



San Diego City Employees' Retirement System

City of San Diego

**Actuarial Valuation
as of June 30, 2014**

Produced by Cheiron

February 2015

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LETTER OF TRANSMITTAL

February 26, 2015

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

Re: San Diego City Employees' Retirement System June 30, 2014 Actuarial Valuation

Dear Members of the Board:

At your request, we have performed the June 30, 2014 Actuarial Valuation of the San Diego City Employees' Retirement System (SDCERS). The valuation results with respect to the City of San Diego (City) are contained in this valuation report. The table below presents the key results of the valuation for the City.

Table I-1			
SDCERS - City of San Diego			
Valuation as of:	June 30, 2014		June 30, 2013
Unfunded Actuarial Liability (in millions)	\$	2,030.1	\$ 2,237.7
Funding Ratio		74.2%	70.4%
City Contribution Rate		60.12%	59.55%
	Fiscal Year 2016		Fiscal Year 2015
Actuarially Determined Contribution (in millions)			
-if paid at the beginning of the year	\$	254.9	\$ 263.6
-if paid throughout the year	\$	263.9	\$ 272.9

- *Unfunded Actuarial Liability (UAL):* The City's UAL has decreased by \$207.6 million. Just under half of this decrease was expected to occur and the balance of the decrease was attributable to a net experience gain, primarily driven by investment returns in excess of our 7.25% assumption.
- *Funding Ratio:* The ratio of the System's actuarial value of assets to its actuarial liabilities improved by 3.8%, from 70.4% to 74.2%, again due primarily to investment gains over the assumed return.
- *Contributions (ADC):* The City's actuarially determined contribution (ADC) dropped by \$8.7 million. This decrease was attributable to the investment gain (\$13.9 million) which more than offset a small liability loss (\$3.9 million) and the recognition of \$4.2 million of administrative expenses, which represents a 3-year phase-in of such expenses.

More details on plan experience for previous plan years and projections into the future can be found in the valuation report. This valuation was prepared using census data and financial information as of the valuation date, June 30, 2014. Changes in membership and investment experience following that date are not reflected in this report.

In preparing our report, we relied on information (some oral and some written) supplied by SDCERS' staff. This information includes, but is not limited to, plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice Number 23.

To the best of our knowledge, this report and its contents have 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 of Practice set out by the Actuarial Standards Board. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained in this report. This report does not address any contractual or legal issues. We are not attorneys and our firm does not provide any legal services or advice.

Finally, this report was prepared exclusively for the San Diego City Employees' Retirement System for the purpose described herein and for the use by the plan auditor in completing an audit related to the matters herein. This report is not intended to benefit any third party, and Cheiron assumes no duty or liability to any such party.

Sincerely,
Cheiron



Gene Kalwarski, FSA, EA, MAAA
Principal Consulting Actuary



David Holland, FSA, EA, MAAA
Consulting Actuary

cc: Alice Alsberghe, ASA

**SDCERS-CITY OF SAN DIEGO
ACTUARIAL VALUATION AS OF JUNE 30, 2014**

**SECTION I
BOARD SUMMARY**

The primary purpose of the actuarial valuation is to disclose, as of the valuation date, on the following:

- The financial condition of the SDCERS-City of San Diego Defined Benefit Plan,
- Past and expected trends in the financial condition of SDCERS-City of San Diego,
- The City's Actuarially Determined Contribution for Fiscal Year 2016, and
- Information required for the Comprehensive Annual Financial Report (CAFR).

In this Section, we present a summary of the principal valuation results. This summary includes the basis upon which the June 30, 2014 valuation was completed and an examination of the current financial condition of SDCERS-City of San Diego. In addition, we present a review of the key historical trends followed by the projected financial outlook for SDCERS-City of San Diego.

A. Valuation Basis

Effective with the June 30, 2014 valuation, GASB disclosures (67 and 68, previously 25 and 27) have been removed from the actuarial valuation report. GASB disclosures are now presented in a stand-alone report, which was issued in October 2014. A number of exhibits have been removed from last year's report Section V, Accounting Statement Information, which has been renamed Comprehensive Annual Financial Report Information.

Prompted by the new standards set forth by GASB 67/68 and the Actuarial Standards Board, in January 2015 the Board voted to account for expected administrative expenses explicitly in the actuarially determined contribution (ADC). The administrative expense component is \$4.2 million for FY 2016, based on a three-year phase-in of \$12.5 million in assumed expenses. The development of this component of the ADC is shown in Table IV-1. All other assumptions and methods are the same as the prior valuation. More details can be found in Appendix B.

SDCERS was closed to new City employees (except for Police) effective July 20, 2012, as a result of Proposition B. The non-Police portion of the UAL as of June 30, 2012 is being amortized in level dollar amounts over a closed 15-year period. Subsequent gains and losses are being amortized over new 15-year periods in accordance with the System's funding policy, also in level dollar amounts. The portion of the UAL associated with the Police Plan will continue to be amortized in layers as a level percentage of pay.

Throughout this report there will be references to "Old Plan," "2009 Plan," "2011 Plan," "2012 Plan," "2012 No COL Plan," and "Prop B Plan" which distinguish each membership category's various benefit tiers according to their effective dates. In the 2014 valuation, one additional tier was added, a Police-Prop B Plan for Police Members hired on or after July 1, 2013. More details on the plan provisions for all tiers can be found in Appendix C.

**SDCERS-CITY OF SAN DIEGO
ACTUARIAL VALUATION AS OF JUNE 30, 2014**

**SECTION I
BOARD SUMMARY**

B. Current Financial Condition of SDCERS-City of San Diego

The following discussion summarizes the key results of the June 30, 2014 valuation and how they compare to the results from the June 30, 2013 valuation.

1. City Membership

Table I-2 shows that total membership in SDCERS-City of San Diego remained steady, with an increase of 0.1% from 2013 to 2014. However, there was movement from active and terminated vested to retiree status, with a 6.2% increase in retirees and decreases of 3.9% and 1.7% for active and terminated vested participants, respectively. Expected active member payroll decreased by 3.8%, and the average pay per active member increased by 0.1%. Since the Plan is closed to non-Police new hires, continued decreases in active member counts and total payroll are to be expected.

Note: The payroll figures shown below are the expected amounts for the fiscal year beginning July 1, 2014. The figures shown in Appendix A are the actual pensionable compensation for the fiscal year ending June 30, 2014.

Table I-2				
SDCERS - City of San Diego - Membership Total				
Valuation as of:	June 30, 2014	June 30, 2013	% Change	
Active Counts	7,272	7,566	-3.9%	
Terminated Vested	2,920	2,971	-1.7%	
Disabled	1,197	1,212	-1.2%	
Retirees	6,414	6,042	6.2%	
Beneficiaries	1,211	1,200	0.9%	
Total City Members	19,014	18,991	0.1%	
Active Member Payroll	\$ 480,535,973	\$ 499,463,072	-3.8%	
Average Pay per Active Member	\$ 66,080	\$ 66,014	0.1%	
Benefits in Pay Status	\$ 398,603,106	\$ 371,628,344	7.3%	
Average Benefit	\$ 45,183	\$ 43,959	2.8%	

**SDCERS-CITY OF SAN DIEGO
ACTUARIAL VALUATION AS OF JUNE 30, 2014**

**SECTION I
BOARD SUMMARY**

2. City Assets and Liabilities

Table I-3 presents a comparison between the June 30, 2014 and June 30, 2013 SDCERS-City of San Diego assets, liabilities, unfunded actuarial liability, and funding ratios.

The key results shown in Table I-3 indicate that due to the total actuarial liability increase of 4.0% and the actuarial value of assets increase of 9.6%, the funding ratio increased from 70.4% as of June 30, 2013 to 74.2% as of June 30, 2014. SDCERS employs a commonly used actuarial smoothing method on the market value that dampens market volatility, so the actuarial value of assets increased less than the market value (16.6%). Had the funding ratio been measured on a market value of assets basis, the ratio would be 80.1% as of June 30, 2014.

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

Table I-3				
SDCERS - City of San Diego - Assets & Liabilities				
Entry Age Normal (EAN) Liabilities	June 30, 2014	June 30, 2013	% Change	
Actives	\$ 2,275,740,035	\$ 2,275,193,142	0.0%	
Terminated Vested	278,692,976	304,783,508	-8.6%	
Disabled	460,414,291	459,745,043	0.1%	
Retirees	4,644,460,467	4,327,095,904	7.3%	
Beneficiaries	<u>199,395,610</u>	<u>188,709,141</u>	<u>5.7%</u>	
Total Actuarial (EAN) Liability	\$ 7,858,703,379	\$ 7,555,526,738	4.0%	
Actuarial Value Assets	\$ 5,828,593,547	\$ 5,317,778,092	9.6%	
Unfunded Actuarial Liability-Actuarial Value	\$ 2,030,109,833	\$ 2,237,748,646	-9.3%	
Funding Ratio-Actuarial Value	74.2%	70.4%	3.8%	
Market Value Assets	\$ 6,292,855,000	\$ 5,395,158,000	16.6%	
Unfunded Actuarial Liability-Market Value	\$ 1,565,848,379	\$ 2,160,368,738	-27.5%	
Funding Ratio-Market Value	80.1%	71.4%	8.7%	

**SDCERS-CITY OF SAN DIEGO
ACTUARIAL VALUATION AS OF JUNE 30, 2014**

**SECTION I
BOARD SUMMARY**

3. Components of UAL Change between June 30, 2013 and June 30, 2014

The unfunded actuarial liability (UAL) for SDCERS-City of San Diego decreased by \$207.6 million, from \$2,237.7 million to \$2,030.1 million. Table I-4 below presents the specific components of the change in the UAL.

The two largest components of the change in UAL were the investment experience gain, which decreased the UAL by \$131.8 million, and the liability experience loss, which increased the UAL by \$28.1 million. The primary components of the liability loss were mortality (Members living longer than expected) as well as retirement and termination experience different than expected.

Table I-4	
SDCERS - City of San Diego-Change in UAL	
(In Millions)	
1. UAL at June 30, 2013	\$ 2,237.7
2. Expected change in UAL*	(100.9)
3. Investment experience gain	
a. Anticipated loss/(gain)	(22.5)
b. Actual loss/(gain)	(154.3)
c. Difference (b - a)	(131.8)
4. Liability experience loss	28.1
5. Administrative expense	N/A
6. Employee contributions paid greater than expected	(3.1)
7. Other misc (includes purchased service)	0.1
8. Total change in UAL: sum of 2 through 7	(207.6)
9. UAL at June 30, 2014: 1 + 8	\$ 2,030.1

*Includes projected phase-in of asset gains or losses.

**SDCERS-CITY OF SAN DIEGO
ACTUARIAL VALUATION AS OF JUNE 30, 2014**

**SECTION I
BOARD SUMMARY**

4. City Contributions (ADC)

The City's actuarially determined contribution (ADC) for FY 2016 decreased by \$8.7 million, from \$263.6 million to \$254.9 million. The ADC was expected to decrease by \$2.6 million to \$261.0 million, assuming continued phase-in of investment experience from prior years, so the ADC of \$254.9 million is \$6.1 million less than expected.

The three largest factors impacting the ADC were the investment experience gain, which decreased the ADC by \$13.9 million, the liability experience loss, which increased the ADC by \$3.9 million, and the explicit recognition of administrative expenses, which added \$4.2 million. This administrative expense add-on to the ADC represents one-third of total expected administrative expenses. For FY 2017 there will be two-thirds recognition, and for all fiscal years following, 100% of the expected administrative expenses will be added to the ADC.

Table I-5 below presents the specific components of the change in the ADC. In Section IV we provide more detail on the development of this contribution.

Table I-5	
SDCERS - City of San Diego-Change in ADC	
(In Millions)	
1. ADC at June 30, 2013	\$ 263.6
2. Expected change in ADC*	(2.6)
3. Investment experience gain	
a. Anticipated increase/(decrease)	(2.4)
b. Actual increase/(decrease)	(16.3)
c. Difference (b - a)	(13.9)
4. Liability experience loss	3.9
5. Administrative expense	4.2
6. Employee contributions paid greater than expected	(0.3)
7. Other misc (includes purchased service)	0.0
8. Total change in ADC: sum of 2 through 7	(8.7)
9. ADC at June 30, 2014: 1 + 8	\$ 254.9

*Includes projected phase-in of asset gains or losses.

**SDCERS-CITY OF SAN DIEGO
ACTUARIAL VALUATION AS OF JUNE 30, 2014**

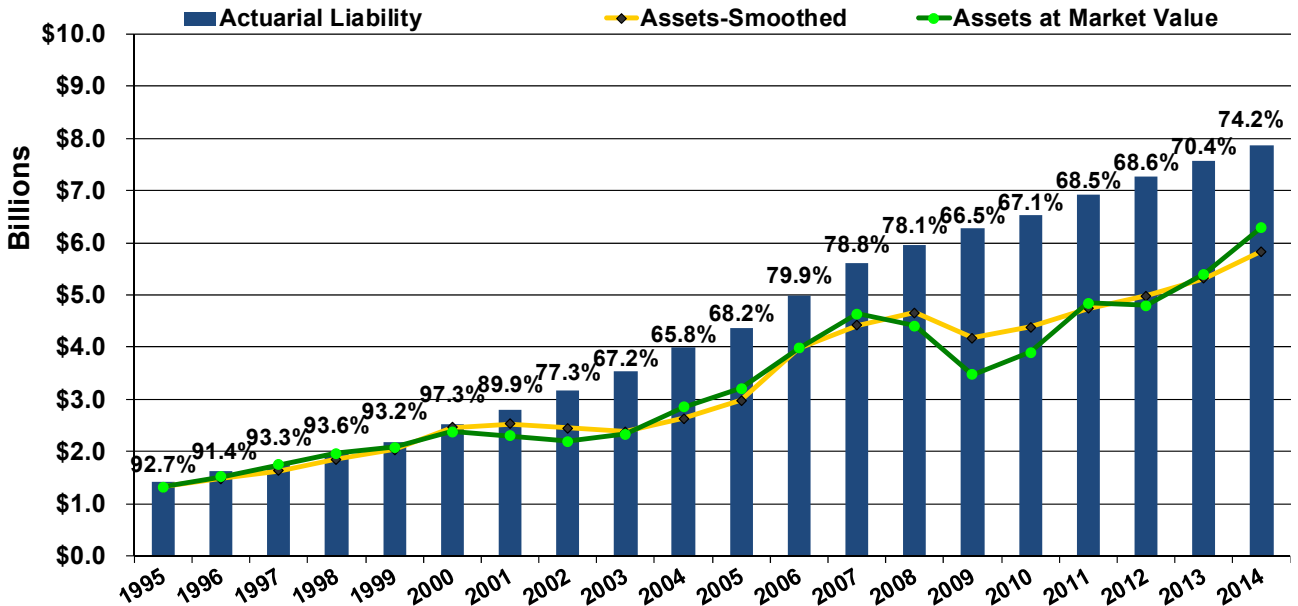
**SECTION I
BOARD SUMMARY**

C. Historical Trends for SDCERS-City of San Diego

Despite the primary focus given each year on the most recently computed unfunded actuarial liability (UAL), funding ratio, and City contribution (ADC), it is important to remember that each valuation is merely a snapshot of the long-term progress of a pension plan. It is more important to judge a current year's valuation results relative to historical trends, and trends expected into the future.

In the chart below, we present the historical trends of the market value and smoothed assets compared to actuarial liabilities and SDCERS-City of San Diego funding ratios since 1995.

SDCERS-City of San Diego Assets and Liabilities 1995-2014



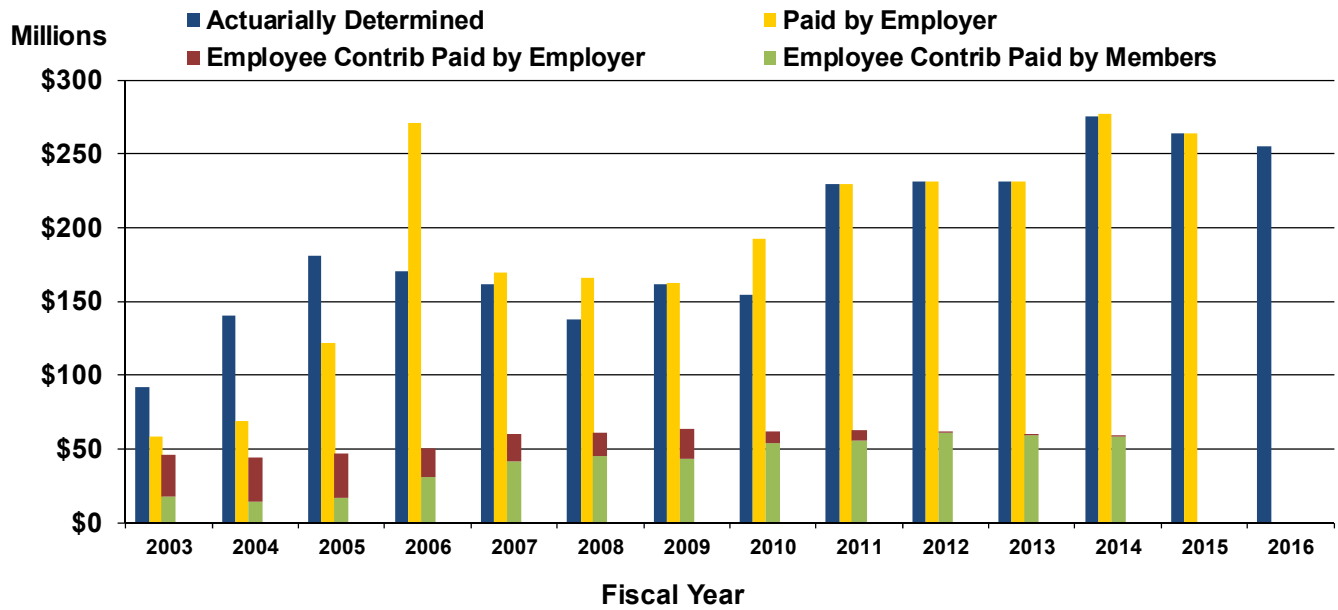
From a low of 65.8% in 2004, the funding ratio improved significantly over the next several years primarily due to strong investment performance. In 2009, the funding ratio declined significantly due to investment losses but has since been increasing steadily each year. As mentioned earlier, the funding ratios represent the ratio of the smoothed (actuarial) assets over the actuarial liabilities. If the market value of assets were used instead, the funding ratio as of June 30, 2014 reached 80.1%

**SDCERS-CITY OF SAN DIEGO
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**SECTION I
BOARD SUMMARY**

In the next chart below, we present the historical trends for the SDCERS-City of San Diego contributions: actual contributions made by the City and by the Members, and the actuarially computed contributions (previously the GASB ARC, but now referred to as the ADC).

SDCERS-City of San Diego City and Member Contribution Rates FY 2003-2016



This chart compares the actual contributions made by the City to the actuarially determined contributions (ADC) based on the Board’s adopted funding practice of Normal Cost plus amortization of the various UAL components, including the requirement beginning in FY 2009 that there be no negative amortization. The FY 2016 ADC also reflects a component for the 3-year phase-in of expected administrative expenses. The chart indicates that the City has been consistently paying at or above the ADC since FY 2006.

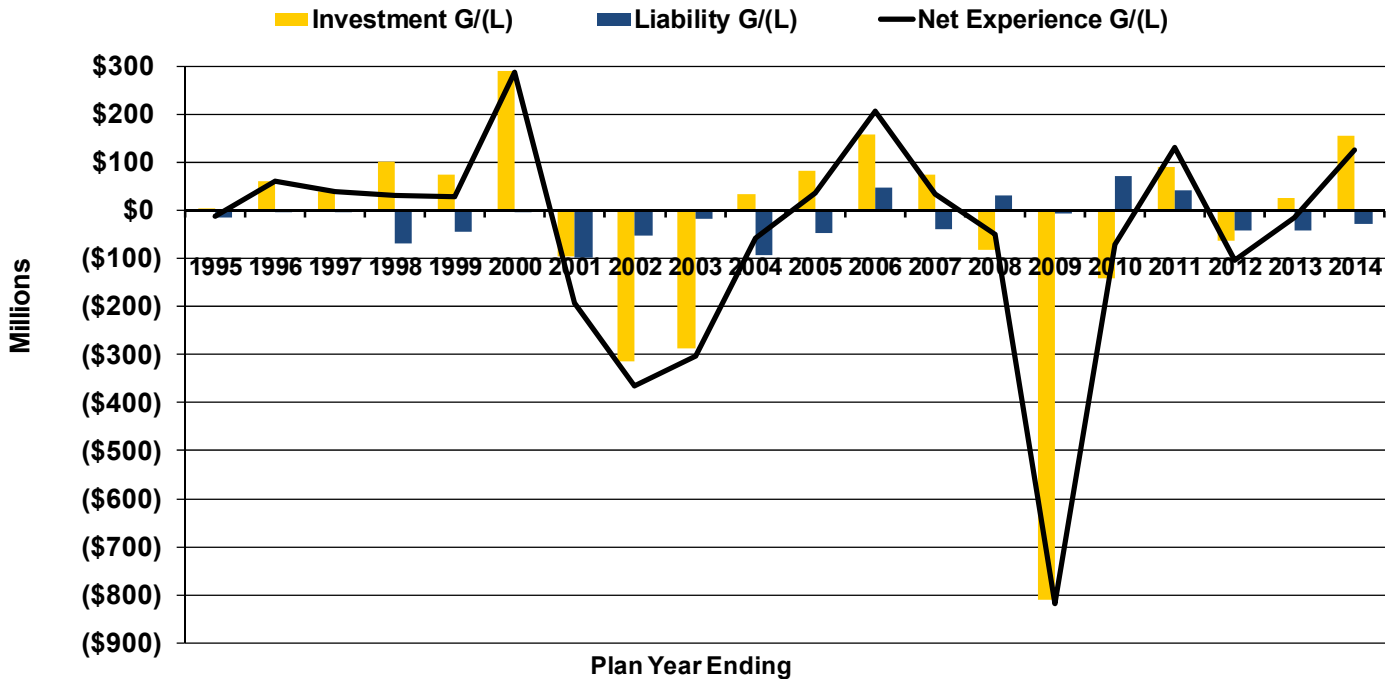
Employee contributions paid by the City and paid by the Members are also shown in this chart. In the earlier years a substantial portion of employee contributions were “offset” (paid for) by the City, but such offsets have disappeared almost completely in recent years.

**SDCERS-CITY OF SAN DIEGO
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**SECTION I
BOARD SUMMARY**

The chart below for SDCERS-City of San Diego presents the pattern of annual gains and losses, broken into the investment and liability components. The chart does not include any changes in SDCERS' assets and liabilities attributable to changes to actuarial methods, procedures or assumptions or plan benefit changes.

SDCERS-City of San Diego Historical Gain/(Loss) 1995-2014



The key insights from this chart are:

- The System experienced significant investment losses (gold bars) in 2002 and 2003, which were offset by investment gains from 2004 to 2007. However, the investment losses from 2008 through 2010 more than offset those gains.
- The investment loss in 2009 was by far the most significant gain or loss during the period shown.
- From 1995 to 2005 there was a pattern of liability losses. Since 2006 the liability experience has been more varied (small gains and small losses) each year, however, there have been losses in each of the past three years. The sources of these gains and losses will be explored in our next formal experience study, scheduled for 2016.

**SDCERS-CITY OF SAN DIEGO
ACTUARIAL VALUATION AS OF JUNE 30, 2014**

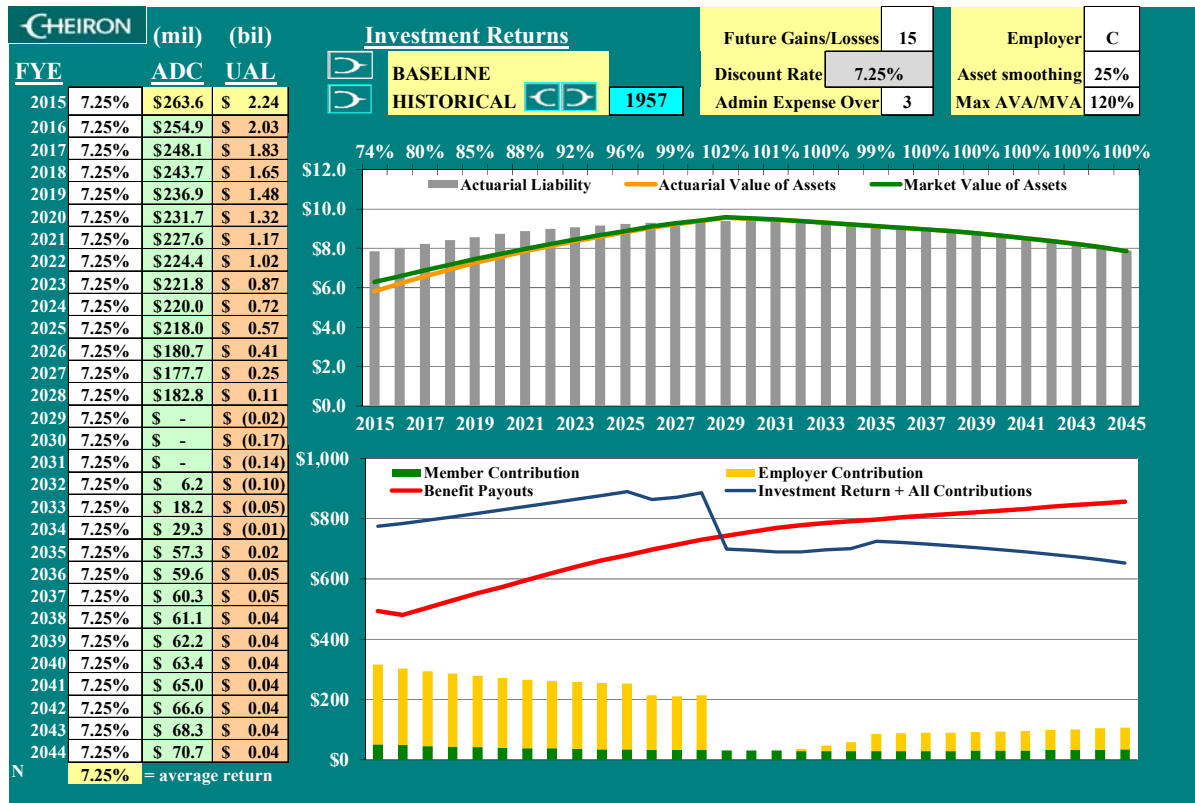
**SECTION I
BOARD SUMMARY**

D. Projected Financial Trends

Our analysis of SDCERS-City of San Diego projected financial trends is a very important part of this valuation. These projections based on the June 30, 2014 valuation results are presented in terms of benefit security (assets over liabilities) and the City's expected cost progression.

In the chart that follows, we project the SDCERS-City of San Diego assets and liabilities and the City's contributions assuming 7.25% returns each and every year and liability growth exactly as anticipated by the Plan assumptions. The upper chart compares the assets (green and yellow lines) and liabilities (gray bars) and the lower chart shows contributions in dollars (employer contributions in yellow bars and member contributions in green bars). The left side of the exhibit shows the returns assumed each year followed by the annual ADC and UAL in dollar amounts.

SDCERS-City of San Diego Projections FY 2015-2045 (earnings as assumed)



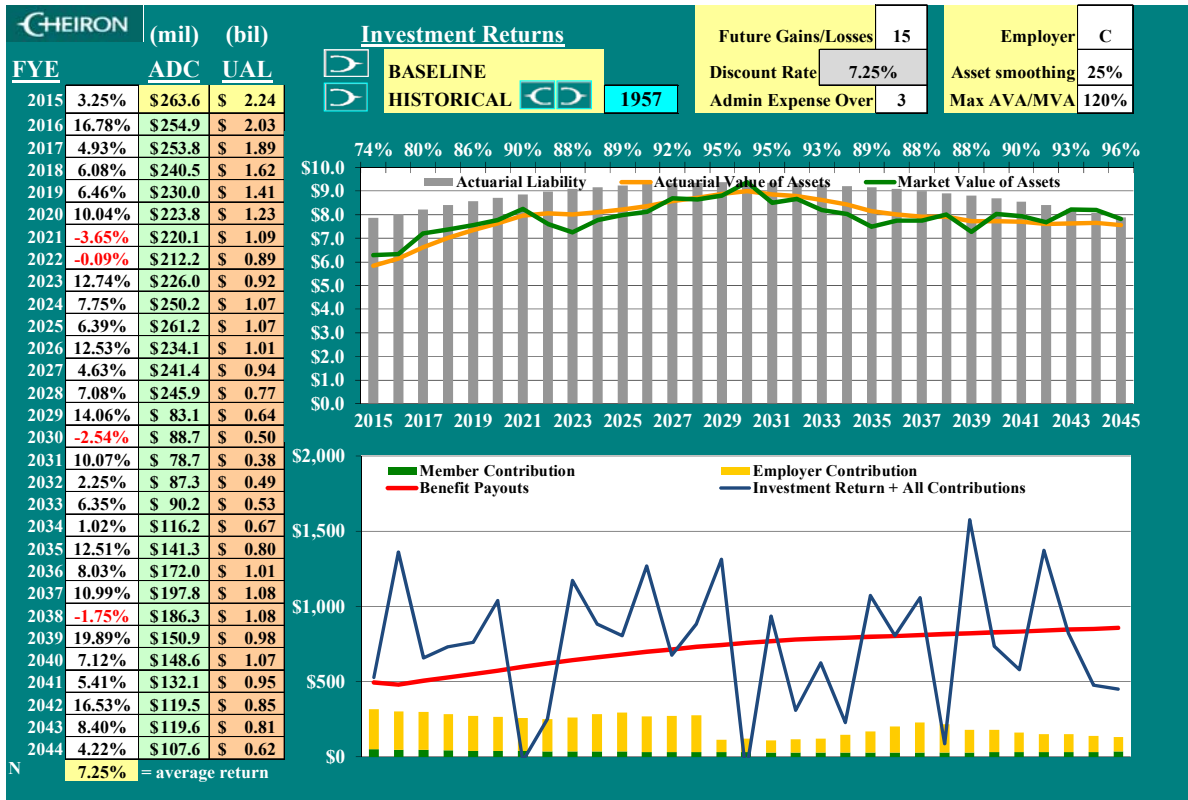
Based on assuming 7.25% earnings each and every year, the City's funded status (percentages at the top of the upper graph) is ultimately projected to reach 100% by the year 2028. The Plan's assets and liabilities peak around that time period, and then begin to decline. This is primarily due to the closure of the non-Police portion of the Plan to new hires. The City's ADC is projected to gradually decrease from approximately \$255 million to \$180 million in 2028. It then drops to \$0 for several years as the Plan is beyond full funding and the net amortization payment is negative, temporarily offsetting expected normal cost and expenses. As several of the Plan's significant gains are fully recognized and the surplus is depleted by the absence of employer contributions, the ADC payments resume.

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ACTUARIAL VALUATION AS OF JUNE 30, 2014**

**SECTION I
BOARD SUMMARY**

However, it is very important to note that these projections, while valid as baseline projections, **are not going to occur** as experience never conforms exactly to assumptions from year to year. As a result, we present the following additional stress testing projection based on assuming varying returns in the future, which are approximately 7.25% on average.

SDCERS-City of San Diego Projections FY 2015-2045 (earnings which vary by year)



With varying annual earnings that average over the period to approximately 7.25%, one can see the volatility in the funding ratios in the top chart and the employer contributions in the bottom chart. Note that this chart reflects an illustrative scenario and is not intended to reflect future expectations.

This last chart demonstrates the risks faced by SDCERS measured in terms of funding ratios and contributions. Whether the System is fully funded or poorly funded, subsequent returns can quickly alter the financial position of the Plan dramatically. It is impossible to judge the financial soundness of a System with a single year point measurement. What is more important to consider is the System's level of conservatism in funding the Plan, and the discipline and ability of the plan sponsor to consistently contribute the ADC as determined by the plan actuary.

**SDCERS-CITY OF SAN DIEGO
ACTUARIAL VALUATION AS OF JUNE 30, 2014**

**SECTION II
ASSETS**

Like other public pension plans, SDCERS uses two different asset measurements that are presented in this section: 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 smooths 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 San Diego Unified Port District, and the San Diego County Regional Airport Authority is included.

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

- A. Disclosure of the June 30, 2014 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; and
- D. Disclosure of the investment performance for the year.

**SDCERS-CITY OF SAN DIEGO
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**SECTION II
ASSETS**

A. Disclosure of Market Value of Assets

The market value of assets represents a “snap-shot” value as of June 30, 2014, 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, 2014.

Cash	\$ 240,528,000
US Stocks	1,703,423,000
International Stocks	1,626,092,000
Private Equity	380,975,000
Bonds	2,225,269,000
Real Estate	744,441,000
Receivables	63,615,000
Miscellaneous	6,954,000
Accounts Payable	<u>(205,968,000)</u>
Market Value of Assets – June 30, 2014	\$ 6,785,329,000

**SDCERS-CITY OF SAN DIEGO
ACTUARIAL VALUATION AS OF JUNE 30, 2014**

**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. Administrative expenses are allocated based on the proportion of participants of a participating trust to the number of total participants of all participating trusts on the first day of the plan year. Table II-2 below discloses the market value and actuarial value of assets by Plan.

Table II-2			
Summary of Market and Actuarial Assets for Each Employer Group as of June 30, 2014			
	<u>Market Value</u> Total Net Assets June 30, 2013	<u>Market Value</u> Total Net Assets June 30, 2014	<u>Actuarial Value</u> Total Assets June 30, 2014
City of San Diego	\$ 5,395,158,000	\$ 6,292,855,000	\$ 5,828,593,547
Unified Port District	309,699,000	362,246,000	333,228,645
Airport Authority	<u>108,456,000</u>	<u>130,228,000</u>	<u>121,917,825</u>
Total-SDCERS	\$ 5,813,313,000	\$ 6,785,329,000	\$ 6,283,740,017

**SDCERS-CITY OF SAN DIEGO
ACTUARIAL VALUATION AS OF JUNE 30, 2014**

**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, 2014 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 greater than 120% of the market value of assets.

Table II-3 SDCERS - City of San Diego Development of Actuarial Value of Assets at June 30, 2014 Expected Value of Assets Method	
1. Actuarial Value of Assets at June 30, 2013	\$ 5,317,778,092
2. Amount in (1) with interest at 7.25% to June 30, 2014	5,703,317,004
3. Employer and Member contributions for the Plan Year ended June 30, 2014	345,125,000
4. Disbursements from Trust excluding investment expenses, June 30, 2013 through June 30, 2014	382,480,000
5. Interest on cash flows to June 30, 2014 at 7.25% per year	7,877,725
6. Expected Actuarial Value of Assets at June 30, 2014 = (2) + (3) – (4) + (5)	5,673,839,729
7. Actual Market Value of Assets at June 30, 2014	6,292,855,000
8. Excess of (7) over (6)	619,015,271
9. Preliminary Actuarial Value of Assets at June 30, 2014 = (6) + 25% of (8)	\$ 5,828,593,547
10. 80% Minimum Corridor on the Actuarial Value of Assets = 80% of (7)	5,034,284,000
11. 120% Maximum Corridor on the Actuarial Value of Assets = 120% of (7)	7,551,426,000
12. Final Actuarial Value of Assets at June 30, 2014 = (9), but no less than (10) and no more than (11)	\$ 5,828,593,547

**SDCERS-CITY OF SAN DIEGO
ACTUARIAL VALUATION AS OF JUNE 30, 2014**

**SECTION II
ASSETS**

D. Investment Performance

The return on the market value of assets, as reported by SDCERS' investment consultant Hewitt Ennis Knupp, was 16.8%. The return in FY 2013 was 13.6%.

On an actuarial (smoothed) value of assets basis, the return for FY 2014 was 10.35%. This return produced for SDCERS-All Employers an overall investment gain of \$166.7 million for the year ending June 30, 2014. (Note: this reported gain is different than the investment gain of \$154.3 million reported in Table I-4 of this report. \$154.3 million is the gain only for SDCERS-City).

SECTION III LIABILITIES

In this section, we present detailed information on liabilities for SDCERS-City of San Diego, including:

- Disclosure of liabilities at June 30, 2013 and June 30, 2014, 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. 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:** 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. Tables III-2 through III-4 break down these liabilities by tier. Subtracting the actuarial value of assets from the actuarial liability results in a net surplus or an unfunded actuarial liability (UAL). Table III-5 discloses the third of these liabilities, present value of accrued benefits, for the current and prior year valuations.

**SDCERS-CITY OF SAN DIEGO
ACTUARIAL VALUATION AS OF JUNE 30, 2014**

**SECTION III
LIABILITIES**

Table III-1			
SDCERS - City of San Diego - Total			
Valuation as of:	June 30, 2014		June 30, 2013
Present Value of Future Benefits			
Actives	\$ 2,928,505,089	\$	2,949,691,756
Terminated Vested	278,692,976		304,783,508
Disabled	460,414,291		459,745,043
Retirees	4,644,460,467		4,327,095,904
Beneficiaries	199,395,610		188,709,141
Total City	\$ 8,511,468,433	\$	8,230,025,352
Actuarial Liability - EAN			
Total Present Value of Future Benefits	\$ 8,511,468,433	\$	8,230,025,352
Present Value of Future Normal Costs			
Employer Portion	315,320,118		324,133,102
Employee Portion	337,444,935		350,365,512
Actuarial Liability - EAN	\$ 7,858,703,380	\$	7,555,526,738
Actuarial Value of Assets	\$ 5,828,593,547	\$	5,317,778,092
Unfunded EAN Actuarial Liability	\$ 2,030,109,833	\$	2,237,748,646

Table III-2 shows the actuarial liability as of June 30, 2014 for General and Elected Members of SDCERS-City of San Diego.

Table III-2				
SDCERS - City of San Diego - General & Elected as of June 30, 2014				
	Total	General-Old	General-2009	Elected
Present Value of Future Benefits				
Actives	\$ 1,647,374,335	\$ 1,589,861,613	\$ 55,557,104	\$ 1,955,618
Terminated Vested	213,319,614	211,582,873	1,260,361	476,380
Disabled	91,392,227	91,392,227	-	-
Retirees	2,320,081,943	2,311,867,038	-	8,214,905
Beneficiaries	85,679,467	84,986,026	-	693,441
Total City General & Elected	\$ 4,357,847,587	\$ 4,289,689,777	\$ 56,817,465	\$ 11,340,344
Actuarial Liability - EAN				
Actives	\$ 1,333,843,955	\$ 1,319,908,411	\$ 12,962,333	\$ 973,211
Terminated Vested	213,319,614	211,582,873	1,260,361	476,380
Disabled	91,392,227	91,392,227	-	-
Retirees	2,320,081,943	2,311,867,038	-	8,214,905
Beneficiaries	85,679,467	84,986,026	-	693,441
Total City General & Elected	\$ 4,044,317,207	\$ 4,019,736,575	\$ 14,222,694	\$ 10,357,937

**SDCERS-CITY OF SAN DIEGO
ACTUARIAL VALUATION AS OF JUNE 30, 2014**

**SECTION III
LIABILITIES**

Table III-3 shows the actuarial liability as of June 30, 2014 for Police Members of SDCERS-City of San Diego.

Table III-3						
SDCERS - City of San Diego - Police as of June 30, 2014						
	Total	Police-Old	Police-2009	Police-2012	Police-2012 No COL	Police-Prop B
Present Value of Future Benefits						
Actives	\$ 872,864,865	\$ 806,265,807	\$ 30,563,937	\$ 7,204,068	\$ 17,110,456	\$ 11,720,597
Terminated Vested	59,020,333	58,514,037	354,862	41,045	107,876	2,513
Disabled	249,543,489	249,543,489	-	-	-	-
Retirees	1,455,036,991	1,455,036,991	-	-	-	-
Beneficiaries	76,668,221	76,668,221	-	-	-	-
Total City Safety	\$ 2,713,133,899	\$ 2,646,028,545	\$ 30,918,799	\$ 7,245,113	\$ 17,218,332	\$ 11,723,110
Actuarial Liability - EAN						
Actives	\$ 632,938,595	\$ 622,478,324	\$ 7,952,747	\$ 1,133,630	\$ 1,347,666	\$ 26,228
Terminated Vested	59,020,332	58,514,037	354,862	41,045	107,876	2,513
Disabled	249,543,489	249,543,489	-	-	-	-
Retirees	1,455,036,991	1,455,036,991	-	-	-	-
Beneficiaries	76,668,221	76,668,221	-	-	-	-
Total City Safety	\$ 2,473,207,627	\$ 2,462,241,061	\$ 8,307,609	\$ 1,174,675	\$ 1,455,542	\$ 28,741

**SDCERS-CITY OF SAN DIEGO
ACTUARIAL VALUATION AS OF JUNE 30, 2014**

**SECTION III
LIABILITIES**

Table III-4 shows the actuarial liability as of June 30, 2014 for Fire and Lifeguard Members of SDCERS-City of San Diego.

Table III-4				
SDCERS - City of San Diego - Fire and Lifeguard as of June 30, 2014				
	Total	Fire-Old	Fire-2012	Lifeguard
Present Value of Future Benefits				
Actives	\$ 408,265,890	\$ 367,322,610	\$ 419,760	\$ 40,523,520
Terminated Vested	6,353,030	5,597,239	-	755,791
Disabled	119,478,575	107,403,228	-	12,075,347
Retirees	869,341,533	816,743,656	-	52,597,877
Beneficiaries	37,047,922	36,417,507	-	630,415
Total City Safety	\$ 1,440,486,949	\$ 1,333,484,240	\$ 419,760	\$ 106,582,950
Actuarial Liability - EAN				
Actives	\$ 308,957,487	\$ 278,572,239	\$ 26,423	\$ 30,358,825
Terminated Vested	6,353,030	5,597,239	-	755,791
Disabled	119,478,575	107,403,228	-	12,075,347
Retirees	869,341,533	816,743,656	-	52,597,877
Beneficiaries	37,047,922	36,417,507	-	630,415
Total City Safety	\$ 1,341,178,547	\$ 1,244,733,869	\$ 26,423	\$ 96,418,255

Table III-5 shows the present value of accrued benefits as of June 30, 2014 for all Members of SDCERS-City of San Diego.

Table III-5				
SDCERS - City of San Diego - Present Value of Accrued Benefits				
	Valuation as of:	June 30, 2014	June 30, 2013	% Change
Present Value of Accrued Benefits				
1. Present Value of Benefits Accrued and Vested to Date				
a. Members Currently Receiving Payments		\$ 5,304,270,368	\$ 4,975,550,088	6.6%
b. Vested Terminated and Inactive Members		278,692,976	304,783,508	-8.6%
c. Active Members		<u>1,854,591,733</u>	<u>1,895,038,471</u>	<u>-2.1%</u>
d. Total PVAB		\$ 7,437,555,076	\$ 7,175,372,068	3.7%
2. Assets at Market Value		\$ 6,292,855,000	\$ 5,395,158,000	16.6%
3. Unfunded Present Value of Accrued Benefits, But Not Less Than Zero		\$ 1,144,700,076	\$ 1,780,214,068	
4. Ratio of Assets to Value of Benefits (2)/(1)(d)		84.61%	75.19%	9.4%

**SDCERS-CITY OF SAN DIEGO
ACTUARIAL VALUATION AS OF JUNE 30, 2014**

**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-6		
Development of 2014 Experience Gain/(Loss) SDCERS - City of San Diego		
(In Millions)		
1. Unfunded Actuarial Liability at June 30, 2013	\$	2,237.7
2. Beginning of year Unfunded Actuarial Liability payment		(224.4)
3. Interest accrued ((1+2) x 7.25%)		<u>146.0</u>
4. Expected Unfunded Actuarial Liability at June 30, 2014 (1+2+3)		2,159.4
5. Actual Unfunded Liability at June 30, 2014		2,030.1
6. Difference: (4 - 5)		129.3
7. Portion of difference (6) due to actuarial assumption or method changes		-
8. Portion of difference (6) due to plan changes		-
9. Portion of difference (6) due to contributions greater than expected		3.1
10. Portion of difference (6) due to net experience Gain/(Loss)		126.2
a) portion of (10) due to investment experience	\$	154.3
b) portion of (10) due to liability experience	\$	(28.1)
c) portion of (10) due to service purchases	\$	(0.0)
Elements of Liability Gain/(Loss)		
1. G/(L) due to demographic and payroll experience		(28.1)
2. Other Gain/(Loss)		<u>-</u>
3. Total Estimated Liability Gain/(Loss): sum 1 and 2	\$	(28.1)

**SDCERS-CITY OF SAN DIEGO
ACTUARIAL VALUATION AS OF JUNE 30, 2014**

**SECTION III
LIABILITIES**

Table III-7 shows the history of past experience gains and losses.

Table III-7			
Experience Gain/(Loss) - Historical SDCERS - City of San Diego *			
Valuation		Beginning-of-Year	Gain/(Loss)
Date	Gain/(Loss)	Actuarial Liabilities	% of Liability
6/30/1992	\$ 57,952,320	\$ 1,006,299,729	5.8%
6/30/1993	(42,605,778)	1,057,238,917	(4.0)
6/30/1994	(6,744,850)	1,220,830,059	(0.6)
6/30/1995	(11,370,990)	1,338,279,541	(0.8)
6/30/1996	59,592,960	1,476,710,662	4.0
6/30/1997	38,473,993	1,682,604,532	2.3
6/30/1998	31,086,010	1,822,432,018	1.7
6/30/1999	* 29,750,299	1,979,668,038	1.5
6/30/2000	286,639,160	2,181,547,453	13.1
6/30/2001	(193,168,984)	2,528,773,900	(7.6)
6/30/2002	(364,815,155)	2,809,537,745	(13.0)
6/30/2003	(303,699,305)	3,168,921,175	(9.6)
6/30/2004	(58,123,874)	3,532,625,521	(1.6)
6/30/2005	36,775,882	3,997,328,084	0.9
6/30/2006	205,249,486	4,377,092,948	4.7
6/30/2007	35,189,811	4,982,699,455	0.7
6/30/2008	(49,930,537)	5,597,652,861	(0.9)
6/30/2009	(818,906,079)	5,963,549,545	(13.7)
6/30/2010	(71,030,037)	6,281,636,108	(1.1)
6/30/2011	130,020,025	6,527,223,751	2.0
6/30/2012	(102,581,872)	6,917,175,002	(1.5)
6/30/2013	(16,759,103)	7,261,730,655	(0.2)
6/30/2014	126,171,209	7,555,526,738	1.7

* Beginning with the June 30, 1999 valuation, experience is City only. The prior years include all employers.

**SDCERS-CITY OF SAN DIEGO
ACTUARIAL VALUATION AS OF JUNE 30, 2014**

**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 the funding method, there are three components to the total contribution: the normal cost, an amortization payment on the unfunded actuarial liability, and the expected administrative expenses. The normal cost for an individual employee is the ratio of their present value of future benefits to present value of future salaries at entry age, multiplied by their valuation salary. The gross normal cost rate for each sub-group is determined by dividing the sum of the individual normal costs by the total valuation salary for that sub-group. The gross normal cost rate is then reduced by the average employee contribution rate to determine the employer normal cost rate. Finally, the employer normal cost rate for each sub-group is multiplied by that group's projected FY 2016 payroll to determine the normal cost component of the FY 2016 ADC.

The EAN actuarial liability is the Plan's total present value of future benefits minus the total present value of future normal costs. The difference between the EAN actuarial liability and the actuarial value of assets is the unfunded actuarial liability. The UAL for FY 2016 is to be amortized over several different periods. Table IV-2 shows the outstanding balance, the FY 2016 payment and the remaining amortization period for each of these components. If necessary, there is an additional UAL cost component to ensure that there is no negative amortization in any year.

Beginning with the June 30, 2012 valuation, the non-Police portion of the UAL has been amortized in level dollar amounts, due to the closure of that portion of the plan to new hires. The portion of the UAL associated with the open Police Plans continues to be amortized as a level percentage of pay.

In January 2015 the Board voted to account for expected administrative expenses explicitly in the actuarially determined contribution (ADC). The administrative expense component is \$4.2 million for FY 2016, based on a three-year phase-in of \$12.5 million in expected expenses. For FY 2017 there will be two-thirds recognition, and for all fiscal years following, 100% of the expected administrative expenses will be added to the ADC.

Table IV-1 on the following page shows how the City's contribution rate for SDCERS for FY 2016 is developed.

**SDCERS-CITY OF SAN DIEGO
ACTUARIAL VALUATION AS OF JUNE 30, 2014**

**SECTION IV
CONTRIBUTIONS**

**Table IV-1
SDCERS - City of San Diego
Development of the City's Contribution as of June 30, 2014, For (FY 2016)
(dollars in millions)**

	WEIGHTED TOTAL CITY	Non-Safety				Safety								
		Weighted Total	General Old Plan	General 2009 Plan	Elected	Weighted Total	Police Old	Police 2009	Police 2012	Police 2012 No COL	Police Prop B	Fire Old	Fire 2012	Lifeguard
1. Total Normal Cost Rate as of June 30, 2014	21.37%	17.57%	17.81%	15.33%	36.10%	27.63%	27.75%	26.92%	26.25%	25.72%	26.07%	27.86%	29.22%	27.94%
2. Member Contribution Rate as of June 30, 2014	11.08%	9.13%	9.35%	7.35%	9.05%	14.29%	14.46%	13.45%	13.42%	11.13%	11.41%	14.73%	14.47%	14.46%
3. Employer Normal Cost Rate as of June 30, 2014 (1-2)	10.29%	8.44%	8.46%	7.98%	27.05%	13.34%	13.29%	13.47%	12.83%	14.59%	14.66%	13.13%	14.75%	13.48%
4. Actuarial Liability	\$ 7,858.7	\$ 4,044.3	\$ 4,019.7	\$ 14.2	\$ 10.4	\$ 3,814.4	\$ 2,462.2	\$ 8.3	\$ 1.2	\$ 1.5	\$ 0.0	\$ 1,244.7	\$ 0.0	\$ 96.4
5. Actuarial Assets	\$ 5,828.6	\$ 3,007.3	\$ 2,989.0	\$ 10.6	\$ 7.7	\$ 2,821.3	\$ 1,816.0	\$ 6.1	\$ 0.9	\$ 1.1	\$ 0.0	\$ 925.6	\$ 0.0	\$ 71.7
6. Total Unfunded Actuarial Liability (UAL) (4-5)*	\$ 2,030.1	\$ 1,037.1	\$ 1,030.8	\$ 3.6	\$ 2.7	\$ 993.1	\$ 646.3	\$ 2.2	\$ 0.3	\$ 0.4	\$ 0.0	\$ 319.2	\$ 0.0	\$ 24.7
7. Preliminary FY16 UAL amortization*	\$ 206.5	\$ 110.0	\$ 109.3	\$ 0.4	\$ 0.3	\$ 96.5	\$ 59.7	\$ 0.2	\$ 0.0	\$ 0.0	\$ 0.0	\$ 33.9	\$ 0.0	\$ 2.6
8. <u>Negative Amortization Test for FY16</u>														
a. Total UAL on 6/30/14 less FY15 UAL payment	\$ 1,812.3	\$ 925.8	\$ 920.2	\$ 3.3	\$ 2.4	\$ 886.5	\$ 576.9	\$ 1.9	\$ 0.3	\$ 0.3	\$ 0.0	\$ 284.9	\$ 0.0	\$ 22.1
b. Interest on 8a. To 6/30/15	\$ 131.4	\$ 67.1	\$ 66.7	\$ 0.2	\$ 0.2	\$ 64.3	\$ 41.8	\$ 0.1	\$ 0.0	\$ 0.0	\$ 0.0	\$ 20.7	\$ 0.0	\$ 1.6
c. Preliminary FY16 UAL amortization (line 7)	\$ 206.5	\$ 110.0	\$ 109.3	\$ 0.4	\$ 0.3	\$ 96.5	\$ 59.7	\$ 0.2	\$ 0.0	\$ 0.0	\$ 0.0	\$ 33.9	\$ 0.0	\$ 2.6
d. Negative interest (8b - 8c, not less than zero)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9. Total FY16 UAL payment on 7/01/15 (8c + 8d)	\$ 206.5	\$ 110.0	\$ 109.3	\$ 0.4	\$ 0.3	\$ 96.5	\$ 59.7	\$ 0.2	\$ 0.0	\$ 0.0	\$ 0.0	\$ 33.9	\$ 0.0	\$ 2.6
10. Total FY16 UAL payment throughout year	\$ 213.8	\$ 113.9	\$ 113.2	\$ 0.4	\$ 0.3	\$ 99.9	\$ 61.8	\$ 0.2	\$ 0.0	\$ 0.0	\$ 0.0	\$ 35.1	\$ 0.0	\$ 2.7
11. Total Expected Payroll for FY16	\$ 439.0	\$ 263.8	\$ 233.1	\$ 30.2	\$ 0.5	\$ 175.2	\$ 93.7	\$ 7.8	\$ 2.1	\$ 5.5	\$ 16.8	\$ 44.2	\$ 0.1	\$ 5.0
12. FY16 Normal Cost paid throughout the year	\$ 45.8	\$ 22.3	\$ 19.7	\$ 2.4	\$ 0.1	\$ 23.5	\$ 12.5	\$ 1.1	\$ 0.3	\$ 0.8	\$ 2.5	\$ 5.8	\$ 0.0	\$ 0.7
13. FY16 Normal Cost paid at start of year	\$ 44.2	\$ 21.5	\$ 19.0	\$ 2.3	\$ 0.1	\$ 22.7	\$ 12.0	\$ 1.0	\$ 0.3	\$ 0.8	\$ 2.4	\$ 5.6	\$ 0.0	\$ 0.7
14. Administrative Expenses paid throughout the year**	\$ 4.3	\$ 2.3	\$ 2.2	\$ 0.0	\$ 0.0	\$ 2.1	\$ 1.2	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.7	\$ 0.0	\$ 0.1
15. Determination of FY16 ADC %														
a. Employer Normal Cost Rate (12 divided by 11)	10.43%	8.44%	8.46%	7.98%	27.05%	13.43%	13.29%	13.47%	12.83%	14.59%	14.66%	13.13%	14.75%	13.48%
b. UAL Rate (line 10 divided by line 11)	48.71%	43.19%	48.58%	1.33%	59.40%	57.01%	66.01%	2.66%	1.39%	0.66%	0.00%	79.30%	0.58%	54.33%
c. Admin Expense Rate (line 14 divided by line 11)	0.98%	0.86%	0.95%	0.15%	1.44%	1.17%	1.32%	0.27%	0.24%	0.25%	0.24%	1.54%	0.25%	1.13%
d. Total employer ADC % (15a + 15b + 15c)	60.12%	52.49%	57.98%	9.46%	87.90%	71.61%	80.62%	16.40%	14.46%	15.51%	14.90%	93.97%	15.59%	68.94%
16. Determination of FY16 ADC dollars														
a. FY16 ADC if paid throughout year	\$ 263.9	\$ 138.5	\$ 135.2	\$ 2.9	\$ 0.4	\$ 125.5	\$ 75.5	\$ 1.3	\$ 0.3	\$ 0.9	\$ 2.5	\$ 41.6	\$ 0.0	\$ 3.4
b. FY16 ADC if paid at beginning of year	\$ 254.9	\$ 133.7	\$ 130.5	\$ 2.8	\$ 0.4	\$ 121.2	\$ 72.9	\$ 1.2	\$ 0.3	\$ 0.8	\$ 2.4	\$ 40.1	\$ 0.0	\$ 3.3

* See Table IV-2 for components of these amounts.

** Administrative Expenses are to be phased-in over 3 years.

Note: Numbers may not add due to rounding.

SDCERS-CITY OF SAN DIEGO
ACTUARIAL VALUATION AS OF JUNE 30, 2014

**SECTION IV
CONTRIBUTIONS**

Table IV-2 shows information on each layer of the June 30, 2014 UAL.

Table IV-2							
SDCERS - City of San Diego							
Schedule of Amortization Bases as of July 1, 2014							
Used in Development of the City's Contribution for FY 2016							
Type of Base	Date Established	Initial Amount	Initial Amortization Years	July 1, 2014 Outstanding Balance	Outstanding Balance for FY 2016 (BOY)*	Remaining Amortization Years	Amortization Payment for FY 2016 (BOY)**
1. June 30, 2007 UAL	7/1/2007	\$ 1,184,242,049	20	\$ 357,596,760	\$ 348,957,584	13	\$ 33,291,920
2. Assumption Change	7/1/2008	83,787,434	30	30,560,090	30,792,387	24	1,910,265
3. Experience Loss	7/1/2008	13,564,981	15	3,988,497	3,774,135	9	484,983
4. Experience Loss	7/1/2009	810,661,179	15	247,954,570	236,970,629	10	27,894,031
5. Experience Loss	7/1/2010	25,942,732	15	8,187,137	7,888,748	11	859,106
6. Experience Gain***	7/1/2010	(50,000,000)	14	(14,235,199)	(13,604,606)	10	(1,601,411)
7. Experience Gain	7/1/2011	(141,139,563)	15	(45,642,278)	(44,281,193)	12	(4,498,149)
8. Assumption Change	7/1/2011	188,313,322	30	65,381,648	66,150,513	27	3,825,043
9. Experience Loss	7/1/2012	36,799,824	15	38,843,595	37,905,174	13	3,616,302
10. Method Change	7/1/2012	2,465,954	30	2,691,753	2,726,582	28	154,418
11. Non-Police UAL****	7/1/2012	1,564,122,860	15	1,487,828,492	1,423,010,922	13	161,011,781
12. Experience Loss	7/1/2013	25,877,674	15	27,753,805	26,846,778	14	2,747,034
13. Salary Freeze	7/1/2013	(194,945,486)	15	(209,079,034)	(202,041,607)	14	(20,855,800)
14. Assumption Change	7/1/2013	146,882,570	30	157,531,556	157,221,130	29	11,034,047
15. Experience Gain	7/1/2014	(129,251,561)	15	(129,251,561)	(138,622,299)	15	(13,400,109)
TOTAL				\$ 2,030,109,833	\$ 1,943,694,876		\$ 206,473,461

* July 1, 2014 outstanding balance adjusted to the FY2016 beginning of year (BOY), July 1, 2015.

** For bases established 7/1/2013 and after, payment reflects level percent of pay amortization for Police portion and level dollar amortization for non-Police portion.

*** Reduction in UAL from anticipated impact of PSC correction as of the June 30, 2010 valuation.

**** Entire non-Police UAL as of June 30, 2012. Other pre-2013 bases reflect amounts attributable to Police.

**SDCERS-CITY OF SAN DIEGO
ACTUARIAL VALUATION AS OF JUNE 30, 2014**

**SECTION V
COMPREHENSIVE ANNUAL FINANCIAL REPORT INFORMATION**

Effective with the June 30, 2014 valuation, GASB disclosures (67 and 68, previously 25 and 27) have been removed from the actuarial valuation report. GASB disclosures are now presented in a stand-alone report, which was issued in October 2014. A number of exhibits have been removed from this section as a result.

Tables V-1 and V-2 are exhibits required for the System'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 in the CAFR. Table V-1 presents an analysis of financial experience for the valuation year, and Table V-2 presents the Solvency Test which shows the portion of actuarial liability covered by assets.

Table V-1 SDCERS - City of San Diego 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	<i>Gain (or Loss) for Year ending June 30, 2014</i>
Investment Income	\$ 154,272,465
Combined Liability Experience	<u>(28,100,573)</u>
Gain (or Loss) During Year from Financial Experience	\$ 126,171,892
Non-Recurring Gain (or Loss) Items (e.g., Contributions, Assumption Changes)	<u>3,079,669</u>
Composite Gain (or Loss) During Year	\$ 129,251,561

**SDCERS-CITY OF SAN DIEGO
ACTUARIAL VALUATION AS OF JUNE 30, 2014**

**SECTION V
COMPREHENSIVE ANNUAL FINANCIAL REPORT INFORMATION**

**Table V-2
SDCERS - City of San Diego
SOLVENCY TEST
Actuarial Liabilities For
(\$ in thousands)**

Valuation Date June 30,	(A)	(B)	(C)	Reported Assets ¹	Portion of Actuarial Liabilities Covered by Reported Assets		
	Active Member Contributions	Retirees And Beneficiaries	Remaining Active Members' Liabilities		(A)	(B)	(C)
2014	\$ 741,628	\$ 5,304,270	\$ 1,812,805	\$ 5,828,594	100%	95.90%	0.00%
2013 ⁷	709,796	4,975,550	1,870,181	5,317,778	100	92.61	0.00
2012	662,488	4,625,110	1,974,133	4,982,442	100	93.40	0.00
2011 ⁶	627,447	4,344,218	1,945,510	4,739,399	100	94.65	0.00
2010	584,296	3,912,113	2,030,816	4,382,047	100	97.08	0.00
2009	535,797	3,673,185	2,072,655	4,175,229	100	99.08	0.00
2008 ⁵	522,966	3,286,668	2,153,916	4,662,346	100	100	39.50
2007 ⁴	482,526	3,101,594	2,013,532	4,413,311	100	100	41.19
2006 ³	456,562	2,822,203	1,703,935	3,981,932	100	100	41.27
2005	457,550	2,183,263	1,736,279	2,983,080	100	100	19.71
2004	414,986 ²	1,946,660	1,635,681	2,628,680	100	100	16.33

¹ Actuarial Value of Assets.

² Estimated.

³ Reflects contingent liabilities (Corbett pre-July 1, 2000 and 13th check), DROP reserves, supplemental COLA 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.

⁵ Reflects revised actuarial and economic assumptions.

⁶ Reflects revised actuarial and economic assumptions.

⁷ Reflects revised actuarial and economic assumptions.

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**APPENDIX A
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Table A-1 Reconciliation of Member Data Total SDCERS - City of San Diego								
	Active	Terminated Vested	Terminated Non-Vested	Disabled	Retired	Beneficiaries	DROP	Totals
Participants as of 7/1/2013	7,566	870	2,101	1,212	5,058	1,200	984	18,991
New Entrants	182	0	0	0	0	0	0	182
Returned to Work	103	(57)	(46)	0	0	0	0	0
Vested Terminations	(51)	60	(9)	0	0	0	0	0
Non-Vested Terminations	(102)	(25)	127	0	0	0	0	0
Retirements	(70)	(52)	(7)	0	369	0	(240)	0
DROP	(305)	(8)	0	0	0	0	313	0
Disabilities	(6)	0	(2)	16	(8)	0	0	0
New Continuants	0	0	0	0	0	93	0	93
New Dissolutions *	0	0	0	2	21	0	21	44
Benefits Ceased **	(3)	(1)	(5)	(32)	(103)	(71)	(2)	(217)
Lump Sum Cashout	(34)	(6)	(21)	0	0	0	0	(61)
Transferred Out	(5)	(1)	0	0	0	0	0	(6)
Miscellaneous Adjustments	(3)	0	2	(1)	1	(11)	0	(12)
Participants as of 7/1/2014	7,272	780	2,140	1,197	5,338	1,211	1,076	19,014

* Includes participants who may have previously had a frozen benefit and retired from a different plan.

** Includes deaths and benefits that were terminated or suspended.

Table A-2 Reconciliation of Member Data City General								
	Active	Terminated Vested	Terminated Non-Vested	Disabled	Retired	Beneficiaries	DROP	Totals
Participants as of 7/1/2013	5,338	702	1,707	411	3,449	711	546	12,864
New Entrants	93	0	0	0	0	0	0	93
Returned to Work	79	(43)	(36)	0	0	0	0	0
Vested Terminations	(43)	52	(9)	0	0	0	0	0
Non-Vested Terminations	(73)	(22)	95	0	0	0	0	0
Retirements	(55)	(40)	(7)	0	235	0	(133)	0
DROP	(194)	(5)	0	0	0	0	199	0
Disabilities	0	0	(2)	4	(2)	0	0	0
New Continuants	0	0	0	0	0	49	0	49
New Dissolutions *	0	0	0	2	14	0	18	34
Benefits Ceased **	(2)	(1)	(5)	(4)	(76)	(53)	(1)	(142)
Lump Sum Cashout	(24)	(5)	(19)	0	0	0	0	(48)
Transferred Out	(2)	(1)	0	0	0	0	0	(3)
Miscellaneous Adjustments	(2)	0	0	0	0	(5)	0	(7)
Participants as of 7/1/2014	5,115	637	1,724	413	3,620	702	629	12,840

* Includes participants who may have previously had a frozen benefit and retired from a different plan.

** Includes deaths and benefits that were terminated or suspended.

Table A-3 Reconciliation of Member Data City Safety								
	Active	Terminated Vested	Terminated Non-Vested	Disabled	Retired	Beneficiaries	DROP	Totals
Participants as of 7/1/2013	2,228	168	394	801	1,609	489	438	6,127
New Entrants	89	0	0	0	0	0	0	89
Returned to Work	24	(14)	(10)	0	0	0	0	0
Vested Terminations	(8)	8	0	0	0	0	0	0
Non-Vested Terminations	(29)	(3)	32	0	0	0	0	0
Retirements	(15)	(12)	0	0	134	0	(107)	0
DROP	(111)	(3)	0	0	0	0	114	0
Disabilities	(6)	0	0	12	(6)	0	0	0
New Continuants	0	0	0	0	0	44	0	44
New Dissolutions *	0	0	0	0	7	0	3	10
Benefits Ceased **	(1)	0	0	(28)	(27)	(18)	(1)	(75)
Lump Sum Cashout	(10)	(1)	(2)	0	0	0	0	(13)
Transferred Out	(3)	0	0	0	0	0	0	(3)
Miscellaneous Adjustments	(1)	0	2	(1)	1	(6)	0	(5)
Participants as of 7/1/2014	2,157	143	416	784	1,718	509	447	6,174

* Includes participants who may have previously had a frozen benefit and retired from a different plan.

** Includes deaths and benefits that were terminated or suspended.

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Table A-4 SDCERS - City of San Diego Active Member Data			
	June 30, 2014	June 30, 2013	% Change
<u>Total</u>			
Count	7,272	7,566	-3.9%
Average Current Age	44.7	44.5	0.5%
Average Service	13.4	13.3	1.1%
Average Pensionable Earnings	\$ 66,080	\$ 66,014	0.1%
Annual Pensionable Earnings	\$ 480,535,973	\$ 499,463,072	-3.8%
Average Valuation Compensation ¹	\$ 66,080	\$ 66,014	0.1%
Annual Valuation Compensation ¹	\$ 480,535,973	\$ 499,463,072	-3.8%
Service Without Permissive Service Purchased	12.7	12.5	1.7%
Members with Paid Purchased Service	1,485	1,620	-8.3%
Members with Any Purchased Service	1,539	1,685	-8.7%
Amount of Paid Purchased Service	5,086	5,755	-11.6%
Amount of Total Purchased Service	5,475	6,228	-12.1%
<u>General</u>			
Count	5,115	5,338	-4.2%
Average Current Age	46.7	46.4	0.6%
Average Service	13.9	13.6	2.2%
Average Pensionable Earnings	\$ 58,701	\$ 58,302	0.7%
Annual Pensionable Earnings	\$ 300,257,118	\$ 311,216,674	-3.5%
Average Valuation Compensation ¹	\$ 58,701	\$ 58,302	0.7%
Annual Valuation Compensation ¹	\$ 300,257,118	\$ 311,216,674	-3.5%
Service Without Permissive Service Purchased	13.0	12.6	3.2%
Members with Paid Purchased Service	1,168	1,281	-8.8%
Members with Any Purchased Service	1,180	1,299	-9.2%
Amount of Paid Purchased Service	4,312	4,907	-12.1%
Amount of Total Purchased Service	4,437	5,085	-12.7%
<u>Safety</u>			
Count	2,157	2,228	-3.2%
Average Current Age	39.9	39.8	0.3%
Average Service	12.3	12.6	-2.4%
Average Pensionable Earnings	\$ 83,579	\$ 84,491	-1.1%
Annual Pensionable Earnings	\$ 180,278,855	\$ 188,246,398	-4.2%
Average Valuation Compensation ¹	\$ 83,579	\$ 84,491	-1.1%
Annual Valuation Compensation ¹	\$ 180,278,855	\$ 188,246,398	-4.2%
Service Without Permissive Service Purchased	11.8	12.1	-2.5%
Members with Paid Purchased Service	317	339	-6.5%
Members with Any Purchased Service	359	386	-7.0%
Amount of Paid Purchased Service	773	848	-8.8%
Amount of Total Purchased Service	1,038	1,143	-9.1%

¹ The definition of valuation compensation differs from the definition of pensionable earnings due to IRS 401(a).

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Table A-5 SDCERS - City of San Diego Non-Active Participant Data							
	Count			Average Age			
	June 30, 2014	June 30, 2013	%Change	June 30, 2014	June 30, 2013	%Change	
Total							
Retired	6,414	6,042	6.2%	65.6	65.6	0.0%	
Disabled	1,197	1,212	-1.2%	65.4	65.0	0.7%	
Beneficiaries	<u>1,211</u>	<u>1,200</u>	<u>0.9%</u>	<u>74.2</u>	<u>74.2</u>	<u>0.0%</u>	
Payee Total	8,822	8,454	4.4%	66.7	66.7	0.0%	
DROP Participants	1,076	984	9.3%	56.8	56.9	-0.1%	
Deferred Vested ¹	2,920	2,971	-1.7%	46.7	46.2	0.9%	
Vested < 10 yrs svc	2,140	2,101	1.9%				
General							
Retired	4,249	3,995	6.4%	67.2	67.2	0.0%	
Disabled	413	411	0.5%	64.0	63.3	1.1%	
Beneficiaries	<u>702</u>	<u>711</u>	<u>-1.3%</u>	<u>76.2</u>	<u>76.6</u>	<u>-0.5%</u>	
Payee Total	5,364	5,117	4.8%	68.1	68.2	-0.1%	
DROP Participants	629	546	15.2%	59.0	59.3	-0.5%	
Deferred Vested ¹	2,361	2,409	-2.0%	47.9	47.4	1.1%	
Vested < 10 yrs svc	1,724	1,707	1.0%				
Safety							
Retired	2,165	2,047	5.8%	62.4	62.3	0.2%	
Disabled	784	801	-2.1%	66.2	65.9	0.5%	
Beneficiaries	<u>509</u>	<u>489</u>	<u>4.1%</u>	<u>71.3</u>	<u>70.7</u>	<u>0.8%</u>	
Payee Total	3,458	3,337	3.6%	64.6	64.4	0.3%	
DROP Participants	447	438	2.1%	53.8	53.9	-0.2%	
Deferred Vested ¹	559	562	-0.5%	41.4	41.2	0.5%	
Vested < 10 yrs svc	416	394	5.6%				

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

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Table A-6 SDCERS - City of San Diego Non-Active Participant Data						
	Total Annual Benefit			Average Annual Benefit		
	June 30, 2014	June 30, 2013	%Change	June 30, 2014	June 30, 2013	%Change
Total						
Retired	\$ 337,838,017	\$ 312,528,881	8.1%	\$ 52,672	\$ 51,726	1.8%
Disabled	39,993,657	39,597,716	1.0%	33,412	32,671	2.3%
Beneficiaries	<u>20,771,433</u>	<u>19,501,747</u>	<u>6.5%</u>	<u>17,152</u>	<u>16,251</u>	<u>5.5%</u>
Payee Total	\$ 398,603,106	\$ 371,628,344	7.3%	\$ 45,183	\$ 43,959	2.8%
DROP Participants	\$ 60,831,857	\$ 57,528,747	5.7%	\$ 56,535	\$ 58,464	-3.3%
Deferred Vested ¹	\$ 133,420,493	\$ 134,186,414	-0.6%	\$ 45,692	\$ 45,165	1.2%
General						
Retired	\$ 180,895,525	\$ 167,224,555	8.2%	\$ 42,574	\$ 41,858	1.7%
Disabled	8,015,783	7,791,951	2.9%	19,409	18,959	2.4%
Beneficiaries	<u>9,542,816</u>	<u>9,068,522</u>	<u>5.2%</u>	<u>13,594</u>	<u>12,755</u>	<u>6.6%</u>
Payee Total	\$ 198,454,124	\$ 184,085,028	7.8%	\$ 36,997	\$ 35,975	2.8%
DROP Participants	\$ 25,922,297	\$ 22,948,218	13.0%	\$ 41,212	\$ 42,030	-1.9%
Deferred Vested ¹	\$ 108,773,185	\$ 107,311,378	1.4%	\$ 46,071	\$ 44,546	3.4%
Safety						
Retired	\$ 156,942,492	\$ 145,304,326	8.0%	\$ 72,491	\$ 70,984	2.1%
Disabled	31,977,874	31,805,765	0.5%	40,788	39,708	2.7%
Beneficiaries	<u>11,228,616</u>	<u>10,433,225</u>	<u>7.6%</u>	<u>22,060</u>	<u>21,336</u>	<u>3.4%</u>
Payee Total	\$ 200,148,982	\$ 187,543,315	6.7%	\$ 57,880	\$ 56,201	3.0%
DROP Participants	\$ 34,909,560	\$ 34,580,528	1.0%	\$ 78,097	\$ 78,951	-1.1%
Deferred Vested ¹	\$ 24,647,309	\$ 26,875,036	-8.3%	\$ 44,092	\$ 47,820	-7.8%

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 June 30, 2014.

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Table A-7
SDCERS - City of San Diego
Distribution of Active Members (Excludes DROP Participants) as of June 30, 2014
Total City

Age	Years of Service										Total
	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	37	51	-	-	-	-	-	-	-	-	88
25 to 29	72	274	157	1	-	-	-	-	-	-	504
30 to 34	34	234	435	85	2	-	-	-	-	-	790
35 to 39	19	160	350	320	74	3	-	-	-	-	926
40 to 44	12	119	193	373	325	94	5	-	-	-	1,121
45 to 49	15	92	150	304	369	379	208	10	1	-	1,528
50 to 54	10	62	115	225	289	289	288	128	13	1	1,420
55 to 59	5	41	92	138	181	68	51	18	1	-	595
60 to 64	5	24	62	65	60	12	6	4	-	-	238
65 to 69	-	10	18	4	6	2	1	-	1	-	42
70 and up	2	3	10	2	1	-	1	-	-	1	20
Total Count	211	1,070	1,582	1,517	1,307	847	560	160	16	2	7,272

Table A-8
SDCERS - City of San Diego
Distribution of Active Members (Excludes DROP Participants) as of June 30, 2014
Total City

Age	Average Salary Years of Service										Total
	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	\$ 46,594	\$ 42,976	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 44,497
25 to 29	49,640	55,305	69,303	49,301	-	-	-	-	-	-	58,844
30 to 34	53,910	59,266	69,992	65,488	69,478	-	-	-	-	-	65,637
35 to 39	44,723	59,389	69,090	71,558	70,894	58,501	-	-	-	-	67,876
40 to 44	46,508	57,261	66,886	68,783	77,531	69,130	58,440	-	-	-	69,514
45 to 49	49,353	54,854	63,250	63,277	73,803	79,461	78,291	58,760	74,728	-	71,208
50 to 54	33,777	52,152	57,311	57,215	65,507	66,312	72,673	69,155	67,157	51,979	64,675
55 to 59	39,032	61,135	58,736	54,406	59,390	66,120	67,840	71,259	44,533	-	59,910
60 to 64	31,243	53,237	67,741	53,124	57,426	67,826	52,151	60,273	-	-	58,405
65 to 69	-	66,389	67,136	74,822	62,214	56,191	92,518	-	74,477	-	67,245
70 and up	38,303	115,838	66,213	39,593	34,632	-	66,581	-	-	49,462	65,805
Avg. Salary	\$ 47,606	\$ 56,641	\$ 66,985	\$ 64,350	\$ 69,893	\$ 72,463	\$ 73,997	\$ 68,520	\$ 66,674	\$ 50,721	\$ 66,080

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**Table A-9
SDCERS - City of San Diego
Distribution of Active Members (Excludes DROP Participants) as of June 30, 2014
General**

Age	Years of Service										Total	
	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	21	32	-	-	-	-	-	-	-	-	-	53
25 to 29	38	149	56	1	-	-	-	-	-	-	-	244
30 to 34	12	140	196	53	2	-	-	-	-	-	-	403
35 to 39	12	122	183	183	48	3	-	-	-	-	-	551
40 to 44	7	99	131	238	166	67	5	-	-	-	-	713
45 to 49	11	89	125	237	227	200	123	10	1	-	-	1,023
50 to 54	9	61	102	200	239	249	250	126	13	1	-	1,250
55 to 59	5	39	91	132	178	68	47	18	1	-	-	579
60 to 64	5	24	62	64	60	12	6	4	-	-	-	237
65 to 69	-	10	18	4	6	2	1	-	1	-	-	42
70 and up	2	3	10	2	1	-	1	-	-	1	-	20
Total Count	122	768	974	1,114	927	601	433	158	16	2	-	5,115

**Table A-10
SDCERS - City of San Diego
Distribution of Active Members (Excludes DROP Participants) as of June 30, 2014
General**

Age	Average Salary Years of Service										Total	
	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	\$ 41,271	\$ 35,294	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 37,662
25 to 29	45,616	48,451	48,225	49,301	-	-	-	-	-	-	-	47,961
30 to 34	44,989	52,992	55,545	53,148	69,478	-	-	-	-	-	-	54,098
35 to 39	36,387	57,416	58,471	59,868	61,317	58,501	-	-	-	-	-	58,469
40 to 44	35,109	55,217	59,694	59,441	64,687	59,632	58,440	-	-	-	-	59,895
45 to 49	46,106	54,128	59,890	57,077	62,839	64,616	63,303	58,760	74,728	-	-	60,581
50 to 54	31,255	51,828	53,587	53,723	60,192	61,583	67,397	67,885	67,157	51,979	-	60,561
55 to 59	39,032	58,681	58,396	52,757	58,975	66,120	65,311	71,259	44,533	-	-	58,985
60 to 64	31,243	53,237	67,741	53,452	57,426	67,826	52,151	60,273	-	-	-	58,516
65 to 69	-	66,389	67,136	74,822	62,214	56,191	92,518	-	74,477	-	-	67,245
70 and up	38,303	115,838	66,213	39,593	34,632	-	66,581	-	-	49,462	-	65,805
Avg. Salary	\$ 41,302	\$ 53,119	\$ 57,951	\$ 56,557	\$ 61,296	\$ 62,979	\$ 65,749	\$ 67,499	\$ 66,674	\$ 50,721	-	\$ 58,701

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Table A-11
SDCERS - City of San Diego
Distribution of Active Members (Excludes DROP Participants) as of June 30, 2014
Safety

Age	Years of Service										Total
	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	16	19	-	-	-	-	-	-	-	-	35
25 to 29	34	125	101	-	-	-	-	-	-	-	260
30 to 34	22	94	239	32	-	-	-	-	-	-	387
35 to 39	7	38	167	137	26	-	-	-	-	-	375
40 to 44	5	20	62	135	159	27	-	-	-	-	408
45 to 49	4	3	25	67	142	179	85	-	-	-	505
50 to 54	1	1	13	25	50	40	38	2	-	-	170
55 to 59	-	2	1	6	3	-	4	-	-	-	16
60 to 64	-	-	-	1	-	-	-	-	-	-	1
65 to 69	-	-	-	-	-	-	-	-	-	-	-
70 and up	-	-	-	-	-	-	-	-	-	-	-
Total Count	89	302	608	403	380	246	127	2	-	-	2,157

Table A-12
SDCERS - City of San Diego
Distribution of Active Members (Excludes DROP Participants) as of June 30, 2014
Safety

Age	Average Salary Years of Service										Total
	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	\$ 53,580	\$ 55,916	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 54,848
25 to 29	54,139	63,476	80,990	-	-	-	-	-	-	-	69,058
30 to 34	58,776	68,609	81,839	85,926	-	-	-	-	-	-	77,652
35 to 39	59,013	65,723	80,725	87,172	88,576	-	-	-	-	-	81,699
40 to 44	62,468	67,378	82,081	85,254	90,940	92,696	-	-	-	-	86,324
45 to 49	58,282	76,387	80,054	85,209	91,329	96,047	99,979	-	-	-	92,737
50 to 54	56,473	71,926	86,536	85,149	90,912	95,754	107,387	149,140	-	-	94,923
55 to 59	-	108,997	89,660	90,690	83,979	-	97,558	-	-	-	93,373
60 to 64	-	-	-	32,129	-	-	-	-	-	-	32,129
65 to 69	-	-	-	-	-	-	-	-	-	-	-
70 and up	-	-	-	-	-	-	-	-	-	-	-
Avg. Salary	\$ 56,248	\$ 65,597	\$ 81,456	\$ 85,894	\$ 90,865	\$ 95,632	\$ 102,119	\$ 149,140	\$ -	\$ -	\$ 83,579

SDCERS-CITY OF SAN DIEGO
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**APPENDIX A
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Table A-13

SDCERS - City of San Diego

**Retirees (Includes DROP Participants), Disabled, and Beneficiaries Tabulated by Attained Age/Benefit Effective Date
Total City**

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	
pre-1995	11	25	53	65	162	145	274	240	256	154	1,385
1995	2	5	12	9	5	23	17	22	7	1	103
1996	3	8	12	8	16	26	23	20	7	2	125
1997	10	6	10	8	43	92	44	23	4	6	246
1998	5	7	11	3	46	95	46	13	8	3	237
1999	2	14	6	10	79	101	39	13	9	3	276
2000	4	16	4	11	125	44	32	7	10	4	257
2001	6	12	9	54	131	56	41	9	9	4	331
2002	4	6	7	46	93	41	15	10	1	6	229
2003	4	2	9	81	249	86	26	15	3	8	483
2004	7	4	8	87	168	61	27	6	6	10	384
2005	3	7	60	195	122	68	11	6	5	5	482
2006	15	6	110	191	66	38	9	10	7	6	458
2007	6	4	89	210	74	27	12	7	12	10	451
2008	8	7	88	201	63	23	10	9	8	5	422
2009	11	18	183	245	81	24	9	14	6	5	596
2010	8	102	172	57	52	11	6	13	11	8	440
2011	10	109	212	58	56	13	1	3	5	5	472
2012	6	115	228	77	35	12	6	8	5	1	493
2013	14	107	193	82	25	3	10	6	4	8	452
2014	6	121	210	91	22	18	14	8	9	1	500
Total	145	701	1,686	1,789	1,713	1,007	672	462	392	255	8,822

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

Average Age at Retirement/Disability 55.5
Average Current Age 66.7
Average Annual Pension \$ 45,183

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Table A-14

SDCERS - City of San Diego

**Retirees (Includes DROP Participants), Disabled, and Beneficiaries Tabulated by Attained Age/Benefit Effective Date
General**

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	
pre-1995	2	10	10	18	39	28	83	137	188	123	638
1995	1	1	6	4	1	4	14	21	6	1	59
1996	2	2	3	5	5	10	19	17	5	1	69
1997	4	4	3	4	6	23	32	21	4	5	106
1998	3	3	6	2	8	49	42	13	7	2	135
1999	1	3	3	6	5	66	38	12	7	2	143
2000	4	8	2	5	40	38	31	7	7	1	143
2001	1	5	7	12	63	48	39	8	6	4	193
2002	1	2	5	5	46	34	15	10	1	6	125
2003	3	1	4	10	198	78	25	12	3	6	340
2004	2	2	6	12	142	54	23	5	5	5	256
2005	1	4	5	113	103	62	10	6	3	5	312
2006	11	2	14	153	61	36	7	9	3	4	300
2007	4	2	12	178	65	22	9	5	7	7	311
2008	3	4	2	180	59	20	6	8	4	2	288
2009	4	6	18	224	78	19	5	9	6	4	373
2010	3	12	135	49	49	6	4	9	10	3	280
2011	3	17	178	50	49	10	-	2	5	3	317
2012	2	11	195	72	32	10	5	4	5	1	337
2013	7	11	170	78	20	3	8	5	1	5	308
2014	-	14	190	84	16	11	8	3	5	-	331
Total	62	124	974	1,264	1,085	631	423	323	288	190	5,364

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

Average Age at Retirement/Disability 58.1
Average Current Age 68.1
Average Annual Pension \$ 36,997

SDCERS-CITY OF SAN DIEGO
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**APPENDIX A
MEMBERSHIP INFORMATION**

Table A-15

SDCERS - City of San Diego

**Retirees (Includes DROP Participants), Disabled, and Beneficiaries Tabulated by Attained Age/Benefit Effective Date
Safety**

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	
pre-1995	9	15	43	47	123	117	191	103	68	31	747
1995	1	4	6	5	4	19	3	1	1	-	44
1996	1	6	9	3	11	16	4	3	2	1	56
1997	6	2	7	4	37	69	12	2	-	1	140
1998	2	4	5	1	38	46	4	-	1	1	102
1999	1	11	3	4	74	35	1	1	2	1	133
2000	-	8	2	6	85	6	1	-	3	3	114
2001	5	7	2	42	68	8	2	1	3	-	138
2002	3	4	2	41	47	7	-	-	-	-	104
2003	1	1	5	71	51	8	1	3	-	2	143
2004	5	2	2	75	26	7	4	1	1	5	128
2005	2	3	55	82	19	6	1	-	2	-	170
2006	4	4	96	38	5	2	2	1	4	2	158
2007	2	2	77	32	9	5	3	2	5	3	140
2008	5	3	86	21	4	3	4	1	4	3	134
2009	7	12	165	21	3	5	4	5	-	1	223
2010	5	90	37	8	3	5	2	4	1	5	160
2011	7	92	34	8	7	3	1	1	-	2	155
2012	4	104	33	5	3	2	1	4	-	-	156
2013	7	96	23	4	5	-	2	1	3	3	144
2014	6	107	20	7	6	7	6	5	4	1	169
Total	83	577	712	525	628	376	249	139	104	65	3,458

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

Average Age at Retirement/Disability 51.5
Average Current Age 64.6
Average Annual Pension \$ 57,880

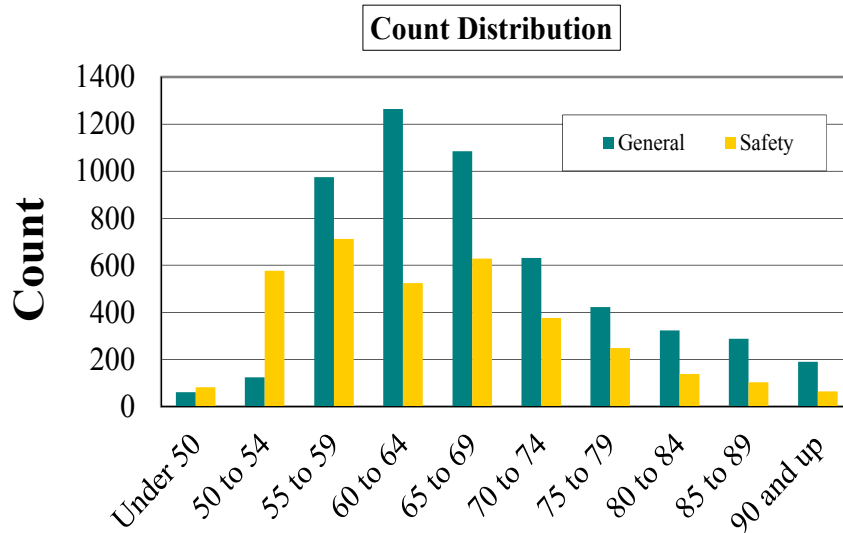
**SDCERS-CITY OF SAN DIEGO
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**APPENDIX A
MEMBERSHIP INFORMATION**

**Table A-16
SDCERS - City of San Diego
Distribution of Retirees, Disabilitants,
Beneficiaries and Survivors
as of June 30, 2014**

Age	Count		
	General	Safety	Total
Under 50	62	83	145
50 to 54	124	577	701
55 to 59	974	712	1,686
60 to 64	1,264	525	1,789
65 to 69	1,085	628	1,713
70 to 74	631	376	1,007
75 to 79	423	249	672
80 to 84	323	139	462
85 to 89	288	104	392
90 and up	190	65	255
Total	5,364	3,458	8,822

Chart A-1



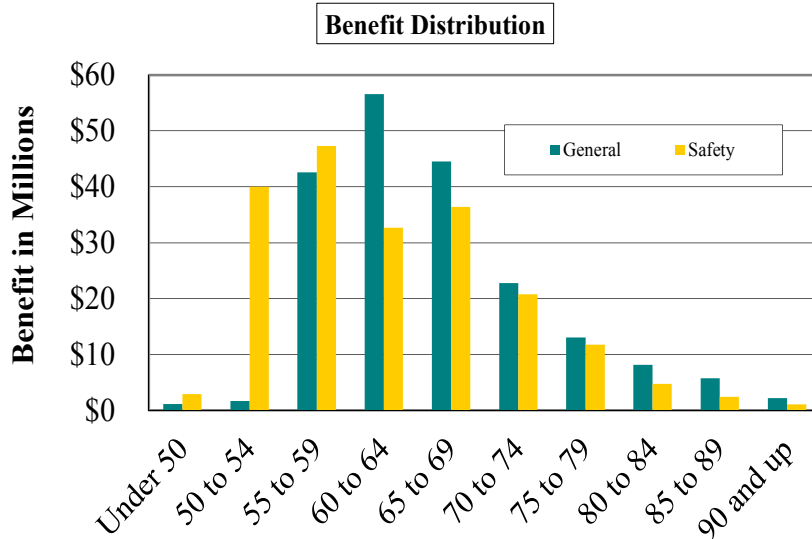
**SDCERS-CITY OF SAN DIEGO
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**APPENDIX A
MEMBERSHIP INFORMATION**

**Table A-17
SDCERS - City of San Diego
Distribution of Retirees, Disabilitants,
Beneficiaries and Survivors
as of June 30, 2014**

Age	Annual Benefit		
	General	Safety	Total
Under 50	\$ 1,133,095	\$ 2,896,104	\$ 4,029,199
50 to 54	1,688,894	39,973,154	41,662,047
55 to 59	42,597,650	47,321,834	89,919,484
60 to 64	56,553,736	32,704,430	89,258,166
65 to 69	44,555,641	36,398,380	80,954,021
70 to 74	22,775,625	20,767,192	43,542,817
75 to 79	13,028,503	11,779,030	24,807,532
80 to 84	8,187,082	4,756,519	12,943,601
85 to 89	5,746,753	2,456,547	8,203,299
90 and up	2,187,146	1,095,793	3,282,939
Total	\$ 198,454,124	\$200,148,982	\$ 398,603,106

Chart A-2



APPENDIX A
MEMBERSHIP INFORMATION

Data Assumptions and Practices

In preparing our data, we relied 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,” “1 Yr Prior Fiscal Year Pensionable Salary,” “2 Yr Prior Fiscal Year Pensionable Salary,” “3 Yr Prior Fiscal Year Pensionable Salary,” “4 Yr Prior Fiscal Year Pensionable Salary.”
- New hires with a “Date of Entry” after 6/30/2013 had their “Current Annual Pensionable Salary” annualized based on accrued service to date.
- Actives with an “Employment Type” of Half Time or $\frac{3}{4}$ Time had their “Current Annual Pensionable Salary” annualized to a full year.
- “Contrib Rate” was updated to reflect the new contribution rates for active employees. If the “Contrib Rate” was not provided, the prior year contribution for the participant was used to update and reflect the new rate.
- 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.
- For duplicate records (based on SSN and Benefit Type) in the payee file, records having the same plan and same benefit type but different benefit amounts, we have added those benefit 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 or 27) 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.
- For continuing Inactives, the supplemental file “Average Comp sent to Cheiron 11142014” was used for the “Average Compensation.” If a participant was not provided in the file, last year’s “Average Compensation” was used.
- For new Inactives, “Average Compensation” will be the maximum of the annualized pay over the prior year and the last four fiscal years’ pensionable salaries.
- We assume that any active member found in the inactive data last year has returned to work and should be valued as active.

**SDCERS-CITY OF SAN DIEGO
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**APPENDIX A
MEMBERSHIP INFORMATION**

- 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 “DRO Reduction Amt.” The “DRO Reduction Amt” field is mainly for Qualified Domestic Relations Order purposes. The “13th Check Supplement” field is added as an annual benefit and the “Corbett Supplement” is annualized for new retirees in the City only. It is assumed the payment is annual for retirees already in pay status prior to this valuation.
- Members retiring since the prior valuation date and not having a “13th Check Supplement Amount” will have their projected “13th Check Supplement Amount” calculated assuming \$30 multiplied by the “13th Check Supplement Years.”
- Payees’ “Cola Pension” and “Star Cola Pension” do not include a COLA as of 7/1/2014. These COLA increases were provided in the supplemental file “07012014 COLAs.”
- Members may retire and receive benefits from multiple Plans (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.
- The Final 415 Regulations were used to calculate the present value of Member benefits over the Internal Revenue Service Code 415 Benefit Limits.

**APPENDIX B
ACTUARIAL ASSUMPTIONS AND METHODS**

A. Actuarial Assumptions

1. Investment Return Assumption

SDCERS' assets are assumed to earn 7.25% net of investment expenses.

2. Inflation Rate

An inflation assumption of 3.3% compounded annually is used for projecting the total annual payroll growth for amortization of the non-Police UAL.

3. Administrative Expense Assumption

Administrative expenses are assumed to be \$12.5 million for FY 2016, increasing by 2.50% annually. Of this amount, one-third, or \$4.2 million, has been included in the FY 2016 ADC. For FY 2017 there will be two-thirds recognition, and for all fiscal years following, 100% of the expected administrative expenses will be added to the ADC.

4. Interest Credited to Member Contributions

7.25%, compounded annually.

5. Salary Increase Rate

Inflation component 3.3% (following assumed freezes in FYs 2016-2018. Freezes had also been assumed for FYs 2013, 2014 and 2015.)

The additional merit component:

Table B-1		
Years of Service at Valuation Date	General	Safety
0	5.00%	8.00%
1	4.00%	7.00%
2	3.00%	6.00%
3	2.00%	3.50%
4	1.00%	2.00%
5+	0.50%	0.50%

APPENDIX B
ACTUARIAL ASSUMPTIONS AND METHODS

5. Cost-of-Living Increase in Benefits

Assumed to be 2% per annum, compounded annually.

There is a closed group of Special Safety Officers for whom we assume an annual adjustment equal to inflation (3.3% per year).

6. COL Annuity Benefit

For active Members, the COL annuity benefit is valued by adding to the liabilities one-sixth of accumulated member contribution accounts and using load factors for future member contributions. The load varies by Plan as follows:

General	Elected	Police	Fire	Lifeguard
2.19%	2.5%	3.51%	3.69%	3.58%

For terminated vested participants, one-sixth of the accumulated member contribution accounts are recognized as a liability for the COL annuity.

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. However, such offsets are not directly reflected in either the employee contributions or related refund calculations.

**SDCERS-CITY OF SAN DIEGO
ACTUARIAL VALUATION AS OF JUNE 30, 2014**

**APPENDIX B
ACTUARIAL ASSUMPTIONS AND METHODS**

8. Rates of Termination

Table B-2		
SDCERS - City of San Diego		
Rates of Termination		
Service	General	Safety
0	11.00%	8.80%
1	10.00	7.72
2	9.00	6.62
3	8.00	5.53
4	7.00	4.41
5	6.00	3.31
6	5.00	3.16
7	5.00	3.09
8	4.00	3.01
9	3.50	2.94
10	3.50	2.89
11	3.50	2.77
12	3.25	2.70
13	3.25	2.63
14	3.25	2.58
15	3.25	2.52
16	3.25	2.46
17	3.25	2.41
18	3.25	2.38
19	3.25	2.37
20	3.25	2.35
21	3.25	2.34
22+	3.25	2.33

20% of terminating employees, with 10+ years of service at termination, are assumed to subsequently work for a reciprocal employer and receive 3.8% pay increases per year.

**APPENDIX B
 ACTUARIAL ASSUMPTIONS AND METHODS**

9. Rates of Disability

Age	General	Safety
20	0.02%	0.25%
25	0.03	0.25
30	0.04	0.25
35	0.06	0.35
40	0.08	0.45
45	0.12	0.55
50	0.20	0.65
55	0.35	0.75
60	0.45	--

60% of the General disabilities and 80% of the Safety disabilities are assumed to be industrial disability retirements. Non-industrial disability retirement is subject to a 10-year service requirement.

10. Rates of Mortality for Active Lives

To reflect improvements in mortality since the date of the tables, the mortality tables have been modified to reflect actual experience through June 30, 2010 and include a projection to 2013.

All active Members follow the RP2000 Combined Healthy table (male and female) projected to 2013.

Age	General and Safety	
	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	0.13	0.09
50	0.17	0.13
55	0.28	0.25
60	0.55	0.47
65	1.06	0.91
70	1.83	1.57

50% of active member deaths are assumed to be industrial deaths for Safety Members and all active member deaths are assumed to be non-industrial deaths for other members.

**APPENDIX B
ACTUARIAL ASSUMPTIONS AND METHODS**

11. Rates of Mortality for Retired Healthy Lives

To reflect improvements in mortality since the date of the tables, the mortality tables have been modified to reflect actual experience through June 30, 2010. No modifications have been made to project future mortality improvements. In the next experience study we will examine the mortality experience and consider the projection of future improvement.

All retired healthy Members use the RP2000 Combined Healthy table (male and female). Safety female Members use the RP2000 Combined Healthy female table, set forward one year.

Table B-5				
SDCERS - City of San Diego				
Rates of Mortality for Retired Healthy Lives at Selected Ages				
Age	General		Safety	
	Male	Female	Male	Female
40	0.11%	0.07%	0.11%	0.08%
45	0.15	0.11	0.15	0.12
50	0.21	0.17	0.21	0.19
55	0.36	0.27	0.36	0.31
60	0.67	0.51	0.67	0.58
65	1.27	0.97	1.27	1.10
70	2.22	1.67	2.22	1.86
75	3.78	2.81	3.78	3.10
80	6.44	4.59	6.44	5.08
85	11.08	7.74	11.08	8.64
90	18.34	13.17	18.34	14.46

**SDCERS-CITY OF SAN DIEGO
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**APPENDIX B
ACTUARIAL ASSUMPTIONS AND METHODS**

12. Rates of Mortality for Retired Disabled Lives

To reflect improvements in mortality since the date of the tables, the mortality tables have been modified to reflect actual experience through June 30, 2010. No modifications have been made to project future mortality improvements. In the next experience study we will examine the mortality experience and consider the projection of future improvement.

The mortality tables used for disabled retirees are variations of the CALPERS Disability Tables (male and female):

Table B-6				
SDCERS - City of San Diego				
Rates of Mortality for Disabled Lives at Selected Ages				
Age	General		Safety	
	Male	Female	Male	Female
40	1.45%	0.67%	0.19%	0.20%
45	1.65	0.99	0.25	0.26
50	1.63	1.25	0.44	0.36
55	1.86	1.58	0.56	0.55
60	2.19	1.63	0.78	0.80
65	2.99	1.97	1.39	1.18
70	3.76	3.02	2.24	1.72
75	5.42	3.92	3.59	2.67
80	7.90	5.56	6.93	4.53
85	12.48	9.58	11.80	8.02

**SDCERS-CITY OF SAN DIEGO
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**APPENDIX B
ACTUARIAL ASSUMPTIONS AND METHODS**

13. Rates of Retirement

Rates of Retirement for City General and City Safety are shown in the two tables below. Retirement rates include both service retirements and entry into DROP.

Table B-7 SDCERS - City of San Diego Rates of Retirement by Age and Service				
Service	General - Old Plan		Safety - Old Plan	
	Prior to age 62	Age 62 or greater	Prior to age 55	Age 55 or greater
10	--	60.0%	--	40.0%
11	--	45.0	--	40.0
12	--	45.0	--	40.0
13	--	45.0	--	40.0
14	--	45.0	--	40.0
15	--	40.0	--	31.5
16	--	40.0	--	31.5
17	--	40.0	--	31.5
18	--	40.0	--	31.5
19	--	40.0	--	31.5
20	50.0	55.0	35.0	50.0
21	35.0	35.0	20.0	25.0
22	37.5	35.0	25.0	30.0
23	40.0	35.0	30.0	35.0
24	42.5	35.0	35.0	40.0
25	45.0	45.0	40.0	45.0
26	47.5	45.0	45.0	50.0
27	50.0	45.0	50.0	55.0
28	52.5	45.0	55.0	60.0
29	55.0	45.0	60.0	65.0
30	57.5	50.0	100.0	100.0
31	60.0	50.0	100.0	100.0
32	60.0	55.0	100.0	100.0
33	60.0	55.0	100.0	100.0
34	60.0	55.0	100.0	100.0
35+	100.0	100.0	100.0	100.0

Table B-8 SDCERS - City of San Diego Rates of Retirement by Age for All New Tiers		
Age	General	Safety
50	--	10.0%
51	--	10.0
52	--	10.0
53	--	10.0
54	--	20.0
55	3.0%	40.0
56	3.0	40.0
57	3.0	40.0
58	5.0	50.0
59	5.0	80.0
60	10.0	85.0
61	15.0	90.0
62	20.0	100.0
63	30.0	100.0
64	40.0	100.0
65	50.0	100.0
66	50.0	100.0
67	50.0	100.0
68	50.0	100.0
69	50.0	100.0
70	100.0	100.0

In addition, if a Police-2009 Plan, a Police-2012 Plan, a Police-2012 No COL Plan, a Police-Prop B or a Fire-2012 Plan Member has both attained age 55 and completed at least 30 years of service, 100% retirement is assumed.

For vested deferred participants, we assume that retirement will occur provided they have at least 10 years of service on the later of attained age or:

General Members: Earlier of age 62 or age 55 and 20+ years of service.

Safety Members: Earlier of age 55 or age 50 and 20+ years of service.

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Rates of Retirement for Elected Officials are based on age and are shown in the table below.

Age	Elected Officials
50	--
51	--
52	--
53	15%
54	1
55	5
56	3
57	4
58	5
59	6
60	60
61	25
62	37
63	23
64	34
65	68
66	69
67	74
68	80
69	90
70	100

For vested deferred Elected Officials, we assume that retirement will occur provided they have at least four years of service on the later of attained age or the earlier of age 55 or age 53 and at least eight years of service.

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

14. Family Composition Assumptions

80% of men and 55% of women were assumed married at retirement. A female spouse is assumed to be three-years younger than her male spouse.

APPENDIX B
ACTUARIAL ASSUMPTIONS AND METHODS

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.

16. Deferred Member 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 1.8%. Thereafter, it was assumed the account balance would be converted to an annuity at an interest rate of 3.6% 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. The liability for pre-2006 DROP account balances still left on account was valued assuming they would be paid out until age 70 ½, with an interest crediting rate of 1.8%. The liability for the remaining account balances was adjusted based on the DROP annuity rate in effect at the Member's benefit effective date.

These adjustments are applied to the DROP account balance values provided in the financial statements. The account balance liability is allocated to each individual Tier (e.g., General) based on the total amount of the DROP account balances for that Tier in the valuation data.

18. Other

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

Actual experience of SDCERS will not coincide exactly with assumed experience, 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

19. Changes Since Last Valuation

The DROP interest crediting and annuity rates used to value the liability for account balances were increased from 1.2% to 1.8% and from 3.3% to 3.6%, respectively, to reflect the Board's adoption of these rates at its November 2014 meeting.

In January 2015, the Board voted to account for expected administrative expenses explicitly in the actuarially determined contribution (ADC) with a three-year phase in.

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 rate is computed as the average level annual percent of pay required to fund the retirement benefits for all Members between their dates of hire and assumed dates of retirement. The EAN actuarial liability is the difference between the plan's total present value of future benefits and the present value of future normal costs, calculated for each sub-group (e.g., General). The unfunded actuarial liability is the difference between the actuarial liability and the actuarial value of assets, and is allocated to each sub-group based on its liability.

The unfunded actuarial liability is amortized by annual payments. For the non-Police portion of the Plan, the UAL payments are determined as level dollar amounts. For the Police portion of the Plan, the payments are determined as a level percentage of pay, assuming payroll increases of 3.3% per year. The UAL is amortized over various closed periods. The UAL as of June 30, 2007 is amortized over 20 years. Subsequent gains and losses are amortized over 15 years, changes in assumptions over 30 years, and changes in benefits over five years. The non-Police portion of the UAL as of June 30, 2012 is amortized over 15 years. Funding surplus, if any, is amortized over 30 years. 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 City of San Diego's actuarially determined 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 provision of retirement benefits and expenses.

The actuarial value of assets 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

1. Membership Requirement

Membership is mandatory from the first day of employment with the City, for all full, three-quarter, and half-time classified employees initially hired between July 1, 1991 and July 19, 2012 and for any unclassified employees initially hired between August 11, 1993 and July 19, 2012 (§24.0104).*

Membership is mandatory from the first day of employment for Police Recruits hired between July 1, 1991 and June 30, 2014 and for all sworn Police Officers initially hired on or after July 1, 1991 (City Charter §140).

As a result of Proposition B, new employees (other than sworn Police) initially hired on or after July 20, 2012 will not participate in SDCERS.

2. Monthly Salary Base for Benefits

General and Safety Old Plan Members:

Highest consecutive 12-month average in any qualified employment with a California governmental jurisdiction (§ 24.0103), subject to a 10% increase for those who joined the system before July 1, 2002, if the General or Safety Member elects such increase in lieu of an increased benefit formula (§24.0402 and §24.0403).

General-2009 Plan Members:

Average of highest three years in any qualified employment with a California governmental jurisdiction (§ 24.0103).

Police-2009 Plan Members:

Highest consecutive 12-month average in any qualified employment with a California governmental jurisdiction (§ 24.0103).

Fire-2012 Plan, Police-2012 Plan, Police-2012 No COL Plan, and Police-Prop B Plan Members:

Average of highest three years in any qualified employment with a California governmental jurisdiction (§ 24.0103).

3. Service Retirement

Eligibility

General Members:

Age 62 with 10 years of service, or age 55 with 20 years of service (§ 141 of City Charter).

Safety Members (includes Fire, Lifeguard, and Police):

Age 55 with 10 years of service, or age 50 with 20 years of service (§ 141 of City Charter).

Elected Officers:

Age 55 with 4 years of service. Eligible to retire at any age with 8 years of service, however, benefit is reduced by 2% per year for each year under age 55 (§ 24.1705).

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

**SDCERS-CITY OF SAN DIEGO
ACTUARIAL VALUATION AS OF JUNE 30, 2014**

**APPENDIX C
SUMMARY OF PLAN PROVISIONS**

Benefit

The basic formula used to calculate monthly retirement allowances for all membership categories is: Retirement Factor X Final Average Compensation X Years of Service Credit.

General Members:

For General-Old Plan Members, choice of factors in place on June 30, 2000 (Option 1), or factors effective as of July 1, 2000 (Option 2), or factors in effect as of July 1, 2002 (Option 3), with a benefit cap of 90% of Final Average Compensation unless an exception to the 90% cap applies (§ 24.0402).

For General-2009 Plan Members, factors shown in Table C-1 (§ 24.0402.1).

There is an additional amount equal to the annuitized Member COL Annuity contributions at retirement date.

General Member Service Retirement Accrual Factors

Table C-1				
SDCERS - City of San Diego				
General Member Service Retirement Accrual Factors				
Retirement Age	Hired Before July 1, 2009			Hired on or After July 1, 2009
	Option 1	Option 2	Option 3	
55	2.00%	2.25%	2.50%	1.00%
56	2.00%	2.25%	2.50%	1.25%
57	2.00%	2.25%	2.50%	1.65%
58	2.00%	2.25%	2.50%	1.758%
59	2.08%	2.25%	2.50%	1.874%
60	2.16%	2.30%	2.55%	2.00%
61	2.24%	2.35%	2.60%	2.12%
62	2.31%	2.40%	2.65%	2.24%
63	2.39%	2.45%	2.70%	2.36%
64	2.47%	2.50%	2.75%	2.46%
65 and up	2.55%	2.55%	2.80%	2.60%

Elected Officers:

The retirement factor for Elected Officers is 3.5% (§ 24.1706). A 2% annual reduction factor applies to benefits for Members retiring prior to age 55 (§ 24.1705).

Safety Members:

For all Safety-Old Plan Members, choice of factors in place on June 30, 2000 (Option 1), or factors effective as of July 1, 2000 (Option 2), with a benefit cap of 90% of Final Average Compensation unless an exception to the 90% cap applies (§ 24.0403).

**SDCERS-CITY OF SAN DIEGO
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**APPENDIX C
SUMMARY OF PLAN PROVISIONS**

For Police-2009 Plan, Fire-2012 Plan, Police-2012 Plan, Police-2012 No COL Plan, and Police-Prop B Plan Members, formula shown in Table C-2 (§ 24.0403).

There is an additional amount equal to the annuitized Member COL Annuity contributions at retirement date, with the exception of Police-2012 No COL Plan and Police-Prop B Plan Members.

Safety Member Service Retirement Accrual Factors

Table C-2				
SDCERS - City of San Diego				
Safety Member Service Retirement Accrual Factors				
	Police Hired Before July 1, 2009 Lifeguard Hired Before July 1, 2011 Fire Hired Before January 1, 2012			
Retirement Age	Police & Fire Option 1	Lifeguard Option 1	Safety Option 2	Police-2009 Fire-2012 Police-2012 Police-2012 No COL Police Prop B
50	2.50%	2.20%	3.00%	2.50%
51	2.60%	2.32%	3.00%	2.60%
52	2.70%	2.44%	3.00%	2.70%
53	2.80%	2.57%	3.00%	2.80%
54	2.90%	2.72%	3.00%	2.90%
55 and up	2.99%	2.77%	3.00%	3.00%

For vested Members who terminate City employment, different retirement accrual factors may apply depending on which options were available at the time of termination.

For Members of the General-2009 Plan who terminate City employment, the accrual factors are those shown in Tables C-1. For Members of the Police-2009 Plan, Fire-2012 Plan, Police-2012 Plan, Police-2012 No COL Plan, and Police-Prop B Plan who terminate City employment, the accrual factors are those shown in Table C-2. For General-Old Plan and Safety-Old Plan Members, the accrual factors are as shown in Tables C-3 and C-4:

GENERAL:

Table C-3	
SDCERS - City of San Diego	
For Vested Members who terminated--	--the accrual factors are--
Prior to January 1, 1997	See Table C-5
January 1, 1997 - June 30, 2000	Option 1 without 10% increase in Final Average Compensation
July 1, 2000 - June 30, 2002	Option 1 with 10% increase in Final Average Compensation, or Option 2
July 1, 2002 - Present	Option 3

**SDCERS-CITY OF SAN DIEGO
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**APPENDIX C
SUMMARY OF PLAN PROVISIONS**

SAFETY:

Table C-4 SDCERS - City of San Diego	
For Vested Members who terminated--	--the accrual factors are--
Prior to January 1, 1997	See Table C-5
January 1, 1997 - June 30, 2000	Option 1 without 10% increase in Final Average Compensation
July 1, 2000 - Present	Option 1 with 10% increase in Final Average Compensation; or Option 2

Table C-5 SDCERS - City of San Diego Pre-1997 Member Service Retirement Accrual Factors				
Age	General	Safety		
		Police	Fire	Lifeguard
50	--	2.50%	2.20%	2.00%
51	--	2.54%	2.32%	2.10%
52	--	2.58%	2.44%	2.22%
53	--	2.62%	2.57%	2.34%
54	--	2.66%	2.72%	2.47%
55	1.48%	2.70%	2.77%	2.62%
56	1.55%	2.77%	2.77%	2.62%
57	1.63%	2.77%	2.77%	2.62%
58	1.72%	2.77%	2.77%	2.62%
59	1.81%	2.77%	2.77%	2.62%
60	1.92%	2.77%	2.77%	2.62%
61	1.99%	2.77%	2.77%	2.62%
62	2.09%	2.77%	2.77%	2.62%
63	2.20%	2.77%	2.77%	2.62%
64	2.31%	2.77%	2.77%	2.62%
65 and up	2.43%	2.77%	2.77%	2.62%

Maximum Benefit

General-Old Plan Members: 90% of Final Average compensation if Option 3 is chosen, unless an exception to the 90% cap applies.

General-2009 Plan Members: 80% of Final Average compensation.

Safety-Old Plan Members: 90% of Final Average Compensation (subject to 10% increase).

Police-2009 Plan, Fire-2012 Plan, Police-2012 Plan and Police-2012 No COL Plan Members: 90% of Final Average compensation.

Police-Prop B Plan Members: 80% of Final Average compensation.

Elected Officers: None.

APPENDIX C
SUMMARY OF PLAN PROVISIONS

Unmodified Form of Payment

Monthly payments continued for the life of the Member, with 50% continuance to the eligible spouse 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: City employees withdrew from Social Security effective January 1, 1982. We assume that all future benefits for active Members will be determined on a non-integrated basis.

Note: Effective July 1, 1991, service credit earned under the 1981 Pension System will be considered equivalent to SDCERS service for the purpose of benefit calculations (i.e., the above formulas will apply to 1981 Pension System service) (§ 24.1102, 24.0210, 24.0310).

4. Non-Industrial Disability

Eligibility

Ten years of service (Charter §141).

Benefit

General Members:

Greater of 1.5% per year of service, one-third of final compensation, or the earned service retirement benefit (§24.0502, §24.0505).

Safety Members:

Greater of 1.8% per year of service, one-third of final compensation, or the earned service retirement benefit (§24.0502, §24.0504).

Elected Officers:

Earned service retirement benefit (§24.1707).

5. Industrial Disability

Eligibility

No age or service requirement (§24.0501).

Benefit

General Members:

Greater of one-half of final compensation, or the earned service retirement benefit if eligible. (§24.0502, §24.0505).

Safety Members:

Greater of one-half of final compensation, or the earned service retirement benefit if eligible. (§24.0502, §24.0503).

Elected Officers:

Earned service retirement benefit (§24.1707).

**APPENDIX C
SUMMARY OF PLAN PROVISIONS**

6. Non-Industrial Active 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 (§24.0702).

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

50% of earned benefit payable to surviving eligible spouse, domestic partner, or dependent child under 18 years of age (§24.0704).

8. Industrial Active Death

50% of the final average compensation (subject to 10% increase) preceding death, payable to eligible spouse, domestic partner, or dependent child under 18 years of age (§24.0705).

9. Death After Retirement

Continuance to surviving beneficiary depending on benefit selection made at retirement (§24.0601).

\$2,000 payable in lump sum to the beneficiary or the estate of the retiree.(§24.0710).

10. Withdrawal Benefits (§24.0206, §24.0306)

Pre-12/8/76 Hires

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

Post-12/7/76 Hires

Less than ten years of service:

Refund of accumulated employee contributions with interest, or may keep deposits in the System and earn additional interest and use service with a reciprocal system to establish eligibility for earned benefits upon concurrent retirement from reciprocal system (§24.0206, 24.0306, 24.1005).

Ten or more years of service:

If contributions left on deposit, entitled to earned benefits commencing anytime after eligible to retire (§24.0206, 24.0306)

11. Post-retirement Cost-of-Living Adjustment Benefit

General and Safety Members:

Based on changes in Consumer Price Index, to a maximum of 2% per year (§24.1505).

12. COL Annuity

Actuarial equivalent of accumulated contributions in cost-of-living annuity account at time of retirement (§24.0103).

**SDCERS-CITY OF SAN DIEGO
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**APPENDIX C
SUMMARY OF PLAN PROVISIONS**

13. Member Contributions

Member contributions vary by age at time of entrance into SDCERS (§24.0201, §24.0301), and were recalculated following the experience study in 2011 based on the then current actuarial assumptions, in accordance with the requirement in San Diego City Charter Section 143 for “substantially equal” employer and employee contributions. Member contributions were adjusted in 2013 based on the most recent changes to the actuarial assumptions as listed in Appendix B of this report. Table C-6 below contains the contribution rates by plan.

Entry Age	GENERAL		FIRE		LIFEGUARD	POLICE				
	Hired Before 7/1/2009	Hired On or After 7/1/2009	Hired Before 1/1/2012	Hired On or After 1/1/2012	Hired Before 7/1/2011	Hired Before 7/1/2009	Hired On or After 7/1/2009 and Before 1/1/2012	Hired On or After 1/1/2012 and Before 8/2/2012	Hired On or After 8/2/2012 and Before 7/1/2013	Hired On or After 7/1/2013
20	7.45%	3.87%	12.75%	10.49%	12.66%	12.75%	10.60%	10.38%	8.71%	7.85%
21	7.56	4.07	12.87	10.92	12.79	12.87	11.05	10.81	9.08	8.25
22	7.73	4.27	13.10	11.37	13.01	13.10	11.51	11.25	9.45	8.67
23	7.92	4.49	13.39	11.83	13.24	13.39	11.98	11.71	9.84	9.11
24	8.14	4.72	13.69	12.30	13.49	13.69	12.46	12.18	10.22	9.57
25	8.35	4.94	13.98	12.78	13.73	13.98	12.96	12.66	10.63	10.04
26	8.56	5.17	14.25	13.08	13.95	14.25	13.26	12.95	10.87	10.27
27	8.76	5.40	14.51	13.22	14.15	14.51	13.40	13.09	10.98	10.57
28	8.96	5.64	14.75	13.41	14.32	14.75	13.60	13.27	11.14	10.91
29	9.16	5.89	14.97	13.62	14.44	14.97	13.82	13.48	11.32	11.24
30	9.34	6.14	15.29	13.85	14.76	15.29	14.06	13.71	11.52	11.55
31	9.51	6.40	15.34	14.09	14.68	15.34	14.31	13.95	11.71	11.82
32	9.68	6.65	15.45	14.35	14.61	15.45	14.57	14.20	11.92	12.08
33	9.82	6.89	15.60	14.61	14.56	15.60	14.83	14.46	12.14	12.32
34	9.95	7.15	15.72	14.85	14.55	15.72	15.09	14.70	12.35	12.55
35	10.18	7.40	15.90	15.03	14.68	15.90	15.28	14.88	12.49	12.71
36	10.09	7.62	16.13	15.35	14.90	16.13	15.60	15.19	12.76	12.98
37	10.02	7.81	16.40	15.65	15.14	16.40	15.92	15.50	13.02	13.26
38	9.96	7.98	16.66	15.95	15.39	16.66	16.23	15.79	13.26	13.52
39	9.96	8.16	16.93	16.24	15.63	16.93	16.53	16.08	13.50	13.78
40	9.99	8.33	17.17	16.51	15.87	17.17	16.81	16.34	13.72	14.02
41	10.02	8.50	17.56	16.75	16.23	17.56	17.07	16.59	13.93	14.24
42	10.06	8.68	17.88	16.98	16.52	17.88	17.30	16.81	14.11	14.44
43	10.27	8.88	18.15	17.17	16.76	18.15	17.51	17.00	14.27	14.62
44	10.47	9.08	18.33	17.31	16.95	18.33	17.66	17.14	14.39	14.76
45	10.65	9.29	18.46	17.39	17.05	18.46	17.76	17.21	14.46	14.84
46	10.83	9.48	18.01	17.07	16.63	18.01	17.43	16.90	14.19	14.57
47	11.00	9.66	17.68	16.91	16.33	17.68	17.27	16.74	14.06	14.43
48	11.18	9.84	17.33	16.80	16.01	17.33	17.16	16.64	13.97	14.34
49	11.33	9.99	16.96	16.68	15.66	16.96	17.04	16.52	13.87	14.24
50	11.44	10.14								
51	11.51	10.26								
52	11.61	10.36								
53	11.42	10.39								
54	11.20	10.37								
55	10.89	10.20								
56	10.57	9.90								
57	10.27	9.62								

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The employee contribution rates are the sum of four components, three of which are specified in the Municipal Code: a cost-of-living rate (§24.1506(a)), a surviving spouse rate (§24.0601), and, other than Police hired on or after August 2, 2012, a COL Annuity rate (§24.1506(b)). The fourth component is the “substantially equal” rate, which is 50% of the normal cost of accrued service retirement allowances, payable either immediately or deferred until a later age, when a member leaves employment via termination, disability, or service retirement. Since the cost-of-living rate funds the Member’s portion of the post-retirement cost-of-living benefit, the surviving spouse rate funds the Member’s portion of surviving spouse allowances, and the COL Annuity rate funds the COL Annuity, these benefits are not included in the calculation of the “substantially equal” rate.

All benefits not included in the components described above are paid for entirely by the City. Those benefits paid for entirely by the City include the refund of Member contributions for non-vested terminations, the portion of the disability allowance in excess of the earned service retirement (if any), the 13th check benefit, the pre-retirement death benefit for non-vested Members, the pre-retirement industrial death benefit, and the post-retirement \$2,000 lump sum benefit.

The assumptions used to develop the rates were the same as those used in this valuation, except that mortality tables for General Members were blended 50/50 between male and female rates, mortality tables for Safety Members were blended 90/10 between male and female rates, and mortality table for beneficiaries of Safety Members were blended 10/90 between male and female rates.

Elected Officers (General) contribute 9.05% of total salary, regardless of entry age (§24.1704).

14. Internal Revenue Code Limitation

Benefits provided by SDCERS’ Trust Fund are subject to the limitations set forth in Section 415 of the Internal Revenue Code in accordance with the “grandfather” election in Section 415(b)(10) of the Code (§24.1004).

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 valuation, all benefit payments were limited by Section 415 of the Internal Revenue Code.

15. Deferred Retirement Option Plan

Effective April 1, 1997, 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 (except for Safety Members who elect to accrue benefits under Section 24.0403(g)), but only those hired before July 1, 2005 may enter the program (§24.1402.1).

A participant in DROP may leave DROP at any time before the end of his or her designated DROP participation period by voluntarily leaving City employment. (§24.1403) The maximum DROP participation period is 60 months. (§24.1402)

A DROP participation account is a nominal account established with the Retirement System, which is credited with the following amounts (§24.1404):

- The Member’s monthly service retirement allowance, credited monthly, calculated at the date of DROP entry and increased each year by a cost-of-living adjustment.
- The Member’s supplemental 13th check benefit, if applicable, credited annually.
- 3.05% of base compensation, payable by the City and credited bi-weekly.

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**APPENDIX C
SUMMARY OF PLAN PROVISIONS**

- 3.05% of base compensation, payable by the Member and credited bi-weekly.
- Interest credited to the DROP account, as determined by the Board.

When a Member leaves DROP and City employment, they begin to collect their monthly service retirement allowance, their supplemental 13th check benefit (if applicable), and the amounts credited to their DROP participation account, payable as a single lump sum distribution, as a 240-month annuity with equal payments, or any other form approved by the Board and subject to applicable provisions of the Internal Revenue Code (§24.1407).

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 Plans (e.g., a City Police Officer could have also worked for the Airport Authority).

17. Changes since Last Valuation

A new plan for Police Members (“Prop B Plan”) was effective for employees hired on or after July 1, 2013. The only change to the previous plan was to cap the maximum benefit at 80% of Final Average compensation.

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 Liability

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

A mathematical budgeting procedure for allocating the dollar amount of the actuarial present value of a 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. Actuarially Determined Contribution (ADC)

Contribution determined each year based on the SDCERS Board’s adopted funding policy. The term also exists in GASB 67 and 68 as a contribution determined by the actuary in accordance with Actuarial Standards of Practice, but no further guidance is provided.

9. Amortization

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

**APPENDIX D
GLOSSARY OF TERMS**

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 two 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 Liability (UAL)

The difference between actuarial liability and the actuarial value of assets.

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

The existence of unfunded actuarial liability is not in itself bad, any more than a mortgage on a house is bad. Unfunded actuarial 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).