

1959 Survivor Benefit Program

Actuarial Valuation as of June 30, 2024

Required Contributions for Fiscal Year

July 1, 2025, through June 30, 2026

Table of Contents

Actuarial Certification	1
Highlights and Executive Summary	2
Introduction	3
Purpose	3
Funded Status	3
Required Employer and Employee Monthly Premiums	4
Changes Since the Prior Year's Valuation	5
Assets.....	6
Reconciliation of the Market Value of Assets.....	7
Asset Allocation	9
CalPERS History of Investment Returns.....	10
Liabilities and Funding Requirements.....	11
Key Results.....	12
Development of Normal Costs	15
Development of Funding Requirements.....	17
Schedule of Amortization Bases	20
(Gain)/Loss Analysis 6/30/2023-6/30/2024	20
Risk Analysis.....	23
Future Investment Return Scenarios	24
Discount Rate Sensitivity	25
Mortality Rate Sensitivity.....	26
Funded Status – Low-Default-Risk Basis.....	27
Appendix A – Actuarial Methods and Assumptions.....	28
Appendix B – Principal Plan Provisions.....	46
Appendix C – Demographic and Experience Information	48
Appendix D – 1959 Survivor Deaths Per Year	49
Appendix E – List of Contracting Agencies	50
Appendix F – Glossary.....	70

Actuarial Certification

It is our opinion that the valuation has been performed in accordance with generally accepted actuarial principles as well as the applicable Standards of Practice promulgated by the Actuarial Standards Board. While this report is intended to be complete, our office is available to answer questions as needed. All of the undersigned are actuaries who satisfy the Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States of the American Academy of Actuaries with regard to pensions.

Actuarial Methods and Assumptions

It is our opinion that the assumptions and methods, as recommended by the Chief Actuary and adopted by the CalPERS Board of Administration, are internally consistent and reasonable for this plan.

Randall Dziubek, ASA, MAAA, FCA
Deputy Chief Actuary, Valuation Services, CalPERS

Scott Terando, ASA, EA, MAAA, FCA, CFA
Chief Actuary, CalPERS

Actuarial Data and Rate Plan Results

To the best of our knowledge and having relied upon the attestation above that the actuarial methods and assumptions are reasonable, this report is complete and accurate and contains sufficient information to disclose, fully and fairly, the funded condition of the 1959 Survivor Program for Public Agencies 1st, 2nd, 3rd, 4th, and Indexed Level pools, and the State and Schools 5th Level pools and satisfies the actuarial valuation requirements of Government Code section 7504. This valuation and related validation work was performed by the CalPERS Actuarial Office. The valuation was based on member and financial data as of June 30, 2024, provided by the CalPERS databases and the benefits with CalPERS as of the date this report was produced.

SHELLY CHU, ASA, MAAA
Senior Actuary, CalPERS

Tony Cuny, ASA, MAAA
Senior Actuary, CalPERS

Highlights and Executive Summary

- 3 Introduction
- 3 Purpose
- 3 Funded Status
- 4 Required Employer and Employee Monthly Premiums
- 5 Changes Since the Prior Year's Valuation

Highlights and Executive Summary

Introduction

The 1959 Survivor program was designed to provide pre-retirement death benefits comparable to those provided by Social Security, formally the Federal Old Age and Survivor Insurance (OASI) program, to CalPERS' members not covered by Social Security.

Purpose

This actuarial valuation of the 1959 Survivor Program for Public Agencies 1st, 2nd, 3rd, 4th, and Indexed Level pools, and the State and Schools 5th Level pools within the California Public Employees' Retirement System (CalPERS) was performed by CalPERS staff actuaries as of June 30, 2024 in order to:

- Set forth the funded status of the program, reflecting the assets and funding liabilities of this program as of June 30, 2024.
- Establish the actuarially required premiums for all levels and employee premiums for the Indexed Level, and State and Schools 5th Levels for the fiscal year July 1, 2025 through June 30, 2026; and
- Provide actuarial information as of June 30, 2024 to the CalPERS Board of Administration and other interested parties.

The use of this report for any other purposes may be inappropriate.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; changes in actuarial policies; changes in plan provisions or applicable law; and differences between the required premiums determined by the valuation and the actual premiums made by the agency.

Funded Status

Shown below are the Accrued Liability, Market Value of Assets (MVA), and Funded Ratio of all pools within the 1959 Survivor Benefit Program as of June 30, 2024.

Plan	Accrued Liability ¹	Market Value of Assets	Funded Ratio
State 5 th Level Pool	\$153,785,899	\$127,171,416	82.7%
Schools 5 th Level Pool	14,059,937	110,559,351	786.3%
PA 1 st Level Pool	2,552,168	75,315,322	2,951.0%
PA 2 nd Level Pool	2,200,586	16,771,258	762.1%
PA 3 rd Level Pool	32,729,893	160,454,199	490.2%
PA 4 th Level Pool	150,896,962	159,315,252	105.6%
PA Indexed Level Pool	22,659,024	31,459,101	138.8%
Total	\$378,884,469	\$681,045,899	179.8%

(1) Under the Term Insurance Method, the accrued liability and the present value of future benefits are defined to be equal. Under the Entry Age Actuarial Cost Method, which is being used to fund the benefit in the Indexed Level pool, the accrued liability is defined as the difference between the present value of future benefits and the present value of future normal costs.

Highlights and Executive Summary

Required Employer and Employee Monthly Premiums

Shown below are the 1959 Survivor Program’s actuarially required employer and employee monthly premiums per covered member, per month for the fiscal year July 1, 2025 through June 30, 2026. The premiums for fiscal year July 1, 2024 through June 30, 2025 are shown for comparison. Except for the Public Agency Indexed Level pool, these monthly premiums are determined using a Modified Term Insurance Method. Monthly premiums for the Public Agency Indexed Level pool are determined using the Entry Age Actuarial Cost Method.

Required Monthly Premiums

Plan	2024-25 Premiums			2025-26 Premiums		
	Employer	Employee	Total	Employer	Employee	Total
State 5 th Level Pool ¹	\$6.60	\$6.60	\$13.20	\$6.20	\$6.20	\$12.40
Schools 5 th Level Pool ¹	0.00	2.00	2.00	0.00	2.00	2.00
PA 1 st Level Pool ²	0.00	2.00	2.00	0.00	2.00	2.00
PA 2 nd Level Pool ²	0.00	2.00	2.00	0.00	2.00	2.00
PA 3 rd Level Pool ²	0.00	2.00	2.00	0.00	2.00	2.00
PA 4 th Level Pool ²	5.80	2.00	7.80	5.20	2.00	7.20
PA Indexed Level Pool ¹	2.95	2.95	5.90	3.00	3.00	6.00

(1) For the Indexed Level and State and Schools 5th Levels, Section 21581 of the California Public Employees’ Retirement Law requires mandatory cost sharing when the total premium exceeds \$4.00. Mandatory \$2.00 member monthly premium required.

(2) Mandatory \$2.00 member monthly premium required.

The required employee premium for the State 5th Level pool will change from \$6.60 to \$6.20 per member, per month (or from \$3.05 to \$2.87 for biweekly paid members) for fiscal year 2025-26. This is in accordance with Section 21581(c), which specifies that for State and Schools 5th Levels when the total required premium (after amortization of surplus/unfunded liability) exceeds \$4.00, the employer and the member shall evenly share the required monthly premium.

The required employee premium for the Indexed Level pool will change from \$2.95 to \$3.00 per member, per month (or from \$1.37 to \$1.39 for biweekly paid members) for fiscal year 2025-26. Employer premiums will also change from \$2.95 to \$3.00 per member, per month.

Employee required premiums for Public Agency 1st, 2nd, and 3rd Level pools will remain the same as in the prior year: \$2.00 per member, per month (or \$0.93 for biweekly paid members). There are no employer required premiums for these pools.

Employee required premiums for Public Agency 4th Level pool shall remain the same as in the prior year: \$2.00 per member, per month (or \$0.93 for biweekly paid members). Employer premiums will change from \$5.80 to \$5.20 per member, per month. This decrease is due to favorable non-investment experience in the past year.

Highlights and Executive Summary

Changes Since the Prior Year's Valuation

Board Policy

On April 16, 2024, the board took action to modify the Funding Risk Mitigation Policy to remove the automatic change to the discount rate when the investment return exceeds various thresholds. Rather than an automatic change to the discount rate, a board discussion would be placed on the calendar. The Future Investment Return Scenarios exhibit in this report, which includes a high enough return scenario to trigger a board discussion, does not reflect any change in the discount rate.

Actuarial Methods and Assumptions

There are no significant changes to the actuarial methods and assumptions for the June 30, 2024 actuarial valuation.

Plan Provisions

No changes were made since the prior valuation. A complete description of the principal plan provisions used in the June 30, 2024 valuation may be found in Appendix B of this report.

Subsequent Events

This actuarial valuation report reflects fund investment return through June 30, 2024, as well as statutory changes, regulatory changes and board actions through January 2025.

CalPERS will be completing an Asset Liability Management (ALM) review process in November 2025 that will review the capital market assumptions and the CalPERS Total Fund Investment Policy and ascertain whether a change in the discount is warranted. In addition, the Actuarial Office will be presenting the findings of its Experience Study which reviews economic assumptions other than the discount rate as well as all demographic assumptions and makes recommendations to modify actuarial assumptions where appropriate. Any changes in actuarial assumptions will be reflected in the June 30, 2025, actuarial valuations.

To the best of our knowledge, there have been no other subsequent events that could materially affect current or future certifications rendered in this report.

Assets

- 7 Reconciliation of the Market Value of Assets
- 9 Asset Allocation
- 10 CalPERS History of Investment Returns

Assets

Reconciliation of the Market Value of Assets

State 5 th Level	June 30, 2023	June 30, 2024
Beginning Balance	\$118,493,561	\$ 120,264,494
Contributions (Employer and Employee) Received During Fiscal Year	10,267,000	10,616,790
Benefit Payments During Fiscal Year	(15,066,329)	(14,894,808)
Net Transfer of Assets Into and Out of this Pool	0	0
Investment Earnings Credited	6,570,262	11,184,940
Ending Balance	\$120,264,494	\$127,171,416

Schools 5 th Level	June 30, 2023	June 30, 2024
Beginning Balance	\$98,145,312	\$ 102,193,009
Contributions (Employer and Employee) Received During Fiscal Year	218,747	232,040
Benefit Payments During Fiscal Year	(1,667,152)	(1,416,705)
Net Transfer of Assets Into and Out of this Pool	0	0
Investment Earnings Credited	5,496,102	9,551,008
Ending Balance	\$102,193,009	\$ 110,559,351

Public Agency 1 st Level	June 30, 2023	June 30, 2024
Beginning Balance	\$65,355,742	\$ 68,946,830
Contributions (Employer and Employee) Received During Fiscal Year	159,607	165,165
Benefit Payments During Fiscal Year	(252,838)	(261,505)
Net Transfer of Assets Into and Out of this Pool	0	0
Investment Earnings Credited	3,684,319	6,464,832
Ending Balance	\$68,946,830	\$ 75,315,322

Public Agency 2 nd Level	June 30, 2023	June 30, 2024
Beginning Balance	\$14,938,427	\$ 15,679,218
Contributions (Employer and Employee) Received During Fiscal Year	104,363	105,485
Benefit Payments During Fiscal Year	(201,857)	(214,755)
Net Transfer of Assets Into and Out of this Pool	0	(252,595)
Investment Earnings Credited	838,285	1,453,905
Ending Balance	\$15,679,218	\$ 16,771,258

Public Agency 3 rd Level	June 30, 2023	June 30, 2024
Beginning Balance	\$141,922,852	\$ 148,164,721
Contributions (Employer and Employee) Received During Fiscal Year	1,134,703	1,215,223
Benefit Payments During Fiscal Year	(2,856,647)	(2,762,249)
Net Transfer of Assets Into and Out of this Pool	0	0
Investment Earnings Credited	7,963,813	13,836,504
Ending Balance	\$148,164,721	\$ 160,454,199

Assets

Reconciliation of the Market Value of Assets (continued)

Public Agency 4 th Level	June 30, 2023	June 30, 2024
Beginning Balance	\$157,027,464	\$ 154,622,524
Contributions (Employer and Employee) Received During Fiscal Year	3,921,869	6,640,958
Benefit Payments During Fiscal Year	(13,678,612)	(14,191,027)
Net Transfer of Assets Into and Out of this Pool	0	252,595
Investment Earnings Credited	7,351,803	11,990,203
Ending Balance	\$154,622,524	\$ 159,315,252

Public Agency Indexed Level	June 30, 2023	June 30, 2024
Beginning Balance	\$29,314,086	\$ 29,793,115
Contributions (Employer and Employee) Received During Fiscal Year	362,698	772,985
Benefit Payments During Fiscal Year	(1,409,264)	(1,674,788)
Net Transfer of Assets Into and Out of this Pool	0	0
Investment Earnings Credited	1,525,595	2,567,789
Ending Balance	\$29,793,115	\$ 31,459,101

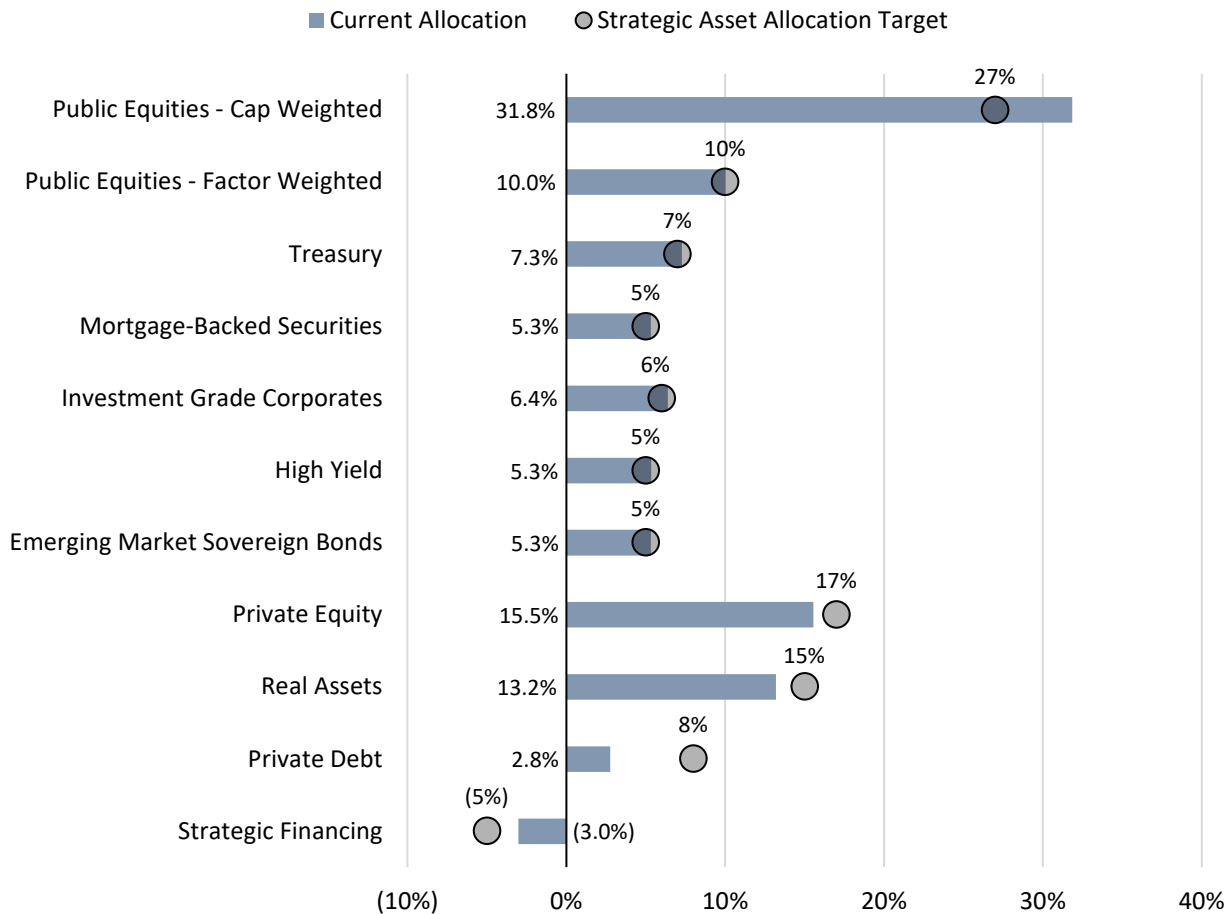
Assets

Asset Allocation

CalPERS adheres to an Asset Allocation Strategy which establishes asset class allocation policy targets and ranges and manages those asset class allocations within their policy ranges. CalPERS Investment Belief No. 6 recognizes that strategic asset allocation is the dominant determinant of portfolio risk and return.

The asset allocation shown below reflects the allocation of the Public Employees' Retirement Fund (PERF) in its entirety. The assets for the 1959 Survivor Benefit Program are a subset of the PERF and are invested accordingly.

On March 20, 2024, the board adopted changes to the strategic asset allocation. The new allocation was effective July 1, 2024. The asset allocation as of June 30, 2024, is shown below, along with the strategic asset allocation targets.



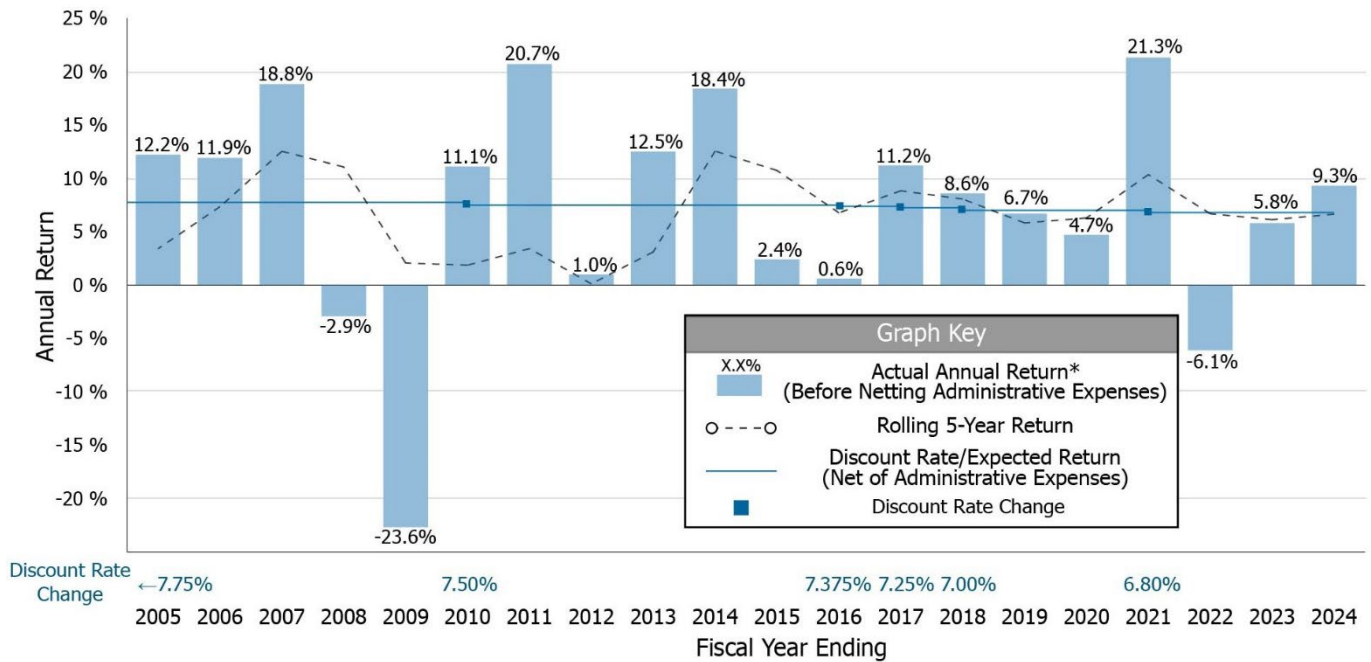
For more information see the [Trust Level Review as of June 30, 2024](#), which is available on the CalPERS website.

Assets

CalPERS History of Investment Returns

The following is a chart with 20 years of historical annual returns of the PERF for each fiscal year ending on June 30 as reported by the Investment Office. Investment returns reported are net of investment expenses but without reduction for administrative expenses. The assumed rate of return, however, is net of both investment and administrative expenses. Also, the Investment Office uses lagged private asset valuations for investment performance reporting purposes. This can lead to a timing difference in private asset contributions to performance in the returns below and those used for financial reporting purposes. The investment gain or loss calculation in this report relies on final assets that have been audited and are appropriate for financial reporting. Because of these differences, the effective investment return for funding purposes in a single year can be higher or lower than the return reported by the Investment Office shown here.

History of Investment Returns (2005 through 2024)



* As reported by the Investment Office with lagged private valuations and without any reduction for administrative expenses.

The table below shows annualized investment returns of the PERF for various time periods ending on June 30, 2024. These returns are the annual rates that if compounded over the indicated number of years would equate to the actual time-weighted investment performance of the PERF. It should be recognized that the annual rate of return is volatile, as the chart above illustrates, so when looking at investment returns, it is informative to look at returns over longer time horizons.

PERF Realized Rates of Return as of June 30, 2024					
1 year	3 year	5 year	10 year	20 year	30 year
9.3%	2.8%	6.6%	6.2%	6.7%	7.7%

Liabilities and Funding Requirements

- 12 Key Results
- 15 Development of Normal Costs
- 17 Development of Funding Requirements
- 20 Schedule of Amortization Bases
- 20 (Gain)/Loss Analysis 6/30/2023 - 6/30/2024

Liabilities and Funding Requirements

Key Results

Key results of the current and prior valuations are shown below.

State 5 th Level	June 30, 2023	June 30, 2024
Covered Active Members	74,885	76,176
Survivors Included in the Valuation		
Deferred (eligible, but not currently receiving benefits)	281	269
Receiving Benefits	1,406	1,427
Total	1,687	1,696
Accrued Liabilities	\$152,615,077	\$153,785,899
Market Value of Assets (MVA)	120,264,494	127,171,416
Unfunded Liability/(Excess Assets)	32,350,583	26,614,483
Required Employer Monthly Premium Per Member		
Before Amortization of Unfunded Liability/(Excess Assets)	\$9.10	\$8.70
After Amortization of Unfunded Liability/(Excess Assets)	13.20	12.40
After Employer/Employee Premium Sharing	6.60	6.20
Funded Ratio	78.8%	82.7%

Schools 5 th Level	June 30, 2023	June 30, 2024
Covered Active Members	10,815	11,148
Survivors Included in the Valuation		
Deferred (eligible, but not currently receiving benefits)	17	21
Receiving Benefits	147	140
Total	164	161
Accrued Liabilities	\$14,282,181	\$14,059,937
Market Value of Assets (MVA)	102,193,009	110,559,351
Unfunded Liability/(Excess Assets)	(87,910,828)	(96,499,414)
Required Employer Monthly Premium Per Member		
Before Amortization of Unfunded Liability/(Excess Assets)	\$6.30	\$6.40
After Amortization of Unfunded Liability/(Excess Assets)	0.00	0.00
After Employer/Employee Premium Sharing	0.00	0.00
Funded Ratio	715.5%	786.3%

Liabilities and Funding Requirements

Key Results (continued)

Public Agency 1 st Level	June 30, 2023	June 30, 2024
Covered Active Members	6,797	6,879
Survivors Included in the Valuation		
Deferred (eligible, but not currently receiving benefits)	23	24
Receiving Benefits	103	98
Total	126	122
Accrued Liabilities	\$2,708,326	\$2,552,168
Market Value of Assets (MVA)	68,946,830	75,315,322
Unfunded Liability/(Excess Assets)	(66,238,504)	(72,763,154)
Required Employer Monthly Premium Per Member		
Total Premium Required	\$1.40	\$1.40
Premium Required After Employee Contributions	0.00	0.00
Employer Premium After Amortization of Unfunded Liability/(Excess Assets)	0.00	0.00
Funded Ratio	2,545.7%	2,951.0%
Public Agency 2 nd Level	June 30, 2023	June 30, 2024
Covered Active Members	4,399	4,498
Survivors Included in the Valuation		
Deferred (eligible, but not currently receiving benefits)	15	12
Receiving Benefits	69	74
Total	84	86
Accrued Liabilities	\$2,160,126	\$2,200,586
Market Value of Assets (MVA)	15,679,218	16,771,258
Unfunded Liability/(Excess Assets)	(13,519,092)	(14,570,672)
Required Employer Monthly Premium Per Member		
Total Premium Required	\$1.80	\$1.70
Premium Required After Employee Contributions	0.00	0.00
Employer Premium After Amortization of Unfunded Liability/(Excess Assets)	0.00	0.00
Funded Ratio	725.8%	762.1%
Public Agency 3 rd Level	June 30, 2023	June 30, 2024
Covered Active Members	49,081	51,832
Survivors Included in the Valuation		
Deferred (eligible, but not currently receiving benefits)	159	154
Receiving Benefits	628	658
Total	787	812
Accrued Liabilities	\$31,365,075	\$32,729,893
Market Value of Assets (MVA)	148,164,721	160,454,199
Unfunded Liability/(Excess Assets)	(116,799,646)	(127,724,306)
Required Employer Monthly Premium Per Member		
Total Premium Required	\$2.80	\$2.70
Premium Required After Employee Contributions	0.80	0.70
Employer Premium After Amortization of Unfunded Liability/(Excess Assets)	0.00	0.00
Funded Ratio	472.4%	490.2%

Liabilities and Funding Requirements

Key Results (continued)

Public Agency 4 th Level	June 30, 2023	June 30, 2024
Covered Active Members	75,949	78,677
Survivors Included in the Valuation		
Deferred (eligible, but not currently receiving benefits)	176	175
Receiving Benefits	1,076	1,095
Total	1,252	1,270
Accrued Liabilities	\$149,612,700	\$150,896,962
Market Value of Assets (MVA)	154,622,524	159,315,252
Unfunded Liability/(Excess Assets)	(5,009,824)	(8,418,290)
Required Employer Monthly Premium Per Member		
Total Premium Required	\$7.90	\$7.70
Premium Required After Employee Contributions	5.90	5.70
Employer Premium After Amortization of Unfunded Liability/(Excess Assets)	5.80	5.20
Funded Ratio	103.3%	105.6%

Public Agency Indexed Level	June 30, 2023	June 30, 2024
Covered Active Members		
Counts	12,312	12,746
Average Attained Age	41.15	40.99
Average Years of Credited Service	9.01	8.77
Survivors Included in the Valuation		
Deferred (eligible, but not currently receiving benefits)	22	24
Receiving Benefits	115	120
Total	137	144
Accrued Liabilities	\$21,497,855	\$22,659,024
Market Value of Assets (MVA)	29,793,115	31,459,101
Unfunded Liability/(Excess Assets)	(8,295,260)	(8,800,077)
Required Employer Monthly Premium Per Member		
Before Amortization of Unfunded Liability/(Excess Assets)	\$9.80	\$10.00
After Amortization of Unfunded Liability/(Excess Assets)	5.90	6.00
After Employer/Employee Premium Sharing	2.95	3.00
Funded Ratio	138.6%	138.8%

Liabilities and Funding Requirements

Development of Normal Costs

The following six tables show the development of the Normal Cost using the Modified Term Method. The Normal Cost is developed using the historical present value of future benefits arising from deaths that occurred in the given year. These values are divided by the number of members in the given year and weighted by percentages listed below. Please see Appendix A – Actuarial Methods and Assumptions for more details.

State 5th Level Pool

Year	Present Value of Future Benefits (PVB)	Members	Weight	Normal Cost (PVB / Members / 12)
2014	\$6,781,756	72,848	1%	\$7.76
2015	6,638,184	74,372	3%	7.44
2016	7,552,847	75,782	5%	8.31
2017	5,716,168	76,638	7%	6.22
2018	4,066,199	77,362	9%	4.38
2019	6,956,100	78,011	11%	7.43
2020	8,394,269	78,713	13%	8.89
2021	11,337,991	76,995	15%	12.27
2022	11,326,652	75,812	17%	12.45
2023	6,018,234	74,885	19%	6.70
Final Weighted Average Normal Cost				\$8.70

Schools 5th Level Pool

Year	Present Value of Future Benefits (PVB)	Members	Weight	Normal Cost (PVB / Members / 12)
2014	\$356,592	10,287	1%	\$2.89
2015	693,955	10,490	3%	5.51
2016	200,586	10,259	5%	1.63
2017	874,049	10,557	7%	6.90
2018	979,346	10,894	9%	7.49
2019	1,207,548	11,190	11%	8.99
2020	207,912	11,219	13%	1.54
2021	995,922	10,413	15%	7.97
2022	1,054,050	10,390	17%	8.45
2023	767,795	10,815	19%	5.92
Final Weighted Average Normal Cost				\$6.40

Public Agencies 1st Level Pool

Year	Present Value of Future Benefits (PVB)	Members	Weight	Normal Cost (PVB / Members / 12)
2014	\$1,771,714	132,024	1%	\$1.12
2015	1,870,607	134,879	3%	1.16
2016	2,177,004	139,581	5%	1.30
2017	2,300,250	141,063	7%	1.36
2018	2,167,085	140,339	9%	1.29
2019	1,935,701	141,374	11%	1.14
2020	2,013,690	141,081	13%	1.19
2021	2,942,713	139,036	15%	1.76
2022	2,937,211	142,364	17%	1.72
2023	2,257,174	148,538	19%	1.27
Final Weighted Average Normal Cost				\$1.40

Liabilities and Funding Requirements

Development of Normal Costs (continued)

Public Agencies 2nd Level Pool

Year	Present Value of Future Benefits (PVB)	Members	Weight	Normal Cost (PVB / Members / 12)
2014	\$2,215,157	132,024	1%	\$1.40
2015	2,338,658	134,879	3%	1.44
2016	2,721,826	139,581	5%	1.62
2017	2,875,981	141,063	7%	1.70
2018	2,709,721	140,339	9%	1.61
2019	2,420,041	141,374	11%	1.43
2020	2,517,912	141,081	13%	1.49
2021	3,679,273	139,036	15%	2.21
2022	3,672,238	142,364	17%	2.15
2023	2,822,116	148,538	19%	1.58
Final Weighted Average Normal Cost				\$1.70

Public Agencies 3rd Level Pool

Year	Present Value of Future Benefits (PVB)	Members	Weight	Normal Cost (PVB / Members / 12)
2014	\$3,448,999	132,024	1%	\$2.18
2015	3,640,399	134,879	3%	2.25
2016	4,237,503	139,581	5%	2.53
2017	4,477,909	141,063	7%	2.65
2018	4,220,505	140,339	9%	2.51
2019	3,767,090	141,374	11%	2.22
2020	3,921,728	141,081	13%	2.32
2021	5,728,804	139,036	15%	3.43
2022	5,716,879	142,364	17%	3.35
2023	4,393,991	148,538	19%	2.47
Final Weighted Average Normal Cost				\$2.70

Public Agencies 4th Level Pool

Year	Present Value of Future Benefits (PVB)	Members	Weight	Normal Cost (PVB / Members / 12)
2014	\$9,687,436	132,024	1%	\$6.11
2015	10,319,088	134,879	3%	6.38
2016	12,032,521	139,581	5%	7.18
2017	12,656,392	141,063	7%	7.48
2018	11,865,928	140,339	9%	7.05
2019	10,773,469	141,374	11%	6.35
2020	11,045,518	141,081	13%	6.52
2021	16,285,043	139,036	15%	9.76
2022	16,113,051	142,364	17%	9.43
2023	12,444,227	148,538	19%	6.98
Final Weighted Average Normal Cost				\$7.70

Liabilities and Funding Requirements

Development of Funding Requirements

The following table develops the annual premiums required for fiscal year 2025-26 for the State 5th and Schools 5th Level pools.

June 30, 2024	State 5 th Level	Schools 5 th Level
1) Development of Unfunded Liability		
a) Present Value of Future Benefits for Current Survivors as of 6/30/2024	\$151,751,899	\$13,609,937
b) Reserve for Unclaimed Benefits as of 6/30/2024	2,034,000	450,000
c) Total Accrued Liabilities as of 6/30/2024 [(1a) + (1b)]	153,785,899	14,059,937
d) Market Value of Assets as of 6/30/2024	127,171,416	110,559,351
e) Unfunded Accrued Liability/(Excess Assets) as of 6/30/2024 [(1c) - (1d)]	\$26,614,483	(\$96,499,414)
2) Development of Normal Cost		
a) Total Per Member, Per Month 2024-25 Term Insurance Normal Cost rounded to the nearest \$0.10	\$8.70	\$6.40
3) 2025 Projected Unfunded Liability		
a) Unfunded Accrued Liability/(Excess Assets) as of 6/30/2024 [(1e)]	\$26,614,483	(\$96,499,414)
b) Projected Normal Cost Contributions with Interest 7/1/2024 – 6/30/2025	8,452,595	843,784
c) Projected UAL Payment 7/1/2024 – 6/30/2025	3,398,147	(843,784)
d) Projected Required Contributions 7/1/2024 – 6/30/2025 [(3b) + (3c)]	11,850,742	0
e) Projected Employee Contributions 7/1/2024 – 6/30/2025	5,932,080	259,200
f) Changes in Contributions due to Contribution (Gain)/Loss ¹	428,424	(39,686)
g) Excess Assets due to Employee Contributions [maximum, (\$0, (3e) - (3d))]	0	259,200
h) Projected UAL/(Excess Assets) as of 6/30/2025 [(3a) * 1.068 - ((3c) + (3f) + (3g)) * 1.068^{1/2}]	\$24,469,733	(\$102,416,228)
4) Required Contribution		
a) Required Normal Cost Per Member, Per Month [(2a)]	\$8.70	\$6.40
b) Projected Active Members as of 6/30/2025	76,200	11,100
c) Required Normal Cost Contribution [(4a) * (4b) * 12 * (1.068) ^{1/2}]	\$8,221,311	\$880,988
d) Amortization of the UAL/(Excess Assets) ²	3,152,899	(880,988)
e) Total Required Contributions [(4c) + (4d)]	11,374,210	0
f) Required Contributions Per Member, Per Month [(4e) / (4b) / 12], rounded to the nearest \$0.10	\$12.40	\$0.00
g) Amortization Period	See Table on Pg. 20	30-year
5) 2025-26 Required Employer and Employee Premiums with Cost Sharing Provision		
a) Required Employee Premium Per Member, Per Month [maximum, (\$2, (4f) / 2)]	\$6.20	\$2.00
b) Required Employer Premium Per Member, Per Month [maximum, (\$0, (4f) - (5a))]	6.20	0.00

(1) This reflects differences in calculated Normal Costs from the prior year and the current year, as well as differences in actual and estimated member counts.
(2) See amortization schedule on Page 20.

Liabilities and Funding Requirements

Development of Funding Requirements (continued)

The following table develops the annual premiums required for fiscal year 2025-26 for the Public Agency 1st, 2nd, 3rd, and 4th Level pools.

June 30, 2024	Public Agency 1 st Level	Public Agency 2 nd Level	Public Agency 3 rd Level	Public Agency 4 th Level
1) Development of Unfunded Liability				
a) Present Value of Future Benefits for Current Survivors as of 6/30/2024	\$2,483,048	\$2,084,486	\$32,137,693	\$147,967,162
b) Reserve for Unclaimed Benefits as of 6/30/2024	69,120	116,100	592,200	2,929,800
c) Total Accrued Liabilities as of 6/30/2024 [(1a) + (1b)]	2,552,168	2,200,586	32,729,893	150,896,962
d) Market Value of Assets as of 6/30/2024	75,315,322	16,771,258	160,454,199	159,315,252
e) Unfunded Accrued Liability/(Excess Assets) as of 6/30/2024 [(1c) - (1d)]	(\$72,763,154)	(\$14,570,672)	(\$127,724,306)	(\$8,418,290)
2) Development of Normal Cost				
a) Total Per Member, Per Month 2024-25 Term Insurance Normal Cost rounded to the nearest \$0.10	\$1.40	\$1.70	\$2.70	\$7.70
3) 2025 Projected Unfunded Liability				
a) Unfunded Accrued Liability/(Excess Assets) as of 6/30/2024 [(1e)]	(\$72,763,154)	(\$14,570,672)	(\$127,724,306)	(\$8,418,290)
b) Projected Normal Cost Contributions with Interest 7/1/2024 – 6/30/2025	118,060	98,218	1,704,929	7,435,938
c) Projected UAL Payment 7/1/2024 – 6/30/2025	(118,060)	(98,218)	(1,704,929)	(343,672)
d) Projected Required Contributions 7/1/2024 – 6/30/2025 [(3b) + (3c)]	0	0	0	7,092,266
e) Projected Employee Contributions 7/1/2024 – 6/30/2025	163,200	105,600	1,178,400	1,821,600
f) Changes in Contributions due to Contribution (Gain)/Loss ¹	(1,327)	3,281	(29,597)	185,492
g) Excess Assets due to Employee Contributions [maximum, (\$0, (3e) - (3d))]	163,200	105,600	1,178,400	0
h) Projected UAL/(Excess Assets) as of 6/30/2025 [(3a) * 1.068 - ((3c) + (3f) + (3g)) * 1.068 ^{1/2}]	(\$77,756,326)	(\$15,572,497)	(\$135,834,835)	(\$8,827,264)
4) Required Contribution				
a) Required Normal Cost Per Member, Per Month [(2c)]	\$1.40	\$1.70	\$2.70	\$7.70
b) Projected Active Members as of 6/30/2025	6,900	4,500	51,800	78,700
c) Required Normal Cost Contribution [(4a) * (4b) * 12 * (1.068) ^{1/2}]	\$119,796	\$94,870	\$1,734,444	\$7,515,058
d) Amortization of the UAL/(Excess Assets)	(119,796)	(94,870)	(1,734,444)	(674,561)
e) Total Required Contributions [(4c) + (4d)]	0	0	0	6,840,497
f) Required Contributions Per Member, Per Month [(4e) / (4b) / 12], rounded to the nearest \$0.10	\$0.00	\$0.00	\$0.00	\$7.20
g) Amortization Period	30-year	30-year	30-year	30-year
5) 2025-26 Required Employer/Employee Premiums				
a) Required Employee Premium Per Member, Per Month [\$2]	\$2.00	\$2.00	\$2.00	\$2.00
b) Required Employer Premium Per Member, Per Month [maximum, (\$0, (4f) - (5a))]	0.00	0.00	0.00	5.20

(1) This reflects differences in calculated Normal Costs from the prior year and the current year, as well as differences in actual and estimated member counts.

Liabilities and Funding Requirements

Development of Funding Requirements (continued)

The following table develops the annual premiums required for fiscal year 2025-26 for the Public Agency Indexed Level pool.

June 30, 2024	Public Agency Indexed Level
1) Development of Unfunded Liability	
a) Present Value of Future Benefits for Current Survivors as of 6/30/2024	\$18,407,040
b) Present Value of Future Benefits for Active Members as of 6/30/2024	15,600,623
c) Reserve for Unclaimed Benefits as of 6/30/2024	0
d) Total Present Value of Future Benefits as of 6/30/2024 [(1a) + (1b)]	34,007,663
e) Present Value of Future Normal Costs as of 6/30/2024	11,348,639
f) Total Accrued Liabilities as of 6/30/2024 [(1c) + (1d) - (1e)]	22,659,024
g) Market Value of Assets as of 6/30/2024	31,459,101
h) Unfunded Accrued Liability/(Excess Assets) as of 6/30/2024 [(1f) - (1g)]	(\$8,800,077)
2) Development of Normal Cost	
a) Required Entry Age Normal Cost	\$1,522,089
b) Active Members as of 6/30/2024	12,746
c) Total Per Member, Per Month 2024-25 Entry Age Normal Cost [(2a) / (2b) / 12], rounded to the nearest \$0.10	10.00
3) 2025 Projected Unfunded Liability	
a) Unfunded Accrued Liability/(Excess Assets) as of 6/30/2024 [(1h)]	(\$8,800,077)
b) Projected Normal Cost Contributions with Interest 7/1/2024 – 6/30/2025	1,494,852
c) Projected UAL Payment 7/1/2024 – 6/30/2025	(623,256)
d) Projected Required Contributions 7/1/2024 – 6/30/2025 [(3b) + (3c)]	871,596
e) Projected Employee Contributions 7/1/2024 – 6/30/2025	435,420
f) Changes in Contributions due to Contribution (Gain)/Loss ¹	(51,463)
g) Excess Assets due to Employee Contributions [maximum, (\$0, (3e) - (3d))]	0
h) Projected UAL/(Excess Assets) as of 6/30/2025 [(3a) * 1.068 - ((3c) + (3f) + (3g)) * 1.068^{1/2}]	(\$8,701,200)
4) Required Contribution	
a) Required Normal Cost Per Member, Per Month [(2c)]	\$10.00
b) Projected Active Members as of 6/30/2025	12,700
c) Required Normal Cost Contribution [(4a) * (4b) * 12 * (1.068) ^{1/2}]	\$1,574,964
d) Amortization of the UAL/(Excess Assets)	(664,928)
e) Total Required Contributions [(4c) + (4d)]	910,036
f) Required Contributions Per Member, Per Month [(4e) / (4b) / 12], rounded to the nearest \$0.10	\$6.00
g) Amortization Period	30-year
5) 2025-26 Required Employer and Employee Premiums with Cost Sharing Provision	
a) Required Employee Premium Per Member, Per Month [maximum (\$2, (4f) / 2)]	\$3.00
b) Required Employer Premium Per Member, Per Month [maximum (\$0, (4f) - (5a))]	3.00

(1) This reflects differences in calculated Normal Costs from the prior year and the current year, as well as differences in actual and estimated member counts.

Liabilities and Funding Requirements

Schedule of Amortization Bases

The schedule below shows the development of the required payments on the amortization bases in accordance with the Amortization Policy. In order to better achieve the objectives of the Amortization Policy, such as mitigating contribution volatility, a Fresh Start of the total UAL over a 15-year period was established in the June 30, 2022 actuarial valuation.

State 5th Level Pool

	Date Established	Ramp Level 2025-26	Ramp Shape	Remaining Period	Original Period	Balance 6/30/2024	Payment 2024-25	Projected Balance 6/30/2025	Payment 2025-26
Fresh Start	06/30/2022		No Ramp	13	15	\$34,303,474	\$3,750,109	\$32,760,594	\$3,750,109
Investment (Gain)/Loss	06/20/2023	40%	Up Only	19	20	1,417,030	30,459	1,481,910	60,917
Non-Investment (Gain)/Loss	06/20/2023		No Ramp	19	20	(4,252,733)	(382,421)	(4,146,709)	(382,421)
Investment (Gain)/Loss	06/20/2024	20%	Up Only	20	20	(3,150,015)	0	(3,364,216)	(72,313)
Non-Investment (Gain)/Loss	06/20/2024		No Ramp	20	20	(1,703,273)	428,424	(2,261,846)	(203,393)
Total						\$26,614,483	\$3,826,571	\$24,469,733	\$3,152,899

(Gain)/Loss Analysis 6/30/2023 – 6/30/2024

To calculate the funding 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 actual gains or losses, as shown below.

	State 5 th Level	Schools 5 th Level
1) Prior Year Unfunded Accrued Liability/(Excess Assets) Development		
a) Accrued Liability as of 6/30/2023	\$152,615,077	\$14,282,181
b) Market Value of Assets as of 6/30/2023	120,264,494	102,193,009
c) Unfunded Accrued Liability/(Excess Assets) as of 6/30/2023 [(1a) - (1b)]	\$32,350,583	(\$87,910,828)
2) Development of Projected Unfunded Accrued Liability/(Excess Assets) for 6/30/2024		
a) Unfunded Accrued Liability/(Excess Assets) as of 6/30/2023 [(1c)]	\$32,350,583	(\$87,910,828)
b) Projected Unfunded Accrued Liability/(Excess Assets) Payment with Interest 7/1/2023 – 6/30/2024 ¹	2,982,901	(591,802)
c) Projected Unfunded Accrued Liability/(Excess Assets) as of 6/30/2024 [(2a) * 1.068 - (2b) * 1.068 ^{1/2}]	31,467,771	(93,277,172)
3) Development of Projected Assets		
a) Market Value of Assets as of 6/30/2023	\$120,264,494	\$102,193,009
b) Net Cash Flows 7/1/2023 – 6/30/2024	(4,278,018)	(1,184,665)
c) Net Transfer of Assets Into and Out of this Pool	0	0
d) Expected Assets as of 6/30/2024 [(3a) * 1.068 + ((3b) + (3c)) * 1.068^{1/2}]	\$124,021,401	\$107,917,852
4) Current Year Unfunded Liability/(Excess Assets) Development		
a) Accrued Liability as of 6/30/2024	\$153,785,899	\$14,059,937
b) Market Value of Assets as of 6/30/2024	127,171,416	110,559,351
c) Unfunded Accrued Liability/(Excess Assets) as of 6/30/2024 [(4a) - (4b)]	\$26,614,483	(\$96,499,414)
5) Development of (Gain)/Loss due to changes in Reserve for Unclaimed Benefits		
a) Reserve for Unclaimed Benefits as of 6/30/2023	\$1,854,000	\$414,000
b) Reserve for Unclaimed Benefits as of 6/30/2024	2,034,000	450,000
c) (Gain)/Loss due to changes in Reserve for Unclaimed Benefits [(5b) - (5a)]	180,000	36,000
6) (Gain)/Loss for the Period of 6/30/2023 – 6/30/2024		
a) Total (Gain)/Loss [(4c) - (2c)]	(\$4,853,288)	(\$3,222,242)
b) Investment (Gain)/Loss [(3d) - (4b)]	(3,150,015)	(2,641,499)
c) (Gain)/Loss due to changes in Reserve for Unclaimed Benefits [(5c)]	180,000	36,000
d) Non-Investment (Gain)/Loss [(6a) - (6b) - (6c)]	(1,883,273)	(616,743)

(1) Includes payment gain/loss due to changes in Normal Costs, as well as differences in actual and estimated member counts.

Liabilities and Funding Requirements

(Gain)/Loss Analysis 6/30/2023 – 6/30/2024 (continued)

	Public Agency 1 st Level	Public Agency 2 nd Level	Public Agency 3 rd Level	Public Agency 4 th Level
1) Prior Year Unfunded Accrued Liability/(Excess Assets) Development				
a) Accrued Liability as of 6/30/2023	\$2,708,326	\$2,160,126	\$31,365,075	\$149,612,700
b) Market Value of Assets as of 6/30/2023	68,946,830	15,679,218	148,164,721	154,622,524
c) Unfunded Accrued Liability/(Excess Assets) as of 6/30/2023 [(1a) - (1b)]	(\$66,238,504)	(\$13,519,092)	(\$116,799,646)	(\$5,009,824)
2) Development of Projected Unfunded Accrued Liability/(Excess Assets) for 6/30/2024				
a) Unfunded Accrued Liability/(Excess Assets) as of 6/30/2023 [(1c)]	(\$66,238,504)	(\$13,519,092)	(\$116,799,646)	(\$5,009,824)
b) Projected Unfunded Accrued Liability/(Excess Assets) Payment with Interest 7/1/2023 – 6/30/2024 ¹	42,846	2,916	(588,087)	(825,621)
c) Projected Unfunded Accrued Liability/(Excess Assets) as of 6/30/2024 [(2a) * 1.068 - (2b) * 1.068 ^{1/2}]	(70,787,002)	(14,441,404)	(124,134,269)	(4,497,262)
3) Development of Projected Assets				
a) Market Value of Assets as of 6/30/2023	\$68,946,830	\$15,679,218	\$148,164,721	\$154,622,524
b) Net Cash Flows 7/1/2023 – 6/30/2024	(96,340)	(109,270)	(1,547,026)	(7,550,069)
c) Net Transfer of Assets Into and Out of this Pool	0	(252,595)	0	252,595
d) Expected Assets as of 6/30/2024 [(3a) * 1.068 + ((3b) + (3c)) * 1.068^{1/2}]	\$73,535,653	\$16,371,439	\$156,641,162	\$157,595,347
4) Current Year Unfunded Liability/(Excess Assets) Development				
a) Accrued Liability as of 6/30/2024	\$2,552,168	\$2,200,586	\$32,729,893	\$150,896,962
b) Market Value of Assets as of 6/30/2024	75,315,322	16,771,258	160,454,199	159,315,252
c) Unfunded Accrued Liability/(Excess Assets) as of 6/30/2024 [(4a) - (4b)]	(\$72,763,154)	(\$14,570,672)	(\$127,724,306)	(\$8,418,290)
5) Development of (Gain)/Loss due to changes in the Reserve for Unclaimed Benefits				
a) Reserve for Unclaimed Benefits as of 6/30/2023	\$56,160	\$108,000	\$550,200	\$2,052,000
b) Reserve for Unclaimed Benefits as of 6/30/2024	69,120	116,100	592,200	2,929,800
c) (Gain)/Loss due to changes in Reserve for Unclaimed Benefits [(5b) - (5a)]	12,960	8,100	42,000	877,800
6) (Gain)/Loss for the Period of 6/30/2023 – 6/30/2024				
a) Total (Gain)/Loss [(4c) - (2c)]	(\$1,976,152)	(\$129,268)	(\$3,590,037)	(\$3,921,028)
b) Investment (Gain)/Loss [(3d) - (4b)]	(1,779,669)	(399,819)	(3,813,037)	(1,719,905)
c) (Gain)/Loss due to changes in Reserve for Unclaimed Benefits [(5c)]	12,960	8,100	42,000	877,800
d) Non-Investment (Gain)/Loss [(6a) - (6b) - (6c)]	(209,443)	262,451	181,000	(3,078,923)

(1) Includes payment gain/loss due to changes in Normal Costs, as well as differences in actual and estimated member counts.

Liabilities and Funding Requirements

(Gain)/Loss Analysis 6/30/2023 – 6/30/2024 (continued)

	Public Agency Indexed Level
1) Prior Year Unfunded Accrued Liability/(Excess Assets) Development	
a) Accrued Liability as of 6/30/2023	\$21,497,855
b) Market Value of Assets as of 6/30/2023	29,793,115
c) Unfunded Accrued Liability/(Excess Assets) as of 6/30/2023 [(1a) - (1b)]	(\$8,295,260)
2) Development of Projected Unfunded Accrued Liability/(Excess Assets) for 6/30/2024	
a) Unfunded Accrued Liability/(Excess Assets) as of 6/30/2023 [(1c)]	(\$8,295,260)
b) Projected Unfunded Accrued Liability/(Excess Assets) Payment with Interest 7/1/2023 – 6/30/2024 ¹	(680,692)
c) Projected Unfunded Accrued Liability/(Excess Assets) as of 6/30/2024 [(2a) * 1.068 - (2b) * 1.068 ^{1/2}]	(8,155,883)
3) Development of Projected Assets	
a) Market Value of Assets as of 6/30/2023	\$29,793,115
b) Net Cash Flows 7/1/2023 – 6/30/2024	(901,803)
c) Net Transfer of Assets Into and Out of this Pool	0
d) Expected Assets as of 6/30/2024 [(3a) * 1.068 + ((3b) + (3c)) * 1.068^{1/2}]	\$30,887,087
4) Current Year Unfunded Liability/(Excess Assets) Development	
a) Accrued Liability as of 6/30/2024	\$22,659,024
b) Market Value of Assets as of 6/30/2024	31,459,101
c) Unfunded Accrued Liability/(Excess Assets) as of 6/30/2024 [(4a) - (4b)]	(\$8,800,077)
5) Development of (Gain)/Loss due to changes in the Reserve for Unclaimed Benefits	
a) Reserve for Unclaimed Benefits as of 6/30/2023	\$0
b) Reserve for Unclaimed Benefits as of 6/30/2024	0
c) (Gain)/Loss due to changes in Reserve for Unclaimed Benefits [(5b) - (5a)]	0
6) (Gain)/Loss for the Period of 6/30/2023 – 6/30/2024	
a) Total (Gain)/Loss [(4c) - (2c)]	(\$644,194)
b) Investment (Gain)/Loss [(3d) - (4b)]	(572,014)
c) (Gain)/Loss due to changes in Reserve for Unclaimed Benefits [(5c)]	0
d) Non-Investment (Gain)/Loss [(6a) - (6b) - (6c)]	(72,180)

(1) Includes payment gain/loss due to changes in Normal Costs, as well as differences in actual and estimated member counts.

Risk Analysis

- 24 Future Investment Return Scenarios
- 25 Discount Rate Sensitivity
- 26 Mortality Rate Sensitivity
- 27 Funded Status – Low-Default-Risk Basis

Risk Analysis

Future Investment Return Scenarios

Analysis using the investment return scenarios from the Asset Liability Management process completed in 2021 was performed to determine the effects of various future investment returns on required employer contributions. The CalPERS [Funding Risk Mitigation Policy](#) stipulates that when the investment return exceeds the discount rate by at least 2% the board will consider adjustments to the discount rate. The projections below use a discount rate of 6.8% for all scenarios even though an annual return of 30.8% is high enough to trigger a board discussion on the discount rate. The projections also assume that all other actuarial assumptions will be realized and that no further changes in assumptions, contributions, benefits or funding will occur.

The portfolio has an expected volatility (or standard deviation) of 12.0% per year. Accordingly, in any given year there is a 2.5% probability that the annual return will be -17.2% or less, or 30.8% or more. These returns represent two standard deviations below and above the expected return of 6.8%.

The following tables show the effect of an annual return of -17.2% and 30.8% in fiscal year 2024-25 on the fiscal year 2026-27 employer and employee contributions. Note that for the State 5th Level, a single-year investment gain or loss decreases or increases the required UAL contribution amount incrementally for each of the next five years, not just one, due to the 5-year ramp in the amortization policy. However, the contribution requirements beyond the first year are also impacted by investment returns beyond the first year. Historically, significant downturns in the market are often followed by higher than average returns. Such investment gains would offset the impact of these single year negative returns in years beyond fiscal year 2026-27.

- -17.2% investment return (2 standard deviation loss)
- 6.8% investment return
- 30.8% investment return (2 standard deviation gain)

The tables below show fiscal year 2026-27 projected employee and employer contributions under the investment return scenarios mentioned above.

-17.2% Return

	2026-27 Employer Monthly Premium	2026-27 Employee Monthly Premium
State 5 th Level	\$6.55	\$6.55
Schools 5 th Level	0.00	2.00
PA 1 st Level	0.00	2.00
PA 2 nd Level	0.00	2.00
PA 3 rd Level	0.00	2.00
PA 4 th Level	6.60	2.00
PA Indexed Level	4.90	4.90

6.8% Return

	2026-27 Employer Monthly Premium	2026-27 Employee Monthly Premium
State 5 th Level	\$6.20	\$6.20
Schools 5 th Level	0.00	2.00
PA 1 st Level	0.00	2.00
PA 2 nd Level	0.00	2.00
PA 3 rd Level	0.00	2.00
PA 4 th Level	5.30	2.00
PA Indexed Level	3.00	3.00

30.8% Return

	2026-27 Employer Monthly Premium	2026-27 Employee Monthly Premium
State 5 th Level	\$5.85	\$5.85
Schools 5 th Level	0.00	2.00
PA 1 st Level	0.00	2.00
PA 2 nd Level	0.00	2.00
PA 3 rd Level	0.00	2.00
PA 4 th Level	2.20	2.00
PA Indexed Level	0.20	2.00

Risk Analysis

Discount Rate Sensitivity

The following tables illustrate the sensitivity of the valuation results to the discount rate assumption. Shown below are fiscal year 2025-26 contributions assuming alternate discount rates of 5.8% and 7.8%. Those rates were selected since they illustrate the impact of a 1.0% increase or decrease to the current discount rate assumption of 6.8%.

5.8% Discount Rate (-1%)

	2025-26 Employer Monthly Premium	2025-26 Employee Monthly Premium
State 5 th Level	\$7.25	\$7.25
Schools 5 th Level	0.00	2.00
PA 1 st Level	0.00	2.00
PA 2 nd Level	0.00	2.00
PA 3 rd Level	0.00	2.00
PA 4 th Level	7.30	2.00
PA Indexed Level	4.60	4.60

Increase in Contribution

	2025-26 Employer Monthly Premium	2025-26 Employee Monthly Premium
State 5 th Level	\$1.05	\$1.05
Schools 5 th Level	0.00	0.00
PA 1 st Level	0.00	0.00
PA 2 nd Level	0.00	0.00
PA 3 rd Level	0.00	0.00
PA 4 th Level	2.10	0.00
PA Indexed Level	1.60	1.60

7.8% Discount Rate (+1%)

	2025-26 Employer Monthly Premium	2025-26 Employee Monthly Premium
State 5 th Level	\$5.25	\$5.25
Schools 5 th Level	0.00	2.00
PA 1 st Level	0.00	2.00
PA 2 nd Level	0.00	2.00
PA 3 rd Level	0.00	2.00
PA 4 th Level	3.40	2.00
PA Indexed Level	0.90	2.00

Decrease in Contribution

	2025-26 Employer Monthly Premium	2025-26 Employee Monthly Premium
State 5 th Level	(\$0.95)	(\$0.95)
Schools 5 th Level	0.00	0.00
PA 1 st Level	0.00	0.00
PA 2 nd Level	0.00	0.00
PA 3 rd Level	0.00	0.00
PA 4 th Level	(1.80)	0.00
PA Indexed Level	(2.10)	(1.00)

Risk Analysis

Mortality Rate Sensitivity

The following tables illustrate the sensitivity of the valuation results to the mortality rate assumption. Shown below are fiscal year 2025-26 contributions assuming mortality rates that are 10% lower and 10% higher than the mortality tables used in the valuation. These mortality rates were only applied to individuals who were receiving a benefit or in a deferral status as of the valuation date. This analysis will give an indication of the potential required contributions if recipient mortality were to be 10% lower or 10% higher than expected over the long term.

Lower Mortality Rates (-10%)

	2025-26 Employer Monthly Premium	2025-26 Employee Monthly Premium
State 5 th Level	\$6.40	\$6.40
Schools 5 th Level	0.00	2.00
PA 1 st Level	0.00	2.00
PA 2 nd Level	0.00	2.00
PA 3 rd Level	0.00	2.00
PA 4 th Level	5.60	2.00
PA Indexed Level	3.10	3.10

Increase in Contribution

	2025-26 Employer Monthly Premium	2025-26 Employee Monthly Premium
State 5 th Level	\$0.20	\$0.20
Schools 5 th Level	0.00	0.00
PA 1 st Level	0.00	0.00
PA 2 nd Level	0.00	0.00
PA 3 rd Level	0.00	0.00
PA 4 th Level	0.40	0.00
PA Indexed Level	0.10	0.10

Higher Mortality Rate (+10%)

	2025-26 Employer Monthly Premium	2025-26 Employee Monthly Premium
State 5 th Level	\$6.10	\$6.10
Schools 5 th Level	0.00	2.00
PA 1 st Level	0.00	2.00
PA 2 nd Level	0.00	2.00
PA 3 rd Level	0.00	2.00
PA 4 th Level	4.90	2.00
PA Indexed Level	2.85	2.85

Decrease in Contribution

	2025-26 Employer Monthly Premium	2025-26 Employee Monthly Premium
State 5 th Level	(\$0.10)	(\$0.10)
Schools 5 th Level	0.00	0.00
PA 1 st Level	0.00	0.00
PA 2 nd Level	0.00	0.00
PA 3 rd Level	0.00	0.00
PA 4 th Level	(0.30)	0.00
PA Indexed Level	(0.15)	(0.15)

Risk Analysis

Funded Status – Low-Default-Risk Basis

Actuarial Standard of Practice (ASOP) No. 4, *Measuring Pension Obligations and Determining Pension Plan Costs or Contributions*, requires the disclosure of a low-default-risk obligation measure (LDROM) of benefit costs accrued as of the valuation date using a discount rate based on the yields of high-quality fixed income securities with cash flows that replicate expected benefit payments. Conceptually, this measure represents the level at which financial markets would value the accrued plan costs and would be approximately equal to the cost of a portfolio of low-default-risk bonds with similar financial characteristics to accrued plan costs.

As permitted in ASOP No. 4, the Actuarial Office uses the Term Insurance Method and the Entry Age Actuarial Cost Method to calculate the LDROM. As shown below, the discount rate used for the LDROM is 5.35%, which is the Standard FTSE Pension Liability Index¹ discount rate as of .

June 30, 2024	State 5 th Level	Schools 5 th Level	Public Agency 1 st Level	Public Agency 2 nd Level
Discount Rate	5.35%	5.35%	5.35%	5.35%
Selected Measures on a Low-Default-Risk Basis				
1) Accrued Liability – Low-Default-Risk Basis (LDROM)	\$174,930,279	\$15,831,421	\$2,902,742	\$2,473,054
2) Market Value of Assets (MVA)	127,171,416	110,559,351	75,315,322	16,771,258
3) Unfunded Accrued Liability – Low-Default-Risk Basis [(1) – (2)]	\$47,758,863	(\$94,727,930)	(\$2,412,580)	(\$14,298,204)
4) Unfunded Accrued Liability – Funding Policy Basis	26,614,483	(96,499,414)	(72,763,154)	(14,570,672)
5) Present Value of Unearned Investment Risk Premium [(3) – (4)]	\$21,144,380	\$1,771,484	\$350,574	\$272,468

June 30, 2024	Public Agency 3 rd Level	Public Agency 4 th Level	Public Agency Indexed Level
Discount Rate	5.35%	5.35%	5.35%
Selected Measures on a Low-Default-Risk Basis			
1) Accrued Liability – Low-Default-Risk Basis (LDROM)	\$37,138,710	\$171,011,946	\$26,858,159
2) Market Value of Assets (MVA)	160,454,199	159,315,252	31,459,101
3) Unfunded Accrued Liability – Low-Default-Risk Basis [(1) – (2)]	(\$123,315,489)	\$11,696,694	(\$4,600,942)
4) Unfunded Accrued Liability – Funding Policy Basis	(127,724,306)	(8,418,290)	(8,800,077)
5) Present Value of Unearned Investment Risk Premium [(3) – (4)]	\$4,408,817	\$20,114,984	\$4,199,135

The difference between the unfunded liabilities on a low-default-risk basis and on the funding policy basis represents the present value of the investment risk premium that must be earned in future years to keep future contributions for currently accrued plan costs at the levels anticipated by the funding policy.

Benefit security for members of the plan relies on a combination of the assets in the plan, the investment income generated from those assets, and the ability of the plan sponsor to make necessary future contributions. If future returns fall short of 6.8%, benefit security could be at risk for some plans without higher than currently anticipated future contributions.

The funded status on a low-default-risk basis is not appropriate for assessing the need for future contributions.

(1) This index is based on a yield curve of hypothetical AA-rated zero-coupon corporate bonds whose maturities range from 6 months to 30 years. The index represents the single discount rate that would produce the same present value as discounting a standardized set of liability cash flows for a fully open pension plan using the yield curve. The liability cash flows are reasonably consistent with the pattern of benefits expected to be paid from the entire Public Employees' Retirement Fund for current and former plan members. A different index, hence a different discount rate, may be needed to measure the LDROM for a subset of the fund, such as a single rate plan or a group of retirees.

Appendix A – Actuarial 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.

Actuarial Funding Method for Public Agency 1st, 2nd, 3rd, and 4th Level, and State and Schools 5th Level Pools

The actuarial funding method used, as provided in State statute for Public Agencies 1st, 2nd, 3rd, and 4th Level pools, and State and Schools 5th Level pools, is called the Term Insurance Method. This is a terminal funding arrangement with no pre-funding of the survivor benefits payable on account of deaths expected to occur beyond those in the coming year.

The Normal Cost for the year is equal to the Expected Claims (present value of benefits arising from deaths) that will occur in the coming fiscal year. The Expected Claims for the coming fiscal year are determined as the expected claim value divided by the expected member months for the coming fiscal year. The Normal Cost (or Expected Claims) per member, per month for the coming fiscal year is equal to a weighted average of ten years of Normal Costs. The Normal Cost (or Actual Claims divided by Actual Members) for each of the previous years are calculated as the Present Value of Benefits divided by the member counts. The ten years used in this calculation end one year before the valuation date. The most recent year is excluded, and the chart below shows the weights given to the years prior to and including the valuation year. This method attempts to mitigate Normal Cost volatility from year to year by phasing in the experience over a ten-year period. The Present Value of Benefits for current Survivors are recalculated each year, using the current assumptions. The reason for excluding the claims from the most recent year is that when new deaths occur each year, it is often unknown which benefit will ultimately apply (i.e., 1957 Survivor, Industrial Death, Pre-Retirement Option 2, or 1959 Survivor). Many times, new deaths are initially placed under the 1959 Survivor roll, but ultimately are reclassified to another roll sometime later. This can create extreme volatility in the Normal Cost calculation between valuation years, especially for smaller pools.

Weights for Historical Data to Calculate Expected Claims

The table below displays the weights applied to historical Present Value of Benefits and member counts to develop the expected claims per member, per month.

Data 't' Years Ago	Weights
0	0.0%
1	19.0%
2	17.0%
3	15.0%
4	13.0%
5	11.0%
6	9.0%
7	7.0%
8	5.0%
9	3.0%
10	1.0%

A Reserve for Unclaimed Benefits is included in the Accrued Liability. This is done by finding all survivors that are eligible to receive a benefit but are not currently being paid the benefit. This population is assumed to be spouses that were in deferral but have not received a benefit yet due to unforeseen reasons. The amount of this reserve is calculated as the difference between each individual's age as of the valuation date rounded to the nearest whole year minus the age for which their deferral ends, multiplied by their monthly benefit amount. Based on expected lifetimes, the maximum assumed age for receiving benefits is 87.

Appendix A - Actuarial Methods and Assumptions

Actuarial Funding Method for Public Agency 1st, 2nd, 3rd and 4th Level, and State and Schools 5th Level Pools (continued)

Based upon current mortality tables, an individual who starts receiving a benefit at age 62 is expected to continue receiving until age 87.2, while an individual who starts receiving a benefit at age 60 is expected to continue receiving until age 87.0.

The Accrued Liability is equal to the Present Value of Benefits payable to current survivors, plus the Reserve for Unclaimed Benefits. If the Accrued Liability exceeds the Market Value of Assets, the difference is called the Unfunded Liability. On the other hand, if the Market Value of Assets exceeds the Accrued Liability, the difference is called Excess Assets.

The required employer monthly premium is the total required monthly premium less the \$2.00 per month member contributions as required by State Statute Section 21581. For all Levels, existing excess assets in the pool will be amortized and directly used to offset required employer contributions. However, for the State and Schools 5th Level pools, if the total required monthly premium after amortization of excess assets exceeds \$4.00, the member and the employer shall evenly share the required monthly premium. Excess assets for the Schools 5th Level pool, and Public Agency 1st, 2nd, and 3rd Level pools were sufficient to offset required employer contributions, based on June 30, 2024 data and assumptions. Excess assets for the Public Agency 4th Level were amortized over a 30-year period and are not sufficient to fully offset the required employer contribution. The resulting employer contribution for the 4th Level is \$5.20 per covered member, per month.

Actuarial Funding Method for Public Agency Indexed Level Pool

The funding method used for the Public Agency Indexed Level pool is the Entry Age Actuarial Cost Method. Under this method, projected benefits are determined for all members and the associated liabilities are spread in a manner that produces an annual cost that increases by approximately 2% in each year.

The Normal Cost for the Public Agency Indexed Level pool is the portion of the total Entry Age Normal Cost, as described in the preceding paragraph that is allocated to the current fiscal year. Since there is no cost allocated to the current fiscal year for those already receiving benefits or are in a deferred status, only active members have a Normal Cost. The population demographics, excluding population growth, are assumed to remain stable for purposes of projecting the Normal Cost to the year for which the contribution requirement is being determined.

A Reserve for Unclaimed Benefits is included in the Accrued Liability. This is done by finding all survivors that are eligible to receive a benefit but are not currently being paid the benefit. This population is assumed to be spouses that were in deferral but have not received a benefit yet due to unforeseen reasons. The amount of this reserve is calculated as the difference between each individual's age as of the valuation date rounded to the nearest whole year minus the age for which their deferral ends, multiplied by their monthly benefit amount. Based on expected lifetimes, the maximum assumed age for receiving benefits is 87. Based upon current mortality tables, an individual who starts receiving a benefit at age 62 is expected to continue receiving until age 87.2, while an individual who starts receiving a benefit at age 60 is expected to continue receiving until age 87.0.

The Accrued Liability is equal to the Present Value of Future Benefits for both current survivors and active members, less the Present Value of Future Normal Costs.

The total required monthly premium is the sum of the individual Normal Costs divided by the number of member months. The required employer monthly premium is the total required monthly premium less the \$2.00 per month member contributions as required by State Statute Section 21581. Existing excess assets in the pool will be amortized and directly used to offset required employer contributions. However, if the total required monthly premium after amortization of excess assets exceeds \$4.00, the member and the employer shall evenly share the required monthly premium. Excess assets for the Public Agency Indexed Level are amortized over a 30-year period. The employer contribution for the Indexed Level is \$3.00 per covered member, per month.

Appendix A - Actuarial Methods and Assumptions

Models

The valuation results are based on proprietary actuarial valuation models. The models are centralized and maintained by a specialized team to achieve a high degree of accuracy and consistency. The Actuarial Office is responsible for confirming the appropriateness of the inputs (such as participant data, actuarial methods and assumptions, and plan provisions) as well as performing tests and validating the reasonableness of the output. The results of our models are independently confirmed by parallel valuations performed by outside actuaries on a periodic basis using their models. In our professional judgment, our actuarial valuation models produce comprehensive funding information consistent with the purposes of the valuation and have no material limitations or known weaknesses.

Asset Valuation Method

Commencing with the June 30, 2013 valuation, assets were and continue to be valued on a Market Value basis.

Method for Projecting Active Counts

The projected counts this year assume a stable population. Projected counts are necessary to determine employer premiums.

Actuarial Assumptions

In 2021, CalPERS completed its most recent asset liability management study incorporating actuarial assumptions and strategic asset allocation. In November 2021, the board adopted changes to the asset allocation that increased the expected volatility of returns. The adopted asset allocation was expected to have a long-term blended return that continued to support a discount rate assumption of 6.80%. The board also approved several changes to the demographic assumptions that more closely aligned with actual experience.

For more details and additional rationale for the selection of the actuarial assumptions, please refer to the [2021 CalPERS Experience Study and Review of Actuarial Assumptions](#) that can be found on the CalPERS website under: Forms and Publications. Click on "View All" and search for Experience Study.

All actuarial assumptions represent an estimate of future experience rather than observations of the estimates inherent in market data.

Economic Assumptions

The prescribed discount rate assumption, adopted by the board on November 17, 2021, is 6.80% compounded annually (net of investment and administrative expenses) as of June 30, 2024. The discount rate is based on the long-term expected rate of return on assets using a building-block method in which expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. The current assumption, originally based on capital market assumptions developed by the Investment Office in 2021, has been reviewed for this valuation based on capital market assumptions developed by the Investment Office in 2023.

Appendix A - Actuarial Methods and Assumptions

Demographic Assumptions:

The mortality assumptions are based on mortality rates resulting from the most recent CalPERS Experience Study adopted by the CalPERS Board in November 2021. For purposes of the mortality rates, the rates incorporate generational mortality to capture on-going mortality improvement. Generational mortality explicitly assumes that members born more recently will live longer than the members born before them thereby capturing the mortality improvement seen in the past and expected continued improvement.

Sample mortality rates for those who are receiving are shown in the following table:

Age	Healthy Recipients	
	Male	Female
35	0.00058	0.00029
40	0.00075	0.00039
45	0.00093	0.00054
50	0.00267	0.00199
55	0.00390	0.00325
60	0.00578	0.00455
65	0.00857	0.00612
70	0.01333	0.00996
75	0.02391	0.01783
80	0.04371	0.03403
85	0.08274	0.06166
90	0.14539	0.11086
95	0.24665	0.20364
100	0.36198	0.31582
105	0.52229	0.44679
110	1.00000	1.00000

The post-retirement mortality rates above are for 2017 and are projected generationally for future years using 80% of the Society of Actuaries' Scale MP-2020.

Appendix A - Actuarial Methods and Assumptions

Indexed Level Claims Assumptions

The Public Agency Indexed Level pool's Accrued Liability and Entry Age Normal Cost for active members are calculated based on the actuarial assumptions for the plan that the members are currently in. For instance, if a member is currently working for an employer that provides a pension in a Miscellaneous 2% @ 55 plan, then the corresponding assumptions from the Miscellaneous 2% @ 55 plan would be used. Likewise, if the member is working in a Safety Police 2.7% @ 57 plan, then all the assumptions from the 2.7% @ 57 would be used. This is done to reflect the trends in the retirement based on the retirement formula and member category that an individual is working in.

The actuarial assumptions for each of these plans are as follows:

Eligible Survivor Status

For active members of both the Miscellaneous and Safety plans, the probability of having eligible survivor(s) at the date of death is assumed according to the following table:

Age at Death	Percent Having Eligible Survivor(s)
Age 20 and Under	30%
Between Ages 21 and 24	50%
Between Ages 25 and 29	70%
Between Ages 30 and 39	90%
Between Ages 40 and 49	95%
Between Ages 50 and 54	90%
Age 55 and Above	85%

Average claims are developed at every age using actual experience from the program. These average claims are then multiplied by the percentages in the above table. The results are used to estimate expected claims in the active population.

Benefit amounts and Present Value of Benefits were based on average claim experience. A sample of the average claim experience is shown in the table below:

Age at Death	Present Value of Average Claim ¹ at the Time of Death ²
Age 20 and Under	\$32,678
25	103,399
30	142,995
35	137,085
40	129,348
45	110,975
50	89,081
55	72,757
60	66,207
65	64,047
70	64,371
75	63,803
Age 80 and Above	57,493

(1) Average claims were calculated using actual experience from the 1959 Survivor program and smoothed using a polynomial regression model.

(2) Values are based on an initial benefit of \$500/\$1,000/\$1,500 for one, two, or three survivors, respectively. This was the benefit level on June 30, 2000, when the Indexed Level first became effective. The valuation program increases these amounts by 2% per year up to the current valuation year.

Appendix A - Actuarial Methods and Assumptions

Additional Actuarial Assumptions Applicable to the PA Indexed Level

Pre-Retirement Mortality

See sample rates in the table below. The non-industrial death rates are used for all plans. The industrial death rates are used for Safety plans (except for Local Prosecutor Safety members where the corresponding Miscellaneous plan does not have the Industrial Death Benefit).

Non-Industrial (Not Job-Related) and Industrial (Job-Related) Death

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

Age	Pre-Retirement Mortality					
	Miscellaneous		Safety			
	Non-Industrial Death		Non-Industrial Death		Industrial Death	
	Male	Female	Male	Female	Male	Female
20	0.00039	0.00014	0.00038	0.00014	0.00004	0.00002
25	0.00033	0.00013	0.00034	0.00018	0.00004	0.00002
30	0.00044	0.00019	0.00042	0.00025	0.00005	0.00003
35	0.00058	0.00029	0.00048	0.00034	0.00005	0.00004
40	0.00075	0.00039	0.00055	0.00042	0.00006	0.00005
45	0.00093	0.00054	0.00066	0.00053	0.00007	0.00006
50	0.00134	0.00081	0.00092	0.00073	0.00010	0.00008
55	0.00198	0.00123	0.00138	0.00106	0.00015	0.00012
60	0.00287	0.00179	0.00221	0.00151	0.00025	0.00017

The pre-retirement mortality rates above are for 2017 and are projected generationally for future years using 80% of the Society of Actuaries' Scale MP-2020.

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.

Termination with Refund

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

Duration of Service	Public Agency Miscellaneous											
	Entry Age 20		Entry Age 25		Entry Age 30		Entry Age 35		Entry Age 40		Entry Age 45	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
0	0.1851	0.1944	0.1769	0.1899	0.1631	0.1824	0.1493	0.1749	0.1490	0.1731	0.1487	0.1713
1	0.1531	0.1673	0.1432	0.1602	0.1266	0.1484	0.1101	0.1366	0.1069	0.1323	0.1037	0.1280
2	0.1218	0.1381	0.1125	0.1307	0.0970	0.1183	0.0815	0.1058	0.0771	0.0998	0.0726	0.0938
3	0.0927	0.1085	0.0852	0.1020	0.0727	0.0912	0.0601	0.0804	0.0556	0.0737	0.0511	0.0669
4	0.0672	0.0801	0.0616	0.0752	0.0524	0.0670	0.0431	0.0587	0.0392	0.0523	0.0352	0.0459
5	0.0463	0.0551	0.0423	0.0517	0.0358	0.0461	0.0292	0.0404	0.0261	0.0350	0.0230	0.0296
10	0.0112	0.0140	0.0101	0.0129	0.0083	0.0112	0.0064	0.0094	0.0048	0.0071	0.0033	0.0049
15	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
20	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
25	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
30	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
35	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Appendix A - Actuarial Methods and Assumptions

Additional Actuarial Assumptions Applicable to the PA Indexed Level (continued)

Termination with Refund (continued)

Duration of Service	Public Agency Safety					
	Fire		Police		County Peace Officer	
	Male	Female	Male	Female	Male	Female
0	0.1022	0.1317	0.1298	0.1389	0.1086	0.1284
1	0.0686	0.1007	0.0789	0.0904	0.0777	0.0998
2	0.0441	0.0743	0.0464	0.0566	0.0549	0.0759
3	0.0272	0.0524	0.0274	0.0343	0.0385	0.0562
4	0.0161	0.0349	0.0170	0.0206	0.0268	0.0402
5	0.0092	0.0214	0.0113	0.0128	0.0186	0.0276
10	0.0015	0.0000	0.0032	0.0047	0.0046	0.0038
15	0.0000	0.0000	0.0000	0.0000	0.0023	0.0036
20	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
25	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
30	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
35	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

The Police termination and refund rates are also 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 the tables below.

Duration of Service	Public Agency Miscellaneous									
	Entry Age 20		Entry Age 25		Entry Age 30		Entry Age 35		Entry Age 40	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
5	0.0381	0.0524	0.0381	0.0524	0.0358	0.0464	0.0334	0.0405	0.0301	0.0380
10	0.0265	0.0362	0.0265	0.0362	0.0254	0.0334	0.0244	0.0307	0.0197	0.0236
15	0.0180	0.0252	0.0180	0.0252	0.0166	0.0213	0.0152	0.0174	0.0119	0.0132
20	0.0141	0.0175	0.0141	0.0175	0.0110	0.0131	0.0079	0.0087	0.0000	0.0000
25	0.0084	0.0108	0.0084	0.0108	0.0064	0.0076	0.0000	0.0000	0.0000	0.0000
30	0.0047	0.0056	0.0047	0.0056	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
35	0.0038	0.0041	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

The Miscellaneous termination with vested benefits rates are also used for Local Prosecutors.

Duration of Service	Public Agency Safety					
	Fire		Police		County Peace Officer	
	Male	Female	Male	Female	Male	Female
5	0.0089	0.0224	0.0156	0.0272	0.0177	0.0266
10	0.0066	0.0164	0.0113	0.0198	0.0126	0.0189
15	0.0048	0.0120	0.0083	0.0144	0.0089	0.0134
20	0.0035	0.0088	0.0060	0.0105	0.0063	0.0095
25	0.0024	0.0061	0.0042	0.0073	0.0042	0.0063
30	0.0012	0.0031	0.0021	0.0037	0.0021	0.0031
35	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

The Police termination with vested benefits rates are also used for Public Agency Local Prosecutors, Other Safety, Local Sheriff, and School Police.

Appendix A - Actuarial Methods and Assumptions

Additional Actuarial Assumptions Applicable to the PA Indexed Level (continued)

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

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

Age	Public Agency Miscellaneous	
	Non-Industrial Disability	
	Male	Female
20	0.0001	0.0000
25	0.0001	0.0001
30	0.0002	0.0003
35	0.0004	0.0007
40	0.0009	0.0012
45	0.0015	0.0019
50	0.0015	0.0019
55	0.0014	0.0013
60	0.0012	0.0009

The Miscellaneous non-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.

Age	Public Agency Safety					
	Non-Industrial Disability			Industrial Disability		
	Fire	Police	County Peace Officer	Fire	Police	County Peace Officer
20	0.0001	0.0001	0.0001	0.0001	0.0000	0.0004
25	0.0001	0.0001	0.0001	0.0002	0.0017	0.0013
30	0.0001	0.0001	0.0001	0.0006	0.0048	0.0025
35	0.0001	0.0002	0.0003	0.0012	0.0079	0.0037
40	0.0001	0.0002	0.0006	0.0023	0.0110	0.0051
45	0.0002	0.0003	0.0011	0.0040	0.0141	0.0067
50	0.0004	0.0005	0.0016	0.0208	0.0185	0.0092
55	0.0006	0.0007	0.0009	0.0307	0.0479	0.0151
60	0.0006	0.0011	0.0005	0.0438	0.0602	0.0174

The Police non-industrial disability rates are also used for Other Safety, Local Sheriff, and School Police. The Police industrial disability rates are used for Local Sheriff and Other Safety. 50% of the Police industrial disability rates are used for School Police. 1% of the Police industrial disability rates are used for Local Prosecutors.

Appendix A - Actuarial Methods and Assumptions

Additional Actuarial Assumptions Applicable to the PA Indexed Level (continued)

Service Retirement

Rates vary by age, service, and formula, except for the Safety Half Pay at 55 and 2% at 55 formulas, where retirement rates vary by age only. See sample rates in the tables below.

Age	Public Agency Miscellaneous 1.5% @ 65					
	Duration of Service					
	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.008	0.011	0.013	0.015	0.017	0.019
51	0.007	0.010	0.012	0.013	0.015	0.017
52	0.010	0.014	0.017	0.019	0.021	0.024
53	0.008	0.012	0.015	0.017	0.019	0.022
54	0.012	0.016	0.019	0.022	0.025	0.028
55	0.018	0.025	0.031	0.035	0.038	0.043
56	0.015	0.021	0.025	0.029	0.032	0.036
57	0.020	0.028	0.033	0.038	0.043	0.048
58	0.024	0.033	0.040	0.046	0.052	0.058
59	0.028	0.039	0.048	0.054	0.060	0.067
60	0.049	0.069	0.083	0.094	0.105	0.118
61	0.062	0.087	0.106	0.120	0.133	0.150
62	0.104	0.146	0.177	0.200	0.223	0.251
63	0.099	0.139	0.169	0.191	0.213	0.239
64	0.097	0.136	0.165	0.186	0.209	0.233
65	0.140	0.197	0.240	0.271	0.302	0.339
66	0.092	0.130	0.157	0.177	0.198	0.222
67	0.129	0.181	0.220	0.249	0.277	0.311
68	0.092	0.129	0.156	0.177	0.197	0.221
69	0.092	0.130	0.158	0.178	0.199	0.224
70	0.103	0.144	0.175	0.198	0.221	0.248

Age	Public Agency Miscellaneous 2% @ 60					
	Duration of Service					
	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.010	0.011	0.014	0.014	0.017	0.017
51	0.017	0.013	0.014	0.010	0.010	0.010
52	0.014	0.014	0.018	0.015	0.016	0.016
53	0.015	0.012	0.013	0.010	0.011	0.011
54	0.006	0.010	0.017	0.016	0.018	0.018
55	0.012	0.016	0.024	0.032	0.036	0.036
56	0.010	0.014	0.023	0.030	0.034	0.034
57	0.006	0.018	0.030	0.040	0.044	0.044
58	0.022	0.023	0.033	0.042	0.046	0.046
59	0.039	0.033	0.040	0.047	0.050	0.050
60	0.063	0.069	0.074	0.090	0.137	0.116
61	0.044	0.058	0.066	0.083	0.131	0.113
62	0.084	0.107	0.121	0.153	0.238	0.205
63	0.173	0.166	0.165	0.191	0.283	0.235
64	0.120	0.145	0.164	0.147	0.160	0.172
65	0.138	0.160	0.214	0.216	0.237	0.283
66	0.198	0.228	0.249	0.216	0.228	0.239
67	0.207	0.242	0.230	0.233	0.233	0.233
68	0.201	0.234	0.225	0.231	0.231	0.231
69	0.152	0.173	0.164	0.166	0.166	0.166
70	0.200	0.200	0.200	0.200	0.200	0.200

Appendix A - Actuarial Methods and Assumptions

Additional Actuarial Assumptions Applicable to the PA Indexed Level (continued)

Service Retirement (continued)

Age	Public Agency Miscellaneous 2% @ 55					
	Duration of Service					
	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.014	0.014	0.017	0.021	0.023	0.024
51	0.013	0.017	0.017	0.018	0.018	0.019
52	0.013	0.018	0.018	0.020	0.020	0.021
53	0.013	0.019	0.021	0.024	0.025	0.026
54	0.017	0.025	0.028	0.032	0.033	0.035
55	0.045	0.042	0.053	0.086	0.098	0.123
56	0.018	0.036	0.056	0.086	0.102	0.119
57	0.041	0.046	0.056	0.076	0.094	0.120
58	0.052	0.044	0.048	0.074	0.106	0.123
59	0.043	0.058	0.073	0.092	0.105	0.126
60	0.059	0.064	0.083	0.115	0.154	0.170
61	0.087	0.074	0.087	0.107	0.147	0.168
62	0.115	0.123	0.151	0.180	0.227	0.237
63	0.116	0.127	0.164	0.202	0.252	0.261
64	0.084	0.138	0.153	0.190	0.227	0.228
65	0.167	0.187	0.210	0.262	0.288	0.291
66	0.187	0.258	0.280	0.308	0.318	0.319
67	0.195	0.235	0.244	0.277	0.269	0.280
68	0.228	0.248	0.250	0.241	0.245	0.245
69	0.188	0.201	0.209	0.219	0.231	0.231
70	0.229	0.229	0.229	0.229	0.229	0.229

Age	Public Agency Miscellaneous 2.5% @ 55					
	Duration of Service					
	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.014	0.017	0.027	0.035	0.046	0.050
51	0.019	0.021	0.025	0.030	0.038	0.040
52	0.018	0.020	0.026	0.034	0.038	0.037
53	0.013	0.021	0.031	0.045	0.052	0.053
54	0.025	0.025	0.030	0.046	0.057	0.068
55	0.029	0.042	0.064	0.109	0.150	0.225
56	0.036	0.047	0.068	0.106	0.134	0.194
57	0.051	0.047	0.060	0.092	0.116	0.166
58	0.035	0.046	0.062	0.093	0.119	0.170
59	0.029	0.053	0.072	0.112	0.139	0.165
60	0.039	0.069	0.094	0.157	0.177	0.221
61	0.080	0.077	0.086	0.140	0.167	0.205
62	0.086	0.131	0.149	0.220	0.244	0.284
63	0.135	0.135	0.147	0.214	0.222	0.262
64	0.114	0.128	0.158	0.177	0.233	0.229
65	0.112	0.174	0.222	0.209	0.268	0.273
66	0.235	0.254	0.297	0.289	0.321	0.337
67	0.237	0.240	0.267	0.249	0.267	0.277
68	0.258	0.271	0.275	0.207	0.210	0.212
69	0.117	0.208	0.266	0.219	0.250	0.270
70	0.229	0.229	0.229	0.229	0.229	0.229

Appendix A - Actuarial Methods and Assumptions

Additional Actuarial Assumptions Applicable to the PA Indexed Level (continued)

Service Retirement (continued)

Age	Public Agency Miscellaneous 2.7% @ 55					
	Duration of Service					
	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.011	0.016	0.022	0.033	0.034	0.038
51	0.018	0.019	0.023	0.032	0.031	0.031
52	0.019	0.020	0.026	0.035	0.034	0.037
53	0.020	0.020	0.025	0.043	0.048	0.053
54	0.018	0.030	0.040	0.052	0.053	0.070
55	0.045	0.058	0.082	0.138	0.208	0.278
56	0.057	0.062	0.080	0.121	0.178	0.222
57	0.045	0.052	0.071	0.106	0.147	0.182
58	0.074	0.060	0.074	0.118	0.163	0.182
59	0.058	0.067	0.086	0.123	0.158	0.187
60	0.087	0.084	0.096	0.142	0.165	0.198
61	0.073	0.084	0.101	0.138	0.173	0.218
62	0.130	0.133	0.146	0.187	0.214	0.249
63	0.122	0.140	0.160	0.204	0.209	0.243
64	0.104	0.124	0.154	0.202	0.214	0.230
65	0.182	0.201	0.242	0.264	0.293	0.293
66	0.272	0.249	0.273	0.285	0.312	0.312
67	0.182	0.217	0.254	0.249	0.264	0.264
68	0.223	0.197	0.218	0.242	0.273	0.273
69	0.217	0.217	0.217	0.217	0.217	0.217
70	0.227	0.227	0.227	0.227	0.227	0.227

Age	Public Agency Miscellaneous 3% @ 60					
	Duration of Service					
	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.015	0.020	0.025	0.039	0.040	0.044
51	0.041	0.034	0.032	0.041	0.036	0.037
52	0.024	0.020	0.022	0.039	0.040	0.041
53	0.018	0.024	0.032	0.047	0.048	0.057
54	0.033	0.033	0.035	0.051	0.049	0.052
55	0.137	0.043	0.051	0.065	0.076	0.108
56	0.173	0.038	0.054	0.075	0.085	0.117
57	0.019	0.035	0.059	0.088	0.111	0.134
58	0.011	0.040	0.070	0.105	0.133	0.162
59	0.194	0.056	0.064	0.081	0.113	0.163
60	0.081	0.085	0.133	0.215	0.280	0.333
61	0.080	0.090	0.134	0.170	0.223	0.292
62	0.137	0.153	0.201	0.250	0.278	0.288
63	0.128	0.140	0.183	0.227	0.251	0.260
64	0.174	0.147	0.173	0.224	0.239	0.264
65	0.152	0.201	0.262	0.299	0.323	0.323
66	0.272	0.273	0.317	0.355	0.380	0.380
67	0.218	0.237	0.268	0.274	0.284	0.284
68	0.200	0.228	0.269	0.285	0.299	0.299
69	0.250	0.250	0.250	0.250	0.250	0.250
70	0.245	0.245	0.245	0.245	0.245	0.245

Appendix A - Actuarial Methods and Assumptions

Additional Actuarial Assumptions Applicable to the PA Indexed Level (continued)

Service Retirement (continued)

Age	Public Agency Miscellaneous 2% @ 62					
	Duration of Service					
	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.000	0.000	0.000	0.000	0.000	0.000
51	0.000	0.000	0.000	0.000	0.000	0.000
52	0.005	0.008	0.012	0.015	0.019	0.031
53	0.007	0.011	0.014	0.018	0.021	0.032
54	0.007	0.011	0.015	0.019	0.023	0.034
55	0.010	0.019	0.028	0.036	0.061	0.096
56	0.014	0.026	0.038	0.050	0.075	0.108
57	0.018	0.029	0.039	0.050	0.074	0.107
58	0.023	0.035	0.048	0.060	0.073	0.099
59	0.025	0.038	0.051	0.065	0.092	0.128
60	0.031	0.051	0.071	0.091	0.111	0.138
61	0.038	0.058	0.079	0.100	0.121	0.167
62	0.044	0.074	0.104	0.134	0.164	0.214
63	0.077	0.105	0.134	0.163	0.192	0.237
64	0.072	0.101	0.129	0.158	0.187	0.242
65	0.108	0.141	0.173	0.206	0.239	0.300
66	0.132	0.172	0.212	0.252	0.292	0.366
67	0.132	0.172	0.212	0.252	0.292	0.366
68	0.120	0.156	0.193	0.229	0.265	0.333
69	0.120	0.156	0.193	0.229	0.265	0.333
70	0.120	0.156	0.193	0.229	0.265	0.333

Public Agency Police ½ @ 55 and 2% @ 55	
Age	Rate
50	0.026
51	0.000
52	0.016
53	0.027
54	0.010
55	0.167
56	0.069
57	0.051
58	0.072
59	0.070
60	0.300

Public Agency Fire ½ @ 55 and 2% @ 55	
Age	Rate
50	0.016
51	0.000
52	0.034
53	0.020
54	0.041
55	0.075
56	0.111
57	0.000
58	0.095
59	0.044
60	1.000

Appendix A - Actuarial Methods and Assumptions

Additional Actuarial Assumptions Applicable to the PA Indexed Level (continued)

Service Retirement (continued)

Age	Public Agency Police 2% @ 50					
	Duration of Service					
	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.018	0.077	0.056	0.046	0.043	0.046
51	0.022	0.087	0.060	0.048	0.044	0.047
52	0.020	0.102	0.081	0.071	0.069	0.075
53	0.016	0.072	0.053	0.045	0.042	0.046
54	0.006	0.071	0.071	0.069	0.072	0.080
55	0.009	0.040	0.099	0.157	0.186	0.186
56	0.020	0.051	0.108	0.165	0.194	0.194
57	0.036	0.072	0.106	0.139	0.156	0.156
58	0.001	0.046	0.089	0.130	0.152	0.152
59	0.066	0.094	0.119	0.143	0.155	0.155
60	0.177	0.177	0.177	0.177	0.177	0.177
61	0.134	0.134	0.134	0.134	0.134	0.134
62	0.184	0.184	0.184	0.184	0.184	0.184
63	0.250	0.250	0.250	0.250	0.250	0.250
64	0.177	0.177	0.177	0.177	0.177	0.177
65	1.000	1.000	1.000	1.000	1.000	1.000

These rates also apply to County Peace Officers, Local Prosecutors, Local Sheriff, School Police, and Other Safety.

Age	Public Agency Fire 2% @ 50					
	Duration of Service					
	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.054	0.054	0.056	0.080	0.064	0.066
51	0.020	0.020	0.021	0.030	0.024	0.024
52	0.037	0.037	0.038	0.054	0.043	0.045
53	0.051	0.051	0.053	0.076	0.061	0.063
54	0.082	0.082	0.085	0.121	0.097	0.100
55	0.139	0.139	0.139	0.139	0.139	0.139
56	0.129	0.129	0.129	0.129	0.129	0.129
57	0.085	0.085	0.085	0.085	0.085	0.085
58	0.119	0.119	0.119	0.119	0.119	0.119
59	0.167	0.167	0.167	0.167	0.167	0.167
60	0.152	0.152	0.152	0.152	0.152	0.152
61	0.179	0.179	0.179	0.179	0.179	0.179
62	0.179	0.179	0.179	0.179	0.179	0.179
63	0.179	0.179	0.179	0.179	0.179	0.179
64	0.179	0.179	0.179	0.179	0.179	0.179
65	1.000	1.000	1.000	1.000	1.000	1.000

Appendix A - Actuarial Methods and Assumptions

Additional Actuarial Assumptions Applicable to the PA Indexed Level (continued)

Service Retirement (continued)

Age	Public Agency Police 3% @ 55					
	Duration of Service					
	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.019	0.053	0.045	0.054	0.057	0.061
51	0.002	0.017	0.028	0.044	0.053	0.060
52	0.002	0.031	0.037	0.051	0.059	0.066
53	0.026	0.049	0.049	0.080	0.099	0.114
54	0.019	0.034	0.047	0.091	0.121	0.142
55	0.006	0.115	0.141	0.199	0.231	0.259
56	0.017	0.188	0.121	0.173	0.199	0.199
57	0.008	0.137	0.093	0.136	0.157	0.157
58	0.017	0.126	0.105	0.164	0.194	0.194
59	0.026	0.146	0.110	0.167	0.195	0.195
60	0.155	0.155	0.155	0.155	0.155	0.155
61	0.210	0.210	0.210	0.210	0.210	0.210
62	0.262	0.262	0.262	0.262	0.262	0.262
63	0.172	0.172	0.172	0.172	0.172	0.172
64	0.227	0.227	0.227	0.227	0.227	0.227
65	1.000	1.000	1.000	1.000	1.000	1.000

These rates also apply to County Peace Officers, Local Prosecutors, Local Sheriff, School Police, and Other Safety.

Age	Public Agency Fire 3% @ 55					
	Duration of Service					
	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.003	0.006	0.013	0.019	0.025	0.028
51	0.004	0.008	0.017	0.026	0.034	0.038
52	0.005	0.011	0.022	0.033	0.044	0.049
53	0.005	0.034	0.024	0.038	0.069	0.138
54	0.007	0.047	0.032	0.051	0.094	0.187
55	0.010	0.067	0.046	0.073	0.134	0.266
56	0.010	0.063	0.044	0.069	0.127	0.253
57	0.135	0.100	0.148	0.196	0.220	0.220
58	0.083	0.062	0.091	0.120	0.135	0.135
59	0.137	0.053	0.084	0.146	0.177	0.177
60	0.162	0.063	0.099	0.172	0.208	0.208
61	0.598	0.231	0.231	0.231	0.231	0.231
62	0.621	0.240	0.240	0.240	0.240	0.240
63	0.236	0.236	0.236	0.236	0.236	0.236
64	0.236	0.236	0.236	0.236	0.236	0.236
65	1.000	1.000	1.000	1.000	1.000	1.000

Appendix A - Actuarial Methods and Assumptions

Additional Actuarial Assumptions Applicable to the PA Indexed Level (continued)

Service Retirement (continued)

Age	Public Agency Police 3% @ 50					
	Duration of Service					
	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.124	0.103	0.113	0.143	0.244	0.376
51	0.060	0.081	0.087	0.125	0.207	0.294
52	0.016	0.055	0.111	0.148	0.192	0.235
53	0.072	0.074	0.098	0.142	0.189	0.237
54	0.018	0.049	0.105	0.123	0.187	0.271
55	0.069	0.074	0.081	0.113	0.209	0.305
56	0.064	0.108	0.113	0.125	0.190	0.288
57	0.056	0.109	0.160	0.182	0.210	0.210
58	0.108	0.129	0.173	0.189	0.214	0.214
59	0.093	0.144	0.204	0.229	0.262	0.262
60	0.343	0.180	0.159	0.188	0.247	0.247
61	0.221	0.221	0.221	0.221	0.221	0.221
62	0.213	0.213	0.213	0.213	0.213	0.213
63	0.233	0.233	0.233	0.233	0.233	0.233
64	0.234	0.234	0.234	0.234	0.234	0.234
65	1.000	1.000	1.000	1.000	1.000	1.000

These rates also apply to County Peace Officers, Local Prosecutors, Local Sheriff, School Police, and Other Safety.

Age	Public Agency Fire 3% @ 50					
	Duration of Service					
	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.095	0.048	0.053	0.093	0.134	0.175
51	0.016	0.032	0.053	0.085	0.117	0.149
52	0.013	0.032	0.054	0.087	0.120	0.154
53	0.085	0.044	0.049	0.089	0.129	0.170
54	0.038	0.065	0.074	0.105	0.136	0.167
55	0.042	0.043	0.049	0.085	0.132	0.215
56	0.133	0.103	0.075	0.113	0.151	0.209
57	0.062	0.048	0.060	0.124	0.172	0.213
58	0.124	0.097	0.092	0.153	0.194	0.227
59	0.092	0.071	0.078	0.144	0.192	0.233
60	0.056	0.044	0.061	0.131	0.186	0.233
61	0.282	0.219	0.158	0.198	0.233	0.260
62	0.292	0.227	0.164	0.205	0.241	0.269
63	0.196	0.196	0.196	0.196	0.196	0.196
64	0.197	0.197	0.197	0.197	0.197	0.197
65	1.000	1.000	1.000	1.000	1.000	1.000

Appendix A - Actuarial Methods and Assumptions

Additional Actuarial Assumptions Applicable to the PA Indexed Level (continued)

Service Retirement (continued)

Age	Public Agency Police 2% @ 57					
	Duration of Service					
	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.040	0.040	0.040	0.040	0.040	0.080
51	0.028	0.028	0.028	0.028	0.040	0.066
52	0.028	0.028	0.028	0.028	0.043	0.061
53	0.028	0.028	0.028	0.028	0.057	0.086
54	0.028	0.028	0.028	0.032	0.069	0.110
55	0.050	0.050	0.050	0.067	0.099	0.179
56	0.046	0.046	0.046	0.062	0.090	0.160
57	0.054	0.054	0.054	0.072	0.106	0.191
58	0.060	0.060	0.060	0.066	0.103	0.171
59	0.060	0.060	0.060	0.069	0.105	0.171
60	0.113	0.113	0.113	0.113	0.113	0.171
61	0.108	0.108	0.108	0.108	0.108	0.128
62	0.113	0.113	0.113	0.113	0.113	0.159
63	0.113	0.113	0.113	0.113	0.113	0.159
64	0.113	0.113	0.113	0.113	0.113	0.239
65	1.000	1.000	1.000	1.000	1.000	1.000

These rates also apply to County Peace Officers, Local Prosecutors, Local Sheriff, School Police, and Other Safety.

Age	Public Agency Fire 2% @ 57					
	Duration of Service					
	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.005	0.005	0.005	0.005	0.008	0.012
51	0.006	0.006	0.006	0.006	0.009	0.013
52	0.012	0.012	0.012	0.012	0.019	0.028
53	0.033	0.033	0.033	0.033	0.050	0.075
54	0.045	0.045	0.045	0.045	0.069	0.103
55	0.061	0.061	0.061	0.061	0.094	0.140
56	0.055	0.055	0.055	0.055	0.084	0.126
57	0.081	0.081	0.081	0.081	0.125	0.187
58	0.059	0.059	0.059	0.059	0.091	0.137
59	0.055	0.055	0.055	0.055	0.084	0.126
60	0.085	0.085	0.085	0.085	0.131	0.196
61	0.085	0.085	0.085	0.085	0.131	0.196
62	0.085	0.085	0.085	0.085	0.131	0.196
63	0.085	0.085	0.085	0.085	0.131	0.196
64	0.085	0.085	0.085	0.085	0.131	0.196
65	1.000	1.000	1.000	1.000	1.000	1.000

Appendix A - Actuarial Methods and Assumptions

Additional Actuarial Assumptions Applicable to the PA Indexed Level (continued)

Service Retirement (continued)

Age	Public Agency Police 2.5% @ 57					
	Duration of Service					
	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.050	0.050	0.050	0.050	0.050	0.100
51	0.038	0.038	0.038	0.038	0.055	0.089
52	0.038	0.038	0.038	0.038	0.058	0.082
53	0.036	0.036	0.036	0.036	0.073	0.111
54	0.036	0.036	0.036	0.041	0.088	0.142
55	0.061	0.061	0.061	0.082	0.120	0.217
56	0.056	0.056	0.056	0.075	0.110	0.194
57	0.060	0.060	0.060	0.080	0.118	0.213
58	0.072	0.072	0.072	0.079	0.124	0.205
59	0.072	0.072	0.072	0.083	0.126	0.205
60	0.135	0.135	0.135	0.135	0.135	0.205
61	0.130	0.130	0.130	0.130	0.130	0.153
62	0.135	0.135	0.135	0.135	0.135	0.191
63	0.135	0.135	0.135	0.135	0.135	0.191
64	0.135	0.135	0.135	0.135	0.135	0.287
65	1.000	1.000	1.000	1.000	1.000	1.000

These rates also apply to County Peace Officers, Local Prosecutors, Local Sheriff, School Police, and Other Safety.

Age	Public Agency Fire 2.5% @ 57					
	Duration of Service					
	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.007	0.007	0.007	0.007	0.010	0.015
51	0.008	0.008	0.008	0.008	0.012	0.018
52	0.016	0.016	0.016	0.016	0.025	0.038
53	0.042	0.042	0.042	0.042	0.064	0.096
54	0.057	0.057	0.057	0.057	0.088	0.132
55	0.074	0.074	0.074	0.074	0.114	0.170
56	0.066	0.066	0.066	0.066	0.102	0.153
57	0.090	0.090	0.090	0.090	0.139	0.208
58	0.071	0.071	0.071	0.071	0.110	0.164
59	0.066	0.066	0.066	0.066	0.101	0.151
60	0.102	0.102	0.102	0.102	0.157	0.235
61	0.102	0.102	0.102	0.102	0.157	0.236
62	0.102	0.102	0.102	0.102	0.157	0.236
63	0.102	0.102	0.102	0.102	0.157	0.236
64	0.102	0.102	0.102	0.102	0.157	0.236
65	1.000	1.000	1.000	1.000	1.000	1.000

Appendix A - Actuarial Methods and Assumptions

Additional Actuarial Assumptions Applicable to the PA Indexed Level (continued)

Service Retirement (continued)

Age	Public Agency Police 2.7% @ 57					
	Duration of Service					
	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.050	0.050	0.050	0.050	0.050	0.100
51	0.040	0.040	0.040	0.040	0.058	0.094
52	0.038	0.038	0.038	0.038	0.058	0.083
53	0.038	0.038	0.038	0.038	0.077	0.117
54	0.038	0.038	0.038	0.044	0.093	0.150
55	0.068	0.068	0.068	0.091	0.134	0.242
56	0.063	0.063	0.063	0.084	0.123	0.217
57	0.060	0.060	0.060	0.080	0.118	0.213
58	0.080	0.080	0.080	0.088	0.138	0.228
59	0.080	0.080	0.080	0.092	0.140	0.228
60	0.150	0.150	0.150	0.150	0.150	0.228
61	0.144	0.144	0.144	0.144	0.144	0.170
62	0.150	0.150	0.150	0.150	0.150	0.213
63	0.150	0.150	0.150	0.150	0.150	0.213
64	0.150	0.150	0.150	0.150	0.150	0.319
65	1.000	1.000	1.000	1.000	1.000	1.000

These rates also apply to County Peace Officers, Local Prosecutors, Local Sheriff, School Police, and Other Safety.

Age	Public Agency Fire 2.7% @ 57					
	Duration of Service					
	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.007	0.007	0.007	0.007	0.010	0.015
51	0.008	0.008	0.008	0.008	0.013	0.019
52	0.016	0.016	0.016	0.016	0.025	0.038
53	0.044	0.044	0.044	0.044	0.068	0.102
54	0.061	0.061	0.061	0.061	0.093	0.140
55	0.083	0.083	0.083	0.083	0.127	0.190
56	0.074	0.074	0.074	0.074	0.114	0.171
57	0.090	0.090	0.090	0.090	0.139	0.208
58	0.079	0.079	0.079	0.079	0.122	0.182
59	0.073	0.073	0.073	0.073	0.112	0.168
60	0.114	0.114	0.114	0.114	0.175	0.262
61	0.114	0.114	0.114	0.114	0.175	0.262
62	0.114	0.114	0.114	0.114	0.175	0.262
63	0.114	0.114	0.114	0.114	0.175	0.262
64	0.114	0.114	0.114	0.114	0.175	0.262
65	1.000	1.000	1.000	1.000	1.000	1.000

Appendix B – Principal Plan Provisions

The 1959 Survivor program was designed to provide pre-retirement death benefits comparable to those provided by Social Security, formally the Federal Old Age and Survivor Insurance (OASI) program, to CalPERS' members not covered by Social Security.

Eligibility

The benefit is available only to those members not covered by Social Security OASI benefits. For public agencies, this benefit is provided by contract with CalPERS. Only those public agencies that contract for the 1st, 2nd, 3rd, 4th, or Indexed Levels of the program are eligible for the benefits valued in this report. The Public Agency 1st and 2nd Levels have been closed since January 1, 1994 and the 3rd Level has been closed since July 1, 2001. For State and Schools members, the 5th Level benefit is provided by State statute to certain groups of employees. Members who are eligible for the benefit are given a one-time option to join at the time of the 1959 Survivor contract. Members hired subsequent to the time of contract are automatically enrolled in the program.

Spousal or Domestic Partner Benefit

The benefit is a monthly payment to eligible surviving spouses or domestic partners age 62 or older for the Public Agency 1st, 2nd, and 3rd Levels and age 60 or older for all other Levels. The benefit is also payable under these deferred ages for spouses or partners that have care of children under the age of 22. As an example, assume an agency contracts for the 3rd Level benefit and an active member dies and leaves behind a 35-year-old spouse and 2 children, ages 5 and 15. The following table describes how the benefit would be paid over the course of time.

Event	Monthly Benefit Paid
Member Death	\$840
1 st Child Turns 22	\$700
2 nd Child Turns 22 ¹	\$0
Spouse Turns 62 ²	\$350

(1) At this time, the spouse would be 52 years old and would not receive any benefit until age 62.

(2) Spouse would continue to receive this benefit until his/her death.

Child Benefit

Children are eligible if they are not married or in a registered domestic partnership and are under the age of 22 whether or not a spouse or domestic partner exists. For 3 or more children, the 3-survivor benefit is paid; for 2 children, the 2-survivor benefit is paid and so forth (see tables below). In all cases, unless a child is disabled, the benefit stops at age 22. If a child is disabled, the benefit is paid until the disability ceases.

Parental Benefits

If there is no eligible spouse or domestic partner or children, parent(s) dependent for at least half of their support from the deceased member may be eligible for benefits. The parent(s) must be over age 62 for the Public Agency 1st, 2nd, and 3rd Levels and over age 60 for all other Levels.

Appendix B - Principal Plan Provisions

Monthly Benefit Amounts

The monthly benefit amount depends upon the coverage Level within the program.

1st, 2nd, and 3rd Levels (For Members of Public Agencies who Contract)

	1 st Level	2 nd Level	3 rd Level
Spouse or Domestic Partner with Two or More Eligible Children; or Three or More Eligible Children	\$430	\$538	\$840
Spouse or Domestic Partner with One Eligible Child; or Two Eligible Children Only	360	450	700
Spouse or Domestic Partner Age 62 or Older; or One Eligible Child Only; or Eligible Dependent parents	180	225	350

4th Level and Indexed Level (For Members of Public Agencies who Contract) and 5th Level (State and Schools Members)

	4 th Level	Indexed Level	State and Schools 5 th Level
Spouse or Domestic Partner with Two or More Eligible Children; or Three or More Eligible Children	\$2,280	\$2,461 ¹	\$1,800
Spouse or Domestic Partner with One Eligible Child; or Two Eligible Children Only	1,900	1,641 ¹	1,500
Spouse or Domestic Partner Age 60 or Older; or One Eligible Child Only; or Eligible Dependent parents	950	820 ¹	750

(1) These figures indicate calendar year benefit amounts for the Indexed Level in effect for calendar year 2025. Benefit amounts will increase by 2% each January 1.

Comparison of Social Security and CalPERS 1959 Survivor Benefits

The following tables compare current Social Security survivor benefits with current benefit levels paid under the 1959 Survivor Program.

Social Security

Survivor Group	Low	Average	High
Three Survivors	\$1,843	\$2,837	\$4,660
Two Survivors	1,842	2,618	3,860
One Survivor	921	1,309	1,930

Unlike the 1959 Survivor Benefit (with the exception of the Indexed Level), Federal Social Security benefits normally receive an automatic cost-of-living adjustment every year. Also, unlike the 1959 Survivor Benefit, Social Security benefits are based on a worker's actual earnings up to the maximum covered. The values shown assume death at age 45 (benefits slightly higher at lower ages, lower at higher ages), and steady earnings. "Low" is a 2024 salary of \$25,000, "Average" is \$50,000, and "High" is \$90,000.

CalPERS 1959 Survivor Benefit

Survivor Group	1 st Level	2 nd Level	3 rd Level	4 th Level	Indexed Level ¹	State and Schools 5 th Level
Three Survivors	\$430	\$538	\$840	\$2,280	\$2,461	\$1,800
Two Survivors	360	450	700	1,900	1,641	1,500
One Survivor	180	225	350	950	820	750

(1) Amounts effective January 1, 2025

Summary of Plan Changes

Existing public agency employers joining the Public Agency 4th or Indexed Level pools during the 2025-26 fiscal year are required to pay only the Unfunded Liability based on their own membership (amortized over a period of five years) which exists at the time they join plus the agency's normal cost for all members at the new benefit level for the first five years. If they have excess assets, the excess assets will be amortized over five years and used to offset the agency's normal cost for each year.

Appendix C – Demographic and Experience Information

Current and Deferred Survivors – All Levels of the 1959 Survivor Program for Public Agencies, State and Schools

Currently, there are 4,291 cases where liability exists. These cases include surviving spouses or domestic partners in deferred status even though presently there are no benefits being paid. There are 9 possible survivor combinations that can be associated with each case. The combinations presented below are given as of the date of the valuation, for all Levels of the 1959 Survivor program.

Status as of 6/30/2024	Number	Percent
Surviving Spouse or Domestic Partner Deferred	679	15.8%
Surviving Spouse or Domestic Partner Only Receiving	2,623	61.1%
Surviving Spouse or Domestic Partner with One Child	330	7.7%
Surviving Spouse or Domestic Partner with Two or More Children	305	7.1%
One Child	191	4.5%
Two Children	103	2.4%
Three or More Children	23	0.5%
One Parent	29	0.7%
Two Parents	8	0.2%
Totals	4,291	100.0%¹

(1) Percentages may not sum to 100% due to rounding.

Survivor Combinations as of the Member's Date of Death – All Levels of the 1959 Survivor Program for Public Agencies, State and Schools

There exist 8,901 cases of death associated with the 1959 Survivor program since its inception where 1959 Survivor benefits became payable. With this data, a historical account of each combination can be made. Further, probabilities can be approximated with respect to these combinations when a member dies. Below is a list of all combinations on record, numbers and associated percentages as of the time of death, for all Levels of the 1959 Survivor program.

Status as of the Member's Date of Death	Number	Percent
Surviving Spouse or Domestic Partner Deferred	2,469	27.7%
Surviving Spouse or Domestic Partner Only Receiving	1,144	12.9%
Surviving Spouse or Domestic Partner with One Child	1,430	16.1%
Surviving Spouse or Domestic Partner with Two or More Children	2,358	26.5%
One Child	643	7.2%
Two Children	510	5.7%
Three or More Children	288	3.2%
One Parent	48	0.5%
Two Parents	11	0.1%
Totals	8,901	100.0%¹

(1) Percentages may not sum to 100% due to rounding.

Appendix D – 1959 Survivor Deaths Per Year

1959 Survivor Deaths Per Year

Displayed below is a year-by-year account of the number of deaths under the program and the death rate each year for the last 35 years for public agencies, State, and Schools. Deaths given in the exhibit are on a fiscal year basis (changed from a calendar year basis in previous years) and may change from previous valuations due mainly to reclassification of the benefit that ultimately gets paid to the survivor. The historic covered active counts may not match those reported in the prior year’s valuation. This is due to the fact that in some cases there is a time gap between the time of the member’s death and the determination of which type of death benefit that the survivor will receive. In addition, since the basis was changed this year most of the death counts will not match those of the previous year.

Fiscal Year Ending On	Public Agency			State			Schools		
	Deaths	Active Counts	Death Rate	Deaths	Active Counts	Death Rate	Deaths	Active Counts	Death Rate
6/30/2024	98	154,632	0.06%	60	76,176	0.08%	4	11,148	0.04%
6/30/2023	86	148,538	0.06%	61	74,885	0.08%	7	10,815	0.06%
6/30/2022	110	142,364	0.08%	92	75,812	0.12%	9	10,390	0.09%
6/30/2021	115	139,036	0.08%	92	76,995	0.12%	11	10,413	0.11%
6/30/2020	81	141,081	0.06%	72	78,713	0.09%	3	11,219	0.03%
6/30/2019	86	141,374	0.06%	62	78,011	0.08%	9	11,190	0.08%
6/30/2018	74	140,339	0.05%	47	77,362	0.06%	6	10,894	0.06%
6/30/2017	88	141,063	0.06%	51	76,638	0.07%	7	10,557	0.07%
6/30/2016	78	139,581	0.06%	67	75,782	0.09%	4	10,259	0.04%
6/30/2015	75	134,879	0.06%	55	74,372	0.07%	5	10,490	0.05%
6/30/2014	60	132,024	0.05%	56	72,848	0.08%	4	10,287	0.04%
6/30/2013	93	129,796	0.07%	57	71,180	0.08%	4	9,944	0.04%
6/30/2012	106	132,754	0.08%	53	71,759	0.07%	7	10,123	0.07%
6/30/2011	93	134,255	0.07%	55	77,714	0.07%	6	9,811	0.06%
6/30/2010	86	138,470	0.06%	71	79,587	0.09%	5	10,203	0.05%
6/30/2009	98	143,207	0.07%	47	82,434	0.06%	9	10,562	0.09%
6/30/2008	111	144,828	0.08%	56	81,369	0.07%	4	10,550	0.04%
6/30/2007	96	140,012	0.07%	68	76,902	0.09%	6	10,131	0.06%
6/30/2006	94	137,095	0.07%	74	71,742	0.10%	15	9,469	0.16%
6/30/2005	105	133,510	0.08%	61	70,193	0.09%	4	9,402	0.04%
6/30/2004	93	131,633	0.07%	71	64,252	0.11%	5	9,325	0.05%
6/30/2003	81	129,620	0.06%	57	68,791	0.08%	6	9,390	0.06%
6/30/2002	83	129,355	0.06%	51	65,558	0.08%	7	9,195	0.08%
6/30/2001	90	116,161	0.08%	61	64,309	0.09%	5	7,884	0.06%
6/30/2000	83	121,538	0.07%	61	60,349	0.10%	2	8,338	0.02%
6/30/1999	90	118,850	0.08%	55	59,406	0.09%	7	7,444	0.09%
6/30/1998	78	112,389	0.07%	61	55,435	0.11%	3	6,956	0.04%
6/30/1997	74	102,475	0.07%	67	55,084	0.12%	5	6,794	0.07%
6/30/1996	73	100,494	0.07%	51	51,746	0.10%	7	6,726	0.10%
6/30/1995	74	99,235	0.07%	60	47,689	0.13%	9	6,751	0.13%
6/30/1994	68	98,088	0.07%	55	47,323	0.12%	8	6,653	0.12%
6/30/1993	86	97,752	0.09%	42	46,872	0.09%	9	6,776	0.13%
6/30/1992	91	95,840	0.09%	47	48,872	0.10%	5	6,823	0.07%
6/30/1991	100	91,574	0.11%	47	47,708	0.10%	6	7,752	0.08%
6/30/1990	73	86,196	0.08%	63	45,502	0.14%	8	7,942	0.10%

Appendix E – List of Contracting Agencies

Level 1

1. Belmont Fire Protection District, Miscellaneous
2. Central Basin Municipal Water District, Miscellaneous
3. City and County of San Francisco, Safety - County Peace Officer
4. City and County of San Francisco, Safety - Sheriff
5. City of Baldwin Park, Miscellaneous
6. City of Baldwin Park, Safety - Police
7. City of Bishop, Miscellaneous
8. City of Bishop, Safety - Police
9. City of Calexico, Safety - Fire
10. City of Calexico, Safety - Police
11. City of Camarillo, Safety - Fire
12. City of Camarillo, Safety - Police
13. City of Coachella City, Miscellaneous
14. City of Coachella City, Safety - Fire
15. City of Coachella City, Safety - Police
16. City of Compton, Safety - Fire
17. City of Culver City, Miscellaneous
18. City of Dixon, Miscellaneous
19. City of El Segundo, Miscellaneous
20. City of Glendora, Safety - Fire
21. City of Hawthorne, Miscellaneous
22. City of Hawthorne, Safety - Fire
23. City of Hawthorne, Safety - Police
24. City of Hemet, Safety - Police
25. City of Indio, Safety - Fire
26. City of Indio, Safety - Police
27. City of Lynwood, Safety - Police
28. City of Madera, Safety - Fire
29. City of Manhattan Beach, Safety - Police
30. City of Maywood, Safety - Police
31. City of Menlo Park, Miscellaneous
32. City of Palo Alto, Miscellaneous
33. City of Palo Alto, Safety - Fire
34. City of Palo Alto, Safety - Police
35. City of Placentia, Safety - Fire
36. City of Pleasanton, Safety - Police
37. City of Pomona, Miscellaneous
38. City of Pomona, Safety - Fire
39. City of Pomona, Safety - Police
40. City of Redondo Beach, Miscellaneous
41. City of Richmond, Miscellaneous
42. City of Richmond, Safety - Fire
43. City of Richmond, Safety - Police
44. City of Rolling Hills Estates, Miscellaneous
45. City of Salinas, Safety - Fire
46. City of San Fernando, Safety - Fire
47. City of San Mateo, Miscellaneous
48. City of San Pablo, Safety - Fire
49. City of Santa Clara, Miscellaneous
50. City of Santa Monica, Safety - Other Safety
51. City of Santa Paula, Safety - Fire
52. City of Sausalito, Miscellaneous
53. City of Seal Beach, Safety - Fire
54. City of South Lake Tahoe, Safety - Police
55. City of South Pasadena, Miscellaneous
56. City of South Pasadena, Safety - Fire
57. City of South Pasadena, Safety - Police
58. City of South San Francisco, Miscellaneous
59. City of Sunnyvale, Safety - Fire
60. City of Tustin, Safety - Fire
61. City of Union City, Safety - Fire
62. City of Union City, Safety - Police
63. City of Vallejo, Miscellaneous
64. City of Vernon, Safety - Police
65. City of Vista, Safety - Police
66. City of Watsonville, Miscellaneous
67. City of Westminster, Safety - Fire
68. City of Whittier, Safety - Fire
69. County of Glenn, Miscellaneous
70. County of Inyo, Miscellaneous
71. County of Madera, Miscellaneous
72. County of Monterey, Miscellaneous
73. County of Plumas, Safety - Fire
74. County of Santa Clara, Miscellaneous
75. County of Santa Clara, Safety - County Peace Officer
76. County of Santa Clara, Safety - Fire
77. County of Santa Cruz, Safety - Fire

Appendix E – List of Contracting Agencies

Level 1 (continued)

78. County of Siskiyou, Safety - Fire
79. County of Solano, Safety - Fire
80. East Contra Costa Irrigation District, Miscellaneous
81. Fruitridge Fire Protection District, Miscellaneous
82. Fruitridge Fire Protection District, Safety - Fire
83. Lakeside Fire Protection District, Miscellaneous
84. Los Angeles Community College District, Safety - Police
85. Monterey County Water Resources Agency, Miscellaneous
86. Monterey-Salinas Transit District, Miscellaneous
87. Moulton-Niguel Water District, Miscellaneous
88. Northern California Special Districts Insurance Authority,
Miscellaneous
89. Pomona, Calif State Polytechnic University, Associated
Students, Inc., Miscellaneous
90. Riverside County Air Pollution Control District, Miscellaneous
91. Riverside County Flood Control and Water Conservation
District, Miscellaneous
92. Riverside County Regional Park and Open Space District,
Miscellaneous
93. San Luis Obispo Cal Poly Associated Students, Inc.,
Miscellaneous
94. Town of Hillsborough, Miscellaneous
95. Town of Tiburon, Safety - Police
96. Town of Yountville, Miscellaneous

Appendix E – List of Contracting Agencies

Level 2

1. Belmont-San Carlos Fire Department, Miscellaneous
2. Brooktrails Township Community Services District, Miscellaneous
3. California Interscholastic Federation, Southern Section, Miscellaneous
4. California Interscholastic Federation, State Office, Miscellaneous
5. Capitol Area Development Authority, Miscellaneous
6. City and County of San Francisco, Safety - Police
7. City of Antioch, Miscellaneous
8. City of Capitola, Miscellaneous
9. City of Capitola, Safety - Fire
10. City of Capitola, Safety - Police
11. City of Corcoran, Miscellaneous
12. City of Corcoran, Safety - Fire
13. City of Corcoran, Safety - Police
14. City of Cotati, Safety - Police
15. City of Crescent City, Miscellaneous
16. City of Crescent City, Safety - Police
17. City of Del Mar, Safety - Other Safety
18. City of Emeryville, Safety - Police
19. City of Eureka, Safety - Fire
20. City of Eureka, Safety - Police
21. City of Glendora, Miscellaneous
22. City of Inglewood, Safety - Police
23. City of La Puente, Miscellaneous
24. City of Lakeport, Miscellaneous
25. City of Lakeport, Safety - Police
26. City of Martinez, Safety - Fire
27. City of Montclair, Miscellaneous
28. City of Montclair, Safety - Fire
29. City of Palm Desert, Miscellaneous
30. City of Palos Verdes Estates, Safety - Fire
31. City of Palos Verdes Estates, Safety - Police
32. City of Patterson, Safety - Fire
33. City of Patterson, Safety - Police
34. City of Santa Barbara, Safety - Fire
35. City of Santa Barbara, Safety - Police
36. City of Sierra Madre, Safety - Police
37. City of Solana Beach, Miscellaneous
38. City of Solana Beach, Safety - Other Safety
39. City of Stanton, Miscellaneous
40. City of Stanton, Safety - Fire
41. City of Stanton, Safety - Police
42. City of Susanville, Safety - Police
43. City of Visalia, Miscellaneous
44. City of Vista, Miscellaneous
45. City of Watsonville, Safety - Fire
46. City of Watsonville, Safety - Police
47. County of Alpine, Miscellaneous
48. County of Alpine, Safety - County Peace Officer
49. County of Alpine, Safety - Fire
50. County of Calaveras, Miscellaneous
51. County of Calaveras, Safety - County Peace Officer
52. County of Calaveras, Safety - Fire
53. Los Angeles County Office of Education, Miscellaneous
54. Main San Gabriel Basin Watermaster, Miscellaneous
55. North Coast Unified Air Quality Management District, Miscellaneous
56. Pacific Fire Protection District, Miscellaneous
57. Public Risk Innovation, Solutions and Management, Miscellaneous
58. Pupil Transportation Cooperative, Miscellaneous
59. Rancho California Water District, Miscellaneous
60. Running Springs Water District, Miscellaneous
61. Running Springs Water District, Safety - Fire
62. San Diego Trolley, Inc., Miscellaneous
63. San Francisco County Transportation Authority, Miscellaneous
64. Sonoma County Library, Miscellaneous
65. Tahoe Transportation District, Miscellaneous

Appendix E – List of Contracting Agencies

Level 3

1. Access Services Incorporated, Miscellaneous
2. Agoura Hills and Calabasas Community Center, Miscellaneous
3. Alameda Alliance for Health, Miscellaneous
4. Alameda Corridor Transportation Authority, Miscellaneous
5. Alameda County Fire Department, Miscellaneous
6. Alameda County Fire Department, Safety - Fire
7. Alameda County Mosquito Abatement District, Miscellaneous
8. Alameda County Transportation Authority, Miscellaneous
9. American Canyon Fire Protection District, Safety - Fire
10. Apple Valley Fire Protection District, Miscellaneous
11. Apple Valley Fire Protection District, Safety - Fire
12. Arcata Fire Protection District, Miscellaneous
13. Arcata Fire Protection District, Safety - Fire
14. Association of California Water Agencies, Miscellaneous
15. Avila Beach Community Services District, Miscellaneous
16. Baldwin Park Unified School District, Safety - Police
17. Beaumont-Cherry Valley Recreation and Park District, Miscellaneous
18. Belmont-San Carlos Fire Department, Safety - Fire
19. Belvedere-Tiburon Library Agency, Miscellaneous
20. Big Bear City Community Services District, Miscellaneous
21. Bighorn-Desert View Water Agency, Miscellaneous
22. Bodega Bay Fire Protection District, Miscellaneous
23. Bodega Bay Fire Protection District, Safety - Fire
24. Borrego Springs Fire Protection District, Miscellaneous
25. Borrego Water District, Miscellaneous
26. Broadmoor Police Protection District, Miscellaneous
27. Broadmoor Police Protection District, Safety - Police
28. Brooktrails Township Community Services District, Safety - Fire
29. Buena Park Library District, Miscellaneous
30. Butte County Air Quality Management District, Miscellaneous
31. Butte Schools Self-Funded Programs, Miscellaneous
32. California Firefighter's Joint Apprenticeship Committee, Safety - Fire
33. California Intergovernmental Risk Authority, Miscellaneous
34. California Pines Community Services District, Miscellaneous
35. Cambria Community Healthcare District, Miscellaneous
36. Cambria Community Healthcare District, Safety - Fire
37. Cameron Park Community Services District, Miscellaneous
38. Cameron Park Community Services District, Safety - Fire
39. Camrosa Water District, Miscellaneous
40. Casitas Municipal Water District, Miscellaneous
41. Castaic Lake Water Agency, Miscellaneous
42. Castro Valley Sanitary District, Miscellaneous
43. Central Calaveras Fire and Rescue Protection District, Safety - Fire
44. Central Coast Water Authority, Miscellaneous
45. Central Valley Regional Center, Inc., Miscellaneous
46. City and County of San Francisco, Miscellaneous
47. City of Adelanto, Safety - Police
48. City of Agoura Hills, Miscellaneous
49. City of Alameda, Miscellaneous
50. City of Alameda, Safety - Fire
51. City of Alameda, Safety - Police
52. City of Alhambra, Miscellaneous
53. City of Alhambra, Safety - Fire
54. City of Alhambra, Safety - Police
55. City of Arcadia, Miscellaneous
56. City of Arcadia, Safety - Police
57. City of Bell, Safety - Fire
58. City of Bell, Safety - Police
59. City of Belvedere, Miscellaneous
60. City of Belvedere, Safety - Police
61. City of Benicia, Miscellaneous
62. City of Berkeley, Miscellaneous
63. City of Brentwood, Miscellaneous
64. City of Brentwood, Safety - Fire
65. City of Brentwood, Safety - Police
66. City of Brisbane, Miscellaneous
67. City of Brisbane, Safety - Fire
68. City of Brisbane, Safety - Police
69. City of Burlingame, Miscellaneous
70. City of Calabasas, Miscellaneous
71. City of Campbell, Miscellaneous
72. City of Carlsbad, Miscellaneous
73. City of Carlsbad, Safety - Police
74. City of Claremont, Miscellaneous
75. City of Claremont, Safety - Police
76. City of Clayton, Miscellaneous
77. City of Compton, Miscellaneous
78. City of Compton, Safety - Police
79. City of Corona, Safety - Police

Appendix E – List of Contracting Agencies

Level 3 (continued)

- | | |
|---|---|
| 80. City of Costa Mesa, Miscellaneous | 122. City of Hermosa Beach, Safety - Fire |
| 81. City of Costa Mesa, Safety - Fire | 123. City of Hermosa Beach, Safety - Police |
| 82. City of Costa Mesa, Safety - Police | 124. City of Highland, Miscellaneous |
| 83. City of Cypress, Miscellaneous | 125. City of Inglewood, Miscellaneous |
| 84. City of Daly City, Miscellaneous | 126. City of Inglewood, Safety - Fire |
| 85. City of Daly City, Safety - Police | 127. City of La Mesa, Safety - Fire |
| 86. City of Dana Point, Miscellaneous | 128. City of La Mesa, Safety - Police |
| 87. City of Del Mar, Miscellaneous | 129. City of La Quinta, Miscellaneous |
| 88. City of Dinuba, Miscellaneous | 130. City of Laguna Hills, Miscellaneous |
| 89. City of Dinuba, Safety - Fire | 131. City of Laguna Niguel, Miscellaneous |
| 90. City of Dinuba, Safety - Police | 132. City of Lake Forest, Miscellaneous |
| 91. City of Downey, Safety - Fire | 133. City of Lancaster, Miscellaneous |
| 92. City of Downey, Safety - Police | 134. City of Larkspur, Miscellaneous |
| 93. City of Duarte, Miscellaneous | 135. City of Lathrop, Miscellaneous |
| 94. City of Dublin, Miscellaneous | 136. City of Lodi, Miscellaneous |
| 95. City of East Palo Alto, Miscellaneous | 137. City of Lodi, Safety - Fire |
| 96. City of East Palo Alto, Safety - Police | 138. City of Lodi, Safety - Police |
| 97. City of El Cajon, Safety - Fire | 139. City of Lompoc, Miscellaneous |
| 98. City of El Cajon, Safety - Police | 140. City of Los Altos, Miscellaneous |
| 99. City of El Centro, Miscellaneous | 141. City of Los Altos, Safety - Police |
| 100. City of Emeryville, Miscellaneous | 142. City of Lynwood, Safety - Fire |
| 101. City of Encinitas, Miscellaneous | 143. City of Manhattan Beach, Miscellaneous |
| 102. City of Encinitas, Safety - Fire | 144. City of Marysville, Miscellaneous |
| 103. City of Encinitas, Safety - Other Safety | 145. City of Menlo Park, Safety - Police |
| 104. City of Eureka, Miscellaneous | 146. City of Mill Valley, Miscellaneous |
| 105. City of Exeter, Safety - Police | 147. City of Milpitas, Miscellaneous |
| 106. City of Fortuna, Safety - Police | 148. City of Milpitas, Safety - Fire |
| 107. City of Gardena, Miscellaneous | 149. City of Mission Viejo, Miscellaneous |
| 108. City of Gardena, Safety - Fire | 150. City of Modesto, Miscellaneous |
| 109. City of Gardena, Safety - Police | 151. City of Montclair, Safety - Police |
| 110. City of Gilroy, Miscellaneous | 152. City of Montebello, Safety - Fire |
| 111. City of Gridley, Miscellaneous | 153. City of Montebello, Safety - Police |
| 112. City of Gridley, Safety - Fire | 154. City of Mountain View, Miscellaneous |
| 113. City of Gridley, Safety - Police | 155. City of National City, Miscellaneous |
| 114. City of Half Moon Bay, Miscellaneous | 156. City of National City, Safety - Fire |
| 115. City of Hanford, Miscellaneous | 157. City of National City, Safety - Police |
| 116. City of Hayward, Safety - Fire | 158. City of Norwalk, Miscellaneous |
| 117. City of Hayward, Safety - Police | 159. City of Oakdale, Miscellaneous |
| 118. City of Hemet, Safety - Fire | 160. City of Oakdale, Safety - Police |
| 119. City of Hercules, Miscellaneous | 161. City of Oakland, Safety - Fire |
| 120. City of Hercules, Safety - Police | 162. City of Oceanside, Miscellaneous |
| 121. City of Hermosa Beach, Miscellaneous | 163. City of Oceanside, Safety - Fire |

Appendix E – List of Contracting Agencies

Level 3 (continued)

- | | |
|--|---|
| 164. City of Oceanside, Safety - Police | 206. City of Sebastopol, Safety - Police |
| 165. City of Oxnard, Safety - Police | 207. City of Sonoma, Miscellaneous |
| 166. City of Palmdale, Miscellaneous | 208. City of Sonoma, Safety - Fire |
| 167. City of Palos Verdes Estates, Miscellaneous | 209. City of South San Francisco, Safety - Fire |
| 168. City of Patterson, Miscellaneous | 210. City of South San Francisco, Safety - Police |
| 169. City of Petaluma, Miscellaneous | 211. City of Suisun City, Miscellaneous |
| 170. City of Pinole, Miscellaneous | 212. City of Suisun City, Safety - Fire |
| 171. City of Pinole, Safety - Fire | 213. City of Sunnyvale, Miscellaneous |
| 172. City of Pinole, Safety - Police | 214. City of Sunnyvale, Safety - Police |
| 173. City of Pleasant Hill, Miscellaneous | 215. City of Turlock, Miscellaneous |
| 174. City of Pleasant Hill, Safety - Police | 216. City of Tustin, Miscellaneous |
| 175. City of Pleasanton, Miscellaneous | 217. City of Twentynine Palms, Miscellaneous |
| 176. City of Redwood City, Miscellaneous | 218. City of Ukiah, Miscellaneous |
| 177. City of Riverside, Miscellaneous | 219. City of Ukiah, Safety - Fire |
| 178. City of Riverside, Safety - Fire | 220. City of Union City, Miscellaneous |
| 179. City of Riverside, Safety - Police | 221. City of Upland, Miscellaneous |
| 180. City of Rohnert Park, Miscellaneous | 222. City of Upland, Safety - Fire |
| 181. City of Rohnert Park, Safety - Fire | 223. City of Upland, Safety - Police |
| 182. City of Rohnert Park, Safety - Police | 224. City of Vernon, Miscellaneous |
| 183. City of Roseville, Miscellaneous | 225. City of Vernon, Safety - Prosecutor |
| 184. City of Roseville, Safety - Fire | 226. City of Victorville, Safety - Police |
| 185. City of San Buenaventura, Safety - Fire | 227. City of West Sacramento, Miscellaneous |
| 186. City of San Carlos, Safety - Police | 228. City of West Sacramento, Safety - Police |
| 187. City of San Dimas, Miscellaneous | 229. City of Whittier, Miscellaneous |
| 188. City of San Joaquin, Miscellaneous | 230. City of Whittier, Safety - Police |
| 189. City of San Jose, Miscellaneous | 231. City of Woodlake, Miscellaneous |
| 190. City of San Luis Obispo, Safety - Fire | 232. City of Woodlake, Safety - Police |
| 191. City of San Marino, Safety - Police | 233. City of Yucaipa, Miscellaneous |
| 192. City of San Pablo, Miscellaneous | 234. Coachella Valley Association of Governments, Miscellaneous |
| 193. City of San Pablo, Safety - Police | 235. Coast Life Support District, Miscellaneous |
| 194. City of Santa Cruz, Miscellaneous | 236. Coast Life Support District, Safety - Fire |
| 195. City of Santa Cruz, Safety - Fire | 237. Coastal Developmental Services Fdn DBA Westside Regional Center, Miscellaneous |
| 196. City of Santa Cruz, Safety - Police | 238. Compton Unified School District, Safety - Police |
| 197. City of Santa Paula, Miscellaneous | 239. Contra Costa County Schools Insurance Group, Miscellaneous |
| 198. City of Santa Paula, Safety - Police | 240. Cooperative Personnel Services, Miscellaneous |
| 199. City of Santee, Miscellaneous | 241. Cottonwood Fire Protection District, Safety - Fire |
| 200. City of Saratoga, Miscellaneous | 242. County of Amador, Safety - County Peace Officer |
| 201. City of Seal Beach, Miscellaneous | 243. County of Amador, Safety - Fire |
| 202. City of Seal Beach, Safety - Other Safety | 244. County of Amador, Safety - Prosecutor |
| 203. City of Seal Beach, Safety - Police | 245. County of El Dorado, Miscellaneous |
| 204. City of Sebastopol, Miscellaneous | 246. County of Inyo, Safety - County Peace Officer |
| 205. City of Sebastopol, Safety - Fire | |

Appendix E – List of Contracting Agencies

Level 3 (continued)

247. County of Lassen, Safety - County Peace Officer
248. County of Plumas, Miscellaneous
249. County of Santa Cruz, Safety - County Peace Officer
250. County of Santa Cruz, Safety - Sheriff
251. County of Yuba, Miscellaneous
252. County of Yuba, Safety - County Peace Officer
253. Crestline Lake Arrowhead Water Agency, Miscellaneous
254. Dairy Council of California, Miscellaneous
255. Del Norte County Library District, Miscellaneous
256. Dougherty Regional Fire Authority, Miscellaneous
257. Dougherty Regional Fire Authority, Safety - Fire
258. El Dorado County Fire Protection District, Miscellaneous
259. El Dorado County Fire Protection District, Safety - Fire
260. El Dorado County Transit Authority, Miscellaneous
261. El Dorado Hills County Water District, Miscellaneous
262. Encina Wastewater Authority, Miscellaneous
263. Encinitas Fire Protection District, Miscellaneous
264. Encinitas Fire Protection District, Safety - Fire
265. Feather River Air Quality Management District, Miscellaneous
266. Fontana Unified School District, Safety - Police
267. Fort Ord Reuse Authority, Miscellaneous
268. Georgetown Fire Protection District, Miscellaneous
269. Georgetown Fire Protection District, Safety - Fire
270. Greater Anaheim Special Education Local Plan Area, Miscellaneous
271. Greater Vallejo Recreation District, Miscellaneous
272. Green Valley County Water District, Miscellaneous
273. Grossmont Healthcare District, Miscellaneous
274. Gualala Community Services District, Miscellaneous
275. Henry Miller Reclamation District No. 2131, Miscellaneous
276. Higgins Area Fire Protection District, Miscellaneous
277. Higgins Area Fire Protection District, Safety - Fire
278. Hilton Creek Community Services District, Miscellaneous
279. Housing Authority of the City of Madera, Miscellaneous
280. Human Rights/Fair Housing Commission of the City and County of Sacramento, Miscellaneous
281. Humboldt Bay Harbor Recreation and Conservation District, Miscellaneous
282. Humboldt No. 1 Fire Protection District of Humboldt County, Safety - Fire
283. Independent Cities Association, Inc., Miscellaneous
284. Indian Wells Valley Water District, Miscellaneous
285. Inland Counties Regional Center, Inc., Miscellaneous
286. Inland Empire Health Plan, Miscellaneous
287. Isla Vista Recreation and Park District, Miscellaneous
288. June Lake Public Utility District, Miscellaneous
289. Kern Health Systems, Miscellaneous
290. Kings Mosquito Abatement District, Miscellaneous
291. Laguna Beach County Water District, Miscellaneous
292. Lake Don Pedro Community Services District, Miscellaneous
293. Leucadia Wastewater District, Miscellaneous
294. Los Angeles County Area 'E' Civil Defense and Disaster Board, Miscellaneous
295. Los Angeles County Sanitation District No. 2, Miscellaneous
296. Los Angeles County West Vector Control District, Miscellaneous
297. Los Angeles Regionalized Insurance Services Authority, Miscellaneous
298. Los Gatos-Saratoga Department of Community Education and Recreation, Miscellaneous
299. Los Osos Community Services District, Miscellaneous
300. Los Osos Community Services District, Safety - Fire
301. Majestic Pines Community Services District, Miscellaneous
302. Management of Emeryville Services Authority, Miscellaneous
303. Meeks Bay Fire Protection District, Miscellaneous
304. Mendocino Transit Authority, Miscellaneous
305. Metropolitan Transportation Commission, Miscellaneous
306. Mid City Development Corporation, Miscellaneous
307. Minter Field Airport District, Miscellaneous
308. Mojave Air and Space Port, Safety - Fire
309. Mojave Water Agency, Miscellaneous
310. Montecito Fire Protection District, Miscellaneous
311. Montecito Fire Protection District, Safety - Fire
312. Monterey County Regional Fire Protection District, Miscellaneous
313. Monterey County Regional Fire Protection District, Safety - Fire
314. Monterey One Water, Miscellaneous
315. Monterey Regional Waste Management District, Miscellaneous
316. Mountains Recreation and Conservation Authority, Miscellaneous
317. Murrieta Fire Protection District, Miscellaneous
318. Nevada Irrigation District, Miscellaneous
319. North Bay Schools Insurance Authority, Miscellaneous

Appendix E – List of Contracting Agencies

Level 3 (continued)

- | | |
|---|---|
| <p>320. North County Fire Protection District of Monterey County, Safety - Fire</p> <p>321. North Tahoe Fire Protection District, Miscellaneous</p> <p>322. North Tahoe Fire Protection District, Safety - Fire</p> <p>323. Northern Sierra Air Quality Management District, Miscellaneous</p> <p>324. Novato Sanitary District, Miscellaneous</p> <p>325. Oakdale Rural Fire Protection District, Miscellaneous</p> <p>326. Oakdale Rural Fire Protection District, Safety - Fire</p> <p>327. Oakland Unified School District, Safety - Police</p> <p>328. Ojai Valley Sanitary District, Miscellaneous</p> <p>329. Ophir Hill Fire Protection District, Miscellaneous</p> <p>330. Ophir Hill Fire Protection District, Safety - Fire</p> <p>331. Orange County Health Authority, Miscellaneous</p> <p>332. Orange County Transportation Authority, Miscellaneous</p> <p>333. Pajaro Valley Fire Protection Agency, Safety - Fire</p> <p>334. Peardale Chicago Park Fire Protection District, Safety - Fire</p> <p>335. Peninsula Fire Protection District, Miscellaneous</p> <p>336. Penn Valley Fire Protection District, Miscellaneous</p> <p>337. Personal Assistance Services Council, Miscellaneous</p> <p>338. Placer Hills Fire Protection District, Miscellaneous</p> <p>339. Pleasant Hill - Martinez Joint Facilities Agency, Miscellaneous</p> <p>340. Pomona Valley Transportation Authority, Miscellaneous</p> <p>341. Public Entity Risk Management Authority, Miscellaneous</p> <p>342. Public Transportation Services Corporation, Miscellaneous</p> <p>343. Quincy Community Services District, Miscellaneous</p> <p>344. Rancho Murieta Community Services District, Miscellaneous</p> <p>345. Redwood Empire School Insurance Group, Miscellaneous</p> <p>346. Rescue Fire Protection District, Miscellaneous</p> <p>347. Rincon Del Diablo Municipal Water District, Safety - Fire</p> <p>348. Riverbank City Housing Authority, Miscellaneous</p> <p>349. Riverside County Department of Waste Resources, Miscellaneous</p> <p>350. Riverside County Transportation Commission, Miscellaneous</p> <p>351. Roseville Public Cemetery District, Miscellaneous</p> <p>352. Ross Valley Fire Department, Safety - Fire</p> <p>353. Rural County Representatives of California, Miscellaneous</p> <p>354. Russian River Fire Protection District, Miscellaneous</p> <p>355. Russian River Fire Protection District, Safety - Fire</p> <p>356. Sacramento Area Council of Governments, Miscellaneous</p> <p>357. Sacramento Metropolitan Air Quality Management District, Miscellaneous</p> <p>358. Sacramento Public Library Authority, Miscellaneous</p> | <p>359. Sacramento Regional Fire/EMS Communications Center, Miscellaneous</p> <p>360. Sacramento Transportation Authority, Miscellaneous</p> <p>361. Sacramento-Yolo Mosquito and Vector Control District, Miscellaneous</p> <p>362. Salida Fire Protection District, Miscellaneous</p> <p>363. Salida Fire Protection District, Safety - Fire</p> <p>364. Samoa Peninsula Fire Protection District, Safety - Fire</p> <p>365. San Andreas Regional Center, Inc., Miscellaneous</p> <p>366. San Diego County Law Library, Miscellaneous</p> <p>367. San Diego Rural Fire Protection District, Miscellaneous</p> <p>368. San Diego Rural Fire Protection District, Safety - Fire</p> <p>369. San Dieguito Water District, Miscellaneous</p> <p>370. San Francisco Health Authority, Miscellaneous</p> <p>371. San Joaquin Delta Community College District, Safety - Police</p> <p>372. San Luis Obispo Regional Transit Authority, Miscellaneous</p> <p>373. San Mateo County Harbor District, Miscellaneous</p> <p>374. San Mateo County In-Home Supportive Services Public Authority, Miscellaneous</p> <p>375. Santa Barbara Regional Health Authority, Miscellaneous</p> <p>376. Santa Clara County Central Fire Protection District, Miscellaneous</p> <p>377. Santa Clara County Central Fire Protection District, Safety - Fire</p> <p>378. Santa Clara County Health Authority, Miscellaneous</p> <p>379. Santa Clarita Valley School Food Services Agency, Miscellaneous</p> <p>380. Santa Cruz Metropolitan Transit District, Miscellaneous</p> <p>381. Santa Cruz Regional 9-1-1, Miscellaneous</p> <p>382. Santa Fe Irrigation District, Miscellaneous</p> <p>383. Santa Maria Public Airport District, Miscellaneous</p> <p>384. School Risk And Insurance Management Group, Miscellaneous</p> <p>385. Schools Excess Liability Fund, Miscellaneous</p> <p>386. Scotts Valley Water District, Miscellaneous</p> <p>387. Sewer Authority Mid-Coastside, Miscellaneous</p> <p>388. Shasta Lake Fire Protection District, Safety - Fire</p> <p>389. Solano Cemetery District, Miscellaneous</p> <p>390. Solano County Water Agency, Miscellaneous</p> <p>391. Solano Transportation Authority, Miscellaneous</p> <p>392. Southern California Regional Rail Authority, Miscellaneous</p> <p>393. Stockton Unified School District, Safety - Police</p> <p>394. Sunnyslope County Water District, Miscellaneous</p> |
|---|---|

Appendix E – List of Contracting Agencies

Level 3 (continued)

- 395. Sweetwater Springs Water District, Miscellaneous
- 396. Tahoe-Truckee Sanitation Agency, Miscellaneous
- 397. Tehama County Mosquito Abatement District, Miscellaneous
- 398. Town of Atherton, Miscellaneous
- 399. Town of Atherton, Safety - Police
- 400. Town of Fairfax, Miscellaneous
- 401. Town of Fairfax, Safety - Police
- 402. Town of Loomis, Miscellaneous
- 403. Town of Truckee, Miscellaneous
- 404. Town of Yucca Valley, Miscellaneous
- 405. Transportation Agency for Monterey County, Miscellaneous
- 406. Tri-City Mental Health Center, Miscellaneous
- 407. Tri-Counties Association for the Developmentally Disabled,
Miscellaneous
- 408. Tuolumne Utilities District, Miscellaneous
- 409. Valley Mountain Regional Center, Inc., Miscellaneous
- 410. Valley-Wide Recreation and Park District, Miscellaneous
- 411. Ventura County Schools Business Services Authority,
Miscellaneous
- 412. Victor Valley Wastewater Reclamation Authority,
Miscellaneous
- 413. Water Facilities Authority, Miscellaneous
- 414. Weaverville Community Services District, Miscellaneous
- 415. West Almanor Community Services District, Safety - Fire
- 416. West Cities Communication Center, Miscellaneous
- 417. West End Communications Authority, Miscellaneous
- 418. West Valley-Mission Community College District, Safety -
Police
- 419. Westlands Water District, Miscellaneous
- 420. Yolo County Public Agency Risk Management Insurance
Authority, Miscellaneous
- 421. Yolo County Transportation District, Miscellaneous
- 422. Yuba County Water Agency, Miscellaneous
- 423. Yuba Sutter Transit Authority, Miscellaneous

Appendix E – List of Contracting Agencies

Level 4

1. Academic Senate for California Community Colleges, Miscellaneous
2. Alameda County Congestion Management Agency, Miscellaneous
3. Alameda County Schools Insurance Group, Miscellaneous
4. Alameda County Transportation Commission, Miscellaneous
5. Alameda County Transportation Improvement Authority, Miscellaneous
6. Alameda County Waste Management Authority, Miscellaneous
7. Alameda County Water District, Miscellaneous
8. Albany Municipal Services Joint Powers Authority, Miscellaneous
9. Alliance of Schools for Cooperative Insurance Programs, Miscellaneous
10. Alpine Fire Protection District, Miscellaneous
11. Alpine Fire Protection District, Safety - Fire
12. Amador County Transportation Commission, Miscellaneous
13. Aptos/La Selva Fire Protection Agency, Safety - Fire
14. Association of California Water Agencies - Joint Powers Insurance Authority, Miscellaneous
15. Bay Area Water Supply and Conservation Agency, Miscellaneous
16. Belmont Fire Protection District, Safety - Fire
17. Berkeley Housing Authority, Miscellaneous
18. Big Bear Area Regional Wastewater Agency, Miscellaneous
19. Big Bear City Airport District, Miscellaneous
20. Black Gold Cooperative Library System, Miscellaneous
21. Blue Lake Fire Protection District, Safety - Fire
22. Bolinas Community Public Utility District, Miscellaneous
23. Bonita-Sunnyside Fire Protection District, Safety - Fire
24. Borrego Springs Fire Protection District, Safety - Fire
25. Boulder Creek Fire Protection District, Safety - Fire
26. Butte County Association of Governments, Miscellaneous
27. Butte County Fair Association, Miscellaneous
28. Butte County In-Home Supportive Services Public Authority, Miscellaneous
29. Butte Local Agency Formation Commission, Miscellaneous
30. Butte-Glenn Community College District, Safety - Police
31. Calaveras Council of Governments, Miscellaneous
32. California Firefighter's Joint Apprenticeship Committee, Miscellaneous
33. California Interscholastic Federation, Northern Section, Miscellaneous
34. California Joint Powers Risk Management Authority, Miscellaneous
35. California Pines Community Services District, Safety - Fire
36. California Redevelopment Association Foundation, Miscellaneous
37. Carmel Regional Fire Ambulance Authority, Safety - Fire
38. Central Calaveras Fire and Rescue Protection District, Miscellaneous
39. Central Contra Costa Solid Waste Authority, Miscellaneous
40. Central County Fire Department, Miscellaneous
41. Central County Fire Department, Safety - Fire
42. Central Fire Protection District of Santa Cruz County, Safety - Fire
43. Central Marin Fire Authority, Miscellaneous
44. Central Marin Fire Authority, Safety - Fire
45. Central Marin Police Authority, Miscellaneous
46. Central Marin Police Authority, Safety - Police
47. Central Marin Sanitation Agency, Miscellaneous
48. Children and Families Commission of San Luis Obispo County, Miscellaneous
49. Chino Basin Watermaster, Miscellaneous
50. Chino Valley Independent Fire District, Miscellaneous
51. Chino Valley Independent Fire District, Safety - Fire
52. City of Adelanto, Miscellaneous
53. City of Albany, Safety - Fire
54. City of Albany, Safety - Police
55. City of Anaheim, Miscellaneous
56. City of Anaheim, Safety - Fire
57. City of Anaheim, Safety - Police
58. City of Arcadia, Safety - Fire
59. City of Atascadero, Safety - Fire
60. City of Atascadero, Safety - Police
61. City of Auburn, Safety - Fire
62. City of Auburn, Safety - Police
63. City of Azusa, Miscellaneous
64. City of Azusa, Safety - Police
65. City of Bakersfield, Miscellaneous
66. City of Bakersfield, Safety - Fire
67. City of Bakersfield, Safety - Police
68. City of Barstow, Miscellaneous
69. City of Barstow, Safety - Police
70. City of Beaumont, Safety - Police
71. City of Bell Gardens, Miscellaneous

Appendix E – List of Contracting Agencies

Level 4 (continued)

- | | |
|---|--|
| 72. City of Bell Gardens, Safety - Police | 114. City of Chula Vista, Miscellaneous |
| 73. City of Belmont, Miscellaneous | 115. City of Chula Vista, Safety - Fire |
| 74. City of Belmont, Safety - Police | 116. City of Chula Vista, Safety - Police |
| 75. City of Benicia, Safety - Fire | 117. City of Citrus Heights, Miscellaneous |
| 76. City of Benicia, Safety - Police | 118. City of Citrus Heights, Safety - Police |
| 77. City of Berkeley, Safety - Police | 119. City of Clayton, Safety - Police |
| 78. City of Beverly Hills, Miscellaneous | 120. City of Cloverdale, Miscellaneous |
| 79. City of Beverly Hills, Safety - Fire | 121. City of Cloverdale, Safety - Fire |
| 80. City of Beverly Hills, Safety - Police | 122. City of Cloverdale, Safety - Police |
| 81. City of Bishop, Safety - Fire | 123. City of Clovis, Miscellaneous |
| 82. City of Brea, Miscellaneous | 124. City of Clovis, Safety - Fire |
| 83. City of Brea, Safety - Fire | 125. City of Clovis, Safety - Police |
| 84. City of Brea, Safety - Police | 126. City of Colton, Miscellaneous |
| 85. City of Buena Park, Miscellaneous | 127. City of Colton, Safety - Fire |
| 86. City of Buena Park, Safety - Fire | 128. City of Colton, Safety - Police |
| 87. City of Buena Park, Safety - Police | 129. City of Corona, Miscellaneous |
| 88. City of Burbank, Miscellaneous | 130. City of Corona, Safety - Fire |
| 89. City of Burbank, Safety - Fire | 131. City of Coronado, Safety - Fire |
| 90. City of Burbank, Safety - Police | 132. City of Coronado, Safety - Police |
| 91. City of Burlingame, Safety - Police | 133. City of Cotati, Miscellaneous |
| 92. City of California City, Miscellaneous | 134. City of Covina, Miscellaneous |
| 93. City of California City, Safety - Fire | 135. City of Covina, Safety - Fire |
| 94. City of California City, Safety - Police | 136. City of Covina, Safety - Police |
| 95. City of Camarillo, Miscellaneous | 137. City of Culver City, Safety - Fire |
| 96. City of Campbell, Safety - Police | 138. City of Culver City, Safety - Police |
| 97. City of Carlsbad, Safety - Fire | 139. City of Cupertino, Miscellaneous |
| 98. City of Carmel-By-The-Sea, Miscellaneous | 140. City of Cypress, Safety - Police |
| 99. City of Carmel-By-The-Sea, Safety - Fire | 141. City of Daly City, Safety - Fire |
| 100. City of Carmel-By-The-Sea, Safety - Police | 142. City of Davis, Miscellaneous |
| 101. City of Carson, Miscellaneous | 143. City of Davis, Safety - Fire |
| 102. City of Cathedral City, Miscellaneous | 144. City of Davis, Safety - Police |
| 103. City of Cathedral City, Safety - Fire | 145. City of Diamond Bar, Miscellaneous |
| 104. City of Cathedral City, Safety - Police | 146. City of Dixon, Safety - Fire |
| 105. City of Cerritos, Miscellaneous | 147. City of Dixon, Safety - Police |
| 106. City of Chico, Miscellaneous | 148. City of Downey, Miscellaneous |
| 107. City of Chico, Safety - Fire | 149. City of El Cajon, Miscellaneous |
| 108. City of Chico, Safety - Police | 150. City of El Centro, Safety - Fire |
| 109. City of Chino, Miscellaneous | 151. City of El Centro, Safety - Police |
| 110. City of Chino, Safety - Police | 152. City of El Cerrito, Safety - Fire |
| 111. City of Chowchilla, Miscellaneous | 153. City of El Cerrito, Safety - Police |
| 112. City of Chowchilla, Safety - Fire | 154. City of El Monte, Miscellaneous |
| 113. City of Chowchilla, Safety - Police | 155. City of El Monte, Safety - Fire |

Appendix E – List of Contracting Agencies

Level 4 (continued)

- | | |
|---|--|
| 156. City of El Monte, Safety - Police | 198. City of Hollister, Safety - Police |
| 157. City of El Segundo, Safety - Fire | 199. City of Hughson, Miscellaneous |
| 158. City of El Segundo, Safety - Police | 200. City of Huntington Beach, Miscellaneous |
| 159. City of Elk Grove, Miscellaneous | 201. City of Huntington Beach, Safety - Fire |
| 160. City of Elk Grove, Safety - Police | 202. City of Huntington Beach, Safety - Other Safety |
| 161. City of Escondido, Miscellaneous | 203. City of Huntington Beach, Safety - Police |
| 162. City of Escondido, Safety - Fire | 204. City of Huntington Park, Miscellaneous |
| 163. City of Escondido, Safety - Police | 205. City of Huntington Park, Safety - Fire |
| 164. City of Exeter, Miscellaneous | 206. City of Huntington Park, Safety - Police |
| 165. City of Fairfield, Miscellaneous | 207. City of Industry, Miscellaneous |
| 166. City of Fairfield, Safety - Fire | 208. City of Irvine, Miscellaneous |
| 167. City of Fairfield, Safety - Police | 209. City of Irvine, Safety - Police |
| 168. City of Fontana, Miscellaneous | 210. City of Irwindale, Miscellaneous |
| 169. City of Fontana, Safety - Police | 211. City of Irwindale, Safety - Fire |
| 170. City of Foster City, Miscellaneous | 212. City of Irwindale, Safety - Police |
| 171. City of Foster City, Safety - Fire | 213. City of La Canada Flintridge, Miscellaneous |
| 172. City of Foster City, Safety - Police | 214. City of La Habra, Miscellaneous |
| 173. City of Fountain Valley, Miscellaneous | 215. City of La Habra, Safety - Fire |
| 174. City of Fremont, Miscellaneous | 216. City of La Habra, Safety - Police |
| 175. City of Fremont, Safety - Fire | 217. City of La Mirada, Miscellaneous |
| 176. City of Fremont, Safety - Police | 218. City of La Palma, Miscellaneous |
| 177. City of Fullerton, Miscellaneous | 219. City of La Palma, Safety - Police |
| 178. City of Fullerton, Safety - Fire | 220. City of La Verne, Miscellaneous |
| 179. City of Fullerton, Safety - Police | 221. City of La Verne, Safety - Fire |
| 180. City of Gilroy, Safety - Fire | 222. City of La Verne, Safety - Police |
| 181. City of Gilroy, Safety - Police | 223. City of Laguna Beach, Miscellaneous |
| 182. City of Glendale, Miscellaneous | 224. City of Laguna Beach, Safety - Fire |
| 183. City of Glendale, Safety - Fire | 225. City of Laguna Beach, Safety - Other Safety |
| 184. City of Glendale, Safety - Police | 226. City of Laguna Beach, Safety - Police |
| 185. City of Glendora, Safety - Police | 227. City of Larkspur, Safety - Fire |
| 186. City of Goleta, Miscellaneous | 228. City of Lathrop, Safety - Police |
| 187. City of Grand Terrace, Miscellaneous | 229. City of Lawndale, Miscellaneous |
| 188. City of Half Moon Bay, Safety - Police | 230. City of Lemon Grove, Miscellaneous |
| 189. City of Hanford, Safety - Police | 231. City of Lemon Grove, Safety - Fire |
| 190. City of Hayward, Miscellaneous | 232. City of Livermore, Miscellaneous |
| 191. City of Healdsburg, Miscellaneous | 233. City of Livermore, Safety - Police |
| 192. City of Healdsburg, Safety - Fire | 234. City of Loma Linda, Safety - Fire |
| 193. City of Healdsburg, Safety - Police | 235. City of Lomita, Miscellaneous |
| 194. City of Hemet, Miscellaneous | 236. City of Lompoc, Safety - Fire |
| 195. City of Hesperia, Miscellaneous | 237. City of Lompoc, Safety - Police |
| 196. City of Hollister, Miscellaneous | 238. City of Long Beach, Safety - Fire |
| 197. City of Hollister, Safety - Fire | 239. City of Long Beach, Safety - Police |

Appendix E – List of Contracting Agencies

Level 4 (continued)

- | | |
|---|---|
| 240. City of Los Alamitos, Miscellaneous | 282. City of Novato, Miscellaneous |
| 241. City of Los Alamitos, Safety - Police | 283. City of Novato, Safety - Police |
| 242. City of Lynwood, Miscellaneous | 284. City of Oakdale, Safety - Fire |
| 243. City of Manhattan Beach, Safety - Fire | 285. City of Oakley, Miscellaneous |
| 244. City of Manteca, Miscellaneous | 286. City of Oakley, Safety - Police |
| 245. City of Manteca, Safety - Fire | 287. City of Ontario, Safety - Fire |
| 246. City of Manteca, Safety - Police | 288. City of Ontario, Safety - Police |
| 247. City of Marina, Miscellaneous | 289. City of Orange, Miscellaneous |
| 248. City of Marina, Safety - Fire | 290. City of Orange, Safety - Fire |
| 249. City of Marina, Safety - Police | 291. City of Orange, Safety - Police |
| 250. City of Martinez, Safety - Police | 292. City of Oroville, Miscellaneous |
| 251. City of Marysville, Safety - Fire | 293. City of Oroville, Safety - Fire |
| 252. City of Marysville, Safety - Police | 294. City of Oroville, Safety - Police |
| 253. City of Menifee, Miscellaneous | 295. City of Oxnard, Miscellaneous |
| 254. City of Menifee, Safety - Police | 296. City of Oxnard, Safety - Fire |
| 255. City of Millbrae, Miscellaneous | 297. City of Pacific Grove, Miscellaneous |
| 256. City of Milpitas, Safety - Police | 298. City of Pacific Grove, Safety - Fire |
| 257. City of Monrovia, Miscellaneous | 299. City of Pacific Grove, Safety - Police |
| 258. City of Monrovia, Safety - Fire | 300. City of Pacifica, Miscellaneous |
| 259. City of Monrovia, Safety - Police | 301. City of Pacifica, Safety - Fire |
| 260. City of Monterey, Miscellaneous | 302. City of Pacifica, Safety - Police |
| 261. City of Monterey Park, Miscellaneous | 303. City of Palm Springs, Miscellaneous |
| 262. City of Monterey Park, Safety - Fire | 304. City of Palm Springs, Safety - Fire |
| 263. City of Monterey Park, Safety - Police | 305. City of Palm Springs, Safety - Police |
| 264. City of Moorpark, Miscellaneous | 306. City of Paramount, Miscellaneous |
| 265. City of Moreno Valley, Miscellaneous | 307. City of Pasadena, Miscellaneous |
| 266. City of Morgan Hill, Miscellaneous | 308. City of Pasadena, Safety - Fire |
| 267. City of Morgan Hill, Safety - Police | 309. City of Pasadena, Safety - Police |
| 268. City of Morro Bay, Miscellaneous | 310. City of Petaluma, Safety - Fire |
| 269. City of Morro Bay, Safety - Fire | 311. City of Petaluma, Safety - Police |
| 270. City of Morro Bay, Safety - Police | 312. City of Pico Rivera, Miscellaneous |
| 271. City of Mountain View, Safety - Fire | 313. City of Piedmont, Safety - Fire |
| 272. City of Mountain View, Safety - Police | 314. City of Pittsburg, Safety - Police |
| 273. City of Murrieta, Miscellaneous | 315. City of Placentia, Miscellaneous |
| 274. City of Murrieta, Safety - Police | 316. City of Placentia, Safety - Police |
| 275. City of Napa, Safety - Police | 317. City of Pleasanton, Safety - Fire |
| 276. City of Newport Beach, Miscellaneous | 318. City of Porterville, Miscellaneous |
| 277. City of Newport Beach, Safety - Fire | 319. City of Porterville, Safety - Fire |
| 278. City of Newport Beach, Safety - Other Safety | 320. City of Porterville, Safety - Police |
| 279. City of Newport Beach, Safety - Police | 321. City of Rancho Cucamonga, Miscellaneous |
| 280. City of Norco, Miscellaneous | 322. City of Rancho Mirage, Miscellaneous |
| 281. City of Norco, Safety - Fire | 323. City of Rancho Palos Verdes, Miscellaneous |

Appendix E – List of Contracting Agencies

Level 4 (continued)

- 324. City of Redding, Safety - Fire
- 325. City of Redding, Safety - Police
- 326. City of Redondo Beach, Safety - Fire
- 327. City of Redondo Beach, Safety - Police
- 328. City of Redwood City, Safety - Fire
- 329. City of Redwood City, Safety - Police
- 330. City of Rialto, Miscellaneous
- 331. City of Rialto, Safety - Fire
- 332. City of Rocklin, Miscellaneous
- 333. City of Rocklin, Safety - Fire
- 334. City of Rocklin, Safety - Police
- 335. City of Roseville, Safety - Police
- 336. City of San Bernardino, Miscellaneous
- 337. City of San Bernardino, Safety - Fire
- 338. City of San Bruno, Miscellaneous
- 339. City of San Bruno, Safety - Fire
- 340. City of San Bruno, Safety - Police
- 341. City of San Buenaventura, Miscellaneous
- 342. City of San Buenaventura, Safety - Police
- 343. City of San Clemente, Miscellaneous
- 344. City of San Fernando, Miscellaneous
- 345. City of San Fernando, Safety - Police
- 346. City of San Gabriel, Miscellaneous
- 347. City of San Gabriel, Safety - Fire
- 348. City of San Gabriel, Safety - Police
- 349. City of San Jacinto, Miscellaneous
- 350. City of San Jacinto, Safety - Fire
- 351. City of San Jacinto, Safety - Police
- 352. City of San Leandro, Safety - Police
- 353. City of San Luis Obispo, Miscellaneous
- 354. City of San Luis Obispo, Safety - Police
- 355. City of San Marino, Miscellaneous
- 356. City of San Marino, Safety - Fire
- 357. City of San Mateo, Safety - Fire
- 358. City of San Mateo, Safety - Police
- 359. City of San Ramon, Miscellaneous
- 360. City of San Ramon, Safety - Police
- 361. City of Sand City, Miscellaneous
- 362. City of Sand City, Safety - Police
- 363. City of Santa Ana, Miscellaneous
- 364. City of Santa Ana, Safety - Fire
- 365. City of Santa Ana, Safety - Police
- 366. City of Santa Barbara, Miscellaneous
- 367. City of Santa Clara, Safety - Fire
- 368. City of Santa Clara, Safety - Police
- 369. City of Santa Cruz, Safety - Other Safety
- 370. City of Santa Fe Springs, Miscellaneous
- 371. City of Santa Fe Springs, Safety - Fire
- 372. City of Santa Maria, Miscellaneous
- 373. City of Santa Maria, Safety - Fire
- 374. City of Santa Maria, Safety - Police
- 375. City of Santa Monica, Miscellaneous
- 376. City of Santa Monica, Safety - Fire
- 377. City of Santa Monica, Safety - Police
- 378. City of Santa Rosa, Miscellaneous
- 379. City of Santa Rosa, Safety - Fire
- 380. City of Santa Rosa, Safety - Police
- 381. City of Sausalito, Safety - Fire
- 382. City of Sausalito, Safety - Police
- 383. City of Seaside, Miscellaneous
- 384. City of Seaside, Safety - Fire
- 385. City of Seaside, Safety - Police
- 386. City of Sierra Madre, Miscellaneous
- 387. City of Sierra Madre, Safety - Fire
- 388. City of Signal Hill, Safety - Fire
- 389. City of Signal Hill, Safety - Police
- 390. City of Simi Valley, Miscellaneous
- 391. City of Simi Valley, Safety - Police
- 392. City of Sonoma, Safety - Police
- 393. City of South Gate, Miscellaneous
- 394. City of Stockton, Miscellaneous
- 395. City of Stockton, Safety - Fire
- 396. City of Stockton, Safety - Police
- 397. City of Suisun City, Safety - Police
- 398. City of Temecula, Miscellaneous
- 399. City of Temple City, Miscellaneous
- 400. City of Thousand Oaks, Miscellaneous
- 401. City of Torrance, Safety - Fire
- 402. City of Torrance, Safety - Police
- 403. City of Tracy, Safety - Fire
- 404. City of Tracy, Safety - Police
- 405. City of Tulare, Miscellaneous
- 406. City of Tulare, Safety - Fire
- 407. City of Tulare, Safety - Police

Appendix E – List of Contracting Agencies

Level 4 (continued)

- | | |
|---|--|
| 408. City of Turlock, Safety - Fire | 449. Cosumnes Community Services District, Safety - Fire |
| 409. City of Turlock, Safety - Police | 450. County of El Dorado, Safety - County Peace Officer |
| 410. City of Tustin, Safety - Police | 451. County of Humboldt, Miscellaneous |
| 411. City of Ukiah, Safety - Police | 452. County of Humboldt, Safety - County Peace Officer |
| 412. City of Vacaville, Miscellaneous | 453. County of Humboldt, Safety - Fire |
| 413. City of Vacaville, Safety - Fire | 454. County of Kings, Safety - County Peace Officer |
| 414. City of Vacaville, Safety - Police | 455. County of Kings, Safety - Fire |
| 415. City of Vallejo, Safety - Fire | 456. County of Mono, Miscellaneous |
| 416. City of Vallejo, Safety - Police | 457. County of Mono, Safety - County Peace Officer |
| 417. City of Vernon, Safety - Fire | 458. County of Mono, Safety - Fire |
| 418. City of Victorville, Miscellaneous | 459. County of Mono, Safety - Sheriff |
| 419. City of Victorville, Safety - Fire | 460. County of Monterey, Safety - County Peace Officer |
| 420. City of Villa Park, Miscellaneous | 461. County of Monterey, Safety - Fire |
| 421. City of Visalia, Safety - Fire | 462. County of Napa, Miscellaneous |
| 422. City of Visalia, Safety - Police | 463. County of Napa, Safety - County Peace Officer |
| 423. City of Vista, Safety - Fire | 464. County of Plumas, Safety - County Peace Officer |
| 424. City of Walnut, Miscellaneous | 465. County of Plumas, Safety - Sheriff |
| 425. City of Walnut Creek, Miscellaneous | 466. County of Shasta, Safety - Sheriff |
| 426. City of Walnut Creek, Safety - Police | 467. County of Siskiyou, Safety - County Peace Officer |
| 427. City of West Covina, Miscellaneous | 468. County of Solano, Safety - County Peace Officer |
| 428. City of West Covina, Safety - Fire | 469. County of Solano, Safety - Sheriff |
| 429. City of West Covina, Safety - Police | 470. Crestline Village Water District, Miscellaneous |
| 430. City of West Hollywood, Miscellaneous | 471. Crockett - Valona Sanitary District, Miscellaneous |
| 431. City of West Sacramento, Safety - Fire | 472. Crockett Community Services District, Miscellaneous |
| 432. City of Westminster, Miscellaneous | 473. Cucamonga Valley Water District, Miscellaneous |
| 433. City of Westminster, Safety - Police | 474. Del Puerto Water District, Miscellaneous |
| 434. City of Wildomar, Miscellaneous | 475. East County Fire Protection District, Miscellaneous |
| 435. City of Woodland, Miscellaneous | 476. East County Fire Protection District, Safety - Fire |
| 436. City of Woodland, Safety - Fire | 477. East Valley Water District, Miscellaneous |
| 437. City of Woodland, Safety - Police | 478. Eastern Municipal Water District, Miscellaneous |
| 438. City of Yorba Linda, Miscellaneous | 479. Eastern Sierra Transit Authority, Miscellaneous |
| 439. City/County Association of Governments of San Mateo
County, Miscellaneous | 480. El Dorado County Transportation Commission, Miscellaneous |
| 440. Cloverdale Fire Protection District, Miscellaneous | 481. El Dorado County Water Agency, Miscellaneous |
| 441. Cloverdale Fire Protection District, Safety - Fire | 482. El Dorado Hills County Water District, Safety - Fire |
| 442. Coastside Fire Protection District, Miscellaneous | 483. El Dorado Local Agency Formation Commission,
Miscellaneous |
| 443. Coastside Fire Protection District, Safety - Fire | 484. Esparto Fire Protection District, Miscellaneous |
| 444. Colusa County One-Stop Partnership, Miscellaneous | 485. Esparto Fire Protection District, Safety - Fire |
| 445. Conejo Recreation and Park District, Miscellaneous | 486. Estero Municipal Improvement District, Miscellaneous |
| 446. Contra Costa Transportation Authority, Miscellaneous | 487. Estero Municipal Improvement District, Safety - Fire |
| 447. Costa Mesa Sanitary District, Miscellaneous | 488. Estero Municipal Improvement District, Safety - Police |
| 448. Cosumnes Community Services District, Miscellaneous | 489. Exeter District Ambulance, Miscellaneous |

Appendix E – List of Contracting Agencies

Level 4 (continued)

490. Far Northern Coordinating Council on Developmental Disabilities, Miscellaneous
491. Florin Resource Conservation District Elk Grove Water District, Miscellaneous
492. Foothill-De Anza Community College District, Safety - Police
493. Georgetown Divide Resource Conservation District, Miscellaneous
494. Glen Ellen Fire Protection District, Safety - Fire
495. Glendale Community College District, Safety - Police
496. Gold Coast Transit, Miscellaneous
497. Gold Ridge Fire Protection District, Miscellaneous
498. Graton Community Services District, Miscellaneous
499. Graton Fire Protection District, Safety - Fire
500. Great Redwood Trail Agency, Miscellaneous
501. Hacienda La Puente Unified School District, Safety - Police
502. Hamilton Branch Fire Protection District, Safety - Fire
503. Health Plan of San Joaquin, Miscellaneous
504. Heartland Communications Facility Authority, Miscellaneous
505. Helendale Community Services District, Miscellaneous
506. Heritage Ranch Community Services District, Miscellaneous
507. Herlong Public Utility District, Miscellaneous
508. Hesperia Fire Protection District, Miscellaneous
509. Hesperia Fire Protection District, Safety - Fire
510. Hesperia Water District, Miscellaneous
511. Hidden Valley Lake Community Services District, Miscellaneous
512. Hopland Public Utility District, Miscellaneous
513. Housing Authority of the City of Alameda, Miscellaneous
514. Housing Authority of the City of San Buenaventura, Miscellaneous
515. Hub Cities Consortium, Miscellaneous
516. Humboldt Bay Fire Joint Powers Authority, Miscellaneous
517. Humboldt Bay Fire Joint Powers Authority, Safety - Fire
518. Humboldt Transit Authority, Miscellaneous
519. Humboldt Waste Management Authority, Miscellaneous
520. Idyllwild Fire Protection District, Safety - Fire
521. Intelcom Intelligent Telecommunications, Miscellaneous
522. Intergovernmental Training and Development Center, Miscellaneous
523. Ironhouse Sanitary District, Miscellaneous
524. Irvine Ranch Water District, Miscellaneous
525. Kaweah Delta Water Conservation District, Miscellaneous
526. Kensington Community Services District, Safety - Police
527. Kentfield Fire Protection District, Miscellaneous
528. Kentfield Fire Protection District, Safety - Fire
529. Kern-Tulare Water District, Miscellaneous
530. Kings County Area Public Transit Agency, Miscellaneous
531. Kings County Association of Governments, Miscellaneous
532. Kings County In-Home Supportive Services Public Authority, Miscellaneous
533. Lake County Fire Protection District, Miscellaneous
534. Lake County Fire Protection District, Safety - Fire
535. Lake Shastina Community Services District, Miscellaneous
536. Lake Shastina Community Services District, Safety - Fire
537. Lake Shastina Community Services District, Safety - Police
538. Lake Valley Fire Protection District, Miscellaneous
539. Lake Valley Fire Protection District, Safety - Fire
540. Lakeport County Fire Protection District, Miscellaneous
541. Lakeport County Fire Protection District, Safety - Fire
542. Lakeside Fire Protection District, Safety - Fire
543. Lassen County Waterworks District No. 1, Miscellaneous
544. Linda Fire Protection District, Miscellaneous
545. Linda Fire Protection District, Safety - Fire
546. Livermore/Amador Valley Transit Authority, Miscellaneous
547. Local Agency Formation Commission of Monterey County, Miscellaneous
548. Local Agency Formation Commission of Solano County, Miscellaneous
549. Local Government Services Authority, a Joint Powers Authority, Miscellaneous
550. Los Angeles County Development Authority, Miscellaneous
551. Los Angeles Unified School District, Safety - Police
552. Mammoth Lakes Fire District, Safety - Fire
553. Mammoth Lakes Mosquito Abatement District, Miscellaneous
554. March Joint Powers Authority, Miscellaneous
555. Marin Community College District, Safety - Police
556. Mendocino County Russian River Flood Control & Water Conservation Improvement Dt, Miscellaneous
557. Metropolitan Water District of Southern California, Miscellaneous
558. Midway Heights County Water District, Miscellaneous
559. Monterey Bay Unified Air Pollution Control District, Miscellaneous
560. Monterey Peninsula Regional Park District, Miscellaneous
561. Monterey Peninsula Water Management District, Miscellaneous

Appendix E – List of Contracting Agencies

Level 4 (continued)

- 562. Municipal Pooling Authority, Miscellaneous
- 563. Municipal Water District of Orange County, Miscellaneous
- 564. Murrieta Fire Protection District, Safety - Fire
- 565. Murrieta Valley Cemetery District, Miscellaneous
- 566. Napa County Mosquito Abatement District, Miscellaneous
- 567. Napa County Resource Conservation District, Miscellaneous
- 568. Napa Sanitation District, Miscellaneous
- 569. Napa Valley Transportation Authority, Miscellaneous
- 570. Nevada County Consolidated Fire District, Miscellaneous
- 571. Nevada County Consolidated Fire District, Safety - Fire
- 572. Nipomo Community Services District, Miscellaneous
- 573. North Bay Regional Center, Miscellaneous
- 574. North County Dispatch Joint Powers Authority, Miscellaneous
- 575. North County Fire Protection District of San Diego County, Miscellaneous
- 576. North County Fire Protection District of San Diego County, Safety - Fire
- 577. Northshore Fire Protection District, Miscellaneous
- 578. Northshore Fire Protection District, Safety - Fire
- 579. Orange County Vector Control District, Miscellaneous
- 580. Pasadena Unified School District, Safety - Police
- 581. Pebble Beach Community Services District, Miscellaneous
- 582. Peninsula Traffic Congestion Relief Alliance, Miscellaneous
- 583. Penn Valley Fire Protection District, Safety - Fire
- 584. Phelan Pinon Hills Community Services District, Miscellaneous
- 585. Pixley Irrigation District, Miscellaneous
- 586. Placer Mosquito and Vector Control District, Miscellaneous
- 587. Plumas Eureka Community Services District, Miscellaneous
- 588. Point Montara Fire Protection District, Safety - Fire
- 589. Rancho Cucamonga Fire Protection District, Miscellaneous
- 590. Rancho Cucamonga Fire Protection District, Safety - Fire
- 591. Rancho Santa Fe Fire Protection District, Miscellaneous
- 592. Rancho Santa Fe Fire Protection District, Safety - Fire
- 593. Redwood Empire Municipal Insurance Fund, Miscellaneous
- 594. Regional Center of Orange County, Miscellaneous
- 595. Rescue Fire Protection District, Safety - Fire
- 596. Rincon Del Diablo Municipal Water District, Miscellaneous
- 597. Rincon Valley Fire Protection District, Miscellaneous
- 598. Rincon Valley Fire Protection District, Safety - Fire
- 599. Rose Bowl Operating Company, Miscellaneous
- 600. Rosedale-Rio Bravo Water Storage District, Miscellaneous
- 601. Sacramento Groundwater Authority, Miscellaneous
- 602. Sacramento Metropolitan Fire District, Miscellaneous
- 603. Sacramento Metropolitan Fire District, Safety - Fire
- 604. Sacramento Suburban Water District, Miscellaneous
- 605. Salinas Valley Solid Waste Authority, Miscellaneous
- 606. San Bernardino City Unified School District, Safety - Police
- 607. San Diego Association of Governments, Miscellaneous
- 608. San Diego Pooled Insurance Program Authority, Miscellaneous
- 609. San Diego Unified School District, Safety - Police
- 610. San Francisco Bay Area Rapid Transit District, Safety - Police
- 611. San Francisco Bay Area Water Emergency Transportation Authority, Miscellaneous
- 612. San Gabriel Valley Council of Governments, Miscellaneous
- 613. San Joaquin County IHSS Public Authority, Miscellaneous
- 614. San Luis Obispo Council of Governments, Miscellaneous
- 615. San Mateo Consolidated Fire Department, Miscellaneous
- 616. San Mateo Consolidated Fire Department, Safety - Fire
- 617. San Miguel Community Services District, Miscellaneous
- 618. San Miguel Community Services District, Safety - Fire
- 619. San Miguel Consolidated Fire Protection District, Miscellaneous
- 620. San Miguel Consolidated Fire Protection District, Safety - Fire
- 621. San Simeon Community Services District, Miscellaneous
- 622. Santa Ana Unified School District, Safety - Police
- 623. Santa Clara Valley Water District, Miscellaneous
- 624. Santa Clarita Valley Water Agency, Miscellaneous
- 625. Santa Cruz County Regional Transportation Commission, Miscellaneous
- 626. Santa Margarita Water District, Miscellaneous
- 627. Santos Manuel Student Union of California State University, San Bernardino, Miscellaneous
- 628. Schell Vista Fire Protection District, Safety - Fire
- 629. Selma-Kingsburg-Fowler County Sanitation District, Miscellaneous
- 630. Shasta Lake Fire Protection District, Miscellaneous
- 631. Shasta Regional Transportation Agency, Miscellaneous
- 632. Sierra-Sacramento Valley Emergency Medical Services Agency, Miscellaneous
- 633. Silicon Valley Animal Control Authority, Miscellaneous
- 634. Silicon Valley Clean Water, Miscellaneous
- 635. Sonoma County Fire District, Miscellaneous
- 636. Sonoma County Fire District, Safety - Fire
- 637. Sonoma Marin Area Rail Transit District, Safety - Other Safety

Appendix E – List of Contracting Agencies

Level 4 (continued)

- 638. Soquel Creek Water District, Miscellaneous
- 639. South Central Los Angeles Regional Center for Developmentally Disabled Persons, Miscellaneous
- 640. South Coast Water District, Miscellaneous
- 641. South County Support Services Agency, Miscellaneous
- 642. South Orange County Wastewater Authority, Miscellaneous
- 643. South Placer Fire District, Miscellaneous
- 644. South Placer Fire District, Safety - Fire
- 645. South San Joaquin County Fire Authority, Miscellaneous
- 646. South San Joaquin County Fire Authority, Safety - Fire
- 647. Southeast Area Social Services Funding Authority, Miscellaneous
- 648. Stanislaus Consolidated Fire Protection District, Miscellaneous
- 649. Stanislaus Consolidated Fire Protection District, Safety - Fire
- 650. Stinson Beach County Water District, Miscellaneous
- 651. Stinson Beach Fire Protection District, Miscellaneous
- 652. Stinson Beach Fire Protection District, Safety - Fire
- 653. Stockton East Water District, Miscellaneous
- 654. Successor Agency to the Redevelopment Agency of the City of San Bernardino, Miscellaneous
- 655. Summit Cemetery District, Miscellaneous
- 656. Susanville Sanitary District, Miscellaneous
- 657. Temescal Valley Water District, Miscellaneous
- 658. Three Rivers Community Services District, Miscellaneous
- 659. Three Valleys Municipal Water District, Miscellaneous
- 660. Tiburon Fire Protection District, Miscellaneous
- 661. Tiburon Fire Protection District, Safety - Fire
- 662. Town of Corte Madera, Miscellaneous
- 663. Town of Corte Madera, Safety - Fire
- 664. Town of Hillsborough, Safety - Police
- 665. Town of Los Altos Hills, Miscellaneous
- 666. Town of Los Gatos, Miscellaneous
- 667. Town of Los Gatos, Safety - Police
- 668. Town of Mammoth Lakes, Miscellaneous
- 669. Town of Mammoth Lakes, Safety - Police
- 670. Town of Moraga, Miscellaneous
- 671. Town of Moraga, Safety - Police
- 672. Town of Paradise, Miscellaneous
- 673. Town of Paradise, Safety - Fire
- 674. Town of Paradise, Safety - Police
- 675. Town of Tiburon, Miscellaneous
- 676. Town of Windsor, Miscellaneous
- 677. Transbay Joint Powers Authority, Miscellaneous
- 678. Transportation Authority of Marin, Miscellaneous
- 679. Treasure Island Development Authority, Miscellaneous
- 680. Trindel Insurance Fund, Miscellaneous
- 681. Truckee Fire Protection District, Miscellaneous
- 682. Truckee Fire Protection District, Safety - Fire
- 683. Truckee Tahoe Airport District, Miscellaneous
- 684. Tuolumne County Transportation Council, Miscellaneous
- 685. Tuolumne Fire District, Safety - Fire
- 686. Twain Harte Community Services District, Miscellaneous
- 687. Twain Harte Community Services District, Safety - Fire
- 688. Twin Rivers Unified School District, Safety - Police
- 689. Ukiah Valley Fire District, Safety - Fire
- 690. Union Sanitary District, Miscellaneous
- 691. Upper San Gabriel Valley Municipal Water District, Miscellaneous
- 692. Val Verde Unified School District, Safety - Police
- 693. Valley Center Municipal Water District, Miscellaneous
- 694. Ventura County Schools Self-Funding Authority, Miscellaneous
- 695. Ventura Port District, Miscellaneous
- 696. Ventura Port District, Safety - Police
- 697. Victor Valley Transit Authority, Miscellaneous
- 698. Water Employee Services Authority, Miscellaneous
- 699. West Bay Sanitary District, Miscellaneous
- 700. West Contra Costa Integrated Waste Management Authority, Miscellaneous
- 701. West Contra Costa Transportation Advisory Committee, Miscellaneous
- 702. West County Wastewater District, Miscellaneous
- 703. West Valley Mosquito and Vector Control District, Miscellaneous
- 704. Western Contra Costa Transit Authority, Miscellaneous
- 705. Winton Water and Sanitary District, Miscellaneous
- 706. Woodbridge Rural County Fire Protection District, Miscellaneous
- 707. Woodbridge Rural County Fire Protection District, Safety - Fire
- 708. Woodside Fire Protection District, Safety - Fire
- 709. Yorba Linda Water District, Miscellaneous
- 710. Yuima Municipal Water District, Miscellaneous

Appendix E – List of Contracting Agencies

Indexed Level

1. Alpine Springs County Water District, Miscellaneous
2. Alta California Regional Center, Inc., Miscellaneous
3. BETA Healthcare Group Risk Management Authority, Miscellaneous
4. California Central Valley Flood Control Association, Miscellaneous
5. California Special Districts Association, Miscellaneous
6. Central Fire Protection District of Santa Cruz County, Miscellaneous
7. Central Fire Protection District of Santa Cruz County, Safety - Fire
8. Central Sierra Child Support Agency, Miscellaneous
9. Channel Islands Beach Community Services District, Miscellaneous
10. City of Aliso Viejo, Miscellaneous
11. City of American Canyon, Miscellaneous
12. City of Berkeley, Safety - Fire
13. City of Crescent City, Safety - Fire
14. City of Del Mar, Safety - Fire
15. City of Eastvale, Miscellaneous
16. City of Emeryville, Safety - Fire
17. City of Garden Grove, Miscellaneous
18. City of Garden Grove, Safety - Fire
19. City of Garden Grove, Safety - Police
20. City of Greenfield, Safety - Fire
21. City of Hanford, Safety - Fire
22. City of Madera, Miscellaneous
23. City of Madera, Safety - Police
24. City of Maywood, Miscellaneous
25. City of Mill Valley, Safety - Fire
26. City of Mill Valley, Safety - Police
27. City of Modesto, Safety - Fire
28. City of Modesto, Safety - Police
29. City of Monterey, Safety - Fire
30. City of Monterey, Safety - Police
31. City of Napa, Miscellaneous
32. City of Napa, Safety - Fire
33. City of Newark, Miscellaneous
34. City of Newark, Safety - Fire
35. City of Newark, Safety - Police
36. City of Oceanside, Safety - Other Safety
37. City of Poway, Miscellaneous
38. City of Poway, Safety - Fire
39. City of Rancho Cordova, Miscellaneous
40. City of Rancho Santa Margarita, Miscellaneous
41. City of Redding, Miscellaneous
42. City of Sacramento, Safety - Police
43. City of Salinas, Safety - Police
44. City of San Carlos, Safety - Fire
45. City of San Marcos, Safety - Fire
46. City of Santa Clarita, Miscellaneous
47. City of Santee, Safety - Fire
48. City of Shasta Lake, Miscellaneous
49. City of Solana Beach, Safety - Fire
50. City of South Lake Tahoe, Miscellaneous
51. City of South Lake Tahoe, Safety - Fire
52. City of Yuba City, Miscellaneous
53. City of Yuba City, Safety - Fire
54. City of Yuba City, Safety - Police
55. Coalinga/Huron Unified School District Library District, Miscellaneous
56. Coastal Animal Services Authority, Miscellaneous
57. Contra Costa Community College District, Safety - Police
58. Cooperative Organization for the Development of Employee Selection Procedures, Miscellaneous
59. County of Riverside, Miscellaneous
60. County of Riverside, Safety - County Peace Officer
61. County of Riverside, Safety - Fire
62. Foothill Municipal Water District, Miscellaneous
63. Foundation for California Community Colleges, Miscellaneous
64. Greater Los Angeles County Vector Control District, Miscellaneous
65. Greenfield Fire Protection District, Safety - Fire
66. Hesperia Unified School District, Safety - Police
67. Housing Authority of the County of Santa Cruz, Miscellaneous
68. Inland Empire Resource Conservation District, Miscellaneous
69. Jurupa Area Recreation and Park District, Miscellaneous
70. Loomis Fire Protection District, Miscellaneous
71. Loomis Fire Protection District, Safety - Fire
72. Marin Children and Families Commission, Miscellaneous
73. Marin County In-Home Supportive Services Public Authority, Miscellaneous
74. Menlo Park Fire Protection District, Miscellaneous
75. Menlo Park Fire Protection District, Safety - Fire
76. Midpeninsula Regional Open Space District, Miscellaneous

Appendix E – List of Contracting Agencies

Indexed Level (continued)

77. Mojave Air and Space Port, Miscellaneous
78. North Bay Cooperative Library System, Miscellaneous
79. North Delta Water Agency, Miscellaneous
80. Oceano Community Services District, Safety - Fire
81. Penryn Fire Protection District, Safety - Fire
82. Plumas Local Agency Formation Commission, Miscellaneous
83. Redwood Coast Regional Center, Miscellaneous
84. Regional Center of the East Bay, Miscellaneous
85. Sacramento Area Flood Control Agency, Miscellaneous
86. San Diego County Office Of Education, Miscellaneous
87. San Elijo Joint Powers Authority, Miscellaneous
88. San Francisquito Creek Joint Powers Authority, Miscellaneous
89. Santa Clara Valley Open Space Authority, Miscellaneous
90. Santa Monica Community College District, Safety - Police
91. Schools Insurance Authority, Miscellaneous
92. Scotts Valley Fire Protection District, Miscellaneous
93. Scotts Valley Fire Protection District, Safety - Fire
94. Shasta Local Agency Formation Commission, Miscellaneous
95. Sonoma Marin Area Rail Transit District, Miscellaneous
96. State and Federal Contractors Water Agency, Miscellaneous
97. Stege Sanitary District, Miscellaneous
98. Town of Truckee, Safety - Police
99. Utica Water and Power Authority, Miscellaneous
100. Vallejo Flood and Wastewater District, Miscellaneous
101. Williams Fire Protection Authority, Miscellaneous
102. Williams Fire Protection Authority, Safety - Fire
103. Yolo County In-Home Supportive Services Public Authority,
Miscellaneous
104. Yuba Community College District, Safety - Polices

Appendix F – Glossary

Accrued Liability (Actuarial Accrued Liability)

The portion of the Present Value of Benefits allocated to prior years. It can also be expressed as the Present Value of Benefits minus the present value of future Normal Cost. Different actuarial cost methods and different assumptions will lead to different measures of Accrued Liability.

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 discount rate, wage inflation, and price inflation.

Actuarial Methods

Procedures employed by actuaries to achieve certain funding goals of a pension plan. Actuarial methods include an actuarial cost method, an amortization policy, and an asset valuation method.

Actuarial Valuation

The determination as of a valuation date of the Normal Cost, Accrued Liability, and related actuarial present values for a pension plan. These valuations are performed annually or when an employer is contemplating a change in plan provisions.

Actuary

A business professional proficient in mathematics and statistics who performs the calculations necessary to properly fund a pension plan and allow the plan sponsor to disclose its liabilities. An actuary performing an actuarial valuation for a public retirement system in California must satisfy the qualification standards for actuaries issuing statements of actuarial opinion in the United States with regard to pensions.

Amortization Bases

Separate payment schedules for different portions of the Unfunded Accrued Liability (UAL). The total UAL of a rate plan can be segregated by cause. The impact of such individual causes on the UAL are quantified at the time of their occurrence, resulting in new amortization bases. Each base is separately amortized and paid for over a specific period of time. Generally, in an actuarial valuation, the separate bases consist of changes in UAL due to contract amendments, actuarial assumption changes, method changes, and/or experience gains and losses.

Amortization Period

The number of years required to pay off an Amortization Base.

Discount Rate

This is the rate used to discount the expected future benefit payments to the valuation date to determine the Projected Value of Benefits. Different discount rates will produce different measures of the Projected Value of Benefits. The discount rate for funding purposes is based on the assumed long-term rate of return on plan assets, net of investment and administrative expenses. This rate is called the "actuarial interest rate" in Section 20014 of the California Public Employees' Retirement Law.

Entry Age

The earliest age at which a plan member begins to accrue benefits under a defined benefit pension plan. In most cases, this is the age of the member on their date of hire.

Entry Age Actuarial Cost Method

An actuarial cost method that allocates the cost of the projected benefits on an individual basis as a level percent of earnings for the individual between entry age and retirement age. This method yields a total normal cost rate, expressed as a percentage of payroll, which is designed to remain level throughout the member's career.

Fresh Start

A Fresh Start is when multiple amortization bases are combined into a single base and amortized over a new Amortization Period.

Funded Ratio

Defined as the Market Value of Assets divided by the Accrued Liability. Different actuarial cost methods and different assumptions will lead to different measures of Funded Ratio. The Funded Ratio with the Accrued Liability equal to the funding target is a measure of how well funded a rate plan is. A ratio greater than 100% means the rate plan has more assets than the funding target and the employer need only contribute the Normal Cost. A ratio less than 100% means assets are less than the funding target and contributions in addition to Normal Cost are required.

Appendix F – Glossary

Glossary (continued)

Funded Status

Any comparison of a particular measure of plan assets to a particular measure of pension obligations. The methods and assumptions used to calculate a funded status should be consistent with the purpose of the measurement.

Funding Target

The Accrued Liability measure upon which the funding requirements are based. The funding target is the Accrued Liability under the Entry Age Actuarial Cost Method using the assumptions adopted by the board.

Normal Cost

The portion of the Present Value of Benefits allocated to the upcoming fiscal year for active employees. Different actuarial cost methods and different assumptions will lead to different measures of Normal Cost. The Normal Cost under the Entry Age Actuarial Cost Method, using the assumptions adopted by the board, plus the required amortization of the UAL, if any, make up the required contributions.

Present Value of Benefits (PVB)

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.

Term Insurance Method

An actuarial cost method designed such that contributions are made to the plan to meet benefit payments expected to fall due within the year for which the contribution is made.

Unfunded Accrued Liability (UAL)

The Accrued Liability minus the Market Value of Assets. If the UAL for a rate plan is positive, the employer is required to make contributions in excess of the Normal Cost.

Actuarial Office
400 Q Street
Sacramento, CA 95811
TTY - (877) 249-7442
(888) 225-7377
FAX (916) 795-2744

Available online on the CalPERS Website



California Public Employees' Retirement System
A Component Unit of the State of California