

# **Fresno County Employees' Retirement Association**

**Actuarial Valuation and Review as of June 30, 2011**

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*December 1, 2011*

*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, 2011. It summarizes the actuarial data used in the valuation, establishes the funding requirements for fiscal 2012-2013 and analyzes the preceding year's experience.*


*The census and financial information were prepared by FCERA. That assistance is gratefully acknowledged. The actuarial calculations were completed under the supervision of Andy Yeung, ASA, MAAA, Enrolled Actuary.*

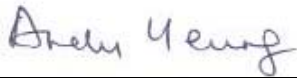
*This actuarial valuation has been completed in accordance with generally accepted actuarial principles and practices. In our opinion, the combined operation of the assumptions and the methods applied in this valuation fairly represent past and anticipated future experience of the Association and it is our understanding that they meet the parameters required by GASB Statement 25. To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate. The undersigned are Members of the American Academy of Actuaries and meet the qualification requirements to render the actuarial opinion contained herein.*

*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 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, 2011. 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, 2011, provided by the Retirement Association;
- The assets of the Plan as of June 30, 2011, 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 22-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 or changes in actuarial assumptions has been amortized over separate 15-year declining periods. Any increase in UAAL due to benefit improvements is amortized over 30 years.

## 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, 2012 through June 30, 2013.

### Significant Issues in Valuation Year

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

- Reference:* Pg. 33      ➤ On June 30, 2011, after crediting interest to the various reserve accounts at the assumed earnings rate, the balance of the Contra Tracking Account increased from \$300.0 million to \$372.9 million for the six-month period ending December 31, 2010 and increased again from \$372.9 million to \$423.6 million for the six-month period ending June 30, 2011.
- Reference:* Pg. 34      ➤ In this June 30, 2011 valuation, the funding ratio on a valuation value of assets basis has increased from 72.9% to 73.5%, and the UAAL has increased from \$1,109.4 million to \$1,123.5 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 43.79% of payroll to 46.10% 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, 2010 valuation, (iii) salary increases less than expected, (iv) increase in UAAL rate due to less than expected increase in total payroll, (v) COLA increases less than expected, (vi) liability for new retirees higher than expected, (vii) reclassification of certain retirees to beneficiaries by the Association, and (viii) other actuarial gains and losses. A reconciliation of the Association's aggregate employer rate is provided in Section 2, Subsection D (see Chart 15).

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

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- Reference:* Pg. 17 > The aggregate member rate calculated in this valuation has decreased from 8.81% of payroll to 8.80% of payroll. The change in the aggregate member rate is due to changes in membership demographics for the June 30, 2011 valuation. A reconciliation of the Association's aggregate member rate is provided in Section 2, Subsection D (see Chart 16).
- Reference:* Pg. 71 > 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 gains as of June 30, 2011 is \$15.6 million. This is a significant change compared to the total unrecognized investment losses of \$441.5 million as of June 30, 2010. These investment gains will be recognized in the determination of the actuarial value of assets for funding purposes in the next few years, and will help offset any investment losses that may occur after June 30, 2011. 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 gains 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 decrease in the next few years.
- > The footnote in Chart 7 shows that under the asset smoothing method the \$15.6 million in net deferred gains will be recognized in the next nine six-month interest crediting periods, but in a very non-level (uneven) pattern. In particular, there will be losses recognized in the next two years, followed by offsetting gains in the two and one-half years after that, so as to ultimately recognize all of the current total net deferred gains of \$15.6 million. This means that, absent any new gains or losses in the future, there will be two more years of increases in the average employer contribution rate followed by three years of decreases before the \$15.6 million in deferred gains are fully recognized.
- > In keeping with model actuarial practice for this situation, effective July 1, 2011 the asset smoothing method could be modified by combining the net deferred gains of \$15.6 million from the current valuation into a single four and one-half year smoothing "layer" and thereby recognizing those net deferred gains over the next four and one-half years in nine level amounts of approximately \$1.7 million for each six-month period. This would reduce the volatility associated with the current pattern of deferred gain/loss recognition and thereby result in both more stable funded ratios (on an actuarial value basis) and more level employer contribution rates. Please note that this change would have no impact on the current June 30, 2011 valuation results as the total amount of unrecognized losses as of June 30, 2011 remains unchanged. Also, note that we recommend using a four and one-half year smoothing period for the combined deferred gains as that will complete

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

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the recognition of those gains over the same time period as under the current separate smoothing layers. We will provide more information on this policy option during our presentation of the June 30, 2011 valuation.

*Reference:* Pg. 55

- 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.
- The actuarial valuation report as of June 30, 2011 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.
- In preparing the data for the June 30, 2011 valuation, we observe that some active members were reported with reduced pensionable salaries when those salaries were compared against the data provided for the June 30, 2010 valuation. We understand that the salary reductions were made based on MOU reached between the employer and the employees. This means that for some active members who retire from the Association in the next few years, their highest final average compensation may be based on salaries earned prior to the salary reductions until future salary increases offset the impact of the salary reductions. For this valuation, we have estimated the highest final average compensation earned prior to the salary reductions. If these types of salary reductions will be expanded to include more active members, we may have to work with the Association to get the actual highest final average compensation for use in the next valuation.

### 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, 2011		June 30, 2010	
<b>Employer Contribution Rates:</b>				
	Total Rate	Estimated Annual Amount <sup>(1)</sup>	Total Rate	Estimated Annual Amount <sup>(1)</sup>
General Tier 1	43.03%	\$127,296,000	41.03%	\$121,380,000
General Tier 2	41.15%	\$4,167,000	38.78%	\$3,928,000
General Tier 3	39.71%	\$12,584,000	37.42%	\$11,858,000
Safety Tier 1	65.06%	\$38,155,000	61.25%	\$35,920,000
Safety Tier 2	63.86%	\$1,715,000	60.26%	\$1,618,000
All categories combined	46.10%	\$183,917,000	43.79%	\$174,704,000
<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	8.66%	\$25,619,000	8.69%	\$25,708,000
General Tier 2	6.30%	\$638,000	6.23%	\$631,000
General Tier 3	6.83%	\$2,164,000	6.79%	\$2,152,000
Safety Tier 1	10.98%	\$6,439,000	10.91%	\$6,398,000
Safety Tier 2	9.60%	\$258,000	9.64%	\$259,000
All categories combined	8.80%	\$35,118,000	8.81%	\$35,148,000
<b>Funded Status:</b>				
Actuarial accrued liability <sup>(2)</sup>	\$4,237,961,000		\$4,092,464,000	
Valuation value of assets <sup>(3)</sup>	\$3,114,483,000		\$2,983,044,000	
Funded percentage	73.5%		72.9%	
Unfunded actuarial accrued liability	\$1,123,478,000		\$1,109,420,000	
<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, 2011 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, 2011	June 30, 2010	Percentage Change
<b>Active Members:</b>			
Number of members	6,763	6,946	-2.6%
Average age	44.7	44.4	N/A
Average service	11.6	11.2	N/A
Projected total compensation	\$398,975,424	\$408,861,532	-2.4%
Average projected compensation	\$58,994	\$58,863	0.2%
<b>Retired Member and Beneficiaries:</b>			
Number of members:			
Service retired	4,816	4,701	2.4%
Disability retired	332	333	-0.3%
Beneficiaries	739	602	22.8%
Total	5,887	5,636	4.5%
Average age	68.4	68.3	N/A
Average monthly benefit <sup>(1)</sup>	\$2,525	\$2,493	1.3%
<b>Vested Terminated Members:</b>			
Number of vested terminated members <sup>(2)</sup>	1,414	1,452	-2.6%
Average age	48.3	48.4	N/A
<b>Summary of Financial Data:</b>			
Market value of assets	\$3,167,176,709	\$2,586,687,255	22.4%
Return on market value of assets	23.34%	14.98%	N/A
Actuarial value of assets	\$3,151,541,457	\$3,028,181,056	4.1%
Return on actuarial value of assets	4.78%	3.44%	N/A
Valuation value of assets	\$3,114,482,906	\$2,983,044,156	4.4%
Return on valuation value of assets	4.84%	4.31%	N/A

<sup>(1)</sup> Benefits include regular and settlement benefits but exclude non-vested supplemental benefits.

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

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

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**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 seven valuations can be seen in this chart.*

**CHART 1**  
**Member Population: 2005 – 2011**

<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

\* 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 6,763 active members with an average age of 44.7 years, average years of service of 11.6 and average compensation of \$58,994. The 6,946 active members in the prior valuation had an average age of 44.4 years, average years of service of 11.2 and average compensation of \$58,863.

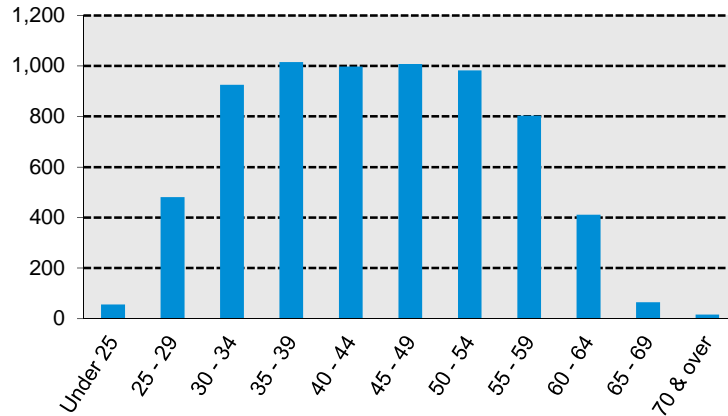
Among the active members, there were none with unknown age.

**Inactive Members**

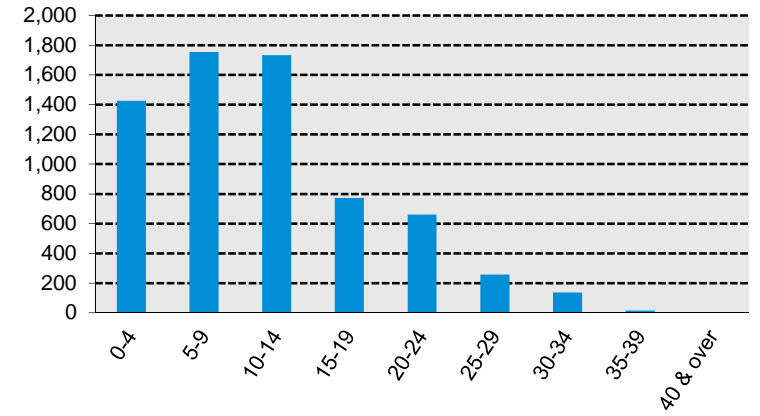
In this year's valuation, there were 1,414 members with a vested right to a deferred or immediate vested benefit or entitled to a return of their member contributions versus 1,452 in the prior valuation

*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, 2011**



**CHART 3**  
**Distribution of Active Members by Years of Service as of June 30, 2011**



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

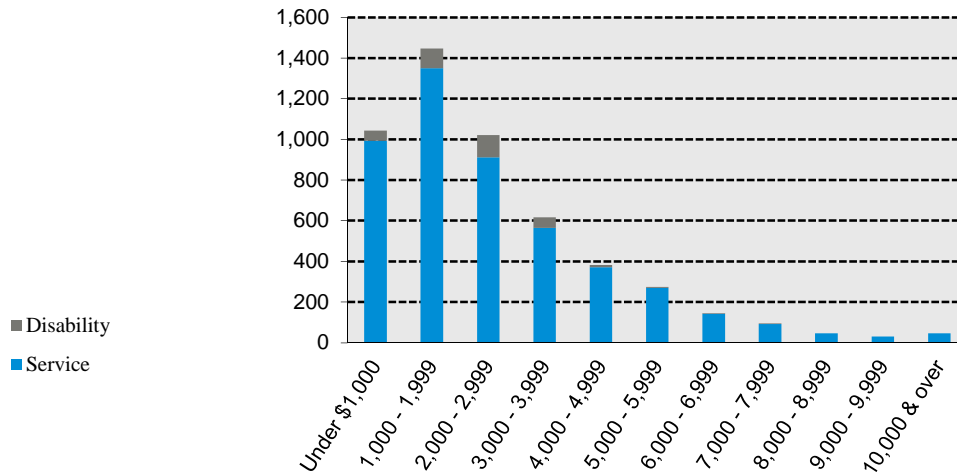
**Retired Members and Beneficiaries**

As of June 30, 2011, 5,148 retired members and 739 beneficiaries were receiving total monthly benefits of \$14,866,469. For comparison, in the previous valuation, there were 5,034 retired members and 602 beneficiaries receiving monthly benefits of \$14,049,009. 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.*

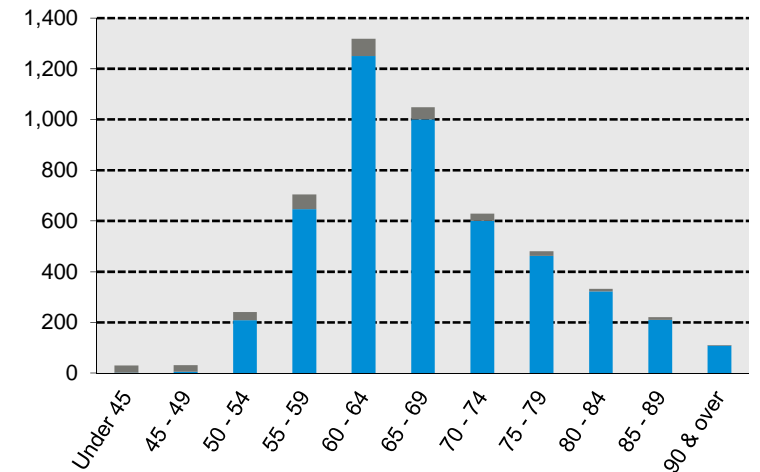
**CHART 4**

**Distribution of Retired Members (Excl. Beneficiaries) by Type and by Monthly Amount as of June 30, 2011**



**CHART 5**

**Distribution of Retired Members (Excl. Beneficiaries) by Type and by Age as of June 30, 2011**



**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.

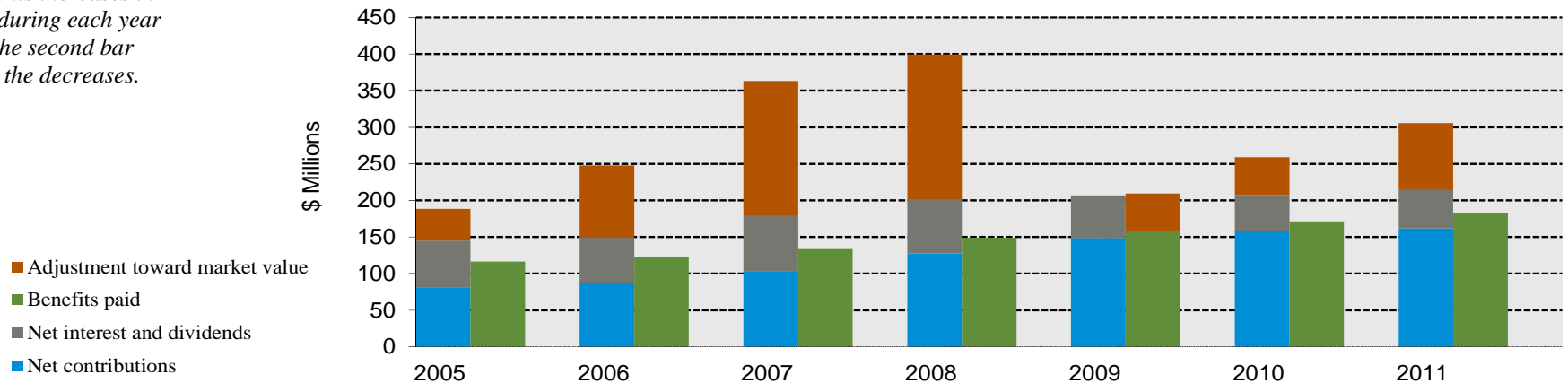
It is desirable to have level and predictable plan costs from one year to the next. For this reason, the Board of Retirement has approved an asset valuation method that gradually adjusts to market value. Under this valuation method, the full value of market fluctuations is not recognized in a single 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 seven 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 2011**



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

**CHART 7**

**Determination of Actuarial Value of Assets for Year Ended June 30, 2011**

Six Month Period		Total Actual	Expected Market	Investment	Deferred	Deferred
From	To	Market	Return (net)	Gain (Loss)	Factor	Return
		Return (net)				
7/1/2006	12/31/2006	\$257,896,965	\$100,922,267	\$156,974,698	0.0	\$ -
1/1/2007	6/30/2007	181,159,138	110,636,787	70,522,351	0.1	7,052,235
7/1/2007	12/31/2007	13,492,805	117,309,620	(103,816,815)	0.2	(20,763,363)
1/1/2008	6/30/2008	(203,972,361)	117,417,984	(321,390,346)	0.3	(96,417,104)
7/1/2008	12/31/2008	(533,520,330)	109,009,763	(642,530,093)	0.4	(257,012,037)
1/1/2009	6/30/2009	78,165,778	87,482,182	(9,316,405)	0.5	(4,658,202)
7/1/2009	12/31/2009	350,943,662	90,414,427	260,529,234	0.6	156,317,541
1/1/2010	6/30/2010	(13,074,426)	104,190,286	(117,264,712)	0.7	(82,085,299)
7/1/2010	12/31/2010	387,779,345	103,304,323	284,475,022	0.8	227,580,017
1/1/2011	6/30/2011	213,533,980	118,399,020	95,134,960	0.9	85,621,464

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

1. Total Deferred Return <sup>(1)</sup>	\$15,635,252
2. Net Market Value	3,167,176,709
3. Actuarial Value of Assets (Item 2 – Item 1)	3,151,541,457
4. Actuarial Value (before corridor) as a percentage of Market Value	99.5%
5. Actuarial Value of Assets – Corridor Limits:	
a. Lower Limit – 70% of Net Market Value	\$2,217,023,696
b. Upper Limit – 130% of Net Market Value	4,117,329,722
6. Actuarial Value of Assets (within corridor)	3,151,541,457
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	4,073,697
d. Retiree Health Insurance	32,984,854
e. Subtotal	<u>\$37,058,551</u>
8. Valuation Value of Assets (Item 6 – Item 7e)	<u>\$3,114,482,906</u>

<sup>(1)</sup> *The amounts of deferred return that will be recognized in each subsequent valuation are as follows:*

6/30/2012	\$(103,783,596)
6/30/2013	\$(57,933,433)
6/30/2014	\$103,643,260
6/30/2015	\$64,195,525
6/30/2016	\$9,513,496

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

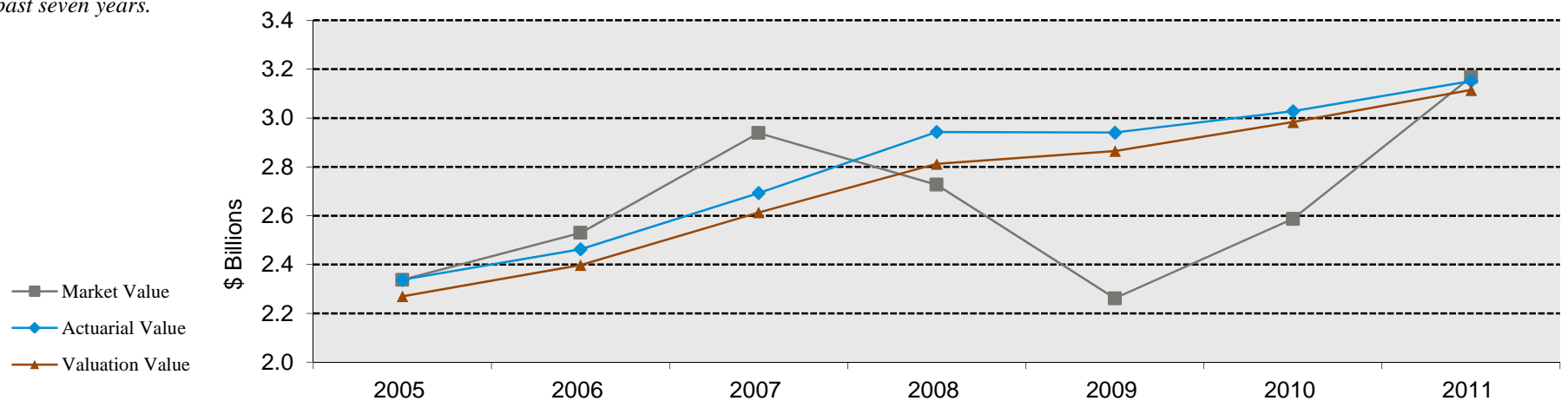
## SECTION 2: Valuation Results for the Fresno County Employees' Retirement Association

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 seven years.*

**CHART 8**

**Market Value, Actuarial Value and Valuation Value of Assets as of June 30, 2005 – 2011**



**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 \$18.3 million, a loss of \$86.5 million from investments and a gain of \$104.8 million from all other sources. The net experience variation from individual sources other than investments was 2.5% 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, 2011**

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1. Net gain/(loss) from investments <sup>(1)</sup>	\$(86,508,000)
2. Net gain/(loss) from other experience <sup>(2)</sup>	<u>104,792,000</u>
3. Net experience gain/(loss): (1) + (2)	\$18,284,000

---

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

<sup>(2)</sup> See Section 3, Items (6b) through (6f) 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 2010/2011 plan year was 4.84%.

Since the actual return for the year was less than the assumed return, FCERA experienced an actuarial loss during the year ended June 30, 2011 with regard to its investments.

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

---

**CHART 10**

**Investment Experience for Year Ended June 30, 2011 – Valuation Value of Assets**

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	<b>Valuation Value</b>
1. Actual return	\$144,184,273
2. Average value of assets	2,976,671,395
3. Actual rate of return: (1) ÷ (2)	4.84%
4. Assumed rate of return	7.75%
5. Expected return: (2) x (4)	230,692,033
6. Actuarial gain/(loss): (1) – (5)	<u>\$(86,507,760)</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 seven years.

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**CHART 11**

**Investment Return – Actuarial Value, Valuation Value and Market Value: 2005 – 2011**

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%
Average Return		5.81%		5.79%		6.75%

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

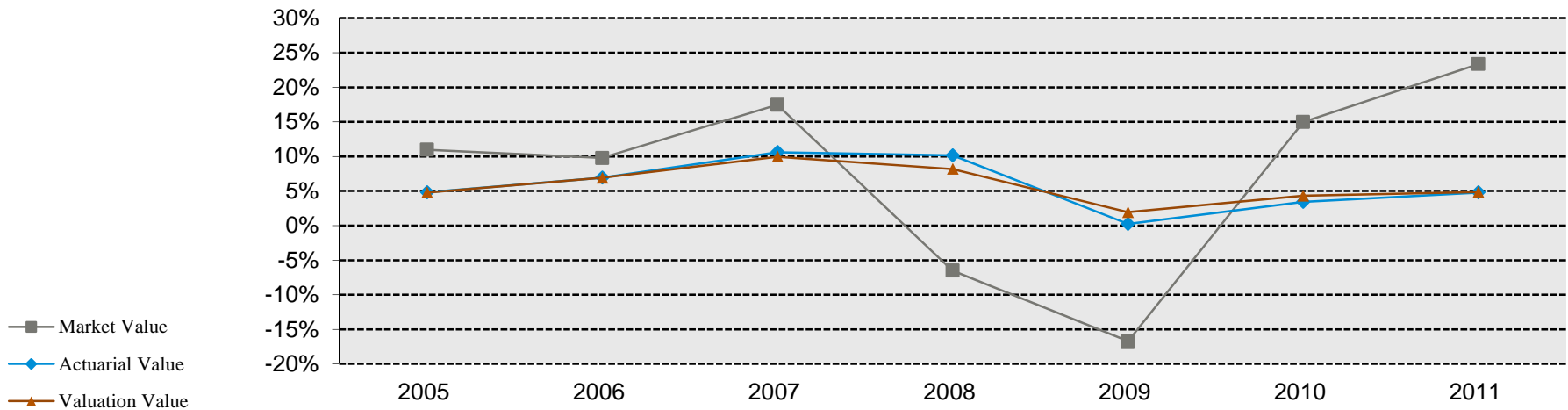
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Subsection B described the actuarial asset valuation method that gradually takes into account fluctuations in the market value rate of return. The effect of this is to stabilize the actuarial rate of return, which contributes to leveling pension plan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

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**CHART 12**  
**Market, Actuarial and Valuation Rates of Return for Years Ended June 30, 2005 - 2011**

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## 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, 2011 amounted to \$104.8 million which is 2.5% 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 22-year period. Any new UAAL established on each subsequent valuation after June 30, 2003 as a result of actuarial gains or losses or changes in actuarial assumptions has been amortized over separate 15-year declining periods. Any increase in UAAL due to benefit improvements is amortized over 30 years.

The recommended employer contributions are provided on Chart 13.

**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 for General Tiers 1 and 2, 1/200 of Three-Year Average Final Compensation for General Tier 3 and 1/200 of One-Year Average Final Compensation for Safety Tiers 1 and 2. That age is 60 for all General Tiers 1 and 2, 55 for all General Tier 3 and 50 for Safety Tiers 1 and 2. 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 retirement age 55 for General Tier 1 and 1/160 of One-Year Average Final Compensation at retirement 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 pay one-half of the total normal cost necessary to fund their cost-of-living benefits. 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, 2011						June 30, 2010	
	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%	\$41,742	4.30%	\$12,720	18.41%	\$54,462	18.57%	\$54,936
UAAL	<u>19.94%</u>	<u>58,989</u>	<u>4.68%</u>	<u>13,845</u>	<u>24.62%</u>	<u>72,834</u>	<u>22.46%</u>	<u>66,444</u>
Total Contribution	34.05%	\$100,731	8.98%	\$26,565	43.03%	\$127,296	41.03%	\$121,380
<b>General Tier 2 Members</b>								
Normal Cost	16.35%	\$1,656	0.18%	\$18	16.53%	\$1,674	16.32%	\$1,653
UAAL	<u>19.94%</u>	<u>2,019</u>	<u>4.68%</u>	<u>474</u>	<u>24.62%</u>	<u>2,493</u>	<u>22.46%</u>	<u>2,275</u>
Total Contribution	36.29%	\$3,675	4.86%	\$492	41.15%	\$4,167	38.78%	\$3,928
<b>General Tier 3 Members</b>								
Normal Cost	14.87%	\$4,712	0.22%	\$70	15.09%	\$4,782	14.96%	\$4,741
UAAL	<u>19.94%</u>	<u>6,319</u>	<u>4.68%</u>	<u>1,483</u>	<u>24.62%</u>	<u>7,802</u>	<u>22.46%</u>	<u>7,117</u>
Total Contribution	34.81%	\$11,031	4.90%	\$1,553	39.71%	\$12,584	37.42%	\$11,858
<b>Safety Tier 1 Members</b>								
Normal Cost	22.63%	\$13,271	4.56%	\$2,675	27.19%	\$15,946	26.91%	\$15,781
UAAL	<u>33.18%</u>	<u>19,458</u>	<u>4.69%</u>	<u>2,751</u>	<u>37.87%</u>	<u>22,209</u>	<u>34.34%</u>	<u>20,139</u>
Total Contribution	55.81%	\$32,729	9.25%	\$5,426	65.06%	\$38,155	61.25%	\$35,920
<b>Safety Tier 2 Members</b>								
Normal Cost	25.84%	\$694	0.15%	\$4	25.99%	\$698	25.92%	\$696
UAAL	<u>33.18%</u>	<u>891</u>	<u>4.69%</u>	<u>126</u>	<u>37.87%</u>	<u>1,017</u>	<u>34.34%</u>	<u>922</u>
Total Contribution	59.02%	\$1,585	4.84%	\$130	63.86%	\$1,715	60.26%	\$1,618
<b>All Categories Combined</b>								
Normal Cost	15.56%	\$62,075	3.88%	\$15,487	19.44%	\$77,562	19.50%	\$77,807
UAAL	<u>21.98%</u>	<u>87,676</u>	<u>4.68%</u>	<u>18,679</u>	<u>26.66%</u>	<u>106,355</u>	<u>24.29%</u>	<u>96,897</u>
Total Contribution	37.54%	\$149,751	8.56%	\$34,166	46.10%	\$183,917	43.79%	\$174,704

\*Amounts are in thousands and are based on June 30, 2011 projected annual compensation (also in thousands):

<b>General Tier 1</b>	\$295,831
<b>General Tier 2</b>	10,127
<b>General Tier 3</b>	31,688
<b>Safety Tier 1</b>	58,645
<b>Safety Tier 2</b>	<u>2,685</u>
<b>Total Compensation</b>	\$398,976

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

**CHART 14**

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

	June 30, 2011					June 30, 2010				
	General			Safety		General			Safety	
	Tier 1	Tier 2	Tier 3	Tier 1	Tier 2	Tier 1	Tier 2	Tier 3	Tier 1	Tier 2
<b>Normal Cost</b>										
Regular - Basic	11.38%	13.57%	12.14%	18.03%	20.88%	11.46%	13.36%	12.02%	17.85%	20.83%
Regular - COLA	2.73%	2.78%	2.73%	4.60%	4.96%	2.74%	2.76%	2.69%	4.58%	4.91%
Section 6	4.01%	0.00%	0.00%	4.30%	0.00%	4.05%	0.00%	0.00%	4.23%	0.00%
Section 8	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Section 9	0.29%	0.18%	0.22%	0.26%	0.15%	0.32%	0.20%	0.25%	0.25%	0.18%
<b>UAAL</b>										
Regular – Basic	12.98%	12.98%	12.98%	16.08%	16.08%	11.37%	11.37%	11.37%	14.16%	14.16%
Regular – COLA	6.96%	6.96%	6.96%	17.10%	17.10%	6.69%	6.69%	6.69%	15.93%	15.93%
Section 6	3.89%	3.89%	3.89%	3.90%	3.90%	3.68%	3.68%	3.68%	3.53%	3.53%
Section 8	0.22%	0.22%	0.22%	0.22%	0.22%	0.24%	0.24%	0.24%	0.24%	0.24%
Section 9	0.57%	0.57%	0.57%	0.57%	0.57%	0.48%	0.48%	0.48%	0.48%	0.48%

Note: Please refer to Section 4, Exhibit V 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, 2011 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, 2010 to June 30, 2011 (Dollars in Thousands)

	Contribution Rate	Estimated Amount <sup>(1)</sup>
Recommended Contribution Rate as of June 30, 2010	43.79%	\$174,704
Effect of actuarial experience during 2010/2011:		
1. Effect of investment loss on valuation value of assets	1.91%	\$7,620
2. Effect of one year delay in implementing employer and employee contribution rates calculated in June 30, 2010 valuation	0.99%	3,950
3. Effect of salary increases less than expected during 2010/2011	-1.59%	-6,344
4. Effect of increase in UAAL rate due to less than expected increase in total payroll	1.60%	6,384
5. Effect of COLA increases less than expected during 2010/2011	-0.94%	-3,750
6. Effect of liability for new retirees higher than expected	0.22%	878
7. Effect of reclassification of certain retirees to beneficiaries by the Association	-0.04%	-160
8. Effect of other experience (gain)/loss	0.16%	635
Subtotal	2.31%	\$9,213
Recommended Contribution Rate as of June 30, 2011	46.10%	\$183,917

<sup>(1)</sup> Based on June 30, 2011 projected annual compensation of \$398,976.

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

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The member contribution rates as of June 30, 2011 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, 2010 to June 30, 2011  
(Dollar Amounts in Thousands)**

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	Contribution Rate	Estimated Amount <sup>(1)</sup>
Average Contribution Rate as of June 30, 2010	8.81%	\$35,148
1. Effect of demographic changes	-0.01%	-30
Average Contribution Rate as of June 30, 2011	8.80%	\$35,118

<sup>(1)</sup> Based on June 30, 2011 projected compensation of \$398,976.

*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.

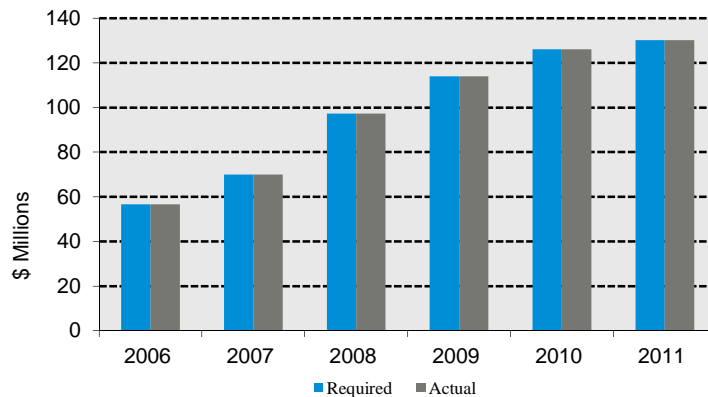
Critical information to GASB is the historical comparison of the GASB required contributions to the actual contributions. This comparison demonstrates whether a plan is being funded on an actuarially sound basis and in accordance with the GASB funding requirements. Chart 17 below presents a graphical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

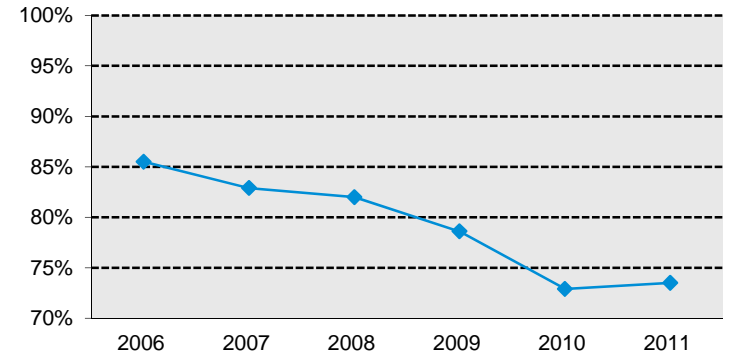
The details regarding the calculations of these values and other GASB numbers may be found in Section 4, Exhibits I, II, and III.

*These graphs show key GASB factors.*

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



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



**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>2011</b>	<b>2010</b>	
<b>Active members in valuation</b>			
Number	5,079	5,371	-5.4%
Average age	46.2	45.7	N/A
Average service	12.8	12.1	N/A
Projected total compensation <sup>(1)</sup>	\$295,830,517	\$308,146,673	-4.0%
Projected average compensation <sup>(1)</sup>	\$58,246	\$57,372	1.5%
Member account balances	\$202,726,851	\$195,844,788	3.5%
<b>Vested terminated members</b>			
Number	1,278	1,321	-3.3%
Average age	48.9	48.9	N/A
<b>Retired members</b>			
Number in pay status	4,300	4,196	2.5%
Average age	68.7	68.7	N/A
Average monthly benefit <sup>(2)</sup>	\$2,526	\$2,475	2.1%
<b>Disabled members</b>			
Number in pay status	195	197	-1.0%
Average age	65.5	66.1	N/A
Average monthly benefit <sup>(2)</sup>	\$1,701	\$1,651	3.0%
<b>Beneficiaries</b>			
Number in pay status	623	515	21.0%
Average age	73.3	73.0	N/A
Average monthly benefit <sup>(2)</sup>	\$1,431	\$1,397	2.4%

<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**

**ii. General Tier 2**

<b>Category</b>	<b>Year Ended June 30</b>		<b>Change From Prior Year</b>
	<b>2011</b>	<b>2010</b>	
<b>Active members in valuation</b>			
Number	166	138	20.3%
Average age	41.9	41.5	N/A
Average service	3.0	2.9	N/A
Projected total compensation <sup>(1)</sup>	\$10,127,265	\$8,537,294	18.6%
Projected average compensation <sup>(1)</sup>	\$61,008	\$61,864	-1.4%
Member account balances	\$1,632,892	\$1,270,786	28.5%
<b>Vested terminated members</b>			
Number	8	8	0.0%
Average age	43.0	42.0	N/A
<b>Retired members</b>			
Number in pay status	5	5	0.0%
Average age	58.2	57.2	N/A
Average monthly benefit <sup>(2)</sup>	\$2,068	\$2,528	-18.2%
<b>Disabled members</b>			
Number in pay status	0	0	0.0%
Average age	N/A	N/A	N/A
Average monthly benefit <sup>(2)</sup>	0	0	0.0%
<b>Beneficiaries</b>			
Number in pay status	0	0	0.0%
Average age	N/A	N/A	N/A
Average monthly benefit <sup>(2)</sup>	0	0	0.0%

<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>2011</b>	<b>2010</b>	
<b>Active members in valuation</b>			
Number	751	625	20.2%
Average age	37.5	37.0	N/A
Average service	3.3	3.1	N/A
Projected total compensation <sup>(1)</sup>	\$31,687,513	\$26,056,905	21.6%
Projected average compensation <sup>(1)</sup>	\$42,194	\$41,691	1.2%
Member account balances	\$5,325,330	\$3,943,956	35.0%
<b>Vested terminated members</b>			
Number	6	1	600.0%
Average age	40.3	32.2	N/A
<b>Retired members</b>			
Number in pay status	2	1	100.0%
Average age	64.4	57.4	N/A
Average monthly benefit <sup>(2)</sup>	\$1,790	\$3,290	-45.6%
<b>Disabled members</b>			
Number in pay status	0	0	0.0%
Average age	N/A	N/A	N/A
Average monthly benefit <sup>(2)</sup>	0	0	0.0%
<b>Beneficiaries</b>			
Number in pay status	0	0	0.0%
Average age	N/A	N/A	N/A
Average monthly benefit <sup>(2)</sup>	0	0	0.0%

<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. Safety Tier 1**

<b>Category</b>	<b>Year Ended June 30</b>		<b>Change From Prior Year</b>
	<b>2011</b>	<b>2010</b>	
<b>Active members in valuation</b>			
Number	729	772	-5.6%
Average age	42.6	42.1	N/A
Average service	14.3	13.6	N/A
Projected total compensation <sup>(1)</sup>	\$58,645,297	\$63,304,313	-7.4%
Projected average compensation <sup>(1)</sup>	\$80,446	\$82,000	-1.9%
Member account balances	\$48,290,045	\$46,143,236	4.7%
<b>Vested terminated members</b>			
Number	118	120	-1.7%
Average age	43.3	43.4	N/A
<b>Retired members</b>			
Number in pay status	509	499	2.0%
Average age	64.8	64.6	N/A
Average monthly benefit <sup>(2)</sup>	\$4,171	\$4,061	2.7%
<b>Disabled members</b>			
Number in pay status	137	136	0.7%
Average age	56.9	56.9	N/A
Average monthly benefit <sup>(2)</sup>	\$3,011	\$2,905	3.6%
<b>Beneficiaries</b>			
Number in pay status	116	87	33.3%
Average age	67.1	67.4	N/A
Average monthly benefit <sup>(2)</sup>	\$2,006	\$2,097	-4.3%

<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**

**v. Safety Tier 2**

<b>Category</b>	<b>Year Ended June 30</b>		<b>Change From Prior Year</b>
	<b>2011</b>	<b>2010</b>	
<b>Active members in valuation</b>			
Number	38	40	-5.0%
Average age	34.8	33.6	N/A
Average service	4.6	3.5	N/A
Projected total compensation <sup>(1)</sup>	\$2,684,833	\$2,816,348	-4.7%
Projected average compensation <sup>(1)</sup>	\$70,653	\$70,409	0.3%
Member account balances	\$920,392	\$705,745	30.4%
<b>Vested terminated members</b>			
Number	4	2	100.0%
Average age	29.2	28.9	N/A
<b>Retired members</b>			
Number in pay status	0	0	0.0%
Average age	N/A	N/A	N/A
Average monthly benefit <sup>(2)</sup>	0	0	0.0%
<b>Disabled members</b>			
Number in pay status	0	0	0.0%
Average age	N/A	N/A	N/A
Average monthly benefit <sup>(2)</sup>	0	0	0.0%
<b>Beneficiaries</b>			
Number in pay status	0	0	0.0%
Average age	N/A	N/A	N/A
Average monthly benefit <sup>(2)</sup>	0	0	0.0%

<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, 2011**

**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	19	18	1	--	--	--	--	--	--	--
	\$32,242	\$32,150	\$33,902	--	--	--	--	--	--	--
25 - 29	222	136	86	--	--	--	--	--	--	--
	43,906	42,348	46,371	--	--	--	--	--	--	--
30 - 34	619	153	363	103	--	--	--	--	--	--
	53,388	49,726	55,484	\$51,440	--	--	--	--	--	--
35 - 39	724	89	271	334	30	--	--	--	--	--
	57,136	50,612	55,391	60,027	\$60,059	--	--	--	--	--
40 - 44	734	60	210	279	140	45	--	--	--	--
	59,081	50,727	56,850	60,858	63,865	\$54,726	--	--	--	--
45 - 49	785	48	176	239	149	143	28	2	--	--
	60,103	59,120	58,160	58,602	62,570	63,008	\$59,889	\$45,665	--	--
50 - 54	803	39	147	209	126	156	84	42	--	--
	61,405	52,902	55,508	57,464	61,640	65,952	70,289	74,181	--	--
55 - 59	724	27	111	193	106	136	75	67	9	--
	61,884	45,929	57,617	61,437	55,550	64,938	72,221	69,504	\$57,520	--
60 - 64	377	11	68	109	77	61	29	14	6	2
	58,622	54,742	55,055	58,226	57,229	58,083	73,927	55,123	70,877	\$58,763
65 - 69	57	1	17	23	7	5	1	2	--	1
	57,114	34,616	52,599	57,686	70,854	49,843	61,721	75,839	--	41,334
70 & over	15	1	3	4	3	1	2	--	1	--
	69,541	41,989	70,783	73,241	72,688	29,155	82,443	--	83,708	--
Total	5,079	583	1,453	1,493	638	547	219	127	16	3
	\$58,246	\$48,566	\$55,577	\$59,053	\$60,880	\$62,915	\$70,174	\$69,189	\$64,165	\$52,954

**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, 2011**

**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	6	6	--	--	--	--	--	--	--
	\$41,161	\$41,161	--	--	--	--	--	--	--
25 - 29	18	17	1	--	--	--	--	--	--
	45,414	45,684	\$40,813	--	--	--	--	--	--
30 - 34	36	32	4	--	--	--	--	--	--
	55,496	56,175	50,066	--	--	--	--	--	--
35 - 39	24	21	2	1	--	--	--	--	--
	61,775	60,465	71,372	\$70,090	--	--	--	--	--
40 - 44	17	17	--	--	--	--	--	--	--
	65,303	65,303	--	--	--	--	--	--	--
45 - 49	18	16	2	--	--	--	--	--	--
	66,983	56,929	147,408	--	--	--	--	--	--
50 - 54	21	17	3	1	--	--	--	--	--
	64,658	68,973	48,595	39,495	--	--	--	--	--
55 - 59	16	12	3	1	--	--	--	--	--
	81,550	72,065	70,755	227,751	--	--	--	--	--
60 - 64	7	4	3	--	--	--	--	--	--
	55,974	61,163	49,055	--	--	--	--	--	--
65 - 69	3	1	2	--	--	--	--	--	--
	70,712	147,586	32,275	--	--	--	--	--	--
70 & Over	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
Total	166	143	20	3	--	--	--	--	--
	\$61,008	\$59,731	\$62,420	\$112,445	--	--	--	--	--

**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, 2011**

**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	31	31	--	--	--	--	--	--	--	--
	\$30,251	\$30,251	--	--	--	--	--	--	--	--
25 - 29	195	185	10	--	--	--	--	--	--	--
	40,334	40,269	\$41,524	--	--	--	--	--	--	--
30 - 34	157	145	9	3	--	--	--	--	--	--
	44,580	44,203	49,834	\$47,008	--	--	--	--	--	--
35 - 39	109	91	16	2	--	--	--	--	--	--
	43,692	42,628	49,483	45,771	--	--	--	--	--	--
40 - 44	76	61	8	7	--	--	--	--	--	--
	44,349	42,711	47,249	55,312	--	--	--	--	--	--
45 - 49	68	52	9	5	2	--	--	--	--	--
	42,655	40,455	43,188	53,024	\$71,545	--	--	--	--	--
50 - 54	58	49	4	5	--	--	--	--	--	--
	40,107	39,949	41,295	40,705	--	--	--	--	--	--
55 - 59	34	25	5	2	2	--	--	--	--	--
	43,195	44,130	41,685	36,605	41,880	--	--	--	--	--
60 - 64	19	17	2	--	--	--	--	--	--	--
	45,161	45,964	38,334	--	--	--	--	--	--	--
65 - 69	3	3	--	--	--	--	--	--	--	--
	57,625	57,625	--	--	--	--	--	--	--	--
70 & over	1	1	--	--	--	--	--	--	--	--
	26,415	26,415	--	--	--	--	--	--	--	--
<b>Total</b>	<b>751</b>	<b>660</b>	<b>63</b>	<b>24</b>	<b>4</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
	<b>\$42,194</b>	<b>\$41,556</b>	<b>\$45,594</b>	<b>\$48,400</b>	<b>\$56,713</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, 2011**

**iv. Safety Tier 1**

Age	Years of Service								
	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35 & over
Under 25	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
25 - 29	26	5	21	--	--	--	--	--	--
	\$69,880	\$67,302	\$70,494	--	--	--	--	--	--
30 - 34	108	4	81	22	1	--	--	--	--
	76,477	63,894	76,151	\$79,877	\$78,382	--	--	--	--
35 - 39	156	1	52	84	19	--	--	--	--
	79,910	69,501	78,057	80,082	84,769	--	--	--	--
40 - 44	166	1	32	61	57	15	--	--	--
	79,795	45,477	73,709	80,903	81,504	\$84,065	--	--	--
45 - 49	136	--	15	27	36	52	6	--	--
	82,391	--	76,544	78,216	82,075	84,846	\$96,408	--	--
50 - 54	99	--	3	11	13	36	29	7	--
	84,884	--	76,322	79,225	80,736	84,190	87,748	\$96,851	--
55 - 59	27	--	1	4	5	11	2	4	--
	88,092	--	74,329	81,861	86,893	86,944	126,954	82,985	--
60 - 64	9	1	3	2	1	--	1	--	1
	81,830	58,213	80,335	74,066	77,998	--	80,124	--	\$130,997
65 - 69	2	--	--	2	--	--	--	--	--
	66,721	--	--	66,721	--	--	--	--	--
70 & Over	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
Total	729	12	208	213	132	114	38	11	1
	\$80,446	\$63,773	\$75,763	\$79,867	\$82,208	\$84,739	\$90,978	\$91,809	\$130,997

**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, 2011**

**v. Safety Tier 2**

Age	Years of Service							
	Total	0-4	5-9	10-14	15-19	20-24	25-29	30 & over
Under 25	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
25 - 29	20	16	4	--	--	--	--	--
	\$69,394	\$65,973	\$83,079	--	--	--	--	--
30 - 34	6	2	4	--	--	--	--	--
	67,393	65,257	68,461	--	--	--	--	--
35 - 39	2	2	--	--	--	--	--	--
	63,519	63,519	--	--	--	--	--	--
40 - 44	4	2	2	--	--	--	--	--
	73,678	74,652	72,704	--	--	--	--	--
45 - 49	1	1	--	--	--	--	--	--
	65,151	65,151	--	--	--	--	--	--
50 - 54	2	2	--	--	--	--	--	--
	85,202	85,202	--	--	--	--	--	--
55 - 59	2	2	--	--	--	--	--	--
	78,393	78,393	--	--	--	--	--	--
60 - 64	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
65 - 69	1	--	--	1	--	--	--	--
	78,499	--	--	\$78,499	--	--	--	--
70 & Over	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
Total	38	27	10	1	--	--	--	--
	\$70,653	\$68,695	\$75,156	\$78,499	--	--	--	--

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

**EXHIBIT C**

**Reconciliation of Member Data – June 30, 2010 to June 30, 2011**

	<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, 2010	6,946	1,452	4,701	333	602	14,034
New members	255	0	0	0	0	255
Terminations – with vested rights	-116	116	0	0	0	0
Contributions refunds	-117	-30	0	0	0	-147
Retirements	-205	-118	323	0	0	0
New disabilities	-7	-5	-7	19	0	0
Return to work	17	-12	-5	0	0	0
Died with or without beneficiary	-10	-1	-111	-9	39*	-92
Data adjustments	0	12	-85**	-11**	98**	14
Number as of June 30, 2011	6,763	1,414	4,816	332	739	14,064

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

\*\* Includes reclassification of 85 pensioners and 13 disableds to beneficiaries by the Association.

**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,	
	2011	2010
<b>Contribution income:</b>		
Employer contributions	\$130,289,781	\$126,138,168
Employee contributions	<u>31,293,249</u>	<u>32,208,668</u>
Contribution income	\$161,583,030	\$158,346,835
<b>Investment income:</b>		
Interest, dividends and other income	\$71,653,924	\$65,306,147
Adjustment toward market value	91,572,565	51,777,089
Less investment and administrative fees	<u>-19,042,217</u>	<u>-16,293,921</u>
Net investment income	<u>144,184,272</u>	<u>100,789,315</u>
<b>Total income available for benefits</b>	<b>\$305,767,302</b>	<b>\$259,136,150</b>
<b>Less benefit payments:</b>		
Service retirement	-\$167,274,249	-\$157,065,801
Death payments	-1,396,941	-1,226,799
Supplemental cost of living	-1,188,404	-1,155,011
Members refunds	-2,043,926	-1,915,119
Health insurance subsidies	<u>-10,503,381</u>	<u>-10,078,490</u>
Benefit payments	-\$182,406,901	-\$171,441,220
<b>Change in reserve for future benefits</b>	<b>\$123,360,401</b>	<b>\$87,694,930</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,	
	2011	2010
<b>Cash equivalents</b>	\$100,015,589	\$58,797,048
<b>Accounts receivable:</b>		
Investment trades	\$70,435,869	\$52,030,118
Interest and dividends	8,853,030	6,437,704
Contributions and others	8,305,285	22,158,770
Securities lending	<u>126,494</u>	<u>121,730</u>
Total accounts receivable	87,720,678	80,748,323
<b>Investments:</b>		
Equities	\$1,681,911,346	\$1,354,202,179
Fixed income	783,462,873	694,610,575
Real estate	54,943,151	49,814,431
Securities lending collateral	250,675,277	219,009,679
Capital assets	2,532,839	2,192,901
Others	<u>554,299,607</u>	<u>424,299,811</u>
Total investments at market value	<u>3,327,825,093</u>	<u>2,744,129,575</u>
<b>Total assets</b>	<b>\$3,515,561,359</b>	<b>\$2,883,674,947</b>
<b>Less accounts payable:</b>		
Investment trades	-\$94,267,354	-\$74,600,368
Cash collateral payable for securities lending	-250,675,277	-219,009,679
Securities lending bank and broker fees	-39,064	-47,929
Others	<u>-3,402,955</u>	<u>-3,329,716</u>
Total accounts payable	-\$348,384,650	-\$296,987,692
<b>Net assets at market value</b>	<b><u>\$3,167,176,709</u></b>	<b><u>\$2,586,687,255</u></b>
<b>Net assets at actuarial value</b>	<b><u>\$3,151,541,457</u></b>	<b><u>\$3,028,181,056</u></b>
<b>Net assets at valuation value</b>	<b><u>\$3,114,482,906</u></b>	<b><u>\$2,983,044,156</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>Regular</b>	<b>Section 6</b>	<b>Section 8</b>	<b>Section 9</b>	<b>Total</b>
1. Total valuation assets	\$2,451,456	\$552,024	\$87,774	\$23,229	\$3,114,483
2. Present value of future contributions by members	\$212,863	\$63,897	\$0	\$0	\$276,760
3. Present value of future employer contributions for:					
a. entry age normal cost	\$448,462	\$94,668	\$0	\$7,182	\$550,312
b. unfunded actuarial accrued liability	\$864,298	\$212,084	\$12,967	\$34,129	\$1,123,478
4. Total current and future assets	\$3,977,079	\$922,673	\$100,741	\$64,540	\$5,065,033
<b>Liabilities</b>					
5. Present value of benefits already granted	\$1,793,972	\$347,124	\$100,741	\$37,171	\$2,279,008
6. Present value of benefits to be granted - deferred members	\$150,864	\$54,355	\$0	\$2,733	\$207,952
- active members	\$2,032,243	\$521,194	\$0	\$24,636	\$2,578,073
7. Total liabilities	\$3,977,079	\$922,673	\$100,741	\$64,540	\$5,065,033

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

**EXHIBIT G**

**Summary of Reported Asset Information as of June 30, 2011**

	<b>Reserves</b>
<b>Used in Development of Valuation Value of Assets</b>	
<i>Regular Valuation Reserves</i>	
Members' Accumulated Contributions	\$338,176,396
Current Service Reserve	715,525,263
Annuity Pension Reserve	125,035,473
Current Service Pension Reserve	890,888,764
Cost of Living Reserve	709,854,222
Survivors' Death Benefit Reserve	3,006,267
Subtotal	<u>\$2,782,486,385</u>
<i>Settlement Reserves (Section 6)</i>	
Supplemental Annuity Reserve	\$425,030,764
Members' Accumulated Contributions	40,852,561
Current Service Reserve	151,294,874
Annuity Pension Reserve	8,306,983
Subtotal	<u>\$625,485,183</u>
<i>Supplemental Benefit Reserve (Section 8)</i>	
	\$102,528,702
<i>Retiree Health Insurance Reserve (Section 9)</i>	
	\$27,572,005
<i>Contra Tracking Account</i>	
	<u>\$(423,589,369)</u>
Total	<u>\$3,114,482,906</u>
<b>Not Used in Development of Valuation Value of Assets</b>	
<i>Supplemental COLA</i>	
	\$4,073,697
<i>Retiree Health Insurance Reserves</i>	
	32,984,854
<i>Contingency Reserve</i>	
	0
<i>Board Contingency Reserve/Undistributed Earnings ("Available Earnings")</i>	
	0
<i>Market Stabilization Reserve</i>	
	<u>15,635,252</u>
Total	<u>\$52,693,804</u>
Grand Total	<u>\$3,167,176,709</u>

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

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

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**EXHIBIT H**

**Development of Unfunded Actuarial Accrued Liability as of June 30, 2011**

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	<b>(Dollar amounts in Thousands)</b>
1 Unfunded actuarial accrued liability at beginning of year	\$1,109,420
2 Gross Normal Cost payable at middle of year	109,946
3 Actual employer and member contributions	-161,583
4 Interest (full year on (1) plus half year on (2) + (3))	<u>83,979</u>
5 Expected unfunded actuarial accrued liability at end of year	\$1,141,762
6 Actuarial (gain)/loss due to all changes:	
<u>Experience (gain)/loss</u>	
a. Loss from investment return	\$86,508
b. Lower than expected salary increases	-72,369
c. Lower than expected COLA increases	-42,861
d. Higher than expected liability for new retirees	9,792
e. Reclassification of certain retirees to beneficiaries by the Association	-1,610
f. Other experience (gain)/loss	<u>2,256</u>
g. Subtotal	-\$18,284
7 Actual unfunded actuarial accrued liability at end of year (5) + (6g)	\$1,123,478

### 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 \$195,000 for 2011 and \$200,000 for 2012. 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**

**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>
2006 <sup>(1)</sup>	\$57	\$57	100.0%
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%

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<sup>(1)</sup> Source: June 30, 2006 CAFR.

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

**EXHIBIT II**

**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>
6/30/2006	\$2,398,454	\$2,803,990	\$405,536	85.5	\$376,270	107.8
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

<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 III**

**Supplementary Information Required by GASB**

<b>Valuation date</b>	June 30, 2011
<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>	22 years (declining) for UAAL established as of June 30, 2003 plus 15 years (declining) for UAAL or changes in actuarial assumptions established on each subsequent valuation. Any increase in UAAL due to benefit improvements is amortized over 30 years.
<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.
<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
<b>Plan membership:</b>	
Retired members and beneficiaries receiving benefits	5,887
Terminated members entitled to, but not yet receiving benefits	1,414
Active members	<u>6,763</u>
Total	14,064

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

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

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**EXHIBIT IV**

**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.

*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)			
Years of Service	General		Safety
	Male	Female	Male and Female
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)			
Age	General		Safety
	Male	Female	Male and Female
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**

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**Retirement Rates:**

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

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**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 all General and Safety.

**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.

**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 is based on costs allocated as a level percentage of compensation.

**Changes in Actuarial Assumptions:** There have been no changes in actuarial assumptions since the previous actuarial valuation.

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

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**EXHIBIT V**

**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.

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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 Tier 3</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	$(3.27\% \times \text{FAS1} - 1/3 \times 3.27\% \times \$350 \times 12) \times \text{Yrs}$
	<b>Retirement Age</b>	<b>Benefit Formula</b>
<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	$(2.42\% \times \text{FAS1} - 1/3 \times 2.42\% \times \$350 \times 12) \times \text{Yrs}$
	<b>Retirement Age</b>	<b>Benefit Formula</b>
<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	$(3.13\% \times \text{FAS3} - 1/3 \times 3.13\% \times \$350 \times 12) \times \text{Yrs}$

**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	$(3.00\% \times \text{FAS1} - 1/3 \times 3.00\% \times \$350 \times 12) \times \text{Yrs}$

**Maximum Benefit:** 100% of Highest Average Compensation (§31676.14, §31676.16, §31676.15, §31664 and §31664.2).

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**Ordinary Disability:**

*General Tier 1, Tier 2 and Tier 3*

*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.

*Safety Tier 1 and Tier 2*

*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).

**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.

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

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Annual Leave IV Plan or the Old Annual Leave Plan (50)	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.
<b>County Contributions:</b>	The amortization period for Unfunded Actuarial Accrued Liability established as of June 30, 2003 is amortized over a declining 22-year period. The amortization period for Unfunded Actuarial Accrued Liability established as a result of the Tier 3 benefit improvement is amortized over 25 years. The amortization period for UAAL established on each subsequent valuation as a result of actuarial gains or losses or changes in actuarial assumptions is a declining 15-year period.
<b>Ventura Settlement Benefits:</b>	
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 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.
<b>Non-Vested Supplemental Benefit:</b>	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.
<b>Member Contributions:</b>	Please refer to Appendix A for specific rates.
<i>General Tier 1</i>	
<i>Regular Basic</i>	Provide for an average annuity at age 60 equal to 1/200 of FAS1 (§31621.5).
<i>Regular Plus Settlement Basic</i>	Provide for an average annuity at age 55 equal to 1/160 of FAS1 (§31627).
<i>Cost-of-Living</i>	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 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.

##### *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.

##### *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.

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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, 2011 (New) and June 30, 2010 (Current) Valuations

General Tier 1				General Tier 2			
Entry Age	Current	New	Change	Entry Age	Current	New	Change
25	7.74%	7.72%	<b>-0.02%</b>	25	5.11%	5.10%	<b>-0.01%</b>
35	9.01%	9.00%	<b>-0.01%</b>	35	5.96%	5.94%	<b>-0.02%</b>
45	10.67%	10.65%	<b>-0.02%</b>	45	6.97%	6.94%	<b>-0.03%</b>

General Tier 3			
Entry Age	Current	New	Change
25	6.10%	6.11%	<b>0.01%</b>
35	7.11%	7.12%	<b>0.01%</b>
45	8.42%	8.43%	<b>0.01%</b>

Safety Tier 1				Safety Tier 2			
Entry Age	Current	New	Change	Entry Age	Current	New	Change
25	10.84%	10.89%	<b>0.05%</b>	25	9.39%	9.35%	<b>-0.04%</b>
30	11.58%	11.63%	<b>0.05%</b>	30	10.02%	9.99%	<b>-0.03%</b>
35	12.42%	12.48%	<b>0.06%</b>	35	10.76%	10.72%	<b>-0.04%</b>

<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, 2011  
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%	0.61%	4.55%	6.82%
18	2.01%	3.01%	1.33%	2.00%	0.87%	1.30%	0.41%	0.62%	4.62%	6.93%
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%	1.40%	2.10%	0.91%	1.36%	0.43%	0.65%	4.84%	7.26%
22	2.13%	3.20%	1.42%	2.13%	0.92%	1.38%	0.44%	0.66%	4.91%	7.37%
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%	0.70%	5.23%	7.83%
27	2.30%	3.46%	1.53%	2.30%	0.99%	1.49%	0.47%	0.71%	5.29%	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	Basic Regular	COLA	COLA	Basic	Basic	COLA	COLA	Combined	Combined
	First \$350 per month	Over \$350 per month	Regular	Regular	Settlement	Settlement	Settlement	Settlement		
			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
33	2.52%	3.79%	1.68%	2.52%	1.09%	1.64%	0.52%	0.78%	5.81%	8.73%
34	2.56%	3.84%	1.71%	2.56%	1.11%	1.66%	0.53%	0.80%	5.91%	8.86%
35	2.60%	3.90%	1.73%	2.60%	1.13%	1.69%	0.54%	0.81%	6.00%	9.00%
36	2.64%	3.96%	1.76%	2.64%	1.14%	1.72%	0.55%	0.82%	6.09%	9.14%
37	2.68%	4.02%	1.79%	2.68%	1.16%	1.75%	0.56%	0.84%	6.19%	9.29%
38	2.72%	4.09%	1.81%	2.72%	1.18%	1.78%	0.57%	0.85%	6.28%	9.44%
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%	1.90%	2.85%	1.25%	1.88%	0.60%	0.90%	6.60%	9.91%
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%	1.96%	2.94%	1.31%	1.96%	0.63%	0.94%	6.85%	10.26%
44	2.99%	4.49%	1.99%	2.99%	1.34%	2.00%	0.64%	0.96%	6.96%	10.44%
45	3.04%	4.57%	2.03%	3.04%	1.37%	2.06%	0.65%	0.98%	7.09%	10.65%
46	3.10%	4.64%	2.06%	3.09%	1.41%	2.12%	0.67%	1.01%	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%	3.20%	1.49%	2.23%	0.71%	1.07%	7.53%	11.31%
49	3.26%	4.90%	2.17%	3.26%	1.52%	2.27%	0.73%	1.09%	7.68%	11.52%
50	3.33%	4.99%	2.21%	3.32%	1.46%	2.19%	0.70%	1.05%	7.70%	11.55%
51	3.40%	5.10%	2.26%	3.39%	1.37%	2.06%	0.66%	0.99%	7.69%	11.54%
52	3.47%	5.20%	2.31%	3.46%	1.28%	1.92%	0.61%	0.92%	7.67%	11.50%
53	3.54%	5.30%	2.35%	3.53%	1.17%	1.75%	0.56%	0.84%	7.62%	11.42%
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%	2.40%	3.60%	1.03%	1.55%	0.49%	0.74%	7.53%	11.30%
56	3.60%	5.40%	2.39%	3.59%	1.03%	1.55%	0.49%	0.74%	7.51%	11.28%
57	3.58%	5.36%	2.38%	3.57%	1.03%	1.55%	0.49%	0.74%	7.48%	11.22%
58	3.54%	5.32%	2.36%	3.54%	1.03%	1.55%	0.49%	0.74%	7.42%	11.15%
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 IV)  
 COLA Loading Factor: 66.49% for Regular Benefits, 47.87% 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, 2011 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	1.62%	2.43%	1.34%	2.01%	2.96%	4.44%
16	1.62%	2.43%	1.34%	2.01%	2.96%	4.44%
17	1.65%	2.47%	1.36%	2.04%	3.01%	4.51%
18	1.67%	2.51%	1.38%	2.07%	3.05%	4.58%
19	1.70%	2.55%	1.40%	2.10%	3.10%	4.65%
20	1.72%	2.59%	1.43%	2.14%	3.15%	4.73%
21	1.75%	2.63%	1.45%	2.17%	3.20%	4.80%
22	1.78%	2.67%	1.47%	2.20%	3.25%	4.87%
23	1.81%	2.71%	1.49%	2.24%	3.30%	4.95%
24	1.83%	2.75%	1.51%	2.27%	3.34%	5.02%
25	1.86%	2.79%	1.54%	2.31%	3.40%	5.10%
26	1.89%	2.84%	1.56%	2.34%	3.45%	5.18%
27	1.92%	2.88%	1.59%	2.38%	3.51%	5.26%
28	1.95%	2.92%	1.61%	2.41%	3.56%	5.33%
29	1.98%	2.97%	1.63%	2.45%	3.61%	5.42%

**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	2.01%	3.01%	1.66%	2.49%	3.67%	5.50%
31	2.04%	3.06%	1.69%	2.53%	3.73%	5.59%
32	2.07%	3.11%	1.71%	2.57%	3.78%	5.68%
33	2.10%	3.16%	1.74%	2.61%	3.84%	5.77%
34	2.14%	3.20%	1.77%	2.65%	3.91%	5.85%
35	2.17%	3.25%	1.79%	2.69%	3.96%	5.94%
36	2.20%	3.30%	1.82%	2.73%	4.02%	6.03%
37	2.24%	3.35%	1.85%	2.77%	4.09%	6.12%
38	2.27%	3.41%	1.87%	2.81%	4.14%	6.22%
39	2.31%	3.46%	1.91%	2.86%	4.22%	6.32%
40	2.34%	3.51%	1.93%	2.90%	4.27%	6.41%
41	2.38%	3.57%	1.97%	2.95%	4.35%	6.52%
42	2.42%	3.62%	1.99%	2.99%	4.41%	6.61%
43	2.46%	3.68%	2.03%	3.04%	4.49%	6.72%
44	2.50%	3.74%	2.06%	3.09%	4.56%	6.83%
45	2.54%	3.80%	2.09%	3.14%	4.63%	6.94%
46	2.58%	3.87%	2.13%	3.20%	4.71%	7.07%
47	2.62%	3.94%	2.17%	3.25%	4.79%	7.19%
48	2.67%	4.01%	2.21%	3.31%	4.88%	7.32%
49	2.72%	4.08%	2.25%	3.37%	4.97%	7.45%

**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
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50	2.77%	4.16%	2.29%	3.44%	5.06%	7.60%
51	2.83%	4.25%	2.34%	3.51%	5.17%	7.76%
52	2.89%	4.33%	2.39%	3.58%	5.28%	7.91%
53	2.95%	4.42%	2.43%	3.65%	5.38%	8.07%
54	3.00%	4.50%	2.48%	3.72%	5.48%	8.22%
55	3.01%	4.51%	2.49%	3.73%	5.50%	8.24%
56	3.00%	4.50%	2.47%	3.71%	5.47%	8.21%
57	2.98%	4.47%	2.46%	3.69%	5.44%	8.16%
58	2.95%	4.43%	2.44%	3.66%	5.39%	8.09%
59	2.91%	4.37%	2.41%	3.61%	5.32%	7.98%

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 IV)  
 COLA Loading Factor: 82.58% 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, 2011 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%	1.45%	2.17%	3.61%	5.41%
18	2.19%	3.29%	1.47%	2.20%	3.66%	5.49%
19	2.23%	3.34%	1.49%	2.24%	3.72%	5.58%
20	2.26%	3.39%	1.51%	2.27%	3.77%	5.66%
21	2.29%	3.44%	1.53%	2.30%	3.82%	5.74%
22	2.33%	3.50%	1.56%	2.34%	3.89%	5.84%
23	2.37%	3.55%	1.59%	2.38%	3.96%	5.93%
24	2.40%	3.60%	1.61%	2.41%	4.01%	6.01%
25	2.44%	3.66%	1.63%	2.45%	4.07%	6.11%
26	2.48%	3.72%	1.66%	2.49%	4.14%	6.21%
27	2.51%	3.77%	1.69%	2.53%	4.20%	6.30%
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%	1.82%	2.73%	4.53%	6.80%
33	2.76%	4.13%	1.85%	2.77%	4.61%	6.90%
34	2.80%	4.20%	1.87%	2.81%	4.67%	7.01%
35	2.84%	4.26%	1.91%	2.86%	4.75%	7.12%
36	2.89%	4.33%	1.93%	2.90%	4.82%	7.23%
37	2.93%	4.40%	1.97%	2.95%	4.90%	7.35%
38	2.98%	4.47%	1.99%	2.99%	4.97%	7.46%
39	3.03%	4.54%	2.03%	3.04%	5.06%	7.58%
40	3.08%	4.62%	2.06%	3.09%	5.14%	7.71%
41	3.13%	4.70%	2.09%	3.14%	5.22%	7.84%
42	3.19%	4.78%	2.13%	3.20%	5.32%	7.98%
43	3.24%	4.86%	2.17%	3.26%	5.41%	8.12%
44	3.30%	4.95%	2.21%	3.32%	5.51%	8.27%
45	3.36%	5.05%	2.25%	3.38%	5.61%	8.43%
46	3.43%	5.14%	2.29%	3.44%	5.72%	8.58%
47	3.49%	5.23%	2.33%	3.50%	5.82%	8.73%
48	3.52%	5.28%	2.36%	3.54%	5.88%	8.82%
49	3.53%	5.30%	2.37%	3.55%	5.90%	8.85%

**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%	3.53%	5.87%	8.81%
51	3.49%	5.24%	2.34%	3.51%	5.83%	8.75%
52	3.45%	5.18%	2.31%	3.47%	5.76%	8.65%
53	3.58%	5.36%	2.39%	3.59%	5.97%	8.95%
54	3.71%	5.56%	2.48%	3.72%	6.19%	9.28%

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 IV)  
 COLA Loading Factor: 66.95% for Regular Benefits

**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, 2011  
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%	2.59%	3.88%	0.68%	1.02%	0.49%	0.74%	6.48%	9.72%
16	2.72%	4.08%	2.59%	3.88%	0.68%	1.02%	0.49%	0.74%	6.48%	9.72%
17	2.75%	4.13%	2.62%	3.93%	0.69%	1.03%	0.50%	0.75%	6.56%	9.84%
18	2.79%	4.18%	2.65%	3.98%	0.70%	1.05%	0.51%	0.76%	6.65%	9.97%
19	2.82%	4.24%	2.69%	4.03%	0.71%	1.06%	0.51%	0.77%	6.73%	10.10%
20	2.86%	4.29%	2.72%	4.08%	0.71%	1.07%	0.52%	0.78%	6.81%	10.22%
21	2.90%	4.34%	2.75%	4.13%	0.72%	1.09%	0.53%	0.79%	6.90%	10.35%
22	2.93%	4.40%	2.79%	4.18%	0.73%	1.10%	0.53%	0.80%	6.98%	10.48%
23	2.97%	4.45%	2.83%	4.24%	0.74%	1.11%	0.54%	0.81%	7.08%	10.61%
24	3.01%	4.51%	2.86%	4.29%	0.75%	1.13%	0.55%	0.82%	7.17%	10.75%
25	3.05%	4.57%	2.90%	4.35%	0.76%	1.14%	0.55%	0.83%	7.26%	10.89%
26	3.09%	4.63%	2.93%	4.40%	0.77%	1.16%	0.56%	0.84%	7.35%	11.03%
27	3.13%	4.69%	2.97%	4.46%	0.78%	1.17%	0.57%	0.85%	7.45%	11.17%
28	3.17%	4.75%	3.01%	4.52%	0.79%	1.19%	0.57%	0.86%	7.54%	11.32%
29	3.21%	4.81%	3.05%	4.58%	0.80%	1.20%	0.59%	0.88%	7.65%	11.47%
30	3.25%	4.88%	3.09%	4.64%	0.81%	1.22%	0.59%	0.89%	7.74%	11.63%
31	3.30%	4.95%	3.13%	4.70%	0.82%	1.24%	0.60%	0.90%	7.85%	11.79%
32	3.34%	5.01%	3.18%	4.77%	0.84%	1.25%	0.61%	0.91%	7.97%	11.94%
33	3.39%	5.09%	3.23%	4.84%	0.85%	1.27%	0.62%	0.93%	8.09%	12.13%
34	3.44%	5.16%	3.27%	4.91%	0.86%	1.29%	0.63%	0.94%	8.20%	12.30%

**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%	3.32%	4.98%	0.87%	1.31%	0.63%	0.95%	8.31%	12.48%
36	3.54%	5.32%	3.37%	5.06%	0.89%	1.33%	0.65%	0.97%	8.45%	12.68%
37	3.60%	5.40%	3.43%	5.14%	0.90%	1.35%	0.65%	0.98%	8.58%	12.87%
38	3.66%	5.49%	3.48%	5.22%	0.92%	1.37%	0.67%	1.00%	8.73%	13.08%
39	3.73%	5.59%	3.55%	5.32%	0.93%	1.40%	0.68%	1.02%	8.89%	13.33%
40	3.80%	5.70%	3.61%	5.42%	0.95%	1.42%	0.69%	1.04%	9.05%	13.58%
41	3.88%	5.82%	3.69%	5.54%	0.97%	1.46%	0.71%	1.06%	9.25%	13.88%
42	3.90%	5.85%	3.71%	5.56%	0.97%	1.46%	0.71%	1.06%	9.29%	13.93%
43	3.91%	5.87%	3.73%	5.59%	0.98%	1.47%	0.71%	1.07%	9.33%	14.00%
44	3.93%	5.90%	3.74%	5.61%	0.98%	1.48%	0.71%	1.07%	9.36%	14.06%
45	3.94%	5.91%	3.75%	5.62%	0.98%	1.48%	0.72%	1.08%	9.39%	14.09%
46	3.92%	5.88%	3.73%	5.60%	0.98%	1.47%	0.71%	1.07%	9.34%	14.02%
47	3.89%	5.84%	3.70%	5.55%	0.97%	1.46%	0.71%	1.06%	9.27%	13.91%
48	3.86%	5.79%	3.67%	5.50%	0.96%	1.45%	0.70%	1.05%	9.19%	13.79%
49	3.80%	5.70%	3.61%	5.42%	0.95%	1.43%	0.69%	1.04%	9.05%	13.59%

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 IV)  
 COLA Loading Factor: 95.12% for Regular Benefits, 72.80% 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, 2011  
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%	2.85%	4.27%	5.57%	8.35%
16	2.72%	4.08%	2.85%	4.27%	5.57%	8.35%
17	2.75%	4.13%	2.88%	4.32%	5.63%	8.45%
18	2.79%	4.18%	2.92%	4.38%	5.71%	8.56%
19	2.82%	4.24%	2.95%	4.43%	5.77%	8.67%
20	2.86%	4.29%	2.99%	4.49%	5.85%	8.78%
21	2.90%	4.34%	3.03%	4.55%	5.93%	8.89%
22	2.93%	4.40%	3.07%	4.60%	6.00%	9.00%
23	2.97%	4.45%	3.11%	4.66%	6.08%	9.11%
24	3.01%	4.51%	3.15%	4.72%	6.16%	9.23%
25	3.05%	4.57%	3.19%	4.78%	6.24%	9.35%
26	3.09%	4.63%	3.23%	4.85%	6.32%	9.48%
27	3.13%	4.69%	3.27%	4.91%	6.40%	9.60%
28	3.17%	4.75%	3.31%	4.97%	6.48%	9.72%
29	3.21%	4.81%	3.36%	5.04%	6.57%	9.85%
30	3.25%	4.88%	3.41%	5.11%	6.66%	9.99%
31	3.30%	4.95%	3.45%	5.18%	6.75%	10.13%
32	3.34%	5.01%	3.50%	5.25%	6.84%	10.26%
33	3.39%	5.09%	3.55%	5.32%	6.94%	10.41%
34	3.44%	5.16%	3.60%	5.40%	7.04%	10.56%

**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%	3.65%	5.48%	7.14%	10.72%
36	3.54%	5.32%	3.71%	5.56%	7.25%	10.88%
37	3.60%	5.40%	3.77%	5.65%	7.37%	11.05%
38	3.66%	5.49%	3.83%	5.75%	7.49%	11.24%
39	3.73%	5.59%	3.90%	5.85%	7.63%	11.44%
40	3.80%	5.70%	3.98%	5.97%	7.78%	11.67%
41	3.88%	5.82%	4.06%	6.09%	7.94%	11.91%
42	3.90%	5.85%	4.08%	6.12%	7.98%	11.97%
43	3.91%	5.87%	4.10%	6.15%	8.01%	12.02%
44	3.93%	5.90%	4.12%	6.18%	8.05%	12.08%
45	3.94%	5.91%	4.13%	6.19%	8.07%	12.10%
46	3.92%	5.88%	4.11%	6.16%	8.03%	12.04%
47	3.89%	5.84%	4.07%	6.11%	7.96%	11.95%
48	3.86%	5.79%	4.04%	6.06%	7.90%	11.85%
49	3.80%	5.70%	3.98%	5.97%	7.78%	11.67%
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 IV)			
COLA Loading Factor:			104.67% for Regular Benefits			

**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, 2011:	\$6,011,556
Reserve <sup>(4)</sup> as of June 30, 2011:	\$4,073,697

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 70% 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>
2011 - 2012	\$1,085,666	2014 - 2015	\$798,766
2012 - 2013	986,613	2015 - 2016 <sup>(5)</sup>	312,196
2013 - 2014	890,456		

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

Total Undiscounted Benefits as of June 30, 2011:	\$420,212,460
Reserve <sup>(4)</sup> as of June 30, 2011:	\$32,984,854

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 14% higher than at June 30, 2011.

<b>Period</b>	<b>Payment (undiscounted)</b>	<b>Period</b>	<b>Payment (undiscounted)</b>
2011 - 2012	\$7,524,967	2014 - 2015	\$8,170,615
2012 - 2013	7,746,132	2015 - 2016 <sup>(5)</sup>	1,580,496
2013 - 2014	7,962,644		

- <sup>(1)</sup> Assuming no change in the level of benefit provided as of June 30, 2011.
- <sup>(2)</sup> Including only those members receiving the benefits as of June 30, 2011.
- <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.



**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*	\$61,173,795	22	\$4,095,401
June 30, 2004	Actuarial Loss/POB Proceeds**	N/A*	(38,142,061)	8	(5,601,009)
June 30, 2005	Actuarial Loss	\$165,807,070	139,194,587	9	18,477,246
June 30, 2006	Actuarial Loss	74,355,835	65,492,972	10	7,956,348
June 30, 2006	Plan Provision Change	333,000	364,071	25	22,455
June 30, 2007	Actuarial Loss	9,736,697	8,943,854	11	1,004,306
June 30, 2007	Assumption Change	48,705,000	44,739,024	11	5,023,745
June 30, 2008	Actuarial Loss	37,435,443	35,444,830	12	3,709,195
June 30, 2009	Actuarial Loss	99,661,060	96,599,966	13	9,485,634
June 30, 2010	Actuarial Loss	40,450,188	39,904,974	14	3,698,393
June 30, 2010	Assumption Change	180,478,000	178,045,402	14	16,501,247
June 30, 2011	Actuarial Loss	33,654,586	33,654,586	15	2,958,710

<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*	\$140,842,348	22	\$9,428,973
June 30, 2004	Actuarial Loss/POB Proceeds **	N/A*	(42,467,434)	8	(6,236,173)
June 30, 2005	Actuarial Loss	\$10,771,055	9,042,272	9	1,200,307
June 30, 2006	Actuarial Loss	8,282,685	7,295,428	10	886,278
June 30, 2007	Actuarial Gain	(162,430)	(149,203)	11	(16,754)
June 30, 2007	Assumption Change	37,063,000	34,045,017	11	3,822,915
June 30, 2008	Actuarial Loss	11,510,769	10,898,690	12	1,140,515
June 30, 2009	Actuarial Loss	17,637,452	17,095,717	13	1,678,714
June 30, 2010	Actuarial Loss	4,210,394	4,153,644	14	384,960
June 30, 2010	Assumption Change	38,322,000	37,805,472	14	3,503,811
June 30, 2011	Actuarial Loss	208,522	208,522	15	18,332

\* 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*	\$20,928,790	22	\$1,401,119
June 30, 2004	Actuarial Loss/POB Proceeds **	N/A*	(8,242,335)	8	(1,210,354)
June 30, 2005	Actuarial Loss	\$28,456,160	23,888,871	9	3,171,104
June 30, 2006	Actuarial Loss	36,122,657	31,817,007	10	3,865,257
June 30, 2007	Actuarial Loss	11,440,206	10,508,646	11	1,180,016
June 30, 2007	Assumption Change	18,663,000	17,143,300	11	1,925,022
June 30, 2008	Actuarial Loss	25,279,442	23,935,221	12	2,504,749
June 30, 2009	Actuarial Loss	33,290,245	32,267,735	13	3,168,530
June 30, 2010	Actuarial Loss	7,016,461	6,921,888	14	641,520
June 30, 2010	Assumption Change	44,211,000	43,615,096	14	4,042,247
June 30, 2011	Actuarial Gain	(3,902,219)	(3,902,219)	15	(343,059)

<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*	\$23,208,774	22	\$1,553,758
June 30, 2004	Actuarial Loss/POB Proceeds **	N/A*	(6,749,946)	8	(991,203)
June 30, 2005	Actuarial Gain	\$(8,133,004)	(6,827,634)	9	(906,327)
June 30, 2006	Actuarial Loss	6,885,605	6,064,875	10	736,785
June 30, 2007	Actuarial Loss	810,988	744,951	11	83,651
June 30, 2007	Assumption Change	4,474,000	4,109,688	11	461,477
June 30, 2008	Actuarial Loss	4,845,166	4,587,527	12	480,071
June 30, 2009	Actuarial Loss	7,849,312	7,608,220	13	747,089
June 30, 2010	Actuarial Loss	1,272,629	1,255,476	14	116,358
June 30, 2010	Assumption Change	6,935,000	6,841,526	14	634,073
June 30, 2011	Actuarial Gain	(433,930)	(433,930)	15	(38,149)

\* 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	\$3,315,754	\$922,207	\$4,237,961
UAAL	\$864,298	\$259,180	\$1,123,478
Funded Ratio	73.9%	71.9%	73.5%

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