San Diego County Employees' Retirement Association

Actuarial Valuation and Review as of June 30, 2003

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March 24, 2004

Board of Retirement San Diego County Employees' Retirement Association 401 West A Street, Suite 1300 San Diego, CA 92101-7906

Dear Board Members:

We are pleased to submit this Actuarial Valuation and Review as of June 30, 2003. It summarizes the actuarial data used in the valuation, establishes the funding requirements for fiscal 2004-2005 and analyzes the preceding year's experience.

The census information on which our calculations were based was prepared by SDCERA and the financial information was provided by the Retirement Office. That assistance is gratefully acknowledged. The actuarial calculations were completed under the supervision of Andy Yeung, ASA, MAAA, Enrolled Actuary.

This actuarial valuation has been completed in accordance with generally accepted actuarial principles and practices. To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate. Further, in our opinion, the assumptions as approved by the Board of Retirement are reasonably related to the experience of and the expectations for the Plan.

We look forward to reviewing this report at your next meeting and to answering any questions.

Sincerely,

THE SEGAL COMPANY

By:

Paul Angelo, FSA, MAAA, FCA
Vice President and Actuary

Andy Yeung, ASA, MAAA
Associate Actuary

AYY/czr

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# **Purpose**

This report has been prepared by The Segal Company to present a valuation of the San Diego County Employees' Retirement Association as of June 30, 2003. The valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits. The contribution requirements presented in this report are based on:

- > The benefit provisions of the Retirement Association, as administered by the Board of Retirement;
- > The characteristics of covered active members, inactive vested members, and retired members and beneficiaries as of June 30, 2003, provided by the Retirement Office;
- > The assets of the Plan as of June 30, 2003, provided by the Retirement Office;
- > Economic assumptions regarding future salary increases and investment earnings; and
- > Other actuarial assumptions, regarding employee terminations, retirement, death, etc.

San Diego County Employees' Retirement Association's basic financial goal is to establish contributions which fully fund the Association's liabilities, and which, as a percentage of payroll, remain as level as possible for each generation of active members. Annual actuarial valuations measure the progress toward this goal, as well as test the adequacy of the contribution rates.

In preparing this valuation, we have employed generally accepted actuarial methods and assumptions to evaluate the Association's assets, liabilities and future contribution requirements. Our calculations are based upon member data and financial information provided to us by the Association's staff. This information has not been audited by us, but it has been reviewed and found to be consistent, both internally and with prior year's information.

The contribution requirements are determined as a percentage of payroll. The Association's employer rates provide for both normal cost and a contribution to amortize any unfunded or overfunded actuarial accrued liabilities. In this valuation, we have continued with the Board's funding policy to amortize the Association's entire unfunded actuarial accrued liability as of June 30, 2003 over a rolling (i.e. non-declining) 15-year period. The aggregate employer contribution rate calculated using the rolling 15-year amortization period is 27.64% of payroll.

The rates calculated in this report may be adopted by the Board for the fiscal year that extends from July 1, 2004 through June 30, 2005.

#### **Significant Issues in This Valuation**

The following key findings were the result of this actuarial valuation:

- > The ratio of valuation value of assets to actuarial accrued liabilities decreased from 82.5% (calculated as of October 3, 2003 after the issuance of Pension obligation bonds) to 75.5% (calculated as of June 30, 2003). The Association's unfunded actuarial accrued liability has changed from \$905.1 million as of October 3, 2003 to \$1,435.3 million as of June 30, 2003. A complete reconciliation of the Association's unfunded actuarial accrued liability is provided in Section 3, Exhibit H.
- > The aggregate employer rate calculated in this valuation has increased from 22.49% of payroll to 27.64% of payroll. The reasons for the increase are: (i) higher than expected salary increases, (ii) lower than expected return on investment, (iii) other actuarial losses and (iv) change in actuarial assumptions. A complete reconciliation of the Association's aggregate employer rate is provided in Section 2, Subsection D (see Chart 15).
- > The aggregate member rate calculated in this valuation has increased from 8.94% of payroll to 9.89% of payroll. The increase in member rate is primarily due to the adoption of new actuarial assumptions determined in the July 1, 2000 June 30, 2003 triennial experience study and an adjustment to the COLA contribution rate for Safety Members. It is our understanding that the current Safety Member COLA rate was calculated using the old 2% at 50 formula because the County agreed to defer the application of higher COLA rate required for the 3% at 50 formula enhancement until the 2004/2005 fiscal year. This cost reallocation for the 2004/2005 fiscal year results in an increase to the Safety Member rate. The legislation which enabled the 3% at 50 formula did not change the formula used to determine the Basic contribution rate for Safety members under the 2% at 50 formula. A complete reconciliation of the Association's aggregate member rate is provided in Section 2, Subsection D (see Chart 16).
- > The results of this valuation reflect the changes in economic (e.g. salary increase assumptions) and non-economic assumptions adopted by the Board as a result of the June 30, 2003 triennial experience study. The impact of the assumption changes is provided in Section 2, Subsection D (see Charts 15 and 16). The specific assumption changes can be found in Section 4, Exhibit IV.
- > As indicated in Section 2, Subsection B (see Chart 7) of this report, the total unrecognized investment loss as of June 30, 2003 is \$672,887,090. This investment loss will be recognized in the determination of the actuarial value of assets for funding purposes in the next few years, to the extent it is not offset by recognition of investment gains derived from future experience. This implies that earning the assumed rate of investment return of 8.25% per year (net of expenses) on a market value basis will result in investment losses on the actuarial value of assets in the next few years. Therefore, if the

actual market return is equal to the assumed 8.25% rate and all other actuarial assumptions are met, the contribution requirements would still increase in each of the next few years.

Impact of Future Experience on Contribution Rates

Future contribution requirements may differ from those determined in the valuation because of:

- > difference between actual experience and anticipated experience;
- > changes in actuarial assumptions or methods;
- > changes in statutory provisions; and
- > difference between the contribution rates determined by the valuation and those adopted by the Board.

	June	30, 2003	June 30, 2002 <sup>(3)</sup>		
Employer Contribution Rates:(1)		Estimated		Estimated	
	Total Rate	Annual Amount <sup>(2)</sup>	Total Rate	Annual Amount <sup>(2)</sup>	
General Combined	25.59%	\$181,212	19.72%	\$139,646	
Safety	34.99%	69,281	32.41%	64,173	
All Categories combined	27.64%	250,493	22.49%	203,819	
Average Member Contribution Rates:		Estimated		Estimated	
-	Total Rate <sup>(1)</sup>	Annual Amount <sup>(2)</sup>	Total Rate <sup>(1)</sup>	Annual Amount <sup>(2)</sup>	
General Tier 1	8.92%	\$298	8.39%	\$280	
General Tier A	9.49%	66,885	8.85%	62,374	
Safety Members	11.31%	22,394	9.27%	18,355	
All Categories combined	9.89%	89,577	8.94%	81,009	
Funded Status:					
Actuarial accrued liability <sup>(4)</sup>	\$5,853,125		\$5,183,340		
Valuation value of assets <sup>(5)</sup>	4,417,766		4,278,240		
Funded percentage	75.5%		82.5%		
Unfunded Actuarial Accrued Liability	1,435,359		905,100		
Key Assumptions:					
Interest rate	8.25%		8.25%		
Inflation rate	4.00%		4.00%		

<sup>(1)</sup> Before reflection of any member rate that may be "picked-up" by the employer.



<sup>(2)</sup> Based on June 30, 2003 projected annual compensation.

<sup>(3)</sup> From the October 3, 2002 revised Actuarial Valuation Report.

<sup>(4)</sup> Excludes liabilities for STAR COLA and Health Benefit Reserves

<sup>(5)</sup> Excludes assets for STAR COLA and Health Benefit Reserves.

SECTION 1: Valuation Summary for the San Diego County Employees' Retirement Association

	June 30, 2003	June 30, 2002	Percentage Change
Active Members:			
Number of members	18,466	18,276	1.0%
Average age	43.9	43.8	N/A
Average service	9.7	9.7	N/A
Projected total compensation	\$906,139,000	\$826,596,000	9.6%
Average projected compensation	\$49,071	\$45,228	8.5%
Retired Member and Beneficiaries:			
Number of members:			
Service retired	7,782	7,287	6.8%
Disability retired	1,320	1,236	6.8%
Beneficiaries	1,151	1,134	1.5%
Total	10,253	9,657	6.2%
Average age	69.1	69.4	N/A
Average monthly benefit*	\$1,669	\$1,517	10.0%
Vested Terminated Members:			
Number of terminated vested members**	3,910	3,323	17.7%
Average age	44.6	46.0	N/A
Summary of Financial Data (dollar amounts in thousands):			
Market value of assets	\$4,103,348	\$3,533,580	16.1%
Return on market value of assets	3.68%	-4.58%	N/A
Actuarial value of assets	\$4,776,235	\$4,182,208	14.2%
Return on actuarial value of assets	3.69%	8.00%	N/A
Valuation value of assets	\$4,417,766	\$3,831,334	3.3%
Return on valuation value of assets	3.05%	4.68%	N/A

<sup>\*</sup> Excludes monthly benefits for STAR COLA.

<sup>\*\*</sup> Effective January 1, 2003, this includes members who choose to leave their contributions on deposit even though they have less than five years of service.

#### A. MEMBER DATA

The Actuarial Valuation and Review considers the number and demographic characteristics of covered members, including active members, vested terminated members, retired members and beneficiaries. This section presents a summary of significant statistical data on these member groups.

More detailed information for this valuation year and the preceding valuation can be found in Section 3, Exhibits A, B, and C.

A historical perspective of how the member population has changed over the past ten valuations can be seen in this chart.

CHART 1 Member Population: 1994 – 2003

Year Ended June 30	Active Members	Vested Terminated Members	Retired Members and Beneficiaries	Ratio of Non-Actives to Actives
1994	16,180	1,189	7,106	0.51
1995	16,500	1,401	7,294	0.53
1996	16,524	1,588	7,499	0.55
1997	16,635	1,929	7,692	0.58
1998	16,443	2,271	7,955	0.62
1999	16,579	2,653	8,292	0.66
2000	16,669	3,081	8,703	0.71
2001	17,346	3,290	8,921	0.70
2002	18,276	3,323	9,657	0.71
2003	18,466	3,910	10,253	0.77

#### **Active Members**

Plan costs are affected by the age, years of service and compensation of active members. In this year's valuation, there were 18,466 active members with an average age of 43.9, average years of service of 9.7 years and average compensation of \$49,071. The 18,276 active members in the prior valuation had an average age of 43.8, average service of 9.7 years and average compensation of \$45,228.

Among the active members, there were none with unknown age.

#### **Inactive Members**

In this year's valuation, there were 3,910 members with a vested right to a deferred or immediate vested benefit or entitled to a return of their member contributions versus 3,323 in the prior valuation

These graphs show a distribution of active members by age and by years of service.

CHART 2
Distribution of Active Members by Age as of June 30, 2003

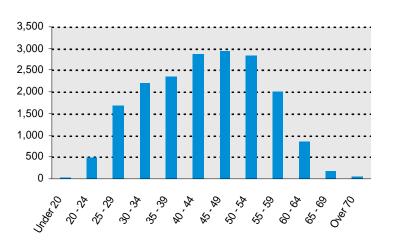
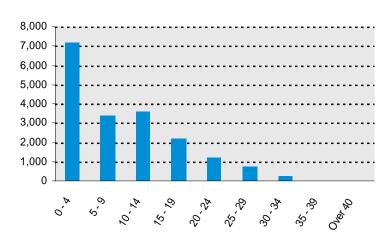


CHART 3

Distribution of Active Members by Years of Service as of June 30, 2003

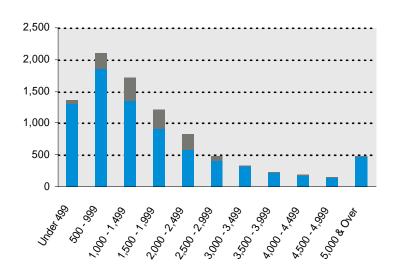


# **Retired Members and Beneficiaries**

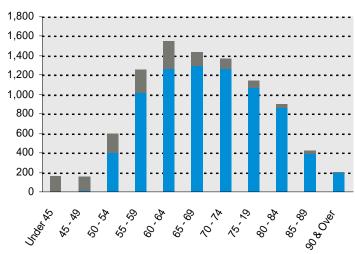
As of June 30, 2003, 9,102 retired members and 1,151 beneficiaries were receiving total monthly benefits of \$17,117,466. For comparison, in the previous valuation, there were 8,523 retired members and 1,134 beneficiaries receiving monthly benefits of \$14,647,327. These monthly benefits exclude benefits for STAR COLA.

These graphs show a distribution of the current retired members based on their monthly amount and age, by type of pension.

CHART 4
Distribution of Retired Members by Type and by Monthly Amount as of June 30, 2003



# CHART 5 Distribution of Retired Members by Type and by Age as of June 30, 2003



■ Disability
■ Service



#### B. FINANCIAL INFORMATION

Retirement plan funding anticipates that, over the long term, both net contributions and net investment earnings (less investment fees and administrative expenses) will be needed to cover benefit payments.

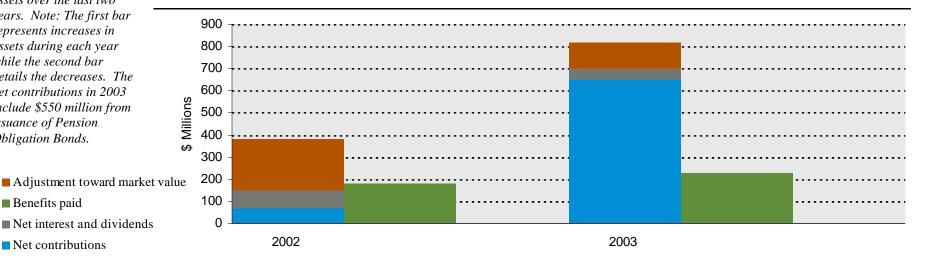
Retirement plan assets change as a result of the net impact of these income and expense components. The adjustment toward market value shown in the chart is the "non-cash" earnings on investments implicitly included in the actuarial value of assets. Additional financial information, including a summary of these transactions for the valuation year, is presented in Section 3, Exhibits D, E and F.

The chart depicts the components of changes in the actuarial value of assets over the last two years. Note: The first bar represents increases in assets during each year while the second bar details the decreases. The net contributions in 2003 include \$550 million from issuance of Pension Obligation Bonds.

■ Benefits paid

■ Net contributions

# **CHART 6** Comparison of Increases and Decreases in the Actuarial Value of Assets for Years Ended June 30, 2002 - 2003





It is desirable to have level and predictable plan costs from one year to the next. For this reason, the Board of Retirement has approved an asset valuation method that gradually adjusts to market value. The Actuarial Value of Assets is determined by phasing in the actual return on the market value of assets that is in excess/below the expected return on the valuation value of assets over a five-year period. Under this method, the full value of market fluctuations is not recognized in a single year and, as a result, the asset value and the plan costs are more stable.

The amount of the adjustment to recognize market value is treated as income, which may be positive or negative. Realized and unrealized gains and losses are treated equally and, therefore, the sale of assets has no immediate effect on the actuarial value.

The determination of the Actuarial Value of Assets is provided on the following page.

The chart shows the determination of the actuarial value of assets as of the valuation date.

# CHART 7 Determination of Actuarial Value of Assets for Year Ended June 30, 2003

A	<u>Date of Actuarial Valuation</u> Valuation Value of Assets (Beginning of Year)	June 30, 1999	June 30, 2000	June 30, 2001	June 30, 2002	June 30, 2003 \$3,831,334,307
В	Market Value (End of Year)					\$4,103,348,121
C	Market Value (Beginning of Year)					\$3,506,634,195 *
D1	Pension Obligation Bond					\$550,000,000
D2	Non-investment Cash Flow (Including Pension Obligation Bond	d Provided in D1)				\$426,813,774
Е	Investment Income					
E1	Actual Return on Market Value (B-C-D2)					\$169,900,152
E2	Expected Return on Valuation Value, Adjusted for Timing (A*0.0825+(D2-D1)*0.0825*0.5+D1*0.0825*0.75)					\$345,034,899
E3	Portion Subject to Smoothing**	\$140,449,992	\$349,957,881	(\$599,291,580)	(\$605,090,394)	(\$175,134,747)
E4	Percentage Deferred	0%	20%	40%	60%	80%
E5	Amount Deferred (E3*E4)	\$0	\$69,991,576	(\$239,716,632)	(\$363,054,236)	(\$140,107,798)
E6	Total of Amount Deferred (Sum of E5 From Last 5 Years)					(\$672,887,090)
E7	Actuarial Value of Assets (B-E6)					\$4,776,235,211
F	Phased-in Amount Recognized in Current Year					
F1	Current Year					(\$35,026,949)
F2	First Prior Year					(\$121,018,079)
F3	Second Prior Year					(\$119,858,316)
F4	Third Prior Year					\$69,991,576
F5	Fourth Prior Year					\$28,089,998
F6	Total Phased-in Amount Recognized					(\$177,821,770)
G	Non-valuation Reserves					
G1	Health Benefit Reserve					\$269,140,000
G2	401(h) Reserve					\$296,000
G3	Star COLA					\$48,537,000
G4	Contingency Reserve					\$35,336,000
G5	Undistributed Reserve					\$5,160,000
G6	Non-valuation Reserves (End of Year)					\$358,469,000
G7	Non-valuation Reserves (Beginning of Year)					\$350,874,000 *
G8	Change in Non-Valuation Reserve (G6-G7)					\$7,595,000
Н	Valuation Value of Assets (End of Year) (A+D2+E2+F6-G8)					\$4,417,766,210



From October 3, 2002 SDCERA Actuarial Valuation Report Amounts prior to June 30, 2003 obtained from October 3, 2002 SDCERA Actuarial Valuation Report

CHART 8
Allocation of Valuation Value of Assets as of June 30, 2003

The allocation of the valuation reserves between General and Safety is provided below:

1	Beginning of Year Asset Allocation	General 2,863,516,704	Safety 967,817,603	Total 3,831,334,307
2	Estimated Percentage of Total Employee Contributions Including Pickups	77.04%	22.96%	100.00%
3	Employee Contributions Less Refunds, Allocated in Proportion to (2)	25,588,944	7,626,196	33,215,140
4 4a	Employer Contributions Proceeds from Pension Obligation Bond (Per Allocation in October 3, 2002 GRS Report)	386,779,207	163,220,793	550,000,000
4b	Employer Contributions Including Pickups but Excluding Proceeds from Pension Obligation Bonds, Allocated in Proportion to (	50,933,244	15,179,482	66,112,726
5	Annual Allowances for Retired Members (From Last Year's Valuation Report)	139,381,055	36,386,877	175,767,932
6	Benefit Payments Allocated in Proportion to (5)	151,528,996	39,558,223	191,087,219
7	Subtotal = $(1) + (3) + (4a) + (4b) - (6)$	3,175,289,103	1,114,285,851	4,289,574,954
8	Total Valuation Value of Assets			4,417,766,210
9	Residual to Allocate			128,191,256
10	Allocate Residual in Proportion to (7)	94,891,523	33,299,733	128,191,256
11	End of Year Asset Allocation = $(7) + (10)$	3,270,180,626	1,147,585,584	4,417,766,210

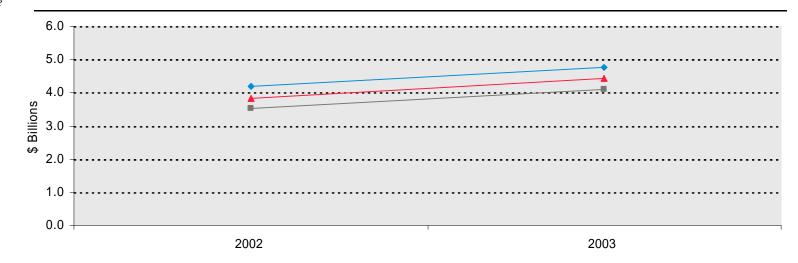


The market value, actuarial value, and valuation value of assets are representations of the SDCERA's financial status. As investment gains and losses are gradually taken into account, the actuarial value of assets tracks the market value of assets, but with less volatility. The valuation value of assets is the actuarial value, excluding any non-valuation reserves. The valuation asset value is significant because the SDCERA's liabilities are compared to these assets to determine what portion, if any, remains unfunded. Amortization of the unfunded actuarial accrued liability is an important element in determining the contribution requirement.

This chart shows the change in market value, actuarial value and valuation value over the past two years.

CHART 9

Market Value, Actuarial Value and Valuation Value of Assets as of June 30, 2002 – 2003



Actuarial Value

── Market Value

→ Valuation Value



#### C. ACTUARIAL EXPERIENCE

To calculate the required contribution, 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 measured against the assumptions. If overall experience is more favorable than anticipated (an actuarial gain), the contribution requirement will decrease from the previous year. On the other hand, the contribution requirement will increase if overall actuarial experience is less favorable than expected (an actuarial loss).

Taking account of experience gains or losses in one year without making a change in assumptions reflects the belief that the single year's experience was a short-term

development and that, over the long term, experience will return to the original assumptions. For contribution requirements to remain stable, assumptions should approximate experience.

If assumptions are changed, the contribution requirement is adjusted to take into account a change in experience anticipated for all future years.

The total experience loss was \$424.5 million, \$51.4 million from investments and \$373.1 million from all other sources. The net experience variation from individual sources other than investments was 6.4% of the actuarial accrued liability. A discussion of the major components of the actuarial experience is on the following pages.

This chart provides a summary of the actuarial experience during the past year.

#### **CHART 10**

# Actuarial Experience for Year Ended June 30, 2003 (From October 3, 2002 to June 30, 2003)

1.	Net gain/(loss) from investments*	-\$51,435,000
2.	Net gain/(loss) from other experience**	<u>-373,148,000</u>
3.	Net experience gain/(loss): $(1) + (2)$	-\$424,583,000

<sup>\*</sup> Details in Chart 11

<sup>\*\*</sup> See Exhibit H. Includes \$106.4 million in losses due to delay in implementation of contribution rates calculated in the October 3, 2002 valuation but excludes \$88.2 million increase in UAAL due to change in actuarial assumptions.

#### **Investment Rate of Return**

A major component of projected asset growth is the assumed rate of return. The assumed return should represent the expected long-term rate of return, based on the SDCERA's investment policy. For valuation purposes, the assumed rate of return on the valuation value of assets was 8.25% (based on June 30, 2002 valuation). The actual rate of return on a valuation basis for the 2002/2003 plan year was 3.05%.

Since the actual return for the year was less than the assumed return, the SDCERA experienced an actuarial loss during the year ended June 30, 2003 with regard to its investments.

This chart shows the gain/(loss) due to investment experience.

#### CHART 11

Investment Experience for Year Ended June 30, 2003 – Valuation Value and Actuarial Value of Assets (From July 1, 2002 to June 30, 2003)

	Valuation Value	Actuarial Value
1. Actual return	\$128,191,000	\$167,213,000
2. Average value of assets	4,197,955,000	4,533,115,000
3. Actual rate of return: (1) ÷ (2)	3.05%	3.69%
4. Assumed rate of return	8.25%	8.25%
5. Expected return: (2) x (4)	345,035,000	373,982,000
6. Actuarial gain/(loss)*: (1) – (5)	<u>-\$216,844,000</u>	<u>-\$206,769,000</u>

<sup>\*</sup> Please note that the loss shown for the Valuation Value of Assets was for the entire fiscal year. The loss from October 3, 2002 to June 30, 2003 was \$51.4 million.



Because actuarial planning is long term, it is useful to see how the assumed investment rate of return has followed actual experience over time. The chart below shows the rate of return on an actuarial valuation, and market basis for the last two years. Based upon the Review of Economic Assumptions dated January 27, 2004, we have maintained the assumed rate of return at 8.25%

CHART 12
Investment Return – Actuarial Value, Valuation Value and Market Value: 2002 - 2003 (Dollar amount in thousands)

Year Ended June 30	Net Interest and Other	•	Recognition Apprec	•	Valuatior Investmen		Actuaria Investmen		Market Value Retu	
	Amount	Percent*	Amount	Percent*	Amount	Percent	Amount	Percent	Amount	Percent
2002	\$79,758	2.03%	\$234,181	5.97%	\$173,066	4.68%	\$313,759	8.00%	-\$172,418	-4.58%
2003	50,447	1.11%	116,766	2.58%	128,191	3.05%	167,213	3.69%	142,954	3.68%

Note Expressed as a percent of average actuarial asset value in that year.

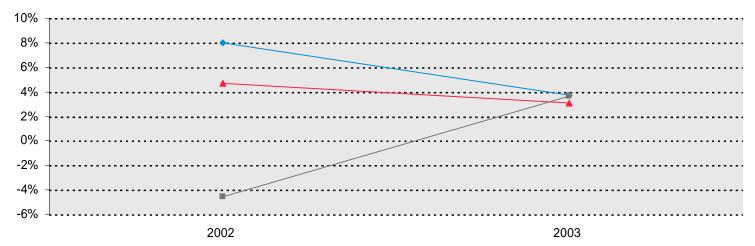


Subsection B described the actuarial asset valuation method that gradually takes into account fluctuations in the market value rate of return. The effect of this is to stabilize the actuarial rate of return, which contributes to leveling pension plan costs.

This chart illustrates how this leveling effect has actually worked over the years 2002 - 2003.

CHART 13

Market, Actuarial and Valuation Rates of Return for Years Ended June 30, 2002 - 2003



Actuarial Value

Market Value

Valuation Value

# **Other Experience**

There are other differences between the expected and the actual experience that appear when the new valuation is compared with the projections from the previous valuation.

#### These include:

- > the extent of turnover among the participants,
- > retirement experience (earlier or later than expected),
- > mortality (more or fewer deaths than expected),

- > the number of disability retirements, and
- > salary increases different than assumed.

The net loss from this other experience for the year ended June 30, 2003 amounted to \$373.1 million which is 6.4% of the actuarial accrued liability. See Exhibit H for a detailed development of the Unfunded Actuarial Accrued Liability.

#### D. EMPLOYER AND MEMBER CONTRIBUTIONS

Employer contributions consist of two components:

Normal Cost

The annual contribution rate that, if paid annually from a member's first year of membership through the year of retirement, would accumulate to the amount necessary to fully fund the member's retirement-related benefits. Accumulation includes annual crediting of interest at the assumed investment earning rate. The contribution rate is expressed as a level percentage of the member's compensation.

Contribution to the Unfunded Actuarial Accrued Liability (UAAL)

The annual contribution rate that, if paid annually over the UAAL amortization period, would accumulate to the amount necessary to fully fund the UAAL. Accumulation includes annual crediting of interest at the assumed investment earning rate. The contribution (or rate credit in the case of a negative unfunded actuarial accrued liability) is calculated to remain as a level percentage of future active member payroll (including payroll for new members as they enter the Association) assuming a constant number of active members. In order to remain as a level percentage of payroll, amortization payments (credits) are scheduled to increase at the annual inflation rate of 4.00%. The current UAAL is being recognized over a rolling 15-year period.

The recommended employer contributions are provided on Charts 14a and 14b.

**Member Contributions** 

Articles 6 and 6.8 of the 1937 Act define the methodology to be used in the calculation of member basic contribution rates for General members and Safety members, respectively. The basic contribution rate is determined so that the accumulation of a member's basic contributions made in a given year until a certain age will be sufficient to fund an annuity at that age that is equal to 1/100 of Final Average Compensation for General and Safety members. That age is 60 for General Tier 1 members, 55 for General Tier A members and 50 for Safety members. It is assumed that contributions are made annually at the same rate, starting at entry age. In addition to their basic contributions, members pay one-half of the total normal cost necessary to fund their cost-of-living benefits. Accumulation includes semi-annual crediting of interest at half of the assumed investment earning rate. The member contribution rates are provided in Appendix A. Please note that the member rates provided in the report are the full rate before reflecting any employer pickup.

CHART 14a

Recommended Employer Contribution Rates (Dollar Amounts in Thousands)

	June 30, 2003 Actuaria	al Valuation	June 30, 2002 Actuarial	Valuation**
		Estimated Annual		Estimated Annua
Seneral Members	<u>Rate</u>	Amount*	Rate	Amount*
Normal Cost - Basic Only	9.36%	\$66,282	8.18%	\$57,926
Normal Cost - COLA Only	<u>2.65%</u>	\$18,765	2.59%	\$18,342
Normal Cost - Total***	12.01%	\$85,047	10.77%	\$76,268
UAAL (Basic and COLA)	13.58%	<u>\$96,165</u>	<u>8.95%</u>	\$63,378
Total Contribution	25.59%	\$181,212	19.72%	\$139,646
afety Members				
Normal Cost - Basic Only	13.76%	\$27,245	13.83%	\$27,384
Normal Cost - COLA Only	4.02%	\$7,960	<u>5.78%</u>	\$11,445
Normal Cost - Total***	17.78%	\$35,205	19.61%	\$38,829
UAAL (Basic and COLA)	<u>17.21%</u>	\$34,076	12.80%	\$25,344
Total Contribution	34.99%	\$69,281	32.41%	\$64,173
ll Categories Combined				
Normal Cost - Basic Only	10.32%	\$93,527	9.41%	\$85,310
Normal Cost - COLA Only	2.95%	<u>\$26,725</u>	<u>3.29%</u>	\$29,787
Normal Cost - Total***	13.27%	\$120,252	12.70%	\$115,097
UAAL (Basic and COLA)	14.37%	\$130,241	<u>9.79%</u>	\$88,722
Total Contribution	27.64%	\$250,493	22.49%	\$203,819

<sup>\*</sup> Amounts are in thousands and are based on June 30, 2003 annual payroll (Also in thousands):

General	Tier 1	\$3,343
General	Tier A	\$704,793
	Subtotal	\$708,136
Safety		\$198,003
	Total	\$906,139

<sup>\*\*</sup> From October 3, 2002 SDCERA Actuarial Valuation Report.



<sup>\*\*\*</sup> A breakdown of the employer's total Normal Cost to fund for each type of benefit is provided in Chart 14b.

# CHART 14b

# Breakdown of the Employer's Normal Cost to Fund for Each Type of Benefit (% of Payroll)

	Elen	nents of Normal (	Cost
	<u>General</u>	<u>Safety</u>	<u>Overall</u>
Service Retirement*	6.54%	7.45%	6.73%
Vested Termination and Ordinary Withdrawal	3.07%	2.74%	3.00%
Non Service and Service Connected Disability	1.99%	6.64%	3.01%
Non Service and Service Connected Death	0.41%	0.95%	0.53%
Total Employer Normal Cost	12.01%	17.78%	13.27%
Total Employee Normal Cost*	9.49%	11.31%	9.89%
Employer Plus Employee Normal Cost	21.50%	29.09%	23.16%

<sup>\*</sup> Assuming that employee normal cost is only used to fund service retirement benefit.

The contribution rates as of June 30, 2003 are based on all of the data described in the previous sections, the actuarial assumptions described in Section 4, and the Plan provisions adopted at the time of preparation of the Actuarial Valuation. They include all changes affecting future costs, adopted benefit changes, actuarial gains and losses and changes in the actuarial assumptions.

#### **Reconciliation of Recommended Contribution**

The chart below details the changes in the recommended contribution from the prior valuation to the current year's valuation.

The chart reconciles the contribution from the prior valuation to the amount determined in this valuation.

# CHART 15 Reconciliation of Recommended Contribution from June 30, 2002 to June 30, 2003 (Dollar Amounts in Thousands)

	Aggregate	Estimated Annual <u>Dollar Cost**</u>
Recommended Employer Contribution Rate as of June 30, 2002*	22.49%	\$203,819
Effect of investment loss (1)	0.52%	\$4,712
Effect of one-year delay in implementation of contribution rates calculated in October 3, 2003 valuation	1.07%	\$9,696
Effect of higher than expected salary increase	1.22%	\$11,055
Effect of increase in Normal Cost due to change in membership demographic	0.49%	\$4,440
Effect of adjustment to COLA contribution rate for Safety members (2)	-0.28%	-\$2,537
Effect of higher than expected liabilities for new retirees and retiree data corrections/adjustments	0.41%	\$3,715
Effect of change in actuarial assumptions	1.25%	\$11,326
Effect of net other changes (3)	0.47%	\$4,267
Subtotal	5.15%	\$46,674
Recommended Employer Contribution Rate as of June 30, 2003	27.64%	\$250,493

<sup>\*</sup> Calculated in the October 3, 2002 Valuation



<sup>\*\*</sup> Based on June 30, 2003 projected annual payroll of \$906,139

<sup>(1)</sup> Return on valuation assets was 3.05% and less than the 8.25% assumed in the valuation.

<sup>(2)</sup> The current Safety member COLA rate was calculated using the old 2% at 50 formula because the County agreed to defer the application of higher COLA required for the 3% at 50 formula enhancement until the 2004/2005 fiscal year. This cost reallocation for the 2004/2005 fiscal year results in a reduction to the employer's rate.

<sup>(3)</sup> Other differences in actual versus expected actuarial experience.

The member contribution rates as of June 30, 2003 are based on all of the data described in the previous sections, the actuarial assumptions described in Section 4, and the Plan provisions adopted at the time of preparation of the Actuarial Valuation. They include all changes affecting future costs, adopted benefit changes, actuarial gains and losses and changes in the actuarial assumptions.

#### **Reconciliation of Recommended Contribution Rate**

The chart below details the changes in the recommended member contribution rate from the prior valuation to the current year's valuation.

The chart reconciles the member contribution from the prior valuation to the amount determined in this valuation.

# CHART 16 Reconciliation of Recommended Member Contribution from June 30, 2002 to June 30, 2003 (Dollar Amounts in Thousands)

	Contribution	Estimated Annual
	<u>Rate</u>	<u>Dollar Cost**</u>
Recommended Contribution Rate as of June 30, 2002*, Before Reflecting Any Employer Pickups	8.94%	\$81,009
Effect of adjustment to COLA contribution rate for Safety members (1)	0.28%	\$2,537
Effect of change in actuarial assumptions	0.74%	\$6,705
Effect of net other changes (2)	-0.07%	-\$674
Subtotal	0.95%	\$8,568
Recommended Contribution Rate as of June 30, 2003, Before Reflecting Any Employer Pickups	9.89%	\$89,577

<sup>\*</sup> Calculated in the October 3, 2002 Valuation

<sup>\*\*</sup> Based on June 30, 2003 projected annual payroll of \$906,139

<sup>(1)</sup> The current Safety member COLA rate was calculated using the old 2% at 50 formula because the County agreed to defer the application of higher COLA rate required for the 3% at 50 formula enhancement until the 2004/2005 fiscal year. This cost reallocation for the 2004/2005 fiscal year results in an increase to the Safety member rate.

<sup>(2)</sup> Other differences in actual versus expected actuarial experience.

#### E. INFORMATION REQUIRED BY THE GASB

Governmental Accounting Standards Board (GASB) reporting information provides standardized information for comparative purposes of governmental pension plans. This information allows a reader of the financial statements to compare the funding status of one governmental plan to another on relatively equal terms.

Critical information to GASB is the historical comparison of the GASB required contributions to the actual contributions. This comparison demonstrates whether a plan is being funded on an actuarially sound basis and in accordance with the GASB funding requirements. Chart 17 below presents a graphical representation of this information for the Plan.

The other critical piece of information regarding the Plan's financial status is the funded ratio. This ratio compares the actuarial value of assets to the actuarial accrued liabilities of the plan as calculated under GASB. High ratios indicate a well-funded plan with assets sufficient to pay most benefits. Lower ratios may indicate recent changes to benefit structures, funding of the plan below actuarial requirements, poor asset performance, or a variety of other changes.

The details regarding the calculations of these values and other GASB numbers may be found in Section 4, Exhibits I, II, and III.

These graphs show key GASB factors.

CHART 17
Required Versus Actual Contributions

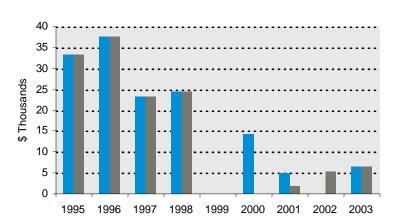
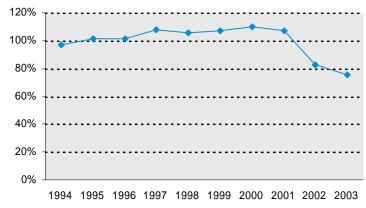


CHART 18 Funded Ratio



■ Required ■ Actual



Supplemental Information for the San Diego County Employees' Retirement Association SECTION 3:

# **EXHIBIT A**

# **Table of Plan Coverage**

#### i. General

	Year End	Year Ended June 30				
Category	2003	2002	– Change From Prior Year			
Active members in valuation						
Number	15,057	14,914	1.0%			
Average age	44.9	44.7	N/A			
Average service	9.5	9.5	N/A			
Projected total compensation <sup>(1)</sup>	\$708,136,533	\$643,528,852	10.0%			
Projected average compensation	\$47,030	\$43,149	9.0%			
Total annualized compensation rates <sup>(2)</sup>	\$694,251,503	\$630,910,639	10.0%			
Average annualized compensation rates	\$46,108	\$42,303	9.0%			
Account balances	\$133,024,057	\$115,938,421	14.7%			
Total active vested members	8,908	9,058	-0.2%			
Vested terminated members	3,561	3,051	16.7%			
Retired members						
Number in pay status	7,148	6,738	6.1%			
Average age	70.7	71.1	N/A			
Average monthly benefit <sup>(3)</sup>	\$1,603	\$1,449	10.6%			
Disabled members						
Number in pay status	855	819	4.4%			
Average age	61.8	62.0	N/A			
Average monthly benefit <sup>(3)</sup>	\$1,268	\$1,221	3.9%			
Beneficiaries						
Number in pay status	1,074	1,056	1.7%			
Average age	74.9	74.4	N/A			
Average monthly benefit <sup>(3)</sup>	\$804	\$808	-0.5%			

 <sup>(1)</sup> Compensation calculated by increasing annualized compensation rates as of valuation date by one-half year of inflation.
 (2) Includes 38 members without a compensation rate for June 2003. An annual amount of \$42,000 was used for these members.

<sup>(3)</sup> Excludes STAR COLA.

**SECTION 3:** Supplemental Information for the San Diego County Employees' Retirement Association

**EXHIBIT A Table of Plan Coverage** ii. Safety

	Year End	Year Ended June 30			
Category	2003	2002	– Change From Prior Year		
Active members in valuation					
Number	3,409	3,362	1.4%		
Average age	39.9	40.0	N/A		
Average service	10.7	10.7	N/A		
Projected total compensation <sup>(1)</sup>	\$198,003,165	\$183,067,551	8.2%		
Projected average compensation	\$58,082	\$54,452	6.7%		
Total annualized compensation rates <sup>(2)</sup>	\$194,120,750	\$179,477,995	8.2%		
Average annualized compensation rates	\$56,944	\$53,384	6.7%		
Account balances	\$59,964,722	\$60,246,204	-0.5%		
Total active vested members	2,406	2,361	1.9%		
Vested terminated members	349	272	28.3%		
Retired members					
Number in pay status	634	549	15.5%		
Average age	63.1	63.3	N/A		
Average monthly benefit <sup>(3)</sup>	\$3,970	\$3,681	7.9%		
Disabled members					
Number in pay status	465	417	11.5%		
Average age	54.7	54.4	N/A		
Average monthly benefit <sup>(3)</sup>	\$2,268	\$2,108	7.6%		
Beneficiaries					
Number in pay status	77	78	-1.3%		
Average age	62.2	61.5	N/A		
Average monthly benefit <sup>(3)</sup>	\$1,818	\$1,695	7.3%		

Calculated by increasing annualized compensation rates as of valuation date by one-half year of inflation.
 Includes 4 members without a compensation rate for June 2003. An annual amount of \$50,000 was used for these members.
 Excludes STAR COLA.

**EXHIBIT B** 

Members in Active Service During Year Ended June 30, 2003 By Age, Years of Service, and Average Annualized Compensation Rate<sup>(1)</sup> for June 2003.

# i. General Tier 1

	Years of Service											
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over		
Under 25	2	2							-			
	\$31,866	\$31,866							-			
25 - 29	11	11							-			
	44,431	44,431							-			
30 - 34	10	10							-			
	44,999	44,999							-			
35 - 39	6	5	1						-			
	45,843	47,981	\$35,152						-			
40 - 44	6	5		1					-			
	39,780	38,484		\$46,259					-			
45 - 49	10	7	1	1	1				-			
	34,688	30,157	35,152	63,710	\$36,920				-			
50 - 54	16	14	2						-			
	32,653	32,842	31,335						-			
55 - 59	13	11	2						-			
00 07	32,363	31,410	37,606						-			
60 - 64	11	6	1	2	2				-			
00 01	38,561	35,606	48,402	40,706	40,362				_			
65 - 69	1	1							_			
03 07	47,341	47,341							_			
70 & over									_			
, 5 66 5 761									_			
Total	86	72	7	4	3				_			
1 Otal	\$38,114	\$37,669	\$36,656	\$47,845	\$39,215				_			

<sup>(1)</sup> Includes 2 members without a compensation rate for June 2003. An annual amount of \$42,000 was used for these members.

**EXHIBIT B** 

Members in Active Service During Year Ended June 30, 2003 By Age, Years of Service, and Average Annualized Compensation Rate<sup>(1)</sup> for June 2003.

# ii. General Tier A

	Years of Service											
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over		
Under 25	409	409								_		
	\$28,736	\$28,736								-		
25 - 29	1,243	1,166	77							-		
	37,117	36,833	\$41,410									
30 - 34	1,548	1,069	367	111	1							
	42,961	41,347	47,628	\$43,203	\$28,434							
35 - 39	1,700	780	397	382	138	3						
	46,090	41,100	49,721	52,355	46,461	\$48,360						
40 - 44	2,305	789	446	613	360	94	3					
	46,731	39,102	46,283	53,205	52,519	48,324	\$52,069					
45 - 49	2,492	735	451	556	395	251	93	11				
,	48,642	40,809	45,547	52,234	55,952	55,515	53,725	\$54,986				
50 - 54	2,472	570	385	533	374	278	247	84	1			
	50,179	42,465	45,775	51,739	51,362	53,998	61,097	62,854	\$46,883			
55 - 59	1,792	357	267	391	307	188	176	97	9			
00 07	49,604	41,330	43,692	50,506	52,029	50,439	59,365	65,834	47,967			
60 - 64	796	167	148	217	126	81	35	18	4			
00 0.	47,094	41,574	42,868	48,157	48,208	53,013	52,379	66,673	86,960			
65 - 69	168	36	41	52	18	9	7	4		1		
00 07	41,720	41,078	41,418	38,942	44,782	40,930	45,445	64,298		\$57,283		
70 & over	46	11	8	17	4	3	3					
	40,659	32,637	43,307	45,147	40,409	29,806	48,762					
Total	14,971	6,089	2,587	2,872	1,723	907	564	214	14			
	\$46,154	\$39,341	\$46,103	\$51,190	\$52,044	\$52,775	\$58,492	\$64,149	\$59,030	\$57,283		

<sup>(1)</sup> Includes 36 members without a compensation rate for June 2003. An annual amount of \$42,000 was used for these members.

**EXHIBIT B** 

Members in Active Service During Year Ended June 30, 2003 By Age, Years of Service, and Average Annualized Compensation Rate<sup>(1)</sup> for June 2003

iii. Safety

	Years of Service											
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35 & over			
Under 25	96	96							_			
	\$36,523	\$36,523										
25 - 29	434	345	89									
	42,760	40,799	\$50,362									
30 - 34	661	247	332	81	1							
	50,868	43,058	54,098	\$61,285	\$63,515							
35 - 39	632	112	168	282	69	1						
	57,333	44,723	55,546	61,342	65,682	\$63,515						
40 - 44	565	96	79	169	185	36						
	59,975	44,961	55,670	60,479	66,895	71,531						
45 - 49	450	61	52	60	114	123	39	1				
	65,273	47,676	54,900	62,251	67,390	72,492	\$81,632	\$92,400				
50 - 54	333	29	39	59	49	76	70	11				
	68,728	48,632	56,632	62,239	66,684	72,840	82,814	90,449				
55 - 59	187	15	24	32	31	30	33	22				
	68,241	58,501	59,193	61,777	64,816	70,581	79,911	78,281				
60 - 64	46	2	7	9	9	9	6	4				
	62,197	42,438	53,065	54,434	64,497	69,650	65,450	78,704				
65 - 69	5		1	2	2							
	86,179		159,994	70,875	64,576							
Total	3,409	1,003	791	694	460	275	148	38				
	\$56,944	\$42,695	\$54,599	\$61,238	\$66,609	\$72,128	\$81,151	\$82,219				

<sup>(1)</sup> Includes 4 members without a compensation rate for June 2003. An annual amount of \$50,000 was used for these members.

SECTION 3: Supplemental Information for the San Diego County Employees' Retirement Association

**EXHIBIT C**Reconciliation of Member Data

	Active Members	Deferred Vested Members	Disabled Pensioners	Retired Members	Beneficiaries	Total
Number as of July 1, 2002	18,276	3,323	1,236	7,287	1,134	31,256
New members	1,573	453	N/A	N/A	102	2,128
Terminations – with vested rights	-406	406	0	0	0	0
Refunds	-315	N/A	N/A	N/A	N/A	-315
Retirements	-562	-190	N/A	752	N/A	0
New disabilities	-89	-11	100	N/A	N/A	0
Return to work	48	-39	-5	-4	N/A	0
Deaths	-30	-5	-40	-229	-79	-383
Data adjustments	<u>-29</u>	<u>-27</u>	_29	24	<u>-6</u>	<u>-57</u>
Number as of June 30, 2003	18,466	3,910	1,320	7,782	1,151	32,629

# SECTION 3: Supplemental Information for the San Diego County Employees' Retirement Association

EXHIBIT D
Summary Statement of Income and Expenses on an Actuarial Value Basis

	Year Ended J	une 30, 2003	Year Ended June 30, 2002		
Contribution income:					
Employer contributions	\$616,112,726		\$50,581,110		
Employee contributions	34,666,576		17,346,370		
Net contribution income		\$650,779,302		\$67,927,480	
Investment income:					
Interest, dividends and other income	\$105,545,520		\$132,321,095		
Adjustment toward market value	116,765,897		234,180,626		
Less investment fees and administrative expenses	-55,098,288		<u>-52,742,765</u>		
Net investment income		167,213,129		313,758,956	
Total income available for benefits		\$817,992,431		\$381,686,436	
Less benefit payments:					
Service retirement and disability benefits	\$189,779,897		\$153,772,271		
Death benefits	1,307,322		595,831		
Health benefits	19,963,751		14,312,373		
STAR cost of living allowance	11,463,122		9,225,575		
Member refunds	1,451,436		889,997		
Net benefit payments		\$223,965,528		\$178,796,047	
Change in assets held for future benefits		\$594,026,903		\$202,890,389	

# SECTION 3: Supplemental Information for the San Diego County Employees' Retirement Association

EXHIBIT E

Table of Financial Information

	Year Ended June 30, 2003		Year Ended June 30, 2002	
Cash equivalents		\$87,952,309		\$50,675,576
Accounts receivable:				
Contributions	\$4,409,797		\$3,504,842	
Accrued interest and dividends	14,826,962		14,933,781	
Settlement of securities sold	28,626,750		22,270,399	
Total accounts receivable		47,863,509		40,709,022
Investments:				
Domestic equity securities and cash	\$1,451,800,076		\$1,357,118,226	
International equity securities and cash	975,909,709		884,752,992	
Bonds and cash	1,176,215,264		850,216,001	
Other investments	473,983,598		415,263,136	
Securities lending collateral	329,126,483		250,748,251	
Total investments at market value		4,407,035,130		3,758,098,606
Total assets		\$4,542,850,948		\$3,849,483,204
Less accounts payable:				
Securities lending & settlement of securities purchased	-\$427,357,989		-\$308,032,070	
Professional service	-7,994,703		-4,671,780	
Cash in transit	-2,472,451		-2,050,035	
Others	<u>-1,677,684</u>		<u>-1,149,158</u>	
Total accounts payable		-\$439,502,827		-\$315,903,043
Net assets at market value		<u>\$4,103,348,121</u>		<u>\$3,533,580,161</u>
Net assets at actuarial value		<u>\$4,776,235,211</u>		<u>\$4,182,208,308</u>
Net assets at valuation value		\$4,417,766,210		\$3,831,334,307

#### **EXHIBIT F**

#### **Actuarial Balance Sheet**

An overview of your Plan's funding is given by an Actuarial Balance Sheet. In this approach, we first determine the amount and timing of all future payments that will be made by the Plan for current participants. We then discount these payments at the valuation interest rate to the date of the valuation, thereby determining their present value. We refer to this present value as the "liability" of the Plan.

Second, we determine how this liability will be met. These actuarial "assets" include the net amount of assets already accumulated by the Plan, the present value of future member contributions, the present value of future employer normal cost contributions, and the present value of future employer amortization payments.

#### **Actuarial Balance Sheet (Dollar Amounts in Thousands)**

Assets		<u>General</u>	<u>Safety</u>	<u>Total</u>
1	Total valuation assets	\$3,270,181	\$1,147,586	\$4,417,767
2	Present value of future contributions by members	\$504,095	\$181,168	\$685,263
3	Present value of future employer contributions for:			
a	entry age normal cost	\$593,745	\$266,859	\$860,604
b	unfunded actuarial accrued liability	\$1,059,755	\$375,603	\$1,435,358
4	Total current and future assets	\$5,427,776	\$1,971,216	\$7,398,992
Lial	pilities			
5	Present value of benefits for retirees and beneficiaries	\$1,916,130	\$636,625	\$2,552,755
6	Present value of benefits for terminated vested members	\$194,144	\$27,524	\$221,668
7	Present value of benefits to current active members	\$3,317,502	\$1,307,067	\$4,624,569
8	Total liabilities	\$5,427,776	\$1,971,216	\$7,398,992

**EXHIBIT G** 

Summary of Reported Asset Information as of June 30, 2003

## Reserves

(Dollar Amounts in Thousa	nds)
Member contributions (1)	\$216,908
County contributions (1)	996,527
Retired member reserve (1)	2,389,560
Heath benefit reserve (2)	269,436
Star Cost-of-Living reserve (2)	48,537
Undistributed excess earnings (2)	5,160
Contingency reserve (2)	35,336
Total reserves	\$3,961,464
Net unrealized earnings (1)	\$141,884
Net market value	\$4,103,348

<sup>(1)</sup> Included in development of valuation value of assets.

<sup>(2)</sup> Not included in development of valuation value of assets.

SECTION 3: Supplemental Information for the San Diego County Employees' Retirement Association

#### **EXHIBIT H**

### Development of Unfunded Actuarial Accrued Liability for Year Ended June 30, 2003

		(Dollar Amounts in	Thousands)
1	Unfunded Actuarial Accrued Liability as of October 3, 2002		\$905,100
2	Normal Cost from October 3, 2002 to June 30, 2003		140,694
3	Total employer and member contributions		-74,863
4	Interest		
	(a) For 9 months on (1)	\$56,003	
	(b) For $4 \frac{1}{2}$ months on $(2) + (3)$	2,037	
	(c) Total interest		58,040
5	Expected Unfunded Actuarial Accrued Liability	•	\$1,028,971
6	Changes due to:		
	(a) Investment return	\$51,435	
	(b) Higher than expected salary increase	171,968	
	(c) Higher than expected liabilities for new retirees and retiree data corrections/adjustments	41,000	
	(d) Change in actuarial assumptions	88,225	
	(e) Other experience	53,760	
	(f) Total changes		406,388
7	Unfunded Actuarial Accrued Liability as of June 30, 2003		\$1,435,359

Please note that included in Item 5 is a \$106,420 increase in UAAL due to the delay until June 30, 2003 in implementation of contribution rates calculated in the October 3, 2002 valuation.

#### **EXHIBIT I**

#### **Section 415 Limitations**

Section 415 of the Internal Revenue Code (IRC) specifies the maximum benefits that may be paid to an individual from a defined benefit plan and the maximum amounts that may be allocated each year to an individual's account in a defined contribution plan.

A qualified pension plan may not pay benefits in excess of the Section 415 limits. The ultimate penalty for non-compliance is disqualification: active participants could be taxed on their vested benefits and the IRS may seek to tax the income earned on the plan's assets.

In particular, Section 415(b) of the IRC limits the maximum annual benefit payable at the Normal Retirement Age to a dollar indexed for inflation. That limit is \$160,000 for 2003 and \$165,000 for 2004. Normal Retirement Age for these purposes is age 62. These are the limits in simplified terms. They must be adjusted based on each participant's circumstances, for such things as age at retirement, form of benefits chosen and after tax contributions.

Benefits in excess of the limits may be paid through a qualified governmental excess plan that meets the requirements of Section 415(m).

Legal Counsel's review and interpretation of the law and regulations should be sought on any questions in this regard.

Contributions rates determined in this valuation have not been reduced for the Section 415 limitations. Actual limitations will result in gains as they occur.

#### **EXHIBIT J**

#### **Definitions of Pension Terms**

The following list defines certain technical terms for the convenience of the reader:

# Assumptions or Actuarial Assumptions:

The estimates on which the cost of the Plan is calculated including:

- (a) <u>Investment return</u> the rate of investment yield that the Plan will earn over the long-term future;
- (b) <u>Mortality rates</u> the death rates of employees and pensioners; life expectancy is based on these rates;
- (c) <u>Retirement rates</u> the rate or probability of retirement at a given age;
- (d) <u>Turnover rates</u> the rates at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement.

## **Normal Cost:**

The amount of contributions required to fund the level cost allocated to the current year of service.

## Actuarial Accrued Liability For Actives:

The equivalent of the accumulated normal costs allocated to the years before the valuation date.

# Actuarial Accrued Liability For Pensioners:

The single sum value of lifetime benefits to existing pensioners. This sum takes account of life expectancies appropriate to the ages of the pensioners and the interest that the sum is expected to earn before it is entirely paid out in benefits.

# Unfunded Actuarial Accrued Liability:

The extent to which the actuarial accrued liability of the Plan exceeds (or is exceeded by) the assets of the Plan. There is a wide range of approaches to paying off the unfunded or overfunded actuarial accrued liability, from meeting the interest accrual only to amortizing it over a specific period of time.

Amortization of the Unfunded (Overfunded) Actuarial Accrued Liability:

Payments made over a period of years equal in value to the Plan's unfunded or

overfunded actuarial accrued liability.

**Investment Return:** The rate of earnings of the Plan from its investments, including interest, dividends and

capital gain and loss adjustments, computed as a percentage of the average value of the fund. For actuarial purposes, the investment return often reflects a smoothing of the capital gains and losses to avoid significant swings in the value of assets from one

year to the next.

EXHIBIT I

Supplementary Information Required by the GASB – Schedule of Employer Contributions (Dollar Amounts in Thousands)

Plan Year Ended June 30	Annual Required Contributions	Actual Contributions*	Percentage Contributed
1995	\$33,305	\$33,305	100.0%
1996	37,577	37,577	100.0%
1997	23,269	23,269	100.0%
1998	24,320	24,320	100.0%
1999	0	0	N/A
2000	14,341	0	0.0%
2001	4,927	2,035	41.3%
2002	0	5,338	100.0%
2003**	6,538	6,538	100.0%

<sup>\*</sup> Excludes proceeds from Pension Obligation Bonds and County pickup of member contributions.

<sup>\*\*</sup> As of June 30, 2002, there was a Net Pension Obligation(NPO) of \$7,686. That NPO was eliminated when the County issued Pension Obligation Bonds in October 2002.

EXHIBIT II

Supplementary Information Required by the GASB – Schedule of Funding Progress

Actuarial Valuation Date	Valuation Value of Assets* (a)	Actuarial Accrued Liability (AAL)** (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b) - (a) / (c)]
06/30/1994	\$1,947,310,000	\$2,006,689,000	\$59,379,000	97.04%	\$535,981,000	11.10%
06/30/1995	2,172,890,000	2,148,606,000	-24,284,000	101.13%	550,737,000	-4.41%
06/30/1996	2,370,519,000	2,340,663,000	-29,856,000	101.28%	561,692,000	-5.32%
06/30/1997	2,688,098,000	2,487,917,000	-200,181,000	108.05%	581,453,000	-34.40%
06/30/1998	2,834,571,000	2,677,593,000	-156,978,000	105.86%	599,847,000	-26.17%
06/30/1999	3,211,872,000	2,990,111,000	-221,761,000	107.42%	642,780,000	-34.50%
06/30/2000	3,568,671,000	3,248,822,000	-319,849,000	109.85%	672,477,000	-47.56%
06/30/2001	3,745,600,000	3,506,828,000	-238,772,000	106.81%	731,130,000	-32.66%
06/30/2002	3,831,334,000	5,078,067,000	1,246,733,000	75.45%	810,389,000	153.80%
10/02/2002***	4,278,240,000	5,183,340,000	905,100,000	82.54%	818,704,000	110.55%
06/30/2003	4,417,766,000	5,853,125,000	1,435,359,000	75.48%	906,140,000	158.40%

<sup>\*</sup> Excludes assets for STAR COLA.

<sup>\*\*</sup> Exclude liabilities held for STAR COLA.

<sup>\*\*\*</sup> Reflects the issuance of Pension Obligation Bonds.

### EXHIBIT III

### **Supplementary Information Required by the GASB**

Valuation date	June 30, 2003
Actuarial cost method	Entry Age Normal Cost Method
Amortization method	Level percent of payroll for total unfunded liability
Remaining amortization period	15 years (rolling) for all UAAL
Asset valuation method	The Actuarial Value of Assets is determined by phasing in actual return on market value of assets that is in excess/below expected return on valuation value of assets over a five-year period. The Actuarial Value of Assets is reduced by the value of the non-valuation reserves and designations.
Actuarial assumptions:	
Investment rate of return	8.25%
Inflation rate	4.00%
Projected salary increases (5+ years of service)	5.00%*
Cost of living adjustments	3.00% of retirement income
Plan membership:	
Retired members and beneficiaries receiving benefits	10,253
Terminated members entitled to, but not yet receiving benefits	3,910
Active members	<u>18,466</u>
Total	32,629

<sup>\*</sup> Includes inflation at 4.00%, plus merit and longevity increases. See Exhibit IV for increases during the first 5 years of employment.



#### **EXHIBIT IV**

#### **Actuarial Assumptions and Actuarial Cost Method**

## **Post-Retirement Mortality Rates:**

**Healthy Retirement:** 1994 Group Annuity Mortality Table.

**Disabled Retirement:** For General - 1994 Group Annuity Mortality Table set forward

seven years. For Safety – same as Healthy Retirement.

The following are sample rates (%).

I	Healthy Life	ife Mortality Disabled Life Mortal		Life Mortality	
	General and	d Safety*	General		
Age	Male	Female	Male	Female	
30	0.08	0.04	0.09	0.06	
35	0.09	0.05	0.13	0.08	
40	0.11	0.07	0.19	0.11	
45	0.16	0.10	0.32	0.17	
50	0.26	0.14	0.56	0.29	
55	0.44	0.23	1.01	0.58	
60	0.80	0.44	1.80	1.08	

<sup>\*</sup> Includes Disabled Retirement

#### **Employee Contribution Rates:**

General - 1994 Group Annuity Mortality Table for Females set forward two years.

Safety – 1994 Group Annuity Mortality Table for Males set back one year.

**Optional Benefits:** 

**Healthy Retirees:** General – 1994 Group Annuity Mortality Table for Females set forward two years.

Safety – 1994 Group Annuity Mortality Table for Males set back one year.

**Disabled Retirees:** General – 1994 Group Annuity Mortality Table for Females set forward eight years.

Safety – Same as Healthy Retirees.

#### **Termination Rates Before Retirement:**

**Mortality Rates:** 

1994 Group Annuity Mortality Table.

For General members, out of the total probability of mortality before retirement, 100% is assumed to be ordinary death and death while eligible for service retirement or disability retirement.

For Safety and Probation members, 100% is assumed to be service connected death.

The following are sample rates (%).

Healthy Life Mortality					
(	General and	Safety			
Age	Male	Female			
30	0.08	0.04			
35	0.09	0.05			
40	0.11	0.07			
45	0.16	0.10			
50	0.26	0.14			
55	0.44	0.23			
60	0.80	0.44			

## **Disability Rates:**

Rate (%)
Non Service Connected Disability
Service Connected Disability

	Ger	neral		Ger	neral	
Age	Male	Female	Safety	Males	Female	Safety
20	0.01	0.00	0.00	0.01	0.00	0.01
25	0.01	0.00	0.02	0.01	0.01	0.04
30	0.01	0.01	0.05	0.02	0.07	0.20
35	0.03	0.06	0.08	0.04	0.11	0.48
40	0.08	0.16	0.12	0.11	0.13	0.72
45	0.13	0.22	0.15	0.19	0.16	0.92
50	0.20	0.25	0.17	0.30	0.20	1.36
55	0.29	0.28	0.18	0.43	0.26	1.84
60	0.33	0.36	0.19	0.38	0.29	2.00

SECTION 4: Supplemental Information for the San Diego County Employees' Retirement Association

Withdrawal Rates:

Rate (%)

	Ordinary Withdrawals (< 5 Years of		
<del>-</del>	General-	General-	
Years of Service	Male	Female	Safety
0	17.00	19.00	12.00
1	11.00	12.00	11.00
2	7.00	8.00	5.00
3	6.00	7.00	4.50
4	5.00	6.50	4.00
	O	rdinary Withdra	awal (5+ Years of Service) *
Age	General- Male	General- Female	Safety
20	1.80	1.80	1.66
25	1.80	1.80	1.50
30	1.73	1.53	1.30
35	1.51	1.19	1.06
40	1.34	0.86	0.86
45	1.00	0.61	0.70
50	0.79	0.54	0.54
55	0.61	0.54	0.48
60	0.54	0.54	0.19

<sup>\*</sup> No withdrawal is assumed after a member is eligible for retirement.

SECTION 4: Supplemental Information for the San Diego County Employees' Retirement Association

Vested Termination (5+ Years of Service) \*

	. • •		1 0 0 1 0 0 1 1 1 0 0 7
Age	General- Male	General- Female	Safety
20	7.95	9.33	3.56
25	7.27	8.22	2.99
30	6.39	6.44	2.41
35	5.36	4.89	1.67
40	4.33	3.78	1.30
45	3.18	2.67	1.11
50	2.09	1.56	0.53
55	1.01	0.78	0.21
60	0.56	0.56	0.08

<sup>\*</sup> No vested termination is assumed after a member is eligible for retirement.

### **Retirement Rates:**

Rate (%)
Retirement Probability

Age	General	Safety
48	-	4.0
49	-	4.0
50	6.0	15.0
51	3.0	15.0
52	5.0	15.0
53	6.0	15.0
54	6.0	15.0
55	12.0	25.0
56	13.0	30.0
57	15.0	30.0
58	17.0	35.0
59	20.0	35.0
60	20.0	45.0
61	25.0	45.0
62	25.0	50.0
63	25.0	50.0
64	25.0	50.0
65	30.0	100.0
66	30.0	100.0
67	30.0	100.0
68	30.0	100.0
69	40.0	100.0
70	100.0	100.0

Retirement Age and Benefit for Deferred Vested

**Members:** 

Reciprocal and Non-reciprocal Members

General: Age 58; Safety: Age 53.

35% of General and 40% of Safety (including Probation) deferred vested members are assumed to be reciprocal. For reciprocals, we assume 5.0% compensation

increases per annum.

Future Benefit Accruals: 1.0 year of service per year.

**Unknown Data for** 

**Members:** 

Same as those exhibited by members with similar known characteristics. If not

specified, members are assumed to be male.

**Definition of Active** 

**Members:** 

First day of pay period following employment.

Exclusion of Deferred Vested Members:

All deferred vested members are included in the valuation.

**Percent Married:** 80% of male members; 65% of female members.

**Age of Spouse:** Females (or male) spouses are 3 years younger (older) than their spouses

**Net Investment Return:** 8.25%

**Employee Contribution Crediting Rate:** 

½ of the net investment return credited semi-annually.

**Consumer Price Index:** 

Increase of 4.0% per year; benefit increases due to CPI subject to 3.0% maximum.

**Salary Scale:** 

Annual Rate of Compensation Increase

Inflation: 4.0% plus the following additional merit and longevity increases:

Years of Service	General	Safety
0	4.00%	7.00%
1	3.50	6.00
2	3.00	4.75
3	2.50	3.50
4	2.00	2.50
5+	1.00	1.00

There are assumed to be no "across the board" salary increases (other than inflation).

#### **Actuarial Value of Assets:**

The Actuarial Value of Assets is determined by phasing in actual return on market value of assets that is in excess/below expected return on valuation value of assets over a five-year period. The Actuarial Value of Assets is reduced by the value of the non-valuation reserves and designations.

#### **Actuarial Cost Method:**

Entry Age Normal Actuarial Cost Method. Entry Age is the age at the member's hire date. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis and are allocated by salaries, with Normal Cost determined as a level percentage of aggregate salary, as if the current benefit accrual rate had always been in effect. The total unfunded Actuarial Accrued is amortized over a rolling 15-year period.

## **Changes in Assumptions**

and Methods:

Based on the July 1, 2000 to June 30, 2003 triennial experience study, several assumptions

were changed. Previously, those assumptions were as follows:

#### **Post-Retirement Mortality Rates:**

**Healthy Retirement:** 1994 Uninsured Pensioner Mortality Table.

**Disabled Retirement:** 1994 Uninsured Pensioner Mortality Table set forward three

years.

The following are sample rates (%).

H	lealthy Life I	Mortality	Disable	d Life Mortality
_	General and	d Safety	Gener	al and Safety
Age	Male	Female	Male	Female
30	0.09	0.04	0.09	0.05
35	0.09	0.05	0.10	0.06
40	0.12	0.08	0.15	0.09
45	0.17	0.10	0.23	0.13
50	0.28	0.15	0.39	0.21
55	0.48	0.25	0.68	0.36
60	0.86	0.48	1.23	0.72

#### **Employee Contribution Rates:**

General – 1994 Uninsured Pensioner Mortality Table for Females set forward one year.

Safety – 1994 Uninsured Pensioner Mortality Table for Males set back two years.

**Optional Benefits:** 

**Healthy Retirees:** 1971 Group Annuity Mortality Table for Males projected to 1984 and with a three-year age

set back.

**Disabled Retirees:** 1973 Disability Mortality Table.

#### **Termination Rates Before Retirement:**

**Mortality Rates:** 

1994 Uninsured Pensioner Mortality Table.

For General members, out of the total probability of mortality before retirement, 100% is assumed to be ordinary death and death while eligible for service retirement or disability retirement.

For Safety and Probation members, 100% is assumed to be service connected death.

The following are sample rates (%).

Mortality Rates			
C	General and	Safety	
Age	Male	Female	
30	0.09	0.04	
35	0.09	0.05	
40	0.12	0.08	
45	0.17	0.10	
50	0.28	0.15	
55	0.48	0.25	
60	0.86	0.48	

**Disability Rates:** 

The following rates apply after five years of service:

Rate (%)

	Non Se	ervice Connected	Disability	Servi	ce Connected Di	sability
	General ar	nd Probation		General an	d Probation	
Age	Male	Female	Safety	Males	Female	Safety
20	0.01	0.00	0.00	0.01	0.00	0.02
25	0.01	0.00	0.00	0.01	0.00	0.02
30	0.01	0.01	0.00	0.02	0.01	0.30
35	0.03	0.02	0.00	0.04	0.02	0.68
40	0.07	0.03	0.00	0.10	0.05	1.18
45	0.12	0.06	0.00	0.19	0.09	1.78
50	0.19	0.10	0.00	0.29	0.14	2.60
55	0.28	0.14	0.00	0.42	0.20	0.00
60	0.18	0.17	0.00	0.28	0.25	0.00

### Withdrawal Rates:

Ordinary	/ Withdrawals (	(< 5 Years of Service)

	<u> </u>	(
Years of Service	General	Safety
0	22.75%	11.00%
1	12.00	6.00
2	9.75	4.00
3	7.75	4.00
4	6.50	4.00

Ordinary and Vested Withdrawal (5+ Years of Service) \*

	•	,
Age	General	Safety
20	15.00%	9.00%
25	12.50	9.00
30	8.50	6.00
35	5.75	2.50
40	4.25	1.75
45	3.50	1.25
50	2.50	1.00
55	1.75	1.00
60	1.75	1.00

<sup>\*</sup> No withdrawal is assumed after a member is eligible for retirement. In addition, a member is assumed to receive the greater of the member's contribution balance or a deferred retirement benefit.

### **Retirement Rates:**

Rate (%)

	F	Retirement Probability	
Age	General	Probation	Safety
48	-	-	5.0
49	-	-	5.0
50	6.0	12.0	20.6
51	3.0	14.0	20.6
52	5.0	16.0	20.6
53	5.0	18.0	20.6
54	6.0	20.0	20.6
55	12.0	20.0	30.3
56	13.0	25.0	30.3
57	15.0	30.0	30.3
58	15.0	35.0	35.3
59	15.0	35.0	35.3
60	15.0	30.0	50.3
61	15.0	30.0	50.3
62	23.0	50.3	50.3
63	15.0	50.3	50.3
64	20.0	50.3	50.3
65	28.0	100.0	100.0
66	28.0	100.0	100.0
67	30.0	100.0	100.0
68	30.0	100.0	100.0
69	40.0	100.0	100.0
70	100.0	100.0	100.0

Retirement Age and Benefit for Deferred Vested Members: Reciprocal Members

General and Safety: Later of age 55 or attainment of retirement

eligibility.

Non-Reciprocal Members

General and Safety: Attainment of retirement eligibility.

40% of deferred vested members are assumed to be reciprocal. For

reciprocals, we assume 4.5% compensation increases per annum.

**Percent Married:** 80% of male members; 50% of female members.

Age of Spouse: Females (or male) spouses are 4 years younger (older) than their

spouses

## **Salary Scale:**

## Annual Rate of Compensation Increase

Inflation: 4.0%; plus 0.5% for merit and longevity.

For members with less than five years of service, the following additional merit and longevity increases are assumed:

Years of	General	Safety
Service		•
0	3.00%	6.00%
1	2.50	5.00
2	2.00	4.00
3	1.50	2.50
4	1.00	1.25

There are assumed to be no "across the board" salary increases (other than inflation).

#### **EXHIBIT V**

### **Summary of Plan Provisions**

This exhibit summarizes the major provisions of the SDCERA included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Membership Eligibility:	
	All permanent employees of the County of San Diego or contracting district, scheduled to work 20 or more hours weekly, are eligible to become a member of the Retirement Association subject to classification below:
General Tier 1	All General members hired before March 8, 2002 who made a specific and irrevocable election to opt out of Tier A. This also included those General Members in deferred status on March 8, 2002.
General Tier A	All General members hired or continuing employment on or after March 8, 2002 except as noted above.
Safety	All Safety members.
Final Compensation for Benefit Determination:	
General and Safety	Highest consecutive 26 bi-weekly pay periods of compensation earnable (§31462.1) (FAC)
Service:	Years of service. (Yrs)
Service Retirement Eligibility:	
General	Age 50 with 10 years of service credit, or age 70 regardless of service credit, or after 30 years of service credit, regardless of age (§31672).
Safety	Age 50 with 10 years of service credit, or age 70 regardless of service credit, or after 20 years of service credit, regardless of age (§31663.25).

## **Benefit Formula:**

	Retirement Age	Benefit Formula
General Tier 1 (§31676.12)	50	(1.34%xFAC – 1/3x1.34%x\$350 x 12)xYrs
	55	(1.77%xFAC – 1/3x1.77%x\$350 x 12)xYrs
	60	(2.34%xFAC – 1/3x2.34%x\$350 x 12)xYrs
	62	(2.62% xFAC - 1/3x2.62% x\$350 x 12)xYrs
	65	(2.62%xFAC – 1/3x2.62%x\$350 x 12)xYrs
	Retirement Age	Benefit Formula
General Tier A (§31676.17)	Retirement Age 50	<b>Benefit Formula</b> (2.00%xFAC – 1/3% x 2.00%x\$350 x 12) x Yrs
General Tier A (§31676.17)	S	
General Tier A (§31676.17)	50	(2.00%xFAC – 1/3% x 2.00%x\$350 x 12) x Yrs
General Tier A (§31676.17)	50 55	(2.00%xFAC – 1/3% x 2.00%x\$350 x 12) x Yrs (2.50%xFAC – 1/3% x 2.50%x\$350 x 12) x Yrs
General Tier A (§31676.17)	50 55 60	(2.00%xFAC – 1/3% x 2.00%x\$350 x 12) x Yrs (2.50%xFAC – 1/3% x 2.50%x\$350 x 12) x Yrs (3.00%xFAC – 1/3% x 3.00%x\$350 x 12) x Yrs

	Retirement Age	Benefit Formula
Safety (Non-Integrated) (§31664.1)	50	(3.00%xFACxYrs)
	55	(3.00%xFACxYrs)
	60	(3.00%xFACxYrs)

**Maximum Benefit:** 100% of Final Average Compensation (§31676.12, §31676.17, §31664.1)



### **Non Service Connected Disability:**

General Members

Eligibility Five years of service (§31720).

Benefit Formula

Per Year of Service 1.8% of FAC per year of service. If the benefit does not exceed one-third of Final

Compensation, the service is projected to 62, and the total benefit cannot be more than

one-third of Final Compensation (§31727.1).

Safety Members

Eligibility Five years of service (§31720).

Benefit Formula

Per Year of Service 1.8% of FAC per year of service. If the benefit does not exceed one-third of Final

Compensation, the service is projected to 55, and the total benefit cannot be more than

one-third of Final Compensation (§31727.2).

### **Service Connected Disability:**

All Members

Eligibility No age or service requirements (§31720).

Benefit Formula 50% of the Final Compensation or 100% of Service Retirement benefit, if larger

(§31727.4).

#### **Pre-Retirement Death:**

Non Service Connected (Not Vested) Before Eligible to Retire

Eligibility None.

Benefit Refund of employee contributions with interest plus one month's eligible

compensation for each year of service to a maximum of six month's compensation

(§31781).

OR

Non Service Connected (Vested)

Eligibility Five years of service.

Benefit 60% of the greater of Service or Non Service Connected Disability Retirement benefit

payable to surviving eligible spouse or eligible children (§31765.1, §31781.1), in lieu

of above. Additionally, the spouse may choose a combined benefit of:

• A lump sum payment of up to 6 month's compensation (see above), and

• A monthly (60%) benefit reduced by actuarial equivalent of the lump sum

payment (31781.3).

Service Connected Death 50% of Final compensation or 100% of Service Retirement benefit, if greater, payable

to spouse or minor children (§31787). In addition, safety members are entitled to

benefits under sections 31787.5 and 31787.6.

#### **Death After Retirement:**

All Members

Service or Non Service Connected

Disability Retirement

Unless another option was selected at retirement, 60% of member's unmodified

allowance continued to eligible spouse (§31760.1) and

\$3,500 lump sum benefit payable to member's beneficiary (§31789.3). An eligible spouse is a surviving spouse who was married to the member at least one year prior to the day of retirement (31760.1), or, at least two years prior to the date of death and has

attained age 55 on or prior to the date of death (§31760.2).

Service Connected Disability

Retirement

Unless another option was selected at retirement, 100% of member's unmodified

allowance continued to eligible spouse (§31786).



Withdrawal Benefits:			
Less than Five Years of SDCERA/ Reciprocal Service Credit	Refund of accumulated employee contributions with interest or eligible for a retirement benefit at age 70 if actively working (§31628, 31629.5).		
Five or More Years of SDCERA/			
Reciprocal Service Credit	If accumulated employee contributions left on deposit, eligible for retirement benefits at any time after meeting eligibility criteria to retire (§31700).		
Post-retirement			
<b>Cost-of-Living Benefits:</b>			
General and Safety	Future changes based on changes to the Consumer Price Index for the San Diego are to a maximum of 3% per year, excess "banked." (§31870.1)		
<b>County Contributions:</b>			
	Effective with the October 3, 2002 actuarial valuation, the amortization period for Unfunded Actuarial Accrued Liability has changed to a rolling 15-year period.		
<b>Supplemental Benefit:</b>			
	The Association provides a non-vested minimum 80% STAR COLA and health insurance allowance for eligible retirees. These programs do not provide funded benefits and are excluded from this valuation.		

<b>Member Contributions:</b>	Please refer to Appendix A for the specific rates.
General Tier 1	
Basic	Provide for an average annuity at age 60 equal to 1/100 of FAC. (§31621.2)
Cost-of-Living	Provide for one-half of future Cost-of-Living costs.
General Tier A	
Basic	Provide for an average annuity at age 55 equal to 1/100 of FAC. (§31621.8)
Cost-of-Living	Provide for one-half of future Cost-of-Living costs.
Safety	
Basic	Provide for an average annuity at age 50 equal to 1/100 of FAC. (§31639.25)
Cost-of-Living	Provide for one-half of future Cost-of-Living costs.
Other Information:	
	General and Safety members with 30 or more years of qualifying service credit are

## NOTE:

The summary of major plan provisions is designed to outline principle plan benefits as interpreted for purposes of the actuarial valuation. If the Association should find the plan summary not in accordance with the actual provisions, the Association should alert the actuary so they can both be sure the proper provisions are valued.

exempt from paying member contributions (31625.2 and 31625.3).

Appendix A

**Member Contribution Rates** 

General Tier 1 Members' Contribution Rates from the June 30, 2003 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)

### **Calculated Under Recommended Assumptions**

	E	Basic	CC	DLA	To	otal
Entry Age	First \$350	Over \$350	First \$350	Over \$350	First \$350	Over \$350
15	3.15%	4.72%	0.97%	1.46%	4.12%	6.18%
16	3.15%	4.72%	0.97%	1.46%	4.12%	6.18%
17	3.21%	4.81%	0.99%	1.48%	4.20%	6.29%
18	3.27%	4.90%	1.01%	1.51%	4.28%	6.41%
19	3.33%	4.99%	1.03%	1.54%	4.36%	6.53%
20	3.39%	5.08%	1.05%	1.57%	4.44%	6.65%
21	3.45%	5.18%	1.07%	1.60%	4.52%	6.78%
22	3.51%	5.27%	1.09%	1.63%	4.60%	6.90%
23	3.58%	5.37%	1.11%	1.66%	4.69%	7.03%
24	3.65%	5.47%	1.13%	1.69%	4.78%	7.16%
25	3.71%	5.57%	1.15%	1.72%	4.86%	7.29%
26	3.78%	5.67%	1.17%	1.75%	4.95%	7.42%
27	3.85%	5.77%	1.19%	1.78%	5.04%	7.55%
28	3.92%	5.88%	1.21%	1.82%	5.13%	7.70%
29	3.99%	5.98%	1.23%	1.85%	5.22%	7.83%
30	4.06%	6.09%	1.25%	1.88%	5.31%	7.97%
31	4.13%	6.20%	1.27%	1.91%	5.40%	8.11%
32	4.21%	6.31%	1.30%	1.95%	5.51%	8.26%
33	4.28%	6.42%	1.32%	1.98%	5.60%	8.40%
34	4.36%	6.54%	1.35%	2.02%	5.71%	8.56%
35	4.43%	6.65%	1.37%	2.05%	5.80%	8.70%
36	4.51%	6.77%	1.39%	2.09%	5.90%	8.86%
37	4.59%	6.89%	1.42%	2.13%	6.01%	9.02%
38	4.67%	7.01%	1.44%	2.16%	6.11%	9.17%

# General Tier 1 Members' Contribution Rates from the June 30, 2003 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)

### **Calculated Under Recommended Assumptions**

	E	Basic	CC	DLA	To	tal
Entry Age	First \$350	Over \$350	First \$350	Over \$350	First \$350	Over \$350
39	4.75%	7.13%	1.47%	2.20%	6.22%	9.33%
40	4.84%	7.26%	1.49%	2.24%	6.33%	9.50%
41	4.92%	7.38%	1.52%	2.28%	6.44%	9.66%
42	5.01%	7.51%	1.55%	2.32%	6.56%	9.83%
43	5.09%	7.64%	1.57%	2.36%	6.66%	10.00%
44	5.19%	7.78%	1.60%	2.40%	6.79%	10.18%
45	5.27%	7.91%	1.63%	2.44%	6.90%	10.35%
46	5.37%	8.05%	1.66%	2.49%	7.03%	10.54%
47	5.46%	8.19%	1.69%	2.53%	7.15%	10.72%
48	5.56%	8.34%	1.71%	2.57%	7.27%	10.91%
49	5.66%	8.49%	1.75%	2.62%	7.41%	11.11%
50	5.76%	8.64%	1.78%	2.67%	7.54%	11.31%
51	5.87%	8.80%	1.81%	2.72%	7.68%	11.52%
52	5.98%	8.97%	1.85%	2.77%	7.83%	11.74%
53	6.10%	9.15%	1.88%	2.82%	7.98%	11.97%
54	6.23%	9.35%	1.93%	2.89%	8.16%	12.24%
55	6.32%	9.48%	1.95%	2.93%	8.27%	12.41%
56	6.39%	9.58%	1.97%	2.96%	8.36%	12.54%
57	6.43%	9.65%	1.99%	2.98%	8.42%	12.63%
58	6.46%	9.69%	1.99%	2.99%	8.45%	12.68%
59 & Over	6.47%	9.70%	1.99%	2.99%	8.46%	12.69%

Interest: 8.25% (Annual effective rate, compounded semi-annually)

Inflation: 4.00% COLA: 3.00% COLA Loading Factor: 30.87%

Mortality: 1994 Group Annuity Mortality Table for females (with ages set forward two years)

Salary Increase: 5 Year Select and Ultimate Salary Increase Assumptions (see Exhibit IV)

Note: These rates are determined before any pickups by the employee.

# General Tier A Members' Contribution Rates from the June 30, 2003 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)

### **Calculated Under Recommended Assumptions**

Basic		ic COLA		Total		
Entry Age	First \$350	Over \$350	First \$350	Over \$350	First \$350	Over \$350
15	3.68%	5.52%	1.33%	2.00%	5.01%	7.52%
16	3.68%	5.52%	1.33%	2.00%	5.01%	7.52%
17	3.75%	5.63%	1.36%	2.04%	5.11%	7.67%
18	3.82%	5.73%	1.39%	2.08%	5.21%	7.81%
19	3.89%	5.83%	1.41%	2.12%	5.30%	7.95%
20	3.96%	5.94%	1.44%	2.16%	5.40%	8.10%
21	4.03%	6.05%	1.47%	2.20%	5.50%	8.25%
22	4.11%	6.16%	1.49%	2.24%	5.60%	8.40%
23	4.18%	6.27%	1.52%	2.28%	5.70%	8.55%
24	4.25%	6.38%	1.55%	2.32%	5.80%	8.70%
25	4.33%	6.50%	1.57%	2.36%	5.90%	8.86%
26	4.41%	6.61%	1.60%	2.40%	6.01%	9.01%
27	4.49%	6.73%	1.63%	2.44%	6.12%	9.17%
28	4.57%	6.85%	1.66%	2.49%	6.23%	9.34%
29	4.65%	6.97%	1.69%	2.53%	6.34%	9.50%
30	4.73%	7.10%	1.72%	2.58%	6.45%	9.68%
31	4.81%	7.22%	1.75%	2.62%	6.56%	9.84%
32	4.90%	7.35%	1.78%	2.67%	6.68%	10.02%
33	4.99%	7.48%	1.81%	2.71%	6.80%	10.19%
34	5.07%	7.61%	1.84%	2.76%	6.91%	10.37%
35	5.16%	7.74%	1.87%	2.81%	7.03%	10.55%
36	5.25%	7.88%	1.91%	2.86%	7.16%	10.74%
37	5.34%	8.01%	1.94%	2.91%	7.28%	10.92%
38	5.43%	8.15%	1.97%	2.96%	7.40%	11.11%
39	5.53%	8.30%	2.01%	3.01%	7.54%	11.31%
40	5.63%	8.44%	2.04%	3.06%	7.67%	11.50%
41	5.73%	8.59%	2.08%	3.12%	7.81%	11.71%
42	5.83%	8.74%	2.11%	3.17%	7.94%	11.91%

# General Tier A Members' Contribution Rates from the June 30, 2003 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)

### **Calculated Under Recommended Assumptions**

	E	Basic	CC	LA	To	otal
Entry Age	First \$350	Over \$350	First \$350	Over \$350	First \$350	Over \$350
43	5.93%	8.90%	2.15%	3.23%	8.08%	12.13%
44	6.04%	9.06%	2.19%	3.29%	8.23%	12.35%
45	6.15%	9.22%	2.23%	3.35%	8.38%	12.57%
46	6.26%	9.39%	2.27%	3.41%	8.53%	12.80%
47	6.38%	9.57%	2.31%	3.47%	8.69%	13.04%
48	6.51%	9.76%	2.36%	3.54%	8.87%	13.30%
49	6.65%	9.97%	2.41%	3.62%	9.06%	13.59%
50	6.74%	10.11%	2.45%	3.67%	9.19%	13.78%
51	6.81%	10.22%	2.47%	3.71%	9.28%	13.93%
52	6.86%	10.29%	2.49%	3.73%	9.35%	14.02%
53	6.89%	10.34%	2.50%	3.75%	9.39%	14.09%
54 & Over	6.90%	10.35%	2.51%	3.76%	9.41%	14.11%

Interest: 8.25% (Annual effective rate, compounded semi-annually)

Inflation: 4.00% COLA: 3.00% COLA Loading Factor: 36.29%

Mortality: 1994 Group Annuity Mortality Table for females (with ages set forward two years)

Salary Increase: 5 Year Select and Ultimate Salary Increase Assumptions (see Exhibit IV)

Note: These rates are determined before any pickups by the employee.

# Safety Members' Contribution Rates from the June 30, 2003 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)

#### **Calculated Under Recommended Assumptions**

Entry Age	Basic	COLA	Total
15	6.89%	3.57%	10.46%
16	6.89%	3.57%	10.46%
17	6.89%	3.57%	10.46%
18	6.89%	3.57%	10.46%
19	6.89%	3.57%	10.46%
20	6.89%	3.57%	10.46%
21	6.89%	3.57%	10.46%
22	7.01%	3.63%	10.64%
23	7.14%	3.70%	10.84%
24	7.26%	3.76%	11.02%
25	7.39%	3.83%	11.22%
26	7.53%	3.90%	11.43%
27	7.66%	3.97%	11.63%
28	7.80%	4.04%	11.84%
29	7.94%	4.12%	12.06%
30	8.08%	4.19%	12.27%
31	8.22%	4.26%	12.48%
32	8.37%	4.34%	12.71%
33	8.52%	4.42%	12.94%
34	8.67%	4.49%	13.16%
35	8.83%	4.58%	13.41%
36	8.99%	4.66%	13.65%
37	9.16%	4.75%	13.91%
38	9.33%	4.84%	14.17%
39	9.51%	4.93%	14.44%
40	9.70%	5.03%	14.73%
41	9.90%	5.13%	15.03%
42	10.12%	5.25%	15.37%
43	10.35%	5.37%	15.72%

# Safety Members' Contribution Rates from the June 30, 2003 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)

#### **Calculated Under Recommended Assumptions**

Entry Age	Basic	COLA	Total
44	10.61%	5.50%	16.11%
45	10.77%	5.58%	16.35%
46	10.87%	5.64%	16.51%
47	10.89%	5.65%	16.54%
48	10.82%	5.61%	16.43%
49 & Over	10.68%	5.54%	16.22%

Interest: 8.25% (Annual effective rate, compounded semi-annually)

Inflation: 4.00% COLA: 3.00% COLA Loading Factor: 51.84%

Mortality: 1994 Group Annuity Mortality Table for Males (with ages set back one year)
Salary Increase: 5 Year Select and Ultimate Salary Increase Assumptions (see Exhibit IV)

Note: These rates are determined before any pickups by the employer.

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StringBookmarks

PlanNameLong Ventura County Employees' Retirement Association

PlanNameShort VCERA

OfficeAddr1 1190 S. Victoria Avenue, Suite 200

OfficeAddr2 Ventura, CA 93003-6572
ClientContact Board of Retirement
FinanSource Retirement Office
ActuaryName Drew James
ActuaryTitle Consulting Actuary

ActuaryCredential FSA, MAAA ActuaryNumber 99-1234

Assumptions Board of Retirement

ConsultantName Paul Angelo

ConsultantTitle Vice President and Actuary
SegalAddr1 120 Montgomery Street, Suite 500

SegalAddr2 San Francisco, CA 94104

SegalPhone415.263.8200SegalFax415.263.8290ParticipantNameMemberParticipantPluralMembers

RetireeName Retired member
RetireePlural Retired members

AuditorCompany

FMWording Entry Age Normal

ValDate "7/1/2003" ValDateEOY "6/30/2004" FiscalDate "6/30/2003" CensusDate "7/1/2003" CensusDateEOY "6/30/2003" ValDate1 "7/1/2002" ValDateEOY1 "6/30/2003" ValDateMinusOne "6/30/2003" ValDate1MinusOne "6/30/2002" FiscalDate1 "7/1/2002" CreditRef Years of Service CreditRefSingle Year of Service PayRef Compensation PayRefSingle Compensation

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GLAdminText loss
OtherGLText loss
GLInvText loss
HistYearsText three
OptCategory1 Optional

OptCategory2 OptRow InactNonText Disableds Optional Inactive non-vested

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RecContPctInc	0.0086	"#.00%"

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Chart6First	2002
Chart8First	2001
Chart11First	2002
Chart12First	2002

	Last
Chart1Last	2003
Chart6Last	2003
Chart8Last	2003
Chart11Last	2003
Chart12Last	2003

	Num
Chart1Num	3
Chart6Num	2
Chart8Num	3
Chart11Num	2
Chart12Num	2

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