San Diego City Employees' Retirement System

June 30, 2009 Actuarial Valuation for the

San Diego County Regional Airport Authority

Produced by Cheiron

January 2010

Classic Values, Innovative Advice

Table of Contents

LETTER OF TRANSMITTAL

January 8, 2010

Board of Administration
San Diego City Employees' Retirement System
401 West A Street, Suite 400
San Diego, CA 92101

Dear Members of the Board:

At your request, we performed the June 30, 2009 actuarial valuation of the San Diego City Employees' Retirement System (SDCERS). The valuation results with respect to the San Diego County Regional Airport Authority are contained in this valuation report. The table below presents the key results of the valuation for the Airport Authority.

Table I-1
SDCERS – Airport Authority
(all dollar amounts in millions)

Valuation Date	**6/30/2009**	**6/30/2008**
Unfunded Actuarial Liability (UAL)	$ 8.9	$ -1.3
Funding Ratio	86.9%	102.3%
Airport Contribution Rate	16.60%	11.96%
Fiscal Year	**2011**	**2010**
Annual Required Contribution (GASB):		
-if paid at the beginning of the year	$ 4.3 million	$ 3.0 million
-if paid throughout the year	$ 4.5 million	$ 3.1 million

- *Unfunded Actuarial Liability (UAL):* The Airport Authority's UAL has increased by $10.2 million. The primary cause of this increase was the significant investment loss experienced during the worst equity market since the Great Depression.

- *Funding Ratio:* This is the ratio of the system's actuarial value of assets to actuarial liabilities, which declined by 15.4%.

- *Contributions (GASB ARC):* Airport Authority contributions were determined under full compliance with the Governmental Accounting Standards Board (GASB) Statement Number 25, defining the annual required contribution (ARC) for the Airport Authority for fiscal year July 1, 2010 through June 30, 2011 (FY 2011). The results of this valuation produced an increase in the Airport Authority's ARC of $1.3 million. When measured as a percent of membership payroll, the ARC rose by 4.64%.

More details on Plan experience for the past year and its impact on these June 30, 2009 valuation results can be found in the valuation report.

We certify that, to the best of our knowledge, this valuation report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the Code of Professional Conduct and applicable actuarial standards set out by the Actuarial Standards Board, including Actuarial Standards of Practice (ASOPs) Nos. 4, 27, 35, and 44. As such, it reflects the actuary's responsibility under ASOP No. 4 "for assessing the implications of the overall results, in terms of short- and long-range benefit security and expected cost progression." In preparing our report, we relied without audit, on information supplied by SDCERS staff. This information includes, but is not limited to, plan provisions, employee data, and financial information.

Finally, it is important to note that this valuation was prepared using census data and financial information as of the valuation date, June 30, 2009. Therefore, changes in membership and investment experience following that date are not, and should not be, reflected in this report. The next valuation will reflect all membership and investment experience changes through June 30, 2010.

Sincerely,

Cheiron

Gene Kalwarski, FSA, EA, MAAA
Principal Consulting Actuary

Margaret Tempkin, FSA, EA, MAAA
Consulting Actuary

SECTION I
BOARD SUMMARY

The primary purpose of the actuarial valuation and this report is to report, as of the valuation date, on the following:

- The financial condition of the SDCERS-Airport Authority,
- Past and expected trends in the financial condition of SDCERS-Airport Authority,
- The Airport Authority's contribution rates for Fiscal Year 2011, and
- Information required by the Governmental Accounting Standards Board (GASB).

In this Section, we present a summary of the principal valuation results. This summary includes the basis upon which the June 30, 2009 valuation was completed and an examination of the current financial condition of SDCERS-Airport Authority. In addition, we present a review of the key historical trends followed by the projected financial outlook for SDCERS-Airport Authority.

A. Valuation Basis

The Airport Authority's June 30, 2009 valuation results are based on the same benefit provisions and actuarial methods used in the June 30, 2008 valuation, except the assumption used to calculate the value of the Deferred Retirement Option Plan (DROP) account balances. More details on the assumptions, methods and benefit provisions can be found in Appendices B and C.

B. Current Financial Condition of SDCERS-Airport Authority

The following discussion summarizes the key results of the June 30, 2009 valuation and shows how they compare to the results from the June 30, 2008 valuation.

1. Airport Authority Membership

Table I-2 shows that total membership in SDCERS-Airport Authority increased by 1.9% from 2008 to 2009. The increase was attributable to the growth in inactive membership (terminated vested, disabled, and retirees), as the active membership count declined by 0.9%. Active member payroll increased by 5.1%, which is above the assumed payroll inflation of 4%.

Table I-2
SDCERS - Airport Authority - Membership Total

Item	June 30, 2009	June 30, 2008	% Change
Active Counts	338	341	-0.9%
Terminated Vested	68	62	9.7%
Disabled	1	-	0.0%
Retirees	20	16	25.0%
Beneficiaries	1	1	0.0%
Total Airport Participants	428	420	1.9%
Active Member Payroll	$ 24,693,427	$ 23,488,283	5.1%
Average Pay per Active Member	$ 73,057	$ 68,881	6.1%

SECTION I
BOARD SUMMARY

2. Airport Authority Assets and Liabilities

Table I-3 presents a comparison between the June 30, 2009 and June 30, 2008 SDCERS - Airport Authority assets, liabilities, unfunded actuarial liability, and funding ratios.

The key results shown in Table I-3 indicate that because the total actuarial liability increased by 19.5% but the actuarial value of assets only increased by 1.5%, the funding ratio decreased from 102.3% as of June 30, 2008 to 86.9% as of June 30, 2009. SDCERS employs a commonly used actuarial smoothing method on the market value that dampens market volatility, so the actuarial value of assets increased slightly, whereas the market value fell by 10.4%.

Section II-C provides additional information explaining the development of the actuarial value of assets.

Table I-3
SDCERS – Airport Authority - Assets & Liabilities

Entry Age Normal (EAN) Liabilities	**June 30, 2009**	**June 30, 2008**	**% Change**
Actives	$ 55,169,739	$ 47,157,366	17.0%
Terminated Vested	2,777,562	3,309,120	-16.1%
Disabled	213,239	-	0.0%
Retirees	9,405,538	6,037,405	55.8%
Beneficiaries	304,867	303,772	0.4%
Total Actuarial (EAN) Liability	$ 67,870,945	$ 56,807,663	19.5%
Market Value Assets	$ 49,150,920	$ 54,856,234	-10.4%
Actuarial Value Assets	58,981,105	58,095,599	1.5%
Unfunded Actuarial Liability	$ 8,889,841	$ (1,287,936)	-790.2%
Funding Ratio-Actuarial Value	86.9%	102.3%	-15.4%
Additional Contributions	**June 30, 2009**	**June 30, 2008**	**% Change**
Desired Funding Ratio of 90%	$ 2,102,746	$ -	0.0%
Desired Funding Ratio of 95%	5,496,294	-	0.0%
Desired Funding Ratio of 100%	8,889,841	-	0.0%

SECTION I
BOARD SUMMARY

3. Components of UAL Change between June 30, 2008 and June 30, 2009

SDCERS-Airport Authority unfunded actuarial liability (UAL) increased by $10.2 million from $(1.3) million to $8.9 million. The table below (shown in thousands for detail) presents the specific components of this change in the UAL.

The key finding in Table I-4 is that investment experience increased the UAL by $9.6 million. Liability experience increased the UAL by $1.4 million. Partially offsetting those increases were Airport and Member contributions $1.1 million in excess of expected.

Table I-4
SDCERS - Airport Authority-Change in UAL
(In Thousands)

	UAL change due to experience factors	
1.	Investment experience	$ 9,584.1
2.	Purchased service credits paid for during the year*	(46.1)
3.	Liability experience	1,438.1
	UAL change due to contribution factors	
4.	Contributions paid in excess of expected	(1,083.1)
	Total	
5.	Total net overall change: (sum 1 through 4)	9,893.0
6.	Expected change in UAL	284.8
7.	Total actual change in UAL: 5 + 6	$ 10,177.8

** Attributable to Members who have entered into a purchased service contract after June 30, 2008. (Gain) or Loss equals the difference between the actuarial liability before and after the additional service purchased. Only Members hired before October 2, 2006 are still eligible to purchase additional service credits.*

SECTION I
BOARD SUMMARY

4. Airport Authority Contributions

The Airport Authority's contribution for FY 2011 measured as a percent of membership payroll increased from 11.96% to 16.60%. In dollars, the required beginning of year contribution increased by $1.3 million, from $3.0 million to $4.3 million.

The contribution increase was primarily attributable to the significant downturn in the markets over the FY ending June 30, 2009, which led to a large increase in the unfunded liability cost component of the annual required contribution (ARC).

In Section IV we provide more detail on the development of this contribution rate.

Table I-5
SDCERS – Airport Authority – Contributions

EAN Funding Method	June 30, 2009	June 30, 2008	% Change
Gross Normal Cost %	24.42%	22.67%	1.8%
Member Cost %	10.53%	9.91%	0.6%
Employer Normal Cost %	13.89%	12.76%	1.1%
Employer Unfunded Liability Cost %	2.64%	-0.80%	3.4%
Negative Amortization Adjustment Cost %	0.07%	0.00%	0.1%
Total Employer Cost %	16.60%	11.96%	4.6%
Annual Required Contribution (GASB):			
-if paid at the beginning of the year	$ 4.3 million	$ 3.0 million	34.8%
-if paid throughout the year	$ 4.5 million	$ 3.1 million	34.8%

The total $4.3 million ARC is made up of the following components (shown in thousands for detail):

in thousands	Beginning of Year ARC Component
$ 3,608.2	Employer Normal Cost
(251.9)	12-year amortization of the outstanding 2007 UAL balance 06/30/2010
167.3	29-year amortization of the FY2008 UAL increase due to assumptions changes
(128.3)	14-year amortization of the UAL due to the experience loss in FY2008
900.1	15-year amortization of the UAL due to the experience loss in FY2009
17.6	Amount needed to avoid negative amortization of UAL for FY 2011
$ 4,313.1	Total FY 2011 beginning of year ARC

Note: The differing amortization periods above for the respective tiers of the UAL were approved by the SDCERS Board effective with the June 30, 2007 valuation.

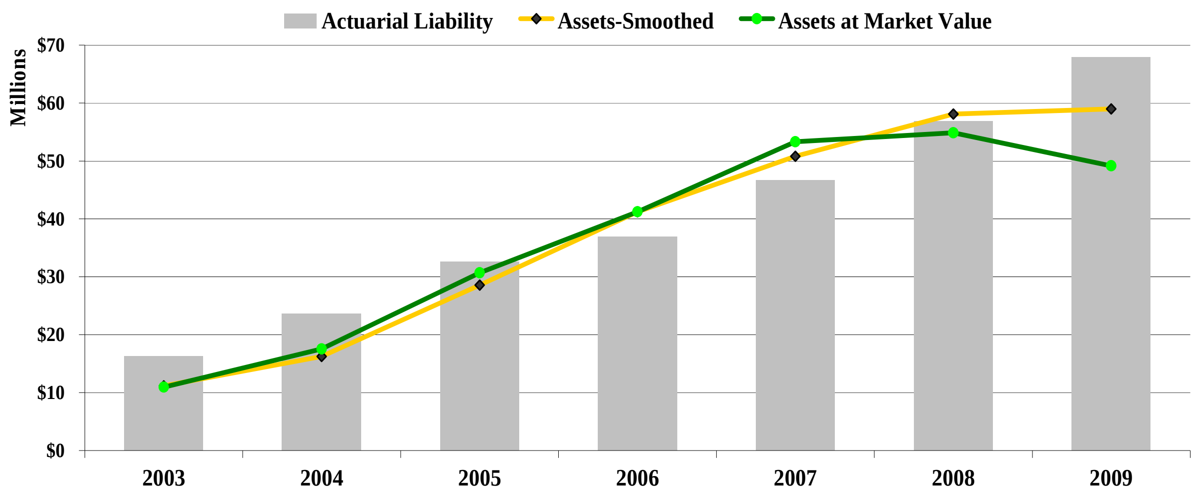
SECTION I
BOARD SUMMARY

C. Historical Trends SDCERS-Airport Authority

Despite the fact that most of the attention given to the valuation focuses on the most recently-computed unfunded actuarial liability (UAL), funding ratio, and the Airport Authority's contribution rate, it is important to remember that each valuation is merely a snapshot of the long-term progress of a pension fund. It is more important to judge a current year's valuation result relative to historical trends and trends expected into the future.

In the chart below, we present the historical trends for both the market value and smoothed assets compared to actuarial liabilities, and SDCERS-Airport Authority funding ratios since 2003.

SDCERS-Airport Authority Assets and Liabilities 2003-2009



	2003	2004	2005	2006	2007	2008	2009
Funding Ratio	68.4%	68.8%	87.6%	111.7%	109.0%	102.3%	86.9%
UAL (millions)	$ 5.1	$ 7.4	$ 4.1	$ (4.3)	$ (4.2)	$ (1.3)	$ 8.9

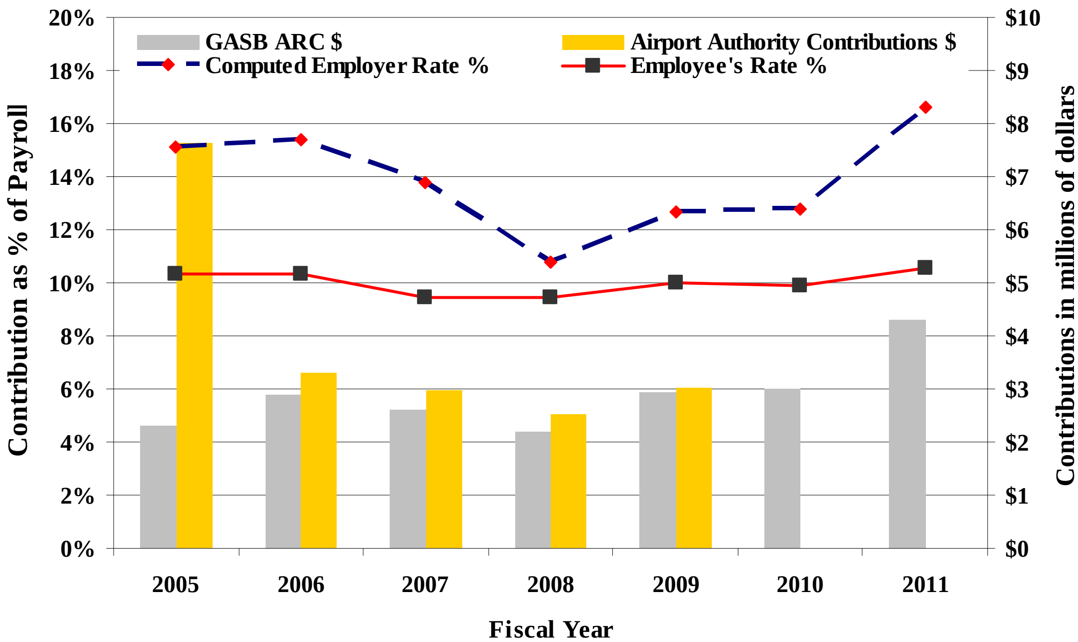
* The UAL for 2007 and after is calculated using the Entry Age Normal method; 2006 and prior years are calculated using the Projected Unit Credit method.

The chart indicates that in 2003 and 2004, the funding rate was slightly more than 68% of the actuarial value of assets. In 2005 through 2006, the funding ratio significantly increased due to excess contributions and strong investment performance. The funding ratio declined slightly in 2007 primarily due to the change in actuarial funding method from the Projected Unit Credit method to the Entry Age Normal Method. In 2008, the funding ratio declined primarily due to a change in the actuarial assumptions, and in 2009 the funding ratio declined significantly due to investment losses.

SECTION I
BOARD SUMMARY

In the chart below, we present the historical trends for the SDCERS-Airport Authority contribution rates since FY 2005, as well as actual contributions made by the Airport Authority and the actuarially computed GASB ARC.

SDCERS-Airport Authority and Member Contribution Rates FY 2005-2011



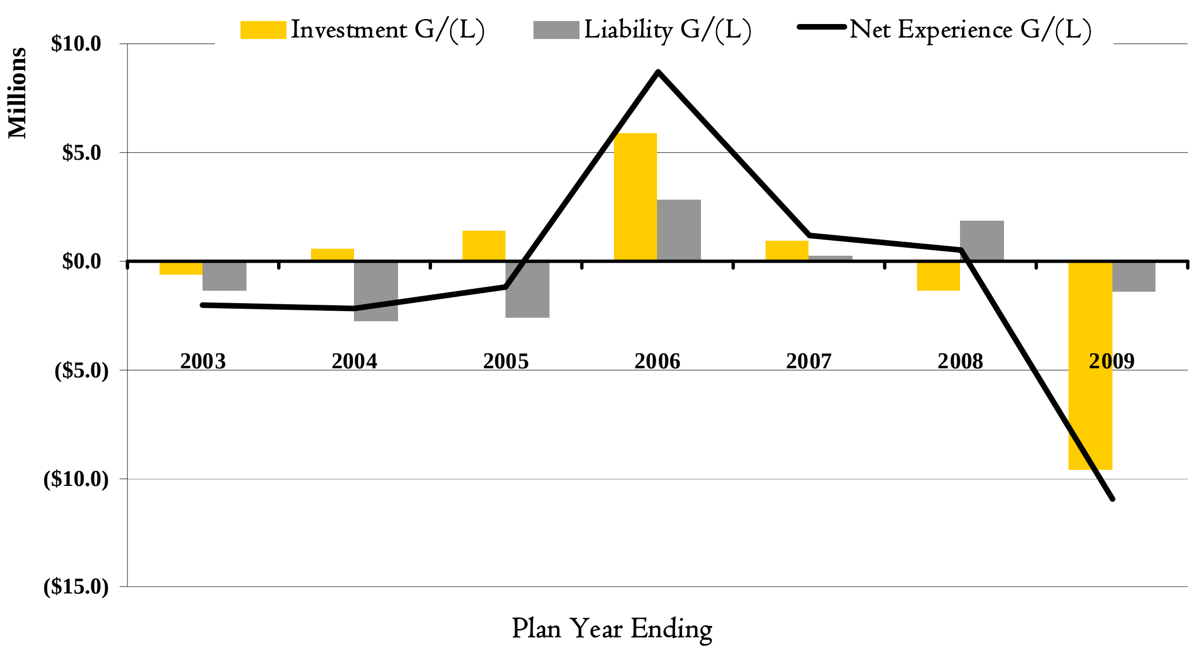
The key information in this chart is that the Airport Authority's contribution rate has now increased significantly for fiscal year 2011 after remaining fairly level for fiscal years 2009 and 2010. The chart also indicates that the Members' contribution rate has remained relatively stable throughout the fiscal years shown in contrast to the volatility in the employer rates.

This chart also compares the actual contributions made by the Airport Authority since 2005 to the annual required contribution (ARC) based on the Board's adopted funding practice of Normal Cost plus various amortization of UALs, including the requirement beginning in fiscal year 2009 that there be no negative amortization. The chart indicates that the Airport Authority has been consistently paying in excess of the ARC since FY 2005.

SECTION I
BOARD SUMMARY

The last historical chart for SDCERS-Airport Authority presents the pattern of annual gains and losses, broken into the investment and liability components. The chart does not include any changes in the SDCERS' assets and liabilities attributable to changes to methods, procedures or assumptions.

SDCERS-Airport Authority Historical Gain/(Loss) 2003-2009



The key insights from this chart are:

- 2003 had investment losses (gold bars), while 2004-2007 had significant investment gains. In 2008, the investment trend turned negative.
- The investment loss in 2009 was by far the most significant gain or loss during the last ten years.
- There had been a pattern of liability losses from 2003 to 2005. The experience produced gains in 2006, 2007 and 2008, and a loss in 2009.

SECTION I
BOARD SUMMARY

D. Projected Financial Trends SDCERS - Airport Authority

Our analysis of SDCERS-Airport Authority projected financial trends is an important part of this valuation. Our assessment of the implications of the June 30, 2009 valuation results on the future outlook of SDCERS-Airport Authority in terms of benefit security (assets over liabilities) and the Airport Authority's expected cost progression is set forth below. In addition, given the concern regarding unfunded liabilities, we also show the Airport Authority's expected future pay down of unfunded liabilities.

In the charts that follow, we project the SDCERS–Airport Authority plan assets and liabilities, the pay down of UAL, and the Airport Authority's contributions as a percent of payroll on two different bases:

1) Assuming 7.75% returns each and every year, and

2) Assuming returns shown in the table below which begin with rates of return that start at positive 12% then vary each year thereafter over the projection period, but over the entire period average out to the assumed 7.75%. We do this in reflection of the positive returns that have occurred historically whenever there have been serious market downturns.

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Return	12.00%	10.63%	7.11%	9.42%	8.45%	3.77%	12.66%	0.63%	13.24%	-4.18%
Fiscal Year	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Return	2.50%	4.94%	11.71%	19.86%	9.33%	9.99%	0.76%	13.05%	12.44%	1.24%
Fiscal Year	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
Return	1.18%	13.12%	6.80%	5.62%	6.46%	21.06%	3.56%	9.06%	3.25%	2.90%

SECTION I
BOARD SUMMARY

Projection Set 1
Assets and Liabilities – Airport Authority

The charts below show asset measures (green and gold lines) compared to liabilities (grey bars). The most revealing insight from these two charts is how varying investment returns can dramatically impact SDCERS-Airport Authority funding ratios.

Chart 1: Projection of Assets and Liabilities, 7.75% return each year

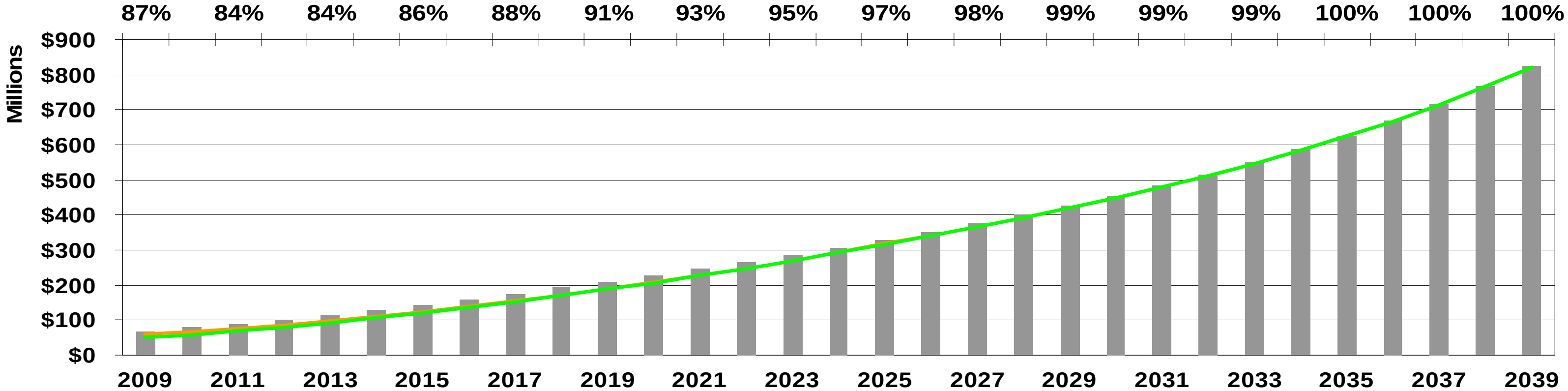
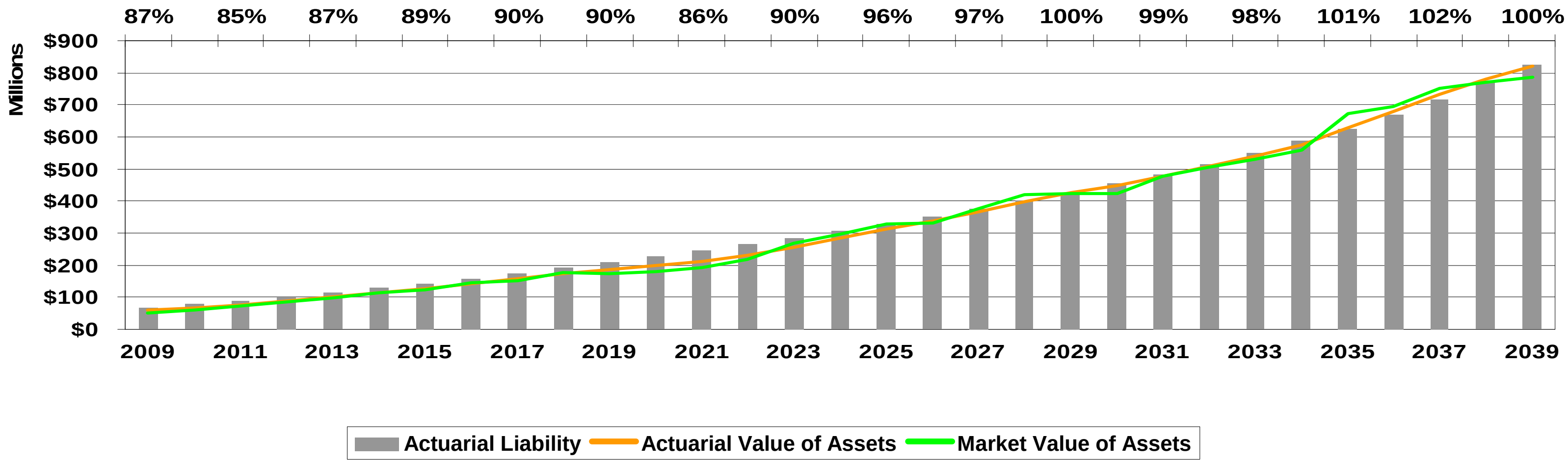


Chart 2: Projection of Assets and Liabilities, varying returns averaging 7.75%



SECTION I
BOARD SUMMARY

Projection Set 2
Pay down of the Unfunded Actuarial Liability (UAL) Airport Authority

The chart to the right below demonstrates that varying returns (which always happen) will have a dramatic impact on the annually computed UAL.

Chart 1: 7.75% return each year

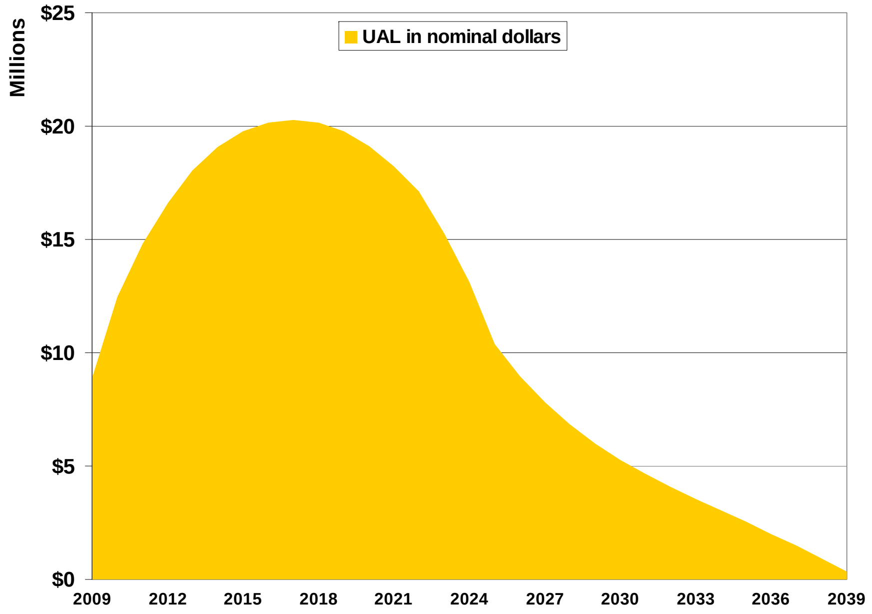
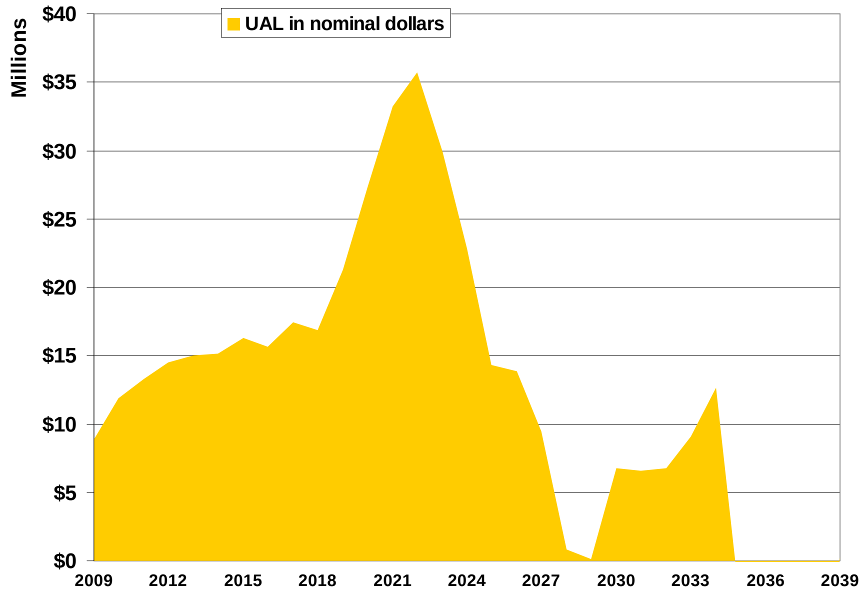


Chart 2: Varying returns averaging 7.75%



SECTION I
BOARD SUMMARY

Projection Set 3
Contribution Rate – Airport Authority

As seen on the chart to the right below, varying returns will also have a significant impact on the actuarially computed Airport Authority contribution rate.

Chart 1: 7.75% return each year

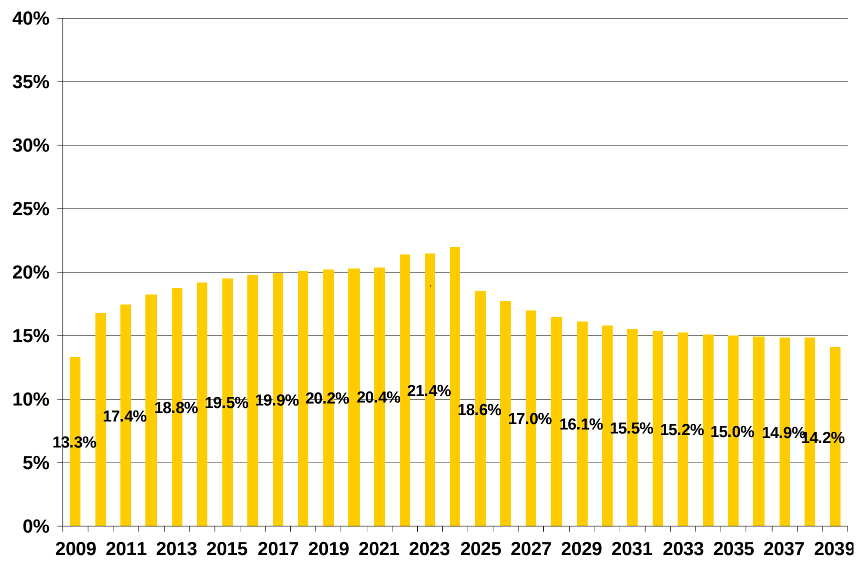
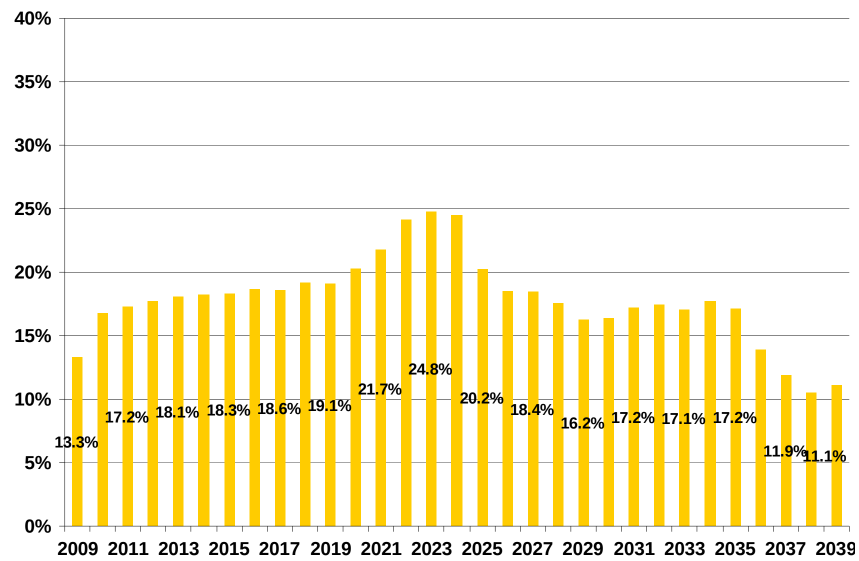


Chart 2: Varying returns averaging 7.75%



SECTION II
ASSETS

Like other public pension plans, SDCERS uses two different asset measurements that are presented in this section of the report: the market value and the actuarial value of assets. The market value represents, as of the valuation date, the value of the assets if they were liquidated on that date. The actuarial value of assets is a value that smoothes annual investment performance over multiple years to reduce the impact of annual investment volatility on employer contribution rates. The actuarial value of assets is used in determining SDCERS' contribution rates for the three participating employer plans.

Each employer receives a separate actuarial valuation report and cost determination. However, the assets of all employer plans are pooled for investment purposes. The apportionment of the assets among the employer plans directly impacts each employer's costs. Therefore, in the interest of ensuring transparency, this section discloses information on the total assets of SDCERS-All Employers. In addition, a brief explanation of how those assets are apportioned to the City of San Diego, the Unified Port District (Port), and the San Diego County Regional Airport Authority (Airport) is included.

On the following pages, detailed information is presented on SDCERS-All Employers assets, including:

A. Disclosure of the June 30, 2009 total SDCERS market value of assets, by asset class

B. Market value of assets by Plan Sponsor

C. Development of the actuarial value of assets

D. Disclosure of the investment performance for the year

SECTION II
ASSETS

A. Disclosure of Market Value of Assets

The market value of assets represents a "snap-shot" value as of June 30, the last day of the fiscal year, which provides the principal basis for measuring financial performance from one year to the next. Market values, however, can fluctuate widely with swings in the investment markets. Because these fluctuations would cause volatility in employer contributions, an actuarial value of assets is developed. Table II-1 below discloses the market value by asset class of SDCERS–All Employers' gross assets on June 30, 2009.

Table II-1
SDCERS – All Employers
Summary of Reported Market Value of Total Defined Benefit Plan Assets

Cash	$ 374,935,440
US Stocks	1,444,848,678
International Stocks	614,245,022
Bonds	1,005,232,083
Real Estate	350,499,079
Receivables	109,333,112
Short Term Investments	33,311,264
Fixed Assets	1,274,343
Miscellaneous	72,718
Accounts Payable	(218,678,061)
Market Value of Assets – June 30, 2009	**$ 3,715,073,678**

SECTION II
ASSETS

B. Market Value of Assets by Plan Sponsor

As of July 1, 2007, the City, Unified Port District and Airport Authority plans were separated into independent, qualified, single employer governmental defined benefit plans and trusts. The assets of the three separate plans and trusts are pooled in the SDCERS Group Trust, which was established as of July 1, 2007. SDCERS invests and administers the Group Trust as a common investment fund and accounts separately for the proportional interest of each plan and trust that participates in the Group Trust. Cash flow activity for each plan is recorded directly to that plan, with investment activity and other cash flow activity not specific to any one plan being allocated based upon each plan's respective share of the Group Trust's total assets, with time-weighted adjustments for the plan-specific cash flows. Table II-2 below discloses the market value of assets by plan.

Table II-2
Summary of Market and Actuarial Assets for Each Employer Group as of June 30, 2009

	Market Value Total Net Assets June 30, 2008	Market Value Total Assets June 30, 2009	Actuarial Value Total Assets June 30, 2009
City of San Diego	$4,408,719,440	$3,479,357,154	$4,175,228,585
Unified Port District	233,027,785	$186,565,603	$223,878,723
Airport Authority	54,856,234	$49,150,920	$58,981,105
Total-SDCERS	***$4,696,603,459***	***$3,715,073,678***	***$4,458,088,413***

SECTION II
ASSETS

C. Actuarial Value of Assets

To determine on-going funding requirements, most pension funds utilize an actuarial value of assets. Unlike the market value of assets, the actuarial value of assets represents an asset value based on averaging or smoothing year-to-year market value returns for purposes of reducing the resulting volatility on contributions.

The actuarial value of assets is equal to 100% of the expected actuarial value of assets as of June 30, 2009 (assuming 7.75% earnings for the year) plus 25% of the difference between the current actual market value of assets and the expected actuarial value of assets. (See Appendix B, section B-2 for further explanation of the asset valuation method). In no event will the actuarial value of assets ever be less than 80% of the market value of assets, nor ever greater than 120% of the market value of assets.

Table II-3
SDCERS - Airport Authority
Development of Actuarial Value of Assets at June 30, 2009
Expected Value of Assets Method

1.	Actuarial Value of Assets at June 30, 2008	$	58,095,599
2.	Amount in (1) with interest at 7.75% to June 30, 2009		62,598,008
3.	Employer, and Member contributions for the Plan Year ended June 30, 2009		6,376,698
4.	Disbursements from Trust excluding investment expenses, June 30, 2008 through June 30, 2009		700,322
5.	Interest on cash flows to June 30, 2009 at 7.75% per year		344,822
6.	Expected Actuarial Value of Assets at June 30, 2009 = (2) + (3) – (4) + (5)		68,619,206
7.	Actual Market Value of Assets at June 30, 2009		49,150,920
8.	Excess of (7) over (6)		(19,468,286)
9.	Preliminary Actuarial Value of Assets at June 30, 2009 = (6) + 25% of (8)	$	63,752,135
10.	80% Minimum Corridor on the Actuarial Value of Assets = 80% of (7)		39,320,736
11.	120% Maximum Corridor on the Actuarial Value of Assets = 120% of (7)		58,981,105
12.	Final Actuarial Value of Assets at June 30, 2009 = (9), but no less than (10) and no more than (11)	$	58,981,105

SECTION II
ASSETS

D. Investment Performance

The return on the market value of assets, as reported by SDCERS' investment advisor Callan Associates, was negative 19.2%. The return in FY 2008 was negative 4.66%.

On an actuarial (smoothed) value of assets basis, the return for FY 2009 was negative 6.18%. This return produced for SDCERS-All Employers an overall investment loss of $863.2 million for the year ending June 30, 2009. (Note this reported loss is different than the investment loss of $9.6 million reported on page 3 in this report. The latter is the loss only for the SDCERS-Airport Authority.)

SECTION III
LIABILITIES

In this section, we present detailed information on System liabilities for SDCERS-Airport Authority including:

- Disclosure of liabilities at June 30, 2008 and June 30, 2009, and
- Statement of changes in the unfunded actuarial liabilities during the year.

A. Disclosure

Several types of liabilities are calculated and presented in this report. Each type is distinguished by the purpose for which the figures are ultimately used.

- **Present Value of Future Benefits:** Used for measuring all future SDCERS obligations, represents the amount of money needed today to fully pay off all benefits of SDCERS both earned as of the valuation date and those to be earned in the future by current plan participants, under the current Plan provisions.
- **Actuarial Liability-Entry Age Normal (EAN):** Used for determining employer contributions and GASB accounting disclosures. This liability is calculated taking the present value of all future benefits and subtracting the present value of future Member contributions and future employer normal costs as determined under the EAN actuarial funding method. It represents the portion of the present value of future benefits attributed to service prior to the valuation date by the Entry Age Normal method.
- **Present Value of Accrued Benefits:** Disclosed in Section V of this report for accounting statement purposes (FASB 35). This liability represents the present value of future benefits payable to all plan participants if the plan were terminated as of the valuation date, and future accruals and contributions stopped.

Table III-1 on the following page discloses the first two of these liabilities for the current and prior year valuations. Subtracting the actuarial value of assets from the actuarial liability results in a net surplus or an unfunded actuarial liability (UAL).

SECTION III
LIABILITIES

Table III-1
SDCERS – Airport Authority – Total

Item	June 30, 2009	June 30, 2008
Present Value of Future Benefits		
Actives	$ 104,753,779	$ 96,409,958
Terminated Vested	2,777,562	3,309,120
Disabled	213,239	-
Retirees	9,405,538	6,037,405
Beneficiaries	304,867	303,772
Total Airport	**$ 117,454,985**	**$ 106,060,255**
Actuarial Liability – EAN		
Total Present Value of Benefits	$ 117,454,985	$ 106,060,255
Present Value of Future Normal Costs		
Employer Portion	28,151,162	27,673,330
Employee Portion	21,432,877	21,579,262
Actuarial Liability – EAN	**$ 67,870,945**	**$ 56,807,663**
Actuarial Value of Assets	$ 58,981,105	$ 58,095,599
Unfunded EAN Actuarial Liability	$ 8,889,841	$ (1,287,936)

Table III-2 shows actuarial liability as of June 30, 2009 for General and Executive Members of SDCERS-Airport Authority.

Table III-2
SDCERS - Airport Authority - General & Executives

Item	June 30, 2009 Total	June 30, 2009 General	June 30, 2009 Executives
Present Value of Future Benefits			
Actives	$ 104,753,779	$ 99,128,164	$ 5,625,615
Terminated Vested	2,777,562	2,777,562	-
Disabled	213,239	213,239	-
Retirees	9,405,538	6,502,826	2,902,712
Beneficiaries	304,867	304,867	-
Total Airport Authority	**$ 117,454,985**	**$ 108,926,658**	**$ 8,528,327**
Actuarial Liability - EAN			
Actives	$ 55,169,740	$ 51,434,771	$ 3,734,969
Terminated Vested	2,777,562	2,777,562	-
Disabled	213,239	213,239	-
Retirees	9,405,538	6,502,826	2,902,712
Beneficiaries	304,867	304,867	-
Total Airport Authority	**$ 67,870,945**	**$ 61,233,264**	**$ 6,637,681**

**SECTION III
LIABILITIES**

B. Changes in Unfunded Actuarial Liabilities

The UAL of any retirement plan is expected to change at each subsequent valuation for a variety of reasons. In each valuation, we report on those elements of change in the UAL that have particular significance or could potentially affect the long-term financial outlook of a retirement plan. Below we present key changes in liabilities since the last valuation.

Table III-3

Development of 2009 Experience Gain/(Loss) SDCERS - Airport Authority

(in Thousands)

1.	Unfunded Actuarial Liability at June 30, 2008	$(1,287.9)
2.	Beginning of year unfunded actuarial liability payment	356.9
3.	Interest accrued ((1+2) x 7.75%)	(72.2)
4.	Expected Unfunded Actuarial Liability at June 30, 2009 (1+2+3)	(1,003.1)
5.	Actual Unfunded Liability at June 30, 2009	8,889.8
6.	Difference: (4 - 5)	(9,893.0)
7.	Portion of difference (6) due to actuarial assumption changes	0.0
8.	Portion of difference (6) due to benefit changes	0.0
9.	Portion of difference (6) due to net experience Gain/(Loss)	(9,893.0)
	a) portion of (9) due to contributions more than expected	*$1,083.1*
	b) portion of (9) due to investment experience	*$(9,584.1)*
	c) portion of (9) due to liability experience	*$(1,392.0)*

Elements of Liability Gain/(Loss)

1.	G/(L) due to demographic and payroll experience	(1,438.1)
2.	G/(L) due to purchased service credit	46.1
3.	Other Gain/(Loss)	0.0
4.	Total Estimated Liability Gain/(Loss): sum 1 through 3	**$(1,392.0)**

SECTION III
LIABILITIES

Table III-4 shows the history of past experience gains and losses.

Table III-4
Experience Gain/(Loss) - Historical SDCERS – Airport Authority

Valuation Date	Gain/(Loss)	Beginning-of-Year Actuarial Liabilities	Gain/(Loss) % of Liability
6/30/2003	$ (2,013,702)	$ 11,526,293	(17.5%)
6/30/2004	(2,204,850)	16,278,613	(13.5)
6/30/2005	(1,207,448)	23,578,460	(5.1)
6/30/2006	8,732,864	32,602,898	26.8
6/30/2007	1,176,387	36,905,216	3.2
6/30/2008	492,707	46,636,555	1.1
6/30/2009	(10,976,099)	56,807,663	(19.3)

SECTION IV
CONTRIBUTIONS

In the process of evaluating the financial condition of any pension plan, the actuary analyzes the assets and liabilities to determine what level (if any) of contributions is needed to achieve and maintain an appropriate funded status of a plan. Typically, the actuarial process will use an actuarial funding method that attempts to create a pattern of contributions that is both stable and predictable.

The actuarial funding methodology employed is the Entry Age Normal (EAN) actuarial funding method. Under this method, there are two components to the total contribution: the normal cost and an amortization payment on the unfunded actuarial liability contribution (ARC). The normal cost rate is determined by taking the value, as of entry age into the plan, of each Member's projected future benefits. This value is then divided by the value, also at entry age, of each Member's expected future salary. The normal cost rate is multiplied by current salary to determine each Member's normal cost. Finally, the normal cost is reduced by the Member contribution to produce the employer normal cost. The difference between the EAN actuarial liability and the actuarial value of assets is the unfunded actuarial liability. The UAL for FY 2011 is to be amortized over several different periods. The fiscal year ending June 30, 2009 experience loss is amortized over 15 years, the outstanding balance of the June 30, 2008 UAL due to assumption changes is amortized over 29 years, the outstanding balance for the fiscal year ending June 30, 2008 experience loss is amortized over 14 years, and the outstanding balance of the June 30, 2007 UAL is amortized over 12 years. Finally, if necessary, there is an additional UAL cost component to ensure that there is no negative amortization in any year.

Table IV-1 on the following page shows how the Airport Authority's contribution rate for SDCERS for FY 2011 is developed. The methodology and assumptions used are in full compliance with the parameters set in GASB Statement No. 25 for purposes of determining the annual required contribution (ARC).

SECTION IV
CONTRIBUTIONS

Table IV-1
SDCERS – Airport Authority
Development of the Airport's Contribution as of June 30, 2009, For (FY 2011)
(dollars in millions)

		WEIGHTED TOTAL APA	General	Executives
1.	Total Normal Cost Rate	**24.42%**	24.25%	27.39%
2.	Member Contribution Rate	**10.53%**	10.50%	11.23%
3.	Employer Normal Cost Rate (1-2)	**13.89%**	13.75%	16.16%
4.	Actuarial Liability	**$ 67.9**	$ 61.2	$ 6.6
5.	Actuarial Assets	**$ 59.0**	$ 53.2	$ 5.8
6.	Total Unfunded Actuarial Liability (UAL)(4-5)	**$ 8.9**	$ 8.0	$ 0.9
	a. Balance of 6/30/2007 UAL on 07/01/10	**$ (2.5)**	$ (2.3)	$ (0.2)
	b. Balance 2008 assumption change on 07/01/10[1]	**$ 3.1**	$ 2.8	$ 0.3
	c. Balance of FY08 experience loss on 07/01/10	**$ (1.4)**	$ (1.3)	$ (0.1)
	d. Balance of FY09 experience loss on 07/01/10	**$ 10.7**	$ 9.6	$ 1.0
7.	a. amortization payment (12 years) for 6a.	**$ (0.3)**	$ (0.2)	$ (0.0)
	b. amortization payment (29 years) for 6b.	**$ 0.2**	$ 0.2	$ 0.0
	c. amortization payment (14 years) for 6c.	**$ (0.1)**	$ (0.1)	$ (0.0)
	d. amortization payment (15 years) for 6d.	**$ 0.9**	$ 0.8	$ 0.1
	e. preliminary FY11 UAL amortization	**$ 0.7**	$ 0.6	$ 0.1
8.	Negative Amortization Test for FY11			
	a. Total UAL on 6/30/09 less FY10 UAL payment	**$ 9.1**	$ 8.2	$ 0.9
	b. interest on 8a. to 6/30/10	**$ 0.7**	$ 0.6	$ 0.1
	c. preliminary FY11 UAL amortization (7e.)	**$ 0.7**	$ 0.6	$ 0.1
	d. Negative interest (8b – 8c, not less than zero)	**$ 0.0**	$ 0.0	$ 0.0
9.	Total FY11 UAL payment on 7/01/10 (8c + 8d)	**$ 0.7**	$ 0.6	$ 0.1
10.	Total FY11 UAL payment throughout year	**$ 0.7**	$ 0.7	$ 0.1
11.	Expected Payroll for FY11	**$ 27.0**	$ 25.5	$ 1.5
12.	FY11 Normal Cost paid throughout year (3 x 11)	**$ 3.7**	$ 3.5	$ 0.2
13.	FY11 Normal Cost paid at start of year	**$ 3.6**	$ 3.4	$ 0.2
14.	Determination of FY11 GASB ARC %			
	a. Employer Normal Cost Rate (line 3)	**13.89%**	13.75%	16.16%
	b. UAL Rate (line 10 divided by line 11)	**2.71%**	2.59%	4.75%
	c. Total employer ARC % (14a + 14b)	**16.60%**	16.34%	20.91%
15.	Determination of FY11 GASB ARC dollars			
	a. FY11 ARC if paid throughout year	**$ 4.5**	$ 4.2	$ 0.3
	b. FY11 ARC if paid at beginning of year	**$ 4.3**	$ 4.0	$ 0.3

1. Adjusts reported 7/1/07 UAL to 7/1/10 by adding interest and removing UAL payments
Note: Numbers may not add due to rounding.

SECTION V
ACCOUNTING STATEMENT INFORMATION

Statement No. 35 of the Financial Accounting Standards Board (FASB) requires the Plan to disclose certain information regarding its funding status. Statement No. 25 of the Governmental Accounting Standards Board (GASB) establishes standards for disclosure of pension information by public employee retirement systems (PERS) and governmental employers in notes to financial statements and supplementary information.

The FASB No. 35 disclosure provides a “snap shot” view of how system assets at market value compare to liabilities if contributions stopped and accrued benefit claims had to be satisfied.

The GASB No. 25 disclosure compares the actuarial liability computed for funding purposes to the actuarial value of assets to determine a funded ratio (i.e., the EAN liability).

Both the present value of accrued benefits (FASB No. 35) and the actuarial liability (GASB No. 25) are determined assuming that participants continue to terminate employment, retire, etc., in accordance with the actuarial assumptions. Liabilities are discounted at the assumed valuation interest rate of 7.75% per annum.

FASB Statement No. 35 specifies that a comparison of the present value of accrued (accumulated) benefits to the market value of the assets as of the valuation date must be provided. GASB Statement No. 25 requires the actuarial liability be compared with the actuarial value of assets for funding purposes. The relevant amounts as of June 30, 2008 and June 30, 2009 are presented in Table V-1 and Table V-2.

SECTION V
ACCOUNTING STATEMENT INFORMATION

Table V-1
SDCERS - Airport Authority - Total

Item	June 30, 2009	June 30, 2008	% Change
FASB No. 35 Basis			
1. Present Value of Benefits Accrued and Vested to Date			
a. Members Currently Receiving Payments	$9,923,644	$6,341,177	56.5%
b. Vested Terminated and Inactive Members	2,777,562	3,309,120	-16.1%
c. Active Members	33,759,235	27,909,715	21.0%
d. Total PVAB	$46,460,441	$37,560,012	23.7%
2. Assets at Market Value	49,150,920	54,856,234	-10.4%
3. Unfunded Present Value of Accrued Benefits, But Not Less Than Zero	-	-	
4. Ratio of Assets to Value of Benefits (2)/(1)(d)	105.79%	146.05%	-40.2%
GASB No. 25 Basis			
1. Actuarial Liabilities			
a. Members Currently Receiving Payments	$9,923,644	$6,341,177	56.5%
b. Vested Terminated and Inactive Members	2,777,562	3,309,120	-16.1%
c. Active Members	55,169,740	47,157,366	17.0%
d. Total Actuarial Liability	$67,870,945	$56,807,663	19.5%
2. Actuarial Value of Assets	$58,981,105	$58,095,599	1.5%
3. Unfunded Actuarial Liability	$8,889,841	$(1,287,936)	-790.2%
4. Ratio of Actuarial Value of Assets To Actuarial Liability (2)/(1)(d)	86.90%	102.27%	-15.4%

Table V-2
SDCERS - Airport Authority – Total

Item	Accumulated Benefits Obligation (FASB 35)
Actuarial Present Value of Benefits Accrued and Vested as of June 30, 2008	**$37,560,012**
Increase (Decrease) During Year Attributable to:	
Passage of Time	2,883,763
Benefits Paid	(700,322)
Assumption Change	-
Plan Amendment	-
Benefits Accrued, Other Gains/Losses	6,716,988
Net Increase (Decrease)	$8,900,429
Actuarial Present Value of Benefits Accrued and Vested as of June 30, 2009	**$46,460,441**

SECTION V
ACCOUNTING STATEMENT INFORMATION

Tables V-3 through V-5 are exhibits required for the Airport Authority's Comprehensive Annual Financial Report (CAFR). The Government Finance Officers Association (GFOA) recommends showing at least 6 years of experience in each of these exhibits. Table V-3 shows the Notes to Required Supplementary Information. Table V-4 presents an analysis of financial experience for the valuation year, and Table V-5 presents the Solvency Test which shows the portion of actuarial liability covered by assets.

Table V-3
SDCERS - Airport Authority
NOTES TO REQUIRED SUPPLEMENTARY INFORMATION

The information presented in the required supplementary schedules to the Financial Section of the CAFR was determined as part of the actuarial valuation at the date indicated. Additional information as of the latest actuarial valuation follows.

Valuation date	June 30, 2009
Actuarial funding method	Entry Age Normal
Amortization method	Level percent closed
Equivalent single amortization period	16.316 years [1]
Asset valuation method	Expected Value Method
Actuarial assumptions:	
Investment rate of return	7.75%
Projected salary increases due to inflation [2]	4.00%
Cost-of-living adjustments	2.0%

The actuarial assumptions used have been recommended by the actuary and adopted by SDCERS' Board of Administration based on the most recent review of SDCERS' experience, completed in 2008.

The rate of employer contributions to SDCERS is composed of the normal cost and an amortization of the unfunded actuarial liability. The normal cost is a level percent of payroll cost which, along with the Member contributions, will pay for projected benefits at retirement for the average plan participant. The actuarial liability is that portion of the present value of projected benefits that will not be paid by future employer normal costs or Member contributions. The difference between this liability and the funds accumulated as of the same date is the unfunded actuarial liability.

1 12 years for the outstanding balance of the 2007 UAL, 15 years for experience gains and losses, 30 years for changes in methods and assumptions, 20 years for benefit changes.

2 Additional merit salary increases of 0.50% to 5.00% based on a participant's years of service, and membership group are also assumed. These increases are not used in the amortization of SDCERS' UAL.

SECTION V
ACCOUNTING STATEMENT INFORMATION

Table V-4
SDCERS - Airport Authority
ANALYSIS OF FINANCIAL EXPERIENCE
Gain and Loss in Actuarial Liability During Years Ended June 30
Resulting from Differences Between Assumed Experience
and Actual Experience

Type of Activity		*Gain (or Loss) for Year ending June 30, 2009*
Investment Income	$	(9,584,108)
Combined Liability Experience		(1,391,991)
Gain (or Loss) During Year from Financial Experience	$	(10,976,099)
Non-Recurring Gain (or Loss) Items (e.g., Contributions)		1,083,115
Composite Gain (or Loss) During Year	$	(9,892,984)

Table V-5
SDCERS - Airport Authority
GASB SOLVENCY TEST
Actuarial Liabilities For
($ in thousands)

Valuation Date June 30,	(A) Active Member Contributions	(B) Retirees And Beneficiaries	(C) Remaining Active Members' Liabilities	Reported Assets [1]	Portion of Actuarial Liabilities Covered by Reported Assets (A)	(B)	(C)
2009	$ 9,120	$ 9,924	$ 48,827	$ 58,981	100%	100%	81.79%
2008	7,335	6,341	43,131	58,096	100	100	102.99
2007 [4]	6,681	4,288	35,668	50,812	100	100	111.71
2006 [3]	5,402	2,783	28,720	41,222	100	100	115.03
2005	4,255	2,713	25,635	28,551	100	100	84.19
2004	2,935 [4]	795	19,848	16,225	100	100	62.95
2003	2,200 [4]	300	13,779	11,142	100	100	62.72
12/31/2002 [2]	1,509	0	10,018	11,028	100	100	95.02

1 Actuarial Value of Assets
2 Interim (mid-year) actuarial valuations performed due to split of San Diego County Regional Airport Authority from Unified Port District.
3 Reflects contingent liabilities (13th check), DROP reserves, and IRC Section 415 limits.
4 The actuarial liability on June 30, 2007 and after is based on the entry age actuarial funding method. All prior years are based on the projected unit credit actuarial funding method.

APPENDIX A
MEMBERSHIP INFORMATION

Table A-1
SDCERS - Airport Authority
Active Member Data

	June 30, 2009	June 30, 2008	% Change
Count	338	341	-0.9%
Average Current Age	46.4	45.5	2.0%
Average Service	8.0	7.2	11.1%
Average Pensionable Earnings	$ 73,057	$ 68,881	6.1%
Annual Pensionable Earnings	$ 24,693,427	$ 23,488,283	5.1%
Average Valuation Compensation[1]	$ 73,049	$ 68,829	6.1%
Annual Valuation Compensation[1]	$ 24,690,683	$ 23,470,538	5.2%
Service Without Permissive Service Purchased	7.3	6.5	12.3%
Members with Paid Purchased Service	39	37	5.4%
Members with Any Purchased Service	54	53	1.9%
Amount of Paid Purchased Service	136	110	24.3%
Amount of Total Purchased Service	262	258	1.7%

1 Valuation compensation differs from pensionable earnings due to IRS 401(a).

Table A-2
SDCERS - Airport Authority
Non-Active Participant Data

	Count			Average Age		
	June 30, 2009	June 30, 2008	%Change	June 30, 2009	June 30, 2008	%Change
Retired	20	16	25.0%	64.4	64.6	-0.3%
Disabled	1	-		46.5	-	
Beneficiaries	1	1	0.0%	57.0	56.0	1.8%
Payee Total	22	17	29.4%	63.3	64.1	-1.2%
DROP Participants	6	6	0.0%	64.2	63.7	0.8%
Deferred Vested[1]	68	62	9.7%	46.9	46.4	1.1%
Vested < 5 yrs svc	44	40	10.0%			

1 Includes all participants having a contribution balance still on account with SDCERS.

Table A-3
SDCERS - Airport Authority
Non-Active Participant Data

	Total Annual Benefit			Average Annual Benefit		
	June 30, 2009	June 30, 2008	%Change	June 30, 2009	June 30, 2008	%Change
Retired	$ 745,038	$ 457,761	62.8%	$ 37,252	$ 28,610	30.2%
Disabled	14,074	-		14,074	-	
Beneficiaries	22,924	22,478	2.0%	22,924	22,478	2.0%
Payee Total	$ 782,035	$ 480,239	62.8%	$ 35,547	$ 28,249	25.8%
DROP Participants	$ 291,661	$ 201,476	44.8%	$ 48,610	$ 33,579	44.8%
Deferred Vested[1]	$ 921,442	$ 1,033,782	-10.9%	$ 13,551	$ 16,674	-18.7%

1 Includes all participants having a contribution balance still on account with SDCERS. Annual benefit for deferred vested participants is the total contribution balance on account as of valuation date.

APPENDIX A
MEMBERSHIP INFORMATION

Table A-4
SDCERS - Airport Authority
Distribution of Active Members (Excludes DROP Participants) as of June 30, 2009
Total Airport Authority

	Years of Service										Total	Average
Age	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 and up	Count	Salary
Under 25	1	2	-	-	-	-	-	-	-	-	3	$ 41,007
25 to 29	-	8	1	-	-	-	-	-	-	-	9	50,217
30 to 34	2	16	14	1	-	-	-	-	-	-	33	63,568
35 to 39	2	26	21	3	-	-	-	-	-	-	52	71,820
40 to 44	3	11	17	7	8	1	-	-	-	-	47	71,821
45 to 49	3	27	16	9	7	5	-	-	-	-	67	70,090
50 to 54	1	12	18	8	13	5	1	1	-	-	59	73,943
55 to 59	4	14	10	8	4	-	1	2	-	-	43	80,876
60 to 64	-	9	5	6	-	1	-	-	-	-	21	86,703
65 to 69	-	1	2	-	-	1	-	-	-	-	4	138,360
70 and up	-	-	-	-	-	-	-	-	-	-	-	-
Tot Count	16	126	104	42	32	13	2	3	-	-	338	
Avg. Salary	$ 62,213	$ 68,798	$ 71,375	$ 89,461	$ 73,138	$ 79,508	$ 92,500	$ 96,689	$ -	$ -		$ 73,057

APPENDIX A
MEMBERSHIP INFORMATION

Table A-5
SDCERS - Airport Authority
Retirees (Includes DROP Participants), Disabled, and Beneficiaries Tabulated by Attained Age/Benefit Effective Date
Total Airport Authority

	Age										
Plan Year	**Under 50**	**50 to 54**	**55 to 59**	**60 to 64**	**65 to 69**	**70 to 74**	**75 to 79**	**80 to 84**	**85 to 89**	**90 and up**	**Total**
2002	-	-	-	-	-	1	-	-	-	-	1
2003	-	-	-	-	-	-	-	-	-	-	-
2004	-	-	-	-	1	1	-	-	-	-	2
2005	1	-	-	2	1	-	-	-	-	-	4
2006	-	-	1	-	-	-	-	-	-	-	1
2007	-	-	-	1	4	-	-	-	-	-	5
2008	-	-	3	1	1	-	-	-	-	-	5
2009	-	-	2	2	-	-	-	-	-	-	4
Total	1	-	6	6	7	2	-	-	-	-	22

Surviving spouses benefit effective date no longer based on participant's original date of retirement.

Average Age at Retirement/Disability	60.5
Average Current Age	63.3
Average Annual Pension	$ 35,547

APPENDIX A
MEMBERSHIP INFORMATION

Data Assumptions and Practices

In preparing our data, we relied without audit on information supplied by the SDCERS staff. This information includes, but is not limited to, plan provisions, employee data, and financial information. Our methodology for obtaining the data used for the valuation is based upon the following assumptions and practices:

- Service for Actives and Inactives was calculated using Benefit Service. An adjusted date of hire is retroactively calculated from the valuation date. Purchased Service that has been paid for is included in the Benefit Service field. Purchased Service that has been applied for, but not paid as of the valuation date will be assumed to be paid in full and this service will be reflected in the projected benefit.

- Valuation Salary will be the maximum of "Current Annual Pensionable Salary" and annualized "Average Compensation."

- For accounts having duplicate records in the Actives and Inactives by Social Security Number the information from the latest payroll date is regarded as most up to date. The other record is treated as out of date and invalid.

- There are two duplicate records (based on SSN and Benefit Type) in the payee file. The records are from the same plan and same benefit type, but different benefit amounts. We have added those amounts together.

- Records on the provided "Member" file are considered to be Active if they have no "Date of Death," no "Date of Separation," do not have a retiree record and they received pay in the last pay period (Last Pay Period = 26) of the current FY.

- Records on the "Member" file are considered to be Inactive if they do not have a "Date of Death," do not have a retiree record and either have a "Date of Separation" or have a "Last Pay Period" earlier than the last pay period of the current FY.

- Records on the "Payee" file are considered in pay status if their benefit is not suspended.

- Pension Benefit for retirees for each plan was calculated by summing "Monthly Pension," "Monthly Annuity," "Cola Annuity," "Surviving Spouse Annuity," and "Cola Pension" and subtracting "Non-Cola Adjustments." "Non-Cola Adjustments" field is mainly for Qualified Domestic Relation Order purposes. The "Supplement Amt" field is added as an annual benefit (i.e., 13^{th} check) and the "Corbett Supplemental Payment" is annualized for new retirees in the City only. It is assumed the payment is annual for Members already in pay status prior to this valuation.

- Members retiring since 11/1/2006 and not having a "Supplement Amt" (13^{th} check) will have their projected "Supplement Amt" (13^{th} check) calculated assuming $30 multiplied by the "Total Service Credit."

APPENDIX A
MEMBERSHIP INFORMATION

- Members may retire and receive benefits from multiple Plan IDs (e.g., a City police officer could have also worked for the Airport Authority); we will value each Member's blended benefit individually. This will result in the counts being slightly higher than actual counts due to people having more than one benefit payable from multiple plans.

- We assume any retiree found in last year's "Payee" file and not in this year's file has died without a beneficiary and should be removed from the valuation data.

- We assume all deceased retirees with payments continuing to a beneficiary have already been accounted for in the "Payee" file.

- We exclude any payee receiving $0.00 from a blended benefit plan.

- We assume that any active Member found in the inactive data last year has returned to work and should be valued as active.

- The VCP filing procedure was used to calculate the present value of Member benefits over the Internal Revenue Service Code Section 415 Benefit Limits.

APPENDIX B
ACTUARIAL ASSUMPTIONS AND METHODS

A. Actuarial Assumptions

1. Investment Return Rate

SDCERS' assets are assumed to earn 7.75% net of expenses.

2. Inflation Rate

An inflation assumption of 4.00% compounded annually is used for projecting the total annual payroll growth for amortization of the UAL.

3. Interest Credited to Member Contributions

7.75%, compounded annually.

4. Salary Increase Rate

Inflation component: 4.00%

The additional merit component:

Table B-1

Years of Service at Valuation Date	General
0	5.00%
1	4.00%
2	3.00%
3	2.00%
4	1.00%
5+	0.50%

5. Cost-of-Living Increase in Benefits

Assumed to be 2.0% per annum, compounded.

6. COLA Annuity Benefit

For active Members, there is a 2.0% load on valued benefits to anticipate the impact of the annuitized employee COLA contributions at retirement.

APPENDIX B
ACTUARIAL ASSUMPTIONS AND METHODS

7. Member Refunds

All or part of the employee contribution rate is subject to potential "offset" by the employer. That "offset" and the related accumulated interest are not to be refunded to employees at termination. The liability for potential refunds is reduced to reflect this.

Rates provided in the census included both the integrated rate and excess rate. The integrated rate was applied to the first $400 per month of salary and the excess rate was applied to the salary amounts over $400 per month.

8. Rates of Termination

Table B-2
SDCERS - Airport Authority
Rates of Termination at Selected Ages and Service 5+ years*

Age	General
20	12.78%
25	8.33
30	5.83
35	4.60
40	3.36
45	2.78
50	2.78
55	2.78
60	2.78

*Add 1% to every age for each year of service less than 5 years.

20% of terminating employees, with 5+ years of service at termination, are assumed to subsequently work for a reciprocal employer and receive 4.50% pay increases per year.

APPENDIX B
ACTUARIAL ASSUMPTIONS AND METHODS

9. Rates of Disability

Table B-3
SDCERS - Airport Authority
Rates of Disability at Selected Ages

Age	General
20	0.04%
25	0.06
30	0.07
35	0.11
40	0.15
45	0.23
50	0.35
55	0.53
60	0.68

60% of the disabilities are assumed to be industrial disability retirements. Non-industrial disability retirement is subject to a service requirement.

10. Rates of Mortality for Active Lives

All Members follow the RP2000 Combined Healthy table (male and female) projected to 2008.

Table B-4
SDCERS - Airport Authority
Rates of Mortality for Active Lives at Selected Ages

Age	Male	Female
20	0.03%	0.02%
25	0.03	0.02
30	0.04	0.02
35	0.07	0.04
40	0.10	0.06
45	0.14	0.10
50	0.18	0.15
55	0.31	0.25
60	0.59	0.49
65	1.14	0.93
70	1.97	1.61

All active Member deaths are assumed to not be duty-related.

APPENDIX B
ACTUARIAL ASSUMPTIONS AND METHODS

11. Rates of Mortality for Retired Healthy Lives

All retired healthy participants use the RP2000 Combined Healthy table (male and female).

Table B-5
SDCERS - Airport Authority
Rates of Mortality for Retired Healthy Lives at Selected Ages

Age	Male	Female
40	0.11%	0.07%
45	0.15	0.11
50	0.21	0.17
55	0.36	0.27
60	0.67	0.51
65	1.27	0.97
70	2.22	1.67
75	3.78	2.81
80	6.44	4.59
85	11.08	7.74
90	18.34	13.17

12. Rates of Mortality for Retired Disabled Lives

Disabled participants use Uninsured Pensioner 1994 (UP 1994) male only table set forward five years.

Table B-6
SDCERS - Airport Authority
Rates of Mortality for Disabled Lives at Selected Ages

Age	General
20	0.07%
25	0.09
30	0.09
35	0.12
40	0.17
45	0.28
50	0.48
55	0.86
60	1.56
65	2.55
70	4.00

APPENDIX B
ACTUARIAL ASSUMPTIONS AND METHODS

13. The Rates of Retirement

Table B-7
SDCERS - Airport Authority
Rates of Retirement by Service Years

Service	General
5-9	9%
10-19	33
20	41
21	33
22	35
23	37
24	39
25	41
26	42
27	44
28	46
29	48
30	50
31	51
32	53
33	55
34	57
35+	100

For vested deferred participants, we assume that retirement will occur provided they have at least 5 years of service (excluding the permissible 5 year purchased service) on the later of attained age or the earlier of age 62 or age 55 and 20+ years of service.

If the inactive participant is not vested, the liability is the contributions with interest.

14. Family Composite Assumptions

80% of men and 50% of women were assumed married at retirement. A female spouse is assumed to be 4 years younger than her male spouse.

15. Member Contributions for Spousal Continuance

All active Members contribute towards a 50% survivor continuance. However, Members who are unmarried at retirement may either be refunded that specific part of their contributions, or they may leave such contributions on account and receive an incremental benefit that is the actuarial equivalent of such contributions.

APPENDIX B
ACTUARIAL ASSUMPTIONS AND METHODS

16. Deferred Member Actuarial Accrued Benefit

The benefit was estimated based on information provided by SDCERS staff. The data used to value the estimated deferred benefit were date of birth, date of hire, date of termination, and last pay. Based on the data provided, service credit, highest average salary, and deferred retirement age were estimated. The estimates were used to compute the retirement benefit, upon which the liabilities are based. For those participants without sufficient data or service, accumulated participant contribution balances, with interest, were used as the actuarial accrued liability.

17. DROP Account Balances

For DROP participants still working, the liability for the account balances in the asset information received from SDCERS staff was adjusted to assume average commencement in 2 ½ years and an interest crediting rate of 3.54%. Thereafter, it was assumed the account balance would be converted to an annuity at an interest rate of 5% over an average period of 10 years. The 10-year period was selected to average among the available DROP payment elections, including a lump sum, life expectancy, and 20 years. Pre-2006 DROP account balances still left on account were valued assuming they would be paid out until age 70 ½, with an interest crediting rate of 3.54%. The remaining account balances were valued without adjustment.

18. Other

The contribution requirements and benefit values of a plan are calculated by applying actuarial assumptions to the benefit provisions and Member information furnished, using the actuarial funding methods described in the following section.

Actual experience of SDCERS will not coincide exactly with assumed experiences, regardless of the choice of the assumptions, the skill of the actuary, or the precision of the many calculations made. Each valuation provides a complete recalculation of assumed future experience and takes into account all past differences between assumed and actual experience. The result is a continual series of adjustments to the computed contribution rate. From time to time it becomes appropriate to modify one or more of the assumptions to reflect experience trends, but not random year-to-year fluctuations.

19. Changes Since Last Valuation

The calculated liability for DROP account balances reflects the reduction in the interest crediting and annuity conversion rates adopted by the Board in February 2009. In prior years, the liability was set equal to the account balances, with no adjustments.

APPENDIX B
ACTUARIAL ASSUMPTIONS AND METHODS

B. Actuarial Methods

1. Actuarial Funding Method

The Entry Age Normal funding method was used for active employees, whereby the normal cost is computed as the level annual percentage of pay required to fund the retirement benefits between each Member's date of hire and assumed retirement. The actuarial liability is the difference between the present value of future benefits and the present value of future normal cost. The unfunded actuarial liability is the difference between the actuarial liability and the actuarial value of assets.

The unfunded actuarial liability is amortized by annual payments. The payments are determined so that they will be a level percentage of pay, assuming payroll increases 4.00% per year. The UAL is amortized over different closed periods depending on the source of the loss. The entire UAL as of June 30, 2007 is amortized over 14 years. Subsequent gains and losses are amortized over 15 years, changes in assumptions over 30 years, and changes in benefits over 20 years (or period over which benefit changes are paid, if shorter). Finally, if necessary, there is an additional UAL cost component to ensure that there is no negative amortization in any year.

2. Asset Valuation Method

For the purposes of determining the Airport Authority's contribution to SDCERS, we use a smoothed actuarial value of assets. The asset smoothing method dampens the volatility in asset values that could occur because of the fluctuations in market conditions. Use of an asset smoothing method is consistent with the long-term nature of the actuarial valuation process. Assets are assumed to be used exclusively for the use of retirement benefits and expenses.

The actuarial value of assets each year is equal to 100% of the *expected actuarial value of assets*[1] plus 25% of the difference between the current market value of assets and the expected actuarial value of assets. In no event will the actuarial value of assets ever be less than 80% of the market value of assets nor greater than 120% of the market value of assets.

3. Changes Since Last Valuation

None.

[1] The expected actuarial value of assets is equal to the prior year's actuarial value of assets increased with actual contributions made, decreased with actual disbursements made, all items (prior assets, contributions and disbursements) further adjusted with expected investment returns for the year.

APPENDIX C
SUMMARY OF PLAN PROVISIONS

The Airport Authority was spun off from the Unified Port District effective January 1, 2003. Existing liabilities and assets were transferred to the new plan based on an interim valuation dated December 31, 2002. The Airport Authority Plan is created pursuant to San Diego City Charter section 149, which became effective on April 24, 2002, and San Diego Municipal Code Chapter 2, Article 4, section 24.0912 and Division 18. This Plan is effective on January 1, 2003, and nothing in this Plan should be constructed to affect any rights or benefits Airport Authority employees have earned in this Retirement System as of that date.

1. Membership Requirement

Salaried Employees – immediate eligibility upon employment (compulsory) (§ 0101).*

2. Monthly Salary Base for Benefits

Highest contiguous 26 bi-weekly pay periods (§ 0102), subject to a 10% increase if the Member elects such increase in lieu of an increased benefit formula.

3. Service Requirement

Eligibility

Age 62 with 5 years of service, or age 55 with 20 years of service (Excludes 5 year permissible purchased service.) (§ 0300).

Benefit

Member choice of: (1) formula in place on December 31, 2001 with 10% increase in Final Average Compensation, (2)"Andrecht" formula effective as of January 1, 2002, or (3) "2.5% at 55" multiplier with a benefit cap of 90% of Final Average Compensation effective April 1, 2004 for Non-Executive General Members. Executive Members receive "3% at 55" multiplier without an increase in Final Average Compensation.

For all employees, there is an additional benefit equal to the annuitized Member COLA contributions at retirement date. In all cases, there is an integration feature which provides for 2/3 of the formula multiplier on the first $400 of Final Average Compensation.

* All "§ " references are to the City of San Diego Municipal Code.

APPENDIX C
SUMMARY OF PLAN PROVISIONS

Member Service Retirement Accrual Factors

Table C-1
SDCERS - Airport Authority
Member Service Retirement Accrual Factors

Age	Pre 12/31/2001	Andrecht	Post 4/1/2004	Executive
55	2.00%	2.25%	2.50%	3.00%
56	2.00%	2.25%	2.60%	3.00%
57	2.00%	2.25%	2.70%	3.00%
58	2.00%	2.25%	2.80%	3.00%
59	2.08%	2.25%	2.90%	3.00%
60	2.16%	2.30%	3.00%	3.00%
61	2.24%	2.35%	3.00%	3.00%
62	2.31%	2.40%	3.00%	3.00%
63	2.39%	2.45%	3.00%	3.00%
64	2.47%	2.50%	3.00%	3.00%
65+	2.55%	2.55%	3.00%	3.00%

Table C-2
SDCERS – Airport Authority

For Vested Members who terminated--	--the accrual factors are--
December 31, 2002 – Present	Pre 12/31/2001 factors above with 10% increase in Final Average Compensation, Andrecht, Post 4/1/2004 or Executive (if applicable)

Maximum Benefit

Effective April 1, 2004, there is a 90% benefit cap, as a percentage of pay, for non-Executive Members who choose post-4/1/2004 factors. This cap does not apply to the annuitized COLA benefit.

Unmodified Form of Payment

Monthly payments continued for the life of the Member, with 50% continuance to the eligible spouse, domestic partner, or dependent child under 21 years of age upon Member's death. If there is no eligible spouse, the Member may receive either a lump sum payment equal to the accumulated surviving spouse contributions or an actuarially equivalent annuity (§ 24.0601).

Note: Airport Authority employees participate in Social Security.

APPENDIX C
SUMMARY OF PLAN PROVISIONS

4. Non-Industrial Disability

Eligibility

Ten years of service (§ 0502).

Benefit

Greater of 1.5% per year of service, one-third of final compensation, or the earned service retirement benefit (§ 0503).

5. Industrial Disability

Eligibility

No age or service requirement (§ 0500).

Benefit

Greater of one-third of final compensation , or the earned service retirement benefit (§ 0501).

6. Non-Industrial Death Before Eligible to Retire

Refund of employee contributions with interest plus one month's salary for each completed year of service to a maximum of six months salary.

7. Non-Industrial Death After Eligible to Retire for Service

50% of earned benefit payable to eligible surviving spouse, domestic partner, or dependent child under 21 years of age.

8. Industrial Death

50% of the final average compensation preceding death, payable to eligible surviving spouse, domestic partner or dependent child under 21 years of age.

9. Death After Retirement

Maximum Benefit

50% of Member's unmodified allowance continued to eligible surviving spouse, domestic partner, or dependent child under 21 years of age. $2,000 payable in lump sum to the beneficiary or the estate of the retiree.

APPENDIX C
SUMMARY OF PLAN PROVISIONS

10. Withdrawal Benefits

Less than five years of service

Refund of accumulated employee contributions with interest, or may keep deposits in the System and earn additional interest to establish reciprocity or maintain service credit in case the member re-hires to SDCERS.

Five or more years of service

If contributions left on deposit, entitled to earned benefits, commencing anytime after eligible to retire.

11. Post-retirement Cost-of-Living Benefit

Based on changes in Consumer Price Index, to a maximum of 2% per year.

12. Cola Annuity

Actuarial equivalent of accumulated contributions in cost-of-living annuity account at time of retirement.

APPENDIX C
SUMMARY OF PLAN PROVISIONS

13. Member Contributions

Vary by age at time of entrance into the system (§ 0200). While a significant portion of these contributions may be "offset," such offsets are not directly reflected in either the employee contributions or related refund calculations.

Table C-3
SDCERS - Airport Authority
Employee Contribution Rates[1]

	Integrated Members[2]	
Entry Age	**First $400/Mo.**	**Over $400/Mo.**
20	5.52%	8.28%
21	5.59	8.38
22	5.66	8.49
23	5.73	8.60
24	5.80	8.70
25	5.89	8.83
26	5.97	8.95
27	6.04	9.06
28	6.12	9.18
29	6.20	9.30
30	6.28	9.42
31	6.37	9.55
32	6.45	9.67
33	6.53	9.79
34	6.61	9.91
35	6.70	10.05
36	6.79	10.18
37	6.88	10.32
38	6.97	10.45
39	7.05	10.58
40	7.15	10.72
41	7.24	10.86
42	7.33	10.99
43	7.42	11.13
44	7.52	11.28
45	7.61	11.42
46	7.71	11.56
47	7.81	11.71
48	7.91	11.86
49	8.01	12.01
50	8.10	12.15
51	8.21	12.32
52	8.31	12.47
53	8.42	12.63
54	8.53	12.79
55	8.63	12.95
56	8.74	13.11
57	8.87	13.31

[1]Rate = Normal Cost + Cost of Living Rate
[2]Non-Integrated Members will follow the "Over $400/month" rate

APPENDIX C
SUMMARY OF PLAN PROVISIONS

Interest:	7.75%
Salary:	4.00%
Mortality:	83 Group Annuity Mortality (GAM) male (Males set back 2 years, Females set back 8 years)

Rates include cost of providing spouse's continuance and cost of funding final one-year average in lieu of final three-year average. Changes to the salary scale and mortality table effective with the June 30, 1994 valuation were applied to the then existing Member rates.

14. Internal Revenue Code Compliance

Benefits provided by SDCERS' Trust Fund are subject to the limitations set forth in Section 415 in accordance with the "grandfather" election in Section 415(b)(10) of the Internal Revenue Code.

As of the June 30, 2006 valuation, active participants' benefit payments were limited by Section 415 of the Internal Revenue Code. As of the June 30, 2007, all benefit payments were limited by Section 415 of the Internal Revenue Code.

15. Deferred Retirement Option Plan

A deferred retirement option plan (DROP) was created and offered to Members as an alternative method of benefit accrual. Members eligible for service retirement are eligible to participate in DROP, but only those hired before October 2, 2006 may enter the program.

A participant in DROP may leave DROP at any time before the end of his or her designated DROP participation period by voluntarily leaving Airport Authority employment.

DROP is not intended to jeopardize the tax-qualified status of the retirement system under the rules and regulations of the Internal Revenue Service. Benefits provided under this division are subject to the limitations of Section 415 of the Internal Revenue Code relating to the amount of benefits that can be paid.

16. Blended Benefit with Participating Agencies

Members may retire and receive benefits from multiple Plan IDs (e.g., an Airport Authority employee could have also worked for the Unified Port District).

17. Changes Since Last Valuation

Effective in 2009, the pricing for purchased service contracts was changed to reflect the actual cost at the time of purchase.

Note: The summary of major plan provisions is designed to outline principal plan benefits. If the SDCERS staff should find the plan summary not in accordance with the actual provisions, the actuary should immediately be alerted so the proper provisions are valued.

APPENDIX D
GLOSSARY OF TERMS

1. Actuarial Accrued Liability

The Actuarial Liability is the difference between the present value of all future system benefits and the actuarial value of future normal costs. This is also referred to by some actuaries as "accrued liability" or "actuarial liability."

2. Actuarial Assumptions

Estimates of future experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment income and salary increases. Actuarial assumptions (rates of mortality, disability, turnover and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (salary increases and investment income) consist of an underlying rate in an inflation-free environment plus a provision for a long-term average rate of inflation.

3. Accrued Service

Service credited under the system which was rendered before the date of the actuarial valuation.

4. Actuarial Equivalent

A single amount or series of amounts of equal actuarial value to another single amount or series of amounts, computed on the basis of appropriate actuarial assumptions.

5. Actuarial Funding Method

A mathematical budgeting procedure for allocating the dollar amount of the actuarial present value of retirement system benefit between future normal cost and actuarial accrued liability. Sometimes referred to as the "actuarial funding method."

6. Actuarial Gain/(Loss)

The difference between actual experience and actuarial assumption anticipated experience during the period between two actuarial valuation dates.

7. Actuarial Present Value

The amount of funds currently required to provide a payment or series of payments in the future. It is determined by discounting future payments at predetermined rates of interest, and by probabilities of payment.

8. Amortization

Paying off an interest-discounted amount with periodic payments of interest and principal—as opposed to paying off with lump sum payment.

APPENDIX D
GLOSSARY OF TERMS

9. Annual Required Contribution (ARC) under GASB 25

The Governmental Accounting Standards Board (GASB) Statement No. 25 defines the Plan Sponsor's "Annual Required Contribution" (ARC) as the employer's periodic required contributions to a defined benefit plan, calculated in accordance with the parameters outlined in Statement No. 25. The SDCERS-Airport Authority's Computed Contribution rate for FY 2011 meets the parameters of GASB 25.

10. Normal Cost

The actuarial present value of retirement system benefits allocated to the current year by the actuarial funding method.

11. Set Back/Set Forward

Set back is a period of years that a standard published table (i.e., mortality) is referenced backwards in age. For instance, if the set back period is 2 years and the participant's age is currently 40, then the table value for age 38 is used from the standard published table. It is the opposite for set forward. A system would use set backs or set forwards to compensate for mortality experience in their work force.

12. Unfunded Actuarial Accrued Liability

The difference between actuarial accrued liability and valuation assets. Sometimes referred to as "unfunded actuarial liability" or "unfunded accrued liability."

Most retirement systems have unfunded actuarial accrued liability. They arise each time new benefits are added and each time an actuarial loss is realized.

The existence of unfunded actuarial accrued liability is not in itself bad, any more than a mortgage on a house is bad. Unfunded actuarial accrued liability does not represent a debt that is payable today. What is important is the ability to amortize the unfunded actuarial accrued liability and the trend in its amount (after due allowance for devaluation of the dollar).