# San Diego County Employees Retirement Association

**Actuarial Valuation Report**
**as of June 30, 2013**

This report has been prepared at the request of the Board of Retirement to assist in administering the Fund. This valuation report may not otherwise be copied or reproduced in any form without the consent of the Board of Retirement and may only be provided to other parties in its entirety. The measurements shown in this actuarial valuation may not be applicable for other purposes.

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*October 31, 2013*

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

*Dear Board Members:*

*We are pleased to submit this Actuarial Valuation and Review as of June 30, 2013. It summarizes the actuarial data used in the valuation, establishes the funding requirements for fiscal 2014-2015 and analyzes the preceding year's experience.*

*This report was prepared in accordance with generally accepted actuarial principles and practices at the request of the Board to assist in administering the Plan. The census information on which our calculations were based was prepared by SDCERA and the financial information was provided by the Retirement Association. That assistance is gratefully acknowledged. The actuarial calculations were completed under the supervision of Andy Yeung, ASA, MAAA, Enrolled Actuary.*

*The measurements shown in this actuarial valuation may not be applicable for other purposes. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period); and changes in plan provisions or applicable law.*

*We are members of the American Academy of Actuaries and we meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. To the best of our knowledge, the information supplied in the actuarial valuation is complete and accurate. Further, in our opinion, the assumptions as approved by the Board are reasonably related to the experience of and the expectations for the Plan.*

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

*Sincerely,*

*SEGAL CONSULTING*

*By:* Paul Angelo

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

*By:* Andy Yeung

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*Vice President and Associate Actuary*

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## SECTION 1

### VALUATION SUMMARY



## SECTION 2

### VALUATION RESULTS



## SECTION 3

### SUPPLEMENTAL INFORMATION



## SECTION 4

### REPORTING INFORMATION

**Purpose**

This report has been prepared by Segal Consulting to present a valuation of the San Diego County Employees Retirement Association as of June 30, 2013. The valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits. The contribution requirements presented in this report are based on:

- The benefit provisions of the Retirement Association, as administered by the Board of Retirement;
- The characteristics of covered active members, deferred terminated members, retired members and beneficiaries as of June 30, 2013, provided by the Retirement Association;
- The assets of the Plan as of June 30, 2013, provided by the Retirement Association;
- Economic assumptions regarding future salary increases and investment earnings; and
- Other actuarial assumptions, regarding employee terminations, retirement, death, etc.

One of the general goals of an actuarial valuation is to establish contributions that fully fund the Association's liabilities, and that, as a percentage of payroll, remain as level as possible for each generation of active members. Annual actuarial valuations measure the progress toward this goal, as well as test the adequacy of the contribution rates.

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

The contribution requirements are determined as a percentage of payroll. The Association's employer rates provide for both normal cost and a contribution to amortize any unfunded or overfunded actuarial accrued liabilities. Effective with the June 30, 2004 valuation, we have modified our calculations to reflect the Board's new funding policy to amortize the Association's unfunded actuarial accrued liability as 20-year fixed (i.e., decreasing) layered amortization periods. The 20-year period was reaffirmed when the Board reviewed its actuarial funding policy again in 2013

As a result of the review in 2013, effective with the June 30, 2013 valuation, any change in the UAAL that arises due to plan amendments is amortized over separate 15-year declining amortization periods. Also, any change in the UAAL that arises due to retirement incentives is amortized over separate declining amortization periods of up to 5 years.

The rates calculated in this report may be adopted by the Board for the fiscal year that extends from July 1, 2014 through June 30, 2015.

## Significant Issues in This Valuation

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

*Reference: Pg. 51*

- The results of this valuation reflect changes in the economic and non-economic assumptions adopted by the Board for the June 30, 2013 valuation. These changes were documented in our Review of Economic Assumptions and our Actuarial Experience Study and are also outlined in Section 4, Exhibit V of this report. These assumption changes resulted in an increase in the average employer rate of 2.65% of payroll and an increase in the average member rate of 0.19% of payroll.

*Reference: Pg. 58*

- The results of this valuation reflect changes in the actuarial methods as recommended by Segal Consulting and adopted by the Association for the June 30, 2013 valuation. These changes were documented in our Review of Funding Policy and Ad Hoc Asset Smoothing Adjustment letters. The most significant of the funding policy changes was a change from the aggregate to the individual version of the Entry Age Actuarial Cost Method. This change increased the average employer contribution rate by 0.13% of payroll. In addition, there were changes to the amortization periods used for certain future changes in liability including the use of a 15-year period for plan amendments.

*Reference: Pg. 42 and 49*

- The ratio of the valuation value of assets to actuarial accrued liabilities increased from 78.7% to 79.0%. On a market value of assets basis the funded ratio increased from 77.1% to 77.4%. The Association's unfunded actuarial accrued liability increased from $2.34 billion as of June 30, 2012 to $2.45 billion as of June 30, 2013. This increase in the UAAL is primarily due to changes in actuarial assumptions, a lower than expected return on the valuation value of assets after "smoothing", and greater than expected retirements. The increases are offset by experience gains resulting from lower than expected salary increases and lower than expected cost-of-living increases in the benefits for retirees and beneficiaries. A complete reconciliation of the Association's unfunded actuarial accrued liability is provided in Section 3, Exhibit H.

*Reference: Pg. 19*

- The total employer contribution rate calculated in this valuation has increased from 34.04% of payroll to 35.79% of payroll. The increase is primarily due to changes in actuarial assumptions and the actuarial cost methods, the effect of greater than expected number of retirements during the year and lower than expected returns on the valuation value of assets after "smoothing". The increase in the employer contribution rate was offset to some degree by lower than expected salary increases and a lower than expected cost-of-living increase in benefits for retirees and beneficiaries. A complete reconciliation of the Association's aggregate employer rate is provided in Section 2, Subsection D (see Chart 15).

*Reference: Pg. 20*

- The average member rate calculated in this valuation increased from 10.47% of payroll to 11.69% of payroll. This increase is primarily due to changes in actuarial assumptions and the actuarial cost methods. Note that the change in the aggregate member rate due to the change in the actuarial cost method is primarily a result of how the new method accounts for member contributions (mainly with regard to the 30-year cessation for the legacy tiers). The individual member rates remain virtually unchanged as a result of the new method. A reconciliation of the Association's average member rate is provided in Section 2, Subsection D (see Chart 16).

*Reference: Pg. 6*

- For the June 30, 2013 valuation, the Board adopted an adjustment to the asset smoothing method that combines the net deferred losses of $170.6 million from the June 30, 2012 valuation into a single four and a half years smoothing "layer". Those net deferred losses are then recognized over the next four and a half years from that date in nine level amounts of approximately $19.0 million each six month period. This reduces the volatility associated with the pattern of deferred loss recognition and results in both more stable projected funded ratios (on an actuarial value basis) and more level employer contribution rates.

- As indicated in Section 2, Subsection B (see Chart 7) of this report, the total unrecognized investment loss as of June 30, 2013 was $177.9 million (versus an unrecognized loss of $170.6 million in the June 30, 2012 valuation). This investment loss will be recognized in the determination of the actuarial value of assets for funding purposes over the next few years, to the extent it is not offset by recognition of investment gains derived from future experience. This implies that earning the assumed rate of investment return of 7.75% per year (net of expenses) on a **market value** basis will result in investment losses on the actuarial value of assets in the next few years. Therefore, if the actual net market return is equal to the assumed 7.75% rate and all other actuarial assumptions are met, the contribution requirements would increase in each of the next few years as those losses are recognized.

  The unrecognized investment losses represent 2.0% of the market value of assets as of June 30, 2013 (the same as in the prior valuation). Unless offset by future investment gains or other favorable experience, the recognition of the $177.9 million market losses is expected to have an impact on the Association's future funded ratio and the aggregate employer contributions. This potential impact may be illustrated as follows:

  - If the deferred losses were recognized immediately in the valuation value of assets, the funded percentage would decrease from 79.0% to 77.4%.

    For comparison purposes, the funded percentage developed in the June 30, 2012 valuation if all the deferred losses were to be recognized immediately in that valuation was 77.1%.

  - If the deferred losses were recognized immediately in the valuation value of assets, the aggregate employer contribution rate would increase from 35.79% of payroll to 36.98% of payroll.

    For comparison purposes, the aggregate employer contribution rate developed in the June 30, 2012 valuation if all the deferred losses were to be recognized immediately in that valuation was 35.42%.

- The actuarial valuation report as of June 30, 2013 is based on financial and demographic information as of that date. Changes subsequent to that date are not reflected and will affect the actuarial cost of the plan.

- The Governmental Accounting Standards Board (GASB) approved two new Statements affecting the reporting of pension liabilities for accounting purposes. Statement 67 replaces Statement 25 and is for plan reporting. Statement 68 replaces Statement 27 and is for employer reporting. It is important to note that the new GASB rules only redefine pension expense for financial reporting purposes, and do not apply to contribution amounts for actual pension funding purposes. Employers and plans can still develop and adopt funding policies under current practices. Because these new Statements are not effective until the fiscal year ending June 30, 2014 for plan reporting and the fiscal year ending June 30, 2015 for employer reporting, we have continued to use Statements 25 and 27 in preparing the financial reporting information in this report.

Impact of Future Experience on Contribution Rates

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

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

## Summary of Key Valuation Results (Dollar amounts in thousands)

| | June 30, 2013 | | June 30, 2012[1] | |
|---|---|---|---|---|
| **Employer Contribution Rates:**[2] | Total Rate | Estimated Annual Amount[3] | Total Rate | Estimated Annual Amount[3] |
| General, other than Tier C | 33.46% | $265,097 | 30.72% | $243,384 |
| General Tier C (CalPEPRA) | 27.68% | 7,235 | 25.14% | 6,571 |
| General Combined | 33.27% | 272,332 | 30.54% | 249,955 |
| Safety, other than Tier C | 44.19% | 108,216 | 45.69% | 111,894 |
| Safety Tier C (CalPEPRA) | 37.45% | 1,646 | 37.73% | 1,659 |
| Safety Combined | 44.07% | 109,862 | 45.55% | 113,553 |
| All Categories combined | 35.79% | 382,194 | 34.04% | 363,508 |
| **Average Member Contribution Rates:**[2] | Total Rate | Estimated Annual Amount[3] | Total Rate | Estimated Annual Amount[3] |
| General Tier 1 | 10.15% | $182 | 8.63% | $155 |
| General Tier A | 11.52% | 80,787 | 10.09% | 70,758 |
| General Tier B | 8.68% | 7,752 | 7.92% | 7,073 |
| General Tier C | 7.72% | 2,018 | 7.05% | 1,843 |
| Safety Tier A | 13.95% | 30,487 | 13.04% | 28,498 |
| Safety Tier B | 11.45% | 3,017 | 11.16% | 2,941 |
| Safety Tier C | 14.11% | 620 | 12.58% | 553 |
| All Categories combined | 11.69% | 124,863 | 10.47% | 111,821 |
| **Funded Status:** | | | | |
| Actuarial accrued liability (AAL) | $11,631,237 | | $10,943,172 | |
| Valuation value of assets (VVA) | 9,186,032 | | 8,607,483 | |
| Market value of assets (MVA), net of non-valuation reserves | 9,008,085 | | 8,436,912 | |
| Unfunded actuarial accrued liability on VVA basis | 2,445,205 | | 2,335,689 | |
| Unfunded actuarial accrued liability on MVA basis | 2,623,152 | | 2,506,260 | |
| Funded ratio on VVA basis (VVA/AAL) | 79.0% | | 78.7% | |
| Funded ratio on MVA basis (MVA/AAL) | 77.4% | | 77.1% | |
| **Key Assumptions:** | | | | |
| Interest rate | 7.75% | | 8.00% | |
| Inflation rate | 3.25% | | 3.50% | |
| Across the board inflation | 0.75% | | 0.75% | |

(1) *Contribution rates as of June 30, 2012 for General and Safety Tier C were provided in our January 28, 2013 letter on contribution rates for CalPEPRA formulas.*

(2) *Before reflection of any member rate that may be "picked-up" by the employer.*

(3) *Based on June 30, 2013 projected annual compensation.*

## Summary of Key Valuation Demographic and Financial Data

| | June 30, 2013 | June 30, 2012 | Percentage Change |
|---|---|---|---|
| **Active Members:** | | | |
| Number of members | 16,891 | 16,457 | 2.6% |
| Average age | 45.1 | 45.6 | N/A |
| Average service | 11.5 | 11.7 | N/A |
| Projected total compensation | $1,067,792,128 | $1,052,366,941 | 1.5% |
| Average projected compensation | $63,217 | $63,946 | -1.1% |
| **Retired Member and Beneficiaries:** | | | |
| Number of members: | | | |
| Service retired | 12,706 | 12,105 | 5.0% |
| Disability retired | 1,635 | 1,631 | 0.2% |
| Beneficiaries | 1,479 | 1,430 | 3.4% |
| Total | 15,820 | 15,166 | 4.3% |
| Average age | 68.9 | 68.8 | N/A |
| Average monthly benefit | $2,801 | $2,733 | 2.5% |
| **Deferred Terminated Members:** | | | |
| Number of deferred terminated members(1) | 5,000 | 5,039 | -0.8% |
| Average age | 46.5 | 46.3 | N/A |
| **Summary of Financial Data (dollar amounts in thousands):** | | | |
| Market value of assets | $9,064,194 | $8,520,503 | 6.4% |
| Return on market value of assets | 7.78% | 5.46% | N/A |
| Actuarial value of assets | $9,242,141 | $8,691,074 | 6.3% |
| Return on actuarial value of assets | 7.72% | 1.70% | N/A |
| Valuation value of assets | $9,186,032 | $8,607,483 | 6.7% |
| Return on valuation value of assets | 7.77% | 1.72% | N/A |

(1) *Includes members who choose to leave contributions on deposit with less than five years of service.*

## A. MEMBER DATA

The Actuarial Valuation and Review considers the number and demographic characteristics of covered members, including active members, deferred terminated members, retired members and beneficiaries.

This section presents a summary of significant statistical data on these member groups.

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

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

**CHART 1**

**Member Population: 2004– 2013**

| As of June 30 | Active Members | Deferred Terminated Members | Retired Members and Beneficiaries | Ratio of Non-Actives to Actives |
|---|---|---|---|---|
| 2004 | 17,717 | 4,280 | 10,770 | 0.85 |
| 2005 | 16,980 | 4,673 | 11,436 | 0.95 |
| 2006 | 17,451 | 4,687 | 12,049 | 0.96 |
| 2007 | 17,733 | 4,908 | 12,504 | 0.98 |
| 2008 | 18,041 | 5,147 | 12,991 | 1.01 |
| 2009 | 17,699 | 5,238 | 13,453 | 1.06 |
| 2010 | 16,981 | 5,254 | 13,922 | 1.13 |
| 2011 | 16,523 | 5,125 | 14,496 | 1.19 |
| 2012 | 16,457 | 5,039 | 15,166 | 1.23 |
| 2013 | 16,891 | 5,000 | 15,820 | 1.23 |

### Active Members

Plan costs are affected by the age, years of service and compensation of active members. In this year's valuation, there were 16,891 active members with an average age of 45.1, average years of service of 11.5 years and average projected compensation of $63,217. The 16,457 active members in the prior valuation had an average age of 45.6, average service of 11.7 years and average projected compensation of $63,946.

### Deferred Terminated Members

In this year's valuation, there were 5,000 members with a vested right to a deferred or immediate vested benefit, including those entitled to a return of their member contributions versus 5,039 in the prior valuation.

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

**CHART 2**

**Distribution of Active Members by Age as of June 30, 2013**

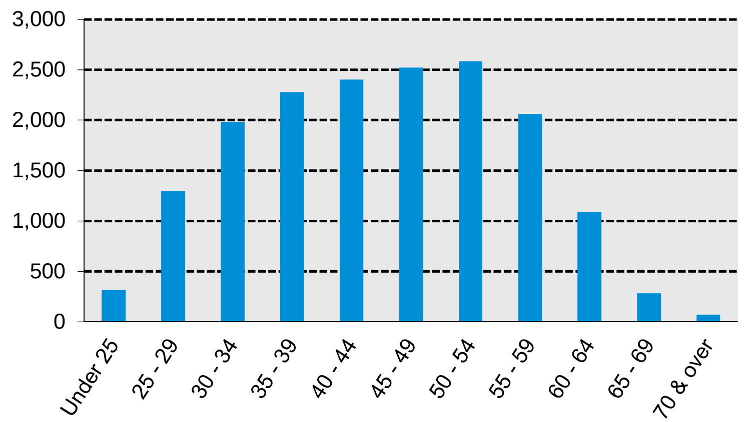
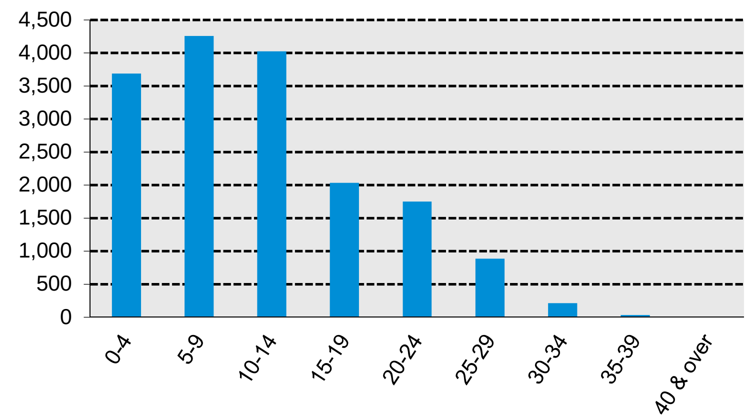



**CHART 3**

**Distribution of Active Members by Years of Service as of June 30, 2013**



**Retired Members and Beneficiaries**

As of June 30, 2013, 14,341 retired members and 1,479 beneficiaries were receiving total monthly benefits of $44,305,693. For comparison, in the previous valuation, there were 13,736 retired members and 1,430 beneficiaries receiving monthly benefits of $41,443,170.

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

**CHART 4**

**Distribution of Retired Members by Type and by Monthly Amount as of June 30, 2013**

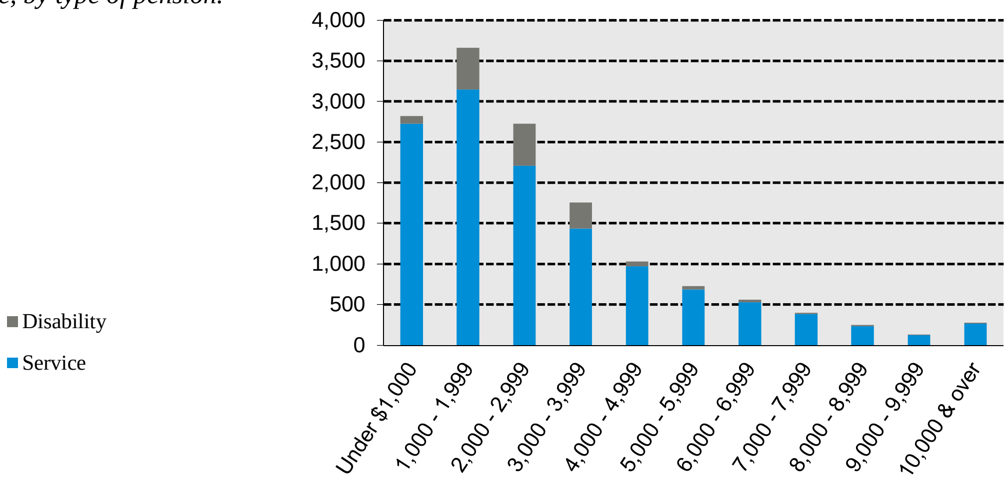
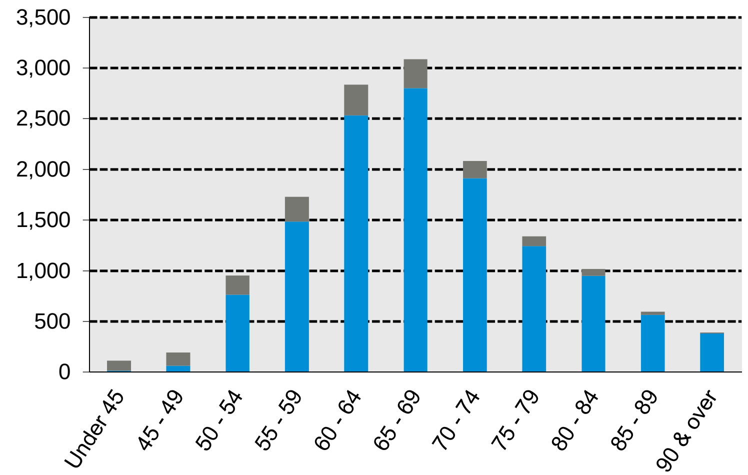



**CHART 5**

**Distribution of Retired Members by Type and by Age as of June 30, 2013**



## B. FINANCIAL INFORMATION

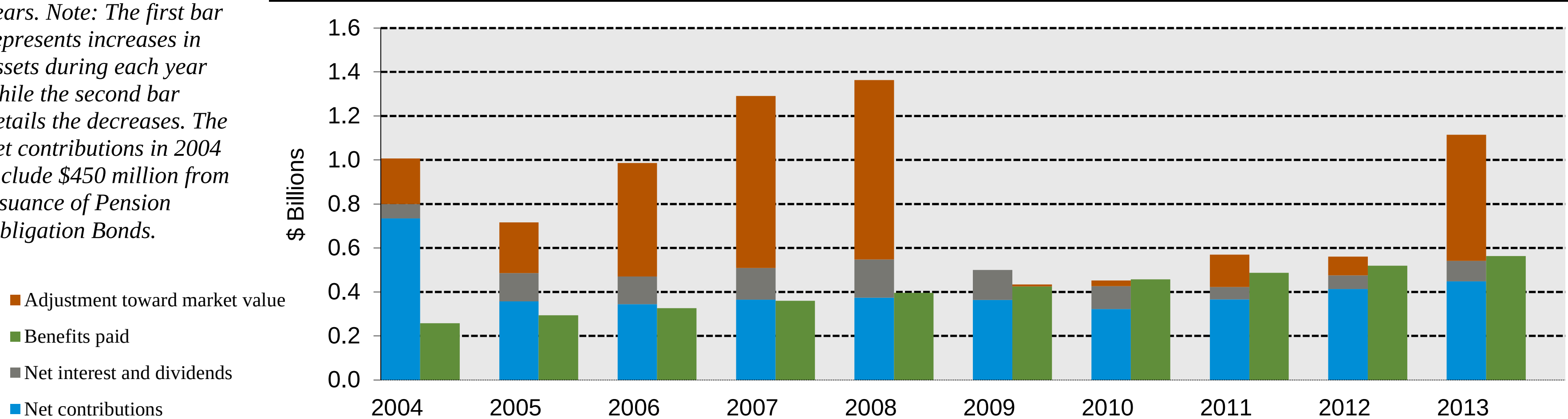
Retirement plan funding anticipates that, over the long term, both contributions and net investment earnings (less investment fees and administrative expenses) will be needed to cover benefit payments.

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

*The chart depicts the components of changes in the actuarial value of assets over the last ten years. Note: The first bar represents increases in assets during each year while the second bar details the decreases. The net contributions in 2004 include $450 million from issuance of Pension Obligation Bonds.*

**CHART 6**

**Comparison of Increases and Decreases in the Actuarial Value of Assets for Years Ended June 30, 2004 – 2013**



It is desirable to have level and predictable plan costs from one year to the next. For this reason, the Board of Retirement has approved an asset valuation method that gradually adjusts to market value. Under this method, the full value of market fluctuations is not recognized in a single year and, as a result, the asset value and the plan costs are more stable.

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

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

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

## CHART 7

### Determination of Actuarial and Valuation Value of Assets for Year Ended June 30, 2013

| Six Month Period | | Total Actual Market Return (net) | Expected Market Return (net) | Investment Gain (Loss) | Deferred Factor | Deferred Return |
|---|---|---|---|---|---|---|
| From | To | | | | | |
| 6/2012 Combined net deferred loss* | | | | ($170,571,295) | 0.7778 | ($132,666,563) |
| 7/2012 | 12/2012 | $595,958,895 | $329,280,436 | 266,678,459 | 0.8 | 213,342,768 |
| 1/2013 | 6/2013 | 62,787,174 | 350,146,351 | (287,359,177) | 0.9 | (258,623,260) |

| | | |
|---|---|---|
| 1. | Total Deferred Return | ($177,947,055) |
| 2. | Net Market Value of Assets | $9,064,193,632 |
| 3. | a. Actuarial Value of Assets (Item 2 – Item 1) | $9,242,140,687 |
| | b. Ratio of Actuarial Value of Assets to Net Market Value of Assets (Item 3a / Item 2) | 102.0% |
| 4. | Non-valuation reserves | |
| | a. Supplemental Benefit Reserve | $45,170,437 |
| | b. 401(h) Reserve | 3,999,159 |
| | c. Disability Supplemental Benefit Reserve | 6,939,506 |
| | d. Contingency Reserve | 0 |
| | e. Undistributed Reserve | 0 |
| | f. Subtotal | $56,109,101 |
| 5. | Valuation Value of Assets (Item 3a – Item 4f) | $9,186,031,586 |
| 6. | Amount of Deferred Returns to be recognized in the following valuations: | |
| | a. June 30, 2014 | ($42,040,876) |
| | b. June 30, 2015 | (42,040,876) |
| | c. June 30, 2016 | (42,040,876) |
| | d. June 30, 2017 | (23,088,510) |
| | e. June 30, 2018 | (28,735,918) |

** Net deferred loss as of June 30, 2012 was combined and will be recognized over 4.5 years.*

*Note: Results may not add due to rounding.*

**CHART 8**

**Allocation of Valuation Value of Assets as of June 30, 2013**

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

| | | General | Safety | Total |
|---|---|---|---|---|
| 1 | Beginning of Year Asset Allocation | $6,210,549,582 | $2,396,933,395 | $8,607,482,977 |
| 2 | Percentage of Total Employee Contributions Excluding Pickups | 75.09% | 24.91% | 100.00% |
| 3 | Employee Contributions * | $53,850,268 | $17,867,809 | $71,718,077 |
| 4 | Employer Contributions Including Pickups * | $244,765,934 | $113,127,165 | $357,893,100 |
| 5 | Annual Allowances for Retired Members (From Last Year's Valuation Report) | $373,734,660 | $123,626,712 | $497,361,372 |
| 6.1 | Benefit Payments Allocated in Proportion to (5) | $386,303,777 | $127,784,418 | $514,088,195 |
| 6.2 | Refunds, Allocated in Proportion to (2) | $2,086,318 | $692,105 | $2,778,423 |
| 7 | Subtotal = (1) + (3) + (4) – (6.1) – (6.2) | $6,120,775,689 | $2,399,451,846 | $8,520,227,536 |
| 8 | Total Valuation Value of Assets | | | $9,186,031,586 |
| 9 | Residual to Allocate = (8) – (7) | | | $665,804,050 |
| 10 | Allocate Residual in Proportion to (7) | $478,301,457 | $187,502,593 | $665,804,050 |
| 11 | End of Year Asset Allocation = (7) + (10) | $6,599,077,146 | $2,586,954,439 | $9,186,031,586 |

** Breakdown between General and Safety was provided by SDCERA.*

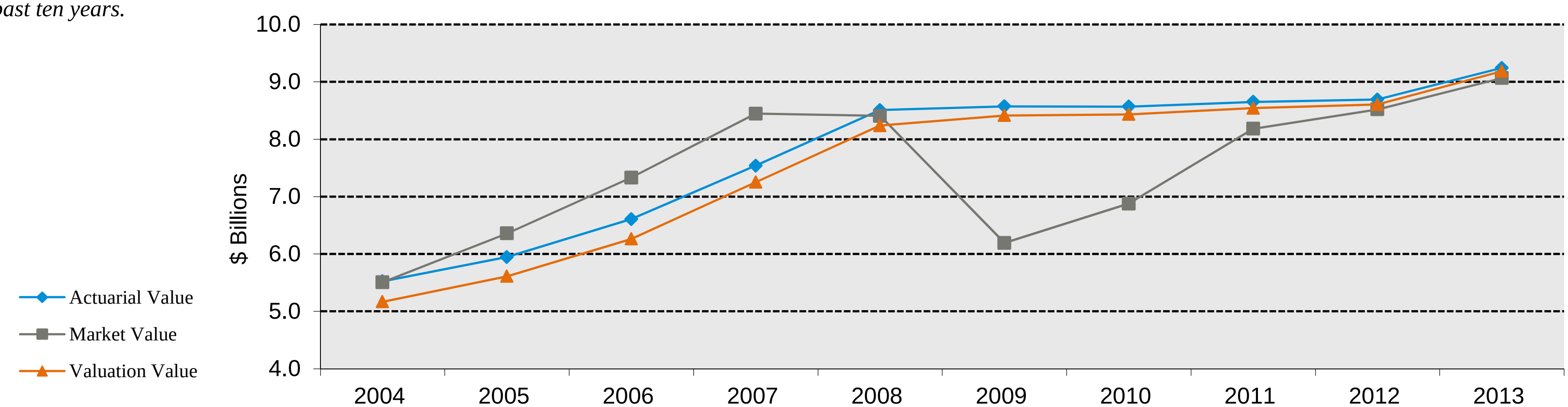
*Note: Results may not add due to rounding.*

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

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

**CHART 9**

**Market Value, Actuarial Value and Valuation Value of Assets as of June 30, 2004 –2013**



## C. ACTUARIAL EXPERIENCE

To calculate the required contribution, assumptions are made about future events that affect the amount and timing of benefits to be paid and assets to be accumulated. Each year actual experience is measured against the assumptions. If overall experience is more favorable than anticipated (an actuarial gain), the contribution requirement will decrease from the previous year. On the other hand, the contribution requirement will increase if overall actuarial experience is less favorable than expected (an actuarial loss).

Taking account of experience gains or losses in one year without making a change in assumptions reflects the belief that the single year's experience was a short-term development and that, over the long term, experience will return to the original assumptions. For contribution requirements to remain stable, assumptions should approximate experience.

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

The total experience gain was $180.1 million, a loss of $19.3 million from investments and a gain of $199.4 million from all other sources. The gain from all other sources was 1.7% of the actuarial accrued liability. A discussion of the major components of the actuarial experience is on the following pages.

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

**CHART 10**

**Actuarial Experience for Year Ended June 30, 2013**

| | | |
|---|---|---|
| 1. | Net loss from investments on valuation value of assets[1] | ($19,304,000) |
| 2. | Net gain from other experience[2] | 199,409,000 |
| 3. | Net experience gain: (1) + (2) | $180,105,000 |

[1] *Details in Chart 11*

[2] *See Section 3, Exhibit H. Does not include the effect of plan or assumption changes, if any.*

**Investment Rate of Return**

A major component of projected asset growth is the assumed rate of return. The assumed return should represent the expected long-term rate of return, based on SDCERA's investment policy. For valuation purposes, the assumed rate of return on the valuation value of assets used in the June 30, 2013 valuation was 8.00%. The actual rate of return on a valuation basis for the 2012/2013 plan year was 7.77%

Since the actual return for the year was less than the assumed return, SDCERA experienced an actuarial loss during the year ended June 30, 2013 with regard to its investments.

*This chart shows the loss due to investment experience.*

**CHART 11**

**Investment Experience for Year Ended June 30, 2013 – Market, Actuarial and Valuation Value of Assets**

| | Market Value | Actuarial Value | Valuation Value |
|---|---|---|---|
| 1. Actual return | $658,746,000 | $666,122,000 | $665,804,000 |
| 2. Average value of assets | 8,462,975,000 | 8,633,546,000 | 8,563,855,000 |
| 3. Actual rate of return: (1) ÷ (2) | 7.78% | 7.72% | 7.77% |
| 4. Assumed rate of return | 8.00% | 8.00% | 8.00% |
| 5. Expected return: (2) x (4) | 677,038,000 | 690,684,000 | 685,108,000 |
| 6. Actuarial loss: (1) – (5) | ($18,292,000) | ($24,562,000) | ($19,304,000) |

Because actuarial planning is long term, it is useful to see how the assumed investment rate of return has followed actual experience over time. The chart below shows the rate of return on an actuarial, valuation and market basis for the last ten years.

**CHART 12**

**Investment Return – Actuarial Value, Valuation Value and Market Value: 2004 – 2013**
**(Dollar amount in thousands)**

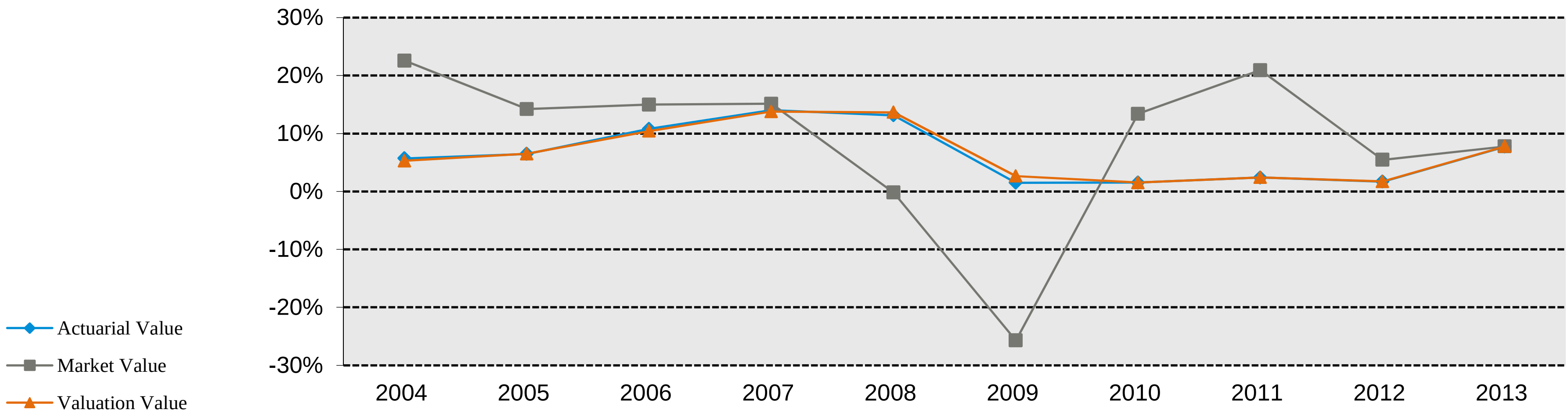
| | Valuation Value Investment Return | | Actuarial Value Investment Return | | Market Value Investment Return | |
|---|---|---|---|---|---|---|
| Year Ended June 30 | Amount | Percent | Amount | Percent | Amount | Percent |
| 2004 | $235,037 | 5.28% | $272,339 | 5.69% | $929,064 | 22.57% |
| 2005 | 339,407 | 6.50% | 359,888 | 6.48% | 787,268 | 14.21% |
| 2006 | 588,807 | 10.43% | 642,588 | 10.79% | 954,171 | 14.98% |
| 2007 | 866,669 | 13.78% | 926,575 | 14.02% | 1,108,996 | 15.12% |
| 2008 | 989,464 | 13.65% | 988,906 | 13.14% | -15,355 | -0.18% |
| 2009 | 217,866 | 2.65% | 128,063 | 1.51% | -2,153,974 | -25.71% |
| 2010 | 127,686 | 1.53% | 129,275 | 1.52% | 820,376 | 13.39% |
| 2011 | 202,986 | 2.42% | 203,518 | 2.39% | 1,425,637 | 20.91% |
| 2012 | 146,477 | 1.72% | 146,380 | 1.70% | 443,667 | 5.46% |
| 2013 | 665,804 | 7.77% | 666,122 | 7.72% | 658,746 | 7.78% |
| Total | $4,380,203 | | $4,463,654 | | $4,958,596 | |
| Average Last 10 Years | | 6.48% | | 6.40% | | 7.91% |

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

*This chart illustrates how this leveling effect has actually worked over the years 2004 - 2013.*

**CHART 13**

**Market, Actuarial and Valuation Rates of Return for Years Ended June 30, 2004 - 2013**



**Other Experience**

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

These include:

- the extent of turnover among the participants,
- retirement experience (earlier or later than expected),
- mortality (more or fewer deaths than expected),
- the number of disability retirements,
- salary increases different than assumed, and
- data adjustments for retiree benefits and active pay for performance.

The net gain from this other experience for the year ended June 30, 2013 amounted to $199.4 million, which was 1.7% of the actuarial accrued liability. See Exhibit H for a detailed development of the Unfunded Actuarial Accrued Liability.

### D. EMPLOYER AND MEMBER CONTRIBUTIONS

Employer contributions consist of two components:

*Normal Cost*

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

*Contribution to the Unfunded Actuarial Accrued Liability (UAAL)*

The annual contribution rate that, if paid annually over the UAAL amortization period, would accumulate to the amount necessary to fully fund the UAAL. Accumulation includes annual crediting of interest at the assumed investment earning rate. The contribution (or rate credit in the case of a negative unfunded actuarial accrued liability) is calculated to remain as a level percentage of future active member payroll (including payroll for new members as they enter the Association) assuming a constant number of active members. In order to remain as a level percentage of payroll, amortization payments (credits) are scheduled to increase at the annual rate of 4.00%. (i.e., 3.25% inflation plus 0.75% across-the-board salary increase).

Prior to July 1, 2013, the Association's UAAL was amortized over 20-year fixed (i.e. decreasing) layered amortization periods. As of July 1, 2013, any new UAAL resulting from plan amendments is amortized over separate decreasing 15-year periods; early retirement incentive programs (ERIPs) are amortized over separate decreasing periods of up to 5 years; assumption and method changes are amortized over separate decreasing 20-year periods; and experience gains or losses are amortized over separate decreasing 20-year periods.

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

Employer Normal Cost and UAAL contribution rates are calculated assuming payments made at the end of every pay period.

Member Contributions:

*Non- Tier C Members*

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

*Tier C Members*

Pursuant to Section 7522.30(a) of the Government Code, Tier C members are required to contribute at least 50% of the Normal Cost rate. We further understand that different rules may have to be applied for collectively bargained employees, non-represented, managerial or other supervisory employees (reference Section 7522.30(e)). In preparing the Normal Cost rates in this report, we have assumed that exactly 50% of the Normal Cost would be paid by the new members and we have taken into account the requirements of Section 7522.30(c), but not the requirements of Section 7522.30(e).

The member contribution rates are provided in Appendix A.

**CHART 14a**

**Recommended Employer Contribution Rates (Dollar Amounts in Thousands)**

| | June 30, 2013 Actuarial Valuation | | June 30, 2012 Actuarial Valuation | |
|---|---|---|---|---|
| **General Members other than Tier C** | Rate | Estimated Annual Amount* | Rate | Estimated Annual Amount* |
| Normal Cost ** | 13.50% | $106,940 | 12.91% | $102,263 |
| UAAL ** | 19.96% | $158,157 | 17.81% | $141,121 |
| Total Contribution | 33.46% | $265,097 | 30.72% | $243,384 |
| **General Tier C Members (CalPEPRA)** | | | | |
| Normal Cost ** | 7.72% | $2,018 | 7.33% | $1,916 |
| UAAL ** | 19.96% | $5,217 | 17.81% | $4,655 |
| Total Contribution | 27.68% | $7,235 | 25.14% | $6,571 |
| **Total General Members** | | | | |
| Normal Cost ** | 13.31% | $108,958 | 12.73% | $104,179 |
| UAAL ** | 19.96% | $163,374 | 17.81% | $145,776 |
| Total Contribution | 33.27% | $272,332 | 30.54% | $249,955 |

* *Amounts are in thousands and are based on June 30, 2013 projected annual payroll (also in thousands):*

| | |
|---|---|
| General Tier 1 | $1,792 |
| General Tier A | 701,272 |
| General Tier B | 89,305 |
| General Tier C | 26,135 |
| General Subtotal | $818,504 |

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

**CHART 14a (continued)**

**Recommended Employer Contribution Rates (Dollar Amounts in Thousands)**

| | June 30, 2013 Actuarial Valuation | | June 30, 2012 Actuarial Valuation | |
|---|---|---|---|---|
| **Safety Members other than Tier C** | Rate | Estimated Annual Amount* | Rate | Estimated Annual Amount* |
| Normal Cost ** | 20.85% | $51,058 | 21.10% | $51,676 |
| UAAL ** | 23.34% | $57,158 | 24.59% | $60,218 |
| Total Contribution | 44.19% | $108,216 | 45.69% | $111,894 |
| **Safety Tier C Members (CalPEPRA)** | | | | |
| Normal Cost ** | 14.11% | $620 | 13.14% | $578 |
| UAAL ** | 23.34% | $1,026 | 24.59% | $1,081 |
| Total Contribution | 37.45% | $1,646 | 37.73% | $1,659 |
| **Total Safety Members** | | | | |
| Normal Cost ** | 20.73% | $51,678 | 20.96% | $52,254 |
| UAAL ** | 23.34% | $58,184 | 24.59% | $61,299 |
| Total Contribution | 44.07% | $109,862 | 45.55% | $113,553 |
| **All Categories Combined** | | | | |
| Normal Cost ** | 15.04% | $160,636 | 14.65% | $156,433 |
| UAAL ** | 20.75% | $221,558 | 19.39% | $207,075 |
| Total Contribution | 35.79% | $382,194 | 34.04% | $363,508 |

* *Amounts are in thousands and are based on June 30, 2013 projected annual payroll (Also in thousands):*

| | |
|---|---|
| Safety Tier A | $218,542 |
| Safety Tier B | 26,350 |
| Safety Tier C | 4,396 |
| Safety Subtotal | $249,288 |
| General & Safety Subtotal | $1,067,792 |

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

**CHART 14b**

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

| | Elements of Normal Cost | | |
|---|---|---|---|
| **Normal Cost** | General | Safety | Overall |
| Service Retirement* | 8.62% | 10.28% | 9.01% |
| Vested Termination and Ordinary Withdrawal | 2.68% | 2.64% | 2.67% |
| Non Service and Service Connected Disability | 1.63% | 7.00% | 2.88% |
| Non Service and Service Connected Death | 0.38% | 0.81% | 0.48% |
| Total Employer Normal Cost | 13.31% | 20.73% | 15.04% |
| Total Employee Normal Cost* | 11.09% | 13.69% | 11.69% |
| Employer Plus Employee Normal Cost | 24.40% | 34.42% | 26.73% |

* *Assuming that employee normal cost is only used to fund service retirement benefit.*

| | Elements of UAAL** | | |
|---|---|---|---|
| **Unfunded Actuarial Accrued Liability**** | General | Safety | Overall |
| Service Retirement | 19.09% | 20.55% | 19.44% |
| Vested Termination and Ordinary Withdrawal | 0.09% | 0.11% | 0.09% |
| Non Service and Service Connected Disability | 0.58% | 2.42% | 1.01% |
| Non Service and Service Connected Death | 0.20% | 0.26% | 0.21% |
| Total Employer Unfunded Actuarial Accrued Liability | 19.96% | 23.34% | 20.75% |

** *Assuming that the liability for all inactive members is fully funded.*

The contribution rates as of June 30, 2013 are based on all of the data described in the previous sections, the actuarial assumptions described in Section 4, and the Plan provisions adopted at the time of preparation of the Actuarial Valuation. They include all changes affecting future costs, adopted benefit changes, actuarial gains and losses and changes in the actuarial assumptions.

**Reconciliation of Recommended Contribution**

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

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

**CHART 15**

**Reconciliation of Recommended Employer Contribution from June 30, 2012 to June 30, 2013 (Dollar Amounts in Thousands)**

| | Contribution Rate | Estimated Annual Dollar Cost[1] |
|---|---|---|
| **Recommended Average Employer Contribution Rate as of June 30, 2012, Before Reflecting Any Employer Pickups** | 34.04% | $363,508 |
| Effect of investment loss [2] | 0.13% | 1,388 |
| Effect of one-year delay in implementation of contribution rates calculated in June 30, 2012 valuation | 0.30% | 3,203 |
| Effect of difference in actual versus expected total and individual salary increases | -1.15% | -12,296 |
| Effect of difference in actual versus expected cost-of-living benefit increases for retirees and beneficiaries | -0.57% | -6,086 |
| Effect of greater number of retirements than expected | 0.48% | 5,125 |
| Effect of $14.2 million in additional contribution made by the County | -0.09% | -961 |
| Effect of other actuarial gains or losses | -0.13% | -1,371 |
| Effect of actuarial assumption changes[3] | 2.65% | 28,296 |
| Effect of change to individual Entry Age actuarial cost method | 0.13% | 1,388 |
| **Total Change** | 1.75% | $18,686 |
| **Recommended Average Employer Contribution Rate as of June 30, 2013, Before Reflecting Any Employer Pickups** | 35.79% | $382,194 |

(1) *Based on June 30, 2013 projected annual payroll of $1,067,792,128.*

(2) *Return on valuation value of assets was 7.77% and less than the 8.00% assumed in the June 30, 2012 valuation.*

(3) *This is the aggregate impact for General and Safety groups combined. For Safety, the impact of the change in economic assumptions was offset entirely by the change in non-economic assumptions.*

The member contribution rates as of June 30, 2013 are based on all of the data described in the previous sections, the actuarial assumptions described in Section 4, and the Plan provisions adopted at the time of preparation of the Actuarial Valuation.

**Reconciliation of Recommended Contribution Rate**

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

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

**CHART 16**

**Reconciliation of Recommended Member Contribution from June 30, 2012 to June 30, 2013 (Dollar Amounts in Thousands)**

| | Contribution Rate | Estimated Annual Dollar Cost[1] |
|---|---|---|
| **Recommended Average Member Contribution Rate as of June 30, 2012, Before Reflecting Any Employer Pickups** | 10.47% | $111,821 |
| Effect of change in demographics of members | -0.07% | -733 |
| Effect of actuarial assumption changes[2] | 0.19% | 2,029 |
| Effect of change to individual Entry Age actuarial cost method[3] | 1.10% | 11,746 |
| **Total Change** | 1.22% | $13,042 |
| **Recommended Average Member Contribution Rate as of June 30, 2013, Before Reflecting Any Employer Pickups** | 11.69% | $124,863 |

(1) *Based on June 30, 2013 projected annual payroll of $1,067,792,128.*

(2) *This is the aggregate impact for General and Safety groups combined. For Safety, the impact of the change in economic assumptions has been offset entirely by the change in non-economic assumptions.*

(3) *This is due to a change in how the new method accounts for member contributions (mainly with regard to the 30-year cessation for the legacy tiers). The individual member contribution rates remain virtually unchanged.*

### E. INFORMATION REQUIRED BY GASB

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

Critical information to the GASB is the historical comparison of the GASB required contributions to the actual contributions. This comparison demonstrates whether a plan is being funded on an actuarially sound basis and in accordance with the GASB funding requirements.

Chart 17 below presents a graphical representation of this information for the Plan.

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

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

*These graphs show key GASB factors.*

**CHART 17**

**Required Versus Actual Contributions**

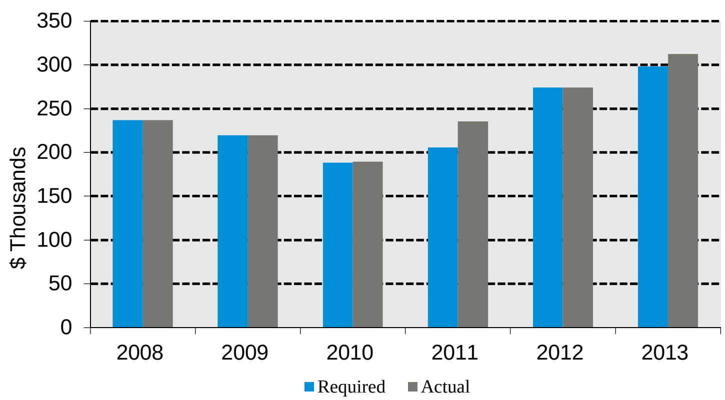
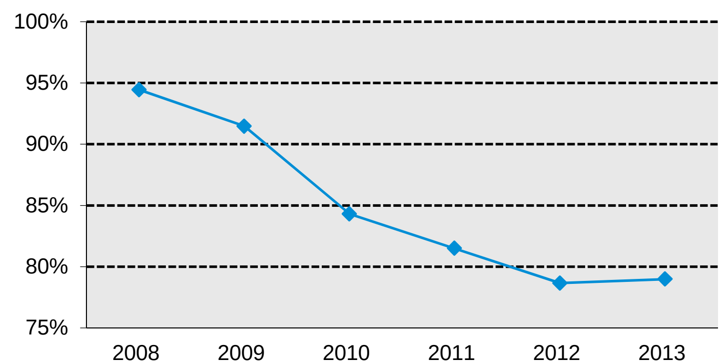



**CHART 18**

**Funded Ratio**



## F. VOLATILITY RATIOS

Retirement plans are subject to volatility in the level of required contributions. This volatility tends to increase as retirement plans become more mature.

The Asset Volatility Ratio (AVR), which is equal to the market value of assets divided by total payroll, provides an indication of the potential contribution volatility for any given level of investment volatility. A higher AVR indicates that the plan is subject to a greater level of contribution volatility. This is a current measure since it is based on the current level of assets.

For SDCERA, the current AVR is about 8.5. This means that a 1% asset gain/(loss) (relative to the assumed investment return) translates to about 8.5% of one-year's payroll. Since SDCERA amortizes actuarial gains and losses over a period of 20 years, there would be a 0.6% of payroll decrease/(increase) in the required contribution for each 1% asset gain/(loss).

The Liability Volatility Ratio (LVR), which is equal to the Actuarial Accrued Liability divided by payroll, provides an indication of the longer-term potential for contribution volatility for any given level of investment volatility. This is because, over an extended period of time, the plan's assets should track the plan's liabilities. For example, if a plan is 50% funded on a market value basis, the liability volatility ratio would be double the asset volatility ratio and the plan sponsor should expect contribution volatility to increase over time as the plan becomes better funded.

The LVR also indicates how volatile contributions will be in response to changes in the Actuarial Accrued Liability due to actual experience or to changes in actuarial assumptions.

For SDCERA, the current LVR is about 10.9. This is about 28% higher than the AVR. Therefore, we would expect that contribution volatility will increase over the long-term.

*This chart shows how the asset and liability volatility ratios have varied over time.*

**CHART 19**

**Volatility Ratios for Years Ended June 30, 2008 – 2013**

| Year Ended June 30 | Asset Volatility Ratio | Liability Volatility Ratio |
|---|---|---|
| 2008 | 7.4 | 7.7 |
| 2009 | 5.5 | 8.1 |
| 2010 | 6.3 | 9.1 |
| 2011 | 7.5 | 9.6 |
| 2012 | 8.1 | 10.4 |
| 2013 | 8.5 | 10.9 |

## EXHIBIT A

### Table of Plan Coverage

### i. General Tier 1

| Category | Year Ended June 30 2013 | Year Ended June 30 2012 | Change From Prior Year |
|---|---|---|---|
| **Active members in valuation** | | | |
| Number | 30 | 31 | -3.2% |
| Average age | 51.5 | 50.8 | N/A |
| Average service | 13.1 | 12.1 | N/A |
| Projected total compensation | $1,792,241 | $1,796,373 | -0.2% |
| Projected average compensation | $59,741 | $57,948 | 3.1% |
| Account balances | $807,161 | $678,879 | 18.9% |
| Total active vested members | 30 | 31 | -3.2% |
| **Deferred terminated members** | 1,699 | 1,832 | -7.3% |
| **Retired members** | | | |
| Number in pay status | 4,071 | 4,156 | -2.0% |
| Average age | 74.3 | 74.4 | N/A |
| Average monthly benefit | $1,905 | $1,908 | -0.2% |
| **Disabled members** | | | |
| Number in pay status | 206 | 224 | -8.0% |
| Average age | 73.9 | 73.6 | N/A |
| Average monthly benefit | $2,127 | $2,058 | 3.4% |
| **Beneficiaries** | | | |
| Number in pay status | 920 | 913 | 0.8% |
| Average age | 81.0 | 80.6 | N/A |
| Average monthly benefit | $1,579 | $1,501 | 5.2% |

## EXHIBIT A
### Table of Plan Coverage
### ii. General Tier A

| Category | Year Ended June 30 2013 | Year Ended June 30 2012 | Change From Prior Year |
|---|---|---|---|
| **Active members in valuation** | | | |
| Number | 10,968 | 11,750 | -6.7% |
| Average age | 48.3 | 47.8 | N/A |
| Average service | 13.6 | 12.8 | N/A |
| Projected total compensation | $701,272,241 | $745,825,665 | -6.0% |
| Projected average compensation | $63,938 | $63,475 | 0.7% |
| Account balances | $369,855,549 | $328,996,997 | 12.4% |
| Total active vested members | 10,414 | 10,302 | 1.1% |
| **Deferred terminated members** | 2,471 | 2,505 | -1.4% |
| **Retired members**[(1)] | | | |
| Number in pay status | 7,048 | 6,498 | 8.5% |
| Average age | 66.9 | 66.6 | N/A |
| Average monthly benefit | $3,053 | $3,006 | 1.6% |
| **Disabled members**[(1)] | | | |
| Number in pay status | 743 | 737 | 0.8% |
| Average age | 61.9 | 61.4 | N/A |
| Average monthly benefit | $1,951 | $1,895 | 3.0% |
| **Beneficiaries**[(1)] | | | |
| Number in pay status | 397 | 363 | 9.4% |
| Average age | 68.5 | 67.5 | N/A |
| Average monthly benefit | $1,309 | $1,218 | 7.5% |

[(1)] *This includes members from General Tier 2 and General Tier A.*

**EXHIBIT A**

**Table of Plan Coverage**

**iii. General Tier B**

| Category | Year Ended June 30: 2013 | 2012 | Change From Prior Year |
|---|---|---|---|
| **Active members in valuation** | | | |
| Number | 1,829 | 1,415 | 29.3% |
| Average age | 37.0 | 36.3 | N/A |
| Average service | 1.6 | 1.0 | N/A |
| Projected total compensation | $89,304,560 | $66,690,489 | 33.9% |
| Projected average compensation | $48,827 | $47,131 | 3.6% |
| Account balances | $8,764,414 | $3,560,817 | 146.1% |
| Total active vested members | 7 | 4 | 75.0% |
| **Deferred terminated members** | 223 | 111 | 100.9% |
| **Retired members** | | | |
| Number in pay status | 5 | 3 | 66.7% |
| Average age | 60.6 | 64.2 | N/A |
| Average monthly benefit | $1,644 | $2,326 | -29.3% |
| **Disabled members** | | | |
| Number in pay status | 0 | 0 | N/A |
| Average age | N/A | N/A | N/A |
| Average monthly benefit | N/A | N/A | N/A |
| **Beneficiaries** | | | |
| Number in pay status | 0 | 0 | N/A |
| Average age | N/A | N/A | N/A |
| Average monthly benefit | N/A | N/A | N/A |

**EXHIBIT A**

**Table of Plan Coverage**

**iv. General Tier C**

| Category | Year Ended June 30: 2013 | 2012 | Change From Prior Year |
|---|---|---|---|
| **Active members in valuation** | | | |
| Number | 643 | 0 | N/A |
| Average age | 34.8 | N/A | N/A |
| Average service | 0.3 | N/A | N/A |
| Projected total pensionable compensation | $26,134,644 | N/A | N/A |
| Projected average pensionable compensation | $40,645 | N/A | N/A |
| Account balances | $425,065 | N/A | N/A |
| Total active vested members | 0 | 0 | N/A |
| **Deferred terminated members** | 19 | 0 | N/A |
| **Retired members** | | | |
| Number in pay status | 0 | 0 | N/A |
| Average age | N/A | N/A | N/A |
| Average monthly benefit | N/A | N/A | N/A |
| **Disabled members** | | | |
| Number in pay status | 0 | 0 | N/A |
| Average age | N/A | N/A | N/A |
| Average monthly benefit | N/A | N/A | N/A |
| **Beneficiaries** | | | |
| Number in pay status | 0 | 0 | N/A |
| Average age | N/A | N/A | N/A |
| Average monthly benefit | N/A | N/A | N/A |

**EXHIBIT A**

**Table of Plan Coverage**

**v. Safety Tier A**

| Category | Year Ended June 30 2013 | Year Ended June 30 2012 | Change From Prior Year |
|---|---|---|---|
| **Active members in valuation** | | | |
| Number | 2,848 | 2,985 | -4.6% |
| Average age | 43.1 | 42.5 | N/A |
| Average service | 14.2 | 13.5 | N/A |
| Projected total compensation | $218,541,998 | $223,815,216 | -2.4% |
| Projected average compensation | $76,735 | $74,980 | 2.3% |
| Account balances | $121,824,977 | $104,187,516 | 16.9% |
| Total active vested members | 2,748 | 2,593 | 6.0% |
| **Deferred terminated members** | 558 | 577 | -3.3% |
| **Retired members**(1) | | | |
| Number in pay status | 1,581 | 1,448 | 9.2% |
| Average age | 63.2 | 63.2 | N/A |
| Average monthly benefit | $5,121 | $5,129 | -0.2% |
| **Disabled members**(1) | | | |
| Number in pay status | 686 | 670 | 2.4% |
| Average age | 59.3 | 58.8 | N/A |
| Average monthly benefit | $3,735 | $3,618 | 3.2% |
| **Beneficiaries**(1) | | | |
| Number in pay status | 162 | 154 | 5.2% |
| Average age | 71.1 | 69.2 | N/A |
| Average monthly benefit | $3,128 | $2,931 | 6.7% |

(1) *This includes members from Safety Tier 1, Safety Tier 2 and Safety Tier A.*

**EXHIBIT A**

**Table of Plan Coverage**

**vi. Safety Tier B**

| Category | Year Ended June 30 2013 | Year Ended June 30 2012 | Change From Prior Year |
|---|---|---|---|
| **Active members in valuation** | | | |
| Number | 486 | 276 | 76.1% |
| Average age | 31.4 | 31.1 | N/A |
| Average service | 1.7 | 1.1 | N/A |
| Projected total compensation | $26,350,285 | $14,239,198 | 85.1% |
| Projected average compensation | $54,219 | $51,591 | 5.1% |
| Account balances | $2,120,715 | $524,955 | 304.0% |
| Total active vested members | 10 | 3 | 233.3% |
| **Deferred terminated members** | 30 | 14 | 114.3% |
| **Retired members** | | | |
| Number in pay status | 1 | 0 | N/A |
| Average age | 54.8 | N/A | N/A |
| Average monthly benefit | $1,946 | N/A | N/A |
| **Disabled members** | | | |
| Number in pay status | 0 | 0 | N/A |
| Average age | N/A | N/A | N/A |
| Average monthly benefit | N/A | N/A | N/A |
| **Beneficiaries** | | | |
| Number in pay status | 0 | 0 | N/A |
| Average age | N/A | N/A | N/A |
| Average monthly benefit | N/A | N/A | N/A |

**EXHIBIT A**

**Table of Plan Coverage**

**ii. Safety Tier C**

| | Year Ended June 30 | | |
|---|---|---|---|
| **Category** | **2013** | **2012** | **Change From Prior Year** |
| **Active members in valuation** | | | |
| Number | 87 | 0 | N/A |
| Average age | 30.7 | N/A | N/A |
| Average service | 0.3 | N/A | N/A |
| Projected total pensionable compensation | $4,396,159 | N/A | N/A |
| Projected average pensionable compensation | $50,531 | N/A | N/A |
| Account balances | $130,122 | N/A | N/A |
| Total active vested members | 0 | 0 | N/A |
| **Deferred terminated members** | 0 | 0 | N/A |
| **Retired members** | | | |
| Number in pay status | 0 | 0 | N/A |
| Average age | N/A | N/A | N/A |
| Average monthly benefit | N/A | N/A | N/A |
| **Disabled members** | | | |
| Number in pay status | 0 | 0 | N/A |
| Average age | N/A | N/A | N/A |
| Average monthly benefit | N/A | N/A | N/A |
| **Beneficiaries** | | | |
| Number in pay status | 0 | 0 | N/A |
| Average age | N/A | N/A | N/A |
| Average monthly benefit | N/A | N/A | N/A |

## EXHIBIT B

## Members in Active Service and Projected Average Compensation as of June 30, 2013
## By Age and Years of Service

### i. General Tier 1

| | | Years of Service | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Age | Total | 0-4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40 & over |
| Under 25 | - - | - - | - - | - - | - - | - - | - - | - - | - - | - - |
| | - - | - - | - - | - - | - - | - - | - - | - - | - - | - - |
| 25 - 29 | - - | - - | - - | - - | - - | - - | - - | - - | - - | - - |
| | - - | - - | - - | - - | - - | - - | - - | - - | - - | - - |
| 30 - 34 | 1 | - - | - - | 1 | - - | - - | - - | - - | - - | - - |
| | $47,817 | - - | - - | $47,817 | - - | - - | - - | - - | - - | - - |
| 35 - 39 | 3 | - - | - - | 3 | - - | - - | - - | - - | - - | - - |
| | 94,417 | - - | - - | 94,417 | - - | - - | - - | - - | - - | - - |
| 40 - 44 | 6 | - - | - - | 6 | - - | - - | - - | - - | - - | - - |
| | 69,893 | - - | - - | 69,893 | - - | - - | - - | - - | - - | - - |
| 45 - 49 | 4 | - - | - - | 3 | 1 | - - | - - | - - | - - | - - |
| | 71,248 | - - | - - | 79,058 | $47,817 | - - | - - | - - | - - | - - |
| 50 - 54 | 1 | - - | - - | 1 | - - | - - | - - | - - | - - | - - |
| | 51,877 | - - | - - | 51,877 | - - | - - | - - | - - | - - | - - |
| 55 - 59 | 7 | - - | - - | 5 | 1 | - - | 1 | - - | - - | - - |
| | 44,705 | - - | - - | 43,461 | 47,817 | - - | $47,817 | - - | - - | - - |
| 60 - 64 | 7 | - - | 1 | 5 | 1 | - - | - - | - - | - - | - - |
| | 50,818 | - - | $16,046 | 57,076 | 54,304 | - - | - - | - - | - - | - - |
| 65 - 69 | 1 | - - | - - | 1 | - - | - - | - - | - - | - - | - - |
| | 36,282 | - - | - - | 36,282 | - - | - - | - - | - - | - - | - - |
| 70 & over | - - | - - | - - | - - | - - | - - | - - | - - | - - | - - |
| | - - | - - | - - | - - | - - | - - | - - | - - | - - | - - |
| Total | 30 | - - | 1 | 25 | 3 | - - | 1 | - - | - - | - - |
| | $59,741 | - - | $16,046 | $63,138 | $49,980 | - - | $47,817 | - - | - - | - - |

## EXHIBIT B

## Members in Active Service and Projected Average Compensation as of June 30, 2013
## By Age and Years of Service

### ii. General Tier A

| | | Years of Service | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Age | Total | 0-4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40 & over |
| Under 25 | 4 | 1 | 3 | - - | - - | - - | - - | - - | - - | - - |
| | $29,870 | $29,902 | $29,859 | - - | - - | - - | - - | - - | - - | - - |
| 25 - 29 | 238 | 63 | 170 | 5 | - - | - - | - - | - - | - - | - - |
| | 47,043 | 45,845 | 47,383 | $50,571 | - - | - - | - - | - - | - - | - - |
| 30 - 34 | 974 | 119 | 682 | 173 | - - | - - | - - | - - | - - | - - |
| | 59,600 | 59,589 | 60,044 | 57,858 | - - | - - | - - | - - | - - | - - |
| 35 - 39 | 1,434 | 113 | 652 | 611 | 58 | - - | - - | - - | - - | - - |
| | 62,975 | 56,768 | 63,239 | 63,329 | $68,377 | - - | - - | - - | - - | - - |
| 40 - 44 | 1,500 | 63 | 486 | 603 | 258 | 88 | 2 | - - | - - | - - |
| | 65,702 | 57,435 | 62,903 | 66,975 | 71,390 | $61,997 | $51,695 | - - | - - | - - |
| 45 - 49 | 1,729 | 47 | 430 | 527 | 297 | 313 | 112 | 3 | - - | - - |
| | 65,633 | 56,836 | 60,604 | 62,979 | 72,186 | 73,102 | 63,095 | $57,562 | - - | - - |
| 50 - 54 | 2,025 | 63 | 389 | 511 | 314 | 445 | 240 | 61 | 2 | - - |
| | 65,511 | 58,260 | 59,301 | 58,666 | 65,404 | 75,578 | 74,371 | 62,778 | $47,430 | - - |
| 55 - 59 | 1,755 | 47 | 304 | 477 | 312 | 302 | 207 | 86 | 18 | 2 |
| | 64,664 | 56,632 | 55,029 | 60,309 | 64,298 | 69,835 | 78,862 | 76,671 | 62,332 | $67,891 |
| 60 - 64 | 973 | 29 | 233 | 287 | 146 | 137 | 94 | 37 | 8 | 2 |
| | 64,729 | 51,226 | 61,313 | 60,209 | 67,661 | 75,124 | 69,398 | 71,135 | 64,215 | 45,239 |
| 65 - 69 | 267 | 9 | 56 | 89 | 46 | 36 | 21 | 7 | 3 | - - |
| | 60,440 | 48,315 | 61,111 | 50,917 | 56,866 | 71,469 | 75,766 | 84,169 | 126,582 | - - |
| 70 & over | 69 | 2 | 10 | 20 | 16 | 10 | 5 | 2 | 3 | 1 |
| | 62,362 | 30,086 | 60,385 | 62,334 | 64,786 | 60,957 | 73,036 | 79,190 | 50,581 | 70,845 |
| Total | 10,968 | 556 | 3,415 | 3,303 | 1,447 | 1,331 | 681 | 196 | 34 | 5 |
| | $63,938 | $55,803 | $60,049 | $61,864 | $67,693 | $72,527 | $73,162 | $71,303 | $66,531 | $59,421 |

## EXHIBIT B

## Members in Active Service and Projected Average Compensation as of June 30, 2013
## By Age and Years of Service

### iii. General Tier B

| | | Years of Service | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Age | Total | 0-4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40 & over |
| Under 25 | 106 | 106 | - - | - - | - - | - - | - - | - - | - - | - - |
| | $37,542 | $37,542 | - - | - - | - - | - - | - - | - - | - - | - - |
| 25 - 29 | 476 | 476 | - - | - - | - - | - - | - - | - - | - - | - - |
| | 44,798 | 44,798 | - - | - - | - - | - - | - - | - - | - - | - - |
| 30 - 34 | 406 | 405 | 1 | - - | - - | - - | - - | - - | - - | - - |
| | 49,415 | 49,419 | $47,817 | - - | - - | - - | - - | - - | - - | - - |
| 35 - 39 | 230 | 228 | 2 | - - | - - | - - | - - | - - | - - | - - |
| | 48,858 | 48,852 | 49,654 | - - | - - | - - | - - | - - | - - | - - |
| 40 - 44 | 189 | 188 | 1 | - - | - - | - - | - - | - - | - - | - - |
| | 51,911 | 51,933 | 47,817 | - - | - - | - - | - - | - - | - - | - - |
| 45 - 49 | 137 | 137 | - - | - - | - - | - - | - - | - - | - - | - - |
| | 55,082 | 55,082 | - - | - - | - - | - - | - - | - - | - - | - - |
| 50 - 54 | 139 | 138 | - - | 1 | - - | - - | - - | - - | - - | - - |
| | 54,293 | 53,158 | - - | $210,945 | - - | - - | - - | - - | - - | - - |
| 55 - 59 | 95 | 95 | - - | - - | - - | - - | - - | - - | - - | - - |
| | 52,119 | 52,119 | - - | - - | - - | - - | - - | - - | - - | - - |
| 60 - 64 | 44 | 44 | - - | - - | - - | - - | - - | - - | - - | - - |
| | 55,881 | 55,881 | - - | - - | - - | - - | - - | - - | - - | - - |
| 65 - 69 | 5 | 5 | - - | - - | - - | - - | - - | - - | - - | - - |
| | 63,765 | 63,765 | - - | - - | - - | - - | - - | - - | - - | - - |
| 70 & over | 2 | 2 | - - | - - | - - | - - | - - | - - | - - | - - |
| | 33,983 | 33,984 | - - | - - | - - | - - | - - | - - | - - | - - |
| Total | 1,829 | 1,824 | 4 | 1 | - - | - - | - - | - - | - - | - - |
| | $48,827 | $48,738 | $48,735 | $210,945 | - - | - - | - - | - - | - - | - - |

## EXHIBIT B

### Members in Active Service and Projected Average Compensation as of June 30, 2013
### By Age and Years of Service

### iii. General Tier C

| | | Years of Service | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Age | Total | 0-4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40 & over |
| Under 25 | 71 | 71 | - - | - - | - - | - - | - - | - - | - - | - - |
| | $36,166 | $36,166 | - - | - - | - - | - - | - - | - - | - - | - - |
| 25 - 29 | 210 | 210 | - - | - - | - - | - - | - - | - - | - - | - - |
| | 39,438 | 39,438 | - - | - - | - - | - - | - - | - - | - - | - - |
| 30 - 34 | 110 | 110 | - - | - - | - - | - - | - - | - - | - - | - - |
| | 41,697 | 41,697 | - - | - - | - - | - - | - - | - - | - - | - - |
| 35 - 39 | 89 | 89 | - - | - - | - - | - - | - - | - - | - - | - - |
| | 40,280 | 40,280 | - - | - - | - - | - - | - - | - - | - - | - - |
| 40 - 44 | 53 | 53 | - - | - - | - - | - - | - - | - - | - - | - - |
| | 41,826 | 41,826 | - - | - - | - - | - - | - - | - - | - - | - - |
| 45 - 49 | 39 | 39 | - - | - - | - - | - - | - - | - - | - - | - - |
| | 41,058 | 41,058 | - - | - - | - - | - - | - - | - - | - - | - - |
| 50 - 54 | 35 | 35 | - - | - - | - - | - - | - - | - - | - - | - - |
| | 43,333 | 43,333 | - - | - - | - - | - - | - - | - - | - - | - - |
| 55 - 59 | 22 | 22 | - - | - - | - - | - - | - - | - - | - - | - - |
| | 47,487 | 47,487 | - - | - - | - - | - - | - - | - - | - - | - - |
| 60 - 64 | 13 | 13 | - - | - - | - - | - - | - - | - - | - - | - - |
| | 52,480 | 52,480 | - - | - - | - - | - - | - - | - - | - - | - - |
| 65 - 69 | 1 | 1 | - - | - - | - - | - - | - - | - - | - - | - - |
| | 51,447 | 51,447 | - - | - - | - - | - - | - - | - - | - - | - - |
| 70 & over | - - | - - | - - | - - | - - | - - | - - | - - | - - | - - |
| | - - | - - | - - | - - | - - | - - | - - | - - | - - | - - |
| Total | 643 | 643 | - - | - - | - - | - - | - - | - - | - - | - - |
| | $40,645 | $40,645 | - - | - - | - - | - - | - - | - - | - - | - - |

## EXHIBIT B

### Members in Active Service and Projected Average Compensation as of June 30, 2013
### By Age and Years of Service

#### iv. Safety Tier A

| | | Years of Service | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Age | Total | 0-4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 | 35 & over |
| Under 25 | 6 | 1 | 5 | - - | - - | - - | - - | - - | - - |
| | $60,787 | $58,315 | $61,282 | - - | - - | - - | - - | - - | - - |
| 25 – 29 | 150 | 36 | 114 | - - | - - | - - | - - | - - | - - |
| | 65,669 | 63,651 | 66,307 | - - | - - | - - | - - | - - | - - |
| 30 – 34 | 398 | 26 | 311 | 61 | - - | - - | - - | - - | - - |
| | 68,314 | 62,114 | 68,321 | $70,919 | - - | - - | - - | - - | - - |
| 35 – 39 | 484 | 16 | 163 | 234 | 71 | - - | - - | - - | - - |
| | 71,345 | 65,056 | 67,751 | 72,367 | $77,649 | - - | - - | - - | - - |
| 40 – 44 | 620 | 10 | 85 | 189 | 271 | 64 | 1 | - - | - - |
| | 77,430 | 70,988 | 68,925 | 71,905 | 81,207 | $89,899 | $87,666 | - - | - - |
| 45 – 49 | 598 | 4 | 85 | 90 | 134 | 222 | 62 | 1 | - - |
| | 82,327 | 71,024 | 74,694 | 73,048 | 80,445 | 87,166 | 93,427 | $101,132 | - - |
| 50 – 54 | 361 | 4 | 32 | 64 | 60 | 102 | 94 | 5 | - - |
| | 83,725 | 72,537 | 75,295 | 71,790 | 80,065 | 85,064 | 94,573 | 112,078 | - - |
| 55 – 59 | 165 | 2 | 29 | 36 | 31 | 23 | 35 | 8 | 1 |
| | 82,986 | 93,992 | 73,726 | 70,057 | 79,089 | 90,380 | 90,407 | 132,779 | $87,666 |
| 60 – 64 | 55 | - - | 7 | 16 | 13 | 4 | 11 | 4 | - - |
| | 79,136 | - - | 82,281 | 69,884 | 79,753 | 82,187 | 82,586 | 96,103 | - - |
| 65 – 69 | 11 | 1 | 1 | 3 | 1 | 3 | 1 | - - | 1 |
| | 99,877 | 61,236 | 59,095 | 145,721 | 67,513 | 95,791 | 67,236 | - - | 119,026 |
| 70 & over | - - | - - | - - | - - | - - | - - | - - | - - | - - |
| | - - | - - | - - | - - | - - | - - | - - | - - | - - |
| Total | 2,848 | 100 | 832 | 693 | 581 | 418 | 204 | 18 | 2 |
| | $76,735 | $65,389 | $69,167 | $72,289 | $80,309 | $87,263 | $92,696 | $117,121 | $103,346 |

## EXHIBIT B

## Members in Active Service and Projected Average Compensation as of June 30, 2013
## By Age and Years of Service

### v. Safety Tier B

| | | Years of Service | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Age** | **Total** | **0-4** | **5-9** | **10-14** | **15-19** | **20-24** | **25-29** | **30-34** | **35 & over** |
| Under 25 | 98 | 98 | - - | - - | - - | - - | - - | - - | - - |
| | $48,857 | $48,857 | - - | - - | - - | - - | - - | - - | - - |
| 25 - 29 | 191 | 190 | 1 | - - | - - | - - | - - | - - | - - |
| | 51,340 | 51,345 | $50,372 | - - | - - | - - | - - | - - | - - |
| 30 - 34 | 87 | 82 | 3 | 2 | - - | - - | - - | - - | - - |
| | 53,967 | 54,233 | 49,213 | $50,190 | - - | - - | - - | - - | - - |
| 35 - 39 | 31 | 30 | 1 | - - | - - | - - | - - | - - | - - |
| | 58,320 | 58,328 | 58,085 | - - | - - | - - | - - | - - | - - |
| 40 - 44 | 35 | 32 | 1 | 1 | 1 | - - | - - | - - | - - |
| | 61,408 | 61,148 | 58,085 | 67,236 | $67,236 | - - | - - | - - | - - |
| 45 - 49 | 13 | 13 | - - | - - | - - | - - | - - | - - | - - |
| | 61,641 | 61,641 | - - | - - | - - | - - | - - | - - | - - |
| 50 - 54 | 21 | 21 | - - | - - | - - | - - | - - | - - | - - |
| | 75,001 | 75,001 | - - | - - | - - | - - | - - | - - | - - |
| 55 - 59 | 10 | 10 | - - | - - | - - | - - | - - | - - | - - |
| | 72,763 | 72,763 | - - | - - | - - | - - | - - | - - | - - |
| 60 - 64 | - - | - - | - - | - - | - - | - - | - - | - - | - - |
| | - - | - - | - - | - - | - - | - - | - - | - - | - - |
| 65 - 69 | - - | - - | - - | - - | - - | - - | - - | - - | - - |
| | - - | - - | - - | - - | - - | - - | - - | - - | - - |
| 70 & over | - - | - - | - - | - - | - - | - - | - - | - - | - - |
| | - - | - - | - - | - - | - - | - - | - - | - - | - - |
| Total | 486 | 476 | 6 | 3 | 1 | - - | - - | - - | - - |
| | $54,219 | $54,204 | $52,364 | $55,872 | $67,236 | - - | - - | - - | - - |

## EXHIBIT B

### Members in Active Service and Projected Average Compensation as of June 30, 2013
### By Age and Years of Service

#### v. Safety Tier C

| | | Years of Service | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Age** | **Total** | **0-4** | **5-9** | **10-14** | **15-19** | **20-24** | **25-29** | **30-34** | **35 & over** |
| Under 25 | 29 | 29 | - - | - - | - - | - - | - - | - - | - - |
| | $41,845 | $41,845 | - - | - - | - - | - - | - - | - - | - - |
| 25 - 29 | 32 | 32 | - - | - - | - - | - - | - - | - - | - - |
| | 43,254 | 43,254 | - - | - - | - - | - - | - - | - - | - - |
| 30 - 34 | 6 | 6 | - - | - - | - - | - - | - - | - - | - - |
| | 50,508 | 50,508 | - - | - - | - - | - - | - - | - - | - - |
| 35 - 39 | 9 | 9 | - - | - - | - - | - - | - - | - - | - - |
| | 55,451 | 55,451 | - - | - - | - - | - - | - - | - - | - - |
| 40 - 44 | - - | - - | - - | - - | - - | - - | - - | - - | - - |
| | - - | - - | - - | - - | - - | - - | - - | - - | - - |
| 45 - 49 | 2 | 2 | - - | - - | - - | - - | - - | - - | - - |
| | 84,604 | 84,605 | - - | - - | - - | - - | - - | - - | - - |
| 50 - 54 | 3 | 3 | - - | - - | - - | - - | - - | - - | - - |
| | 86,178 | 86,178 | - - | - - | - - | - - | - - | - - | - - |
| 55 - 59 | 6 | 6 | - - | - - | - - | - - | - - | - - | - - |
| | 94,780 | 94,780 | - - | - - | - - | - - | - - | - - | - - |
| 60 - 64 | - - | - - | - - | - - | - - | - - | - - | - - | - - |
| | - - | - - | - - | - - | - - | - - | - - | - - | - - |
| 65 - 69 | - - | - - | - - | - - | - - | - - | - - | - - | - - |
| | - - | - - | - - | - - | - - | - - | - - | - - | - - |
| 70 & over | - - | - - | - - | - - | - - | - - | - - | - - | - - |
| | - - | - - | - - | - - | - - | - - | - - | - - | - - |
| Total | 87 | 87 | - - | - - | - - | - - | - - | - - | - - |
| | $50,531 | $50,531 | - - | - - | - - | - - | - - | - - | - - |

## EXHIBIT C

### Reconciliation of Member Data – June 30, 2012 to June 30, 2013

| | Active Members | Deferred Terminated Members | Disabled Pensioners | Retired Members | Beneficiaries | Total |
|---|---|---|---|---|---|---|
| Number as of June 30, 2012 | 16,457 | 5,039 | 1,631 | 12,105 | 1,430 | 36,662 |
| New members | 1,487 | 116 | N/A | N/A | N/A | 1,603 |
| Terminations – with vested rights | -368 | 368 | 0 | 0 | 0 | 0 |
| Contribution refunds | -90 | -151 | N/A | N/A | N/A | -241 |
| Retirements | -609 | -287 | 0 | 896 | N/A | 0 |
| New disabilities | -35 | -10 | 49 | -4 | N/A | 0 |
| Return to work | 69 | -66 | 0 | -3 | N/A | 0 |
| Died with or without beneficiary | -20 | -10 | -39 | -290 | 55 | -304 |
| Data adjustments | 0 | 1 | -6 | 2 | -6 | -9 |
| Number as of June 30, 2013 | 16,891 | 5,000 | 1,635 | 12,706 | 1,479 | 37,711 |

## EXHIBIT D

### Summary Statement of Income and Expenses on an Actuarial Value Basis

| | Year Ended June 30, 2013 | | Year Ended June 30, 2012 | |
|---|---|---|---|---|
| **Contribution income:** | | | | |
| Employer contributions | $376,917,941 | | $354,008,560 | |
| Employee contributions | 71,718,077 | | 59,777,636 | |
| Net contribution income | | $448,636,018 | | $413,786,196 |
| **Investment income:** | | | | |
| Interest, dividends and other income | $196,980,551 | | $159,032,509 | |
| Recognition of capital appreciation | 572,870,943 | | 84,596,722 | |
| Less investment fees and administrative expenses | -103,729,666 | | -97,249,710 | |
| Net investment income | | 666,121,828 | | 146,379,521 |
| **Total income available for benefits** | | $1,114,757,846 | | $560,165,717 |
| **Less benefit payments:** | | | | |
| Service retirement and disability benefits | -$512,755,547 | | -$470,915,988 | |
| Death benefits | -1,332,648 | | -1,590,312 | |
| Health benefits | -20,407,372 | | -20,187,936 | |
| Supplemental retirement benefits | -26,417,257 | | -23,758,657 | |
| Member refunds | -2,778,423 | | -3,366,473 | |
| Net benefit payments | | -$563,691,247 | | -$519,819,366 |
| **Change in assets held for future benefits** | | $551,066,599 | | $40,346,351 |

*Note: Results may not add due to rounding.*

## EXHIBIT E

### Summary Statement of Plan Assets

| | Year Ended June 30, 2013 | | Year Ended June 30, 2012 | |
|---|---|---|---|---|
| **Cash equivalents** | | $2,541,304,203 | | $1,777,208,880 |
| **Accounts receivable:** | | | | |
| Contributions | $4,334,567 | | $3,777,456 | |
| Accrued interest and dividends | 8,480,812 | | 63,136,510 | |
| Settlement of securities sold | 4,291,726 | | 56,871,565 | |
| Total accounts receivable | | 17,107,105 | | 123,785,531 |
| **Investments:** | | | | |
| Domestic equity securities and cash | $325,614,429 | | $494,467,150 | |
| International equity securities and cash | 560,281,754 | | 416,124,813 | |
| Bonds and cash | 2,159,619,829 | | 2,360,213,418 | |
| Securities lending collateral | 23,759,372 | | 106,904,740 | |
| Real Estate | 988,833,392 | | 900,838,627 | |
| Hedge Funds | 686,481,260 | | 838,229,488 | |
| Private Equity | 409,139,861 | | 337,119,455 | |
| Other investments | 1,398,136,881 | | 1,327,129,691 | |
| Total investments at market value | | 6,551,866,778 | | 6,781,027,382 |
| **Total assets** | | $9,110,278,086 | | $8,682,021,793 |
| **Less accounts payable:** | | | | |
| Securities lending & settlement of securities purchased | -$34,594,897 | | -$144,989,280 | |
| Professional service | -9,421,367 | | -8,708,730 | |
| Cash in transit | -352,310 | | -377,605 | |
| Others | -1,715,880 | | -7,443,385 | |
| Total accounts payable | | -$46,084,454 | | -$161,519,000 |
| **Net assets at market value** | | $9,064,193,632 | | $8,520,502,793 |
| **Net assets at actuarial value** | | $9,242,140,687 | | $8,691,074,088 |
| **Net assets at valuation value** | | $9,186,031,586 | | $8,607,482,977 |

*Note: Results may not add due to rounding.*

## EXHIBIT F
### Actuarial Balance Sheet

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

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

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

| **Assets** | | General | Safety | Total |
|---|---|---|---|---|
| 1 | Total valuation assets | $6,599,077 | $2,586,955 | $9,186,032 |
| 2 | Present value of future contributions by members | 670,932 | 277,330 | 948,262 |
| 3 | Present value of future employer contributions for: | | | |
| | a Entry age normal cost | 817,492 | 421,282 | 1,238,774 |
| | b Unfunded actuarial accrued liability | 1,811,611 | 633,594 | 2,445,205 |
| 4 | Total current and future assets | $9,899,112 | $3,919,161 | $13,818,273 |
| **Liabilities** | | | | |
| 5 | Present value of benefits for retirees and beneficiaries | $4,731,146 | $1,845,937 | $6,577,083 |
| 6 | Present value of benefits for deferred terminated members | 306,489 | 57,281 | 363,770 |
| 7 | Present value of benefits for active members | 4,861,477 | 2,015,943 | 6,877,420 |
| 8 | Total liabilities | $9,899,112 | $3,919,161 | $13,818,273 |

## EXHIBIT G

## Summary of Reported Reserve Information as of June 30, 2013

### Reserves

**(Dollar Amounts in Thousands)**

| | |
|---|---|
| Member contributions [(1)] | $551,337 |
| County contributions [(1)] | 1,912,829 |
| Retired member reserve [(1)] | 6,088,335 |
| Transition reserves [(1)] | 633,531 |
| Total valuation reserve [(1)] | $9,186,032 |
| Supplemental benefit, disability supplemental benefit and 401(h) health reserves [(2)] | 56,109 |
| Undistributed reserve [(2)] | 0 |
| Contingency reserve [(2)] | 0 |
| Total reserves | $9,242,141 |
| Net deferred gains (losses) [(2)] | (177,947) |
| Net market value | $9,064,194 |

[(1)] *Included in development of valuation value of assets.*

[(2)] *Excluded in development of valuation value of assets.*

## EXHIBIT H

## Development of Unfunded Actuarial Accrued Liability for Year Ended June 30, 2013

| | | | | **(Amounts in Thousands)** |
|---|---|---|---|---|
| 1 | Unfunded Actuarial Accrued Liability as of June 30, 2012 | | | $2,335,689 |
| 2 | Normal Cost | | | 274,815 |
| 3 | Total employer and member contributions | | | -429,611 |
| 4 | Interest | | | 180,663 |
| 5 | Expected Unfunded Actuarial Accrued Liability* | | | $2,361,556 |
| 6 | Changes due to: | | | |
| | (a) | Investment return less than expected | $19,304 | |
| | (b) | Lower than expected salary increase | -169,406 | |
| | (c) | Lower than expected cost-of-living increase in benefits for retirees and beneficiaries | -87,903 | |
| | (d) | Greater number of retirements than expected | 74,183 | |
| | (e) | Other experience gains/losses | -16,283 | |
| | (f) | Changes in actuarial assumptions | 263,754 | |
| | (g) | Total changes | | $83,649 |
| 7 | Unfunded Actuarial Accrued Liability as of June 30, 2013 | | | $2,445,205 |

* Includes contribution loss of $49.9 million during the year from actual contributions less than expected.

Note: Net gain from other non-investment experience of $199.4 million (as shown on page 9) is equal to: 6(b) + 6(c) + 6(d) + 6(e).

**EXHIBIT I**

**Section 415 Limitations**

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

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

In particular, Section 415(b) of the IRC limits the maximum annual benefit payable at the Normal Retirement Age to a dollar amount indexed for inflation. The amount of that limit is $205,000 for 2013. Normal Retirement Age for these purposes is age 62. These are the limits in simplified terms. They must be adjusted based on each participant's circumstances for such things as age at retirement, form of benefits chosen and after-tax contributions.

Section 415(b) limit has been applied to the benefit data for members in pay status provided by SDCERA for valuation purposes.

For non-PEPRA members, benefits in excess of the limits may be paid through a qualified governmental excess plan that meets the requirements of Section 415(m).

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

Contributions rates determined in this valuation have not been reduced for the Section 415 limitations for members in active and deferred statuses, actual limitations will result in gains as they occur.

## EXHIBIT J
### Definitions of Pension Terms

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

**Assumptions or Actuarial Assumptions:** The estimates on which the cost of the Plan is calculated including:

(a) Investment return — the rate of investment yield that the Plan will earn over the long-term future;

(b) Mortality rates — the death rates of employees and pensioners; life expectancy is based on these rates;

(c) Retirement rates — the rate or probability of retirement at a given age; and

(d) Turnover rates — the rates at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement.

**Normal Cost:** The amount of contributions required to fund the level cost, as a percentage of payroll, allocated to the current year of service.

**Actuarial Accrued Liability For Actives:** The equivalent of the accumulated normal costs allocated to the years before the valuation date.

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

**Unfunded Actuarial Accrued Liability:** The extent to which the actuarial accrued liability of the Plan exceeds (or is exceeded by) the assets of the Plan. There are many approaches to recognizing the unfunded or overfunded actuarial accrued liability, from meeting the interest accrual only to amortizing it over a specific period of time.

**Amortization of the Unfunded (Overfunded) Actuarial Accrued Liability:** Payments made over a period of years equal in value to the Plan's unfunded or overfunded actuarial accrued liability.

**Investment Return:** The rate of earnings of the Plan from its investments, including interest, dividends and capital gain and loss adjustments, computed as a percentage of the average value of the fund. For actuarial purposes, the investment return often reflects a smoothing of the market gains and losses to avoid significant swings in the value of assets from one year to the next.

**EXHIBIT I**

**Summary of Actuarial Valuation Results**

The valuation was made with respect to the following data supplied to us:

| | | | |
|---|---|---|---|
| 1. | Retired members as of the valuation date (including 1,479 beneficiaries in pay status) | | 15,820 |
| 2. | Members inactive during year ended June 30, 2013 with vested rights* | | 5,000 |
| 3. | Members active during the year ended June 30, 2013 | | 16,891 |

The actuarial factors as of the valuation date are as follows (amounts in thousands):

| | | | |
|---|---|---|---|
| 1. | Normal cost | | $285,499 |
| 2. | Present value of future benefits | | 13,818,273 |
| 3. | Present value of future normal costs | | 2,187,036 |
| 4. | Actuarial accrued liability | | 11,631,237 |
| | Retired members and beneficiaries | $6,577,083 | |
| | Inactive members with vested rights* | 363,770 | |
| | Active members | 4,690,384 | |
| 5. | Valuation value of assets | | 9,186,032 |
| 6. | Unfunded actuarial accrued liability | | $2,445,205 |

** Includes terminated members due a refund of member contributions.*

**EXHIBIT I (continued)**

**Summary of Actuarial Valuation Results (Dollar Amounts in Thousands)**

| The determination of the required contribution is as follows: | Dollar Amount* | % of Payroll |
|---|---|---|
| 1. Total normal cost | $285,499 | 26.73% |
| 2. Expected employee contributions | -124,863 | -11.69% |
| 3. Employer normal cost: (1) + (2) | $160,636 | 15.04% |
| 4. Amortization of unfunded actuarial accrued liability | 221,558 | 20.75% |
| 5. Total required contribution: (3) + (4) | $382,194 | 35.79% |

** Based on June 30, 2013 projected annual compensation.*

**EXHIBIT II**

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

| Plan Year Ended June 30 | Annual Required Contributions | Actual Contributions[1] | Percentage Contributed |
|---|---|---|---|
| 2008 | $236,763 | $236,763 | 100.0% |
| 2009 | 219,635 | 219,635 | 100.0% |
| 2010 | 188,414 | 189,470 | 100.6% |
| 2011 | 205,799 | 235,392 | 114.4% |
| 2012 | 274,106 | 274,106 | 100.0% |
| 2013 | 298,128 | 312,288 | 104.8% |

(1) *Excludes employer pickup of member contributions and proceeds from Pension Obligation Bonds.*

**EXHIBIT III**

**Supplementary Information Required by GASB – Schedule of Funding Progress**

| Actuarial Valuation Date | Valuation Value of Assets[1] (a) | Actuarial Accrued Liability (AAL)[2] (b) | Unfunded/ (Overfunded) AAL (UAAL) (b) - (a) | Funded Ratio (a) / (b) | Covered Payroll (c) | UAAL as a Percentage of Covered Payroll [(b) - (a)] / (c) |
|---|---|---|---|---|---|---|
| 06/30/2008 | $8,236,926,000 | $8,722,294,000 | $485,368,000 | 94.44% | $1,135,432,000 | 42.75% |
| 06/30/2009 | 8,413,065,000 | 9,198,636,000 | 785,571,000 | 91.46% | 1,129,171,000 | 69.57% |
| 06/30/2010 | 8,433,310,000 | 9,999,161,000 | 1,565,851,000 | 84.34% | 1,095,582,000 | 142.92% |
| 06/30/2011 | 8,542,291,000 | 10,482,657,000 | 1,940,366,000 | 81.49% | 1,090,413,000 | 177.95% |
| 06/30/2012 | 8,607,483,000 | 10,943,172,000 | 2,335,689,000 | 78.66% | 1,052,366,000 | 221.95% |
| 06/30/2013 | 9,186,032,000 | 11,631,237,000 | 2,445,205,000 | 78.98% | 1,067,792,000 | 229.00% |

[1] *Excludes assets for Supplemental Benefit and Health Benefit Reserves.*

[2] *Excludes liabilities held for Supplemental Benefit and Health Benefit Reserves.*

## EXHIBIT IV

## Supplementary Information Required by GASB

| | |
|---|---|
| **Valuation date** | June 30, 2013 |
| **Actuarial cost method** | Entry Age Actuarial Cost Method |
| **Amortization method** | Level percent of payroll for total unfunded liability (assuming annual 4.00% payroll increase) |
| **Remaining amortization period** | Prior to July 1, 2013, the Association's UAAL was amortized over 20-year fixed (i.e. decreasing) layered amortization periods. As of July 1, 2013, any new UAAL resulting from plan amendments is amortized over separate decreasing 15-year periods; early retirement incentive programs (ERIPs) are amortized over separate decreasing periods of up to 5 years; assumption and method changes are amortized over separate decreasing 20-year periods; and experience gains/losses are amortized over separate decreasing 20-year periods. |
| **Asset valuation method** | Market value of assets less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between the actual market return and the expected return on market value (valuation value before July 1, 2004) and is recognized over a five-year period. The Actuarial Value of Assets is reduced by the value of the non-valuation reserves and designations. Deferred gains and losses as of June 30, 2012 have been combined and will be recognized in equal amounts over a period of four and a half years from that date. |
| **Actuarial assumptions**: | |
| Investment rate of return | 7.75% |
| Inflation rate | 3.25% |
| Across the board salary increase | 0.75% |
| Projected salary increases (5+ years since hire date) | General: 4.75%; Safety: 5.00%* |
| Cost of living adjustments | 3.00% of retirement income for General Tier 1, General Tier A and Safety Tier A |
| | 2.00% of retirement income for General Tier B, Safety Tier B, General Tier C and Safety Tier C |
| **Plan membership:** | |
| Retired members and beneficiaries receiving benefits | 15,820 |
| Deferred terminated members entitled to, but not yet receiving benefits | 5,000 |
| Active members | 16,891 |
| Total | 37,711 |

* *Includes inflation at 3.25%, across the board increase of 0.75%, plus merit and longevity increases. See Exhibit V for increases during the first 5 years of employment.*

## EXHIBIT V

## Actuarial Assumptions and Actuarial Cost Method

**Post-Retirement Mortality Rates:**

**Healthy Retirement:**

For General: RP-2000 Combined Healthy Mortality Table projected with Scale AA to 2016 with a two-year age setback for Males and a one-year age setback for Females.

For Safety: RP-2000 Combined Healthy Mortality Table projected with Scale AA to 2016 with a one-year age setback for Males and no age setback for Females.

**Disabled Retirement:**

For General: RP-2000 Combined Healthy Mortality Table projected with Scale AA to 2016 with a three-year age set forward.

For Safety: RP-2000 Combined Healthy Mortality Table projected with Scale AA to 2016 with a three-year age set forward.

The tables shown above were determined so as to reasonably reflect future mortality improvement, based on a review of mortality experience as of the measurement date.

**Employee Contribution Rates:**

For General – RP-2000 Combined Healthy Mortality Table projected with Scale AA to 2016 for Males with a two-year age setback weighted 30% and RP-2000 Combined Healthy Mortality Table projected with Scale AA to 2016 for Females with a one-year age setback weighted 70%.

For Safety – RP-2000 Combined Healthy Mortality Table projected with Scale AA to 2016 for Males with a one-year age setback weighted 75% and RP-2000 Combined Healthy Mortality Table projected with Scale AA to 2016 for Females with no age set back weighted 25%.

**Termination Rates Before Retirement:**

**Mortality Rates:**

For General – Same as Post-Retirement Healthy Mortality Rates for retired General members (i.e., RP-2000 Combined Healthy Mortality Table projected with Scale AA to 2016 with a two-year age setback for Males and a one-year age setback for Females).

For Safety – Same as Post-Retirement Healthy Mortality Rates for retired Safety members (i.e., RP-2000 Combined Healthy Mortality Table projected with Scale AA to 2016 with a one-year age setback for Males and no age setback for Females).

For General members, 100% of pre-retirement deaths are assumed to be non-service connected deaths.

For Safety members, 100% of pre-retirement deaths are assumed to be service connected deaths.

The following are sample rates (%).

| | Healthy Life Mortality | | | | Disabled Life Mortality | | | |
|---|---|---|---|---|---|---|---|---|
| | General | | Safety | | General | | Safety | |
| Age | Male | Female | Male | Female | Male | Female | Male | Female |
| 25 | 0.03 | 0.02 | 0.03 | 0.02 | 0.04 | 0.02 | 0.04 | 0.02 |
| 30 | 0.04 | 0.02 | 0.04 | 0.02 | 0.06 | 0.03 | 0.06 | 0.03 |
| 35 | 0.06 | 0.04 | 0.06 | 0.04 | 0.09 | 0.05 | 0.09 | 0.05 |
| 40 | 0.09 | 0.05 | 0.09 | 0.06 | 0.11 | 0.07 | 0.11 | 0.07 |
| 45 | 0.11 | 0.08 | 0.12 | 0.09 | 0.14 | 0.11 | 0.14 | 0.11 |
| 50 | 0.14 | 0.12 | 0.15 | 0.13 | 0.21 | 0.17 | 0.21 | 0.17 |
| 55 | 0.21 | 0.21 | 0.23 | 0.24 | 0.41 | 0.35 | 0.41 | 0.35 |
| 60 | 0.41 | 0.41 | 0.46 | 0.47 | 0.80 | 0.71 | 0.80 | 0.71 |
| 65 | 0.80 | 0.80 | 0.90 | 0.90 | 1.43 | 1.24 | 1.43 | 1.24 |
| 70 | 1.43 | 1.37 | 1.58 | 1.55 | 2.39 | 2.12 | 2.39 | 2.12 |

**Disability Rates:**

| | Rate (%) | | | | | |
|---|---|---|---|---|---|---|
| | Non Service Connected Disability | | | Service Connected Disability | | |
| | General | | | General | | |
| Age | Male | Female | Safety | Males | Female | Safety |
| 20 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.03 |
| 25 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.08 |
| 30 | 0.01 | 0.01 | 0.00 | 0.01 | 0.03 | 0.19 |
| 35 | 0.02 | 0.02 | 0.02 | 0.03 | 0.06 | 0.49 |
| 40 | 0.04 | 0.06 | 0.06 | 0.06 | 0.09 | 0.65 |
| 45 | 0.06 | 0.10 | 0.07 | 0.16 | 0.14 | 0.65 |
| 50 | 0.10 | 0.14 | 0.07 | 0.23 | 0.17 | 1.22 |
| 55 | 0.18 | 0.17 | 0.07 | 0.28 | 0.25 | 1.96 |
| 60 | 0.22 | 0.22 | 0.07 | 0.33 | 0.30 | 2.26 |
| 65 | 0.22 | 0.25 | 0.03 | 0.20 | 0.18 | 2.72 |

**Withdrawal Rates:**

| | Rate (%) | | |
|---|---|---|---|
| | Termination (<5 Years of Service) * | | |
| | General | | |
| Years of Service | Male | Female | Safety |
| 0 | 13.50 | 14.50 | 11.50 |
| 1 | 8.25 | 9.25 | 8.00 |
| 2 | 5.70 | 6.50 | 4.00 |
| 3 | 4.30 | 6.00 | 3.00 |
| 4 | 4.05 | 5.50 | 2.75 |

* 60% of all terminating members will choose a refund of contributions and 40% will choose a deferred vested benefit.

| | Termination (5+ Years of Service) ** | | |
|---|---|---|---|
| | General | | |
| Age | Male | Female | Safety |
| 20 | 5.46 | 5.43 | 3.71 |
| 25 | 4.56 | 5.23 | 3.19 |
| 30 | 4.08 | 4.64 | 2.62 |
| 35 | 3.54 | 3.79 | 2.00 |
| 40 | 2.69 | 2.88 | 1.35 |
| 45 | 2.31 | 2.35 | 1.08 |
| 50 | 2.42 | 2.25 | 1.00 |
| 55 | 2.50 | 2.25 | 1.22 |
| 60 | 2.50 | 2.25 | 1.58 |
| 65 | 2.50 | 2.25 | 0.68 |

** 15% of all terminating members will choose a refund of contributions and 85% will choose a deferred vested benefit. Termination rates are zero at ages where members are expected to retire.

**Retirement Rates:**

| | Rate (%) | | | | | |
|---|---|---|---|---|---|---|
| | General | | | Safety | | |
| Age | Tier 1 and Tier A | Tier B | Tier C | Tier A | Tier B | Tier C |
| 48 | - | - | - | 4.0 | 3.0 | - |
| 49 | 55.0 | - | - | 8.0 | 3.5 | - |
| 50 | 7.0 | - | - | 14.0 | 11.0 | 14.0 |
| 51 | 5.0 | - | - | 12.0 | 11.0 | 9.5 |
| 52 | 5.0 | - | - | 12.0 | 11.0 | 9.5 |
| 53 | 5.0 | - | - | 15.0 | 11.0 | 9.5 |
| 54 | 6.0 | - | - | 15.0 | 12.0 | 10.5 |
| 55 | 11.0 | 5.5 | 4.0 | 16.0 | 19.0 | 16.5 |
| 56 | 11.0 | 6.5 | 4.5 | 18.0 | 22.0 | 19.0 |
| 57 | 11.0 | 7.5 | 5.5 | 20.0 | 20.0 | 20.0 |
| 58 | 12.0 | 7.5 | 5.5 | 21.0 | 21.0 | 21.0 |
| 59 | 15.0 | 7.5 | 5.5 | 22.0 | 22.0 | 22.0 |
| 60 | 20.0 | 10.0 | 7.5 | 25.0 | 25.0 | 25.0 |
| 61 | 20.0 | 13.0 | 10.0 | 30.0 | 30.0 | 30.0 |
| 62 | 24.0 | 19.0 | 14.0 | 30.0 | 30.0 | 30.0 |
| 63 | 25.0 | 19.0 | 15.0 | 30.0 | 30.0 | 30.0 |
| 64 | 28.0 | 19.0 | 16.0 | 30.0 | 30.0 | 30.0 |
| 65 | 31.0 | 30.0 | 26.0 | 60.0 | 60.0 | 60.0 |
| 66 | 31.0 | 30.0 | 30.0 | 60.0 | 60.0 | 60.0 |
| 67 | 31.0 | 30.0 | 30.0 | 60.0 | 60.0 | 60.0 |
| 68 | 35.0 | 30.0 | 30.0 | 60.0 | 60.0 | 60.0 |
| 69 | 37.0 | 30.0 | 30.0 | 60.0 | 60.0 | 60.0 |
| 70 | 50.0 | 50.0 | 50.0 | 100.0 | 100.0 | 100.0 |
| 71 | 50.0 | 50.0 | 50.0 | 100.0 | 100.0 | 100.0 |
| 72 | 50.0 | 50.0 | 50.0 | 100.0 | 100.0 | 100.0 |
| 73 | 50.0 | 50.0 | 50.0 | 100.0 | 100.0 | 100.0 |
| 74 | 50.0 | 50.0 | 50.0 | 100.0 | 100.0 | 100.0 |
| 75 and later | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

| | |
|---|---|
| **Retirement Age and Benefit for Deferred Vested Members:** | <u>Reciprocal and Non-reciprocal Members</u><br>General: Age 57<br>Safety: Age 51<br>25% of General and 30% of Safety future deferred vested members are assumed to be reciprocal. For reciprocal members, we assume 4.75% compensation increases per annum for General members and 5.00% compensation increases per annum for Safety members. |
| **Future Benefit Accruals:** | 1.0 year of service per year. |
| **Unknown Data for Members:** | Same as those exhibited by members with similar known characteristics. If not specified, members are assumed to be male. |
| **Definition of Active Members:** | First day of pay period following employment. |
| **Percent Married:** | 75% of male members and 55% of female members are assumed to be married at retirement or pre-retirement death. |
| **Age of Spouse:** | Females are 3 years younger than their spouses |
| **Net Investment Return:** | 7.75%, net of administration and investment expenses. |
| **Employee Contribution Crediting Rate:** | One-half of the net investment return credited semi-annually. |
| **Consumer Price Index:** | Increase of 3.25% per year; benefit increases due to CPI subject to 3.0% maximum for General Tier 1, General Tier A and Safety Tier A. Benefit increases due to CPI subject to 2.0% maximum for General Tier B, Safety Tier B, General Tier C and Safety Tier C. |

**Salary Scale:**

Annual Rate of Compensation Increase

Inflation: 3.25% per year; plus "Across the Board" salary increases of 0.75% per year; plus Merit and Longevity as follows:

| Years from Hire Date | General | Safety |
|---|---|---|
| 0 | 6.00% | 8.00% |
| 1 | 4.50 | 5.75 |
| 2 | 4.00 | 5.00 |
| 3 | 3.00 | 4.75 |
| 4 | 2.25 | 4.25 |
| 5+ | 0.75 | 1.00 |

**Pay for Performance and Other Premium Pays:**

General members are assumed to be eligible for an average annual pay for performance and other premium pay of 1.25%.

Safety members are assumed to be eligible for an average annual pay for performance and other premium pay of 1.25%.

| | |
|---|---|
| **Service Converted From Unused Sick Leave:** | The following assumptions for service converted from unused sick leave as a percentage of service at retirement are used:<br>General: 2.00%<br>Safety: 2.25%<br><br>Pursuant to Section 31641.02, the cost of this benefit for Non-Tier C members will be charged only to employers and will not affect member contribution rates. |
| **Actuarial Value of Assets:** | Market value of assets less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between the actual market return and the expected return on market value and are recognized over a five-year period. Deferred gains and losses as of June 30, 2012 have been combined and will be recognized in equal amounts over a period of four and a half years from that date. |
| **Valuation Value of Assets:** | The actuarial value of assets reduced by the following reserves: (1) 401(h) Health Benefit Reserve; (2) Undistributed Reserve; (3) Contingency Reserve; (4) Supplemental Benefit Reserve; and (5) Disability Supplemental Benefit Reserve. |
| **Actuarial Cost Method:** | Entry Age Actuarial Cost Method. Entry Age is the age at the member's hire date. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis and are based on costs allocated as a level percentage of compensation, as if the current benefit formulas have always been in effect (i.e., "replacement life"). |
| **Amortization Policy:** | The UAAL, (i.e., the difference between the Actuarial Accrued Liability and the Valuation Value of Assets), as of June 30, 2012 shall continue to be amortized over separate 20-year period amortization layers based on the valuations during which each separate layer was previously established.<br><br>Any new UAAL as a result of assumption changes, method changes and actuarial gains or losses identified in the annual valuation as of June 30, 2013 and later will be amortized over a period of 20 years.<br><br>Any new UAAL as a result of plan amendments will be amortized over a period of 15 years. |

| | |
|---|---|
| | Any new UAAL as a result of Golden Handshakes or Early Retirement Incentive Programs (ERIP) will be amortized over a period of up to 5 years.<br><br>The UAAL shall be amortized over “closed” amortization periods so that the amortization period for each layer decreases by one year with each actuarial valuation.<br><br>The UAAL shall be amortized as a level percentage of payroll so that the amortization amount in each year during the amortization period shall be expected to be a level percentage of covered payroll, taking into consideration the current assumption for general payroll increase.<br><br>If the AAL is overfunded (i.e., the Valuation Value of Assets exceeds 120% of the Actuarial Accrued Liability so that there is a surplus), such surplus and any subsequent surpluses will be amortized over an “open” amortization period of 30 years. Any prior UAAL amortization layers will be considered fully amortized, and any subsequent UAAL, will be amortized over 20 years as the first of a new series of amortization layers. |
| **Changes in Actuarial Assumptions and Methods:** | The Board adopted an adjustment to the asset smoothing method that combined the net deferred investment losses from the June 30, 2012 valuation into a single smoothing layer to be recognized in equal amounts over a period of four and a half years from that date.<br><br>In addition, based on the Actuarial Experience Study, Review of Economic Assumptions and Review of Actuarial Funding Policy, several assumptions and methods were changed. Previously, these assumptions and methods were as follows: |

## Changes in Actuarial Assumptions and Methods – Prior Assumptions (continued):

**Post-Retirement Mortality Rates:**

**Healthy Retirement:**

For General: RP-2000 Combined Healthy Mortality Table set back two years.
For Safety: RP-2000 Combined Healthy Mortality Table set back three years.

**Disabled Retirement:**

For General: RP-2000 Combined Healthy Mortality Table set forward six years.
For Safety: RP-2000 Combined Healthy Mortality Table set back two years.

The tables shown above were determined so as to reasonable reflect future mortality improvement, based on a review of mortality experience as of the measurement date.

The following are sample rates (%).

| | Healthy Life Mortality | | | | Disabled Life Mortality | | | |
|---|---|---|---|---|---|---|---|---|
| | General | | Safety | | General | | Safety | |
| Age | Male | Female | Male | Female | Male | Female | Male | Female |
| 30 | 0.04 | 0.02 | 0.04 | 0.02 | 0.08 | 0.05 | 0.04 | 0.02 |
| 35 | 0.06 | 0.04 | 0.06 | 0.04 | 0.11 | 0.08 | 0.06 | 0.04 |
| 40 | 0.10 | 0.06 | 0.09 | 0.06 | 0.16 | 0.12 | 0.10 | 0.06 |
| 45 | 0.13 | 0.09 | 0.12 | 0.09 | 0.24 | 0.19 | 0.13 | 0.09 |
| 50 | 0.19 | 0.14 | 0.17 | 0.13 | 0.42 | 0.31 | 0.19 | 0.14 |
| 55 | 0.29 | 0.22 | 0.27 | 0.20 | 0.77 | 0.58 | 0.29 | 0.22 |
| 60 | 0.53 | 0.39 | 0.47 | 0.35 | 1.44 | 1.10 | 0.53 | 0.39 |
| 65 | 1.00 | 0.76 | 0.88 | 0.67 | 2.46 | 1.86 | 1.00 | 0.76 |
| 70 | 1.79 | 1.34 | 1.61 | 1.22 | 4.22 | 3.10 | 1.79 | 1.34 |

**Changes in Actuarial Assumptions and Methods – Prior Assumptions (continued):**

**Employee Contribution Rates:** For General – RP-2000 Combined Healthy Mortality Table for Males set back two years weighted 30% and RP-2000 Combined Healthy Mortality Table for Females set back two years weighted 70%.

For Safety – RP-2000 Combined Healthy Mortality Table for Males set back three years weighted 75% and RP-2000 Combined Healthy Mortality Table for Females set back three years weighted 25%.

**Termination Rates Before Retirement:**

**Mortality Rates:** For General – Same as Post-Retirement Healthy Mortality Rates for retired General members (i.e., RP-2000 Combined Healthy Mortality Table set back two years).

For Safety – Same as Post-Retirement Healthy Mortality Rates for retired Safety members (i.e., RP-2000 Combined Healthy Mortality Table set back three years).

For General members, 100% of pre-retirement deaths are assumed to be non-service connected deaths.

For Safety and Probation members, 100% of pre-retirement deaths are assumed to be service connected deaths.

**Changes in Actuarial Assumptions and Methods – Prior Assumptions (continued):**

**Disability Rates:**

| | Rate (%) | | | | | |
|---|---|---|---|---|---|---|
| | Non Service Connected Disability | | | Service Connected Disability | | |
| | General | | | General | | |
| Age | Male | Female | Safety | Males | Female | Safety |
| 20 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.05 |
| 25 | 0.00 | 0.00 | 0.00 | 0.01 | 0.02 | 0.10 |
| 30 | 0.01 | 0.01 | 0.02 | 0.02 | 0.05 | 0.24 |
| 35 | 0.02 | 0.02 | 0.05 | 0.04 | 0.10 | 0.61 |
| 40 | 0.04 | 0.07 | 0.08 | 0.10 | 0.13 | 0.81 |
| 45 | 0.07 | 0.12 | 0.10 | 0.17 | 0.21 | 0.81 |
| 50 | 0.12 | 0.15 | 0.10 | 0.21 | 0.25 | 1.18 |
| 55 | 0.19 | 0.18 | 0.10 | 0.31 | 0.30 | 2.07 |
| 60 | 0.22 | 0.26 | 0.10 | 0.38 | 0.33 | 2.56 |
| 65 | 0.22 | 0.30 | 0.04 | 0.16 | 0.13 | 1.04 |

**Changes in Actuarial Assumptions and Methods – Prior Assumptions (continued):**

**Withdrawal Rates:**

| | Rate (%) Ordinary Withdrawals (< 5 Years of Service) | | |
|---|---|---|---|
| | General | | |
| Years of Service | Male | Female | Safety |
| 0 | 12.25 | 13.00 | 11.00 |
| 1 | 7.50 | 8.25 | 7.50 |
| 2 | 5.75 | 6.00 | 3.75 |
| 3 | 4.50 | 5.25 | 3.25 |
| 4 | 4.25 | 5.00 | 3.25 |

| | Ordinary Withdrawal (5+ Years of Service) * | | |
|---|---|---|---|
| | General | | |
| Age | Male | Female | Safety |
| 20 | 1.00 | 1.25 | 0.86 |
| 25 | 1.00 | 1.25 | 0.72 |
| 30 | 1.00 | 1.16 | 0.66 |
| 35 | 0.83 | 0.83 | 0.58 |
| 40 | 0.60 | 0.55 | 0.41 |
| 45 | 0.51 | 0.34 | 0.33 |
| 50 | 0.50 | 0.25 | 0.31 |
| 55 | 0.50 | 0.25 | 0.30 |
| 60 | 0.38 | 0.25 | 0.12 |
| 65 | 0.30 | 0.25 | 0.00 |

* No withdrawal is assumed after a member is eligible for retirement.

**Changes in Actuarial Assumptions and Methods – Prior Assumptions (continued):**

**Withdrawal Rates (continued):**

| | Rate (%) | | |
|---|---|---|---|
| | Vested Termination (<5 Years of Service) * | | |
| | General | | |
| Years of Service | Male | Female | Safety |
| 0 | 3.00 | 3.00 | 2.50 |
| 1 | 2.00 | 2.00 | 1.25 |
| 2 | 1.50 | 1.50 | 1.25 |
| 3 | 1.00 | 1.50 | 1.00 |
| 4 | 1.00 | 1.50 | 1.00 |

| | Vested Termination (5+ Years of Service) * | | |
|---|---|---|---|
| | General | | |
| Age | Male | Female | Safety |
| 20 | 6.16 | 6.48 | 3.42 |
| 25 | 5.76 | 5.28 | 3.12 |
| 30 | 4.94 | 4.50 | 2.58 |
| 35 | 3.72 | 3.76 | 1.94 |
| 40 | 3.02 | 2.92 | 1.34 |
| 45 | 2.67 | 2.36 | 1.04 |
| 50 | 2.50 | 2.08 | 0.88 |
| 55 | 2.50 | 1.94 | 0.80 |
| 60 | 2.50 | 1.90 | 0.32 |

* No vested termination is assumed after a member is eligible for retirement.

## Changes in Actuarial Assumptions and Methods – Prior Assumptions (continued):

**Retirement Rates:**

| | Rate (%) | | | | | |
|---|---|---|---|---|---|---|
| | General | | | Safety | | |
| Age | Tier 1 and Tier A | Tier B | Tier C | Tier A | Tier B | Tier C |
| 48 | - | - | - | 4.0 | 3.0 | - |
| 49 | 50.0 | - | - | 7.0 | 3.0 | - |
| 50 | 8.0 | - | - | 15.0 | 12.0 | 15.0 |
| 51 | 5.0 | - | - | 13.0 | 12.0 | 10.5 |
| 52 | 5.0 | - | - | 13.0 | 12.0 | 10.5 |
| 53 | 5.0 | - | - | 15.0 | 12.0 | 10.5 |
| 54 | 7.0 | - | - | 15.0 | 12.0 | 10.5 |
| 55 | 12.0 | 6.0 | 4.5 | 16.0 | 19.0 | 16.5 |
| 56 | 12.0 | 5.0 | 5.0 | 20.0 | 23.0 | 20.5 |
| 57 | 13.0 | 9.0 | 7.0 | 24.0 | 27.0 | 27.0 |
| 58 | 14.0 | 9.0 | 7.0 | 30.0 | 32.0 | 32.0 |
| 59 | 16.0 | 9.0 | 7.0 | 30.0 | 32.0 | 32.0 |
| 60 | 20.0 | 10.0 | 7.5 | 30.0 | 45.0 | 45.0 |
| 61 | 21.0 | 14.0 | 11.0 | 30.0 | 45.0 | 45.0 |
| 62 | 25.0 | 20.0 | 15.0 | 35.0 | 45.0 | 45.0 |
| 63 | 26.0 | 20.0 | 16.0 | 35.0 | 45.0 | 45.0 |
| 64 | 30.0 | 20.0 | 17.0 | 35.0 | 45.0 | 45.0 |
| 65 | 30.0 | 30.0 | 26.0 | 75.0 | 100.0 | 100.0 |
| 66 | 30.0 | 30.0 | 30.0 | 75.0 | 100.0 | 100.0 |
| 67 | 30.0 | 30.0 | 30.0 | 75.0 | 100.0 | 100.0 |
| 68 | 35.0 | 30.0 | 30.0 | 75.0 | 100.0 | 100.0 |
| 69 | 40.0 | 30.0 | 30.0 | 75.0 | 100.0 | 100.0 |
| 70 | 75.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 71 | 75.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 72 | 75.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 73 | 75.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 74 | 75.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 75 and later | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

**Changes in Actuarial Assumptions and Methods – Prior Assumptions (continued):**

**Retirement Age and Benefit for Deferred Vested Members:**

Reciprocal and Non-reciprocal Members

General: Age 57; Safety: Age 52.

30% of General and 35% of Safety future deferred vested members are assumed to be reciprocal. For reciprocals, we assume 5.00% compensation increases per annum for General members and 5.50% compensation increases per annum for Safety members.

**Percent Married:** 80% of male members and 55% of female members are assumed to be married at retirement or pre-retirement death.

**Net Investment Return:** 8.00%, net of administration and investment expenses.

**Consumer Price Index:** Increase of 3.50% per year; benefit increases due to CPI subject to 3.0% maximum for General Tier 1, General Tier A and Safety Tier A. Benefit increases due to CPI subject to 2.0% maximum for General Tier B, Safety Tier B, General Tier C and Safety Tier C

**Salary Scale:**

Annual Rate of Compensation Increase

Inflation: 3.50% per year; plus "Across the Board" salary increases of 0.75% per year; plus Merit and Longevity as follows:

| Years of Service | General | Safety |
|---|---|---|
| 0 | 6.00% | 8.00% |
| 1 | 4.75 | 6.50 |
| 2 | 3.75 | 5.50 |
| 3 | 2.75 | 4.75 |
| 4 | 2.25 | 4.25 |
| 5+ | 0.75 | 1.25 |

**Changes in Actuarial Assumptions and Methods – Prior Methods:**

| | |
|---|---|
| **Amortization Policy:** | A 20-year level percent of payroll amortization for all UAAL layers. |
| **Actuarial Cost Method:** | Entry Age Normal Actuarial Cost Method. Entry Age is the age at the member's hire date. Actuarial Accrued Liability is calculated on an individual basis and is based on costs allocated as a level percentage of compensation. The Normal Cost is calculated on an aggregate basis by taking the Present Value of Future Normal Costs divided by the Present Value of Future Salaries to obtain a normal cost rate. This normal cost rate is then multiplied by the total of current salaries. |

## EXHIBIT VI
### Summary of Plan Provisions

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

| | |
|---|---|
| **Membership Eligibility:** | All permanent employees of the County of San Diego or contracting district, scheduled to work 20 or more hours weekly, are eligible, subject to classification below: |
| *General Tier 1* | All General members with membership dates before March 8, 2002 who made a specific and irrevocable election to opt out of Tier A. This also included those General Members in deferred status on March 8, 2002. |
| *General Tier A* | All General members with membership dates or continuing employment on or after March 8, 2002 and before August 28, 2009, except as noted above. |
| *General Tier B* | All General members with membership dates on or after August 28, 2009 and before January 1, 2013. |
| *General Tier C* | All General members with membership dates on or after January 1, 2013. |
| *Safety Tier A* | All Safety members with membership dates before August 28, 2009. |
| *Safety Tier B* | All Safety members with membership dates on or after August 28, 2009 and before January 1, 2013. |
| *Safety Tier C* | All Safety members with membership dates on or after January 1, 2013. |
| **Final Average Compensation for Benefit Determination:** | |
| *General Tier 1, General Tier A and Safety Tier A* | Highest consecutive 26 bi-weekly pay periods of compensation earnable (§31462.1) (FAC). |

| | |
|---|---|
| *General Tier B and Safety Tier B* | Three-year average of highest consecutive 78 bi-weekly pay periods of compensation earnable (§31462)(F3AC). |
| *General Tier C and Safety Tier C* | Highest consecutive thirty-six months of pensionable compensation (§7522.32) (FAS3). |
| **Compensation Limit:** | |
| *General Tier C and Safety Tier C* | Pensionable Compensation is limited to $113,700 for 2013 ($136,440, if not enrolled in Social Security). The limit is indexed for inflation on an annual basis. |
| **Service:** | Years of service (Yrs). |
| **Service Retirement Eligibility:** | |
| *General Tier 1 and Tier A* | Age 50 with 10 years of service credit, or age 70 regardless of service credit, or after 30 years of service credit, regardless of age (§31672). |
| *General Tier B* | Age 55 with 10 years of service credit, or age 70 regardless of service credit, or after 30 years of service credit, regardless of age (§31672). |
| *General Tier C* | Age 55 with 5 years of service (§7522.20(a)). |
| *Safety Tier A and Tier B* | Age 50 with 10 years of service credit, or age 70 regardless of service credit, or after 20 years of service credit, regardless of age (§31663.25). |
| *Safety Tier C* | Age 50 with 5 years of service (§7522.25(a)). |

**Benefit Formula:**

| | Retirement Age | Benefit Formula |
|---|---|---|
| *General Tier 1 (§31676.12)* | 50 | (1.34%xFAC – 1/3x1.34%x$350 x 12) x Yrs |
| | 55 | (1.77%xFAC – 1/3x1.77%x$350 x 12) x Yrs |
| | 60 | (2.34%xFAC – 1/3x2.34%x$350 x 12) x Yrs |
| | 62 | (2.62%xFAC – 1/3x2.62%x$350 x 12) x Yrs |
| | 65 or later | (2.62%xFAC – 1/3x2.62%x$350 x 12) x Yrs |
| | **Retirement Age** | **Benefit Formula** |
| *General Tier A (§31676.17)* | 50 | (2.00%xFAC – 1/3x2.00%x$350 x 12) x Yrs |
| | 55 | (2.50%xFAC – 1/3x2.50%x$350 x 12) x Yrs |
| | 60 | (3.00%xFAC – 1/3x3.00%x$350 x 12) x Yrs |
| | 62 | (3.00%xFAC – 1/3x3.00%x$350 x 12) x Yrs |
| | 65 or later | (3.00%xFAC – 1/3x3.00%x$350 x 12) x Yrs |
| | **Retirement Age** | **Benefit Formula** |
| *General Tier B (§31676.12)* | 50 | (1.34%xF3AC – 1/3x1.34%x$350 x 12) x Yrs |
| | 55 | (1.77%xF3AC – 1/3x1.77%x$350 x 12) x Yrs |
| | 60 | (2.34%xF3AC – 1/3x2.34%x$350 x 12) x Yrs |
| | 62 | (2.62%xF3AC – 1/3x2.62%x$350 x 12) x Yrs |
| | 65 or later | (2.62%xF3AC – 1/3x2.62%x$350 x 12) x Yrs |
| | **Retirement Age** | **Benefit Formula** |
| *General Tier C (§7522.20(a))* | 55 | 1.30% x FAS3 x Yrs |
| | 60 | 1.80% x FAS3 x Yrs |
| | 62 | 2.00% x FAS3 x Yrs |
| | 65 | 2.30% x FAS3 x Yrs |
| | 67 or later | 2.50% x FAS3 x Yrs |

| | Retirement Age | Benefit Formula |
|---|---|---|
| *Safety Tier A (Non-Integrated) (§31664.1)* | 50 | (3.00% x FAC x Yrs) |
| | 55 | (3.00% x FAC x Yrs) |
| | 60 or later | (3.00% x FAC x Yrs) |
| | **Retirement Age** | **Benefit Formula** |
| *Safety Tier B (Non-Integrated) (§31664.2)* | 50 | (2.29% x F3AC x Yrs) |
| | 55 | (3.00% x F3AC x Yrs) |
| | 60 or later | (3.00% x F3AC x Yrs) |
| | **Retirement Age** | **Benefit Formula** |
| *Safety Tier C (§7522.25(d))* | 50 | 2.00% x FAS3 x Yrs |
| | 55 | 2.50% x FAS3 x Yrs |
| | 57 or later | 2.70% x FAS3 x Yrs |

**Maximum Benefit:**

*Non-Tier C* 100% of Final Average Compensation (§31676.12, §31676.17, §31664.1, §31664.2)

*Tier C* None

**Non Service Connected Disability:**

*General Members*

*Eligibility* Five years of service (§31720).

*Benefit Formula* 1.8% of Final Average Compensation per year of service. If the benefit does not exceed one-third of Final Average Compensation, the service is projected to 62, and the total benefit cannot be more than one-third of Final Average Compensation (§31727.1).

*Safety Members*

*Eligibility* Five years of service (§31720).

*Benefit Formula* 1.8% of Final Average Compensation per year of service. If the benefit does not exceed one-third of Final Average Compensation, the service is projected to 55, and

| | |
|---|---|
| | the total benefit cannot be more than one-third of Final Average Compensation (§31727.2). |
| **Service Connected Disability:** | |
| *All Members* | |
| *Eligibility* | No age or service requirements (§31720). |
| *Benefit Formula* | 50% of the Final Average Compensation or 100% of Service Retirement benefit, if larger (§31727.4). |
| **Pre-Retirement Death:** | |
| *Non Service Connected (Not Vested) Before Eligible to Retire* | |
| *Eligibility* | None. |
| *Benefit* | Refund of employee contributions with interest, plus one month's eligible compensation for each year of service to a maximum of six month's compensation (§31781).<br>OR |
| *Non Service Connected (Vested)* | |
| *Eligibility* | Five years of service. |
| *Benefit* | 60% of the greater of Service or Non Service Connected Disability Retirement benefit payable to surviving eligible spouse or eligible children (§31765.1, §31781.1), in lieu of above. Alternatively, the spouse may choose a combined benefit of:<br>• A lump sum payment of up to 6 month's compensation (see above), and<br>• A monthly (60%) benefit reduced by actuarial equivalent of the lump sum payment (§31781.3). |
| *Service Connected Death* | 50% of the Final Average Compensation or 100% of Service Retirement benefit, if greater, payable to spouse or minor children (§31787). In addition, safety members are entitled to benefits under Sections 31787.5 and 31787.6. |

| | |
|---|---|
| **Death After Retirement:** | |
| *All Members* | |
| *Service or Non Service Connected Disability Retirement* | Unless another option was selected at retirement, 60% of member's unmodified allowance continued to eligible spouse (§31760.1) and $3,500 lump sum benefit payable to member's beneficiary (§31789.3). An eligible spouse is a surviving spouse who was married to the member at least one year prior to the day of retirement (§31760.1), or at least two years prior to the date of death, having attained age 55 on or prior to the date of death (§31760.2). |
| *Service Connected Disability Retirement* | Unless another option was selected at retirement, 100% of member's unmodified allowance continued to eligible spouse (§31786). |
| **Withdrawal Benefits:** | |
| *Less than Five Years of SDCERA/ Reciprocal Service Credit* | Refund of accumulated employee contributions with interest or entitled to earned benefits commencing at anytime after eligible to retire (§31628, §31629.5). |
| *Five or More Years of SDCERA/ Reciprocal Service Credit* | If accumulated employee contributions left on deposit, eligible for retirement benefits at any time after meeting eligibility criteria to retire (§31700). |
| **Post-retirement Cost-of-Living Benefits:** | |
| *General Tier 1, General Tier A and Safety Tier A* | Future changes based on changes to the Consumer Price Index for the San Diego area to a maximum of 3% per year, excess "banked" (§31870.1). |
| *General Tier B, Safety Tier B, General Tier C and Safety Tier C* | Future changes based on changes to the Consumer Price Index for the San Diego area to a maximum of 2% per year, excess "banked" (§31870). |
| **County Contributions:** | Effective with the June 30, 2004 actuarial valuation, the amortization period for Unfunded Actuarial Accrued Liability was changed to a 20-year fixed (decreasing) layered amortization period. |

| | |
|---|---|
| **Supplemental Benefit Allowance and Health Insurance Allowance:** | The Association provides a supplemental benefit allowance and a health insurance allowance for eligible retirees. These benefits have been excluded from this valuation. |
| **Member Contributions:** | Please refer to Appendix A for the specific rates. |
| *General Tier 1* | |
| *Basic* | Provide for an average annuity at age 60 equal to 1/100 of FAC (§31621.2). |
| *Cost-of-Living* | Provide for one-half of future Cost-of-Living costs. |
| *General Tier A* | |
| *Basic* | Provide for an average annuity at age 55 equal to 1/100 of FAC (§31621.8). |
| *Cost-of-Living* | Provide for one-half of future Cost-of-Living costs. |
| *General Tier B* | |
| *Basic* | Provide for an average annuity at age 60 equal to 1/100 of F3AC (§31621.2). |
| *Cost-of-Living* | Provide for one-half of future Cost-of-Living costs. |
| *General Tier C* | Provide for 50% of total Normal Cost Rate. |
| *Safety Tier A* | |
| *Basic* | Provide for an average annuity at age 50 equal to 1/100 of FAC (§31639.25). |
| *Cost-of-Living* | Provide for one-half of future Cost-of-Living costs. |
| *Safety Tier B* | |
| *Basic* | Provide for an average annuity at age 50 equal to 1/100 of F3AC (§31639.25). |
| *Cost-of-Living* | Provide for one-half of future Cost-of-Living costs. |
| *Safety Tier C* | Provide for 50% of total Normal Cost Rate. |

| | |
|---|---|
| **Other Information:** | General and Safety Non-Tier C members with 30 or more years of qualifying service credit are exempt from paying member contributions (§31625.2 and §31625.3). |
| **Plan Changes:** | All members with membership dates on or after January 1, 2013 enter Tier C. |

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

## Appendix A
## Member Contribution Rates

Comparison of Member Rate at Entry Age 35 for General and Entry Age 30 for Safety Members.

| | June 30, 2013 | | | June 30, 2012 | | | |
|---|---|---|---|---|---|---|---|
| General | Basic | COLA | Total | Basic | COLA | Total | Increase/Decrease in Rate |
| Tier 1[1] | 7.43% | 2.51% | 9.94% | 7.22% | 2.39% | 9.61% | 0.33% |
| Tier A[1] | 8.57% | 3.43% | 12.00% | 8.32% | 3.17% | 11.49% | 0.51% |
| Tier B[1] | 7.10% | 1.47% | 8.57% | 6.88% | 1.28% | 8.16% | 0.41% |
| Tier C | N/A | N/A | 7.72% | N/A | N/A | 7.05% | 0.67%[2] |

| | June 30, 2013 | | | June 30, 2012 | | | |
|---|---|---|---|---|---|---|---|
| Safety | Basic | COLA | Total | Basic | COLA | Total | Increase/Decrease in Rate |
| Tier A | 9.18% | 5.06% | 14.24% | 9.20% | 5.05% | 14.25% | (0.01)% |
| Tier B | 8.75% | 2.48% | 11.23% | 8.73% | 2.60% | 11.33% | (0.10)% |
| Tier C | N/A | N/A | 14.11% | N/A | N/A | 12.58% | 1.53%[2] |

(1) *Rates shown are for salaries in excess of $350 per month.*

(2) *There is a large difference in the contribution rates between the 2012 and 2013 valuations for the CalPEPRA tiers as 2013 is the first valuation that actual membership information is used to set the contribution rates for those tiers. Also, the switch to the individual Entry Age method has a larger impact for those tiers.*

**Appendix A**

**Member Contribution Rates**

### i. General Tier 1 Members' Contribution Rates from the June 30, 2013 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)

**Calculated Under Adopted Assumptions**

| | Basic | | COLA | | Total | |
|---|---|---|---|---|---|---|
| Entry Age | First $350 | Over $350 | First $350 | Over $350 | First $350 | Over $350 |
| 15 | 3.61% | 5.41% | 1.21% | 1.82% | 4.82% | 7.23% |
| 16 | 3.61% | 5.41% | 1.21% | 1.82% | 4.82% | 7.23% |
| 17 | 3.67% | 5.51% | 1.24% | 1.86% | 4.91% | 7.37% |
| 18 | 3.73% | 5.60% | 1.26% | 1.89% | 4.99% | 7.49% |
| 19 | 3.80% | 5.70% | 1.28% | 1.92% | 5.08% | 7.62% |
| 20 | 3.86% | 5.79% | 1.30% | 1.95% | 5.16% | 7.74% |
| 21 | 3.93% | 5.89% | 1.33% | 1.99% | 5.26% | 7.88% |
| 22 | 3.99% | 5.99% | 1.35% | 2.02% | 5.34% | 8.01% |
| 23 | 4.06% | 6.09% | 1.37% | 2.05% | 5.43% | 8.14% |
| 24 | 4.13% | 6.20% | 1.39% | 2.09% | 5.52% | 8.29% |
| 25 | 4.20% | 6.30% | 1.41% | 2.12% | 5.61% | 8.42% |
| 26 | 4.27% | 6.41% | 1.44% | 2.16% | 5.71% | 8.57% |
| 27 | 4.34% | 6.51% | 1.47% | 2.20% | 5.81% | 8.71% |
| 28 | 4.41% | 6.62% | 1.49% | 2.23% | 5.90% | 8.85% |
| 29 | 4.49% | 6.73% | 1.51% | 2.27% | 6.00% | 9.00% |
| 30 | 4.56% | 6.84% | 1.54% | 2.31% | 6.10% | 9.15% |
| 31 | 4.64% | 6.96% | 1.57% | 2.35% | 6.21% | 9.31% |
| 32 | 4.71% | 7.07% | 1.59% | 2.38% | 6.30% | 9.45% |
| 33 | 4.79% | 7.19% | 1.61% | 2.42% | 6.40% | 9.61% |
| 34 | 4.87% | 7.31% | 1.64% | 2.46% | 6.51% | 9.77% |
| 35 | 4.95% | 7.43% | 1.67% | 2.51% | 6.62% | 9.94% |
| 36 | 5.03% | 7.55% | 1.70% | 2.55% | 6.73% | 10.10% |
| 37 | 5.11% | 7.67% | 1.73% | 2.59% | 6.84% | 10.26% |
| 38 | 5.20% | 7.80% | 1.75% | 2.63% | 6.95% | 10.43% |

### i. General Tier 1 Members' Contribution Rates from the June 30, 2013 Actuarial Valuation
### (Expressed as a Percentage of Monthly Payroll)

### Calculated Under Adopted Assumptions

| | Basic | | COLA | | Total | |
|---|---|---|---|---|---|---|
| Entry Age | First $350 | Over $350 | First $350 | Over $350 | First $350 | Over $350 |
| 39 | 5.29% | 7.93% | 1.78% | 2.67% | 7.07% | 10.60% |
| 40 | 5.37% | 8.06% | 1.81% | 2.72% | 7.18% | 10.78% |
| 41 | 5.46% | 8.19% | 1.84% | 2.76% | 7.30% | 10.95% |
| 42 | 5.55% | 8.32% | 1.87% | 2.81% | 7.42% | 11.13% |
| 43 | 5.64% | 8.46% | 1.90% | 2.85% | 7.54% | 11.31% |
| 44 | 5.73% | 8.60% | 1.93% | 2.90% | 7.66% | 11.50% |
| 45 | 5.83% | 8.75% | 1.97% | 2.95% | 7.80% | 11.70% |
| 46 | 5.93% | 8.89% | 2.00% | 3.00% | 7.93% | 11.89% |
| 47 | 6.03% | 9.04% | 2.03% | 3.05% | 8.06% | 12.09% |
| 48 | 6.13% | 9.20% | 2.07% | 3.10% | 8.20% | 12.30% |
| 49 | 6.24% | 9.36% | 2.11% | 3.16% | 8.35% | 12.52% |
| 50 | 6.35% | 9.53% | 2.14% | 3.21% | 8.49% | 12.74% |
| 51 | 6.47% | 9.71% | 2.18% | 3.27% | 8.65% | 12.98% |
| 52 | 6.60% | 9.90% | 2.23% | 3.34% | 8.83% | 13.24% |
| 53 | 6.74% | 10.11% | 2.27% | 3.41% | 9.01% | 13.52% |
| 54 | 6.90% | 10.35% | 2.33% | 3.49% | 9.23% | 13.84% |
| 55 | 6.98% | 10.47% | 2.35% | 3.53% | 9.33% | 14.00% |
| 56 | 7.03% | 10.55% | 2.37% | 3.56% | 9.40% | 14.11% |
| 57 | 7.04% | 10.56% | 2.37% | 3.56% | 9.41% | 14.12% |
| 58 | 7.03% | 10.55% | 2.37% | 3.56% | 9.40% | 14.11% |
| 59 & Over | 6.96% | 10.44% | 2.35% | 3.52% | 9.31% | 13.96% |

| | |
|---|---|
| Interest: | 7.75% |
| Inflation: | 3.25% |
| Across the board increase: | 0.75% |
| COLA: | 3.00% |
| COLA Loading Factor: | 33.72% |
| Mortality: | RP-2000 Combined Healthy Mortality Table Projected to 2016 with Scale AA, set back two years for males and one year for females, weighted 30% Male and 70% Female. |
| Salary Increase: | 5 Year Select and Ultimate Salary Increase Assumptions (see Exhibit V) |
| Note: | These rates are determined before any pickups by the employer. |

### ii. General Tier A Members' Contribution Rates from the June 30, 2013 Actuarial Valuation
### (Expressed as a Percentage of Monthly Payroll)

#### Calculated Under Adopted Assumptions

| | Basic | | COLA | | Total | |
|---|---|---|---|---|---|---|
| Entry Age | First $350 | Over $350 | First $350 | Over $350 | First $350 | Over $350 |
| 15 | 4.17% | 6.26% | 1.67% | 2.51% | 5.84% | 8.77% |
| 16 | 4.17% | 6.26% | 1.67% | 2.51% | 5.84% | 8.77% |
| 17 | 4.25% | 6.37% | 1.70% | 2.55% | 5.95% | 8.92% |
| 18 | 4.32% | 6.48% | 1.73% | 2.59% | 6.05% | 9.07% |
| 19 | 4.39% | 6.59% | 1.76% | 2.64% | 6.15% | 9.23% |
| 20 | 4.47% | 6.70% | 1.79% | 2.68% | 6.26% | 9.38% |
| 21 | 4.54% | 6.81% | 1.82% | 2.73% | 6.36% | 9.54% |
| 22 | 4.61% | 6.92% | 1.85% | 2.77% | 6.46% | 9.69% |
| 23 | 4.69% | 7.04% | 1.88% | 2.82% | 6.57% | 9.86% |
| 24 | 4.77% | 7.16% | 1.91% | 2.87% | 6.68% | 10.03% |
| 25 | 4.85% | 7.28% | 1.94% | 2.91% | 6.79% | 10.19% |
| 26 | 4.93% | 7.40% | 1.97% | 2.96% | 6.90% | 10.36% |
| 27 | 5.01% | 7.52% | 2.01% | 3.01% | 7.02% | 10.53% |
| 28 | 5.09% | 7.64% | 2.04% | 3.06% | 7.13% | 10.70% |
| 29 | 5.18% | 7.77% | 2.07% | 3.11% | 7.25% | 10.88% |
| 30 | 5.27% | 7.90% | 2.11% | 3.16% | 7.38% | 11.06% |
| 31 | 5.35% | 8.03% | 2.14% | 3.21% | 7.49% | 11.24% |
| 32 | 5.44% | 8.16% | 2.18% | 3.27% | 7.62% | 11.43% |
| 33 | 5.53% | 8.29% | 2.21% | 3.32% | 7.74% | 11.61% |
| 34 | 5.62% | 8.43% | 2.25% | 3.37% | 7.87% | 11.80% |
| 35 | 5.71% | 8.57% | 2.29% | 3.43% | 8.00% | 12.00% |
| 36 | 5.81% | 8.71% | 2.33% | 3.49% | 8.14% | 12.20% |
| 37 | 5.90% | 8.85% | 2.36% | 3.54% | 8.26% | 12.39% |
| 38 | 6.00% | 9.00% | 2.40% | 3.60% | 8.40% | 12.60% |
| 39 | 6.09% | 9.14% | 2.44% | 3.66% | 8.53% | 12.80% |
| 40 | 6.20% | 9.30% | 2.48% | 3.72% | 8.68% | 13.02% |
| 41 | 6.30% | 9.45% | 2.52% | 3.78% | 8.82% | 13.23% |
| 42 | 6.41% | 9.61% | 2.57% | 3.85% | 8.98% | 13.46% |
| 43 | 6.52% | 9.78% | 2.61% | 3.91% | 9.13% | 13.69% |

## ii. General Tier A Members' Contribution Rates from the June 30, 2013 Actuarial Valuation
## (Expressed as a Percentage of Monthly Payroll)

### Calculated Under Adopted Assumptions

| | Basic | | COLA | | Total | |
|---|---|---|---|---|---|---|
| Entry Age | First $350 | Over $350 | First $350 | Over $350 | First $350 | Over $350 |
| 44 | 6.63% | 9.95% | 2.65% | 3.98% | 9.28% | 13.93% |
| 45 | 6.75% | 10.13% | 2.70% | 4.05% | 9.45% | 14.18% |
| 46 | 6.88% | 10.32% | 2.75% | 4.13% | 9.63% | 14.45% |
| 47 | 7.02% | 10.53% | 2.81% | 4.21% | 9.83% | 14.74% |
| 48 | 7.17% | 10.75% | 2.87% | 4.30% | 10.04% | 15.05% |
| 49 | 7.33% | 11.00% | 2.93% | 4.40% | 10.26% | 15.40% |
| 50 | 7.42% | 11.13% | 2.97% | 4.45% | 10.39% | 15.58% |
| 51 | 7.48% | 11.22% | 2.99% | 4.49% | 10.47% | 15.71% |
| 52 | 7.49% | 11.23% | 2.99% | 4.49% | 10.48% | 15.72% |
| 53 | 7.48% | 11.22% | 2.99% | 4.49% | 10.47% | 15.71% |
| 54 & Over | 7.40% | 11.10% | 2.96% | 4.44% | 10.36% | 15.54% |

| | |
|---|---|
| Interest: | 7.75% |
| Inflation: | 3.25% |
| Across the board increase: | 0.75% |
| COLA: | 3.00% |
| COLA Loading Factor: | 40.02% |
| Mortality: | RP-2000 Combined Healthy Mortality Table Projected to 2016 with Scale AA, set back two years for males and one year for females, weighted 30% Male and 70% Female. |
| Salary Increase: | 5 Year Select and Ultimate Salary Increase Assumptions (see Exhibit V) |
| Note: | These rates are determined before any pickups by the employer. |

### iii. General Tier B Members' Contribution Rates from the June 30, 2013 Actuarial Valuation
### (Expressed as a Percentage of Monthly Payroll)

## Calculated Under Adopted Assumptions

| | Basic | | COLA | | Total | |
|---|---|---|---|---|---|---|
| Entry Age | First $350 | Over $350 | First $350 | Over $350 | First $350 | Over $350 |
| 15 | 3.45% | 5.17% | 0.71% | 1.07% | 4.16% | 6.24% |
| 16 | 3.45% | 5.17% | 0.71% | 1.07% | 4.16% | 6.24% |
| 17 | 3.51% | 5.26% | 0.73% | 1.09% | 4.24% | 6.35% |
| 18 | 3.57% | 5.35% | 0.74% | 1.11% | 4.31% | 6.46% |
| 19 | 3.63% | 5.44% | 0.75% | 1.13% | 4.38% | 6.57% |
| 20 | 3.69% | 5.54% | 0.77% | 1.15% | 4.46% | 6.69% |
| 21 | 3.75% | 5.63% | 0.78% | 1.17% | 4.53% | 6.80% |
| 22 | 3.82% | 5.73% | 0.79% | 1.19% | 4.61% | 6.92% |
| 23 | 3.88% | 5.82% | 0.81% | 1.21% | 4.69% | 7.03% |
| 24 | 3.95% | 5.92% | 0.82% | 1.23% | 4.77% | 7.15% |
| 25 | 4.01% | 6.02% | 0.83% | 1.25% | 4.84% | 7.27% |
| 26 | 4.08% | 6.12% | 0.85% | 1.27% | 4.93% | 7.39% |
| 27 | 4.15% | 6.22% | 0.86% | 1.29% | 5.01% | 7.51% |
| 28 | 4.22% | 6.33% | 0.87% | 1.31% | 5.09% | 7.64% |
| 29 | 4.29% | 6.43% | 0.89% | 1.33% | 5.18% | 7.76% |
| 30 | 4.36% | 6.54% | 0.91% | 1.36% | 5.27% | 7.90% |
| 31 | 4.43% | 6.65% | 0.92% | 1.38% | 5.35% | 8.03% |
| 32 | 4.51% | 6.76% | 0.93% | 1.40% | 5.44% | 8.16% |
| 33 | 4.58% | 6.87% | 0.95% | 1.42% | 5.53% | 8.29% |
| 34 | 4.65% | 6.98% | 0.97% | 1.45% | 5.62% | 8.43% |
| 35 | 4.73% | 7.10% | 0.98% | 1.47% | 5.71% | 8.57% |
| 36 | 4.81% | 7.21% | 0.99% | 1.49% | 5.80% | 8.70% |
| 37 | 4.89% | 7.33% | 1.01% | 1.52% | 5.90% | 8.85% |
| 38 | 4.97% | 7.45% | 1.03% | 1.54% | 6.00% | 8.99% |
| 39 | 5.05% | 7.57% | 1.05% | 1.57% | 6.10% | 9.14% |
| 40 | 5.13% | 7.70% | 1.07% | 1.60% | 6.20% | 9.30% |
| 41 | 5.21% | 7.82% | 1.08% | 1.62% | 6.29% | 9.44% |
| 42 | 5.30% | 7.95% | 1.10% | 1.65% | 6.40% | 9.60% |

### iii. General Tier B Members' Contribution Rates from the June 30, 2013 Actuarial Valuation
### (Expressed as a Percentage of Monthly Payroll)

## Calculated Under Adopted Assumptions

| | Basic | | COLA | | Total | |
|---|---|---|---|---|---|---|
| Entry Age | First $350 | Over $350 | First $350 | Over $350 | First $350 | Over $350 |
| 43 | 5.39% | 8.08% | 1.11% | 1.67% | 6.50% | 9.75% |
| 44 | 5.48% | 8.22% | 1.13% | 1.70% | 6.61% | 9.92% |
| 45 | 5.57% | 8.36% | 1.15% | 1.73% | 6.72% | 10.09% |
| 46 | 5.67% | 8.50% | 1.17% | 1.76% | 6.84% | 10.26% |
| 47 | 5.76% | 8.64% | 1.19% | 1.79% | 6.95% | 10.43% |
| 48 | 5.86% | 8.79% | 1.21% | 1.82% | 7.07% | 10.61% |
| 49 | 5.96% | 8.94% | 1.23% | 1.85% | 7.19% | 10.79% |
| 50 | 6.07% | 9.11% | 1.26% | 1.89% | 7.33% | 11.00% |
| 51 | 6.19% | 9.28% | 1.28% | 1.92% | 7.47% | 11.20% |
| 52 | 6.31% | 9.46% | 1.31% | 1.96% | 7.62% | 11.42% |
| 53 | 6.41% | 9.62% | 1.33% | 1.99% | 7.74% | 11.61% |
| 54 | 6.49% | 9.73% | 1.35% | 2.02% | 7.84% | 11.75% |
| 55 | 6.51% | 9.77% | 1.35% | 2.03% | 7.86% | 11.80% |
| 56 | 6.52% | 9.78% | 1.35% | 2.03% | 7.87% | 11.81% |
| 57 | 6.48% | 9.72% | 1.34% | 2.01% | 7.82% | 11.73% |
| 58 | 6.71% | 10.07% | 1.39% | 2.09% | 8.10% | 12.16% |
| 59 & Over | 6.96% | 10.44% | 1.44% | 2.16% | 8.40% | 12.60% |

| | |
|---|---|
| Interest: | 7.75% |
| Inflation: | 3.25% |
| Across the board increase: | 0.75% |
| COLA: | 2.00% |
| COLA Loading Factor: | 20.73% |
| Mortality: | RP-2000 Combined Healthy Mortality Table Projected to 2016 with Scale AA, set back two years for males and one year for females, weighted 30% Male and 70% Female. |
| Salary Increase: | 5 Year Select and Ultimate Salary Increase Assumptions (see Exhibit V) |
| Note: | These rates are determined before any pickups by the employer. |

### iv. General Tier C Members' Contribution Rates from the June 30, 2013 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)

| Calculated Under Adopted Assumptions | |
|---|---|
| | **Total** |
| All General Tier C members | 7.72% |

The General Tier C member contribution rate is 50% of the Normal Cost rate.

Note: It is our understanding that in the determination of pension benefits under the Tier C formulas, the compensation that can be taken into account for 2013 is equal to the Social Security Taxable Wage Base or $113,700. (For an employer that is not enrolled in Social Security, the maximum amount is $136,440 or 120% of the Social Security Taxable Wage Base) (reference Section 7522.10). These amounts should be adjusted for changes to the Consumer Price Index for All Urban Consumers after 2013 (reference Section 7522.10(d)).

### v. Safety Tier A Members' Contribution Rates from the June 30, 2013 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)

**Calculated Under Adopted Assumptions**

| Entry Age | Basic | COLA | Total |
|---|---|---|---|
| 15 | 8.01% | 4.41% | 12.42% |
| 16 | 8.01% | 4.41% | 12.42% |
| 17 | 8.01% | 4.41% | 12.42% |
| 18 | 8.01% | 4.41% | 12.42% |
| 19 | 8.01% | 4.41% | 12.42% |
| 20 | 8.01% | 4.41% | 12.42% |
| 21 | 8.01% | 4.41% | 12.42% |
| 22 | 8.13% | 4.48% | 12.61% |
| 23 | 8.26% | 4.55% | 12.81% |
| 24 | 8.38% | 4.62% | 13.00% |
| 25 | 8.51% | 4.69% | 13.20% |
| 26 | 8.64% | 4.76% | 13.40% |
| 27 | 8.77% | 4.83% | 13.60% |
| 28 | 8.91% | 4.91% | 13.82% |
| 29 | 9.04% | 4.98% | 14.02% |
| 30 | 9.18% | 5.06% | 14.24% |
| 31 | 9.32% | 5.13% | 14.45% |
| 32 | 9.47% | 5.22% | 14.69% |
| 33 | 9.62% | 5.30% | 14.92% |
| 34 | 9.77% | 5.38% | 15.15% |
| 35 | 9.93% | 5.47% | 15.40% |
| 36 | 10.09% | 5.56% | 15.65% |
| 37 | 10.26% | 5.65% | 15.91% |
| 38 | 10.43% | 5.75% | 16.18% |
| 39 | 10.62% | 5.85% | 16.47% |
| 40 | 10.81% | 5.96% | 16.77% |
| 41 | 11.02% | 6.07% | 17.09% |
| 42 | 11.25% | 6.20% | 17.45% |
| 43 | 11.51% | 6.34% | 17.85% |
| 44 | 11.82% | 6.51% | 18.33% |
| 45 | 11.83% | 6.52% | 18.35% |

### v. Safety Tier A Members' Contribution Rates from the June 30, 2013 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)

| Calculated Under Adopted Assumptions | | | |
|---|---|---|---|
| **Entry Age** | **Basic** | **COLA** | **Total** |
| 46 | 11.81% | 6.51% | 18.32% |
| 47 | 11.78% | 6.49% | 18.27% |
| 48 | 11.71% | 6.45% | 18.16% |
| 49 & Over | 11.49% | 6.33% | 17.82% |

| | |
|---|---|
| Interest: | 7.75% |
| Inflation: | 3.25% |
| Across the board increase: | 0.75% |
| COLA: | 3.00% |
| COLA Loading Factor: | 55.09% |
| Mortality: | RP-2000 Combined Healthy Mortality Table Projected to 2016 with Scale AA, set back one year for males and no age setback for females, weighted 75% Male and 25% Female. |
| Salary Increase: | 5 Year Select and Ultimate Salary Increase Assumptions (see Exhibit V) |
| Note: | These rates are determined before any pickups by the employer. |

### vi. Safety Tier B Members' Contribution Rates from the June 30, 2013 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)

**Calculated Under Adopted Assumptions**

| Entry Age | Basic | COLA | Total |
|---|---|---|---|
| 15 | 7.64% | 2.16% | 9.80% |
| 16 | 7.64% | 2.16% | 9.80% |
| 17 | 7.64% | 2.16% | 9.80% |
| 18 | 7.64% | 2.16% | 9.80% |
| 19 | 7.64% | 2.16% | 9.80% |
| 20 | 7.64% | 2.16% | 9.80% |
| 21 | 7.64% | 2.16% | 9.80% |
| 22 | 7.75% | 2.20% | 9.95% |
| 23 | 7.87% | 2.23% | 10.10% |
| 24 | 7.99% | 2.26% | 10.25% |
| 25 | 8.11% | 2.30% | 10.41% |
| 26 | 8.24% | 2.33% | 10.57% |
| 27 | 8.36% | 2.37% | 10.73% |
| 28 | 8.49% | 2.41% | 10.90% |
| 29 | 8.62% | 2.44% | 11.06% |
| 30 | 8.75% | 2.48% | 11.23% |
| 31 | 8.89% | 2.52% | 11.41% |
| 32 | 9.03% | 2.56% | 11.59% |
| 33 | 9.17% | 2.60% | 11.77% |
| 34 | 9.31% | 2.64% | 11.95% |
| 35 | 9.46% | 2.68% | 12.14% |
| 36 | 9.62% | 2.73% | 12.35% |
| 37 | 9.78% | 2.77% | 12.55% |
| 38 | 9.94% | 2.82% | 12.76% |
| 39 | 10.12% | 2.87% | 12.99% |
| 40 | 10.30% | 2.92% | 13.22% |
| 41 | 10.50% | 2.97% | 13.47% |
| 42 | 10.73% | 3.04% | 13.77% |
| 43 | 10.87% | 3.08% | 13.95% |
| 44 | 10.92% | 3.09% | 14.01% |
| 45 | 10.90% | 3.09% | 13.99% |

### vi. Safety Tier B Members' Contribution Rates from the June 30, 2013 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)

**Calculated Under Adopted Assumptions**

| Entry Age | Basic | COLA | Total |
|---|---|---|---|
| 46 | 10.84% | 3.07% | 13.91% |
| 47 | 10.70% | 3.03% | 13.73% |
| 48 | 11.09% | 3.14% | 14.23% |
| 49 & Over | 11.49% | 3.26% | 14.75% |

| | |
|---|---|
| Interest: | 7.75% |
| Inflation: | 3.25% |
| Across the board increase: | 0.75% |
| COLA: | 2.00% |
| COLA Loading Factor: | 28.33% |
| Mortality: | RP-2000 Combined Healthy Mortality Table Projected to 2016 with Scale AA, set back one year for males and no age setback for females, weighted 75% Male and 25% Female. |
| Salary Increase: | 5 Year Select and Ultimate Salary Increase Assumptions (see Exhibit V) |
| Note: | These rates are determined before any pickups by the employer. |

### vii. Safety Tier C Members' Contribution Rates from the June 30, 2013 Actuarial Valuation
### (Expressed as a Percentage of Monthly Payroll)

| | Calculated Under Adopted Assumptions |
|---|---|
| | Total |
| All Safety Tier C members | 14.11% |

The Safety Tier C member contribution rate is 50% of the Normal Cost rate.

Note: It is our understanding that in the determination of pension benefits under the Tier C formulas, the compensation that can be taken into account for 2013 is equal to the Social Security Taxable Wage Base or $113,700. (For an employer that is not enrolled in Social Security, the maximum amount is $136,440 or 120% of the Social Security Taxable Wage Base) (reference Section 7522.10). These amounts should be adjusted for changes to the Consumer Price Index for All Urban Consumers after 2013 (reference Section 7522.10(d)).

## Appendix B

## Unfunded Actuarial Accrued Liability (UAAL) Amortization Schedule as of June 30, 2013

| | Date Established | Description | Initial Amount | Outstanding Balance | Years Remaining | Payment |
|---|---|---|---|---|---|---|
| **General** | June 30, 2004 | Reamortize UAAL | $898,323,000 | $833,721,000 | 11 | $93,619,000 |
| | June 30, 2005 | Actuarial loss | 128,924,000 | 123,230,000 | 12 | 12,896,000 |
| | June 30, 2006 | Actuarial gain | (122,837,000) | (119,917,000) | 13 | (11,775,000) |
| | June 30, 2007 | Actuarial gain | (319,377,000) | (316,586,000) | 14 | (29,341,000) |
| | June 30, 2008 | Actuarial gain | (252,322,000) | (252,706,000) | 15 | (22,216,000) |
| | June 30, 2009 | Actuarial loss | 229,764,000 | 231,486,000 | 16 | 19,389,000 |
| | June 30, 2010 | Actuarial loss | 275,738,000 | 278,403,000 | 17 | 22,300,000 |
| | June 30, 2010 | Assumption change | 273,446,000 | 276,089,000 | 17 | 22,115,000 |
| | June 30, 2011 | Actuarial loss | 272,855,000 | 275,403,000 | 18 | 21,168,000 |
| | June 30, 2012 | Actuarial loss | 331,062,000 | 333,049,000 | 19 | 24,638,000 |
| | June 30, 2012 | Assumption change | (23,270,000) | (23,410,000) | 19 | (1,731,000) |
| | June 30, 2013 | Actuarial gain | (111,526,000) | (111,526,000) | 20 | (7,962,000) |
| | June 30, 2013 | Assumption change | 284,375,000 | 284,375,000 | 20 | 20,301,000 |
| **Subtotal** | | | | $1,811,611,000 | | $163,401,000 |

## Appendix B

### Unfunded Actuarial Accrued Liability (UAAL) Amortization Schedule as of June 30, 2013 (continued)

| | Date Established | Description | Initial Amount | Outstanding Balance | Years Remaining | Payment |
|---|---|---|---|---|---|---|
| **Safety** | June 30, 2004 | Reamortize UAAL | $304,408,000 | $282,515,000 | 11 | $31,724,000 |
| | June 30, 2005 | Actuarial loss | 40,271,000 | 38,492,000 | 12 | 4,028,000 |
| | June 30, 2006 | Actuarial gain | (29,564,000) | (28,862,000) | 13 | (2,834,000) |
| | June 30, 2007 | Actuarial gain | (81,955,000) | (81,240,000) | 14 | (7,529,000) |
| | June 30, 2008 | Actuarial gain | (88,653,000) | (88,788,000) | 15 | (7,806,000) |
| | June 30, 2009 | Actuarial loss | 82,198,000 | 82,814,000 | 16 | 6,936,000 |
| | June 30, 2010 | Actuarial loss | 103,299,000 | 104,298,000 | 17 | 8,354,000 |
| | June 30, 2010 | Assumption change | 140,579,000 | 141,939,000 | 17 | 11,370,000 |
| | June 30, 2011 | Actuarial loss | 114,781,000 | 115,853,000 | 18 | 8,905,000 |
| | June 30, 2012 | Actuarial loss | 98,453,000 | 99,044,000 | 19 | 7,327,000 |
| | June 30, 2012 | Assumption change | 6,803,000 | 6,844,000 | 19 | 506,000 |
| | June 30, 2013 | Actuarial gain | (18,694,000) | (18,694,000) | 20 | (1,335,000) |
| | June 30, 2013 | Assumption change | (20,621,000) | (20,621,000) | 20 | (1,472,000) |
| **Subtotal** | | | | $633,594,000 | | $58,174,000 |

## Appendix B
## Unfunded Actuarial Accrued Liability (UAAL) Amortization Schedule as of June 30, 2013 (continued)

| | Date Established | Description | Initial Amount | Outstanding Balance | Years Remaining | Payment |
|---|---|---|---|---|---|---|
| **General and Safety** | June 30, 2004 | Reamortize UAAL | $1,202,731,000 | $1,116,236,000 | 11 | $125,343,000 |
| | June 30, 2005 | Actuarial loss | 169,195,000 | 161,722,000 | 12 | 16,924,000 |
| | June 30, 2006 | Actuarial gain | (152,401,000) | (148,779,000) | 13 | (14,609,000) |
| | June 30, 2007 | Actuarial gain | (401,332,000) | (397,826,000) | 14 | (36,870,000) |
| | June 30, 2008 | Actuarial gain | (340,974,000) | (341,494,000) | 15 | (30,022,000) |
| | June 30, 2009 | Actuarial loss | 311,963,000 | 314,300,000 | 16 | 26,325,000 |
| | June 30, 2010 | Actuarial loss | 379,037,000 | 382,701,000 | 17 | 30,654,000 |
| | June 30, 2010 | Assumption change | 414,025,000 | 418,028,000 | 17 | 33,485,000 |
| | June 30, 2011 | Actuarial loss | 387,636,000 | 391,256,000 | 18 | 30,073,000 |
| | June 30, 2012 | Actuarial loss | 429,515,000 | 432,093,000 | 19 | 31,965,000 |
| | June 30, 2012 | Assumption change | (16,467,000) | (16,566,000) | 19 | (1,225,000) |
| | June 30, 2013 | Actuarial gain | (130,220,000) | (130,220,000) | 20 | (9,297,000) |
| | June 30, 2013 | Assumption change | 263,754,000 | 263,754,000 | 20 | 18,829,000 |
| **Grand Total** | | | | $2,445,205,000 | | $221,575,000 |

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