

# **Fresno County Employees' Retirement Association**

**Actuarial Valuation and Review as of June 30, 2012**

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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The Segal Company  
100 Montgomery Street, Suite 500 San Francisco, CA 94104  
T 415.263.8200 F 415.263.8290 www.segalco.com

January 22, 2013

Board of Retirement  
Fresno County Employees' Retirement Association  
1111 "H" Street  
Fresno, CA 93721

Dear Board Members:

We are pleased to submit this Actuarial Valuation and Review as of June 30, 2012. It summarizes the actuarial data used in the valuation, establishes the funding requirements for fiscal 2013-2014 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 FCERA and the financial information was provided by FCERA. That assistance is gratefully acknowledged. The actuarial calculations were completed under the supervision of Andy Yeung, ASA, MAAA, FCA, 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 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,

THE SEGAL COMPANY

By:

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

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

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## SECTION 1

### VALUATION SUMMARY

Purpose .....	i
Significant Issues in Valuation Year.....	ii
Summary of Key Valuation Results.....	vi
Summary of Key Valuation Demographic and Financial Data.....	vii

## SECTION 2

### VALUATION RESULTS

A. Member Data .....	1
B. Financial Information.....	4
C. Actuarial Experience.....	7
D. Employer and Member Contributions .....	12
E. Information Required by GASB.....	18
F. Volatility Ratios .....	19

## SECTION 3

### SUPPLEMENTAL INFORMATION

#### EXHIBIT A

Table of Plan Coverage	
i. General Tier 1.....	20
ii. General Tier 2.....	21
iii. General Tier 3.....	22
iv. General Tier 4.....	23
v. Safety Tier 1 .....	24
vi. Safety Tier 2 .....	25
vii. Safety Tier 4 .....	26

#### EXHIBIT B

Members in Active Service and Projected Average Compensation as of June 30, 2012	
i. General Tier 1.....	27
ii. General Tier 2 .....	28
iii. General Tier 3 .....	29
iv. General Tier 4.....	30
v. Safety Tier 1 .....	31
vi. Safety Tier 2.....	32
vii. Safety Tier 4.....	33

#### EXHIBIT C

Reconciliation of Member Data – June 30, 2011 to June 30, 2012 .....	34
---	----

#### EXHIBIT D

Summary Statement of Income and Expenses on an Actuarial Value Basis.....	35
---	----

#### EXHIBIT E

Summary Statement of Assets .....	36
-----------------------------------	----

#### EXHIBIT F

Actuarial Balance Sheet.....	37
------------------------------	----

#### EXHIBIT G

Summary of Reported Asset Infor- mation as of June 30, 2012.....	38
---	----

#### EXHIBIT H

Development of Unfunded Actuarial Accrued Liability as of June 30, 2012 .....	39
---	----

#### EXHIBIT I

Section 415 Limitations.....	40
------------------------------	----

#### EXHIBIT J

Definitions of Pension Terms .....	41
------------------------------------	----

## SECTION 4

### REPORTING INFORMATION

#### EXHIBIT I

Summary of Actuarial Valuation Results .....	43
---	----

#### EXHIBIT II

Supplementary Information Required by GASB – Schedule of Employer Contributions.....	45
--	----

#### EXHIBIT III

Supplementary Information Required by GASB – Schedule of Funding Progress .....	46
---	----

#### EXHIBIT IV

Supplementary Information Required by GASB .....	47
---	----

#### EXHIBIT V

Actuarial Assumptions and Actuarial Cost Method .....	48
--	----

#### EXHIBIT VI

Summary of Plan Provisions.....	56
---------------------------------	----

#### Appendix A

Member Contribution Rates.....	64
General Tier 1 .....	65
General Tier 2 .....	68
General Tier 3 .....	71
General Tier 4 .....	74
Safety Tier 1 .....	76
Safety Tier 2 .....	78
Safety Tier 4 .....	80

#### Appendix B

Non-Valuation Reserves and Benefits.....	82
---	----

#### Appendix C

Amortization Schedule for UAAL .....	83
--------------------------------------	----

#### Appendix D

Schedule of UAAL and Associated Funded Ratios.....	85
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## SECTION 1: Valuation Summary for the Fresno County Employees' Retirement Association

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### Purpose

This report has been prepared by The Segal Company to present a valuation of the Fresno County Employees' Retirement Association as of June 30, 2012. 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, inactive vested members, retired members and beneficiaries as of June 30, 2012, provided by the Retirement Association;
- The assets of the Plan as of June 30, 2012, 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 which fully fund the Association's liabilities, and which, 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 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 payment or credit to amortize any unfunded or overfunded actuarial accrued liabilities. In this valuation, we have continued with the Board's funding policy to amortize the Association's outstanding balance of the unfunded actuarial accrued liability (UAAL) established as of June 30, 2003 over a declining 21-year period. Any new UAAL established on each subsequent actuarial valuation after the June 30, 2003 valuation as a result of actuarial gains or losses, changes in actuarial assumptions or plan amendments<sup>1</sup> are amortized over separate 15-year declining periods.

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<sup>1</sup> Prior to the Board's most recent review of actuarial funding policy in April 2011, a 30-year amortization period was used for plan amendments.

## SECTION 1: Valuation Summary for the Fresno County Employees' Retirement Association

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Please note that the Actuarial Standards Board has adopted a revised Actuarial Standard of Practice (ASOP) No. 4 that provides guidelines that actuaries have to follow when selecting actuarial assumptions. For a plan such as that offered by the Retirement Association that may utilize excess earnings to provide contribution rate offsets and additional settlement and non-statutory benefits, we are required to indicate in the valuation report that the possible impact of any such application of future excess earnings on the future financial condition of the plan has not been explicitly measured in the valuation.

The rates calculated in this report may be adopted by the Board for the fiscal year that extends from July 1, 2013 through June 30, 2014.

### Significant Issues in Valuation Year

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

- Reference:* Pg. 38

➤ The results of this valuation reflect a change to combine the \$15.6 million in net deferred gains as of June 30, 2011 and recognize those gains in level amounts over the next nine six-month periods. This adjustment that was approved by the Board was documented in our Ad Hoc Asset Smoothing Adjustment letter dated September 14, 2012.
- Reference:* Pg. 39

➤ On June 30, 2012, after crediting interest to the various reserve accounts at the assumed earnings rate, the balance of the Contra Tracking Account increased from \$423.6 million as of June 30, 2011 to \$516.3 million as of June 30, 2012.
- Reference:* Pg. 39

➤ In this June 30, 2012 valuation, the funding ratio on a valuation value of assets basis has increased from 73.5% to 76.1%. On a market value basis, the funded ratio has decreased from 73.9% to 71.8%. The UAAL has decreased from \$1,123.5 million to \$1,040.4 million. A reconciliation of the Association's unfunded actuarial accrued liability is provided in Section 3, Exhibit H.
- Reference:* Pg. 16

➤ The aggregate employer rate calculated in this valuation has increased from 46.05% of payroll to 48.04% of payroll. The reasons for this change are: (i) lower than expected return on investments (based on valuation value of assets), (ii) one year delay in implementing employer and employee contribution rates calculated in the June 30, 2011 valuation, (iii) increase in UAAL rate due to less than expected increase in total payroll, and (iv) other actuarial losses, offset to some degree by (v) salary increases less than expected. A reconciliation of the Association's aggregate employer rate is provided in Section 2, Subsection D (see Chart 15).
- Reference:* Pg. 17

➤ The aggregate member rate calculated in this valuation has decreased from 8.74% of payroll to 8.68% of payroll. The change in the aggregate member rate is due to changes in membership demographics for the June 30, 2012 valuation. A reconciliation of the Association's aggregate member rate is provided in Section 2, Subsection D (see Chart 16).

## SECTION 1: Valuation Summary for the Fresno County Employees' Retirement Association

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- Reference:* Pg. 82
- The employer and member rates developed in this valuation have been determined only with respect to the Regular and the Settlement benefits. Assets and liabilities associated with the non-vested supplemental benefits (i.e., discretionary purchasing power and additional retiree health benefits) have been excluded from the development of the employer and member rates. However, a comparison of the reserve maintained by the Board for the non-vested supplemental benefits and the annual cash payment requirement is provided in Appendix B.
- Reference:* Pg. 5
- As indicated in Section 2, Subsection B (see Chart 7) of this report, the total unrecognized investment losses as of June 30, 2012 is \$185.3 million. This is a significant change compared to the total unrecognized investment gains of \$15.6 million as of June 30, 2011. These investment losses will be recognized in the determination of the actuarial value of assets for funding purposes in the next few years, and will offset any investment gains that may occur after June 30, 2012. This means that if the Association earns the assumed net rate of investment return of 7.75% per year on a **market value** basis, that will result in investment losses on the actuarial value of assets in the next few years. So, if the actual market return is equal to the assumed 7.75% rate and all other actuarial assumptions are met, the contribution requirements would increase in the next few years.
  - The unrecognized investment losses represent about 6% of the market value of assets. Unless offset by future investments gains or other favorable experience, the recognition of the \$185.3 million in past 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 actuarial value of assets, the funded percentage would decrease from 76.1% to 71.8%.
    - If the deferred losses were recognized immediately in the actuarial value of assets, the aggregate employer contribution rate would increase from 48.04% of payroll to 52.5% of payroll.
- Reference:* Pg. 62
- In preparing the breakdown of the total costs of the General Tier 1 plan into the cost to provide the "Regular" and the "Settlement" benefits, we have followed the Association's practice of allocating the cost to provide a benefit under Section 31676.12 as the cost for the "Regular" benefit and allocating the difference between this "Regular" benefit cost and the cost to provide a benefit under Section 31676.14 plus Section 31627 as the "Settlement" benefit. In particular, this means that the difference between benefits under Sections 31676.12 and 31676.14 is considered "Settlement" and so under the Settlement Agreement could be funded out of future undistributed earnings. Based on discussions with Counsel, the Agreement might not be clear as to what should be considered the "Settlement" benefit. This means we will require guidance from the Board if and when the Board considers the use of any future undistributed earnings to pay the cost of the "Settlement" benefit.

## SECTION 1: Valuation Summary for the Fresno County Employees' Retirement Association

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- The actuarial valuation report as of June 30, 2012 is based on financial information as of that date. Changes in the value of assets subsequent to that date, to the extent that they exist, are not reflected. Declines in asset values will increase the actuarial cost of the plan, while increases will decrease the actuarial cost of the plan.

*Reference:* Pg. 19

- The California Actuarial Advisory Panel (CAAP) has recently adopted a set of model disclosure elements recommended for actuarial valuation reports for public retirement systems in California. Information has been added to this valuation report consistent with the recommendations regarding basic disclosure elements. In particular, we are now including new information regarding measures of plan volatility.
- The Governmental Accounting Standards Board (GASB) recently 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, the financial reporting information in this report continues to be in accordance with Statements 25 and 27.
- The California Public Employees' Pension Reform Act of 2013 (AB340) was passed on September 12, 2012. AB340 became effective on January 1, 2013. In general, it affects new members who enter the plan on or after January 1, 2013. There will be new plan provisions which include new benefit formulas, a cap on pensionable income, a three-year final average salary, changes to elements of pay used in determining benefits and new cost sharing by members. There are also changes that may affect current members including changes to elements of pay used in determining benefits and normal cost sharing by members. We have not reflected any of the AB340 provisions in this report. The impact of AB340 will be addressed in a separate report.

## SECTION 1: Valuation Summary for the Fresno County Employees' Retirement Association

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### Impact of Future Experience on Contribution Rates

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

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



**SECTION 1: Valuation Summary for the Fresno County Employees' Retirement Association**

**Summary of Key Valuation Results**

	June 30, 2012		June 30, 2011	
<b>Employer Contribution Rates:</b>				
	Total Rate	Estimated Annual Amount <sup>(1)</sup>	Total Rate	Estimated Annual Amount <sup>(1)</sup>
General Tier 1	44.99%	\$115,110,000	43.03%	\$110,095,000
General Tier 2	42.86%	\$5,414,000	41.15%	\$5,198,000
General Tier 3	41.64%	\$15,483,000	39.71%	\$14,766,000
General Tier 4	33.88%	\$591,000	31.87%	\$555,000
Safety Tier 1	67.17%	\$36,090,000	65.06%	\$34,956,000
Safety Tier 2	67.21%	\$2,724,000	63.86%	\$2,589,000
Safety Tier 4	54.15%	\$215,000	51.42%	\$204,000
All categories combined	48.04%	\$175,627,000	46.05%	\$168,363,000
<b>Average Member Contribution Rates:</b>				
	Total Rate	Estimated Annual Amount <sup>(1)</sup>	Total Rate	Estimated Annual Amount <sup>(1)</sup>
General Tier 1	8.59%	\$21,978,000	8.66%	\$22,157,000
General Tier 2	6.21%	\$784,000	6.30%	\$796,000
General Tier 3	6.79%	\$2,525,000	6.83%	\$2,540,000
General Tier 4	6.14%	\$107,000	6.03%	\$105,000
Safety Tier 1	10.95%	\$5,883,000	10.98%	\$5,899,000
Safety Tier 2	9.73%	\$394,000	9.60%	\$389,000
Safety Tier 4	9.32%	\$37,000	8.88%	\$35,000
All categories combined	8.68%	\$31,708,000	8.74%	\$31,921,000
<b>Funded Status:</b>				
Actuarial accrued liability <sup>(2)</sup>	\$4,345,402,000		\$4,237,961,000	
Valuation value of assets (VVA) <sup>(3)</sup>	\$3,305,045,000		\$3,114,483,000	
Market value of assets (MVA) <sup>(3)</sup>	\$3,119,702,000		\$3,130,118,000	
Funded percentage on a VVA basis	76.1%		73.5%	
Funded percentage on a MVA basis	71.8%		73.9%	
Unfunded actuarial accrued liability on a VVA basis	\$1,040,357,000		\$1,123,478,000	
Unfunded actuarial accrued liability on a MVA basis	\$1,225,700,000		\$1,107,843,000	
<b>Key Economic Assumptions:</b>				
Interest rate	7.75%		7.75%	
Inflation rate	3.50%		3.50%	
Across-the-board salary increase	0.50%		0.50%	

(1) Based on June 30, 2012 projected annual compensation.

(2) Excludes liabilities for non-vested supplemental benefits.

(3) Excludes non-valuation reserves: supplemental COLA, contingency reserve and retiree health insurance reserve.

**SECTION 1: Valuation Summary for the Fresno County Employees' Retirement Association**

**Summary of Key Valuation Demographic and Financial Data**

	June 30, 2012	June 30, 2011	Percentage Change
<b>Active Members:</b>			
Number of members	6,677	6,763	-1.3%
Average age	44.3	44.7	N/A
Average service	11.4	11.6	N/A
Projected total compensation	\$365,595,810	\$398,975,424	-8.4%
Average projected compensation	\$54,755	\$58,994	-7.2%
<b>Retired Member and Beneficiaries:</b>			
Number of members:			
Service retired	5,087	4,816	5.6%
Disability retired	339	332	2.1%
Beneficiaries	809	739	9.5%
Total	6,235	5,887	5.9%
Average age	68.3	68.4	N/A
Average monthly benefit <sup>(1)</sup>	\$2,634	\$2,525	4.3%
<b>Vested Terminated Members:</b>			
Number of vested terminated members <sup>(2)</sup>	1,375	1,414	-2.8%
Average age	48.4	48.3	N/A
<b>Summary of Financial Data:</b>			
Market value of assets <sup>(3)</sup>	\$3,148,512,663	\$3,167,176,709	-0.6%
Return on market value of assets	-0.44%	23.34%	N/A
Actuarial value of assets <sup>(3)</sup>	\$3,333,855,518	\$3,151,541,457	5.8%
Return on actuarial value of assets	5.94%	4.78%	N/A
Valuation value of assets	\$3,305,045,273	\$3,114,482,906	6.1%
Return on valuation value of assets	6.01%	4.84%	N/A

(1) *Benefits include regular and settlement benefits but exclude non-vested supplemental benefits.*

(2) *Includes members who left their contributions on deposit even though they have less than five years of service.*

(3) *Includes non-valuation reserves: supplemental COLA, contingency reserve and retiree health insurance reserve.*

**SECTION 2: Valuation Results for the Fresno County Employees' Retirement Association**

**A. MEMBER DATA**

The actuarial valuation and review considers the number and demographic characteristics of covered members, including active members, vested 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 eight valuations can be seen in this chart.*

**CHART 1**  
**Member Population: 2005 – 2012**

<b>Year Ended June 30</b>	<b>Active Members</b>	<b>Vested Terminated Members*</b>	<b>Retired Members and Beneficiaries</b>	<b>Ratio of Non-Actives to Actives</b>
2005	7,644	1,326	4,418	0.75
2006	7,686	1,333	4,579	0.77
2007	7,802	1,393	4,831	0.80
2008	7,740	1,541	5,046	0.85
2009	7,407	1,460	5,322	0.92
2010	6,946	1,452	5,636	1.02
2011	6,763	1,414	5,887	1.08
2012	6,677	1,375	6,235	1.14

\* Includes terminated members due a refund of member contributions

**SECTION 2: Valuation Results for the Fresno County Employees' Retirement Association**

**Active Members**

Plan costs are affected by the age, years of service and compensation of active members. In this year's valuation, there were 6,677 active members with an average age of 44.3 years, average years of service of 11.4 and average compensation of \$54,755. The 6,763 active members in the prior valuation had an average age of 44.7 years, average years of service of 11.6 and average compensation of \$58,994.

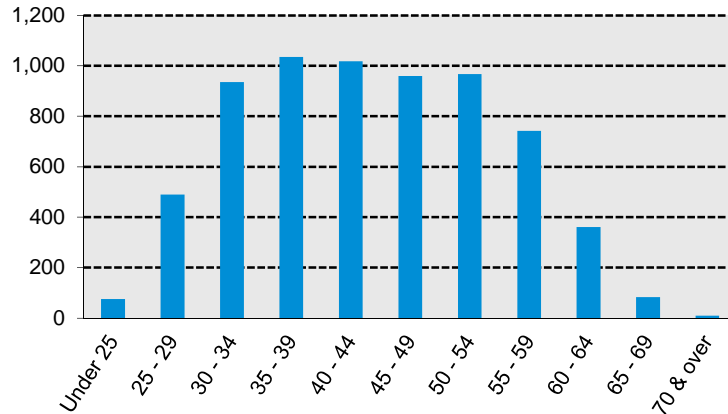
Among the active members, there were none with unknown age.

**Inactive Members**

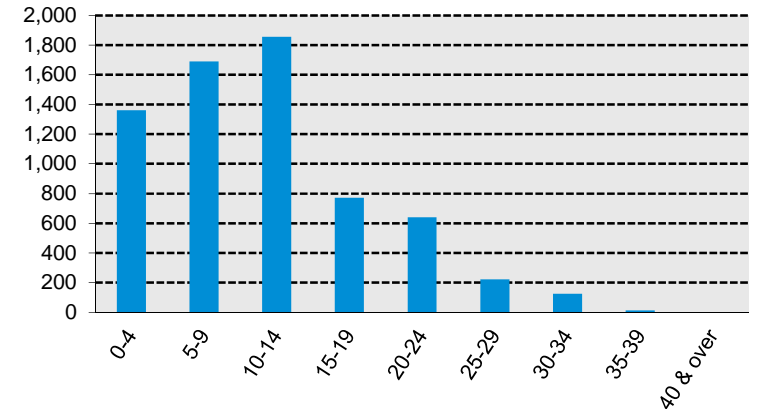
In this year's valuation, there were 1,375 members with a vested right to a deferred or immediate vested benefit or entitled to a return of their member contributions versus 1,414 in the prior valuation

*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, 2012**



**CHART 3**  
**Distribution of Active Members by Years of Service as of June 30, 2012**



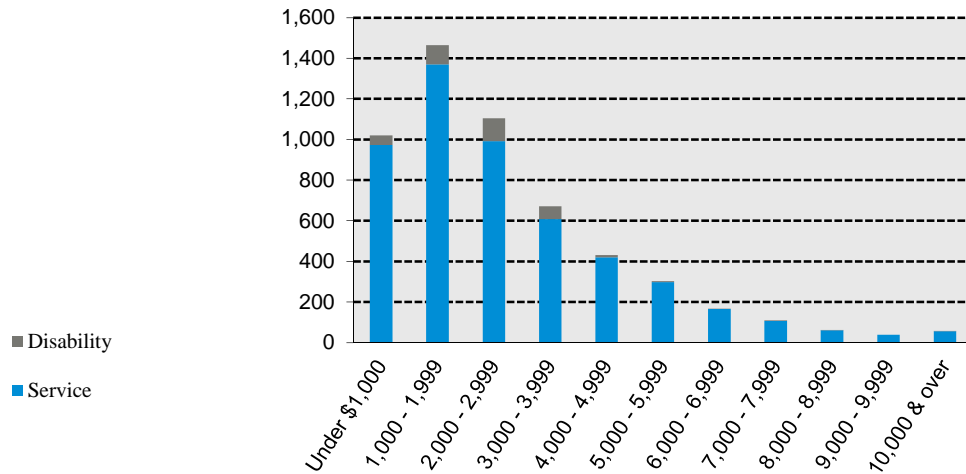
**SECTION 2: Valuation Results for the Fresno County Employees' Retirement Association**

**Retired Members and Beneficiaries**

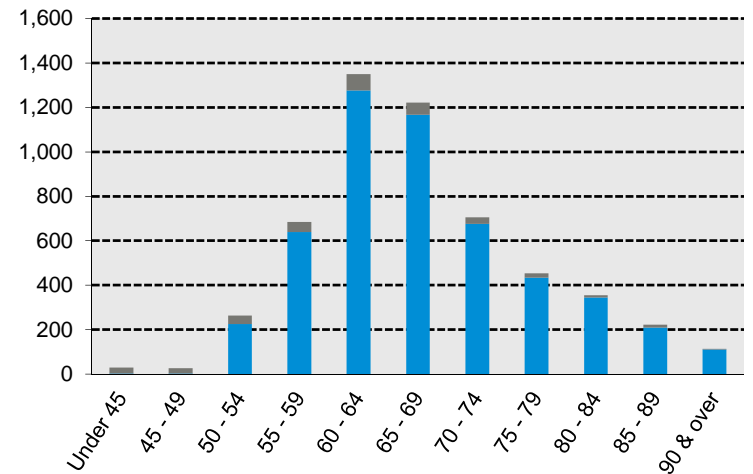
As of June 30, 2012, 5,426 retired members and 809 beneficiaries were receiving total monthly benefits of \$16,420,740. For comparison, in the previous valuation, there were 5,148 retired members and 739 beneficiaries receiving monthly benefits of \$14,866,469. These monthly benefits exclude non-vested supplemental benefits (i.e., discretionary purchasing power and additional health benefits).

*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 (Excl. Beneficiaries) by Type and by Monthly Amount as of June 30, 2012**



**CHART 5**  
**Distribution of Retired Members (Excl. Beneficiaries) by Type and by Age as of June 30, 2012**



**SECTION 2: Valuation Results for the Fresno County Employees' Retirement Association**

**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 and E.

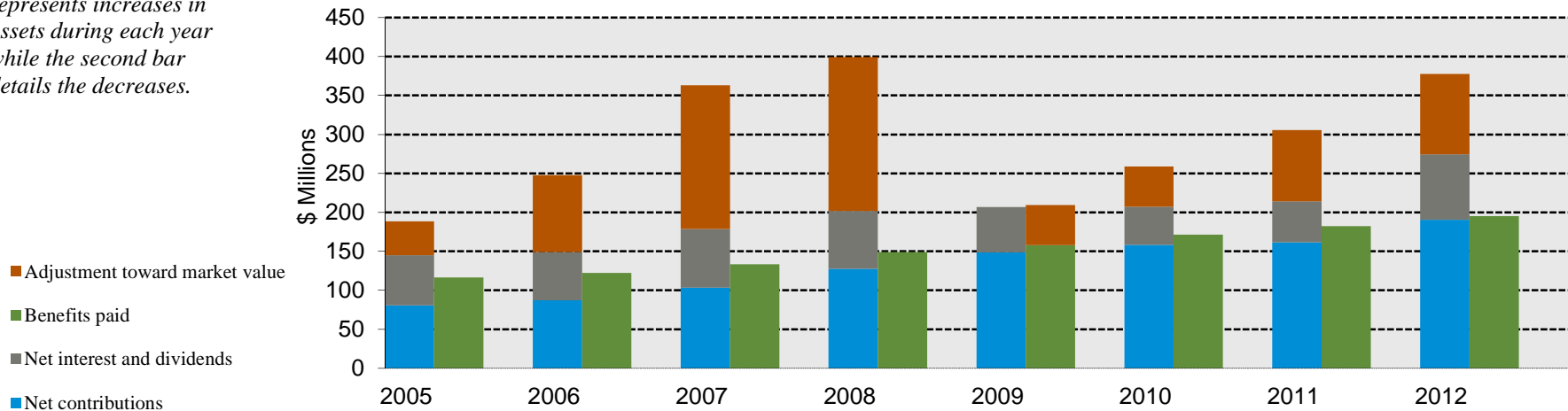
It is desirable to have level and predictable plan costs from one year to the next. For this reason, the Board of Retirement has approved an asset valuation method that gradually adjusts to market value. Under this valuation method, the full value of market fluctuations is not recognized in a single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

The determination of the Actuarial Value of Assets is provided on the following page.

*The chart depicts the components of changes in the actuarial value of assets over the last eight years. Note: The first bar represents increases in assets during each year while the second bar details the decreases.*

**CHART 6**  
**Comparison of Increases and Decreases in the Actuarial Value of Assets for Years Ended June 30, 2005 through 2012**



**SECTION 2: Valuation Results for the Fresno County Employees' Retirement Association**

**CHART 7**

**Determination of Actuarial Value of Assets for Year Ended June 30, 2012**

Six Month Period		Total Actual	Expected Market	Investment	Deferred	Deferred	
From	To	Market Return (net)	Return (net)	Gain (Loss)	Factor	Return	
7/1/2007	12/31/2007	\$13,492,805	\$117,309,620	\$(103,816,815)	see footnote (1) below		
1/1/2008	6/30/2008	(203,972,361)	117,417,984	(321,390,346)			
7/1/2008	12/31/2008	(533,520,330)	109,009,763	(642,530,093)			
1/1/2009	6/30/2009	78,165,778	87,482,182	(9,316,405)			
7/1/2009	12/31/2009	350,943,662	90,414,427	260,529,234			
1/1/2010	6/30/2010	(13,074,426)	104,190,286	(117,264,712)			
7/1/2010	12/31/2010	387,779,345	103,304,323	284,475,022			
1/1/2011	6/30/2011	213,533,980	118,399,020	95,134,960		0.778	\$12,160,752
7/1/2011	12/31/2011	(175,101,712)	122,793,608	(297,895,320)		0.8	(238,316,256)
1/1/2012	6/30/2012	161,262,327	115,914,939	45,347,388		0.9	40,812,649
1. Total Deferred Return <sup>(2)</sup>							\$(185,342,855)
2. Net Market Value							3,148,512,663
3. Actuarial Value of Assets (Item 2 – Item 1)							3,333,855,518
4. Actuarial Value (before corridor) as a percentage of Market Value							105.9%
5. Actuarial Value of Assets – Corridor Limits:							
a. Lower Limit – 70% of Net Market Value							\$2,203,958,864
b. Upper Limit – 130% of Net Market Value							4,093,066,461
6. Actuarial Value of Assets (within corridor)							3,333,855,518
7. Non-valuation reserves and designations:							
a. Reserve for Interest Fluctuations (Contingency Reserve), Limited to No Less Than \$0							0
b. Board Contingency Reserve/Undistributed Earnings (“Available Earnings”)							0
c. Supplemental COLA							3,020,569
d. Retiree Health Insurance							25,789,676
e. Subtotal							\$28,810,245
8. Valuation Value of Assets (Item 6 – Item 7e)							\$3,305,045,273

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

<sup>(1)</sup> Based on action taken by the Board in 2012, the net deferred gain of \$15,635,252 through June 30, 2011 as of that valuation has been recognized in nine level amounts, with seven six-month periods of recognition remaining after the June 30, 2012 valuation.

<sup>(2)</sup> The amounts of deferred return that will be recognized in each subsequent valuation are as follows:

6/30/2013	\$(47,035,086)
6/30/2014	\$(47,035,086)
6/30/2015	\$(47,035,086)
6/30/2016	\$(48,772,336)
6/30/2017	\$4,534,739

Note: Results may not total properly due to rounding.

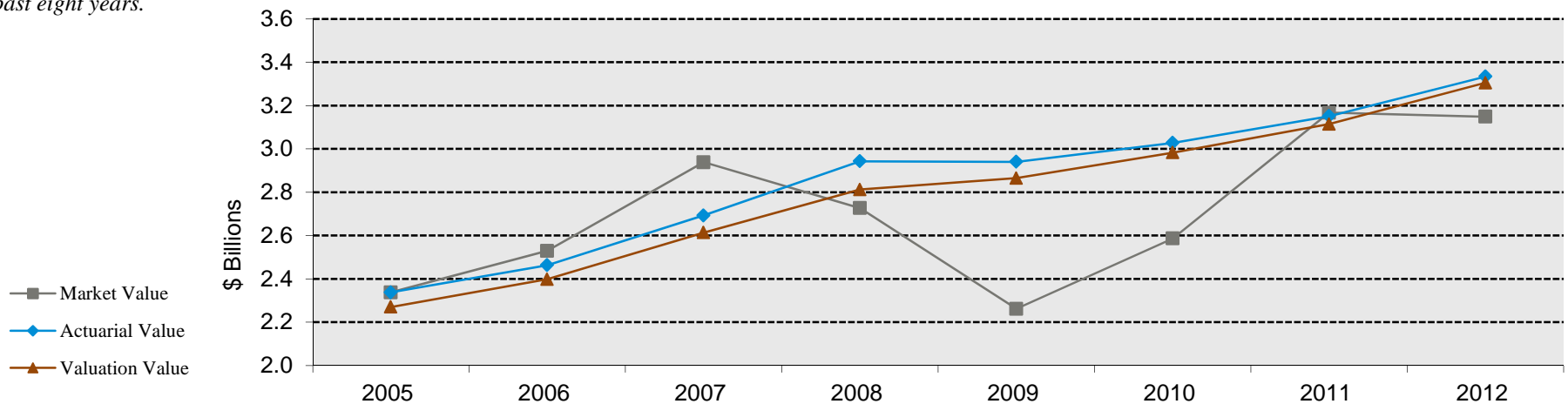
## SECTION 2: Valuation Results for the Fresno County Employees' Retirement Association

The market value, actuarial value, and valuation value of assets are representations of the FCERA'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 FCERA'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 eight years.*

**CHART 8**

**Market Value, Actuarial Value and Valuation Value of Assets as of June 30, 2005 – 2012**





**SECTION 2: Valuation Results for the Fresno County Employees' Retirement Association**

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**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 \$84.1 million, a loss of \$54.4 million from investments and a gain of \$138.5 million from all other sources. The net experience variation from individual sources other than investments was 3.2% of the actuarial accrued liability. A discussion of the major components of the actuarial experience is on the following pages.

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**CHART 9**

**Actuarial Experience for Year Ended June 30, 2012**

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1. Net gain/(loss) from investments <sup>(1)</sup>	\$(54,368,000)
2. Net gain/(loss) from other experience <sup>(2)</sup>	<u>138,474,000</u>
3. Net experience gain/(loss): (1) + (2)	\$84,106,000

---

<sup>(1)</sup> Details in Chart 10.

<sup>(2)</sup> See Section 3, Items (6b) through (6c) in Exhibit H.

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

**SECTION 2: Valuation Results for the Fresno County Employees' Retirement Association**

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**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 FCERA's investment policy. For valuation purposes, the assumed rate of return was 7.75%. The actual rate of return on a valuation basis for the 2011/2012 plan year was 6.01%.

Since the actual return for the year was less than the assumed return, FCERA experienced an actuarial loss during the year ended June 30, 2012 with regard to its investments.

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

**CHART 10**  
**Investment Experience for Year Ended June 30, 2012 – Valuation Value of Assets**

---

	<b>Valuation Value</b>
1. Actual return	\$187,137,138
2. Average value of assets	3,116,195,521
3. Actual rate of return: (1) ÷ (2)	6.01%
4. Assumed rate of return	7.75%
5. Expected return: (2) x (4)	241,505,153
6. Actuarial gain/(loss): (1) – (5)	<u>\$(54,368,015)</u>

**SECTION 2: Valuation Results for the Fresno County Employees' Retirement Association**

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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 eight years.

**CHART 11**

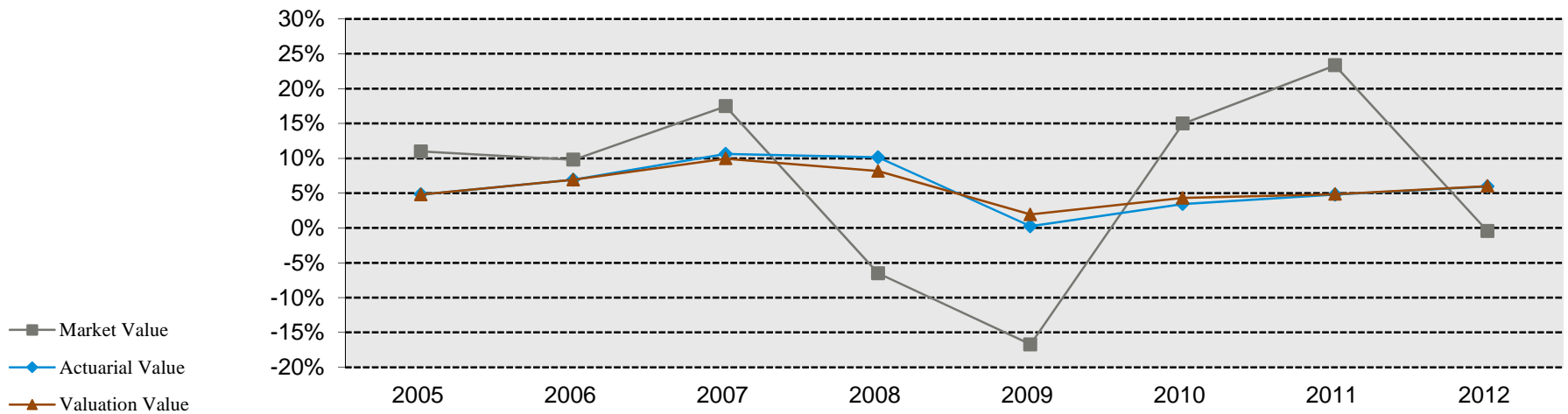
**Investment Return – Actuarial Value, Valuation Value and Market Value: 2005 – 2012**

Year Ended June 30	Valuation Value Investment Return		Actuarial Value Investment Return		Market Value Investment Return	
	Amount	Percent	Amount	Percent	Amount	Percent
2005	\$104,235,839	4.79%	\$107,850,996	4.80%	\$232,922,758	10.97%
2006	155,867,582	6.91%	160,474,530	6.92%	226,902,394	9.78%
2007	237,613,613	9.95%	259,818,285	10.61%	439,056,103	17.46%
2008	212,997,330	8.17%	271,876,171	10.14%	(190,479,656)	(6.51%)
2009	54,209,327	1.93%	6,924,705	0.24%	(455,354,552)	(16.73%)
2010	123,408,438	4.31%	100,789,315	3.44%	337,869,234	14.98%
2011	144,184,273	4.84%	144,184,272	4.78%	601,313,325	23.34%
2012	187,137,138	6.01%	187,138,723	5.94%	(13,839,384)	(0.44%)
Average Return		5.84%		5.81%		5.82%

**SECTION 2: Valuation Results for the Fresno County Employees' Retirement Association**

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.

**CHART 12**  
**Market, Actuarial and Valuation Rates of Return for Years Ended June 30, 2005 – 2012**



## SECTION 2: Valuation Results for the Fresno County Employees' Retirement Association

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### **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:

- actual turnover among the participants,
- retirement experience (earlier or later than expected),
- mortality (more or fewer deaths than expected),

- the number of disability retirements, and
  - salary increases different than assumed.

The net gain from this other experience for the year ended June 30, 2012 amounted to \$138.5 million which is 3.2% of the actuarial accrued liability. See Exhibit H for a detailed development of the Unfunded Actuarial Accrued Liability.

## SECTION 2: Valuation Results for the Fresno County Employees' Retirement Association

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### 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 UAAL) 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 inflation rate of 4.00% (i.e., 3.50% inflation plus 0.50% real across-the-board salary increase). The UAAL established as of the June 30, 2003 valuation is being amortized over a declining 21-year period. Any new UAAL established on each subsequent valuation after June 30, 2003 as a result of actuarial gains or losses, changes in actuarial assumptions or plan amendments<sup>(1)</sup> are amortized over separate 15-year declining periods.

The recommended employer contributions are provided on Chart 13.

<sup>(1)</sup> *Prior to the Board's most recent review of actuarial funding policy in April 2011, a 30-year amortization period was used for plan amendments.*

## SECTION 2: Valuation Results for the Fresno County Employees' Retirement Association

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### Member Contributions

Articles 6 and 6.8 of the 1937 Act define the methodology to be used in the calculation of member basic contribution rates for General members and Safety members, respectively.

The basic contribution rate for the Regular benefit 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:

- 1/200 of One-Year Average Final Compensation at age 60 for General Tier 1
- 1/240 of One-Year Average Final Compensation at age 60 for General Tier 2
- 1/200 of Three-Year Average Final Compensation at age 55 for General Tier 3
- 1/120 of Three-Year Average Final Compensation at age 60 for General Tier 4
- 1/200 of One-Year Average Final Compensation at age 50 for Safety Tiers 1 and 2
- 1/100 of Three-Year Average Final Compensation at age 50 for Safety Tier 4

In addition, as a result of the Settlement Agreement, General Tier 1 and Safety Tier 1 members are required to make additional basic contributions in order to receive the Settlement Benefit. The total basic Regular plus Settlement rate is:

- 1/160 of One-Year Average Final Compensation at age 55 for General Tier 1
- 1/160 of One-Year Average Final Compensation at age 50 for Safety Tier 1

It is assumed that contributions are made annually at the same rate, starting at entry age. In addition to their basic contributions, members in Tiers 1, 2 and 3 pay one-half of the total normal cost necessary to fund their cost-of-living benefits. There are no cost-of-living benefits provided in General and Safety Tiers 4. Accumulation includes semi-annual crediting of interest at the assumed investment earning rate.

The member contribution rates are provided in Appendix A.

**SECTION 2: Valuation Results for the Fresno County Employees' Retirement Association**

**CHART 13**

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

	June 30, 2012						June 30, 2011	
	REGULAR		SETTLEMENT		TOTAL		REGULAR & SETTLEMENT	
	Rate	Estimated Annual Amount*	Rate	Estimated Annual Amount*	Rate	Estimated Annual Amount*	Rate	Estimated Annual Amount*
<b>General Tier 1 Members</b>								
Normal Cost	14.11%	\$36,102	4.33%	\$11,078	18.44%	\$47,180	18.41%	\$47,103
UAAL	<u>21.70%</u>	<u>55,521</u>	<u>4.85%</u>	<u>12,409</u>	<u>26.55%</u>	<u>67,930</u>	<u>24.62%</u>	<u>62,992</u>
Total Contribution	35.81%	\$91,623	9.18%	\$23,487	44.99%	\$115,110	43.03%	\$110,095
<b>General Tier 2 Members</b>								
Normal Cost	16.11%	\$2,035	0.20%	\$25	16.31%	\$2,060	16.53%	\$2,088
UAAL	<u>21.70%</u>	<u>2,741</u>	<u>4.85%</u>	<u>613</u>	<u>26.55%</u>	<u>3,354</u>	<u>24.62%</u>	<u>3,110</u>
Total Contribution	37.81%	\$4,776	5.05%	\$638	42.86%	\$5,414	41.15%	\$5,198
<b>General Tier 3 Members</b>								
Normal Cost	14.83%	\$5,514	0.26%	\$97	15.09%	\$5,611	15.09%	\$5,611
UAAL	<u>21.70%</u>	<u>8,069</u>	<u>4.85%</u>	<u>1,803</u>	<u>26.55%</u>	<u>9,872</u>	<u>24.62%</u>	<u>9,155</u>
Total Contribution	36.53%	\$13,583	5.11%	\$1,900	41.64%	\$15,483	39.71%	\$14,766
<b>General Tier 4 Members</b>								
Normal Cost	7.33%	\$128	0.00%	\$0	7.33%	\$128	7.25%	\$126
UAAL	<u>21.70%</u>	<u>378</u>	<u>4.85%</u>	<u>85</u>	<u>26.55%</u>	<u>463</u>	<u>24.62%</u>	<u>429</u>
Total Contribution	29.03%	\$506	4.85%	\$85	33.88%	\$591	31.87%	\$555
<b>Safety Tier 1 Members</b>								
Normal Cost	22.04%	\$11,842	4.42%	\$2,375	26.46%	\$14,217	27.19%	\$14,609
UAAL	<u>35.66%</u>	<u>19,160</u>	<u>5.05%</u>	<u>2,713</u>	<u>40.71%</u>	<u>21,873</u>	<u>37.87%</u>	<u>20,347</u>
Total Contribution	57.70%	\$31,002	9.47%	\$5,088	67.17%	\$36,090	65.06%	\$34,956
<b>Safety Tier 2 Members</b>								
Normal Cost	26.32%	\$1,067	0.18%	\$7	26.50%	\$1,074	25.99%	\$1,054
UAAL	<u>35.66%</u>	<u>1,446</u>	<u>5.05%</u>	<u>204</u>	<u>40.71%</u>	<u>1,650</u>	<u>37.87%</u>	<u>1,535</u>
Total Contribution	61.98%	\$2,513	5.23%	\$211	67.21%	\$2,724	63.86%	\$2,589
<b>Safety Tier 4 Members</b>								
Normal Cost	13.18%	\$52	0.26%	\$1	13.44%	\$53	13.55%	\$54
UAAL	<u>35.66%</u>	<u>142</u>	<u>5.05%</u>	<u>20</u>	<u>40.71%</u>	<u>162</u>	<u>37.87%</u>	<u>150</u>
Total Contribution	48.84%	\$194	5.31%	\$21	54.15%	\$215	51.42%	\$204
<b>All Categories Combined</b>								
Normal Cost	15.52%	\$56,740	3.72%	\$13,583	19.24%	\$70,323	19.32%	\$70,645
UAAL	<u>23.92%</u>	<u>87,457</u>	<u>4.88%</u>	<u>17,847</u>	<u>28.80%</u>	<u>105,304</u>	<u>26.73%</u>	<u>97,718</u>
Total Contribution	39.44%	\$144,197	8.60%	\$31,430	48.04%	\$175,627	46.05%	\$168,363

<b>Projected Annual Compensation June 30, 2012</b>	
<b>General Tier 1</b>	\$255,858
<b>General Tier 2</b>	12,631
<b>General Tier 3</b>	37,184
<b>General Tier 4</b>	1,743
<b>Safety Tier 1</b>	53,729
<b>Safety Tier 2</b>	4,054
<b>Safety Tier 4</b>	397
<b>Total Compensation</b>	<u>\$365,596</u>

\* Amounts are in thousands and are based on June 30, 2012 projected annual compensation (also in thousands):



**SECTION 2: Valuation Results for the Fresno County Employees' Retirement Association**

**CHART 14**

**Breakdown of Employer Contribution Rate Into Basic and COLA**

	June 30, 2012							June 30, 2011						
	General				Safety			General				Safety		
	Tier 1	Tier 2	Tier 3	Tier 4	Tier 1	Tier 2	Tier 4	Tier 1	Tier 2	Tier 3	Tier 4	Tier 1	Tier 3	Tier 4
<b>Normal Cost</b>														
Regular - Basic	11.36%	13.37%	12.11%	7.33%	17.55%	21.14%	13.18%	11.38%	13.57%	12.14%	7.25%	18.03%	20.88%	13.37%
Regular - COLA	2.75%	2.74%	2.72%	0.00%	4.49%	5.18%	0.00%	2.73%	2.78%	2.73%	0.00%	4.60%	4.96%	0.00%
Section 6	4.01%	0.00%	0.00%	0.00%	4.15%	0.00%	0.00%	4.01%	0.00%	0.00%	0.00%	4.30%	0.00%	0.00%
Section 8	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Section 9	0.32%	0.20%	0.26%	0.00%	0.27%	0.18%	0.26%	0.29%	0.18%	0.22%	0.00%	0.26%	0.15%	0.18%
<b>UAAL</b>														
Regular – Basic	13.85%	13.85%	13.85%	13.85%	16.72%	16.72%	16.72%	12.98%	12.98%	12.98%	12.98%	16.08%	16.08%	16.08%
Regular – COLA	7.85%	7.85%	7.85%	7.85%	18.94%	18.94%	18.94%	6.96%	6.96%	6.96%	6.96%	17.10%	17.10%	17.10%
Section 6	3.91%	3.91%	3.91%	3.91%	4.10%	4.10%	4.10%	3.89%	3.89%	3.89%	3.89%	3.90%	3.90%	3.90%
Section 8	0.21%	0.21%	0.21%	0.21%	0.21%	0.21%	0.21%	0.22%	0.22%	0.22%	0.22%	0.22%	0.22%	0.22%
Section 9	0.73%	0.73%	0.73%	0.73%	0.73%	0.73%	0.73%	0.57%	0.57%	0.57%	0.57%	0.57%	0.57%	0.57%

Note: Please refer to Section 4, Exhibit VI for definition of Regular and Settlement Sections 6, 8 and 9 benefits.

**SECTION 2: Valuation Results for the Fresno County Employees' Retirement Association**

The employer contribution rates as of June 30, 2012 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 Employer 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 employer contribution from the prior valuation to the amount determined in this valuation.*

**CHART 15**

**Reconciliation of Recommended Employer Contribution from June 30, 2011 to June 30, 2012 (Dollars in Thousands)**

	Contribution Rate	Estimated Amount <sup>(1)</sup>
Recommended Contribution Rate as of June 30, 2011	46.05%	\$168,363
Effect of actuarial experience during 2011/2012:		
1. Effect of investment loss on valuation value of assets	1.31%	\$4,789
2. Effect of one year delay in implementing employer and employee contribution rates calculated in June 30, 2011 valuation	0.52%	1,901
3. Effect of salary increases less than expected during 2011/2012 <sup>(2)</sup>	-3.63%	-13,271
4. Effect of increase in UAAL rate due to less than expected increase in total payroll	3.60%	13,161
5. Effect of other experience loss <sup>(3)</sup>	0.19%	684
Subtotal	1.99%	\$7,264
Recommended Contribution Rate as of June 30, 2012	48.04%	\$175,627

<sup>(1)</sup> Based on June 30, 2012 projected annual compensation of \$365,596.

<sup>(2)</sup> For the majority of the active members, their salaries actually decreased from those reported in the June 30, 2011 valuation.

<sup>(3)</sup> Primarily due to liability for new retirees higher than expected.

**SECTION 2: Valuation Results for the Fresno County Employees' Retirement Association**

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The member contribution rates as of June 30, 2012 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 Member Contribution Rate**

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

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**CHART 16**

**Reconciliation of Recommended Member Contribution from June 30, 2011 to June 30, 2012  
(Dollar Amounts in Thousands)**

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	Contribution Rate	Estimated Amount <sup>(1)</sup>
Average Contribution Rate as of June 30, 2011	8.74%	\$31,921
1. Effect of demographic changes	-0.06%	-213
Average Contribution Rate as of June 30, 2012	8.68%	\$31,708

<sup>(1)</sup> Based on June 30, 2012 projected annual compensation of \$365,596.

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

## SECTION 2: Valuation Results for the Fresno County Employees' Retirement Association

### E. INFORMATION REQUIRED BY GASB

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

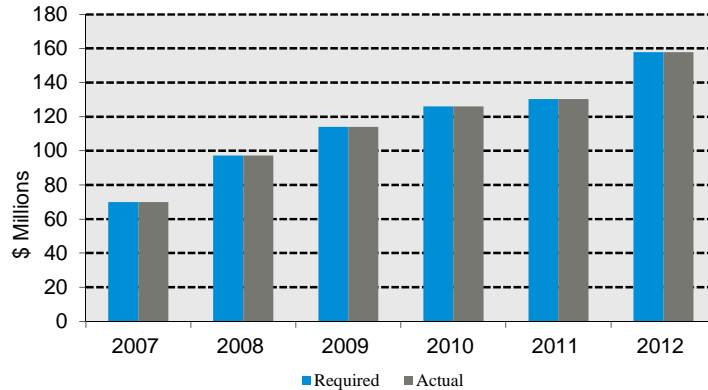
Critical information to GASB is the historical comparison of the GASB required contributions to the actual contributions. This comparison demonstrates whether a plan is being funded on an actuarially sound basis and in accordance with the GASB funding requirements. Chart 17 below presents a graphical representation of this information for the Plan.

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

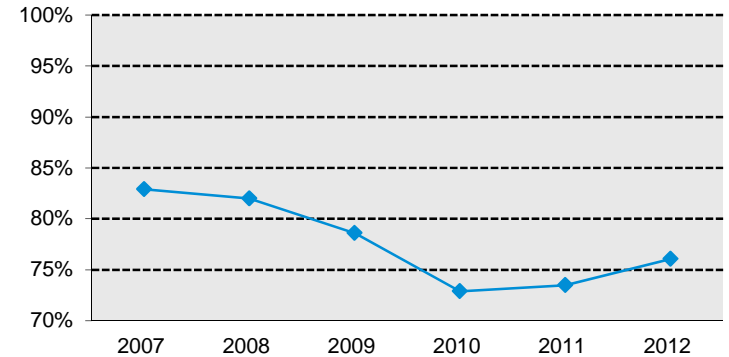
The details regarding the calculations of these values and other GASB numbers may be found in Section 4, Exhibits II, III, and IV.

*These graphs show key GASB factors.*

**CHART 17**  
**Required Versus Actual Contributions**



**CHART 18**  
**Funded Ratio**



**SECTION 2: Valuation Results for the Fresno County Employees' Retirement Association**

**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 FCERA, the current AVR is 8.6. This means that a 1% asset gain/(loss) (relative to the assumed investment return) translates to 8.6% of one-year's payroll. Since FCERA amortizes actuarial gains and losses over a period of 15 years as of June 30, 2012, there would be a 0.8% 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 FCERA, the current LVR is 11.9. This is about 38% higher than the AVR. Therefore, we would expect that contribution volatility will increase over the long-term. These ratios are not only sensitive to changes in assets and liability but also to changes in payroll. A comparative schedule of assets, liabilities and payroll is provided in Section 4, Exhibit III.

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

**CHART 19**  
**Volatility Ratios for Years Ended June 30, 2008 – 2012**

Year Ended June 30	Asset Volatility Ratio	Liability Volatility Ratio
2008	6.4	8.1
2009	5.4	8.6
2010	6.3	10.0
2011	7.9	10.6
2012	8.6	11.9

**SECTION 3: Supplemental Information for the Fresno County Employees' Retirement Association**

**EXHIBIT A**

**Table of Plan Coverage**

**i. General Tier 1**

<b>Category</b>	<b>Year Ended June 30</b>		<b>Change From Prior Year</b>
	<b>2012</b>	<b>2011</b>	
<b>Active members in valuation</b>			
Number	4,642	5,079	-8.6%
Average age	46.4	46.2	N/A
Average service	13.4	12.8	N/A
Projected total compensation <sup>(1)</sup>	\$255,857,624	\$295,830,517	-13.5%
Projected average compensation <sup>(1)</sup>	\$55,118	\$58,246	-5.4%
Member account balances	\$202,083,589	\$202,726,851	-0.3%
<b>Vested terminated members</b>			
Number	1,242	1,278	-2.8%
Average age	49.0	48.9	N/A
<b>Retired members</b>			
Number in pay status	4,562	4,300	6.1%
Average age	68.6	68.7	N/A
Average monthly benefit <sup>(2)</sup>	\$2,638	\$2,526	4.4%
<b>Disabled members</b>			
Number in pay status	195	195	0.0%
Average age	66.1	65.5	N/A
Average monthly benefit <sup>(2)</sup>	\$1,790	\$1,701	5.2%
<b>Beneficiaries</b>			
Number in pay status	668	623	7.2%
Average age	72.2	73.3	N/A
Average monthly benefit <sup>(2)</sup>	\$1,482	\$1,431	3.6%

<sup>(1)</sup> Projected compensation was calculated by increasing the annualized compensation by one-half of the inflation plus across-the-board salary increase plus merit.

<sup>(2)</sup> Benefits include regular and settlement benefits but exclude non-vested supplemental benefits.

**SECTION 3: Supplemental Information for the Fresno County Employees' Retirement Association**

**EXHIBIT A**

**Table of Plan Coverage**

**ii. General Tier 2**

<b>Category</b>	<b>Year Ended June 30</b>		<b>Change From Prior Year</b>
	<b>2012</b>	<b>2011</b>	
<b>Active members in valuation</b>			
Number	213	166	28.3%
Average age	41.0	41.9	N/A
Average service	3.2	3.0	N/A
Projected total compensation <sup>(1)</sup>	\$12,630,744	\$10,127,265	24.7%
Projected average compensation <sup>(1)</sup>	\$59,299	\$61,008	-2.8%
Member account balances	\$2,319,824	\$1,632,892	42.1%
<b>Vested terminated members</b>			
Number	10	8	25.0%
Average age	41.7	43.0	N/A
<b>Retired members</b>			
Number in pay status	5	5	0.0%
Average age	59.2	58.2	N/A
Average monthly benefit <sup>(2)</sup>	\$2,129	\$2,068	2.9%
<b>Disabled members</b>			
Number in pay status	0	0	N/A
Average age	N/A	N/A	N/A
Average monthly benefit <sup>(2)</sup>	N/A	N/A	N/A
<b>Beneficiaries</b>			
Number in pay status	0	0	N/A
Average age	N/A	N/A	N/A
Average monthly benefit <sup>(2)</sup>	N/A	N/A	N/A

<sup>(1)</sup> Projected compensation was calculated by increasing the annualized compensation by one-half of the inflation plus across-the-board salary increase plus merit.

<sup>(2)</sup> Benefits include regular and settlement benefits but exclude non-vested supplemental benefits.

**SECTION 3: Supplemental Information for the Fresno County Employees' Retirement Association**

**EXHIBIT A**

**Table of Plan Coverage**

**iii. General Tier 3**

<b>Category</b>	<b>Year Ended June 30</b>		<b>Change From Prior Year</b>
	<b>2012</b>	<b>2011</b>	
<b>Active members in valuation</b>			
Number	994	751	32.4%
Average age	37.4	37.5	N/A
Average service	3.2	3.3	N/A
Projected total compensation <sup>(1)</sup>	\$37,184,452	\$31,687,513	17.3%
Projected average compensation <sup>(1)</sup>	\$37,409	\$42,194	-11.3%
Member account balances	\$7,163,175	\$5,325,330	34.5%
<b>Vested terminated members</b>			
Number	7	6	16.7%
Average age	32.3	40.3	N/A
<b>Retired members</b>			
Number in pay status	2	2	0.0%
Average age	65.4	64.4	N/A
Average monthly benefit <sup>(2)</sup>	\$1,842	\$1,790	2.9%
<b>Disabled members</b>			
Number in pay status	0	0	N/A
Average age	N/A	N/A	N/A
Average monthly benefit <sup>(2)</sup>	N/A	N/A	N/A
<b>Beneficiaries</b>			
Number in pay status	0	0	N/A
Average age	N/A	N/A	N/A
Average monthly benefit <sup>(2)</sup>	N/A	N/A	N/A

<sup>(1)</sup> Projected compensation was calculated by increasing the annualized compensation by one-half of the inflation plus across-the-board salary increase plus merit.

<sup>(2)</sup> Benefits include regular and settlement benefits but exclude non-vested supplemental benefits.



**SECTION 3: Supplemental Information for the Fresno County Employees' Retirement Association**

**EXHIBIT A**

**Table of Plan Coverage**

**iv. General Tier 4**

<b>Category</b>	<b>Year Ended June 30</b>		<b>Change From Prior Year</b>
	<b>2012</b>	<b>2011</b>	
<b>Active members in valuation</b>			
Number	51	0	N/A
Average age	36.2	N/A	N/A
Average service	0.1	N/A	N/A
Projected total compensation <sup>(1)</sup>	\$1,742,770	N/A	N/A
Projected average compensation <sup>(1)</sup>	\$34,172	N/A	N/A
Member account balances	\$19,951	N/A	N/A
<b>Vested terminated members</b>			
Number	0	0	N/A
Average age	N/A	N/A	N/A
<b>Retired members</b>			
Number in pay status	0	0	N/A
Average age	N/A	N/A	N/A
Average monthly benefit <sup>(2)</sup>	N/A	N/A	N/A
<b>Disabled members</b>			
Number in pay status	0	0	N/A
Average age	N/A	N/A	N/A
Average monthly benefit <sup>(2)</sup>	N/A	N/A	N/A
<b>Beneficiaries</b>			
Number in pay status	0	0	N/A
Average age	N/A	N/A	N/A
Average monthly benefit <sup>(2)</sup>	N/A	N/A	N/A

<sup>(1)</sup> *Projected compensation was calculated by increasing the annualized compensation by one-half of the inflation plus across-the-board salary increase plus merit.*

<sup>(2)</sup> *Benefits include regular benefits but exclude non-vested supplemental benefits.*

**SECTION 3: Supplemental Information for the Fresno County Employees' Retirement Association**

**EXHIBIT A**

**Table of Plan Coverage  
v. Safety Tier 1**

<b>Category</b>	<b>Year Ended June 30</b>		<b>Change From Prior Year</b>
	<b>2012</b>	<b>2011</b>	
<b>Active members in valuation</b>			
Number	698	729	-4.3%
Average age	43.0	42.6	N/A
Average service	14.7	14.3	N/A
Projected total compensation <sup>(1)</sup>	\$53,728,807	\$58,645,297	-8.4%
Projected average compensation <sup>(1)</sup>	\$76,975	\$80,446	-4.3%
Member account balances	\$50,706,309	\$48,290,045	5.0%
<b>Vested terminated members</b>			
Number	111	118	-5.9%
Average age	43.7	43.3	N/A
<b>Retired members</b>			
Number in pay status	518	509	1.8%
Average age	64.9	64.8	N/A
Average monthly benefit <sup>(2)</sup>	\$4,431	\$4,171	6.2%
<b>Disabled members</b>			
Number in pay status	144	137	5.1%
Average age	57.3	56.9	N/A
Average monthly benefit <sup>(2)</sup>	\$3,150	\$3,011	4.6%
<b>Beneficiaries</b>			
Number in pay status	141	116	21.6%
Average age	66.4	67.1	N/A
Average monthly benefit <sup>(2)</sup>	\$2,014	\$2,006	0.4%

<sup>(1)</sup> *Projected compensation was calculated by increasing the annualized compensation by one-half of the inflation plus across-the-board salary increase plus merit.*

<sup>(2)</sup> *Benefits include regular and settlement benefits but exclude non-vested supplemental benefits.*

**SECTION 3: Supplemental Information for the Fresno County Employees' Retirement Association**

**EXHIBIT A**

**Table of Plan Coverage**

**vi. Safety Tier 2**

<b>Category</b>	<b>Year Ended June 30</b>		<b>Change From Prior Year</b>
	<b>2012</b>	<b>2011</b>	
<b>Active members in valuation</b>			
Number	69	38	81.6%
Average age	32.9	34.8	N/A
Average service	2.8	4.6	N/A
Projected total compensation <sup>(1)</sup>	\$4,054,342	\$2,684,833	51.0%
Projected average compensation <sup>(1)</sup>	\$58,759	\$70,653	-16.8%
Member account balances	\$1,053,795	\$920,392	14.5%
<b>Vested terminated members</b>			
Number	5	4	25.0%
Average age	30.3	29.2	N/A
<b>Retired members</b>			
Number in pay status	0	0	N/A
Average age	N/A	N/A	N/A
Average monthly benefit <sup>(2)</sup>	N/A	N/A	N/A
<b>Disabled members</b>			
Number in pay status	0	0	N/A
Average age	N/A	N/A	N/A
Average monthly benefit <sup>(2)</sup>	N/A	N/A	N/A
<b>Beneficiaries</b>			
Number in pay status	0	0	N/A
Average age	N/A	N/A	N/A
Average monthly benefit <sup>(2)</sup>	N/A	N/A	N/A

<sup>(1)</sup> Projected compensation was calculated by increasing the annualized compensation by one-half of the inflation plus across-the-board salary increase plus merit.

<sup>(2)</sup> Benefits include regular and settlement benefits but exclude non-vested supplemental benefits.

**SECTION 3: Supplemental Information for the Fresno County Employees' Retirement Association**

**EXHIBIT A**

**Table of Plan Coverage**

**vii. Safety Tier 4**

<b>Category</b>	<b>Year Ended June 30</b>		<b>Change From Prior Year</b>
	<b>2012</b>	<b>2011</b>	
<b>Active members in valuation</b>			
Number	10	0	N/A
Average age	32.2	N/A	N/A
Average service	0.0	N/A	N/A
Projected total compensation <sup>(1)</sup>	\$397,072	N/A	N/A
Projected average compensation <sup>(1)</sup>	\$39,707	N/A	N/A
Member account balances	\$1,333	N/A	N/A
<b>Vested terminated members</b>			
Number	0	0	N/A
Average age	N/A	N/A	N/A
<b>Retired members</b>			
Number in pay status	0	0	N/A
Average age	N/A	N/A	N/A
Average monthly benefit <sup>(2)</sup>	N/A	N/A	N/A
<b>Disabled members</b>			
Number in pay status	0	0	N/A
Average age	N/A	N/A	N/A
Average monthly benefit <sup>(2)</sup>	N/A	N/A	N/A
<b>Beneficiaries</b>			
Number in pay status	0	0	N/A
Average age	N/A	N/A	N/A
Average monthly benefit <sup>(2)</sup>	N/A	N/A	N/A

<sup>(1)</sup> *Projected compensation was calculated by increasing the annualized compensation by one-half of the inflation plus across-the-board salary increase plus merit.*

<sup>(2)</sup> *Benefits include regular and settlement benefits but exclude non-vested supplemental benefits.*

**SECTION 3: Supplemental Information for the Fresno County Employees' Retirement Association**

**EXHIBIT B**

**Members in Active Service and Projected Average Compensation  
By Age, Years of Service as of June 30, 2012**

**i. General Tier 1**

Age	Total	Years of Service								
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over
Under 25	10	9	1	--	--	--	--	--	--	--
	\$30,105	\$29,702	\$33,728	--	--	--	--	--	--	--
25 - 29	156	64	92	--	--	--	--	--	--	--
	40,628	37,086	43,091	--	--	--	--	--	--	--
30 - 34	539	60	345	134	--	--	--	--	--	--
	49,961	45,023	51,131	\$49,160	--	--	--	--	--	--
35 - 39	692	47	251	361	33	--	--	--	--	--
	53,289	49,514	51,488	54,751	\$56,377	--	--	--	--	--
40 - 44	725	29	179	323	153	41	--	--	--	--
	55,917	42,555	52,983	56,786	60,619	\$53,783	--	--	--	--
45 - 49	705	12	154	233	142	146	15	3	--	--
	56,649	49,121	55,071	54,828	59,456	59,442	\$54,374	\$51,790	--	--
50 - 54	769	21	130	217	120	173	71	36	1	--
	58,522	60,848	54,491	54,006	60,107	62,671	66,040	58,778	\$62,707	--
55 - 59	653	10	90	181	118	113	66	69	6	--
	57,968	52,076	50,018	55,152	56,605	58,852	70,988	64,564	63,116	--
60 - 64	313	4	53	110	53	51	29	8	5	--
	56,332	39,601	57,657	54,390	53,720	54,006	71,714	52,350	66,969	--
65 - 69	71	1	17	30	11	7	2	2	--	1
	55,184	34,616	47,664	55,336	65,145	52,748	73,864	65,673	--	\$48,210
70 & over	9	--	2	4	1	2	--	--	--	--
	58,862	--	75,723	55,898	35,684	59,517	--	--	--	--
Total	4,642	257	1,314	1,593	631	533	183	118	12	1
	\$55,118	\$44,687	\$51,849	\$54,638	\$58,747	\$59,322	\$67,853	\$61,665	\$64,687	\$48,210

**SECTION 3: Supplemental Information for the Fresno County Employees' Retirement Association**

**EXHIBIT B**

**Members in Active Service and Projected Average Compensation  
By Age, Years of Service as of June 30, 2012**

**ii. General Tier 2**

Age	Total	Years of Service							
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35 & over
Under 25	10	10	--	--	--	--	--	--	--
	\$39,721	\$39,721	--	--	--	--	--	--	--
25 - 29	30	29	1	--	--	--	--	--	--
	43,946	44,228	\$35,771	--	--	--	--	--	--
30 - 34	47	37	10	--	--	--	--	--	--
	54,658	53,308	59,653	--	--	--	--	--	--
35 - 39	28	20	7	1	--	--	--	--	--
	59,970	58,037	64,047	\$70,090	--	--	--	--	--
40 - 44	21	16	4	1	--	--	--	--	--
	60,453	63,019	55,066	40,961	--	--	--	--	--
45 - 49	20	14	6	--	--	--	--	--	--
	72,564	68,625	81,756	--	--	--	--	--	--
50 - 54	22	18	3	1	--	--	--	--	--
	66,322	69,762	54,623	39,495	--	--	--	--	--
55 - 59	20	16	2	2	--	--	--	--	--
	79,672	77,171	44,147	135,209	--	--	--	--	--
60 - 64	10	4	6	--	--	--	--	--	--
	57,611	56,855	58,115	--	--	--	--	--	--
65 - 69	5	2	3	--	--	--	--	--	--
	63,528	100,012	39,205	--	--	--	--	--	--
70 & Over	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
Total	213	166	42	5	--	--	--	--	--
	\$59,299	\$58,433	\$59,760	\$84,193	--	--	--	--	--

**SECTION 3: Supplemental Information for the Fresno County Employees' Retirement Association**

**EXHIBIT B**

**Members in Active Service and Projected Average Compensation  
By Age, Years of Service as of June 30, 2012**

**iii. General Tier 3**

Age	Total	Years of Service								
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over
Under 25	46	45	1	--	--	--	--	--	--	--
	\$27,940	\$27,825	\$33,129	--	--	--	--	--	--	--
25 - 29	244	215	29	--	--	--	--	--	--	--
	35,048	34,273	40,791	--	--	--	--	--	--	--
30 - 34	233	195	36	2	--	--	--	--	--	--
	38,415	37,028	46,116	\$34,955	--	--	--	--	--	--
35 - 39	134	108	21	5	--	--	--	--	--	--
	40,577	38,721	48,198	48,668	--	--	--	--	--	--
40 - 44	104	77	20	7	--	--	--	--	--	--
	38,382	36,290	43,748	46,063	--	--	--	--	--	--
45 - 49	80	59	13	6	2	--	--	--	--	--
	37,240	34,167	43,608	45,075	\$63,001	--	--	--	--	--
50 - 54	77	61	10	6	--	--	--	--	--	--
	37,134	35,737	44,314	39,368	--	--	--	--	--	--
55 - 59	44	33	4	5	1	1	--	--	--	--
	41,027	40,892	48,779	36,873	45,705	\$30,568	--	--	--	--
60 - 64	27	21	6	--	--	--	--	--	--	--
	40,144	39,774	41,441	--	--	--	--	--	--	--
65 - 69	4	1	3	--	--	--	--	--	--	--
	54,060	96,297	39,980	--	--	--	--	--	--	--
70 & over	1	1	--	--	--	--	--	--	--	--
	24,001	24,001	--	--	--	--	--	--	--	--
<b>Total</b>	<b>994</b>	<b>816</b>	<b>143</b>	<b>31</b>	<b>3</b>	<b>1</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
	<b>\$37,409</b>	<b>\$35,929</b>	<b>\$44,316</b>	<b>\$42,797</b>	<b>\$57,235</b>	<b>\$30,568</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>

**SECTION 3: Supplemental Information for the Fresno County Employees' Retirement Association**

**EXHIBIT B**

**Members in Active Service and Projected Average Compensation  
By Age, Years of Service as of June 30, 2012**

**iv. General Tier 4**

Age	Total	Years of Service								
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over
Under 25	1	1	--	--	--	--	--	--	--	--
	\$34,425	\$34,425	--	--	--	--	--	--	--	--
25 - 29	16	16	--	--	--	--	--	--	--	--
	32,669	32,669	--	--	--	--	--	--	--	--
30 - 34	10	10	--	--	--	--	--	--	--	--
	36,962	36,962	--	--	--	--	--	--	--	--
35 - 39	6	6	--	--	--	--	--	--	--	--
	29,001	29,001	--	--	--	--	--	--	--	--
40 - 44	9	9	--	--	--	--	--	--	--	--
	35,767	35,767	--	--	--	--	--	--	--	--
45 - 49	5	5	--	--	--	--	--	--	--	--
	34,820	34,820	--	--	--	--	--	--	--	--
50 - 54	2	2	--	--	--	--	--	--	--	--
	45,630	45,630	--	--	--	--	--	--	--	--
55 - 59	1	1	--	--	--	--	--	--	--	--
	28,774	28,774	--	--	--	--	--	--	--	--
60 - 64	1	1	--	--	--	--	--	--	--	--
	25,989	25,989	--	--	--	--	--	--	--	--
65 - 69	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
70 & over	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
<b>Total</b>	<b>51</b>	<b>51</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
	<b>\$34,172</b>	<b>\$34,172</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>



**SECTION 3: Supplemental Information for the Fresno County Employees' Retirement Association**

**EXHIBIT B**

**Members in Active Service and Projected Average Compensation  
By Age, Years of Service as of June 30, 2012**

**v. Safety Tier 1**

Age	Total	Years of Service								
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over
Under 25	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
25 - 29	13	--	13	--	--	--	--	--	--	--
	\$65,962	--	\$65,962	--	--	--	--	--	--	--
30 - 34	90	3	71	16	--	--	--	--	--	--
	71,196	\$49,589	70,318	\$79,140	--	--	--	--	--	--
35 - 39	165	3	49	94	19	--	--	--	--	--
	75,711	54,949	74,047	76,460	\$79,576	--	--	--	--	--
40 - 44	154	--	24	65	53	12	--	--	--	--
	77,100	--	70,848	76,343	79,830	\$81,648	--	--	--	--
45 - 49	147	--	11	30	43	56	7	--	--	--
	78,759	--	67,922	76,196	78,053	82,107	\$84,322	--	--	--
50 - 54	97	--	5	13	15	32	27	5	--	--
	81,288	--	70,264	78,028	77,561	80,219	86,137	\$92,631	--	--
55 - 59	19	--	1	4	5	4	3	2	--	--
	82,984	--	69,746	83,709	78,485	80,478	106,094	69,751	--	--
60 - 64	10	--	3	1	1	2	2	--	--	1
	85,201	--	74,497	78,839	69,422	95,145	82,604	--	--	\$124,759
65 - 69	3	--	--	3	--	--	--	--	--	--
	68,903	--	--	68,903	--	--	--	--	--	--
70 & over	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
Total	698	6	177	226	136	106	39	7	--	1
	\$76,975	\$52,269	\$71,019	\$76,710	\$78,856	\$81,670	\$87,165	\$86,094	--	\$124,759

**SECTION 3: Supplemental Information for the Fresno County Employees' Retirement Association**

**EXHIBIT B**

**Members in Active Service and Projected Average Compensation  
By Age, Years of Service as of June 30, 2012**

**vi. Safety Tier 2**

Age	Years of Service							
	Total	0-4	5-9	10-14	15-19	20-24	25-29	30 & over
Under 25	7	7	--	--	--	--	--	--
	\$41,558	\$41,558	--	--	--	--	--	--
25 - 29	27	22	5	--	--	--	--	--
	58,281	55,438	\$70,790	--	--	--	--	--
30 - 34	15	8	7	--	--	--	--	--
	61,720	55,115	69,269	--	--	--	--	--
35 - 39	9	9	--	--	--	--	--	--
	52,130	52,130	--	--	--	--	--	--
40 - 44	4	3	1	--	--	--	--	--
	60,457	56,561	72,145	--	--	--	--	--
45 - 49	3	3	--	--	--	--	--	--
	75,724	75,723	--	--	--	--	--	--
50 - 54	2	2	--	--	--	--	--	--
	84,836	84,836	--	--	--	--	--	--
55 - 59	2	1	1	--	--	--	--	--
	78,107	84,836	71,377	--	--	--	--	--
60 - 64	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
65 - 69	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
70 & Over	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
<b>Total</b>	<b>69</b>	<b>55</b>	<b>14</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
	<b>\$58,759</b>	<b>\$55,854</b>	<b>\$70,168</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>

**SECTION 3: Supplemental Information for the Fresno County Employees' Retirement Association**

**EXHIBIT B**

**Members in Active Service and Projected Average Compensation  
By Age, Years of Service as of June 30, 2012**

**vii. Safety Tier 4**

Age	Total	Years of Service						
		0-4	5-9	10-14	15-19	20-24	25-29	30 & over
Under 25	1	1	--	--	--	--	--	--
	\$37,912	\$37,912	--	--	--	--	--	--
25 - 29	4	4	--	--	--	--	--	--
	39,788	39,788	--	--	--	--	--	--
30 - 34	2	2	--	--	--	--	--	--
	41,235	41,235	--	--	--	--	--	--
35 - 39	1	1	--	--	--	--	--	--
	41,717	41,717	--	--	--	--	--	--
40 - 44	2	2	--	--	--	--	--	--
	37,912	37,912	--	--	--	--	--	--
45 - 49	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
50 - 54	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
55 - 59	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
60 - 64	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
65 - 69	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
70 & Over	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
<b>Total</b>	<b>10</b>	<b>10</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
	<b>\$39,707</b>	<b>\$39,707</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>

**SECTION 3: Supplemental Information for the Fresno County Employees' Retirement Association**

**EXHIBIT C**

**Reconciliation of Member Data – June 30, 2011 to June 30, 2012**

	<b>Active Members</b>	<b>Vested Terminated Members</b>	<b>Pensioners</b>	<b>Disableds</b>	<b>Beneficiaries</b>	<b>Total</b>
Number as of June 30, 2011	6,763	1,414	4,816	332	739	14,064
New members	480	0	0	0	0	480
Terminations – with vested rights	-98	98	0	0	0	0
Contributions refunds	-128	-24	0	0	0	-152
Retirements	-334	-106	440	0	0	0
New disabilities	-4	-2	-12	18	0	0
Return to work	11	-11	0	0	0	0
Died with or without beneficiary	-11	-3	-159	-12	74*	-111
Data adjustments	-2	9	2	1	-4	6
Number as of June 30, 2012	6,677	1,375	5,087	339	809	14,287

\* This is the net increase in the number of beneficiaries after subtracting the number of beneficiaries who died during the year.

**SECTION 3: Supplemental Information for the Fresno County Employees' Retirement Association**

**EXHIBIT D**

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

	Year Ended June 30,	
	2012	2011
<b>Contribution income:</b>		
Employer contributions	\$157,869,172	\$130,289,781
Employee contributions	<u>32,627,149</u>	<u>31,293,249</u>
Contribution income	\$190,496,321	\$161,583,030
<b>Investment income:</b>		
Interest, dividends and other income	\$102,615,687	\$71,653,924
Adjustment toward market value	102,937,742	91,572,565
Less investment and administrative fees	<u>-18,414,706</u>	<u>-19,042,217</u>
Net investment income	<u>187,138,723</u>	<u>144,184,272</u>
<b>Total income available for benefits</b>	<b>\$377,635,044</b>	<b>\$305,767,302</b>
<b>Less benefit payments:</b>		
Service retirement	-\$180,169,712	-\$167,274,249
Death payments	-1,291,947	-1,396,941
Supplemental cost of living	-1,054,713	-1,188,404
Members refunds	-1,785,748	-2,043,926
Health insurance subsidies	<u>-11,018,863</u>	<u>-10,503,381</u>
Benefit payments	-\$195,320,983	-\$182,406,901
<b>Change in reserve for future benefits</b>	<b>\$182,314,061</b>	<b>\$123,360,401</b>

*Results may not total properly due to rounding.*

**SECTION 3: Supplemental Information for the Fresno County Employees' Retirement Association**

**EXHIBIT E**

**Summary Statement of Assets**

	Year Ended June 30,	
	2012	2011
<b>Cash equivalents</b>	\$110,149,707	\$100,015,589
<b>Accounts receivable:</b>		
Investment trades	\$121,333,234	\$70,435,869
Interest and dividends	9,410,264	8,853,030
Contributions and others	10,186,529	8,305,285
Securities lending	<u>190,725</u>	<u>126,494</u>
Total accounts receivable	141,120,752	87,720,678
<b>Investments:</b>		
Equities	\$1,551,046,644	\$1,681,911,346
Fixed income	888,857,655	783,462,873
Real estate	46,278,197	54,943,151
Securities lending collateral	227,952,164	250,675,277
Capital assets	3,800,637	2,532,839
Others	<u>568,807,039</u>	<u>554,299,607</u>
Total investments at market value	<u>3,286,742,336</u>	<u>3,327,825,093</u>
<b>Total assets</b>	<b>\$3,538,012,795</b>	<b>\$3,515,561,359</b>
<b>Less accounts payable:</b>		
Investment trades	-\$158,550,634	-\$94,267,354
Cash collateral payable for securities lending	-227,952,164	-250,675,277
Securities lending bank and broker fees	-64,177	-39,064
Others	<u>-2,933,157</u>	<u>-3,402,955</u>
Total accounts payable	-\$389,500,132	-\$348,384,650
<b>Net assets at market value</b>	<b><u>\$3,148,512,663</u></b>	<b><u>\$3,167,176,709</u></b>
<b>Net assets at actuarial value</b>	<b><u>\$3,333,855,518</u></b>	<b><u>\$3,151,541,457</u></b>
<b>Net assets at valuation value</b>	<b><u>\$3,305,045,273</u></b>	<b><u>\$3,114,482,906</u></b>

*Results may not total properly due to rounding.*

**SECTION 3: Supplemental Information for the Fresno County Employees' Retirement Association**

**EXHIBIT F**

**Actuarial Balance Sheet**

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

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

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

<b>Assets</b>	<b><u>Regular</u></b>	<b><u>Section 6</u></b>	<b><u>Section 8</u></b>	<b><u>Section 9</u></b>	<b><u>Total</u></b>
1. Total valuation assets	\$2,602,107	\$596,371	\$85,778	\$20,789	\$3,305,045
2. Present value of future contributions by members	\$196,593	\$55,261	\$0	\$0	\$251,854
3. Present value of future employer contributions for:					
a. entry age normal cost	\$412,356	\$81,192	\$0	\$6,926	\$500,474
b. unfunded actuarial accrued liability	\$798,165	\$192,501	\$10,928	\$38,763	\$1,040,357
4. Total current and future assets	\$4,009,221	\$925,325	\$96,706	\$66,478	\$5,097,730
<b>Liabilities</b>					
5. Present value of benefits already granted	\$1,986,910	\$399,806	\$96,706	\$40,083	\$2,523,505
6. Present value of benefits to be granted - deferred members	\$150,898	\$54,577	\$0	\$2,626	\$208,101
- active members	\$1,871,413	\$470,942	\$0	\$23,769	\$2,366,124
7. Total liabilities	\$4,009,221	\$925,325	\$96,706	\$66,478	\$5,097,730

**SECTION 3: Supplemental Information for the Fresno County Employees' Retirement Association**

**EXHIBIT G**

**Summary of Reported Asset Information as of June 30, 2012**

	<b>Reserves</b>
<b>Used in Development of Valuation Value of Assets</b>	
<i>Regular Valuation Reserves</i>	
Members' Accumulated Contributions	\$342,194,586
Current Service Reserve	741,048,108
Annuity Pension Reserve	133,445,924
Current Service Pension Reserve	999,266,083
Cost of Living Reserve	787,711,882
Survivors' Death Benefit Reserve	2,345,629
Subtotal	<u>\$3,006,012,212</u>
<i>Settlement Reserves (Section 6)</i>	
Supplemental Annuity Reserve	\$473,181,655
Members' Accumulated Contributions	43,342,107
Current Service Reserve	157,731,312
Annuity Pension Reserve	11,959,540
Subtotal	<u>\$686,214,614</u>
<i>Supplemental Benefit Reserve (Section 8)</i>	
	\$103,217,759
<i>Retiree Health Insurance Reserve (Section 9)</i>	
	\$25,854,160
<i>Contra Tracking Account</i>	
	<u>\$(516,253,471)</u>
Total	<u>\$3,305,045,273</u>
<b>Not Used in Development of Valuation Value of Assets</b>	
<i>Supplemental COLA</i>	
	\$3,020,569
<i>Retiree Health Insurance Reserves</i>	
	25,789,676
<i>Contingency Reserve</i>	
	0
<i>Board Contingency Reserve/Undistributed Earnings ("Available Earnings")</i>	
	0
<i>Market Stabilization Reserve</i>	
	<u>(185,342,855)</u>
Total	<u>\$(156,532,610)</u>
Grand Total	<u>\$3,148,512,663</u>

*Note: Results may not total properly due to rounding.*



**SECTION 3: Supplemental Information for the Fresno County Employees' Retirement Association**

**EXHIBIT H**

**Development of Unfunded Actuarial Accrued Liability as of June 30, 2012**

	<b>(Dollar amounts in Thousands)</b>
1 Unfunded actuarial accrued liability at beginning of year	\$1,123,478
2 Total Normal Cost payable at middle of year	107,623
3 Actual employer and member contributions	-190,496
4 Interest (full year on (1) plus half year on (2) + (3))	<u>83,858</u>
5 Expected unfunded actuarial accrued liability at end of year <sup>(1)</sup>	\$1,124,463
6 Actuarial (gain)/loss due to all changes:	
<u>Experience (gain)/loss</u>	
a. Loss from investment return	\$54,368
b. Lower than expected salary increases <sup>(2)</sup>	-151,076
c. Other experience loss <sup>(3)</sup>	<u>12,602</u>
d. Subtotal	-\$84,106
7 Actual unfunded actuarial accrued liability at end of year (5) + (6d)	\$1,040,357

<sup>(1)</sup> Includes a contribution loss of about \$22 million due to the one-year lag in implementation of the contribution rates determined in the June 30, 2011 valuation and the payment of the UAAL contributions based on lower than expected payroll.

<sup>(2)</sup> For the majority of the active members, their salaries actually decreased from those reported in the June 30, 2011 valuation.

<sup>(3)</sup> Primarily due to higher than expected liability for new retirees.

### SECTION 3: Supplemental Information for the Fresno County Employees' Retirement Association

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#### EXHIBIT I

#### Section 415 Limitations

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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 indexed for inflation. That limit is \$200,000 for 2012 and \$205,000 for 2013. Normal Retirement Age for these purposes is age 62. These are the limits in simplified terms. They must generally be adjusted based on each participant's circumstances, for such things as age at retirement, form of benefits chosen and after tax contributions.

Benefits in excess of the limits may be paid through a qualified governmental excess plan that meets the requirements of Section 415(m).

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

Contributions rates determined in this valuation have not been reduced for the Section 415 limitations. Actual limitations will result in gains as they occur.

**SECTION 3: Supplemental Information for the Fresno County Employees' Retirement Association**

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**EXHIBIT J**

**Definitions of Pension Terms**

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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 net, in this case, of investment and administrative expenses.
- (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 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 (Overfunded) 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 paying off the unfunded or overfunded actuarial accrued liability, from meeting the interest accrual only to amortizing it over a specific period of time.

**SECTION 3: Supplemental Information for the Fresno County Employees' Retirement Association**

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**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 gains and losses on the market value of assets to avoid significant swings in the value of assets from one year to the next.

**SECTION 4: Reporting Information for the Fresno County Employees' Retirement Association**

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**EXHIBIT I**

**Summary of Actuarial Valuation Results**

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

1. Retired members as of the valuation date (including 809 beneficiaries in pay status)	6,235
2. Members inactive during year ended June 30, 2012 with vested rights	1,375
3. Members active during the year ended June 30, 2012	6,677

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The actuarial factors as of the valuation date are as follows (amounts in 000s):

1. Normal cost		\$102,031
2. Present value of future benefits		5,097,730
3. Present value of future normal costs		752,328
4. Actuarial accrued liability*		4,345,402
Retired members and beneficiaries	\$2,523,505	
Inactive members with vested rights	208,101	
Active members	1,613,796	
5. Valuation value of assets* (\$3,148,513 at market value as reported by FCERA)		3,305,045
6. Unfunded actuarial accrued liability		\$1,040,357

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\* Excludes non-valuation reserves and designations.

**SECTION 4: Reporting Information for the Fresno County Employees' Retirement Association**

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**EXHIBIT I (continued)**

**Summary of Actuarial Valuation Results**

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The determination of the recommended average employer contribution is as follows  
(amounts in 000s):

	<b>Dollar Amount</b>	<b>% of Payroll</b>
1. Total normal cost	\$102,031	27.92%
2. Expected employee contributions	<u>-31,708</u>	<u>-8.68%</u>
3. Employer normal cost: (1) + (2)	\$70,323	19.24%
4. Amortization of unfunded actuarial accrued liability	<u>105,304</u>	<u>28.80%</u>
5. Total recommended average employer contribution: (3) + (4)	\$175,627	48.04%
8. Projected compensation	\$365,596	

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**SECTION 4: Reporting Information for the Fresno County Employees' Retirement Association**

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**EXHIBIT II**

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

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<b>Plan Year Ended June 30</b>	<b>Annual Required Contributions</b>	<b>Actual Contributions</b>	<b>Percentage Contributed</b>
2007	\$70	\$70	100.0%
2008	97	97	100.0%
2009	114	114	100.0%
2010	126	126	100.0%
2011	130	130	100.0%
2012	158	158	100.0%

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**SECTION 4: Reporting Information for the Fresno County Employees' Retirement Association**

**EXHIBIT III**

**Supplementary Information Required by GASB – Schedule of Funding Progress (Dollar Amounts in Thousands)**

<b>Actuarial Valuation Date</b>	<b>Valuation Value of Assets (a)</b>	<b>Actuarial Accrued Liability (AAL) (b)</b>	<b>Unfunded/ (Overfunded) AAL (UAAL) (a) – (b)</b>	<b>Funded Ratio (%) (a) / (b)</b>	<b>Covered Payroll (c)</b>	<b>UAAL as a Percentage of Covered Payroll (%) [(a) – (b)] / (c)</b>
6/30/2007	\$2,610,269 <sup>(1)</sup>	\$3,149,570	\$539,301	82.9	\$404,277	133.4
6/30/2008	2,812,423	3,429,990	617,567	82.0	424,083	145.6
6/30/2009	2,864,956	3,644,743	779,787	78.6	422,519	184.6
6/30/2010	2,983,044	4,092,464	1,109,420	72.9	408,861	271.3
6/30/2011	3,114,483	4,237,961	1,123,478	73.5	398,976	281.6
6/30/2012	3,305,045	4,345,402	1,040,357	76.1	365,596	284.6

<sup>(1)</sup> After decreasing assets by \$3,169 for a net overpayment of member contributions discounted to June 30, 2007.



**SECTION 4: Reporting Information for the Fresno County Employees' Retirement Association**

**EXHIBIT IV**

**Supplementary Information Required by GASB**

<b>Valuation date</b>	June 30, 2012
<b>Actuarial cost method</b>	Entry Age Normal Cost Method
<b>Amortization method</b>	Level percent of payroll for total unfunded liability
<b>Remaining amortization period</b>	21 years (declining) for UAAL established as of June 30, 2003 plus 15 years (declining) for UAAL due to actuarial gains or losses, changes in actuarial assumptions or plan amendments* established on each subsequent valuation.
<b>Asset valuation method</b>	The actuarial value of assets is determined by phasing in any difference between the actual and the expected market return over 10 six-month interest crediting periods. The actuarial value of assets is further adjusted, if necessary, to be within 30% of the market value of assets. The valuation value of assets is the actuarial value of assets reduced by the value of the non-valuation reserves. Deferred gains and losses as of June 30, 2011 have been combined and will be recognized in equal amounts over a period of four and a half years from that date.
<b>Actuarial assumptions:</b>	
Investment rate of return	7.75%
Inflation rate	3.50%
Real across-the-board salary increase	0.50%
Projected salary increases**	General: 5.00% to 11.00% and Safety: 5.50% to 11.00%
Cost of living adjustments	3.00% of retirement income for General Tiers 1, 2 and 3, and Safety Tiers 1 and 2 0.00% for General Tier 4 and Safety Tier 4
<b>Plan membership:</b>	
Retired members and beneficiaries receiving benefits	6,235
Terminated members entitled to, but not yet receiving benefits	1,375
Active members	<u>6,677</u>
Total	14,287

\* Prior to the Board's most recent review of actuarial funding policy in April 2011, a 30-year amortization period was used for plan amendments.

\*\* Includes inflation at 3.50% plus real across-the-board salary increase of 0.50% plus merit and longevity increases. See Exhibit V for these increases.

**SECTION 4: Reporting Information for the Fresno County Employees' Retirement Association**

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**EXHIBIT V**

**Actuarial Assumptions and Actuarial Cost Method**

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**Post – Retirement Mortality Rates:**

*Healthy:*

For General Members and all Beneficiaries: RP-2000 Healthy Annuitant Mortality Table, with adjustment for white collar workers set back two years.

For Safety Members: RP-2000 Healthy Annuitant Mortality Table, with adjustment for blue collar workers set back three years.

*Disabled:*

For General Members: RP-2000 Healthy Annuitant Mortality Table, with adjustment for white collar workers set forward four years.

For Safety Members: RP-2000 Healthy Annuitant Mortality Table, with adjustment for blue collar workers set back three years.

The mortality tables shown above were determined to contain sufficient provision appropriate to reasonably reflect future mortality improvement, based on a review of mortality experience in the June 30, 2009 actuarial experience study.

*Employee Contribution Rates  
and Optional Benefits:*

For General Members and Beneficiaries: RP-2000 Healthy Annuitant Mortality Table, with adjustment for white collar workers set back two years weighted 35% male and 65% female for members and weighted 65% male and 35% female for beneficiaries.

For Safety Members: RP-2000 Healthy Annuitant Mortality Table, with adjustment for blue collar workers set back three years weighted 80% male and 20% female.

For Safety Beneficiaries: RP-2000 Healthy Annuitant Mortality Table, with adjustment for white collar workers set back two years weighted 20% male and 80% female.

Please note that in determining optional benefits for disabled members the RP-2000 Healthy Annuitant Mortality Table, with adjustment for white collar workers set forward four years for General members and the RP-2000 Healthy Annuitant Mortality Table, with adjustment for blue collar workers set back three years for Safety members are used instead.

**SECTION 4: Reporting Information for the Fresno County Employees' Retirement Association**

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**Termination Rates Before Retirement:**

Age	Rate (%) Mortality			
	General <sup>(1)</sup>		Safety <sup>(1)</sup>	
	Male	Female	Male	Female
25	0.04	0.02	0.04	0.02
30	0.04	0.02	0.04	0.02
35	0.05	0.04	0.09	0.04
40	0.08	0.06	0.12	0.06
45	0.11	0.08	0.15	0.11
50	0.17	0.13	0.20	0.16
55	0.27	0.21	0.30	0.22
60	0.45	0.37	0.56	0.34
65	0.85	0.68	1.08	0.68

<sup>(1)</sup> All pre-retirement deaths are assumed to be non-service connected.

**SECTION 4: Reporting Information for the Fresno County Employees' Retirement Association**

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**Termination Rates Before Retirement (Continued):**

Age	Rate (%)		
	Disability		
	General <sup>(1)</sup>		Safety <sup>(2)</sup>
	Male	Female	Male and Female
20	0.01	0.01	0.01
25	0.01	0.02	0.11
30	0.02	0.02	0.24
35	0.03	0.06	0.42
40	0.05	0.10	0.56
45	0.18	0.16	0.66
50	0.28	0.19	0.94
55	0.36	0.26	2.24
60	0.76	0.42	1.20

<sup>(1)</sup> One-third of General disabilities are assumed to be duty disabilities. The other two-third are assumed to be ordinary disabilities.

<sup>(2)</sup> 100% of Safety disabilities are assumed to be duty disabilities.

**SECTION 4: Reporting Information for the Fresno County Employees' Retirement Association**

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**Termination Rates Before Retirement (Continued):**

**Rate (%)**  
**Total Termination (< 5 Years of Service)**

<b>Years of Service</b>	<b>General</b>		<b>Safety</b>
	<b>Male</b>	<b>Female</b>	<b>Male and Female</b>
0	17.00	17.00	17.00
1	6.00	6.00	4.00
2	6.00	6.00	4.00
3	6.00	6.00	4.00
4	6.00	6.00	4.00

**Rate (%)**  
**Total Termination (5+ Years of Service)**

<b>Age</b>	<b>General</b>		<b>Safety</b>
	<b>Male</b>	<b>Female</b>	<b>Male and Female</b>
20	6.00	7.50	4.00
25	6.00	7.50	4.00
30	5.40	7.20	3.70
35	4.70	5.80	3.20
40	4.35	4.70	2.70
45	4.10	4.20	1.60
50	3.70	3.70	1.00
55	3.20	3.20	1.00
60	3.00	3.00	0.00

**SECTION 4: Reporting Information for the Fresno County Employees' Retirement Association**

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**Termination Rates Before Retirement (Continued):**

**Proportion of Total Termination Assumed to  
Receive Refunds and Deferred Vested Benefits (%)**

<b>Years of Service</b>	<b>Refunds</b>	<b>Deferred Vested Benefits</b>
0-4	90.00	10.00
5-9	30.00	70.00
10-14	30.00	70.00
15-19	30.00	70.00
20 or more	30.00	70.00

**SECTION 4: Reporting Information for the Fresno County Employees' Retirement Association**

**Retirement Rates:**

Age	Rate (%)						
	General				Safety		
	Tier 1		Tier 2	Tier 3	Tier 4	Tiers 1 & 2	Tier 4
Male	Female	Male & Female	Male & Female	Male & Female	Male & Female	Male & Female	
45	0.00	0.00	0.00	0.00	0.00	1.00	1.00
46	0.00	0.00	0.00	0.00	0.00	1.00	1.00
47	0.00	0.00	0.00	0.00	0.00	1.00	1.00
48	0.00	0.00	0.00	0.00	0.00	1.00	1.00
49	0.00	0.00	0.00	0.00	0.00	3.00	2.00
50	3.00	4.00	3.00	3.00	2.00	5.00	4.00
51	3.00	4.00	3.00	3.00	2.00	5.00	4.00
52	3.00	4.00	3.60	3.60	2.50	8.00	5.00
53	4.00	4.00	3.60	3.60	2.50	15.00	6.00
54	4.00	5.00	4.20	4.20	3.00	25.00	11.00
55	9.00	10.00	8.40	8.40	4.00	35.00	20.00
56	13.00	12.00	10.00	10.00	5.00	25.00	20.00
57	17.00	13.00	10.00	10.00	6.00	25.00	20.00
58	20.00	15.00	10.00	10.00	7.00	25.00	20.00
59	20.00	16.00	10.00	15.00	8.00	30.00	23.00
60	30.00	18.00	15.00	19.20	9.00	100.00	56.00
61	30.00	22.00	15.00	19.20	11.00	100.00	58.00
62	30.00	25.00	25.00	34.20	17.00	100.00	62.00
63	30.00	25.00	24.00	23.70	16.00	100.00	64.00
64	30.00	25.00	24.00	23.70	20.00	100.00	70.00
65	40.00	35.00	35.00	43.30	25.00	100.00	100.00
66	50.00	35.00	34.00	33.30	21.00	100.00	100.00
67	50.00	40.00	34.00	33.30	21.00	100.00	100.00
68	50.00	45.00	35.00	40.00	25.00	100.00	100.00
69	50.00	50.00	35.00	46.70	30.00	100.00	100.00
70	100.00	100.00	100.00	100.00	100.00	100.00	100.00

#### SECTION 4: Reporting Information for the Fresno County Employees' Retirement Association

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

For current deferred vested members, retirement assumptions are as follows:

General:           Age 58  
Safety:             Age 55

We assume that 40% of future General and 60% of future Safety deferred vested members will continue to work for a reciprocal employer. For these members, we assume 5.00% and 5.50% compensation increases per annum for General and Safety members, respectively.

---

**Future Benefit Accruals:**

1.0 year of service per year of employment.

**Annual Leave Conversion:**

The following assumptions for service converted from unused annual leave at retirement are used:

New Annual Leave Plan:

40 hours per year of service.

Annual Leave Plan II:

35 hours per year of service.

Vacation/Sick Leave Plans:

20 hours per year of service for General and 45 hours per year of service for Safety.

Annual Leave IV Plan or  
the Old Annual Leave Plan:

Based on actual hours in a member's frozen time off bank.

**Unknown Data for Members:**

Same as those exhibited by members with similar known characteristics. If not specified, members are assumed to be male.

**Inclusion of Deferred Vested  
Members:**

All deferred vested members are included in the valuation.

**Percent Married:**

80% of male members; 55% of female members.

**Age of Spouse:**

Wives are 3 years younger than their husbands.

**Net Investment Return:**

7.75%, net of administration and investment expenses.

**Employee Contribution  
Crediting Rate:**

3.00%, compounded semi-annually.



**SECTION 4: Reporting Information for the Fresno County Employees' Retirement Association**

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**Consumer Price Index:** Increase of 3.50% per year, retiree COLA increases due to CPI subject to a 3.00% maximum change per year for General Tiers 1, 2 and 3, and Safety Tiers 1 and 2. General Tier 4 and Safety Tier 4 receive no COLA increases.

**Salary Increases:**

Annual Rate of Compensation Increase		
Inflation: 3.50%; an additional 0.50% “across the board” salary increases (other than inflation); plus the following Merit and Longevity increases based on service.		
Service	General	Safety
0	7.00%	7.00%
1	6.00%	6.00%
2	5.50%	5.75%
3	5.00%	5.25%
4	4.25%	4.35%
5	2.00%	3.75%
6	1.50%	3.75%
7	1.25%	3.50%
8 or more	1.00%	1.50%

**Actuarial Value of Assets:** The actuarial value of assets is determined by phasing in any difference between actual and expected market return over 10 six-month interest crediting periods. The actuarial value of assets is further adjusted, if necessary, to be within 30% of the market value of assets. Deferred gains and losses as of June 30, 2011 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 value of the non-valuation reserves.

**Actuarial Cost Method:** Entry Age Normal 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”).

**Changes in Actuarial Assumptions and Methods:** The Board adopted an adjustment to the asset smoothing method that combined the net deferred investment gains from the June 30, 2011 valuation into a single smoothing layer to be recognized in equal amounts over a period of four and a half years from that date.

**SECTION 4: Reporting Information for the Fresno County Employees' Retirement Association**

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**EXHIBIT VI**

**Summary of Plan Provisions**

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

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**Membership Eligibility:**

	Membership with FCERA usually begins with the first day of the pay period following the date of appointment to a permanent position of at least 50% full-time.
<i>General and Safety Tier 1</i>	All General and Safety members hired on or before June 30, 2005 and General and Safety members of certain bargaining units hired after June 30, 2005.
<i>General and Safety Tier 2</i>	General and Safety members of certain bargaining units hired after June 30, 2005 and those Tier 1 members hired on or before June 30, 2005 who elect to transfer to Tier 2.
<i>General Tier 3</i>	General members of certain bargaining units hired after December 17, 2007 and those eligible Tier 2 members hired on or before December 17, 2007 who elect to transfer to Tier 3.
<i>General and Safety Tier 4</i>	General and Safety County members hired on or after June 11, 2012.

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**Final Compensation for  
Benefit Determination:**

<i>General and Safety Tiers 1 &amp; 2</i>	Highest one-year average final compensation (§31462.1) (FAS1).
<i>General Tiers 3 &amp; 4 and Safety Tier 4</i>	Highest three-year average final compensation (§31462) (FAS3).

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**Service:** Years of service (Yrs).

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**Service Retirement Eligibility:**

<i>General</i>	Age 50 with 10 years of service, or age 70 regardless of service, or after 30 years, regardless of age (§31672).
<i>Safety</i>	Age 50 with 10 years of service, or after 20 years, regardless of age (§31663.25).

**SECTION 4: Reporting Information for the Fresno County Employees' Retirement Association**

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**Benefit Formula:**

	<b>Retirement Age</b>	<b>Benefit Formula</b>
<i>General Tier 1</i>	50	$(1.86\% \times \text{FAS1} - 1/3 \times 1.86\% \times \$350 \times 12) \times \text{Yrs}$
<i>Regular benefit under §31676.12 and</i>	55	$(2.50\% \times \text{FAS1} - 1/3 \times 2.50\% \times \$350 \times 12) \times \text{Yrs}$
<i>Settlement benefit under §31676.14 and §31627</i>	60 or later	$(3.27\% \times \text{FAS1} - 1/3 \times 3.27\% \times \$350 \times 12) \times \text{Yrs}$
<i>General Tier 2 (§31676.16)</i>	50	$(1.43\% \times \text{FAS1} - 1/3 \times 1.43\% \times \$350 \times 12) \times \text{Yrs}$
	55	$(2.00\% \times \text{FAS1} - 1/3 \times 2.00\% \times \$350 \times 12) \times \text{Yrs}$
	60	$(2.26\% \times \text{FAS1} - 1/3 \times 2.26\% \times \$350 \times 12) \times \text{Yrs}$
	62	$(2.37\% \times \text{FAS1} - 1/3 \times 2.37\% \times \$350 \times 12) \times \text{Yrs}$
	63 or later	$(2.42\% \times \text{FAS1} - 1/3 \times 2.42\% \times \$350 \times 12) \times \text{Yrs}$
<i>General Tier 3 (§31676.15)</i>	50	$(1.49\% \times \text{FAS3} - 1/3 \times 1.49\% \times \$350 \times 12) \times \text{Yrs}$
	55	$(2.00\% \times \text{FAS3} - 1/3 \times 2.00\% \times \$350 \times 12) \times \text{Yrs}$
	60	$(2.62\% \times \text{FAS3} - 1/3 \times 2.62\% \times \$350 \times 12) \times \text{Yrs}$
	62	$(2.82\% \times \text{FAS3} - 1/3 \times 2.82\% \times \$350 \times 12) \times \text{Yrs}$
	65 or later	$(3.13\% \times \text{FAS3} - 1/3 \times 3.13\% \times \$350 \times 12) \times \text{Yrs}$
<i>General Tier 4 (§31676.1)</i>	50	$(1.18\% \times \text{FAS3} - 1/3 \times 1.18\% \times \$350 \times 12) \times \text{Yrs}$
	55	$(1.49\% \times \text{FAS3} - 1/3 \times 1.49\% \times \$350 \times 12) \times \text{Yrs}$
	60	$(1.92\% \times \text{FAS3} - 1/3 \times 1.92\% \times \$350 \times 12) \times \text{Yrs}$
	62	$(2.09\% \times \text{FAS3} - 1/3 \times 2.09\% \times \$350 \times 12) \times \text{Yrs}$
	65 or later	$(2.43\% \times \text{FAS3} - 1/3 \times 2.43\% \times \$350 \times 12) \times \text{Yrs}$

**SECTION 4: Reporting Information for the Fresno County Employees' Retirement Association**

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	<b>Retirement Age</b>	<b>Benefit Formula</b>
<i>Safety Tier 1</i>	50	$(2.50\% \times \text{FAS1} - 1/3 \times 2.50\% \times \$350 \times 12) \times \text{Yrs}$
<i>Regular benefit under §31664 and Settlement benefit under §31627</i>	55 or later	$(3.27\% \times \text{FAS1} - 1/3 \times 3.27\% \times \$350 \times 12) \times \text{Yrs}$
<i>Safety Tier 2 (§31664.2)</i>	50	$(2.29\% \times \text{FAS1} - 1/3 \times 2.29\% \times \$350 \times 12) \times \text{Yrs}$
	55 or later	$(3.00\% \times \text{FAS1} - 1/3 \times 3.00\% \times \$350 \times 12) \times \text{Yrs}$
<i>Safety Tier 4 (§31664)</i>	50	$(2.00\% \times \text{FAS3} - 1/3 \times 2.00\% \times \$350 \times 12) \times \text{Yrs}$
	55 or later	$(2.62\% \times \text{FAS3} - 1/3 \times 2.62\% \times \$350 \times 12) \times \text{Yrs}$
<b>Maximum Benefit:</b>	100% of Final Compensation (§31676.14, §31676.16, §31676.15, §31676.1, §31664 and §31664.2).	

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**Ordinary Disability:**

General Tiers 1, 2 & 4

*Eligibility*

Five years of service (§31720).

*Benefit Formula*

1.5% per year of service. If the benefit does not exceed one-third of Final Compensation, the service is projected to 65, but the total benefit cannot be more than one-third of Final Compensation. The service retirement benefit is paid, if greater.

General Tier 3

*Eligibility*

Five years of service (§31720).

*Benefit Formula*

1.8% per year of service. If the benefit does not exceed one-third of Final Compensation, the service is projected to 62, but the total benefit cannot be more than one-third of Final Compensation. The service retirement benefit is paid, if greater.

Safety Tiers 1, 2 & 4

*Eligibility*

Five years of service (§31720).

*Benefit Formula*

1.8% per year of service. If the benefit does not exceed one-third of Final Compensation, the service is projected to 55, but the total benefit cannot be more than one-third of Final Compensation. The service retirement benefit is paid, if greater.

**SECTION 4: Reporting Information for the Fresno County Employees' Retirement Association**

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**Line-of-Duty Disability:**

All Members

*Eligibility*

No age or service requirements (§31720).

*Benefit Formula*

50% of the Final Compensation or 100% of Service Retirement benefit, if greater (§31727.4).

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**Pre-Retirement Death:**

All Members

*Eligibility*

None.

*Basic lump sum benefit*

Refund of employee contributions with interest, plus one month's compensation for each year of service, to a maximum of six months' compensation (§31781).

*Death in line of duty*

50% of Final Compensation or 100% of Service Retirement benefit, if greater, payable to spouse or minor children (§31787).

OR

Vested Members

*Eligibility*

Five years of service.

*Basic benefit*

60% of the greater of Service or Ordinary Disability Retirement benefit payable to surviving eligible spouse (§31765.1, §31781.1), in lieu of the basic lump sum benefit above.

*Death in line of duty*

50% of Final Compensation or 100% of Service Retirement benefit, if greater, payable to spouse or minor children (§31787).

**SECTION 4: Reporting Information for the Fresno County Employees' Retirement Association**

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**Death After Retirement:**

*All Members*

*Service or*

*Ordinary Disability Retirement*

60% of member's unmodified allowance continued to eligible spouse (§31760.1). An eligible spouse is a surviving spouse who was married to the member at least one year prior to the date of retirement (§31760.1) or at least two years prior to the date of death and has attained age 55 on or prior to the date of death (§31786.1).

*Line-of-Duty Disability*

100% of member's allowance continued to eligible spouse (§31786).

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**Withdrawal Benefits:**

*Less than Five Years of Service*

Refund of accumulated employee contributions with interest, or earned benefit at age 70 (§31628). Effective January 1, 2003, a member may also elect to leave contributions on deposit in the retirement fund (§31629.5).

*Five or More Years of Service*

If contributions left on deposit, entitled to earned benefits commencing at any time after eligible to retire (§31700).

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**Post-retirement**

**Cost-of-Living Benefits:**

*General Tiers 1, 2 & 3 and  
Safety Tiers 1 & 2*

Future changes based on Consumer Price Index to a maximum of 3% per year; excess "banked" (§31870.1).

*General Tier 4 and  
Safety Tier 4*

None.

**SECTION 4: Reporting Information for the Fresno County Employees' Retirement Association**

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**Conversion of Annual Leave**

*General members*

- New Annual Leave Plan (5Y) Members who entered the plan on or before October 10, 1983 and in bargaining groups who have agreed to this plan may convert hours in excess of 1,100 hours.
- Annual Leave Plan II (5Y) Members who entered the plan after October 10, 1983 with accruals in the 5Y leave plan and in bargaining groups who have agreed to this plan may convert hours in excess of 400 hours.
- Vacation/Sick Leave Plans (5Q, 5S and 5W) Members who entered the plan on or after December 14, 1998 and in bargaining groups who have agreed to these plans may convert all accrued sick leave hours to service upon retirement.
- Annual Leave IV Plan or the Old Annual Leave Plan (5O) Members hired on or after October 10, 1983 or prior to that date, respectively, and who are in bargaining groups who have agreed to these plans, management or are unrepresented will convert any frozen hours balance to service at retirement.

*Safety members*

- New Annual Leave Plan (5Y) Members who entered the plan on or before October 10, 1983 and in bargaining groups who have agreed to this plan may convert hours in excess of 1,100 hours.
- Annual Leave Plan II (5Y) Members who entered the plan after October 10, 1983 with accruals in the 5Y leave plan and in bargaining groups who have agreed to this plan may convert hours in excess of 400 hours.
- Vacation/Sick Leave Plans (5Q, 5S and 5W) Members who entered the plan on or after December 14, 1998 and in bargaining groups who have agreed to these plans may convert all accrued sick leave hours to service.
- Annual Leave IV Plan or the Old Annual Leave Plan (5O) Members hired on or after October 10, 1983 or prior to that date, respectively, and who are in bargaining groups who have agreed to these plans, management or are unrepresented will convert any frozen hours balance to service at retirement.

#### SECTION 4: Reporting Information for the Fresno County Employees' Retirement Association

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**County Contributions:** Unfunded Actuarial Accrued Liability established as of June 30, 2003 is amortized over a declining 21-year period. Unfunded Actuarial Accrued Liability established as a result of the Tier 3 benefit improvement is amortized over a declining 24-year period. The amortization period for UAAL established on each subsequent valuation as a result of actuarial gains or losses, changes in actuarial assumptions or plan amendments is a declining 15-year period.

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**Ventura Settlement Benefits:**

Section 6 For Tier 1 members retiring on or after January 1, 2001 – This is the difference between the regular plus settlement benefits and the regular benefit (i.e., Section 31676.12 for General Tier 1 and Section 31664 for Safety Tier 1)

Section 8 For Tier 1 members who retired prior to January 1, 2001 - \$15 per month per year of service, up to a maximum monthly benefit of \$450.

Section 9 All retired members (excluding General Tier 4 members) are entitled to a \$3 per month per year of service benefit. Future increase in this benefit will be tied to the amount of future undistributed earnings. For the purpose of this valuation, it is assumed that there will be no future increase in the amount of benefit.

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**Non-Vested Supplemental Benefit:** Non-vested discretionary purchasing power and additional retiree health benefits are also paid to eligible retirees and beneficiaries. These benefits and the associated reserves have been excluded from the development of employer and member contribution rates in this valuation.

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**Member Contributions:**

Please refer to Appendix A for specific rates.

*General Tier 1*

*Regular Basic*

Provide for an average annuity at age 60 equal to 1/200 of FAS1 (§31621.5).

*Regular Plus Settlement Basic*

Provide for an average annuity at age 55 equal to 1/160 of FAS1 (§31627).

*Cost-of-Living*

Provide for one-half of future Cost-of-Living costs.

*General Tier 2*

*Basic*

Provide for an average annuity at age 60 equal to 1/240 of FAS1 (§31621.4).

*Cost-of-Living*

Provide for one-half of future Cost-of-Living costs.



## SECTION 4: Reporting Information for the Fresno County Employees' Retirement Association

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### *General Tier 3*

*Basic* Provide for an average annuity at age 55 equal to 1/200 of FAS3 (§31621.6 and §31630).

*Cost-of-Living* Provide for one-half of future Cost-of-Living costs.

### *General Tier 4*

*Basic* Provide for an average annuity at age 60 equal to 1/120 of FAS3 (§31621).

*Cost-of-Living* Not applicable.

### *Safety Tier 1*

*Regular Basic* Provide for an average annuity at age 50 equal to 1/200 of FAS1 (§31639.5).

*Regular Plus Settlement Basic* Provide for an average annuity at age 50 equal to 1/160 of FAS1 (§31627).

*Cost-of-Living* Provide for one-half of future Cost-of-Living costs.

### *Safety Tier 2*

*Basic* Provide for an average annuity at age 50 equal to 1/200 of FAS1 (§31639.5).

*Cost-of-Living* Provide for one-half of future Cost-of-Living costs.

### *Safety Tier 4*

*Basic* Provide for an average annuity at age 50 equal to 1/100 of FAS3 (§31639.25).

*Cost-of-Living* Not applicable.

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### **Other Information:**

Safety members with 30 or more years of service are exempt from paying member contributions. The same applies for General members hired on or before March 7, 1973.

**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.*

**SECTION 4: Reporting Information for the Fresno County Employees' Retirement Association**

**Appendix A**

**Member Contribution Rates**

Comparison of Total Member Rate<sup>(1)</sup> from June 30, 2012 (New) and June 30, 2011 (Current) Valuations

General Tier 1				General Tier 2			
Entry Age	Current	New	Change	Entry Age	Current	New	Change
25	7.72%	7.72%	-0.00%	25	5.10%	5.09%	-0.01%
35	9.00%	8.99%	-0.01%	35	5.94%	5.92%	-0.02%
45	10.65%	10.65%	-0.00%	45	6.94%	6.93%	-0.01%
General Tier 3				General Tier 4			
Entry Age	Current	New	Change	Entry Age	Current	New	Change
25	6.11%	6.10%	-0.01%	25	5.32%	5.32%	0.00%
35	7.12%	7.11%	-0.01%	35	6.20%	6.20%	0.00%
45	8.43%	8.42%	-0.01%	45	7.25%	7.25%	0.00%
Safety Tier 1				Safety Tier 2			
Entry Age	Current	New	Change	Entry Age	Current	New	Change
25	10.89%	10.82%	-0.07%	25	9.35%	9.38%	0.03%
30	11.63%	11.55%	-0.08%	30	9.99%	10.01%	0.02%
35	12.48%	12.40%	-0.08%	35	10.72%	10.75%	0.03%
Safety Tier 4							
Entry Age	Current	New	Change				
25	8.67%	8.67%	0.00%				
30	9.26%	9.26%	0.00%				
35	9.93%	9.93%	0.00%				

<sup>(1)</sup> Contributions for the first \$350 of monthly payroll are based on 2/3 of the above rates.

**SECTION 4: Reporting Information for the Fresno County Employees' Retirement Association**

**Appendix A**

**Member Contribution Rates (Continued)**

**General Tier 1 Members' Contribution Rates based on the June 30, 2012  
Actuarial Valuation as a percentage of payroll**

Age	Basic Regular First \$350 per month	Basic Regular Over \$350 per month	COLA Regular First \$350 per month	COLA Regular Over \$350 per month	Basic Settlement First \$350 per month	Basic Settlement Over \$350 per month	COLA Settlement First \$350 per month	COLA Settlement Over \$350 per month	Combined First \$350 per month	Combined Over \$350 per month
15	1.94%	2.92%	1.29%	1.94%	0.84%	1.26%	0.41%	0.61%	4.48%	6.73%
16	1.94%	2.92%	1.29%	1.94%	0.84%	1.26%	0.41%	0.61%	4.48%	6.73%
17	1.97%	2.96%	1.31%	1.97%	0.86%	1.28%	0.41%	0.62%	4.55%	6.83%
18	2.01%	3.01%	1.33%	2.00%	0.87%	1.30%	0.42%	0.63%	4.63%	6.94%
19	2.04%	3.06%	1.35%	2.03%	0.88%	1.32%	0.42%	0.63%	4.69%	7.04%
20	2.07%	3.10%	1.37%	2.06%	0.90%	1.34%	0.43%	0.64%	4.77%	7.14%
21	2.10%	3.15%	1.39%	2.09%	0.91%	1.36%	0.43%	0.65%	4.83%	7.25%
22	2.13%	3.20%	1.41%	2.12%	0.92%	1.38%	0.44%	0.66%	4.90%	7.36%
23	2.17%	3.25%	1.44%	2.16%	0.94%	1.40%	0.45%	0.67%	5.00%	7.48%
24	2.20%	3.30%	1.46%	2.19%	0.95%	1.43%	0.45%	0.68%	5.06%	7.60%
25	2.23%	3.35%	1.49%	2.23%	0.96%	1.45%	0.46%	0.69%	5.14%	7.72%
26	2.27%	3.40%	1.51%	2.26%	0.98%	1.47%	0.47%	0.71%	5.23%	7.84%
27	2.30%	3.46%	1.53%	2.29%	0.99%	1.49%	0.48%	0.72%	5.30%	7.96%
28	2.34%	3.51%	1.55%	2.33%	1.01%	1.51%	0.49%	0.73%	5.39%	8.08%
29	2.37%	3.56%	1.58%	2.37%	1.03%	1.54%	0.49%	0.74%	5.47%	8.21%
30	2.41%	3.62%	1.60%	2.40%	1.04%	1.56%	0.50%	0.75%	5.55%	8.33%
31	2.45%	3.67%	1.63%	2.44%	1.06%	1.59%	0.51%	0.76%	5.65%	8.46%
32	2.49%	3.73%	1.65%	2.48%	1.07%	1.61%	0.51%	0.77%	5.72%	8.59%

**SECTION 4: Reporting Information for the Fresno County Employees' Retirement Association**

Age	Basic Regular First \$350 per month	Basic Regular Over \$350 per month	COLA Regular First \$350 per month	COLA Regular Over \$350 per month	Basic Settlement First \$350 per month	Basic Settlement Over \$350 per month	COLA Settlement First \$350 per month	COLA Settlement Over \$350 per month	Combined First \$350 per month	Combined Over \$350 per month
33	2.52%	3.79%	1.67%	2.51%	1.09%	1.64%	0.53%	0.79%	5.81%	8.73%
34	2.56%	3.84%	1.70%	2.55%	1.11%	1.66%	0.53%	0.80%	5.90%	8.85%
35	2.60%	3.90%	1.73%	2.59%	1.13%	1.69%	0.54%	0.81%	6.00%	8.99%
36	2.64%	3.96%	1.75%	2.63%	1.14%	1.72%	0.55%	0.82%	6.08%	9.13%
37	2.68%	4.02%	1.78%	2.67%	1.16%	1.75%	0.56%	0.84%	6.18%	9.28%
38	2.72%	4.09%	1.81%	2.71%	1.18%	1.78%	0.57%	0.85%	6.28%	9.43%
39	2.77%	4.15%	1.84%	2.76%	1.21%	1.81%	0.58%	0.87%	6.40%	9.59%
40	2.81%	4.22%	1.87%	2.80%	1.23%	1.84%	0.59%	0.88%	6.50%	9.74%
41	2.85%	4.28%	1.89%	2.84%	1.25%	1.88%	0.60%	0.90%	6.59%	9.90%
42	2.90%	4.35%	1.93%	2.89%	1.28%	1.92%	0.61%	0.92%	6.72%	10.08%
43	2.95%	4.42%	1.95%	2.93%	1.31%	1.96%	0.63%	0.94%	6.84%	10.25%
44	2.99%	4.49%	1.99%	2.98%	1.34%	2.00%	0.64%	0.96%	6.96%	10.43%
45	3.04%	4.57%	2.02%	3.03%	1.37%	2.06%	0.66%	0.99%	7.09%	10.65%
46	3.10%	4.64%	2.05%	3.08%	1.41%	2.12%	0.68%	1.02%	7.24%	10.86%
47	3.15%	4.72%	2.09%	3.14%	1.45%	2.18%	0.69%	1.04%	7.38%	11.08%
48	3.20%	4.81%	2.13%	3.19%	1.49%	2.23%	0.71%	1.07%	7.53%	11.30%
49	3.26%	4.90%	2.17%	3.25%	1.52%	2.27%	0.73%	1.09%	7.68%	11.51%
50	3.33%	4.99%	2.21%	3.31%	1.46%	2.19%	0.70%	1.05%	7.70%	11.54%
51	3.40%	5.10%	2.25%	3.38%	1.37%	2.06%	0.66%	0.99%	7.68%	11.53%
52	3.47%	5.20%	2.30%	3.45%	1.28%	1.92%	0.61%	0.92%	7.66%	11.49%
53	3.54%	5.30%	2.35%	3.52%	1.17%	1.75%	0.56%	0.84%	7.62%	11.41%
54	3.60%	5.40%	2.39%	3.59%	1.03%	1.55%	0.49%	0.74%	7.51%	11.28%

**SECTION 4: Reporting Information for the Fresno County Employees' Retirement Association**

Age	Basic Regular First \$350 per month	Basic Regular Over \$350 per month	COLA Regular First \$350 per month	COLA Regular Over \$350 per month	Basic Settlement First \$350 per month	Basic Settlement Over \$350 per month	COLA Settlement First \$350 per month	COLA Settlement Over \$350 per month	Combined First \$350 per month	Combined Over \$350 per month
55	3.61%	5.41%	2.39%	3.59%	1.03%	1.55%	0.49%	0.74%	7.52%	11.29%
56	3.60%	5.40%	2.39%	3.58%	1.03%	1.55%	0.49%	0.74%	7.51%	11.27%
57	3.58%	5.36%	2.37%	3.56%	1.03%	1.55%	0.49%	0.74%	7.47%	11.21%
58	3.54%	5.32%	2.35%	3.53%	1.03%	1.55%	0.49%	0.74%	7.41%	11.14%
59	3.49%	5.24%	2.32%	3.48%	1.03%	1.55%	0.49%	0.74%	7.33%	11.01%

Interest: 7.75% per annum  
 COLA: 3.00%  
 Mortality: RP-2000 Healthy Annuitant Mortality, with adjustment for white collar workers set back two years weighted 35% male and 65% female  
 Salary Increase: Inflation (3.50%) + Across-the-Board Increase (0.50%) + Merit (See Exhibit V)  
 COLA Loading Factor: 66.40% for Regular Benefits, 47.99% for Settlement Benefits.

**SECTION 4: Reporting Information for the Fresno County Employees' Retirement Association**

**Appendix A**

**Member Contribution Rates (Continued)**

**General Tier 2 Members' Contribution Rates based on the June 30, 2012 Actuarial Valuation as a percentage of payroll**

Age	Basic Regular	Basic Regular	COLA	COLA	Combined	Combined
	First \$350 per month	Over \$350 per month	Regular	Regular		
15	1.62%	2.43%	1.33%	2.00%	2.95%	4.43%
16	1.62%	2.43%	1.33%	2.00%	2.95%	4.43%
17	1.65%	2.47%	1.35%	2.03%	3.00%	4.50%
18	1.67%	2.51%	1.37%	2.06%	3.04%	4.57%
19	1.70%	2.55%	1.39%	2.09%	3.09%	4.64%
20	1.72%	2.59%	1.42%	2.13%	3.14%	4.72%
21	1.75%	2.63%	1.44%	2.16%	3.19%	4.79%
22	1.78%	2.67%	1.46%	2.19%	3.24%	4.86%
23	1.81%	2.71%	1.49%	2.23%	3.30%	4.94%
24	1.83%	2.75%	1.51%	2.26%	3.34%	5.01%
25	1.86%	2.79%	1.53%	2.30%	3.39%	5.09%
26	1.89%	2.84%	1.55%	2.33%	3.44%	5.17%
27	1.92%	2.88%	1.58%	2.37%	3.50%	5.25%
28	1.95%	2.92%	1.60%	2.40%	3.55%	5.32%
29	1.98%	2.97%	1.63%	2.44%	3.61%	5.41%

**SECTION 4: Reporting Information for the Fresno County Employees' Retirement Association**

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Age	Basic Regular First \$350 per month	Basic Regular Over \$350 per month	COLA Regular First \$350 per month	COLA Regular Over \$350 per month	Combined First \$350 per month	Combined Over \$350 per month
30	2.01%	3.01%	1.65%	2.48%	3.66%	5.49%
31	2.04%	3.06%	1.68%	2.52%	3.72%	5.58%
32	2.07%	3.11%	1.70%	2.55%	3.77%	5.66%
33	2.10%	3.16%	1.73%	2.59%	3.83%	5.75%
34	2.14%	3.20%	1.75%	2.63%	3.89%	5.83%
35	2.17%	3.25%	1.78%	2.67%	3.95%	5.92%
36	2.20%	3.30%	1.81%	2.71%	4.01%	6.01%
37	2.24%	3.35%	1.84%	2.76%	4.08%	6.11%
38	2.27%	3.41%	1.87%	2.80%	4.14%	6.21%
39	2.31%	3.46%	1.89%	2.84%	4.20%	6.30%
40	2.34%	3.51%	1.93%	2.89%	4.27%	6.40%
41	2.38%	3.57%	1.95%	2.93%	4.33%	6.50%
42	2.42%	3.62%	1.99%	2.98%	4.41%	6.60%
43	2.46%	3.68%	2.02%	3.03%	4.48%	6.71%
44	2.50%	3.74%	2.05%	3.08%	4.55%	6.82%
45	2.54%	3.80%	2.09%	3.13%	4.63%	6.93%
46	2.58%	3.87%	2.12%	3.18%	4.70%	7.05%
47	2.62%	3.94%	2.15%	3.23%	4.77%	7.17%
48	2.67%	4.01%	2.19%	3.29%	4.86%	7.30%
49	2.72%	4.08%	2.23%	3.35%	4.95%	7.43%

**SECTION 4: Reporting Information for the Fresno County Employees' Retirement Association**

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Age	Basic Regular	Basic Regular	COLA	COLA	Combined	Combined
	First \$350 per month	Over \$350 per month	First \$350 per month	Over \$350 per month	First \$350 per month	Over \$350 per month

50	2.77%	4.16%	2.28%	3.42%	5.05%	7.58%
51	2.83%	4.25%	2.33%	3.49%	5.16%	7.74%
52	2.89%	4.33%	2.37%	3.56%	5.26%	7.89%
53	2.95%	4.42%	2.42%	3.63%	5.37%	8.05%
54	3.00%	4.50%	2.47%	3.70%	5.47%	8.20%
55	3.01%	4.51%	2.47%	3.71%	5.48%	8.22%
56	3.00%	4.50%	2.47%	3.70%	5.47%	8.20%
57	2.98%	4.47%	2.45%	3.67%	5.43%	8.14%
58	2.95%	4.43%	2.43%	3.64%	5.38%	8.07%
59	2.91%	4.37%	2.39%	3.59%	5.30%	7.96%

Interest: 7.75% per annum  
 COLA: 3.00%  
 Mortality: RP-2000 Healthy Annuitant Mortality, with adjustment for white collar workers set back two years weighted 35% male and 65% female  
 Salary Increase: Inflation (3.50%) + Across-the-Board Increase (0.50%) + Merit (See Exhibit V)  
 COLA Loading Factor: 82.19% for Regular Benefits



**SECTION 4: Reporting Information for the Fresno County Employees' Retirement Association**

**Appendix A**

**Member Contribution Rates (Continued)**

**General Tier 3 Members' Contribution Rates based on the June 30, 2012  
Actuarial Valuation as a percentage of payroll**

Age	Basic Regular	Basic Regular	COLA	COLA	Combined	Combined
	First \$350 per month	Over \$350 per month	Regular First \$350 per month	Regular Over \$350 per month	First \$350 per month	Over \$350 per month
15	2.13%	3.19%	1.42%	2.13%	3.55%	5.32%
16	2.13%	3.19%	1.42%	2.13%	3.55%	5.32%
17	2.16%	3.24%	1.44%	2.16%	3.60%	5.40%
18	2.19%	3.29%	1.46%	2.19%	3.65%	5.48%
19	2.23%	3.34%	1.49%	2.23%	3.72%	5.57%
20	2.26%	3.39%	1.51%	2.26%	3.77%	5.65%
21	2.29%	3.44%	1.53%	2.30%	3.82%	5.74%
22	2.33%	3.50%	1.55%	2.33%	3.88%	5.83%
23	2.37%	3.55%	1.58%	2.37%	3.95%	5.92%
24	2.40%	3.60%	1.61%	2.41%	4.01%	6.01%
25	2.44%	3.66%	1.63%	2.44%	4.07%	6.10%
26	2.48%	3.72%	1.65%	2.48%	4.13%	6.20%
27	2.51%	3.77%	1.68%	2.52%	4.19%	6.29%
28	2.55%	3.83%	1.71%	2.56%	4.26%	6.39%
29	2.59%	3.89%	1.73%	2.60%	4.32%	6.49%

**SECTION 4: Reporting Information for the Fresno County Employees' Retirement Association**

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Age	Basic Regular	Basic Regular	COLA	COLA	Combined	Combined
	First \$350 per month	Over \$350 per month	Regular First \$350 per month	Regular Over \$350 per month	First \$350 per month	Over \$350 per month
30	2.63%	3.95%	1.76%	2.64%	4.39%	6.59%
31	2.67%	4.01%	1.79%	2.68%	4.46%	6.69%
32	2.71%	4.07%	1.81%	2.72%	4.52%	6.79%
33	2.76%	4.13%	1.84%	2.76%	4.60%	6.89%
34	2.80%	4.20%	1.87%	2.80%	4.67%	7.00%
35	2.84%	4.26%	1.90%	2.85%	4.74%	7.11%
36	2.89%	4.33%	1.93%	2.89%	4.82%	7.22%
37	2.93%	4.40%	1.96%	2.94%	4.89%	7.34%
38	2.98%	4.47%	1.99%	2.98%	4.97%	7.45%
39	3.03%	4.54%	2.02%	3.03%	5.05%	7.57%
40	3.08%	4.62%	2.05%	3.08%	5.13%	7.70%
41	3.13%	4.70%	2.09%	3.13%	5.22%	7.83%
42	3.19%	4.78%	2.13%	3.19%	5.32%	7.97%
43	3.24%	4.86%	2.17%	3.25%	5.41%	8.11%
44	3.30%	4.95%	2.21%	3.31%	5.51%	8.26%
45	3.36%	5.05%	2.25%	3.37%	5.61%	8.42%
46	3.43%	5.14%	2.29%	3.43%	5.72%	8.57%
47	3.49%	5.23%	2.33%	3.49%	5.82%	8.72%
48	3.52%	5.28%	2.35%	3.53%	5.87%	8.81%
49	3.53%	5.30%	2.36%	3.54%	5.89%	8.84%

**SECTION 4: Reporting Information for the Fresno County Employees' Retirement Association**

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Age	Basic Regular	Basic Regular	COLA	COLA	Combined	Combined
	First \$350 per month	Over \$350 per month	Regular First \$350 per month	Regular Over \$350 per month	First \$350 per month	Over \$350 per month
50	3.52%	5.28%	2.35%	3.52%	5.87%	8.80%
51	3.49%	5.24%	2.33%	3.50%	5.82%	8.74%
52	3.45%	5.18%	2.30%	3.45%	5.75%	8.63%
53	3.58%	5.36%	2.39%	3.58%	5.97%	8.94%
54	3.71%	5.56%	2.47%	3.71%	6.18%	9.27%

Interest: 7.75% per annum  
 COLA: 3.00%  
 Mortality: RP-2000 Healthy Annuitant Mortality, with adjustment for white collar workers set back two years weighted 35% male and 65% female  
 Salary Increase: Inflation (3.50%) + Across-the-Board Increase (0.50%) + Merit (See Exhibit V)  
 COLA Loading Factor: 66.74% for Regular Benefits

**SECTION 4: Reporting Information for the Fresno County Employees' Retirement Association**

**Appendix A**

**Member Contribution Rates (Continued)**

**General Tier 4 Members' Contribution Rates based on the June 30, 2012  
Actuarial Valuation as a percentage of payroll**

Age	Basic Regular First \$350 per month	Basic Regular Over \$350 per month	Age	Basic Regular First \$350 per month	Basic Regular Over \$350 per month	Age	Basic Regular First \$350 per month	Basic Regular Over \$350 per month
15	3.09%	4.63%	30	3.83%	5.75%	45	4.84%	7.25%
16	3.09%	4.63%	31	3.89%	5.83%	46	4.92%	7.38%
17	3.14%	4.70%	32	3.95%	5.92%	47	5.00%	7.50%
18	3.19%	4.78%	33	4.01%	6.01%	48	5.09%	7.64%
19	3.24%	4.85%	34	4.07%	6.11%	49	5.19%	7.78%
20	3.29%	4.93%	35	4.13%	6.20%	50	5.28%	7.92%
21	3.34%	5.01%	36	4.20%	6.30%	51	5.38%	8.07%
22	3.39%	5.08%	37	4.26%	6.39%	52	5.47%	8.21%
23	3.44%	5.16%	38	4.33%	6.49%	53	5.53%	8.30%
24	3.49%	5.24%	39	4.40%	6.59%	54	5.55%	8.32%
25	3.55%	5.32%	40	4.46%	6.70%	55	5.52%	8.29%
26	3.60%	5.41%	41	4.53%	6.80%	56	5.48%	8.22%
27	3.66%	5.49%	42	4.61%	6.91%	57	5.42%	8.13%
28	3.72%	5.57%	43	4.68%	7.02%	58	5.61%	8.42%
29	3.77%	5.66%	44	4.76%	7.14%	59	5.82%	8.73%

## SECTION 4: Reporting Information for the Fresno County Employees' Retirement Association

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Interest:	7.75% per annum
COLA:	0.00%
Mortality:	RP-2000 Healthy Annuitant Mortality, with adjustment for white collar workers set back two years weighted 35% male and 65% female
Salary Increase:	Inflation (3.50%) + Across-the-Board Increase (0.50%) + Merit (See Exhibit V)

**SECTION 4: Reporting Information for the Fresno County Employees' Retirement Association**

**Appendix A**

**Member Contribution Rates (Continued)**

**Safety Tier 1 Members' Contribution Rates based on the June 30, 2012  
Actuarial Valuation as a percentage of payroll**

Age	Basic Regular First \$350 per month	Basic Regular Over \$350 per month	COLA Regular First \$350 per month	COLA Regular Over \$350 per month	Basic Settlement First \$350 per month	Basic Settlement Over \$350 per month	COLA Settlement First \$350 per month	COLA Settlement Over \$350 per month	Combined First \$350 per month	Combined Over \$350 per month
15	2.72%	4.08%	2.55%	3.83%	0.68%	1.02%	0.49%	0.73%	6.44%	9.66%
16	2.72%	4.08%	2.55%	3.83%	0.68%	1.02%	0.49%	0.73%	6.44%	9.66%
17	2.75%	4.13%	2.59%	3.88%	0.69%	1.03%	0.49%	0.74%	6.52%	9.78%
18	2.79%	4.18%	2.62%	3.93%	0.70%	1.05%	0.50%	0.75%	6.61%	9.91%
19	2.82%	4.24%	2.65%	3.98%	0.71%	1.06%	0.51%	0.76%	6.69%	10.04%
20	2.86%	4.29%	2.69%	4.03%	0.71%	1.07%	0.51%	0.77%	6.77%	10.16%
21	2.90%	4.34%	2.72%	4.08%	0.72%	1.09%	0.52%	0.78%	6.86%	10.29%
22	2.93%	4.40%	2.75%	4.13%	0.73%	1.10%	0.53%	0.79%	6.94%	10.42%
23	2.97%	4.45%	2.79%	4.18%	0.74%	1.11%	0.53%	0.80%	7.03%	10.54%
24	3.01%	4.51%	2.82%	4.23%	0.75%	1.13%	0.54%	0.81%	7.12%	10.68%
25	3.05%	4.57%	2.86%	4.29%	0.76%	1.14%	0.55%	0.82%	7.22%	10.82%
26	3.09%	4.63%	2.89%	4.34%	0.77%	1.16%	0.55%	0.83%	7.30%	10.96%
27	3.13%	4.69%	2.93%	4.40%	0.78%	1.17%	0.56%	0.84%	7.40%	11.10%
28	3.17%	4.75%	2.97%	4.46%	0.79%	1.19%	0.57%	0.85%	7.50%	11.25%
29	3.21%	4.81%	3.01%	4.52%	0.80%	1.20%	0.57%	0.86%	7.59%	11.39%
30	3.25%	4.88%	3.05%	4.58%	0.81%	1.22%	0.58%	0.87%	7.69%	11.55%
31	3.30%	4.95%	3.09%	4.64%	0.82%	1.24%	0.59%	0.88%	7.80%	11.71%
32	3.34%	5.01%	3.14%	4.71%	0.84%	1.25%	0.60%	0.90%	7.92%	11.87%
33	3.39%	5.09%	3.18%	4.77%	0.85%	1.27%	0.61%	0.91%	8.03%	12.04%
34	3.44%	5.16%	3.23%	4.84%	0.86%	1.29%	0.61%	0.92%	8.14%	12.21%

**SECTION 4: Reporting Information for the Fresno County Employees' Retirement Association**

Age	Basic Regular	Basic Regular	COLA Regular	COLA Regular	Basic Settlement	Basic Settlement	COLA Settlement	COLA Settlement	Combined	Combined
	First \$350 per month	Over \$350 per month	First \$350 per month	Over \$350 per month	First \$350 per month	Over \$350 per month	First \$350 per month	Over \$350 per month	First \$350 per month	Over \$350 per month
35	3.49%	5.24%	3.27%	4.91%	0.87%	1.31%	0.63%	0.94%	8.26%	12.40%
36	3.54%	5.32%	3.33%	4.99%	0.89%	1.33%	0.63%	0.95%	8.39%	12.59%
37	3.60%	5.40%	3.38%	5.07%	0.90%	1.35%	0.65%	0.97%	8.53%	12.79%
38	3.66%	5.49%	3.43%	5.15%	0.92%	1.37%	0.65%	0.98%	8.66%	12.99%
39	3.73%	5.59%	3.50%	5.25%	0.93%	1.40%	0.67%	1.00%	8.83%	13.24%
40	3.80%	5.70%	3.57%	5.35%	0.95%	1.42%	0.68%	1.02%	9.00%	13.49%
41	3.88%	5.82%	3.64%	5.46%	0.97%	1.46%	0.69%	1.04%	9.18%	13.78%
42	3.90%	5.85%	3.66%	5.49%	0.97%	1.46%	0.70%	1.05%	9.23%	13.85%
43	3.91%	5.87%	3.67%	5.51%	0.98%	1.47%	0.70%	1.05%	9.26%	13.90%
44	3.93%	5.90%	3.69%	5.54%	0.98%	1.48%	0.70%	1.05%	9.30%	13.97%
45	3.94%	5.91%	3.70%	5.55%	0.98%	1.48%	0.71%	1.06%	9.33%	14.00%
46	3.92%	5.88%	3.68%	5.52%	0.98%	1.47%	0.70%	1.05%	9.28%	13.92%
47	3.89%	5.84%	3.65%	5.48%	0.97%	1.46%	0.69%	1.04%	9.20%	13.82%
48	3.86%	5.79%	3.62%	5.43%	0.96%	1.45%	0.69%	1.03%	9.13%	13.70%
49	3.80%	5.70%	3.57%	5.35%	0.95%	1.43%	0.68%	1.02%	9.00%	13.50%

Interest: 7.75% per annum  
 COLA: 3.00%  
 Mortality: RP-2000 Healthy Annuitant Mortality, with adjustment for blue collar workers set back three years weighted 80% male and 20% female  
 Salary Increase: Inflation (3.50%) + Across-the-Board Increase (0.50%) + Merit (See Exhibit V)  
 COLA Loading Factor: 93.85% for Regular Benefits, 71.47% for Settlement Benefits.

**SECTION 4: Reporting Information for the Fresno County Employees' Retirement Association**

**Appendix A**

**Member Contribution Rates (Continued)**

**Safety Tier 2 Members' Contribution Rates based on the June 30, 2012  
Actuarial Valuation as a percentage of payroll**

Age	Basic Regular	Basic Regular	COLA	COLA	Combined	Combined
	First \$350 per month	Over \$350 per month	Regular	Regular	First \$350 per month	Over \$350 per month
15	2.72%	4.08%	2.86%	4.29%	5.58%	8.37%
16	2.72%	4.08%	2.86%	4.29%	5.58%	8.37%
17	2.75%	4.13%	2.90%	4.35%	5.65%	8.48%
18	2.79%	4.18%	2.93%	4.40%	5.72%	8.58%
19	2.82%	4.24%	2.97%	4.46%	5.79%	8.70%
20	2.86%	4.29%	3.01%	4.51%	5.87%	8.80%
21	2.90%	4.34%	3.05%	4.57%	5.95%	8.91%
22	2.93%	4.40%	3.09%	4.63%	6.02%	9.03%
23	2.97%	4.45%	3.13%	4.69%	6.10%	9.14%
24	3.01%	4.51%	3.17%	4.75%	6.18%	9.26%
25	3.05%	4.57%	3.21%	4.81%	6.26%	9.38%
26	3.09%	4.63%	3.25%	4.87%	6.34%	9.50%
27	3.13%	4.69%	3.29%	4.93%	6.42%	9.62%
28	3.17%	4.75%	3.33%	5.00%	6.50%	9.75%
29	3.21%	4.81%	3.38%	5.07%	6.59%	9.88%
30	3.25%	4.88%	3.42%	5.13%	6.67%	10.01%
31	3.30%	4.95%	3.47%	5.20%	6.77%	10.15%
32	3.34%	5.01%	3.52%	5.28%	6.86%	10.29%
33	3.39%	5.09%	3.57%	5.35%	6.96%	10.44%
34	3.44%	5.16%	3.62%	5.43%	7.06%	10.59%



**SECTION 4: Reporting Information for the Fresno County Employees' Retirement Association**

Age	Basic Regular First \$350 per month	Basic Regular Over \$350 per month	COLA Regular First \$350 per month	COLA Regular Over \$350 per month	Combined First \$350 per month	Combined Over \$350 per month
35	3.49%	5.24%	3.67%	5.51%	7.16%	10.75%
36	3.54%	5.32%	3.73%	5.59%	7.27%	10.91%
37	3.60%	5.40%	3.79%	5.68%	7.39%	11.08%
38	3.66%	5.49%	3.85%	5.78%	7.51%	11.27%
39	3.73%	5.59%	3.92%	5.88%	7.65%	11.47%
40	3.80%	5.70%	4.00%	6.00%	7.80%	11.70%
41	3.88%	5.82%	4.08%	6.12%	7.96%	11.94%
42	3.90%	5.85%	4.10%	6.15%	8.00%	12.00%
43	3.91%	5.87%	4.12%	6.18%	8.03%	12.05%
44	3.93%	5.90%	4.14%	6.21%	8.07%	12.11%
45	3.94%	5.91%	4.15%	6.22%	8.09%	12.13%
46	3.92%	5.88%	4.13%	6.19%	8.05%	12.07%
47	3.89%	5.84%	4.09%	6.14%	7.98%	11.98%
48	3.86%	5.79%	4.06%	6.09%	7.92%	11.88%
49	3.80%	5.70%	4.00%	6.00%	7.80%	11.70%
Interest:			7.75% per annum			
COLA:			3.00%			
Mortality:			RP-2000 Healthy Annuitant Mortality, with adjustment for blue collar workers set back three years weighted 80% male and 20% female			
Salary Increase:			Inflation (3.50%) + Across-the-Board Increase (0.50%) + Merit (See Exhibit V)			
COLA Loading Factor:			105.21% for Regular Benefits			

**SECTION 4: Reporting Information for the Fresno County Employees' Retirement Association**

**Appendix A**

**Member Contribution Rates (Continued)**

**Safety Tier 4 Members' Contribution Rates based on the June 30, 2012  
Actuarial Valuation as a percentage of payroll**

Age	Basic Regular First \$350 per month	Basic Regular Over \$350 per month	Age	Basic Regular First \$350 per month	Basic Regular Over \$350 per month
15	5.16%	7.74%	33	6.43%	9.65%
16	5.16%	7.74%	34	6.53%	9.79%
17	5.23%	7.84%	35	6.62%	9.93%
18	5.29%	7.94%	36	6.73%	10.09%
19	5.36%	8.04%	37	6.83%	10.25%
20	5.43%	8.14%	38	6.95%	10.42%
21	5.49%	8.24%	39	7.07%	10.61%
22	5.56%	8.35%	40	7.17%	10.75%
23	5.64%	8.45%	41	7.23%	10.84%
24	5.71%	8.56%	42	7.25%	10.88%
25	5.78%	8.67%	43	7.27%	10.90%
26	5.86%	8.78%	44	7.26%	10.89%
27	5.93%	8.90%	45	7.22%	10.83%
28	6.01%	9.02%	46	7.16%	10.74%
29	6.09%	9.14%	47	7.08%	10.62%
30	6.17%	9.26%	48	7.33%	11.00%
31	6.26%	9.38%	49	7.60%	11.40%
32	6.34%	9.52%			

#### SECTION 4: Reporting Information for the Fresno County Employees' Retirement Association

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Interest:	7.75% per annum
COLA:	0.00%
Mortality:	RP-2000 Healthy Annuitant Mortality, with adjustment for blue collar workers set back three years weighted 80% male and 20% female
Salary Increase:	Inflation (3.50%) + Across-the-Board Increase (0.50%) + Merit (See Exhibit V)

**SECTION 4: Reporting Information for the Fresno County Employees' Retirement Association**

**Appendix B**

**Non-Valuation Reserves and Benefits**

The Board of Retirement has established a Supplemental COLA Reserve and a Retiree Health Insurance Reserve to pay non-vested discretionary purchasing power and additional taxable retiree health benefits. As requested by the Association, we have provided below a table of the anticipated cash payments and determined the sufficiency of current reserves to make those payments. Please note that in determining the sufficiency of the reserves, we assume no new excess earnings transfers will be made by the Board.

**Supplemental COLA Benefit<sup>(1) (2) (3)</sup>**

Total Undiscounted Benefits as of June 30, 2012: \$7,898,714<sup>(6)</sup>  
 Reserve<sup>(4)</sup> as of June 30, 2012: \$3,020,569

It is anticipated that the current reserve will be sufficient to pay the current benefit only through the year 2015-2016 for the current recipients. As shown in the table below, the benefit payment stream is substantially “front loaded” as total payments are expected to decrease as the number of recipients decreases. For example, in the year 2015-2016 only about 77% of the current recipients are expected to be alive and continuing to receive benefits. Furthermore, we assume that no new members will become eligible for this benefit.

<b>Period</b>	<b>Payment (undiscounted)</b>	<b>Period</b>	<b>Payment (undiscounted)</b>
2012 - 2013	\$926,790	2014 - 2015	\$761,449
2013 - 2014	842,985	2015 - 2016 <sup>(5)</sup>	489,345

**Retiree Health Insurance Benefit<sup>(1) (3)</sup>**

Total Undiscounted Benefits as of June 30, 2012: \$425,532,913  
 Reserve<sup>(4)</sup> as of June 30, 2012: \$25,789,676

It is anticipated that the current reserve will be sufficient to pay the current benefit only through the year 2015-2016. As shown in the table below, the benefit payment stream is somewhat “back loaded” as total payments are expected to increase as the number of recipients increases. For example, in the year 2015-2016 the total number of recipients is expected to be about 9% higher than at June 30, 2012.

<b>Period</b>	<b>Payment (undiscounted)</b>	<b>Period</b>	<b>Payment (undiscounted)</b>
2012 - 2013	\$7,900,261	2014 - 2015	\$8,289,408
2013 - 2014	8,097,184	2015 - 2016 <sup>(5)</sup>	1,502,823

<sup>(1)</sup> Assuming no change in the level of benefit provided as of June 30, 2012.

<sup>(2)</sup> Including only those members receiving the benefits as of June 30, 2012.

<sup>(3)</sup> Assuming no interest will be credited and no excess earnings will be transferred to this reserve.

<sup>(4)</sup> Based on actuarial value of assets.

<sup>(5)</sup> Payment will only be paid for part of the year.

<sup>(6)</sup> In the June 30, 2011 valuation, we have provided the discounted benefits (i.e., present value) of \$6,011,506 in our report. The undiscounted value was \$9,249,405

**SECTION 4: Reporting Information for the Fresno County Employees' Retirement Association**

**Appendix C**

**Amortization Schedule for UAAL**

<b>General – Regular Benefits</b>	<b>Source</b>	<b>Initial Amount</b>	<b>Outstanding Balance</b>	<b>Years Remaining</b>	<b>Payment</b>
June 30, 2003	Restart Amortization	N/A*	\$61,676,583	21	\$4,259,261
June 30, 2004	Actuarial Loss/POB Proceeds**	N/A*	(35,301,839)	7	(5,825,050)
June 30, 2005	Actuarial Loss	\$165,807,070	130,860,844	8	19,216,391
June 30, 2006	Actuarial Loss	74,355,835	62,334,994	9	8,274,597
June 30, 2006	Plan Provision Change	333,000	369,049	24	23,353
June 30, 2007	Actuarial Loss	9,736,697	8,597,686	10	1,044,481
June 30, 2007	Assumption Change	48,705,000	43,007,421	10	5,224,713
June 30, 2008	Actuarial Loss	37,435,443	34,353,331	11	3,857,535
June 30, 2009	Actuarial Loss	99,661,060	94,270,189	12	9,865,093
June 30, 2010	Actuarial Loss	40,450,188	39,170,303	13	3,846,328
June 30, 2010	Assumption Change	180,478,000	174,767,492	13	17,161,294
June 30, 2011	Actuarial Loss	33,654,586	33,200,968	14	3,077,065
June 30, 2012	Actuarial Gain	(37,654,021)	(37,654,021)	15	(3,310,316)

<b>General – Settlement Benefits</b>	<b>Source</b>	<b>Initial Amount</b>	<b>Outstanding Balance</b>	<b>Years Remaining</b>	<b>Payment</b>
June 30, 2003	Restart Amortization	N/A*	\$143,599,182	21	\$9,916,672
June 30, 2004	Actuarial Loss/POB Proceeds **	N/A*	(39,305,126)	7	(6,485,621)
June 30, 2005	Actuarial Loss	\$10,771,055	8,500,901	8	1,248,323
June 30, 2006	Actuarial Loss	8,282,685	6,943,653	9	921,728
June 30, 2007	Actuarial Gain	(162,430)	(143,428)	10	(17,424)
June 30, 2007	Assumption Change	37,063,000	32,727,321	10	3,975,846
June 30, 2008	Actuarial Loss	11,510,769	10,563,072	11	1,186,127
June 30, 2009	Actuarial Loss	17,637,452	16,683,406	12	1,745,868
June 30, 2010	Actuarial Loss	4,210,394	4,077,173	13	400,358
June 30, 2010	Assumption Change	38,322,000	37,109,453	13	3,643,963
June 30, 2011	Actuarial Loss	208,522	205,711	14	19,065
June 30, 2012	Actuarial Gain	(18,843,015)	(18,843,015)	15	(1,656,565)

\* The initial amounts are only available for periods based on prior audit and valuation results reviewed or prepared by Segal.

\*\* It appears that the proceeds from the Pension Obligation Bonds issued by the County were used to offset the actuarial loss in the June 30, 2004 valuation.

**SECTION 4: Reporting Information for the Fresno County Employees' Retirement Association**

<b>Safety – Regular Benefits</b>	<b>Source</b>	<b>Initial Amount</b>	<b>Outstanding Balance</b>	<b>Years Remaining</b>	<b>Payment</b>
June 30, 2003	Restart Amortization	N/A*	\$21,100,804	21	\$1,457,180
June 30, 2004	Actuarial Loss/POB Proceeds **	N/A*	(7,628,576)	7	(1,258,768)
June 30, 2005	Actuarial Loss	\$28,456,160	22,458,615	8	3,297,958
June 30, 2006	Actuarial Loss	36,122,657	30,282,836	9	4,019,864
June 30, 2007	Actuarial Loss	11,440,206	10,101,914	10	1,227,221
June 30, 2007	Assumption Change	18,663,000	16,479,776	10	2,002,029
June 30, 2008	Actuarial Loss	25,279,442	23,198,152	11	2,604,920
June 30, 2009	Actuarial Loss	33,290,245	31,489,508	12	3,295,282
June 30, 2010	Actuarial Loss	7,016,461	6,794,452	13	667,181
June 30, 2010	Assumption Change	44,211,000	42,812,119	13	4,203,936
June 30, 2011	Actuarial Gain	(3,902,219)	(3,849,622)	14	(356,783)
June 30, 2012	Actuarial Gain	(4,727,978)	(4,727,978)	15	(415,655)

<b>Safety – Settlement Benefits</b>	<b>Source</b>	<b>Initial Amount</b>	<b>Outstanding Balance</b>	<b>Years Remaining</b>	<b>Payment</b>
June 30, 2003	Restart Amortization	N/A*	\$24,008,195	21	\$1,657,959
June 30, 2004	Actuarial Loss/POB Proceeds **	N/A*	(6,247,316)	7	(1,030,851)
June 30, 2005	Actuarial Gain	\$(8,133,004)	(6,418,856)	8	(942,583)
June 30, 2006	Actuarial Loss	6,885,605	5,772,435	9	766,256
June 30, 2007	Actuarial Loss	810,988	716,118	10	86,997
June 30, 2007	Assumption Change	4,474,000	3,950,624	10	479,938
June 30, 2008	Actuarial Loss	4,845,166	4,446,257	11	499,270
June 30, 2009	Actuarial Loss	7,849,312	7,424,727	12	776,975
June 30, 2010	Actuarial Loss	1,272,629	1,232,362	13	121,012
June 30, 2010	Assumption Change	6,935,000	6,715,570	13	659,435
June 30, 2011	Actuarial Gain	(433,930)	(428,081)	14	(39,675)
June 30, 2012	Actuarial Gain	(1,098,338)	(1,098,338)	15	(96,559)

\* The initial amounts are only available for periods based on prior audit and valuation results reviewed or prepared by Segal.

\*\* It appears that the proceeds from the Pension Obligation Bonds issued by the County were used to offset the actuarial losses in the June 30, 2004 valuation.

**SECTION 4: Reporting Information for the Fresno County Employees' Retirement Association**

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**Appendix D**

**Schedule of UAAL and Associated Funded Ratios (Dollar Amounts in Thousands)**

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	<b>Regular Benefit</b>	<b>Settlement Benefit</b>	<b>Total</b>
AAL	\$3,400,272	\$945,130	\$4,305,402
UAAL	\$798,165	\$242,192	\$1,040,357
Funded Ratio	76.5%	74.4%	76.1%

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