

**San Diego City  
Employees' Retirement System**

**June 30, 2008  
Actuarial Valuation for the**

**San Diego County  
Regional Airport Authority**

**Produced by [Cheiron](#)**

## Table of Contents

Letter of Transmittal .....	i
Section I – Board Summary .....	1
Section II – Assets .....	13
Section III – Liabilities .....	18
Section IV – Contributions .....	22
Section V – Accounting Statement Information.....	24
Appendix A – Membership Information.....	28
Appendix B – Actuarial Assumptions and Methods.....	33
Appendix C – Summary of Plan Provisions .....	41
Appendix D – Glossary of Terms .....	47

LETTER OF TRANSMITTAL

February 10, 2009

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, 2008 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.

<b>Table I-1</b> <b>SDCERS – Airport Authority</b> (all dollar amounts in millions)		
Valuation Date	6/30/2008	6/30/2007
Entry Age Normal UAL (millions)	\$ -1.3	\$ -4.2
Entry Age Normal Funding Ratio	102.3%	109.0%
Airport Contribution Rate	11.96%	13.15%
Fiscal Year	2010	2009
Annual Required Contribution (GASB):		
-if paid at the beginning of the year	\$ 3.0 million	\$ 3.0 million
-if paid throughout the year	\$ 3.1 million	\$ 3.1 million

- Unfunded Actuarial Liability (UAL):* The Airport Authority's UAL has increased by \$2.9 million. The primary cause of this increase was the change in actuarial assumptions adopted by the Board earlier this year. These changes include a decrease in the investment return assumption from 8.00% to 7.75%, a decrease in the inflation rate assumption from 4.25% to 4.00%, and other changes to the assumptions regarding membership turnover, retirement, disability, mortality and salary increases.
- Funding Ratio:* This is the ratio of system actuarial assets to actuarial liabilities, which declined by 6.7%.
- 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, 2009 through June 30, 2010 (FY 2010). The results of this valuation kept the Airport Authority's ARC at \$3.0 million, similar to what was produced for FY 2009. When measured as a percent of membership payroll the ARC dropped by 1.19%.

More details on the plan experience for the past year, including the assumption changes and their impact on these June 30, 2008 valuation results, can be found in the valuation report.

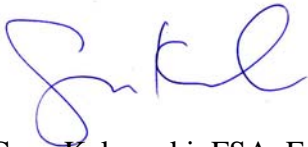


We certify that, to the best of our knowledge, this valuation report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the Code of Professional Conduct and applicable actuarial standards set out by the Actuarial Standards Board and Actuarial Standards of Practice (ASOPs) Nos. 4, 27 and 35. As such, it reflects the actuary's responsibility under Section 5.8 of 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.

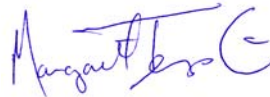
Finally, it's important to note that this valuation was prepared using census data and financial information as of the valuation date, June 30, 2008. Therefore, events following that date are not, and should not be, reflected in this report. The next valuation will reflect all membership and investment experience changes through June 30, 2009.

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 2010, and
- Information required by the Governmental Accounting Standards Board (GASB).

In this Section, we present a summary of the principal valuation results. This includes the basis upon which the June 30, 2008 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**

As stated in the Letter of Transmittal, the June 30, 2008 valuation results reflect a number of assumption changes that were approved by the SDCERS Board based on an experience study completed by Cheiron in July 2008. These changes include:

- Retirement rates were increased and the assumption was changed to be based on service as opposed to the age of a member,
- Termination rates were increased,
- Disability rates were decreased,
- The mortality rates were updated from UP1994 tables to RP2000 tables,
- The investment return assumption was lowered from 8.00% to 7.75%,
- The inflation assumption was lowered from 4.25% to 4.00%.

In May 2007, the SDCERS Board approved several amortization periods that affect the calculation of the Airport Authority's Unfunded Actuarial Liability (UAL). The amortization period for the Airport Authority's then-existing June 30, 2007 UAL was set at 14 years, the amortization of future experience gains and losses was set at 15 years, and the amortization of changes in actuarial methods or assumptions was set at 30 years. The Board also approved an additional UAL cost component to ensure that there is no negative amortization of the UAL in any year. These amortization periods, which became effective with the Airport Authority's June 30, 2007 actuarial valuation, were used to calculate the portion of the Airport Authority's June 30, 2008 ARC that is attributable to the UAL.

The Airport Authority's June 30, 2008 UAL of -\$1.29 million is split into several tiers, each using a different amortization period. These tiers correspond to (1) the -\$2.74 million remaining balance of the Airport Authority's June 30, 2007 UAL now amortized over 13 years (-\$0.24 million of the FY 2010 ARC); (2) the \$2.81 million UAL due to the impact of changes in actuarial assumptions that is amortized over 30 years (\$0.16 million of the FY 2010 ARC); and (3) the -\$1.36 million UAL due to the FY 2008 experience loss that is amortized over 15 years

**SDCERS-AIRPORT AUTHORITY  
JUNE 30, 2008 ACTUARIAL VALUATION**

**SECTION I  
BOARD SUMMARY**

(-\$0.12 million of the FY 2010 ARC). See “Beginning of Year ARC Component” in Table I-5 and Table IV-1 in Section IV.

**B. Current Financial Condition of SDCERS-Airport Authority**

The following discussion summarizes the key results of the June 30, 2008 valuation and shows how they compare to the results from the June 30, 2007 valuation.

1. Airport Authority Membership

Table I-2 shows that total membership in SDCERS-Airport Authority increased by 8.2% from 2007 to 2008. Most of the increase was attributable to the growth in active membership. The average pay per active member increased by 1.6%, below the assumed payroll inflation of 4%.

<b>Table I-2</b>			
<b>SDCERS - Airport Authority - Membership Total</b>			
<b>Item</b>	<b>June 30, 2008</b>	<b>June 30, 2007</b>	<b>% Change</b>
Active Counts	341	324	5.2%
Terminated Vested	62	52	19.2%
Disabled	-	-	0.0%
Retirees	16	11	45.5%
Beneficiaries	<u>1</u>	<u>1</u>	<u>0.0%</u>
Total Airport Members	420	388	8.2%
Active Member Payroll	\$ 23,488,283	\$ 21,956,656	7.0%
Average Pay per Active Member	68,881	67,767	1.6%

**SDCERS-AIRPORT AUTHORITY  
JUNE 30, 2008 ACTUARIAL VALUATION**

**SECTION I  
BOARD SUMMARY**

2. Airport Authority Assets and Liabilities

Table I-3 presents a comparison between the June 30, 2008 and June 30, 2007 SDCERS - Airport Authority assets, liabilities, UAL, and funding ratios.

The key results shown in Table I-3 indicate that even though the total actuarial liability increased 21.8% and the market value of assets increased by 2.9%, the funding ratio decreased only 6.7% from June 30, 2007 to June 30, 2008. This is because SDCERS employs a commonly used actuarial smoothing method on the market value that dampens market volatility. For the year ended June 30, 2008, the smoothed value of assets (called the actuarial value of assets) increased by 14.3%, which largely offset the increase in the actuarial liabilities. Section II-C provides additional information explaining the development of the actuarial value of assets.

<b>Table I-3</b>			
<b>SDCERS – Airport Authority - Assets &amp; Liabilities</b>			
<b>EAN funding method</b>	<b>June 30, 2008</b>	<b>June 30, 2007</b>	<b>% Change</b>
Actives	\$ 47,157,366	\$ 40,418,489	16.7%
Terminated Vested	3,309,120	1,930,181	71.4%
Disabled	-	-	0.0%
Retirees	6,037,405	3,981,919	51.6%
Beneficiaries	<u>303,772</u>	<u>305,966</u>	<u>-0.7%</u>
Total Actuarial Liability	56,807,663	46,636,555	21.8%
Market Value Assets	\$ 54,856,234	\$ 53,305,476	2.9%
Actuarial Value Assets	58,095,599	50,812,142	14.3%
Unfunded Actuarial Liability	\$ (1,287,936)	\$ (4,175,587)	-69.2%
Funding Ratio-Actuarial Value	102.3%	109.0%	-6.7%
<b>Additional Contributions</b>	<b>June 30, 2008</b>	<b>June 30, 2007</b>	<b>% Change</b>
Desired Funding Ratio of 90%	-	-	0.0%
Desired Funding Ratio of 95%	-	-	0.0%
Desired Funding Ratio of 100%	-	-	0.0%

**SDCERS-AIRPORT AUTHORITY  
JUNE 30, 2008 ACTUARIAL VALUATION**

**SECTION I  
BOARD SUMMARY**

3. Components of UAL Change between June 30, 2007 and June 30, 2008

SDCERS-Airport Authority unfunded actuarial liability increased by \$2.9 million from \$(4.2) million to \$(1.3) million. The table below (shown in thousands for detail) presents the specific components of this change in the UAL.

The key findings in Table I-4 are that the assumption changes increased the UAL by \$2.8 million, and the investment losses increased the UAL by \$1.4 million. Partially offsetting those increases was a liability experience gain of \$1.8 million and additional Airport and member contributions were more than expected by \$0.9 million.

<b>Table I-4 SDCERS - Airport Authority-Change in UAL (In Thousands)</b>		
<b>UAL change due to experience factors</b>		
1.	Investment experience	\$ 1,350.1
2.	Purchased service credits paid for during the year*	-
3.	Liability experience	(1,842.8)
<b>UAL change due to contribution factors</b>		
4.	Contributions paid in excess of expected	(863.4)
<b>UAL change due to actuarial assumption changes</b>		
5.	Demographic Assumption Changes	1,497.1
6.	Economic Assumption Changes	1,311.2
<b>Total</b>		
7.	Total net overall change: (sum 1 through 6)	1,452.2
8.	Expected change in UAL	1,435.4
9.	Total actual change in UAL: 7 + 8	\$ 2,887.6

\* *Attributable to members who have entered into a purchased service contract after June 30, 2007. (Gain) or Loss equals the difference between the actuarial liability before and after the additional service purchased. Most members were still purchasing credits under installment contracts primarily entered into before June 30, 2004.*



**SDCERS-AIRPORT AUTHORITY  
JUNE 30, 2008 ACTUARIAL VALUATION**

**SECTION I  
BOARD SUMMARY**

4. Airport Authority Contributions

The Airport Authority's contribution for FY 2010 measured as a percent of membership payroll decreased from 13.15% to 11.96%. In dollars, the required beginning of year contribution remained about the same at \$3.0 million.

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

<b>Table I-5 SDCERS – Airport Authority – Contributions</b>			
<b>EAN funding method</b>	<b>June 30, 2008</b>	<b>June 30, 2007</b>	<b>% Change</b>
Gross Normal Cost %	22.67%	24.86%	-2.2%
Member Cost %	<u>9.91%</u>	<u>10.02%</u>	<u>-0.1%</u>
Employer Normal Cost %	12.76%	14.84%	-2.1%
Employer Unfunded Liability Cost %	-0.80%	-1.69%	0.9%
Negative Amortization Adjustment Cost %	<u>0.00%</u>	<u>0.00%</u>	<u>0.0%</u>
Total Employer Cost %	11.96%	13.15%	-1.2%
Annual Required Contribution (GASB):			
-if paid at the beginning of the year	\$ 3.0 million	\$ 3.0 million	1.6%
-if paid throughout the year	\$ 3.1 million	\$ 3.1 million	1.5%
The total \$3.0 million ARC is made up of the following components (shown in thousands for detail):			
<u>in thousands</u>	<b>Beginning of Year ARC Component</b>		
\$ 3,200.1	Employer Normal Cost		
\$ (239.0)	13-year amortization of the outstanding 2007 UAL balance 06/30/2008		
\$ (123.4)	15-year amortization of the UAL due to the experience gain in FY2008		
\$ 160.9	30-year amortization of the UAL increase due to assumptions changes		
<u>\$ 0</u>	Amount needed to avoid negative UAL for FY 2010		
\$ 2,998.6	Total FY 2010 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.

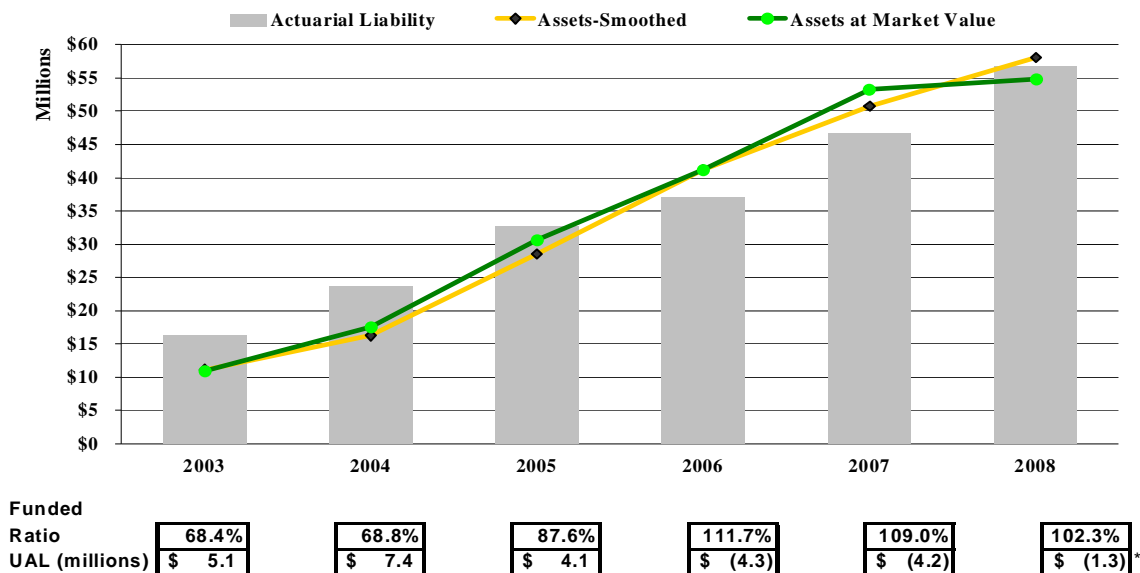
SECTION I  
 BOARD SUMMARY

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 2003-2008**



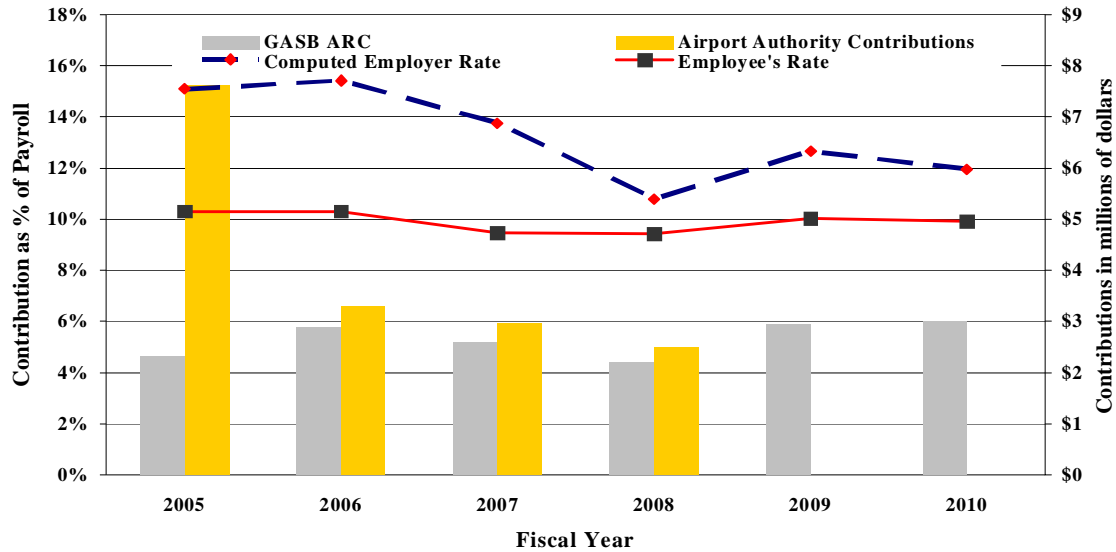
\* The UAL for 2007 and after is calculated using the Entry Age Normal method, 2006 and prior years are calculated using the Projected Unit Credit method.

The chart indicates that in 2003 and 2004, the funding rate was slightly more than 68% of the actuarial value of assets. In 2004 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.

**SECTION I  
 BOARD SUMMARY**

In the chart below, we present the historical trends for the SDCERS-Airport Authority contribution rates since FY 2000, as well as actual contributions made by the Airport Authority and the actuarially computed GASB ARC since FY 2005.

**SDCERS-Airport Authority and Member Contribution Rates FY 2005-2010**



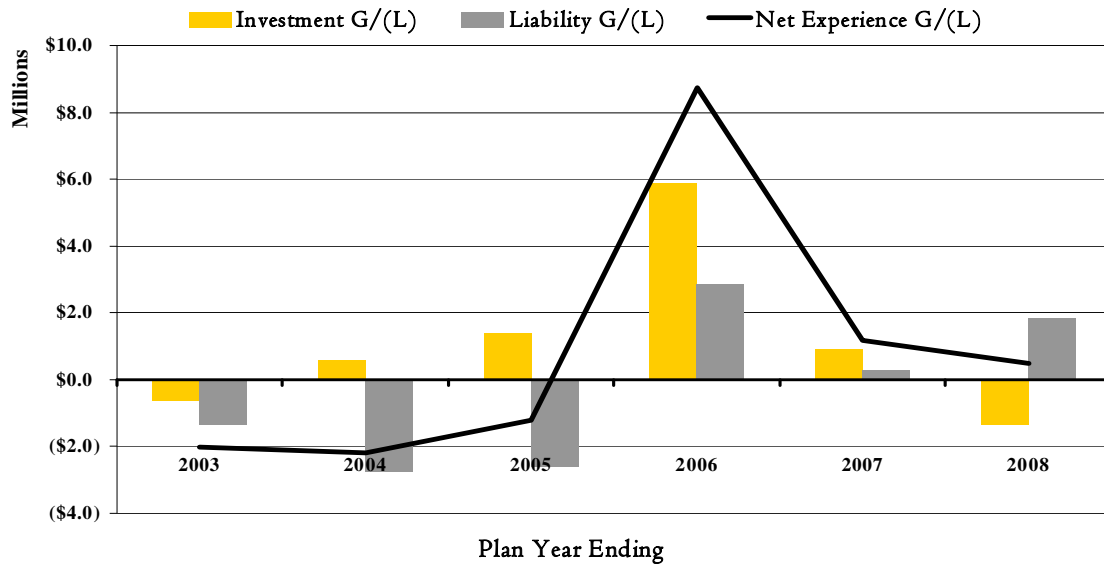
The key information in this chart is that the Airport Authority's contribution rate declined in fiscal year 2007 and 2008 while increasing again fiscal year 2009, and remaining fairly level for fiscal year 2010. The chart also indicates that the members' contribution rate has remained relatively stable throughout the fiscal years shown.

This chart also compares the actual contributions made by the Airport Authority since 2005 to the actuarially 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) 2003-2008**



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.
- There had been a pattern of losses from 2003 to 2005. The experience produced gains in 2006 and 2007. With the change in actuarial assumptions in 2008, the liability experience produced a gain.

**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, 2008 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 negative 15% but then vary each year thereafter over the projection period, but over the entire period averages out to the assumed 7.75%. We do this in reflection of the first half of current fiscal year return which has been significantly negative, but followed by positive returns to reflect what has happened historically whenever there have been serious market downturns.

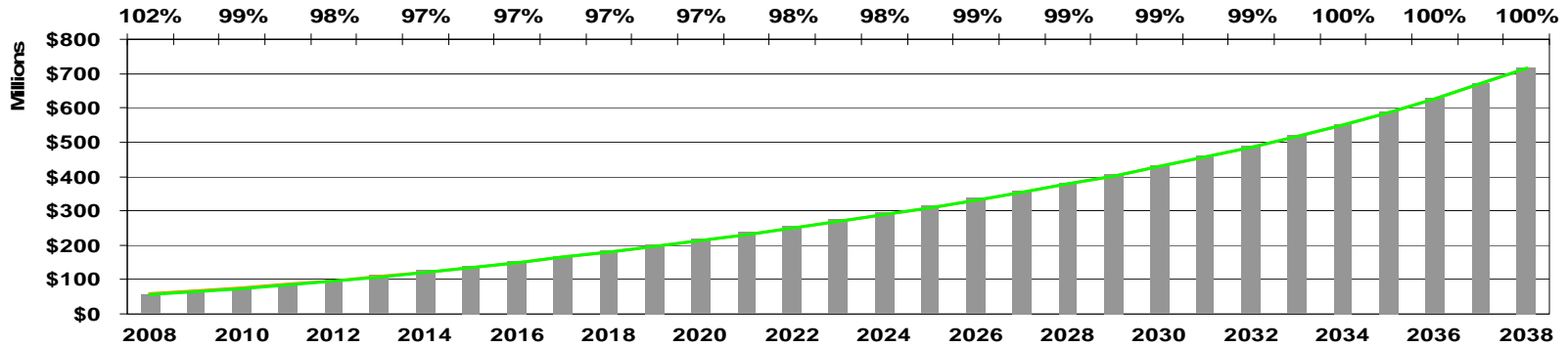
	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>
Return	-15.00%	5.76%	9.65%	7.36%	8.45%	3.77%	16.66%	13.70%	18.76%	-4.18%
	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>
Fiscal Year Return	2.50%	4.94%	12.60%	19.86%	13.32%	12.44%	0.76%	17.86%	19.16%	1.24%
	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	<u>2036</u>	<u>2037</u>
Fiscal Year Return	-3.00%	14.56%	6.80%	5.62%	18.06%	-2.06%	9.87%	11.82%	7.34%	-5.98%

SECTION I  
 BOARD SUMMARY

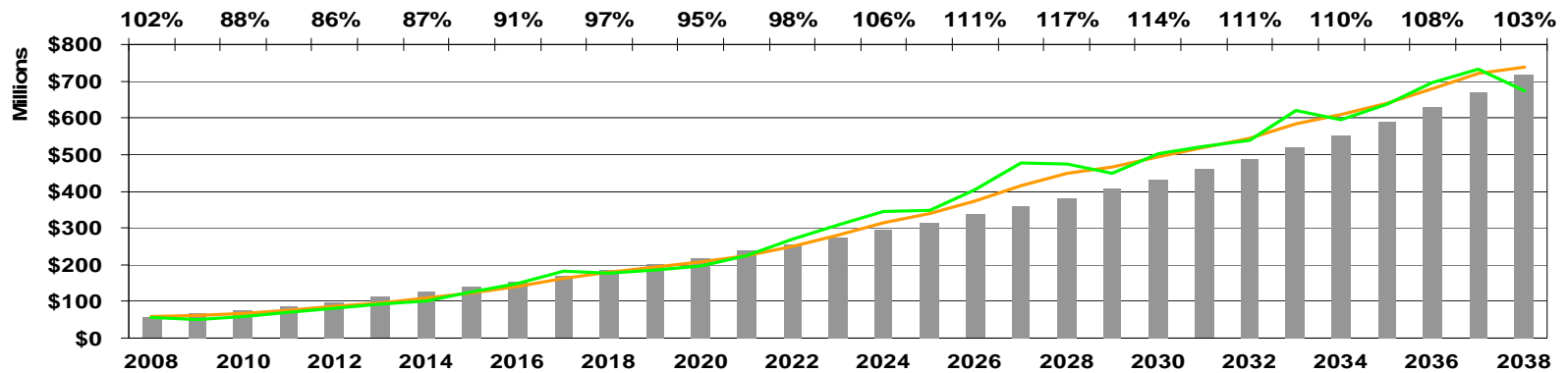
Projection Set 1  
 Assets and Liabilities – Airport Authority

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%**



Actuarial Liability    Actuarial Value of Assets    Market Value of Assets

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. Due to the Airport Authority being overfunded, the UAL pay down is zero for initial years.

Chart 1: 7.75% return each year

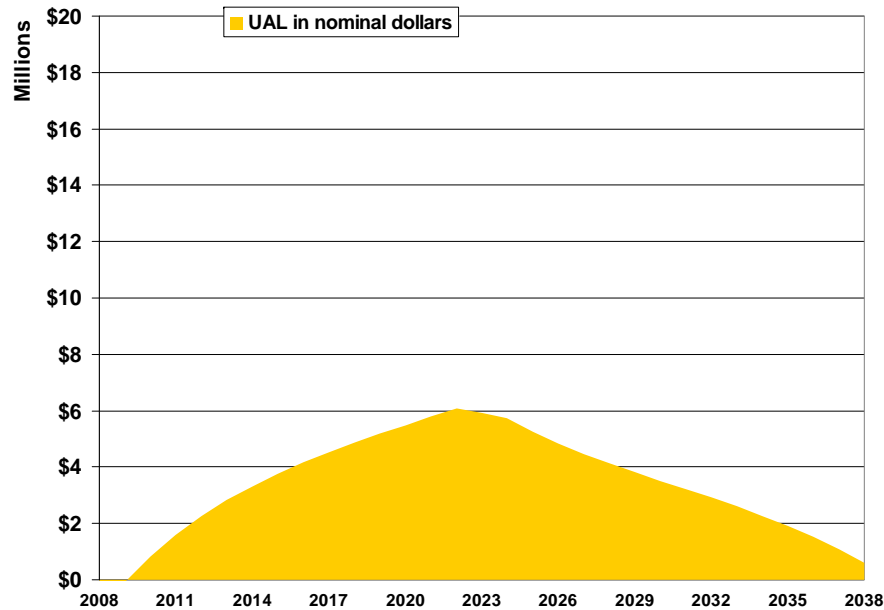
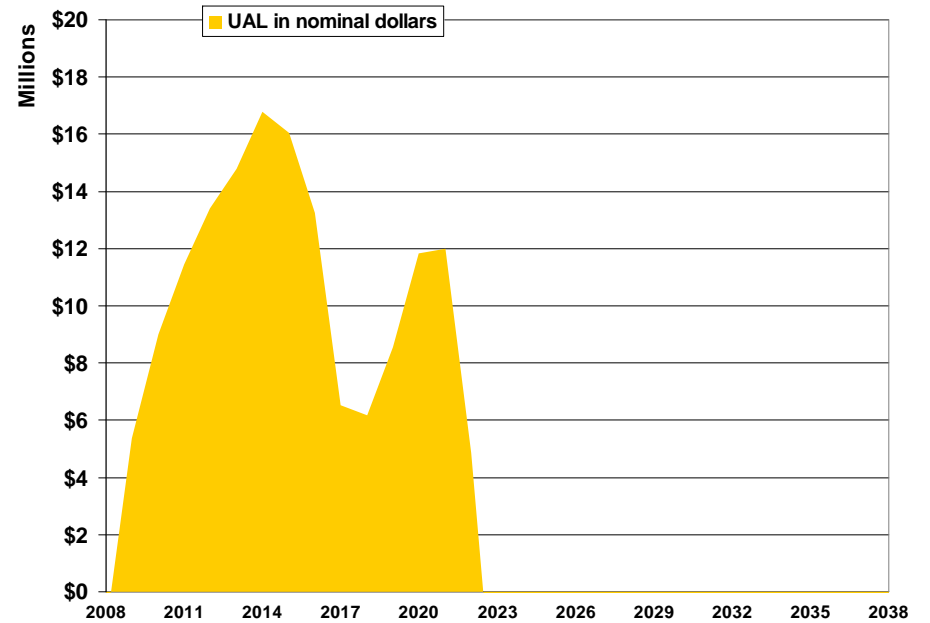


Chart 2: Varying returns averaging 7.75%

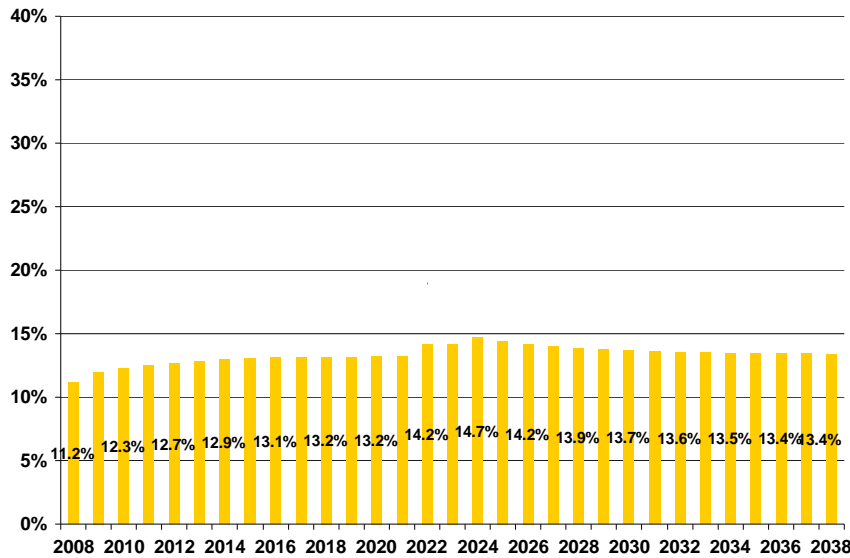


SECTION I  
 BOARD SUMMARY

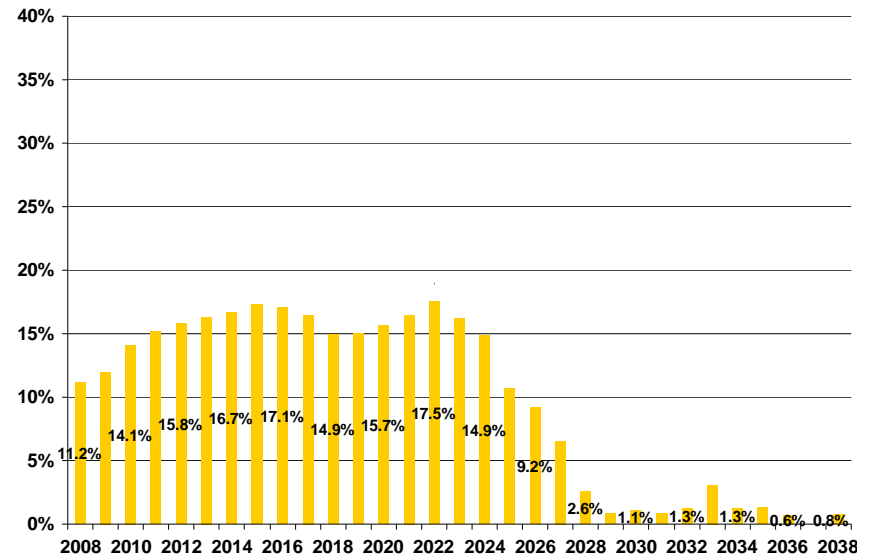
Projection Set 3  
 Contribution Rate – Airport Authority

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: market value and 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 attempts to smooth annual investment return performance over multiple years to reduce annual investment volatility. 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, we disclose in this section information on the total assets of SDCERS-All Employers. 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 explained here.

On the following pages we present detailed information on SDCERS-All Employers assets:

- A. Disclosure of the June 30, 2008 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**

The market value of assets represents a “snap-shot” value as of June 30, the last day of the fiscal year, that 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, 2008.

<b>Table II-1                  SDCERS – All Employers                  Summary of Reported Market Value of Total Defined Benefit Plan Assets</b>	
Cash	\$ 506,522,453
US Stocks	1,780,841,026
International Stocks	819,510,996
Bonds	1,181,751,284
Real Estate	487,530,569
Receivables	134,688,516
Short Term Investments	42,267,813
Fixed Assets	522,829
Miscellaneous	15,664
Accounts Payable	<u>(257,047,691)</u>
<b>Market Value of Assets – June 30, 2008</b>	<b>\$ 4,696,603,459</b>

**SECTION II  
 ASSETS**

**B. Market Value of Assets by Plan Sponsor**

As of July 1, 2007, the City, UPD and Airport Authority plans have been 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  
 Summary of Market and Actuarial Assets for Each Employer Group  
 as of June 30, 2008**

	<u>Reported</u> <u>Market Value</u> <b>Total Net Assets</b> <b>June 30, 2007</b>	<u>Adjusted</u> <u>Market Value</u> <b>Total Assets</b> <b>June 30, 2007</b>	<u>Market Value</u> <b>Total Assets</b> <b>June 30, 2008</b>	<u>Actuarial Value</u> <b>Total Assets</b> <b>June 30, 2008</b>
City of San Diego	\$4,641,340,923	\$4,656,633,408	\$4,408,719,440	\$4,660,346,403
Unified Port District	242,403,219	243,201,899	\$233,027,785	\$245,580,297
Airport Authority	<u>53,305,476</u>	<u>53,481,109</u>	<u>\$54,856,234</u>	<u>\$58,095,599</u>
<b>Total-SDCERS</b>	<b>\$4,937,049,617</b>	<b>\$4,953,316,416</b>	<b>\$4,696,603,459</b>	<b>\$4,964,022,299</b>

**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 typically 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 is calculated by accepting 100% of the expected asset value as of June 30, 2008 (assuming 8% earnings for the year) plus 25% of the difference between the actual market value next year and expected asset value. (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.

<b>Table II-3 SDCERS - Airport Authority Development of Actuarial Value of Assets at June 30, 2008 Expected Value of Assets Method</b>		
1.	Actuarial Value of Assets at June 30, 2007	\$ 50,812,142
2.	Amount in (1) with interest to June 30, 2008	54,877,113
3.	Employer, and member contributions for the Plan Year ended June 30, 2008	5,003,434
4.	Disbursements from Trust excluding investment expenses, June 30, 2007 through June 30, 2008	944,987
5.	Interest on cash flows to June 30, 2008 at 8.00% per year	<u>239,827</u>
6.	Expected Actuarial Value of Assets at June 30, 2008 = (2) + (3) – (4) + (5)	59,175,387
7.	Actual Market Value of Assets at June 30, 2008	<u>54,856,234</u>
8.	Excess of (7) over (6)	(4,319,153)
9.	Actuarial Value of Assets at June 30, 2008 = (6) + 25% of (8)	\$ 58,095,599

**SECTION II**  
**ASSETS**

**D. Investment Performance**

The return on the market value of assets, as reported by SDCERS' investment advisor Callan Associates, was a negative 4.66%. The return in FY 2007 was 16.50%.

On an actuarial (smoothed) value of assets basis, the return for FY 2008 was 6.24%. This return produced for SDCERS-All Employers, an overall investment loss of \$87.1 million for the year ending June 30, 2008. (Note this reported loss is different than the investment loss of \$1.4 million reported on page 4 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, 2007 and June 30, 2008, 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 all 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.
- **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 three 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).

SDCERS-AIRPORT AUTHORITY  
JUNE 30, 2008 ACTUARIAL VALUATION

**SECTION III  
LIABILITIES**

<b>Table III-1</b>		
<b>SDCERS – Airport Authority – Total</b>		
Item	June 30, 2008	June 30, 2007
<b>Present Value of Future Benefits</b>		
Actives	\$ 96,409,958	\$ 94,823,570
Terminated Vested	3,309,120	1,930,181
Disabled	-	-
Retirees	6,037,405	3,981,919
Beneficiaries	<u>303,772</u>	<u>305,966</u>
<b>Total Airport</b>	<b>\$ 106,060,255</b>	<b>\$ 101,041,636</b>
<b>Actuarial Liability – EAN</b>		
Total Present Value of Benefits	\$ 106,060,255	\$ 101,041,636
Present Value of Future Normal Costs		
Employer Portion	27,673,330	32,478,801
Employee Portion	<u>21,579,262</u>	<u>21,926,280</u>
<b>Actuarial Liability – EAN</b>	<b>\$ 56,807,663</b>	<b>\$ 46,636,555</b>
Actuarial Value of Assets	\$ 58,095,599	\$ 50,812,142
<b>Unfunded EAN Actuarial Liability</b>	<b>\$ (1,287,936)</b>	<b>\$ (4,175,587)</b>

Table III-2 shows actuarial liability as of June 30, 2008 for general and executive members of SDCERS-Airport Authority.

<b>Table III-2</b>			
<b>SDCERS - Airport Authority - General &amp; Executives</b>			
Item	June 30, 2008	June 30, 2008	June 30, 2008
Present Value of Future Benefits	Total	General	Executives
Actives	\$ 96,409,958	\$ 90,657,178	\$ 5,752,780
Terminated Vested	3,309,120	2,569,991	739,129
Disabled	-	-	-
Retirees	6,037,405	5,651,354	386,051
Beneficiaries	<u>303,772</u>	<u>303,772</u>	<u>-</u>
<b>Total Airport Authority</b>	<b>\$ 106,060,255</b>	<b>\$ 99,182,295</b>	<b>\$ 6,877,960</b>
<b>Actuarial Liability - EAN</b>			
Actives	\$ 47,157,366	\$ 43,344,804	\$ 3,812,562
Terminated Vested	3,309,120	2,569,991	739,129
Disabled	-	-	-
Retirees	6,037,405	5,651,354	386,051
Beneficiaries	<u>303,772</u>	<u>303,772</u>	<u>-</u>
<b>Total Airport Authority</b>	<b>\$ 56,807,663</b>	<b>\$ 51,869,921</b>	<b>\$ 4,937,742</b>

**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.

<b>Table III-3</b>	
<b>Development of 2008 Experience Gain/(Loss) SDCERS - Airport Authority</b>	
<b>(in Thousands)</b>	
1. Unfunded Actuarial Liability at June 30, 2007	\$(4,175.6)
2. Beginning of year actuarial liability payment	1,638.4
3. Interest accrued ((1+2) x 8.00%)	<u>(203.0)</u>
4. Expected Unfunded Actuarial Liability at June 30, 2008 (1+2+3)	(2,740.2)
5. Actual Unfunded Liability at June 30, 2008	(1,287.9)
6. Difference: (4 - 5)	(1,452.2)
7. Portion of difference (6) due to actuarial assumption changes	(2,808.3)
8. Portion of difference (6) due to benefit changes	0.0
9. Portion of difference (6) due to net experience Gain/(Loss)	1,356.1
a) portion of (9) due to contributions more than expected	\$863.4
b) portion of (9) due to investment experience	\$(1,350.1)
c) portion of (9) due to liability experience	\$1,842.8
<b>Elements of Liability Gain/(Loss)</b>	
1. G/(L) due to demographic and payroll experience	1,842.8
2. G/(L) due to purchased service credit	0.0
3. Other Gain/(Loss)	<u>0.0</u>
4. Total Estimated Liability Gain/(Loss): sum 1 through 3	<b>\$1,842.8</b>
<b>Elements of Actuarial Assumption Changes</b>	
1. (Increase)/decrease due to demographic assumption changes	(1,497.1)
2. (Increase)/decrease due to economic assumption changes	<u>(1,311.2)</u>
3. Total Estimated Actuarial Assumption Changes (Increase)/decrease: 1 + 2	<b>(2,808.3)</b>



**SDCERS-AIRPORT AUTHORITY  
JUNE 30, 2008 ACTUARIAL VALUATION**

**SECTION III  
LIABILITIES**

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

<b>Table III-4</b>			
<b>Experience Gain/(Loss) - Historical SDCERS – Airport Authority</b>			
<b>Valuation</b>		<b>Beginning-of-Year</b>	<b>Gain/(Loss)</b>
<b>Date</b>	<b>Gain/(Loss)</b>	<b>Actuarial Liabilities</b>	<b>% of Liability</b>
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

## 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 will result in a pattern of contributions that are 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 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 2010 is to be amortized over several different periods. The amortization of the UAL due to assumption changes was over 30 years, the fiscal year ending June 30, 2008 experience loss was amortized over 15 years, and the outstanding balance of the June 30, 2007 UAL was amortized over 13 years. Finally, 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 2010 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).

SDCERS-AIRPORT AUTHORITY  
JUNE 30, 2008 ACTUARIAL VALUATION

**SECTION IV  
CONTRIBUTIONS**

Table IV-1 SDCERS – Airport Authority Development of the Airport’s Contribution as of June 30, 2008, For (FY 2010) (dollars in millions)				
		WEIGHTED TOTAL APA	General	Executives
1.	Total Normal Cost Rate	<b>22.67%</b>	22.67%	22.53%
2.	Member Contribution Rate	<b>9.91%</b>	9.91%	9.88%
3.	Employer Normal Cost Rate (1-2)	<b>12.76%</b>	12.76%	12.65%
4.	Actuarial Liability	<b>\$56.8</b>	\$56.8	\$51.9
5.	Actuarial Assets <sup>1</sup>	<b>\$58.1</b>	\$58.1	\$53.0
6.	Total Unfunded Actuarial Liability (UAL)(4-5)	<b>(1.3)</b>	(1.3)	(1.2)
	a. Expected UAL payment on July 1, 2008	<b>(0.4)</b>	(0.4)	(0.4)
	b. Remaining balance of 6/30/2007 UAL <sup>1</sup>	<b>(2.4)</b>	(2.4)	(2.3)
	c. UAL due to change in assumptions	<b>2.8</b>	2.8	2.5
	d. UAL actuarial loss for FY ending 6/30/08	<b>(1.4)</b>	(1.4)	(1.1)
7.	a. amortization factor for 6b (13 years) <sup>2</sup>	<b>9.1330</b>	9.1330	9.1330
	b. amortization factor for 6c (30 years) <sup>2</sup>	<b>16.1973</b>	16.1973	16.1973
	c. amortization factor for 6d (15 years) <sup>2</sup>	<b>10.2010</b>	10.2010	10.2010
8.	<u>Negative Amortization Test for FY10</u>			
	a. Total UAL adjusted to 6/30/09	<b>\$(1.0)</b>	\$(1.0)	\$(0.9)
	b. interest on 8a. to 6/30/10	<b>\$(0.1)</b>	\$(0.1)	\$(0.1)
	c. preliminary FY10 UAL amortization on 6/30/10	<b>\$(0.2)</b>	\$(0.2)	\$(0.2)
	d. Negative interest as of 6/30/10 (8b - 8c)	<b>\$-</b>	\$-	\$-
9.	Total FY10 UAL payment on 6/30/10 (8c + 8d)	<b>\$(0.2)</b>	\$(0.2)	\$(0.2)
10.	Total FY10 UAL payment on 7/01/09	<b>\$(0.2)</b>	\$(0.2)	\$(0.2)
11.	Total FY10 UAL payment throughout year	<b>\$(0.2)</b>	\$(0.2)	\$(0.2)
12.	Expected Payroll during FY10	<b>\$26.0</b>	\$26.0	\$24.4
13.	UAL Rate of pay for FY10	<b>-0.80%</b>	-0.80%	-0.79%
14.	Determination of FY10 GASB ARC %			
	a. Employer Normal Cost Rate (line 3)	<b>12.76%</b>	12.76%	12.65%
	b. UAL Rate (line 13)	<b><u>-0.80%</u></b>	<u>-0.80%</u>	<u>-0.79%</u>
	c. Total employer ARC % (14a + 14b)	<b>11.96%</b>	11.96%	11.86%
15.	Determination of FY10 GASB ARC dollars			
	a. FY10 ARC if paid throughout year	<b>\$3.11</b>	\$3.11	\$2.90
	b. FY10 ARC if paid at beginning of year	<b>3.00</b>	3.00	2.79

1. Adjusts reported 7/01/07 UAL to 7/1/2008 by adding interest and removing UAL payments made for FY08 and FY09

2. Factors based on UAL payments commencing at the end of year FY 2010

**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 presents 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, 2007 and June 30, 2008 are presented in Table V-1 and Table V-2.

SDCERS-AIRPORT AUTHORITY  
JUNE 30, 2008 ACTUARIAL VALUATION

**SECTION V**  
**ACCOUNTING STATEMENT INFORMATION**

<b>Table V-1</b>			
<b>SDCERS - Airport Authority - Total</b>			
<b>Item</b>	<b>June 30, 2008</b>	<b>June 30, 2007</b>	<b>% Change</b>
<b>FASB No. 35 Basis</b>			
1. Present Value of Benefits Accrued and Vested to Date			
a. Members Currently Receiving Payments	\$6,341,177	\$4,287,885	47.9%
b. Vested Terminated and Inactive Members	3,309,120	1,930,181	71.4%
c. Active Members	<u>27,909,715</u>	<u>22,717,098</u>	<u>22.9%</u>
d. Total PVAB	\$37,560,012	\$28,935,164	29.8%
2. Assets at Market Value	54,856,234	53,305,476	2.9%
3. Unfunded Present Value of Accrued Benefits, But Not Less Than Zero	-	-	
4. Ratio of Assets to Value of Benefits (2)/(1)(d)	146.05%	184.22%	-38.2%
<b>GASB No. 25 Basis</b>			
1. Actuarial Liabilities *			
a. Members Currently Receiving Payments	\$6,341,177	\$4,287,885	47.9%
b. Vested Terminated and Inactive Members	3,309,120	1,930,181	71.4%
c. Active Members	<u>47,157,366</u>	<u>40,418,489</u>	<u>16.7%</u>
d. Total PVAB	\$56,807,663	\$46,636,555	21.8%
2. Actuarial Value of Assets	\$58,095,599	\$50,812,142	14.3%
3. Unfunded Actuarial Liability	\$(1,287,936)	\$(4,175,587)	-69.2%
4. Ratio of Actuarial Value of Assets To Actuarial Liability (2)/(1)(d)	102.27%	108.95%	-6.7%

<b>Table V-2</b>	
<b>SDCERS - Airport Authority – Total</b>	
<b>Item</b>	<b>Accumulated Benefits Obligation (FASB 35)</b>
<b>Actuarial Present Value of Benefits Accrued and Vested as of June 30, 2007</b>	<b>\$28,935,164</b>
Increase (Decrease) During Year Attributable to:	
Passage of Time	2,289,895
Benefits Paid	(622,946)
Assumption Change	1,294,170
Plan Amendment	-
Benefits Accrued, Other Gains/Losses	<u>5,663,729</u>
Net Increase (Decrease)	<u>\$8,624,848</u>
<b>Actuarial Present Value of Benefits Accrued and Vested as of June 30, 2008</b>	<b>\$37,560,012</b>

**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, 2008
Actuarial funding method	Entry Age Normal
Amortization method	Level percent closed
Remaining amortization period	13 years <sup>1</sup>
Asset valuation method	Expected Value Method
Actuarial assumptions:	
Investment rate of return	7.75%
Projected salary increases due to inflation <sup>2</sup>	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 13 years for the outstanding balance of the 2007 UAL, 15 years for experience gains and losses, 30 years for changes in methods and assumptions, 5 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.

SDCERS-AIRPORT AUTHORITY  
JUNE 30, 2008 ACTUARIAL VALUATION

**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**

*Gain (or Loss) for  
Year ending  
June 30, 2008*

**Type of Activity**

Investment Income	\$ (1,350,066)
Combined Liability Experience	<u>1,842,772</u>
Gain (or Loss) During Year from Financial Experience	\$ 492,707
Non-Recurring Gain (or Loss) Items	<u>(1,944,924)</u>
Composite Gain (or Loss) During Year	\$ (1,452,217)

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

Valuation Date June 30,	(A)	(B)	(C)	Reported Assets <sup>1</sup>	Portion of Actuarial Liabilities Covered by Reported Assets		
	Active Member Contributions	Retirees And Beneficiaries	Remaining Active Members' Liabilities		(A)	(B)	(C)
2008	\$ 7,335	\$ 6,341	\$ 43,131	\$ 58,096	100%	100%	102.99%
2007 <sup>4</sup>	6,681	4,288	35,668	50,812	100	100	111.71
2006 <sup>3</sup>	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 <sup>4</sup>	795	19,848	16,225	100	100	62.95
2003	2,200 <sup>4</sup>	300	13,779	11,142	100	100	62.72
12/31/2002 <sup>2</sup>	1,509	0	10,018	11,028	100	100	95.02

<sup>1</sup> Actuarial Value of Assets

<sup>2</sup> Interim (mid-year) actuarial valuations performed due to split of San Diego County Regional Airport Authority from Unified Port District.

<sup>3</sup> Reflects contingent liabilities (13<sup>th</sup> check), DROP reserves, and IRC Section 415 limits.

<sup>4</sup> 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.

**SDCERS-AIRPORT AUTHORITY  
JUNE 30, 2008 ACTUARIAL VALUATION**

**APPENDIX A  
MEMBERSHIP INFORMATION**

<b>Table A-1 SDCERS - Airport Authority Active Member Data</b>			
	<b>June 30, 2008</b>	<b>June 30, 2007</b>	<b>% Change</b>
Count	341	324	5.2%
Average Current Age	45.5	45.4	0.2%
Average Service	7.2	7.2	0.0%
Average Pensionable Earnings	\$ 68,881	\$ 67,767	1.6%
Annual Pensionable Earnings	\$ 23,488,283	\$ 21,956,656	7.0%
Average Valuation Compensation <sup>1</sup>	\$ 68,829	\$ 67,739	1.6%
Annual Valuation Compensation <sup>1</sup>	\$ 23,470,538	\$ 21,947,448	6.9%
Service Without Permissive Service Purchased	6.5	6.4	1.6%
Members with Paid Purchased Service	16	18	-11.1%
Members with Any Purchased Service	37	38	-2.6%
Amount of Paid Purchased Service	110	120	-8.4%
Amount of Total Purchased Service	258	273	-5.5%

<sup>1</sup> Valuation compensation differs from pensionable earnings due to IRS 401(a).

<b>Table A-2 SDCERS - Airport Authority Non-Active Member Data</b>						
	<b>Count</b>			<b>Average Age</b>		
	<b>June 30, 2008</b>	<b>June 30, 2007</b>	<b>% Change</b>	<b>June 30, 2008</b>	<b>June 30, 2007</b>	<b>% Change</b>
Retired	16	11	45.5%	64.6	66.0	-2.1%
Disabled	-	-		-	-	
Beneficiaries	<u>1</u>	<u>1</u>	0.0%	<u>56.0</u>	<u>55.0</u>	1.8%
Payee Total	17	12	41.7%	64.1	65.1	-1.5%
DROP Participants	6	3	100.0%	63.7	65.4	-2.6%
Deferred Vested <sup>1</sup>	62	52	19.2%	46.4	47.6	-2.5%
Vested < 5 yrs svc	40	39	2.6%			

<sup>1</sup> Includes all members having a contribution balance still on account with SDCERS.

<b>Table A-3 SDCERS - Airport Authority Non-Active Member Data</b>						
	<b>Total Annual Benefit</b>			<b>Average Annual Benefit</b>		
	<b>June 30, 2008</b>	<b>June 30, 2007</b>	<b>% Change</b>	<b>June 30, 2008</b>	<b>June 30, 2007</b>	<b>% Change</b>
Retired	\$ 457,761	\$ 305,518	49.8%	\$ 28,610	\$ 27,774	3.0%
Disabled	-	-		-	-	
Beneficiaries	<u>22,478</u>	<u>22,040</u>	2.0%	<u>22,478</u>	<u>22,040</u>	2.0%
Payee Total	\$ 480,239	\$ 327,559	46.6%	\$ 28,249	\$ 27,297	3.5%
DROP Participants	\$ 201,476	\$ 97,370	106.9%	\$ 33,579	\$ 32,457	3.5%
Deferred Vested <sup>1</sup>	\$ 1,033,782	\$ 736,406	40.4%	\$ 16,674	\$ 14,162	17.7%

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



**SDCERS-AIRPORT AUTHORITY  
JUNE 30, 2008 ACTUARIAL VALUATION**

**APPENDIX A  
MEMBERSHIP INFORMATION**

**Table A-4  
SDCERS - Airport Authority  
Distribution of Active Members (Excludes DROP Participants) as of June 30, 2008  
Total Airport Authority**

Age	Years of Service <sup>1</sup>											Total Count	Average Salary
	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			
Under 25	2	-	-	-	-	-	-	-	-	-	-	2	\$ 38,277
25 to 29	6	5	1	-	-	-	-	-	-	-	-	12	45,857
30 to 34	5	19	11	-	-	-	-	-	-	-	-	35	57,779
35 to 39	12	23	15	5	-	-	-	-	-	-	-	55	68,957
40 to 44	9	11	12	11	5	2	1	-	-	-	-	51	65,665
45 to 49	7	26	9	13	8	8	-	-	-	-	-	71	64,884
50 to 54	1	21	10	10	8	5	1	2	-	-	-	58	72,049
55 to 59	4	17	10	7	2	-	3	-	-	-	-	43	76,136
60 to 64	-	6	1	3	2	-	-	-	-	-	-	12	112,470
65 to 69	-	1	-	-	-	1	-	-	-	-	-	2	135,406
70 and up	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Tot Count</b>	46	129	69	49	25	16	5	2	-	-	-	341	
<b>Avg. Salary</b>	\$ 55,721	\$ 70,817	\$ 61,505	\$ 82,624	\$ 67,604	\$ 73,678	\$ 84,374	\$ 94,361	\$ -	\$ -	\$ -		\$ 68,829

SDCERS-AIRPORT AUTHORITY  
JUNE 30, 2008 ACTUARIAL VALUATION

**APPENDIX A  
MEMBERSHIP INFORMATION**

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

Plan Year	Age										Total
	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	
2002	-	-	-	-	-	1	-	-	-	-	1
2003	-	-	-	-	-	-	-	-	-	-	-
2004	-	-	-	-	1	1	-	-	-	-	2
2005	-	-	-	2	1	-	-	-	-	-	3
2006	-	-	1	-	-	-	-	-	-	-	1
2007	-	-	-	1	4	-	-	-	-	-	5
2008	-	-	3	2	-	-	-	-	-	-	5
<b>Total</b>	-	-	4	5	6	1	-	-	-	-	16

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

**Average Age at Retirement/Disability** 61.8  
**Average Current Age** 64.1

**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 is one duplicate record (based on SSN and Benefit Type) in the payee file. The two 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<sup>th</sup> check) and the “Corbett Supplemental Payment” is annualized for new members 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<sup>th</sup> check) will have their projected “Supplement Amt” (13<sup>th</sup> 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 members' 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 member 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 members 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's benefits over their 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. It also represents the difference between the investment return rate and the assumed real rate of return.

**3. Interest Credited to Member Contributions**

7.75%, compounded annually.

**4. Salary Increase Rate**

Inflation component: 4.00%

The additional merit component:

<b>Table B-1</b>	
<b>Years of Service at Valuation Date</b>	<b>General</b>
0	5.00%
1	4.00%
2	3.00%
3	2.00%
4	1.00%

**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 “pick up” by the employer. That “pick up” 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**

<b>Age</b>	<b>General</b>
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**

<b>Age</b>	<b>General</b>
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.

<b>Age</b>	<b>Male</b>	<b>Female</b>
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 members use the RP2000 Combined Healthy table (male and female).

<b>Table B-5</b>		
<b>SDCERS - Airport Authority</b>		
<b>Rates of Mortality for Retired Healthy Lives at Selected Ages</b>		
<b>Age</b>	<b>Male</b>	<b>Female</b>
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 members use Uninsured Pensioner 1994 (UP 1994) male only table set forward five years.

<b>Table B-6</b>	
<b>SDCERS - Airport Authority</b>	
<b>Rates of Mortality for Disabled Lives at Selected Ages</b>	
<b>Age</b>	<b>General</b>
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**

<b>Service</b>	<b>General</b>
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 members, 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 member is not vested, the liability is the member's 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 members without sufficient data or service, accumulated member contribution balances, with interest, were used as the actuarial accrued liability.

**17. 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.

**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 for FY 2010 is to be amortized over several different periods. The amortization of the UAL due to assumptions changes was over 30 years, the fiscal year ending June 30, 2008 experience loss was amortized over 15 years, and the outstanding balance of the June 30, 2007 UAL was amortized over 13 years. Finally, 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 an actuarial value of assets. The asset adjustment 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*<sup>1</sup> 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 ever greater than 120% of the market value of assets.

<sup>1</sup> 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 B**  
**ACTUARIAL ASSUMPTIONS AND METHODS**

**3. Changes Since Last Valuation**

As was stated in this report, there have been a few changes in actuarial methods and procedures since the June 30, 2007 actuarial valuation:

- Retirement rates were increased and the assumption was changed to be based on the amount of service as opposed to the age of a member.
- Termination rates were increased.
- Disability rates were decreased.
- Mortality rates for active Airport Authority members were changed from the UP1994 table set back five years to the RP2000 Combined Healthy table projected to 2008.
- Mortality rates for retired Airport Authority members were changed from the UP1994 table set back two years to the RP2000 Combined Healthy table.
- The investment return assumption was lowered from 8.00% to 7.75%.
- The inflation assumption was lowered from 4.25% to 4.00%.

**APPENDIX C**  
**SUMMARY OF PLAN PROVISIONS**

The Airport Authority was spun off from the Unified Port District effective 1/1/2003. Existing liabilities and assets were transferred to the new plan based on an interim valuation dated 12/31/2002. 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**

<b>Table C-1</b>				
<b>SDCERS - Airport Authority</b>				
<b>Member Service Retirement Accrual Factors</b>				
<b>Age</b>	<b>Pre 12/31/2001</b>	<b>Andrecht</b>	<b>Post 4/1/2004</b>	<b>Executive</b>
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%

<b>Table C-2</b>	
<b>SDCERS – Airport Authority</b>	
<b>For Vested Members who terminated--</b>	<b>--the accrual factors are--</b>
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.

**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.



**SDCERS-AIRPORT AUTHORITY  
JUNE 30, 2008 ACTUARIAL VALUATION**

**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 are “picked up”, such pick ups are not directly reflected in either the employee contributions or related refund calculations.

<b>Table C-3</b>		
<b>SDCERS - Airport Authority</b>		
<b>Employee Contribution Rates<sup>1</sup></b>		
<b>Integrated Members<sup>2</sup></b>		
<b>Entry Age</b>	<b>First \$400/Mo.</b>	<b>Over \$400/Mo.</b>
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

<sup>1</sup>Rate = Normal Cost + Cost of Living Rate

<sup>2</sup>Non-Integrated members will follow the “Over \$400/month” rate

**APPENDIX C**  
**SUMMARY OF PLAN PROVISIONS**

Interest:	8.00%
Salary:	5.00%
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.

**Note:** The summary of major plan provision 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.

**15. Deferred Retirement Option Program**

A deferred retirement option plan (DROP) was created and offered to members as an alternative method of benefit accrual. Any member who is eligible for a service retirement is eligible to participate in DROP.

A member who is participating 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).

**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 2010 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).