## San Diego County Employees Retirement Association

Actuarial Valuation and Review as of June 30, 2009

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October 30, 2009

Board of Retirement San Diego County Employees Retirement Association 2275 Rio Bonito Way, Suite 200 San Diego, CA 92108-1685

#### Dear Board Members:

We are pleased to submit this Actuarial Valuation and Review as of June 30, 2009. It summarizes the actuarial data used in the valuation, establishes the funding requirements for fiscal 2010-2011 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 Association. 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. The undersigned are Members of the American Academy of Actuaries and meet the qualification standards to render the actuarial opinion herein.

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

Sincerely,

THE SEGAL COMPANY

*B*v:

Paul Angelo, FSA, EA, MAAA, FCA Senior Vice President and Actuary By:

Andy Yeung, ASA, EA, MAAA Vice President and Associate Actuary

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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, 2009. 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, deferred terminated members, retired members and beneficiaries as of June 30, 2009, provided by the Retirement Association;
- > The assets of the Plan as of June 30, 2009, provided by the Retirement Association;
- > Economic assumptions regarding future salary increases and investment earnings; and
- > Other actuarial assumptions, regarding employee terminations, retirement, death, etc.

One of the general goals of an actuarial valuation is to establish contributions that fully fund the Association's liabilities, and that, 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 reasonably 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. Effective with the June 30, 2004 valuation, we have modified our calculations to reflect the Board's new funding policy to amortize the Association's unfunded actuarial accrued liability as 20-year fixed (i.e., decreasing) layered amortization periods.

The rates calculated in this report may be adopted by the Board for the fiscal year that extends from July 1, 2010 through June 30, 2011.

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

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

Reference: Pg. 31

> The ratio of the valuation value of assets to actuarial accrued liabilities decreased from 94.4% to 91.5%. The Association's unfunded actuarial accrued liability has increased from \$485.4 million as of June 30, 2008 to \$785.6 million as of June 30, 2009. A complete reconciliation of the Association's unfunded actuarial accrued liability is provided in Section 3, Exhibit H.

Reference: Pg. 18

> The total employer contribution rate calculated in this valuation has increased from 18.25% of payroll to 20.46% of payroll primarily as a result of an increase in the Unfunded Actuarial Accrued Liability component of the rate. This increase was mainly due to lower than expected returns on the valuation value of assets after "smoothing".

The increase in the employer contribution rate was offset to some degree by lower than expected actual salary increases during 2008-2009.

A complete reconciliation of the Association's aggregate employer rate is provided in Section 2, Subsection D (see Chart 15).

Reference: Pg. 19

> There are no changes to the individual entry age based member rates; however, the average member rate calculated in this valuation has decreased from 10.38% of payroll to 10.35% of payroll as a result of changes in membership demographics. A complete reconciliation of the Association's average member rate is provided in Section 2, Subsection D (see Chart 16).

Reference: Pg. 6

> As indicated in Section 2, Subsection B (see Chart 7) of this report, the total unrecognized investment loss as of June 30, 2009 was \$2,381.1 million (versus an unrecognized loss of \$99.0 million in the June 30, 2008 valuation). This investment loss will be recognized in the determination of the actuarial value of assets for funding purposes over 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 increase in each of the next few years as those losses are recognized.

- The unrecognized investment losses represent 38.5% of the market value of assets. Unless offset by future investment gains or other favorable experience, the recognition of the \$2,381.1 million market losses is expected to have a significant impact on the Association's future funded ratio and the aggregate employer contributions. This potential impact may be illustrated as follows:
  - If the deferred losses were recognized immediately in the valuation value of assets, the funded percentage would decrease from 91.5% to 65.6%.
  - If the deferred losses were recognized immediately in the valuation value of assets, the aggregate employer contribution rate would increase from 20.46% of payroll to 35.83% of payroll.
- > The actuarial valuation report as of June 30, 2009 is based on financial information as of that date. Changes in the value of assets subsequent to that date, to the extent that they exist, are not reflected. Declines in asset values will increase the actuarial cost of the plan, while increases will decrease the actuarial cost of the plan.
- > Effective August 28, 2009, the employer has implemented new "Tier B" plans for General (2.62% @ 62 under Section 31676.12 with three-year average compensation) and Safety (3% @ 55 under Section 31664.2 with three-year average compensation). The costs associated with the new Tier B plans have not been reflected in the results of this valuation because following the practice used by the Board in establishing the contribution rates for the current General Tier 1 and Tier A plans, a composite General contribution rate and a composite Safety contribution rate would be developed in the valuation based on the actual cost rates for each tier weighted by the payroll for all the covered members reported in each tier at those valuations. As of the June 30, 2009 valuation date, there are no members covered under the two new tiers so the cost rates for those tiers do not affect the rates in this report. The Board may want to refer to our previous report dated June 12, 2009 for the "stand-alone" employer normal costs and the individual entry age based member rates for the new tiers. Also included in that report is a summary of the benefits under the new tiers.

#### 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.

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

	June	30, 2009	June 30, 2008	
Employer Contribution Rates:(1)		Estimated		Estimated
	Total Rate	Annual Amount <sup>(2)</sup>	Total Rate	Annual Amount <sup>(2)</sup>
General Combined	18.55%	\$163,452	16.45%	\$144,948
Safety	27.22%	67,514	24.64%	61,114
All Categories combined	20.46%	230,966	18.25%	206,062
Average Member Contribution Rates:(1)		Estimated		Estimated
	Total Rate	Annual Amount <sup>(2)</sup>	Total Rate	Annual Amount(
General Tier 1	9.06%	\$278	9.18%	\$282
General Tier A	9.91%	87,017	9.95%	87,368
Safety Members	11.93%	29,590	11.93%	29,590
All Categories combined	10.35%	116,885	10.38%	117,240
Funded Status:				
Actuarial accrued liability	\$9,198,636		\$8,722,294	
Valuation value of assets	8,413,065		8,236,926	
Funded percentage	91.5%		94.4%	
Unfunded Actuarial Accrued Liability	\$785,571		\$485,368	
Key Assumptions:				
Interest rate	8.25%		8.25%	
Inflation rate	3.75%		3.75%	
Across the board inflation	0.50%		0.50%	

Before reflection of any member rate that may be "picked-up" by the employer.
Based on June 30, 2009 projected annual compensation.

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

	June 30, 2009	June 30, 2008	Percentage Change
Active Members:			
Number of members	17,699	18,041	-1.9%
Average age	44.9	44.5	N/A
Average service	10.7	10.2	N/A
Projected total compensation	\$1,129,170,721	\$1,135,431,988	-0.6%
Average projected compensation	\$63,799	\$62,936	1.4%
Retired Member and Beneficiaries:			
Number of members:			
Service retired	10,516	10,131	3.8%
Disability retired	1,572	1,555	1.1%
Beneficiaries	1,365	1,305	4.6%
Total	13,453	12,991	3.6%
Average age	68.7	68.6	N/A
Average monthly benefit	\$2,464	\$2,357	4.5%
<b>Deferred Terminated Members:</b>			
Number of deferred terminated members <sup>(1)</sup>	5,238	5,147	1.8%
Average age	45.2	45.0	N/A
Summary of Financial Data (dollar amounts in thousands):			
Market value of assets	\$6,191,953	\$8,408,016	-26.4%
Return on market value of assets	-25.71%	-0.18%	N/A
Actuarial value of assets	\$8,573,030	\$8,507,057	0.8%
Return on actuarial value of assets	1.51%	13.14%	N/A
Valuation value of assets	\$8,413,065	\$8,236,926	2.1%
Return on valuation value of assets	2.65%	13.65%	N/A

<sup>(1)</sup> 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, deferred 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: 2000– 2009

Year Ended June 30	Active Members	Deferred Terminated Members	Retired Members and Beneficiaries	Ratio of Non-Actives to Actives
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
2004	17,717	4,280	10,770	0.85
2005	16,980	4,673	11,436	0.95
2006	17,451	4,687	12,049	0.96
2007	17,733	4,908	12,504	0.98
2008	18,041	5,147	12,991	1.01
2009	17,699	5,238	13,453	1.06

#### **Active Members**

Plan costs are affected by the age, years of service and compensation of active members. In this year's valuation, there were 17,699 active members with an average age of 44.9, average years of service of 10.7 years and average projected compensation of \$63,799. The 18,041 active members in the prior valuation had an average age of 44.5, average service of 10.2 years and average projected compensation of \$62,936.

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

#### **Deferred Terminated Members**

In this year's valuation, there were 5,238 members with a vested right to a deferred or immediate vested benefit or entitled to a return of their member contributions versus 5,147 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, 2009

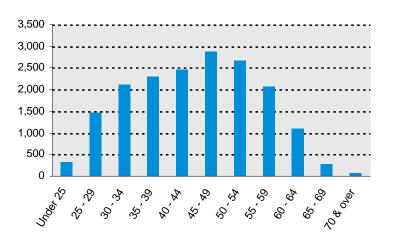
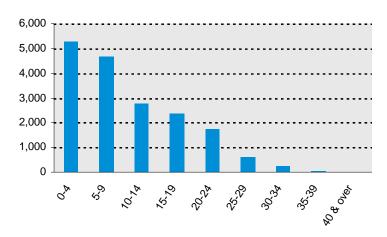


CHART 3
Distribution of Active Members by Years of Service as of June 30, 2009



#### **Retired Members and Beneficiaries**

As of June 30, 2009, 12,088 retired members and 1,365 beneficiaries were receiving total monthly benefits of \$33,147,234. For comparison, in the previous valuation, there were 11,686 retired members and 1,305 beneficiaries receiving monthly benefits of \$30,620,399.

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, 2009

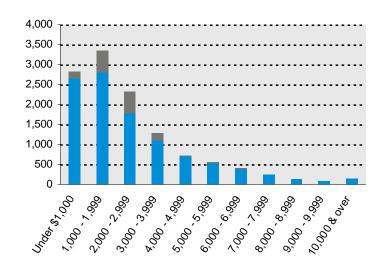
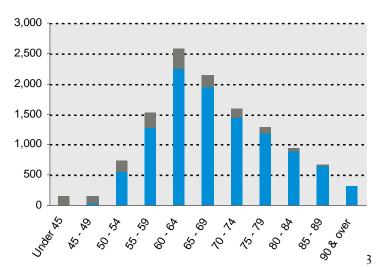


CHART 5
Distribution of Retired Members by Type and by Age as of June 30, 2009



DisabilityService

\*SEGAL

#### **B. FINANCIAL INFORMATION**

Retirement plan funding anticipates that, over the long term, both 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 seven years. Note: The first bar represents increases in assets during each year while the second bar details the decreases. The net contributions in 2003-2004 include \$450 million from issuance of Pension Obligation Bonds.

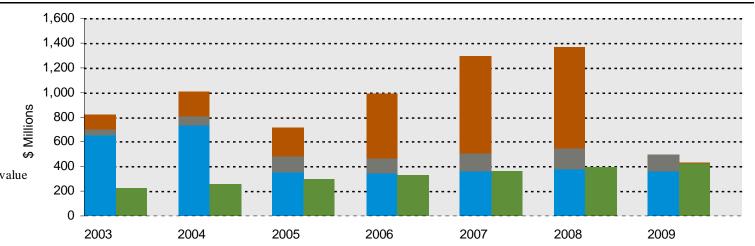
■ Adjustment toward market value

■ Benefits paid

■ Net interest and dividends

■ Net contributions

# CHART 6 Comparison of Increases and Decreases in the Actuarial Value of Assets for Years Ended June 30, 2003 – 2009



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. 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 and valuation value of assets is provided on the following page.

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

CHART 7

Determination of Actuarial and Valuation Value of Assets for Year Ended June 30, 2009

	Six Month Po	eriod To	Total Actual Market Return (net)	Expected Market Return (net)	Investment Gain (Loss)	Deferred Factor	Deferred Return
	7/2004	12/2004	\$393,633,977	\$228,521,789	\$165,112,188	0.0	\$0
	1/2005	6/2005	393,633,977		. , ,	0.0	0
	7/2005	12/2005	565,517,934	228,521,789 262,672,774	165,112,188 302,845,160	0.0	60,569,032
	1/2006	6/2006	, ,		, ,	0.2	30,669,962
	7/2006	12/2006	388,653,398 556,128,897	286,420,193 302,680,212	102,233,205 253,448,686	0.3	, ,
			· · · · ·	, ,	, ,		101,379,474
	1/2007	6/2007	552,867,341	325,757,782	227,109,559	0.5	113,554,780
	7/2007	12/2007	311,315,142	348,358,000	(37,042,857)	0.6	(22,225,714)
	1/2008	6/2008	(326,670,408)	360,831,645	(687,502,053)	0.7	(481,251,437)
	7/2008	12/2008	(2,499,382,909)	346,476,271	(2,845,859,180)	0.8	(2,276,687,344)
	1/2009	6/2009	345,409,043	242,171,217	103,237,826	0.9	92,914,043
1.	Total Deferred Return						(\$2,381,077,204)
2.	Net Market Value of A						6,191,953,275
3.	Actuarial Value of Asse	ets (Item 2 – Item 1)					8,573,030,479
4.	Non-valuation reserves						
	a. Supplemental Ben	efit Reserve					\$131,044,499
	b. 401(h) Reserve						12,124,729
	c. Disability Suppler	nental Benefit Reser	ve				16,796,079
	d. Contingency Rese	rve					0
	e. Undistributed Res	erve					0
	f. Subtotal						\$159,965,307
5.	Valuation Value of Ass	ets (Item 3 – Item 4	f)				8,413,065,173
6.	Amount of Deferred Re	eturns to be recogniz	zed in the following valua	tions:			
	June 30, 2010						(\$516,305,931)
	June 30, 2011						(587,098,283)
	June 30, 2012						(670,722,297)
	June 30, 2013						(617,274,476)
	June 30, 2014						10,323,783
No	te: Results may not add d	ue to rounding					, ,

Note: Results may not add due to rounding.

CHART 8
Allocation of Valuation Value of Assets as of June 30, 2009

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

	_	General	Safety	Total
1	Beginning of Year Asset Allocation	\$6,005,659,464	\$2,231,266,509	\$8,236,925,973
2	Percentage of Total Employee Contributions Excluding Pickups	79.16%	20.84%	100.00%
3	Employee Contributions, Allocated in Proportion to (2)	\$39,164,726	\$10,309,865	\$49,474,591
4.1	Percentage of Total Employer Contributions Including Pickups	70.94%	29.06%	100.00%
4.2	Employer Contributions Including Pickups, Allocated in Proportion to (4.1)	\$206,615,403	\$84,632,261	\$291,247,665
5	Annual Allowances for Retired Members (From Last Year's Valuation Report)	\$279,849,420	\$87,595,908	\$367,445,328
6.1	Benefit Payments Allocated in Proportion to (5)	\$289,497,713	\$90,615,929	\$380,113,642
6.2	Refunds, Allocated in Proportion to (2)	\$1,848,521	\$486,612	\$2,335,133
7	Subtotal = $(1) + (3) + (4.2) - (6.1) - (6.2)$	\$5,960,093,359	\$2,235,106,094	\$8,195,199,454
8	Total Valuation Value of Assets			\$8,413,065,173
9	Residual to Allocate = $(8) - (7)$			\$217,865,719
10	Allocate Residual in Proportion to (7)	\$158,446,421	\$59,419,298	\$217,865,719
11	End of Year Asset Allocation = $(7) + (10)$	\$6,118,539,780	\$2,294,525,392	\$8,413,065,173

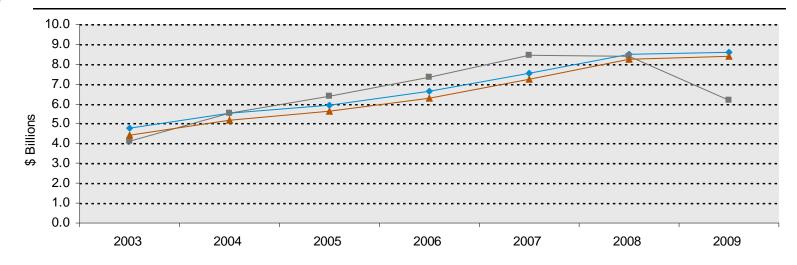
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The market value, actuarial value, and valuation value of assets are representations of SDCERA's financial status. As investment gains and losses are gradually taken into account, the actuarial value of assets tracks the market value of assets, but with less volatility. The valuation value of assets is the actuarial value, excluding any non-valuation reserves. The valuation asset value is significant because 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 seven years.

CHART 9

Market Value, Actuarial Value and Valuation Value of Assets as of June 30, 2003 –2009



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 \$329.5 million, a loss of \$460.0 million from investments and a gain of \$130.5 million from all other sources. The gain from all other sources was 1.4% 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, 2009

1.	Net loss from investments on valuation value of assets <sup>(1)</sup>	-\$459,959,000
2.	Net gain from other experience <sup>(2)</sup>	130,489,000
3.	Net experience loss: $(1) + (2)$	-\$329,470,000

<sup>(1)</sup> Details in Chart 11

<sup>(2)</sup> See Section 3. Exhibit H.

#### **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 SDCERA's investment policy. For valuation purposes, the assumed rate of return on the valuation value of assets was 8.25%. The actual rate of return on a valuation basis for the 2008/2009 plan year was 2.65%.

Since the actual return for the year was less than the assumed return, SDCERA experienced an actuarial loss during the year ended June 30, 2009 with regard to its investments.

CHART 11
Investment Experience for Year Ended June 30, 2009 – Valuation Value and Actuarial Value of Assets

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

	Valuation Value	Actuarial Value
1. Actual return	\$217,866,000	\$128,063,000
2. Average value of assets	8,216,063,000	8,476,012,000
3. Actual rate of return: $(1) \div (2)$	2.65%	1.51%
4. Assumed rate of return	8.25%	8.25%
5. Expected return: (2) x (4)	677,825,000	699,271,000
6. Actuarial gain/(loss): (1) – (5)	<u>(\$459,959,000)</u>	(\$571,208,000)

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 seven years. Based upon this experience, future expectations and discussions with the Board, we have maintained the assumed rate of return at 8.25%.

CHART 12
Investment Return – Actuarial Value, Valuation Value and Market Value: 2003 – 2009 (Dollar amount in thousands)

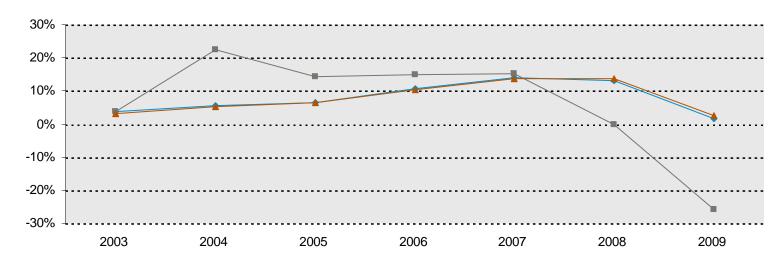
	Valuatior Investmen		Actuarial Value Market Value Investment Return Retu			
Year Ended June 30	Amount	Percent	Amount	Percent	Amount	Percent
2003	\$128,191	3.05%	\$167,213	3.69%	\$142,954	3.68%
2004	235,037	5.28%	272,339	5.69%	929,064	22.57%
2005	339,407	6.50%	359,888	6.48%	787,268	14.21%
2006	588,807	10.43%	642,588	10.79%	954,171	14.98%
2007	866,669	13.78%	926,575	14.02%	1,108,996	15.12%
2008	989,464	13.65%	988,906	13.14%	-15,355	-0.18%
2009	217,866	2.65%	128,063	1.51%	-2,153,974	-25.71%
Total	\$3,365,441		\$3,485,572		\$1,753,124	
Average Last 7 Years		7.82%		7.81%		5.19%

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 2003 - 2009.

CHART 13

Market, Actuarial and Valuation Rates of Return for Years Ended June 30, 2003 - 2009



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,
- > salary increases different than assumed, and
- data adjustments for retiree benefits and active pay for performance.

The net gain from this other experience for the year ended June 30, 2009 amounted to \$130.5 million, which was 1.4% 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 combined annual inflation and across the board salary increase rate of 4.25%. Effective with the June 30, 2004 actuarial valuation, the Association's UAAL will be amortized over 20-year fixed (i.e. decreasing) layered amortization periods.

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, 2009 A	ctuarial Valuation	June 30, 2008 A	Actuarial Valuation
		Estimated Annual		Estimated Annual
<b>General Members</b>	Rate	Amount*	Rate	Amount*
Normal Cost – Basic Only	9.65%	\$85,030	9.66%	\$85,118
Normal Cost – COLA Only	<u>2.80%</u>	<u>\$24,672</u>	<u>2.80%</u>	<u>24,672</u>
Normal Cost – Total **	12.45%	\$109,702	12.46%	\$109,790
UAAL (Basic and COLA)**	6.10%	\$53,750	<u>3.99%</u>	<u>\$35,158</u>
Total Contribution	18.55%	\$163,452	16.45%	\$144,948
Safety Members				
Normal Cost – Basic Only	14.40%	\$35,716	14.43%	\$35,791
Normal Cost – COLA Only	4.32%	<u>\$10,715</u>	<u>4.34%</u>	10,764
Normal Cost – Total **	18.72%	\$46,431	18.77%	\$46,555
UAAL (Basic and COLA)**	<u>8.50%</u>	<u>\$21,083</u>	<u>5.87%</u>	<u>\$14,559</u>
Total Contribution	27.22%	\$67,514	24.64%	\$61,114
All Categories Combined				
Normal Cost – Basic Only	10.69%	\$120,746	10.71%	\$120,909
Normal Cost – COLA Only	3.14%	<u>\$35,387</u>	<u>3.14%</u>	<u>35,436</u>
Normal Cost – Total **	13.83%	\$156,133	13.85%	\$156,345
UAAL (Basic and COLA)**	<u>6.63%</u>	<u>\$74,833</u>	<u>4.40%</u>	<u>\$49,717</u>
Total Contribution	20.46%	\$230,966	18.25%	\$206,062

<sup>\*</sup> Amounts are in thousands and are based on June 30, 2009 projected annual payroll (Also in thousands):

General Tier 1	\$3,069
General Tier A	878,072
Subtotal	\$881,141
Safety	<u>\$248,030</u>
Total	\$1,129,171

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

## CHART 14b Breakdown of the Employer's Normal Cost and UAAL Contributions to Fund for Each Type of Benefit (% of Payroll)

	<b>Elements of Normal Cost</b>				
Normal Cost	General	Safety	Overall		
Service Retirement*	6.95%	7.86%	7.15%		
Vested Termination and Ordinary Withdrawal	3.22%	2.84%	3.14%		
Non Service and Service Connected Disability	1.88%	7.04%	3.01%		
Non Service and Service Connected Death	0.40%	0.98%	0.53%		
Total Employer Normal Cost	12.45%	18.72%	13.83%		
Total Employee Normal Cost*	9.91%	11.93%	10.35%		
Employer Plus Employee Normal Cost	22.36%	30.65%	24.18%		

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

	Elements of UAAL**				
Unfunded Actuarial Accrued Liability**	General	Safety	Overall		
Service Retirement	5.81%	7.38%	6.16%		
Vested Termination and Ordinary Withdrawal	0.03%	0.04%	0.03%		
Non Service and Service Connected Disability	0.18%	0.97%	0.36%		
Non Service and Service Connected Death	0.08%	0.11%	0.08%		
Total Employer Unfunded Actuarial Accrued Liability	6.10%	8.50%	6.63%		

<sup>\*\*</sup> Assuming that the liability for all inactive members is fully funded.

The contribution rates as of June 30, 2009 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 employer 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 Employer Contribution from June 30, 2008 to June 30, 2009 (Dollar Amounts in Thousands)

	Contribution Rate	Estimated Annual Dollar Cost <sup>(1)</sup>
Recommended Average Employer Contribution Rate as of June 30, 2008, Before Reflecting Any Employer Pickups	18.25%	\$206,062
Effect of investment loss (2)	2.97%	\$33,536
Effect of difference in actual versus expected total and individual salary increases	-0.63%	-\$7,114
Effect of one-year delay in implementation of contribution rates calculated in June 30, 2008 valuation	-0.17%	-\$1,920
Effect of other actuarial gains or losses	0.04%	\$402
Subtotal	2.21%	\$24,904
Recommended Average Employer Contribution Rate as of June 30, 2009, Before Reflecting Any Employer Pickups	20.46%	\$230,966

<sup>(1)</sup> Based on June 30, 2009 projected annual payroll of \$1,129,170,721.

<sup>(2)</sup> Return on valuation assets was 2.65% and less than the 8.25% assumed in the valuation.

The individual entry age based member contribution rates as of June 30, 2009 have remained unchanged from those calculated in the June 30, 2008 valuation.

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

The chart below details the changes in the aggregate 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, 2008 to June 30, 2009 (Dollar Amounts in Thousands)

	<b>Contribution</b>	Estimated Annual
	Rate	<u>Dollar Cost<sup>(1)</sup></u>
Recommended Average Member Contribution Rate as of June 30, 2008, Before Reflecting Any Employer Pickups	10.38%	\$117,240
Effect of changes in member demographics	-0.03%	-\$355
Recommended Average Member Contribution Rate as of June 30, 2009, Before Reflecting Any Employer Pickups	10.35%	\$116,885

<sup>(1)</sup> Based on June 30, 2009 projected annual payroll of \$1,129,170,721.

#### E. INFORMATION REQUIRED BY GASB

Governmental Accounting Standards Board (GASB) reporting information provides standardized information for comparative purposes for 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

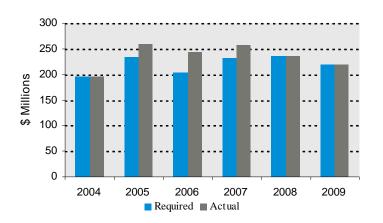
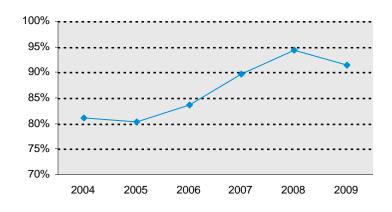


CHART 18 Funded Ratio



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

# EXHIBIT A Table of Plan Coverage i. General

	Year End	Year Ended June 30			
Category	2009	2008	– Change From Prior Year		
Active members in valuation					
Number	14,257	14,617	-2.5%		
Average age	46.0	45.4	N/A		
Average service	10.5	10.0	N/A		
Projected total compensation	\$881,141,156	\$888,953,550	-0.9%		
Projected average compensation	\$61,804	\$60,816	1.6%		
Account balances	\$281,892,971	\$253,105,554	11.4%		
Total active vested members	9,957	10,089	-1.3%		
Deferred terminated members	4,625	4,568	1.2%		
Retired members					
Number in pay status	9,341	9,042	3.3%		
Average age	69.7	69.7	N/A		
Average monthly benefit	\$2,336	\$2,244	4.1%		
Disabled members					
Number in pay status	955	953	0.2%		
Average age	62.9	62.8	N/A		
Average monthly benefit	\$1,750	\$1,693	3.4%		
Beneficiaries			_		
Number in pay status	1,249	1,204	3.7%		
Average age	76.4	76.0	N/A		
Average monthly benefit	\$1,238	\$1,177	5.2%		

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	2009	2008	– Change From Prior Year		
Active members in valuation					
Number	3,442	3,424	0.5%		
Average age	40.6	40.5	N/A		
Average service	11.4	11.2	N/A		
Projected total compensation	\$248,029,565	\$246,478,438	0.6%		
Projected average compensation	\$72,060	\$71,986	0.1%		
Account balances	\$87,857,787	\$82,380,041	6.6%		
Total active vested members	2,466	2,552	-3.4%		
Deferred terminated members	613	579	5.9%		
Retired members					
Number in pay status	1,175	1,089	7.9%		
Average age	62.9	62.8	N/A		
Average monthly benefit	\$4,926	\$4,722	4.3%		
Disabled members					
Number in pay status	617	602	2.5%		
Average age	57.4	57.0	N/A		
Average monthly benefit	\$3,250	\$3,146	3.3%		
Beneficiaries					
Number in pay status	116	101	14.9%		
Average age	67.5	67.1	N/A		
Average monthly benefit	\$2,713	\$2,609	4.0%		

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

**EXHIBIT B** 

Members in Active Service and Projected Average Compensation as of June 30, 2009 By Age and Years of Service

#### 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									_			
									_			
25 - 29	1		1						-			
	\$43,719		\$43,719						-			
30 - 34	4	1	3						-			
	64,596	\$76,084	60,767						-			
35 - 39	8		6	2					-			
	76,379		66,529	\$105,930					-			
40 - 44	7	1	5	1					-			
	55,731	23,461	63,690	48,204					-			
45 - 49	5		3	2					-			
	47,395		48,742	45,376					-			
50 - 54	5		3	1		1			-			
	58,508		65,377	48,204		\$48,204			-			
55 - 59	14		11	2		1			-			
	45,589		47,186	46,028		27,151			-			
60 - 64	9	2	5	1	1				-			
	51,103	122,623	33,292	13,247	\$34,971				-			
65 - 69	2		2						-			
	41,024		41,024						-			
70 & over	1			1					-			
	55,804			55,804					-			
Total	56	4	39	10	1	2			-			
	\$54,800	\$86,198	\$52,655	\$56,013	\$34,971	\$37,677						

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

**EXHIBIT B** 

Members in Active Service and Projected Average Compensation as of June 30, 2009 By Age and Years of Service

#### 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	187	183	4									
	\$38,824	\$38,572	\$50,375									
25 - 29	1,049	890	159									
	47,552	47,085	50,172									
30 - 34	1,626	876	668	81	1							
	57,985	56,217	59,752	\$62,302	\$76,084							
35 - 39	1,654	601	698	292	62	1						
	61,680	56,212	63,452	68,712	61,596	\$63,801						
40 - 44	1,804	472	530	372	316	112	2					
	64,072	56,152	63,205	71,563	68,633	63,849	\$61,702					
45 - 49	2,292	453	540	382	477	353	82	5				
	63,464	54,353	58,034	63,610	70,786	73,067	64,417	\$72,156				
50 - 54	2,348	388	546	382	402	390	164	73	3			
	65,304	52,076	59,083	63,173	69,186	78,068	79,952	69,694	\$92,785			
55 - 59	1,881	275	415	307	316	288	149	114	17			
	66,160	56,452	58,910	66,698	65,588	76,408	73,177	79,843	74,197			
60 - 64	1,037	134	279	186	182	168	58	25	5			
	63,247	55,654	56,114	63,667	67,068	71,270	71,679	75,598	80,984			
65 - 69	253	26	96	38	52	23	10	7	1			
	65,484	68,753	62,489	70,782	62,830	73,374	55,501	72,874	71,422			
70 & over	70	11	19	11	11	11	3	2	1	1		
	52,072	54,437	45,298	45,077	56,830	61,863	59,287	41,311	52,181	\$71,422		
Total	14,201	4,309	3,954	2,051	1,819	1,346	468	226	27	1		
	\$61,831	\$53,073	\$59,798	\$66,147	\$68,161	\$74,146	\$73,314	\$75,369	\$76,601	\$71,422		

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

**EXHIBIT B** 

Members in Active Service and Projected Average Compensation as of June 30, 2009 By Age and Years of Service

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	126	126										
	\$49,622	\$49,622										
25 - 29	423	366	57									
	54,903	53,702	\$62,612									
30 - 34	477	195	203	79								
	63,177	56,585	65,937	\$72,353								
35 - 39	646	112	172	284	75	3						
	70,622	56,985	66,251	75,595	\$81,850	\$78,760						
40 - 44	643	80	84	153	252	73	1					
	77,117	64,272	65,770	76,174	82,121	88,997	\$74,018					
45 - 49	577	52	74	87	146	169	47	2				
	81,125	68,316	72,347	73,494	80,732	89,413	94,921	\$74,988				
50 - 54	312	26	46	47	37	79	62	15				
	83,505	67,988	67,041	77,075	83,163	86,518	98,636	103,482				
55 - 59	166	15	15	39	20	27	36	14				
	84,380	70,450	62,823	74,418	87,996	84,040	95,356	117,420				
60 - 64	61	4	12	7	17	11	7	2	1			
	87,126	58,521	98,029	77,607	87,982	85,786	89,189	89,828	\$117,675			
65 - 69	10		2	1	2	3	1		1			
	80,656		55,243	67,147	66,765	98,298	82,828		117,675			
70 & over	1			1								
	218,902			218,902								
Total	3,442	976	665	698	549	365	154	33	2			
	\$72,060	\$56,431	\$66,979	\$75,340	\$82,124	\$88,182	\$96,044	\$106,841	\$117,675			

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

EXHIBIT C

Reconciliation of Member Data – June 30, 2008 to June 30, 2009

	Active Members	Deferred Terminated Members	Disabled Pensioners	Retired Members	Beneficiaries	Total
Number as of June 30, 2008	18,041	5,147	1,555	10,131	1,305	36,179
New members	681	61	N/A	N/A	N/A	742
Terminations – with vested rights	-372	372	0	0	0	0
Contribution refunds	-163	-84	N/A	N/A	N/A	-247
Retirements	-457	-202	N/A	659	N/A	0
New disabilities	-55	-5	70	-10	N/A	0
Return to work	47	-45	-1	-1	N/A	0
Died with or without beneficiary	-22	-7	-50	-268	60	-287
Data adjustments	1	1		5	0	3
Number as of June 30, 2009	17,699	5,238	1,572	10,516	1,365	36,390

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, 2009	Year Ended June 30, 2008		
Contribution income:					
Employer contributions	\$314,484,703		\$329,094,618		
Employee contributions	49,474,591		45,479,183		
Net contribution income		\$363,959,294		\$374,573,801	
Investment income:					
Interest, dividends and other income	\$207,836,570		\$261,101,440		
Recognition of capital appreciation	-8,035,410		816,046,361		
Less investment fees and administrative expenses	<u>-71,738,512</u>		<u>-88,241,530</u>		
Net investment income		128,062,648		988,906,271	
Total income available for benefits		\$492,021,942		\$1,363,480,072	
Less benefit payments:					
Service retirement and disability benefits	-\$378,327,810		-\$350,222,029		
Death benefits	-1,785,832		-941,703		
Health benefits	-23,939,902		-24,397,076		
Supplemental retirement benefits	-19,659,730		-17,410,323		
Member refunds	<u>-2,335,133</u>		-2,736,288		
Net benefit payments		-\$426,048,407		-\$395,707,419	
Change in assets held for future benefits		\$65,973,535		\$967,772,653	

Note: Results may not add due to rounding.

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

EXHIBIT E
Summary Statement of Plan Assets

	Year Ended June 30, 2009		Year Ended June 30, 2008	
Cash equivalents				\$214,932,759
Accounts receivable:		\$244,149,246		
Contributions	\$9,614,158		\$9,035,009	
Accrued interest and dividends	23,630,952		28,129,178	
Settlement of securities sold	282,361,922		292,285,394	
Total accounts receivable		315,607,032		329,449,581
Investments:				
Domestic equity securities and cash	\$1,005,312,648		\$1,893,089,339	
International equity securities and cash	1,132,511,918		1,833,090,389	
Bonds and cash	2,006,790,902		2,864,003,079	
Securities lending collateral	446,471,169		720,580,407	
Other investments	1,857,485,974		2,026,309,101	
Total investments at market value		6,448,572,611		9,337,072,315
Total assets		\$7,008,328,889		\$9,881,454,655
Less accounts payable:				
Securities lending & settlement of securities purchased	-\$803,902,572		-\$1,461,674,419	
Professional service	-8,314,646		-13,084,525	
Cash in transit	-412,399		-3,036,069	
Others	-3,745,997		<u>-1,715,524</u>	
Total accounts payable		-\$816,375,614		-\$1,473,438,399
Net assets at market value		<u>\$6,191,953,275</u>		<u>\$8,408,016,256</u>
Net assets at actuarial value		<u>\$8,573,030,479</u>		<u>\$8,507,056,945</u>
Net assets at valuation value		\$8,413,065,173		\$8,236,925,973

Note: Results may not add due to rounding.

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

#### **EXHIBIT F**

#### **Actuarial Balance Sheet**

An overview of the 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 are anticipated to 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	General	Safety	Total
1 Total valuation assets	\$6,118,540	\$2,294,525	\$8,413,065
2 Present value of future contributions by members	\$650,057	\$241,648	\$891,705
3 Present value of future employer contributions for:			
a Entry age normal cost	\$760,242	\$355,175	\$1,115,417
b Unfunded actuarial accrued liability	\$559,493	\$226,078	\$785,571
4 Total current and future assets	\$8,088,332	\$3,117,426	\$11,205,758
Liabilities			
5 Present value of benefits for retirees and beneficiaries	\$3,307,695	\$1,308,878	\$4,616,573
6 Present value of benefits for deferred terminated members	\$282,174	\$50,466	\$332,640
7 Present value of benefits for active members	<u>\$4,498,463</u>	\$1,758,082	\$6,256,545
8 Total liabilities	\$8,088,332	\$3,117,426	\$11,205,758

**EXHIBIT G** 

## Summary of Reported Reserve Information as of June 30, 2009

## Reserves

(Dollar Amounts in Thous	ands)				
Member contributions (1)	\$409,580				
County contributions (1)	3,023,746				
Retired member reserve (1)	4,424,854				
Transition reserves (1)	554,885				
Total valuation reserve (1)	\$8,413,065				
Supplemental benefit, disability					
supplemental benefit and 401(h)					
health reserves (2)	159,965				
Undistributed reserve (2)	0				
Contingency reserve (2)	0				
Total reserves	\$8,573,030				
Net deferred gains (losses) (2)	(2,381,077)				
Net market value	\$6,191,953				

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

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, 2009

		(Dollar Amounts in Thousands)
1	Unfunded Actuarial Accrued Liability as of June 30, 2008	\$485,368
2	Normal Cost	274,158
3	Total employer and member contributions	-340,722
4	Interest	37,297
5	Expected Unfunded Actuarial Accrued Liability	\$456,101
6	Changes due to:	
	(a) Investment return	\$459,959
	(b) Lower than expected salary increase	-129,349
	(c) Other experience gains/losses	1,140
	(d) Total changes	<u>329,470</u>
7	Unfunded Actuarial Accrued Liability as of June 30, 2009	\$785,571

Note: Net gain from other non-investment experience of \$130.5 million (as shown on page 9) is equal to: 6(b) + 6(c).

#### **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 amount indexed for inflation. The amount of that limit is \$195,000 for 2009 and 2010. 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.

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

#### **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; and
- (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 are many approaches to recognizing the unfunded or overfunded actuarial accrued liability, from meeting the interest accrual only to amortizing it over a specific period of time.

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

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 market gains and losses to avoid significant swings in the value of assets from one

year to the next.

EXHIBIT I

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

Plan Year Ended June 30	Annual Required Contributions	Actual Contributions <sup>(1)</sup>	Percentage Contributed
2004	\$194,970	\$194,970	100.0%
2005	235,122	259,988	110.6%
2006	203,700	243,700	119.6%
2007	231,300	258,200	111.6%
2008	236,763	236,763	100.0%
2009	219,635	219,635	100.0%

<sup>(1)</sup> Excludes employer pickup of member contributions and proceeds from Pension Obligation Bonds.

EXHIBIT II

Supplementary Information Required by GASB – Schedule of Funding Progress

Actuarial Valuation Date	Valuation Value of Assets <sup>(1)</sup> (a)	Actuarial Accrued Liability (AAL) <sup>(2)</sup> (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b) - (a)] / (c)
06/30/2004(3)	\$5,166,759,000	\$6,369,490,000	\$1,202,731,000	81.12%	\$917,081,000	131.15%
06/30/2005	5,612,320,000	6,990,726,000	1,378,406,000	80.28%	921,796,000	149.53%
06/30/2006	6,263,019,000	7,495,294,000	1,232,275,000	83.56%	979,368,000	125.82%
06/30/2007	7,250,404,000	8,082,517,000	832,113,000	89.70%	1,062,396,000	78.32%
06/30/2008	8,236,926,000	8,722,294,000	485,368,000	94.44%	1,135,432,000	42.75%
06/30/2009	8,413,065,000	9,198,636,000	785,571,000	91.46%	1,129,171,000	69.57%

<sup>(1)</sup> Excludes assets for Health Benefit Reserve. Excludes assets for STAR COLA on and before June 30, 2006.

<sup>&</sup>lt;sup>(2)</sup> Excludes liabilities held for Health Benefit Reserve. Excludes liabilities for STAR COLA on and before June 30, 2006.

<sup>(3)</sup> Reflects the issuance of Pension Obligation Bonds.

### **EXHIBIT III**

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

Valuation date	June 30, 2009
Actuarial cost method	Entry Age Normal Actuarial Cost Method
Amortization method	Level percent of payroll for total unfunded liability (assuming a 4.25% payroll increase)
Remaining amortization period	20-year fixed (decreasing or closed) layered amortization periods for all UAAL
Asset valuation method	Market value of assets less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between the actual market return and the expected return on market value (valuation value before July 1, 2004) and are recognized 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	3.75%
Across the board salary increase	0.50%
Projected salary increases (5+ years of service)	5.25%*
Cost of living adjustments	3.00% of retirement income
Plan membership:	
Retired members and beneficiaries receiving benefits	13,453
Deferred terminated members entitled to, but not yet receiving benefits	5,238
Active members	<u>17,699</u>
Total	36,390

<sup>\*</sup> Includes inflation at 3.75%, across the board increase of 0.50%, 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:** For General – 1994 Group Annuity Mortality Table.

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

**Disabled Retirement:** For General – 1994 Group Annuity Mortality Table set forward seven years.

For Safety – same as Healthy Retirement.

The following are sample rates (%).

	Healthy Life Mortality					ife Mortality
	Gei	neral	Sat	fety*	General	
Age	Male	Female	Male	Female	Male	Female
30	0.08	0.04	0.08	0.03	0.09	0.06
35	0.09	0.05	0.08	0.04	0.13	0.08
40	0.11	0.07	0.10	0.07	0.19	0.11
45	0.16	0.10	0.15	0.09	0.32	0.17
50	0.26	0.14	0.23	0.13	0.56	0.29
55	0.44	0.23	0.40	0.21	1.01	0.58
60	0.80	0.44	0.71	0.39	1.80	1.08

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

Employee Contribution Rates: For General – 1994 Group Annuity Mortality Table for Males weighted 30% and 1994

Group Annuity Mortality Table for Females weighted 70%.

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

75% and 1994 Group Annuity Mortality Table for Females set back one year

weighted 25%.

#### **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 non-service connected death.

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

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

<b>Disability Rates:</b>			Rate (%)			
	Non Se	rvice Connected	Disability	Servi	ce Connected Di	sability
	Gei	neral		Ger	neral	
Age	Male	Female	Safety	Males	Female	Safety
20	0.00	0.00	0.00	0.01	0.00	0.03
25	0.00	0.00	0.00	0.01	0.01	0.08
30	0.01	0.01	0.04	0.02	0.04	0.22
35	0.02	0.03	0.06	0.04	0.08	0.48
40	0.03	0.08	0.06	0.11	0.16	0.72
45	0.06	0.13	0.08	0.19	0.23	0.92
50	0.10	0.18	0.10	0.30	0.28	1.48
55	0.17	0.23	0.10	0.38	0.33	2.28

0.10

0.43

0.38

2.84

60

0.23

0.28

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

Withdrawal Rates:		e (%) dinary Withdrawals (	< 5 Years of Service)
	Ger	neral	
Years of Service	Male	Female	Safety
0	16.00	17.00	12.00
1	10.00	11.00	11.00
2	7.50	8.00	6.00
3	6.00	7.00	4.50
4	5.50	6.50	4.00
		ordinary Withdrawal (	5+ Years of Service) *

	<del></del>		
	General		
Age	Male	Female	Safety
20	1.00	1.80	0.83
25	1.00	1.80	0.75
30	0.94	1.53	0.65
35	0.84	1.02	0.67
40	0.74	0.68	0.65
45	0.58	0.42	0.53
50	0.44	0.30	0.41
55	0.34	0.30	0.36
60	0.30	0.30	0.14

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

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

## **Withdrawal Rates (continued):**

Rate (%)
Vested Termination (5+ Years of Service) \*

		`	
	General		
Age	Male	Female	Safety
20	8.40	8.40	3.56
25	7.40	7.40	2.99
30	6.40	5.80	2.41
35	5.10	4.40	1.91
40	3.60	3.40	1.46
45	2.70	2.40	0.99
50	2.20	2.00	0.68
55	1.40	1.40	0.48
60	1.00	1.00	0.16

<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	8.0	15.0
51	5.0	15.0
52	5.0	15.0
53	6.0	15.0
54	8.0	15.0
55	12.0	20.0
56	13.0	25.0
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	27.0	45.0
63	29.0	45.0
64	30.0	45.0
65	30.0	100.0
66	30.0	100.0
67	30.0	100.0
68	40.0	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 57; Safety: Age 53.

35% of General and 40% of Safety (including Probation) deferred vested members are assumed to be reciprocal. For reciprocals, we assume 5.25% 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.

**Percent Married:** 80% of male members and 55% of female members are assumed to be married at

retirement or pre-retirement death.

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

**Net Investment Return:** 8.25%; net of administration and investment expenses.

**Employee Contribution** 

**Crediting Rate:** 

½ of the net investment return credited semi-annually.

**Consumer Price Index:** 

Increase of 3.75% per year; benefit increases due to CPI subject to 3.0% maximum.

**Salary Scale:** 

Annual Rate of Compensation Increase

Inflation: 3.75% per year; plus "Across the Board" salary increases of 0.50% per year; plus Merit and Longevity as follows:

Years of Service	General	Safety
0	4.50%	7.50%
1	4.00	6.00
2	3.25	5.00
3	2.50	4.00
4	2.00	3.00
5+	1.00	1.00

Pay for Performance and Other Premium Pays:

General members are assumed to be eligible for an average annual pay for performance and other premium pays of 4%.

Safety members are assumed to be eligible for an average annual pay for performance and other premium pays of 3%.

**Actuarial Value of Assets:** Market value of assets less unrecognized returns in each of the last five years.

Unrecognized return is equal to the difference between the actual market return and the expected return on market value (valuation value before July 1, 2004) and are

recognized over a five-year period.

**Valuation Value of Assets** The actuarial value of assets reduced by the following reserves: (1) 401(h) Health

Benefit Reserve; (2) Undistributed Reserve; (3) Contingency Reserve; (4)

Supplemental Benefit Reserve; and (5) Disability Supplemental Benefit Reserve.

**Actuarial Cost Method:** Entry Age Normal Actuarial Cost Method. Entry Age is the age at the member's hire

date. Actuarial Accrued Liability is calculated on an individual basis and is based on costs allocated as a level percentage of compensation. The Normal Cost is calculated on an aggregate basis by taking the Present Value of Future Normal Costs divided by the Present Value of Future Salaries to obtain a normal cost rate. This normal cost

rate is then multiplied by the total of current salaries.

#### **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)
<b>Service Retirement Eligibility:</b>	
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%x2.00%x\$350 x 12) x Yrs
General Tier A (§31676.17)	S	
General Tier A (§31676.17)	50	(2.00%xFAC – 1/3%x2.00%x\$350 x 12) x Yrs
General Tier A (§31676.17)	50 55	(2.00%xFAC - 1/3%x2.00%x\$350 x 12) x Yrs (2.50%xFAC - 1/3%x2.50%x\$350 x 12) x Yrs
General Tier A (§31676.17)	50 55 60	(2.00%xFAC - 1/3%x2.00%x\$350 x 12) x Yrs (2.50%xFAC - 1/3%x2.50%x\$350 x 12) x Yrs (3.00%xFAC - 1/3%x3.00%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 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 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 area to a maximum of 3% per year, excess "banked." (§31870.1)
<b>County Contributions:</b>	Effective with the June 30, 2004 actuarial valuation, the amortization period for Unfunded Actuarial Accrued Liability has changed to a 20-year fixed (decreasing) layered amortization period.
Supplemental Benefit Allowance and Health Insurance Allowance:	The Association provides a supplemental benefit allowance and a health insurance allowance for eligible retirees. These benefits have been 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 exempt from paying member contributions (§31625.2 and §31625.3).

**NOTE:** The summary of major plan provisions is designed to outline principal 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.

Appendix A

Member Contribution Rates

## General Tier 1 Members' Contribution Rates from the June 30, 2009 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)

## **Calculated Under Adopted Assumptions**

Entry Age	E	Basic	COLA		Total	
	First \$350	Over \$350	First \$350	Over \$350	First \$350	Over \$350
15	3.37%	5.05%	1.09%	1.63%	4.46%	6.68%
16	3.37%	5.05%	1.09%	1.63%	4.46%	6.68%
17	3.43%	5.14%	1.11%	1.66%	4.54%	6.80%
18	3.49%	5.23%	1.13%	1.69%	4.62%	6.92%
19	3.55%	5.32%	1.15%	1.72%	4.70%	7.04%
20	3.61%	5.41%	1.17%	1.75%	4.78%	7.16%
21	3.67%	5.50%	1.19%	1.78%	4.86%	7.28%
22	3.73%	5.59%	1.21%	1.81%	4.94%	7.40%
23	3.79%	5.68%	1.23%	1.84%	5.02%	7.52%
24	3.85%	5.78%	1.25%	1.87%	5.10%	7.65%
25	3.92%	5.88%	1.27%	1.90%	5.19%	7.78%
26	3.98%	5.97%	1.29%	1.93%	5.27%	7.90%
27	4.05%	6.07%	1.31%	1.96%	5.36%	8.03%
28	4.11%	6.17%	1.33%	2.00%	5.44%	8.17%
29	4.18%	6.27%	1.35%	2.03%	5.53%	8.30%
30	4.25%	6.38%	1.37%	2.06%	5.62%	8.44%
31	4.32%	6.48%	1.40%	2.10%	5.72%	8.58%
32	4.39%	6.59%	1.42%	2.13%	5.81%	8.72%
33	4.46%	6.69%	1.44%	2.16%	5.90%	8.85%
34	4.53%	6.80%	1.47%	2.20%	6.00%	9.00%
35	4.61%	6.91%	1.49%	2.23%	6.10%	9.14%
36	4.69%	7.03%	1.51%	2.27%	6.20%	9.30%
37	4.76%	7.14%	1.54%	2.31%	6.30%	9.45%
38	4.83%	7.25%	1.56%	2.34%	6.39%	9.59%

## General Tier 1 Members' Contribution Rates from the June 30, 2009 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)

### **Calculated Under Adopted Assumptions**

Entry Age	E	Basic	COLA		Total	
	First \$350	Over \$350	First \$350	Over \$350	First \$350	Over \$350
39	4.91%	7.37%	1.59%	2.38%	6.50%	9.75%
40	4.99%	7.49%	1.61%	2.42%	6.60%	9.91%
41	5.07%	7.61%	1.64%	2.46%	6.71%	10.07%
42	5.15%	7.73%	1.67%	2.50%	6.82%	10.23%
43	5.24%	7.86%	1.69%	2.54%	6.93%	10.40%
44	5.32%	7.98%	1.72%	2.58%	7.04%	10.56%
45	5.41%	8.11%	1.75%	2.62%	7.16%	10.73%
46	5.49%	8.24%	1.77%	2.66%	7.26%	10.90%
47	5.59%	8.38%	1.81%	2.71%	7.40%	11.09%
48	5.68%	8.52%	1.84%	2.76%	7.52%	11.28%
49	5.77%	8.66%	1.87%	2.80%	7.64%	11.46%
50	5.87%	8.81%	1.90%	2.85%	7.77%	11.66%
51	5.97%	8.96%	1.93%	2.90%	7.90%	11.86%
52	6.09%	9.13%	1.97%	2.95%	8.06%	12.08%
53	6.20%	9.30%	2.01%	3.01%	8.21%	12.31%
54	6.33%	9.49%	2.05%	3.07%	8.38%	12.56%
55	6.41%	9.62%	2.07%	3.11%	8.48%	12.73%
56	6.48%	9.72%	2.09%	3.14%	8.57%	12.86%
57	6.51%	9.77%	2.11%	3.16%	8.62%	12.93%
58	6.52%	9.78%	2.11%	3.16%	8.63%	12.94%
59 & Over	6.51%	9.76%	2.11%	3.16%	8.62%	12.92%

Interest: 8.25%
Inflation: 3.75%
Across the board increase: 0.50%
COLA: 3.00%
COLA Loading Factor: 32.34%

Mortality: 1994 Group Annuity Mortality Table weighted 30% male and 70% female Salary Increase: 5 Year Select and Ultimate Salary Increase Assumptions (see Exhibit IV)

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

\*SEGAL

# General Tier A Members' Contribution Rates from the June 30, 2009 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)

## **Calculated Under Adopted Assumptions**

	E	Basic	COLA		Total	
Entry Age	First \$350	Over \$350	First \$350	Over \$350	First \$350	Over \$350
15	3.91%	5.86%	1.42%	2.13%	5.33%	7.99%
16	3.91%	5.86%	1.42%	2.13%	5.33%	7.99%
17	3.97%	5.96%	1.45%	2.17%	5.42%	8.13%
18	4.04%	6.06%	1.47%	2.21%	5.51%	8.27%
19	4.11%	6.16%	1.49%	2.24%	5.60%	8.40%
20	4.17%	6.26%	1.52%	2.28%	5.69%	8.54%
21	4.24%	6.36%	1.55%	2.32%	5.79%	8.68%
22	4.31%	6.47%	1.57%	2.36%	5.88%	8.83%
23	4.38%	6.57%	1.59%	2.39%	5.97%	8.96%
24	4.45%	6.68%	1.62%	2.43%	6.07%	9.11%
25	4.53%	6.79%	1.65%	2.47%	6.18%	9.26%
26	4.60%	6.90%	1.67%	2.51%	6.27%	9.41%
27	4.68%	7.02%	1.71%	2.56%	6.39%	9.58%
28	4.75%	7.13%	1.73%	2.60%	6.48%	9.73%
29	4.83%	7.25%	1.76%	2.64%	6.59%	9.89%
30	4.91%	7.36%	1.79%	2.68%	6.70%	10.04%
31	4.99%	7.48%	1.81%	2.72%	6.80%	10.20%
32	5.07%	7.60%	1.85%	2.77%	6.92%	10.37%
33	5.15%	7.73%	1.87%	2.81%	7.02%	10.54%
34	5.23%	7.85%	1.91%	2.86%	7.14%	10.71%
35	5.32%	7.98%	1.94%	2.91%	7.26%	10.89%
36	5.41%	8.11%	1.97%	2.95%	7.38%	11.06%
37	5.49%	8.24%	2.00%	3.00%	7.49%	11.24%
38	5.58%	8.37%	2.03%	3.05%	7.61%	11.42%
39	5.67%	8.50%	2.06%	3.09%	7.73%	11.59%
40	5.76%	8.64%	2.10%	3.15%	7.86%	11.79%
41	5.85%	8.78%	2.13%	3.20%	7.98%	11.98%
42	5.95%	8.93%	2.17%	3.25%	8.12%	12.18%

## General Tier A Members' Contribution Rates from the June 30, 2009 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)

### **Calculated Under Adopted Assumptions**

	E	Basic	CC	COLA		tal
Entry Age	First \$350	Over \$350	First \$350	Over \$350	First \$350	Over \$350
43	6.05%	9.07%	2.20%	3.30%	8.25%	12.37%
44	6.15%	9.22%	2.24%	3.36%	8.39%	12.58%
45	6.25%	9.38%	2.27%	3.41%	8.52%	12.79%
46	6.37%	9.55%	2.32%	3.48%	8.69%	13.03%
47	6.48%	9.72%	2.36%	3.54%	8.84%	13.26%
48	6.61%	9.91%	2.41%	3.61%	9.02%	13.52%
49	6.74%	10.11%	2.45%	3.68%	9.19%	13.79%
50	6.83%	10.24%	2.49%	3.73%	9.32%	13.97%
51	6.90%	10.35%	2.51%	3.77%	9.41%	14.12%
52	6.94%	10.41%	2.53%	3.79%	9.47%	14.20%
53	6.95%	10.42%	2.53%	3.79%	9.48%	14.21%
54 & Over	6.93%	10.39%	2.52%	3.78%	9.45%	14.17%

Interest:8.25%Inflation:3.75%Across the board increase:0.50%COLA:3.00%COLA Loading Factor:36.40%

Mortality: 1994 Group Annuity Mortality Table weighted 30% male and 70% female Salary Increase: 5 Year Select and Ultimate Salary Increase Assumptions (see Exhibit IV)

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

# Safety Members' Contribution Rates from the June 30, 2009 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)

## **Calculated Under Adopted Assumptions**

Entry Age	Basic	COLA	Total
15	7.23%	3.78%	11.01%
16	7.23%	3.78%	11.01%
17	7.23%	3.78%	11.01%
18	7.23%	3.78%	11.01%
19	7.23%	3.78%	11.01%
20	7.23%	3.78%	11.01%
21	7.23%	3.78%	11.01%
22	7.35%	3.84%	11.19%
23	7.47%	3.90%	11.37%
24	7.59%	3.96%	11.55%
25	7.72%	4.03%	11.75%
26	7.85%	4.10%	11.95%
27	7.98%	4.17%	12.15%
28	8.11%	4.23%	12.34%
29	8.24%	4.30%	12.54%
30	8.38%	4.38%	12.76%
31	8.52%	4.45%	12.97%
32	8.66%	4.52%	13.18%
33	8.80%	4.60%	13.40%
34	8.95%	4.67%	13.62%
35	9.10%	4.75%	13.85%
36	9.26%	4.84%	14.10%
37	9.42%	4.92%	14.34%
38	9.59%	5.01%	14.60%
39	9.76%	5.10%	14.86%
40	9.95%	5.20%	15.15%
41	10.15%	5.30%	15.45%
42	10.36%	5.41%	15.77%
43	10.60%	5.54%	16.14%

## Safety Members' Contribution Rates from the June 30, 2009 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)

#### **Calculated Under Adopted Assumptions**

Entry Age	Basic	COLA	Total
44	10.87%	5.68%	16.55%
45	10.99%	5.74%	16.73%
46	11.04%	5.76%	16.80%
47	11.03%	5.76%	16.79%
48	10.95%	5.72%	16.67%
49 & Over	10.78%	5.63%	16.41%

Interest:8.25%Inflation:3.75%Across the board increase:0.50%COLA:3.00%COLA Loading Factor:52.22%

Mortality: 1994 Group Annuity Mortality Table weighted 75% male and 25% female (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.

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

Appendix B
Unfunded Actuarial Accrued Liability (UAAL) Amortization Schedule as of June 30, 2009

	Unfunded Actuarial Accrued Liability Bases in the June 30, 2009 Actuarial Valuation							
	Date Established	Description	Initial Amount	Outstanding Balance	Years Remaining	Payment		
General	June 30, 2004	Reamortize UAAL	\$898,323,000	\$900,840,000	15	\$80,521,000		
	June 30, 2005	Actuarial loss	128,924,000	130,246,000	16	11,102,000		
	June 30, 2006	Actuarial gain	(122,837,000)	(124,360,000)	17	(10,146,000)		
	June 30, 2007	Actuarial gain	(319,377,000)	(322,936,000)	18	(25,305,000)		
	June 30, 2008	Actuarial gain	(252,322,000)	(254,061,000)	19	(19,177,000)		
	June 30, 2009	Actuarial loss	229,764,000	229,764,000	20	16,751,000		
Subtotal				\$559,493,000		\$53,746,000		
Safety	June 30, 2004	Reamortize UAAL	\$304,408,000	\$305,259,000	15	\$27,286,000		
	June 30, 2005	Actuarial loss	40,271,000	40,684,000	16	3,468,000		
	June 30, 2006	Actuarial gain	(29,564,000)	(29,931,000)	17	(2,442,000)		
	June 30, 2007	Actuarial gain	(81,955,000)	(82,868,000)	18	(6,493,000)		
	June 30, 2008	Actuarial gain	(88,653,000)	(89,264,000)	19	(6,738,000)		
	June 30, 2009	Actuarial loss	82,198,000	82,198,000	20	5,993,000		
Subtotal				\$226,078,000		\$21,074,000		
General and Safety	June 30, 2004	Reamortize UAAL	\$1,202,731,000	\$1,206,099,000	15	\$107,807,000		
	June 30, 2005	Actuarial loss	169,195,000	170,930,000	16	14,570,000		
	June 30, 2006	Actuarial gain	(152,401,000)	(154,291,000)	17	(12,588,000)		
	June 30, 2007	Actuarial gain	(401,332,000)	(405,805,000)	18	(31,798,000)		
	June 30, 2008	Actuarial gain	(340,974,000)	(343,325,000)	19	(25,915,000)		
	June 30, 2009	Actuarial loss	311,963,000	311,963,000	20	22,744,000		
<b>Grand Total</b>				\$785,571,000		\$74,820,000		

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