACTUARIAL VALUATION
as of June 30, 2006
for the
SAFETY PLAN
of the
CITY OF NEWPORT BEACH
(EMPLOYER # 60)

REQUIRED CONTRIBUTIONS
FOR FISCAL YEAR
July 1, 2008 - June 30, 2009



California Public Employees' Retirement System
P.O. Box 942709
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ACTUARIAL CERTIFICATION

To the best of our knowledge, this report is complete and accurate and contains sufficient information to disclose, fully and fairly, the funded condition of the SAFETY PLAN OF THE CITY OF NEWPORT BEACH. This valuation is based on the member and financial data as of June 30, 2006 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 undersigned listed are actuaries for CalPERS. Both are members of the American Academy of Actuaries and Society of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.



Richard Santos, ASA, MAAA
Senior Pension Actuary, CalPERS

Plan Actuary



Ron Seeling, Ph.D., FCA, ASA, MAAA
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, 2006 actuarial valuation of the SAFETY PLAN OF THE CITY OF NEWPORT BEACH of the California Public Employees' Retirement System (CalPERS). The valuation was prepared by the Plan Actuary in order to:

- set forth the actuarial assets and accrued liabilities of this plan as of June 30, 2006;
- certify the actuarially required employer contribution rate of this plan for the fiscal year July 1, 2008 through June 30, 2009 is 29.670%;
- provide actuarial information as of June 30, 2006 to the CalPERS Board of Administration and other interested parties; and
- provide pension information as of June 30, 2006 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

| | Fiscal Year 2007/2008 | Fiscal Year 2008/2009 |
|--------------------------------------------------------|----------------------------------|----------------------------------|
| Required Employer Contributions | | |
| Employer Contribution Required (in Projected Dollars) | | |
| Payment for Normal Cost | \$ 3,801,700 | \$ 4,314,718 |
| Payment on the Amortization Bases | 3,179,506 | 4,193,817 |
| Total (not less than zero) | \$ 6,981,206 | \$ 8,508,535 |
| Annual Lump Sum Prepayment Option* | \$ 6,725,457 | \$ 8,196,834 |
| Employer Contribution Required (Percentage of Payroll) | | |
| Payment for Normal Cost | 14.212% | 15.046% |
| Payment on the Amortization Bases | 11.886% | 14.624% |
| Total (not less than zero) | 26.098% | 29.670% |
| Required Employee Contributions (Percentage) | 9.000% | 9.000% |

Funded Status

| | June 30, 2005 | June 30, 2006 |
|-------------------------------------|----------------------|----------------------|
| Present Value of Projected Benefits | 315,280,017 | 351,703,408 |
| Entry Age Normal Accrued Liability | 267,192,396 | 296,419,617 |
| Actuarial Value of Assets (AVA)** | 215,965,102 | 231,701,095 |
| Unfunded Liability | \$ 51,227,294 | \$ 64,718,522 |
| Market Value of Assets (MVA) | \$ 222,326,329 | \$ 246,396,433 |
| Funded Status (on an MVA basis) | 83.2% | 83.1% |
| Superfunded Status | No | No |

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

** The Actuarial Value of Assets is used to establish funding requirements, while the funded ratio based on the Market Value of Assets is a better indicator of the solvency of the plan.

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 10.0%.

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 lower or raise 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%.

| | As of June 30, 2006 |
|-------------------------------------------------------------------------------------|----------------------------|
| Accrued Liability | 296,419,617 |
| Payroll | 26,053,209 |
| Volatility Index | 11.4 |
| Average Volatility Index for All Plans with 3.0% @ 50 Safety Retirement Formula* | 9.3 |

* Includes pooled and non-pooled plans

Changes since the 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 mandated benefit changes or 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**
- **(GAIN) / LOSS ANALYSIS**
- **SCHEDULE OF AMORTIZATION BASES**
- **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 | \$ | 168,304,116 |
| b) Transferred Members | | 5,269,424 |
| c) Terminated Members | | 2,011,661 |
| d) Members and Beneficiaries Receiving Payments | | 176,118,207 |
| e) Total | | <u>351,703,408</u> |
| 2 Present Value of Future Employer Normal Costs | | 34,601,937 |
| 3 Present Value of Future Employee Contributions | | 20,681,854 |
| 4 Entry Age Normal Accrued Liability | | |
| a) Active Members [(1a) - (2) - (3)] | | 113,020,325 |
| b) Transferred Members [1b] | | 5,269,424 |
| c) Terminated Members [1c] | | 2,011,661 |
| d) Members and Beneficiaries Receiving Payments [1d] | | 176,118,207 |
| e) Total | | <u>296,419,617</u> |
| 5 Actuarial Value of Assets (AVA) | | 231,701,095 |
| 6 Unfunded Accrued Liability/(Excess Assets) [(4e) - (5)] | | 64,718,522 |

(Gain)/Loss Analysis 6/30/05 – 6/30/06

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 6/30/05 | \$ | 51,227,294 |
| 2. | Expected Payment on the Unfunded Liability (UL) during 2005/2006 | | 3,134,043 |
| 3. | Interest through 6/30/06 $ [.0775 \times (A1) - ((1.0775)^{1/2} - 1) \times (A2)]$ | | 3,850,937 |
| 4. | Expected UL before all other changes $ [(A1) - (A2) + (A3)]$ | | 51,944,188 |
| 5. | Change in UL due to new plan changes | | 3,967,462 |
| 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)]$ | | 55,911,650 |
| 9. | Actual UL as of 6/30/06 | | 64,718,522 |
| 10. | Total (Gain)/Loss for 2005/2006 $ [(A9) - (A8)]$ | \$ | 8,806,872 |

B Contribution (Gain)/Loss for the Year

| | | | |
|----|---------------------------------------------------------|----|-------------|
| 1. | Expected Contribution (Employer and Employee) | \$ | 8,958,495 |
| 2. | Expected Interest on Expected Contributions | | 340,664 |
| 3. | Actual Contributions | | 10,211,778 |
| 4. | Expected Interest on Actual Contributions | | 388,323 |
| 5. | Contribution (Gain)/Loss $ [(B1) + (B2) - (B3) - (B4)]$ | \$ | (1,300,942) |

C Asset (Gain)/Loss for the Year

| | | | |
|----|-----------------------------------------------------------------------------------------|----|--------------|
| 1. | Actuarial Value of Assets as of 6/30/05 | \$ | 215,965,102 |
| 2. | Contributions Received | | 10,211,778 |
| 3. | Benefits and Refunds Paid | | (12,260,914) |
| 4. | Transfers/Misc. Adjustments | | 73,302 |
| 5. | Expected Int. $ [.0775 \times (C1) + ((1.0775)^{1/2} - 1) \times ((C2) + (C3) + (C4))]$ | | 16,662,160 |
| 6. | Expected Assets as of 6/30/06 $ [(C1) + (C2) + (C3) + (C4) + (C5)]$ | | 230,651,428 |
| 7. | Actual Actuarial Value of Assets as of 6/30/06 | | 231,701,095 |
| 8. | Asset (Gain)/Loss $ [(C6) - (C7)]$ | \$ | (1,049,667) |

D Liability (Gain)/Loss for the Year

| | | | |
|----|-----------------------------------------------|----|-------------|
| 1. | Total (Gain)/Loss (A10) | \$ | 8,806,872 |
| 2. | Contribution (Gain)/Loss (B5) | | (1,300,942) |
| 3. | Asset (Gain)/Loss (C8) | | (1,049,667) |
| 4. | Liability (Gain)/Loss $ [(D1) - (D2) - (D3)]$ | \$ | 11,157,481 |

Development of the (Gain)/Loss Balance as of 6/30/06

| | | | |
|----|----------------------------------------------------------------------------------|----|------------|
| 1. | (Gain)/Loss Balance as of 6/30/05 | \$ | 51,647,359 |
| 2. | Payment Made on the Balance during 2005/2006 | | 3,370,287 |
| 3. | Interest through 6/30/06 $ [.0775 \times (1) - ((1.0775)^{1/2} - 1) \times (2)]$ | | 3,874,509 |
| 4. | Scheduled (Gain)/Loss Balance as of 6/30/06 $ [(1) - (2) + (3)]$ | \$ | 52,151,581 |
| 5. | (Gain)/Loss for Fiscal Year ending 6/30/06 $ [(A10) \text{ above}]$ | | 8,806,872 |
| 6. | Final (Gain)/Loss Balance as of 6/30/06 $ [(4) + (5)]$ | \$ | 60,958,453 |

Schedule of Amortization Bases

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, 2006).
- The employer contribution rate determined by the valuation is for the fiscal year beginning two years after the valuation date (fiscal year 2008/2009).

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.

| Reason for Base | Date Established | Amortization Period | Amounts for Fiscal 2008/2009 | | | | | | Payment as a % of Payroll |
|---------------------|------------------|---------------------|------------------------------|----------------------------|---------------------|----------------------------|---------------------|---------------------------------|---------------------------|
| | | | Balance 6/30/06 | Expected Payment 2006/2007 | Balance 6/30/07 | Expected Payment 2007/2008 | Balance 6/30/08 | Scheduled Payment for 2008/2009 | |
| (GAIN)/LOSS | 06/30/06 | 30 | \$60,958,453 | \$3,086,146 | \$62,479,231 | \$3,182,090 | \$64,018,276 | \$3,844,359 | 13.406% |
| PAYMENT (GAIN)/LOSS | 06/30/06 | 30 | \$317,011 | \$(27,188) | \$369,802 | \$(107,436) | \$509,983 | \$30,625 | 0.107% |
| FRESH START | 06/30/05 | 29 | \$(524,404) | \$(31,491) | \$(532,357) | \$(31,969) | \$(540,430) | \$(33,008) | (0.115%) |
| BENEFIT CHANGE | 06/30/05 | 19 | \$3,967,462 | \$(227,990) | \$4,511,600 | \$340,766 | \$4,507,525 | \$351,841 | 1.227% |
| TOTAL | | | \$64,718,522 | \$2,799,477 | \$66,828,276 | \$3,383,451 | \$68,495,354 | \$4,193,817 | 14.625% |

Development of Required Employer Contributions

Fiscal Year 2008/2009

| | Percentage of Projected Payroll | Estimated \$ Based On Projected Payroll |
|------------------------------------|------------------------------------|-----------------------------------------------|
| Employer Contribution Required | | |
| Payment for Normal Cost | 15.046% | \$ 4,314,718 |
| Payment on Amortization Bases | 14.624% | 4,193,817 |
| Total (not less than zero) | 29.670% | 8,508,535 |
| Annual Lump Sum Prepayment Option* | | 8,196,834 |

*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 7/1/07 - 6/30/08 from prior year annual report | 26.098% | \$ 6,981,206 |
| 2 Effect of changes since the prior year annual valuation | | |
| a) Effect of unexpected changes in demographics and financial results | 1.465% | 420,245 |
| b) Effect of plan changes | 2.107% | 604,197 |
| c) Effect of elimination of amortization base | 0.000% | 0 |
| d) Effect of change in payroll | N/A | 502,887 |
| 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)] | 3.572% | 1,527,329 |
| 3 Contribution for 7/1/08 - 6/30/09 [(1)+(2h)] | 29.670% | 8,508,535 |

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

| Fiscal Year | Employer Normal Cost | Unfunded Rate | Total Employer Contribution Rate |
|-------------|----------------------|---------------|----------------------------------|
| 2005 – 2006 | 13.913% | 12.789% | 26.702% |
| 2006 – 2007 | 14.200% | 11.253% | 25.453% |
| 2007 – 2008 | 14.212% | 11.886% | 26.098% |
| 2008 – 2009 | 15.046% | 14.624% | 29.670% |

Funding History

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

| Valuation Date | Accrued Liability (a) | Market Value of Assets (MVA) (b) | Funded Ratio (MVA) (b)/(a) | Annual Covered Payroll (c) |
|----------------|-----------------------|----------------------------------|----------------------------|----------------------------|
| 06/30/03 | \$ 229,155,386 | \$ 171,190,233 | 74.7% | \$ 23,941,400 |
| 06/30/04 | 250,554,103 | 197,605,409 | 78.9% | 24,733,619 |
| 06/30/05 | 267,192,396 | 222,326,329 | 83.2% | 24,302,584 |
| 06/30/06 | 296,419,617 | 246,396,433 | 83.1% | 26,053,209 |

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, 2005 | \$ | 222,326,329 |
| 2 | Employer Contributions | | 6,833,240 |
| 3 | Employee Contributions | | 3,378,538 |
| 4 | Benefit Payments to Retirees and Beneficiaries | | (12,258,339) |
| 5 | Refunds | | (2,575) |
| 6 | Lump Sum Payments | | 0 |
| 7 | Transfers and Miscellaneous Adjustments | | 73,302 |
| 8 | Investment Return | | 26,045,938 |
| 9 | Market Value of Assets as of June 30, 2006 | \$ | 246,396,433 |
| | [(1)+(2)+(3)+(4)+(5)+(6)+(7)+(8)] | | |

Development of the Actuarial Value of Assets

| | | | |
|-----|--------------------------------------------------------------------------------|----|--------------|
| 1. | Actuarial Value of Assets as of June 30, 2005 | \$ | 215,965,102 |
| 2. | Employer Contributions | | 6,833,240 |
| 3. | Employee Contributions | | 3,378,538 |
| 4. | Benefit Payments to Retirees and Beneficiaries | | (12,258,339) |
| 5. | Refunds | | (2,575) |
| 6. | Lump Sum Payments | | 0 |
| 7. | Transfers and Miscellaneous Adjustments | | 73,302 |
| 8. | Expected Investment Income at 7.75% | | 16,662,160 |
| 9. | Expected Actuarial Value of Assets | \$ | 230,651,428 |
| | [(1) + (2) + (3) + (4) + (5) + (6) + (7) + (8)] | | |
| 10. | Market Value of Assets as of June 30, 2006 | \$ | 246,396,433 |
| 11. | Preliminary Actuarial Value of Assets [(9) + ((10) - (9)) / 15] | | 231,701,095 |
| 12. | Maximum Actuarial Value of Assets (120% of (10)) | | 295,675,720 |
| 13. | Minimum Actuarial Value of Assets (80% of (10)) | | 197,117,146 |
| 14. | Final Actuarial Value of Assets {Lesser of [(12), Greater of ((11), (13))]} \$ | | 231,701,095 |
| 15. | Actuarial Value to Market Value Ratio | | 94.0% |

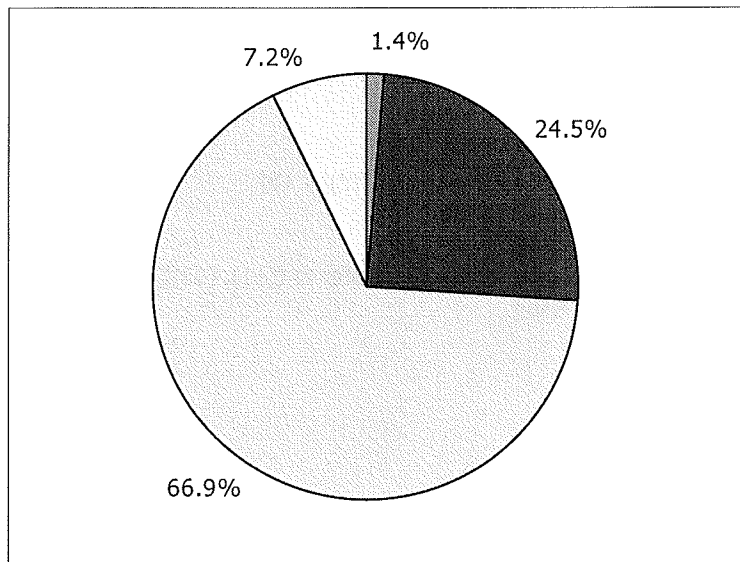
Asset Allocation

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

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

The asset allocation and market value of assets shown below reflect the values of the Public Employees Retirement Fund (PERF) in its entirety as of June 30, 2006. The assets for CITY OF NEWPORT BEACH SAFETY 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 | 2.9 | 1.4% | 0.0% |
| 2) Total Global Fixed Income | 52.0 | 24.5% | 26.0% |
| 3) Total Equities | 142.0 | 66.9% | 66.0% |
| 4) Total Real Estate | <u>15.2</u> | <u>7.2%</u> | <u>8.0%</u> |
| Total Fund | 212.1 | 100.0% | 100.0% |



SUMMARY OF PARTICIPANT DATA

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

Summary of Valuation Data

| | June 30, 2005 | June 30, 2006 |
|---------------------------------------------------|----------------------|----------------------|
| 1. Active Members | | |
| a) Counts | 268 | 266 |
| b) Average Attained Age | 40.46 | 39.74 |
| c) Average Entry Age to Rate Plan | 27.07 | 27.20 |
| d) Average Years of Service | 13.39 | 12.54 |
| e) Average Annual Covered Pay | \$ 90,681 | \$ 97,944 |
| f) Annual Covered Payroll | 24,302,584 | 26,053,209 |
| g) Projected Annual Payroll for Contribution Year | 26,749,929 | 28,676,847 |
| h) Present Value of Future Payroll | 208,980,167 | 229,798,351 |
| 2. Transferred Members | | |
| a) Counts | 51 | 54 |
| b) Average Attained Age | 45.53 | 44.89 |
| c) Average Years of Service | 3.93 | 4.14 |
| d) Average Annual Covered Pay | \$ 77,518 | \$ 80,926 |
| 3. Terminated Members | | |
| a) Counts | 24 | 23 |
| b) Average Attained Age | 43.83 | 43.65 |
| c) Average Years of Service | 3.78 | 3.82 |
| d) Average Annual Covered Pay | \$ 48,572 | \$ 52,114 |
| 4. Retired Members and Beneficiaries | | |
| a) Counts | 283 | 308 |
| b) Average Attained Age | 61.71 | 61.88 |
| c) Average Annual Benefits | \$ 39,461 | \$ 42,478 |
| 5. Active to Retired Ratio [1(a)/4(a)] | 0.9 | 0.9 |

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

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

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

| Attained Age | 0-4 | 5-9 | 10-14 | 15-19 | 20-25 | 25+ | Total |
|-------------------------|------------|------------|--------------|--------------|--------------|------------|--------------|
| 15-24 | 6 | 0 | 0 | 0 | 0 | 0 | 6 |
| 25-29 | 44 | 7 | 0 | 0 | 0 | 0 | 51 |
| 30-34 | 21 | 16 | 3 | 0 | 0 | 0 | 40 |
| 35-39 | 14 | 14 | 10 | 7 | 0 | 0 | 45 |
| 40-44 | 2 | 9 | 8 | 14 | 3 | 0 | 36 |
| 45-49 | 0 | 1 | 2 | 6 | 19 | 12 | 40 |
| 50-54 | 0 | 0 | 2 | 4 | 8 | 22 | 36 |
| 55-59 | 0 | 0 | 0 | 1 | 1 | 8 | 10 |
| 60-64 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| 65 and over | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| All Ages | 87 | 47 | 25 | 32 | 31 | 44 | 266 |

**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 | \$64,838 | \$0 | \$0 | \$0 | \$0 | \$0 | \$64,838 |
| 25-29 | 70,548 | 87,224 | 0 | 0 | 0 | 0 | 72,837 |
| 30-34 | 79,295 | 93,867 | 99,132 | 0 | 0 | 0 | 86,612 |
| 35-39 | 78,185 | 100,371 | 103,920 | 113,727 | 0 | 0 | 96,335 |
| 40-44 | 65,516 | 94,033 | 92,149 | 116,125 | 135,779 | 0 | 104,100 |
| 45-49 | 0 | 87,542 | 105,870 | 112,488 | 117,699 | 121,081 | 116,587 |
| 50-54 | 0 | 0 | 125,437 | 132,233 | 117,132 | 123,245 | 123,007 |
| 55-59 | 0 | 0 | 0 | 100,457 | 121,603 | 110,024 | 110,225 |
| 60-64 | 0 | 0 | 0 | 0 | 0 | 114,254 | 114,254 |
| 65 and over | 0 | 0 | 0 | 0 | 0 | 94,139 | 94,139 |
| Average | 73,379 | 94,712 | 101,456 | 116,443 | 119,428 | 119,385 | 97,944 |

Transferred and Terminated Members

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

| Attained Age | 0-4 | 5-9 | 10-14 | 15-19 | 20-25 | 25+ | Total | Average Salary |
|-----------------|-----|-----|-------|-------|-------|-----|-------|-------------------|
| 15-24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \$0 |
| 25-29 | 3 | 0 | 0 | 0 | 0 | 0 | 3 | 68,468 |
| 30-34 | 7 | 0 | 0 | 0 | 0 | 0 | 7 | 83,860 |
| 35-39 | 4 | 0 | 1 | 0 | 0 | 0 | 5 | 67,956 |
| 40-44 | 5 | 3 | 1 | 1 | 0 | 0 | 10 | 83,014 |
| 45-49 | 6 | 2 | 0 | 0 | 1 | 0 | 9 | 94,324 |
| 50-54 | 8 | 2 | 1 | 0 | 0 | 0 | 11 | 81,068 |
| 55-59 | 7 | 0 | 1 | 0 | 0 | 0 | 8 | 72,970 |
| 60-64 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 83,206 |
| 65 and over | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| All Ages | 40 | 7 | 5 | 1 | 1 | 0 | 54 | 80,926 |

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

| Attained Age | 0-4 | 5-9 | 10-14 | 15-19 | 20-25 | 25+ | Total | Average Salary |
|-----------------|-----|-----|-------|-------|-------|-----|-------|-------------------|
| 15-24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \$0 |
| 25-29 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 51,902 |
| 30-34 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 50,887 |
| 35-39 | 6 | 1 | 0 | 0 | 0 | 0 | 7 | 43,995 |
| 40-44 | 1 | 2 | 0 | 0 | 0 | 0 | 3 | 46,100 |
| 45-49 | 3 | 1 | 0 | 0 | 0 | 0 | 4 | 65,997 |
| 50-54 | 3 | 1 | 1 | 0 | 0 | 1 | 6 | 60,264 |
| 55-59 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 24,000 |
| 60-64 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 65 and over | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| All Ages | 16 | 5 | 1 | 0 | 0 | 1 | 23 | 52,114 |

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 | 3 | 0 | 0 | 0 | 3 |
| 40-44 | 0 | 0 | 8 | 0 | 1 | 1 | 10 |
| 45-49 | 0 | 0 | 5 | 0 | 1 | 0 | 6 |
| 50-54 | 36 | 0 | 15 | 1 | 0 | 1 | 53 |
| 55-59 | 54 | 0 | 21 | 0 | 0 | 3 | 78 |
| 60-64 | 30 | 1 | 24 | 0 | 0 | 3 | 58 |
| 65-69 | 23 | 0 | 14 | 0 | 0 | 2 | 39 |
| 70-74 | 15 | 1 | 10 | 0 | 0 | 1 | 27 |
| 75-79 | 8 | 0 | 3 | 0 | 0 | 3 | 14 |
| 80-84 | 7 | 1 | 2 | 0 | 0 | 1 | 11 |
| 85 and Over | 3 | 0 | 0 | 0 | 0 | 3 | 6 |
| All Ages | 176 | 3 | 105 | 1 | 2 | 18 | 305 |

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

| Attained Age | Service Retirement | Non-Industrial Disability | Industrial Disability | Non-Industrial Death | Industrial Death | Death After Retirement | Average |
|-----------------|--------------------|---------------------------|-----------------------|----------------------|------------------|------------------------|---------|
| Under 30 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 30-34 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 35-39 | 0 | 0 | 25,492 | 0 | 0 | 0 | 25,492 |
| 40-44 | 0 | 0 | 36,622 | 0 | 59,721 | 32,385 | 38,508 |
| 45-49 | 0 | 0 | 37,757 | 0 | 51,369 | 0 | 40,026 |
| 50-54 | 61,103 | 0 | 42,058 | 76,428 | 0 | 72,131 | 56,210 |
| 55-59 | 67,103 | 0 | 31,186 | 0 | 0 | 10,313 | 55,249 |
| 60-64 | 44,267 | 12,856 | 29,962 | 0 | 0 | 26,856 | 36,905 |
| 65-69 | 46,414 | 0 | 26,879 | 0 | 0 | 31,769 | 38,651 |
| 70-74 | 34,659 | 12,199 | 28,093 | 0 | 0 | 9,997 | 30,482 |
| 75-79 | 15,878 | 0 | 30,480 | 0 | 0 | 16,141 | 19,064 |
| 80-84 | 18,738 | 13,577 | 16,078 | 0 | 0 | 13,143 | 17,276 |
| 85 and Over | 5,202 | 0 | 0 | 0 | 0 | 7,374 | 6,288 |
| All Ages | 51,207 | 12,877 | 31,847 | 76,428 | 55,545 | 20,736 | 42,478 |

Retired Members and Beneficiaries (continued)

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

| Years Retired | Service Retirement | Non-Industrial Disability | Industrial Disability | Non-Industrial Death | Industrial Death | Death After Retirement | Total |
|------------------|--------------------|---------------------------|-----------------------|----------------------|------------------|------------------------|-------|
| Under 5 Yrs | 91 | 0 | 24 | 1 | 0 | 9 | 125 |
| 5-9 | 30 | 0 | 15 | 0 | 1 | 2 | 48 |
| 10-14 | 26 | 0 | 21 | 0 | 1 | 3 | 51 |
| 15-19 | 10 | 1 | 13 | 0 | 0 | 0 | 24 |
| 20-24 | 8 | 0 | 16 | 0 | 0 | 1 | 25 |
| 25-29 | 11 | 2 | 16 | 0 | 0 | 3 | 32 |
| 30 and Over | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| All Years | 176 | 3 | 105 | 1 | 2 | 18 | 305 |

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

| Years Retired | Service Retirement | Non-Industrial Disability | Industrial Disability | Non-Industrial Death | Industrial Death | Death After Retirement | Average |
|------------------|--------------------|---------------------------|-----------------------|----------------------|------------------|------------------------|----------|
| Under 5 Yrs | \$65,083 | \$0 | \$47,297 | \$76,428 | \$0 | \$16,019 | \$58,226 |
| 5-9 | 44,641 | 0 | 36,000 | 0 | 51,369 | 39,081 | 41,849 |
| 10-14 | 43,733 | 0 | 32,690 | 0 | 59,721 | 31,974 | 38,808 |
| 15-19 | 27,084 | 12,856 | 24,156 | 0 | 0 | 0 | 24,906 |
| 20-24 | 22,606 | 0 | 22,674 | 0 | 0 | 23,395 | 22,681 |
| 25-29 | 14,722 | 12,888 | 19,094 | 0 | 0 | 10,532 | 16,401 |
| 30 and Over | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| All Years | 51,207 | 12,877 | 31,847 | 76,428 | 55,545 | 20,736 | 42,478 |

* Counts of members do not include alternate payees receiving benefits while the member is still working. Therefore, the total counts may not match information on page 23 of the report. Multiple records may exist for those who have service in more than one coverage group. This does not result in double counting of liabilities.

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 year period. 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. In this situation a 30-year fresh start is used, unless a longer fresh start is needed to avoid a negative total rate.

It should be noted that the actuary may choose to use a fresh start under other circumstances. In all cases, the 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.

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 | | | |
|--------------------------------------------|---------------------|---------------------|---------------------|
| <u>Duration of Service</u> | <u>Entry Age 20</u> | <u>Entry Age 30</u> | <u>Entry Age 40</u> |
| 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 plans with 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 plans with 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.

Public Agency Miscellaneous

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

Public Agency Safety

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

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

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**

SUMMARY OF BENEFITS: COVERAGE GROUP 76001

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

| <u>Retirement Age</u> | <u>3% at 55 Factor</u> |
|-----------------------|------------------------|
| 50 | 2.400% |
| 51 | 2.520% |
| 52 | 2.640% |
| 53 | 2.760% |
| 54 | 2.880% |
| 55 & 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.
- 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 capped at 90% of final compensation.

Vested Deferred Retirement

Eligibility for Deferred Status

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

Eligibility to Start Receiving Benefits

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

Benefit

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

Non-Industrial (Non-Job Related) Disability Retirement

Eligibility

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

Industrial (Job-Related) Disability Retirement

Eligibility

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

Benefit

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

Post-Retirement Death Benefit

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.

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.

Optional Settlement 2 Death Benefit

Eligibility

An employee's *eligible survivor* may receive the Optional Settlement 2 Death benefit if the member dies while actively employed, has attained at least age 50, and has at least 5 years of credited service (total service across all CalPERS employers and with certain other Retirement Systems with which CalPERS has reciprocity agreements). A CalPERS member 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. A

member's survivor may choose this benefit in lieu of the Basic Death benefit or the 1957 Survivor benefit.

Benefit

The Optional Settlement 2 Death benefit is a monthly allowance equal to the Service Retirement benefit that the member would have received had the member retired on the date of his or her death and elected Optional Settlement 2. (A retiree who elects Optional Settlement 2 receives an allowance that has been reduced so that it will continue to be paid after his or her death to a surviving beneficiary.) The allowance is payable as long as the surviving spouse lives, at which time it is continued to any unmarried children under age 18. There is a guarantee that the total amount paid will at least equal the Basic Death Benefit.

Special Death Benefit

Eligibility

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

Benefit

The Special Death benefit is a monthly allowance equal to 50% of final compensation. The deceased member's final compensation will increase correspondingly, at any time the compensation is increased for then-active members employed in the job classification applicable to the deceased member at the time of injury causing death. These increases will apply until the earlier of (1) the death of the surviving spouse or (2) the date the deceased member would have attained age 50. The allowance is payable to the surviving spouse until death, at which time the allowance is continued to any unmarried children under age 22. There is a guarantee that the total amount paid will at least equal the Basic Death Benefit if applicable.

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

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

Cost-of-Living Adjustments

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 9%.

Refund of Employee Contributions

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

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.

SUMMARY OF BENEFITS: COVERAGE GROUP 75001

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

| Retirement Age | 3% at 50 Factor |
|---------------------------|----------------------------|
| 50 | 3.000% |
| 51 | 3.000% |
| 52 | 3.000% |
| 53 | 3.000% |
| 54 | 3.000% |
| 55 & 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.
- 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 capped at 90% of final compensation.

Vested Deferred Retirement

Eligibility for Deferred Status

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

Eligibility to Start Receiving Benefits

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

Benefit

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

Non-Industrial (Non-Job Related) Disability Retirement

Eligibility

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

Industrial (Job-Related) Disability Retirement

Eligibility

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

Benefit

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

Post-Retirement Death Benefit

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.

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.

Optional Settlement 2 Death Benefit

Eligibility

An employee's *eligible survivor* may receive the Optional Settlement 2 Death benefit if the member dies while actively employed, has attained at least age 50, and has at least 5 years of credited service (total service across all CalPERS employers and with certain other Retirement Systems with which CalPERS has reciprocity agreements). A CalPERS member 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. A

member's survivor may choose this benefit in lieu of the Basic Death benefit or the 1957 Survivor benefit.

Benefit

The Optional Settlement 2 Death benefit is a monthly allowance equal to the Service Retirement benefit that the member would have received had the member retired on the date of his or her death and elected Optional Settlement 2. (A retiree who elects Optional Settlement 2 receives an allowance that has been reduced so that it will continue to be paid after his or her death to a surviving beneficiary.) The allowance is payable as long as the surviving spouse lives, at which time it is continued to any unmarried children under age 18. There is a guarantee that the total amount paid will at least equal the Basic Death Benefit.

Special Death Benefit

Eligibility

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

Benefit

The Special Death benefit is a monthly allowance equal to 50% of final compensation. The deceased member's final compensation will increase correspondingly, at any time the compensation is increased for then-active members employed in the job classification applicable to the deceased member at the time of injury causing death. These increases will apply until the earlier of (1) the death of the surviving spouse or (2) the date the deceased member would have attained age 50. The allowance is payable to the surviving spouse until death, at which time the allowance is continued to any unmarried children under age 22. There is a guarantee that the total amount paid will at least equal the Basic Death Benefit if applicable.

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

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

Cost-of-Living Adjustments

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 9%.

Refund of Employee Contributions

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

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.

SUMMARY OF BENEFITS: COVERAGE GROUP 74001

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 50** 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 50 Factor</u> |
|------------------------------|-------------------------------|
| 50 | 3.000% |
| 51 | 3.000% |
| 52 | 3.000% |
| 53 | 3.000% |
| 54 | 3.000% |
| 55 & 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.
- 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 capped at 90% of final compensation.

Vested Deferred Retirement

Eligibility for Deferred Status

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

Eligibility to Start Receiving Benefits

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

Benefit

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

Non-Industrial (Non-Job Related) Disability Retirement

Eligibility

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

Industrial (Job-Related) Disability Retirement

Eligibility

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

Benefit

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

Post-Retirement Death Benefit

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.

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.

Optional Settlement 2 Death Benefit

Eligibility

An employee's *eligible survivor* may receive the Optional Settlement 2 Death benefit if the member dies while actively employed, has attained at least age 50, and has at least 5 years of credited service (total service across all CalPERS employers and with certain other Retirement Systems with which CalPERS has reciprocity agreements). A CalPERS member 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. A

member's survivor may choose this benefit in lieu of the Basic Death benefit or the 1957 Survivor benefit.

Benefit

The Optional Settlement 2 Death benefit is a monthly allowance equal to the Service Retirement Benefit that the member would have received had the member retired on the date of his or her death and elected Optional Settlement 2. (A retiree who elects Optional Settlement 2 receives an allowance that has been reduced so that it will continue to be paid after his or her death to a surviving beneficiary.) The allowance is payable as long as the surviving spouse lives, at which time it is continued to any unmarried children under age 18. There is a guarantee that the total amount paid will at least equal the Basic Death Benefit.

Special Death Benefit

Eligibility

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

Benefit

The Special Death benefit is a monthly allowance equal to 50% of final compensation. The deceased member's final compensation will increase correspondingly, at any time the compensation is increased for then-active members employed in the job classification applicable to the deceased member at the time of injury causing death. These increases will apply until the earlier of (1) the death of the surviving spouse or (2) the date the deceased member would have attained age 50. The allowance is payable to the surviving spouse until death, at which time the allowance is continued to any unmarried children under age 22. There is a guarantee that the total amount paid will at least equal the Basic Death Benefit if applicable.

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

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

Cost-of-Living Adjustments

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 9%.

Refund of Employee Contributions

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

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.

APPENDIX C

- **GASB STATEMENT NO. 27**

SAFETY PLAN of the CITY OF NEWPORT BEACH

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, 2008 to June 30, 2009 has been determined by an actuarial valuation of the plan as of June 30, 2006. The contribution rate for the indicated period is 29.670% of payroll. In order to calculate the dollar value of the ARC for inclusion in financial statements prepared as of June 30, 2009, 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, 2008 to June 30, 2009. 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, 2008 through June 30, 2009 is \$8,196,834 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.

| <u>Retirement Program</u> | |
|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| Valuation Date | June 30, 2006 |
| Actuarial Cost Method | Entry Age Actuarial Cost Method |
| Amortization Method | Level Percent of Payroll |
| Average Remaining Period | 31 Years as of the Valuation Date |
| Asset Valuation Method | 15 Year Smoothed Market |
| Actuarial Assumptions | |
| Investment Rate of Return | 7.75% (net of administrative expenses) |
| Projected Salary Increases | 3.25% to 13.15% 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 (AVA) (b) | Unfunded Liability (UL) (a)-(b) | Funded Ratios | | Annual Covered Payroll (c) | UL As a % of Payroll [(a)-(b)]/(c) |
|----------------|--------------------------|----------------------------------------|------------------------------------|------------------|--------------|-------------------------------|---------------------------------------|
| | | | | (AVA) (b)/(a) | Market Value | | |
| 06/30/04 | \$ 250,554,103 | \$ 200,715,264 | \$ 49,838,839 | 80.1% | 78.9% | \$ 24,733,619 | 201.5% |
| 06/30/05 | 267,192,396 | 215,965,102 | 51,227,294 | 80.8% | 83.2% | 24,302,584 | 210.8% |
| 06/30/06 | 296,419,617 | 231,701,095 | 64,718,522 | 78.2% | 83.1% | 26,053,209 | 248.4% |

APPENDIX D

- **GLOSSARY OF ACTUARIAL TERMS**

Glossary of Actuarial Terms

Accrued Liability *(also called Actuarial Accrued Liability or Entry Age Normal 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 of a risk pool or non-pooled plan 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 unfunded liability 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 as set forth in GASB Statement No. 27, 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

A fresh start is the single amortization base created when multiple amortization bases are collapsed into one base and amortized over a new funding period.

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 market value of assets by the accrued liabilities. A ratio greater than 100% means the plan or risk pool has more assets than liabilities and a ratio less than 100% means liabilities are greater than assets.

GASB 27

Statement No. 27 of the Governmental Accounting Standards Board. The accounting standard governing a state of local governmental employer's accounting for pensions.

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, rather than declining.

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.