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Tulare County Employees' Retirement Association

**Report on the Actuarial
Valuation as of June 30, 2011
Incorporating Changes due to Experience Study**

**TULARE COUNTY
EMPLOYEES' RETIREMENT
ASSOCIATION**

**REPORT ON THE
ACTUARIAL VALUATION
AS OF JUNE 30, 2011**

**Incorporating Changes from Actuarial Audit
and from the 2011 Experience Study**

November 16, 2011

Board of Retirement
Tulare County Employees'
Retirement Association
136 N. Akers
Visalia, CA 93291

Members of the Board:

We are pleased to present our report on the actuarial valuation of the Tulare County Employees' Retirement Association as of June 30, 2011. The actuarial valuation is based on unaudited financial information and member data provided by the Retirement Association and summarized in this report.

All costs, liabilities and other factors under the plan were determined in accordance with generally accepted actuarial principles and procedures, using an actuarial cost method which we believe is reasonable. This report fully and fairly discloses the actuarial position of the plan.

This report reflects the incorporation of all recommendations from the audit report of Roeder Financial and those of the 2011 experience study.

In our opinion, the actuarial assumptions used are reasonable, taking into account the experience of the plan and reasonable expectations, and represent our best estimate of the anticipated experience under the plan. A summary of the actuarial assumptions and methods used in this actuarial valuation are shown in Section 8.

I am an Enrolled Actuary and a Member of the American Academy of Actuaries. I meet the qualification standards of the American Academy of Actuaries to render the actuarial opinions contained in this report. This report has been prepared in accordance with all applicable Actuarial Standards of Practice.

We look forward to discussing this report with the Board and wish to express our appreciation for the invaluable cooperation extended to us by the Retirement Staff during the course of this study.

Respectfully submitted,



Charlie Chittenden, FSA, EA, MAAA
Principal and Consulting Actuary

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Section 1: Executive Summary

The table below summarizes the principal results from the current and the prior valuations.

<u>Item</u>	<u>Actuarial Valuation as of</u>		<u>Change Between Years</u>	
	<u>June 30, 2010</u>	<u>June 30, 2011</u>	<u>Amount</u>	<u>Percent</u>
Contribution Summary*				
Average Employer Contribution Rate	12.39%	12.55%	0.16%	1.3%
Estimated Employer Contributions	\$26,992,000	\$27,586,000	\$594,000	2.2%
Average Member Contribution Rate	7.80%	8.10%	0.30%	3.8%
Estimated Member Contributions	\$16,778,000	\$17,750,000	\$972,000	5.8%
Value of Assets				
Market Value of Assets	\$833,327,605	\$1,001,315,160	\$167,987,555	20.2%
Rate of Return for Last 12 Months	10.29%	21.83%	11.53%	112.0%
Actuarial Value of Assets	\$946,640,331	\$969,635,647	\$22,995,316	2.4%
Rate of Return for Last 12 Months	3.62%	3.78%	0.16%	4.5%
GASB No. 25 Funded Status				
Actuarial Accrued Liability	\$1,033,210,615	\$1,072,144,238	\$38,933,623	3.8%
Unfunded Actuarial Accrued Liability/(Surplus)	\$86,570,284	\$102,508,591	\$15,938,307	18.4%
Funded Ratio	91.60%	90.40%	-1.20%	-1.3%
Summary of Data				
Active Participants	4,241	4,197	-44	-1.0%
Participants with Deferred Benefits	1,766	1,761	-5	-0.3%
Retired Participants and Beneficiaries	<u>2,181</u>	<u>2,313</u>	<u>132</u>	6.1%
Total	8,188	8,271	83	1.0%
Retired Participant Statistics				
Total Annual Allowance	\$41,495,219	\$45,224,268	\$3,729,049	9.0%
Average Annual Allowance	\$19,026	\$19,552	\$526	2.8%
Active Participant Statistics				
Total Annual Compensation	\$217,811,354	\$219,853,614	\$2,042,260	0.9%
Average Annual Compensation	\$51,358	\$52,384	\$1,026	2.0%
Average Age	43.16	43.21	0.05	0.1%
Average Service	9.36	9.65	0.29	3.1%
Key Assumptions				
Interest rate	7.75%	7.75%	0.00%	0.0%
Inflation	4.00%	4.00%	0.00%	0.0%

* Weighted by June 30, 2011 payroll.

Section 1: Executive Summary

Purpose

Buck Consultants has prepared this report to present the results of the June 30, 2011 actuarial valuation of the Tulare County Employees' Retirement Association (the "System"). The main purposes of the report are to:

1. Review the experience of the System over the past year and identify reasons for changes in costs;
2. Recommend economic assumptions to be used in computing System liabilities and costs;
3. Calculate the annual contribution required to fund the System in accordance with actuarial principles;
4. Project any emerging trends in Association costs;
5. Present items required for disclosure under Statement No. 25 of the Governmental Accounting Standards Board (GASB).

Significant Changes Since Last Year

No changes in actuarial methods have been made since last year.

Contribution Rates

During the year, the return on the actuarial value of assets was 3.78%, 4.12% less than the actuarial assumption of 7.90%. This was offset by a small gain on the actuarial liability in fiscal 2011. In addition, there were changes to the coding that were agreed on after the most recent audit and there were changes to the assumptions due to the most recent experience study. The net result is an increase in the recommended County contribution rate from 12.39% as of June 30, 2010, to 12.55% as of June 30, 2011.

The contribution rates reflect the economic and non-economic assumptions recommended in the June 30, 2011, Experience Study.

Asset Returns

During the twelve months ended June 30, 2011, the Association assets had an investment return of 21.83% on a market value basis and 3.78% on an actuarial value basis, compared to the actuarial assumption of 7.90%.

Section 1: Executive Summary

Funding Ratio - GASB 25

The Governmental Accounting Standards Board Statement No. 25 (GASB 25) requires that the funding progress be shown based on the same funding method which was used to develop the system's contribution requirements, the Entry Age Normal Cost funding method. The funding ratio decreased from 91.6% on June 30, 2010, to 90.4% on June 30, 2011.

Noneconomic Assumptions

A triennial experience study of the members of the Association was performed this year. We analyzed the plan experience during the three-year period from July 1, 2008, through June 30, 2011, regarding service retirements, deaths, disabilities and terminations of employment, and compared the number of actual terminations to the incidence expected using the prior actuarial assumptions. Where the results differed materially, we recommended modifying the assumptions. We anticipate that we will use these new actuarial assumptions until the next experience analysis, which is due to be performed at the time of the June 30, 2014, actuarial valuation.

We have reflected both age and service in determining eligibility for applying the decrements.

This valuation incorporates four recommendations of the audit report by Roeder Financial, as well as six changes to assumptions that the 2011 experience study recommended. These changes are summarized below:

Audit of Roeder Financial

1. Delay non-duty disability decrements until member have five years of service;
2. Assume that retirements of both active and deferred vested members occur in the middle of the year;
3. Assume that future pay increases occur in the middle of the year;
4. Correct the multiplier for General deferred vested members and use a better estimate of final average pay for all deferred vested members.

2011 Experience Study

1. Update the mortality table per Actuarial Standard of Practice Statement Number 35;
2. Change the salary scale to incorporate both age and

Section 1: Executive Summary

- service;
- 3. Change retirement assumptions to incorporate both age and service;
- 4. Change termination assumptions;
- 5. Change the deferral age for deferred vested members and change the assumption on percentage married;
- 6. Develop employee contribution rates based on recommended mortality table.

Economic Assumptions

To ensure that the same inflationary expectations are consistently included in all of the economic assumptions, we have used a building block approach in developing these assumptions. That is, we assumed that the investment return earned over the long-term comprises inflation and the real rate of return. In addition, we have assumed future salary increases comprise inflation, merit and longevity increases.

Inflation Assumption

We recommend that the current 4.00% long-term level of inflation be continued.

Investment Return Assumption

Based upon future anticipated long-term returns on the Association's targeted asset mixes, we also recommend that the 3.75% future real rate of return be continued. In combination, these assumptions equate to a 7.75% long-term investment return assumption. Since interest is credited semi-annually, the nominal rate of 3.875% produces an effective annual rate of 7.90%.

Section 1: Executive Summary

Salary Increase Assumption

We incorporated the same inflation assumption, 4.00%, into the recommended long-term salary increase assumption. The overall effect of the merit and longevity increases is to add approximately 0.35% to 2.30% to the total salary increase assumption. Our assumptions vary by years of service and by division.

Actuarial Value of Assets

The Board has adopted an actuarial value of assets method that recognizes the difference between expected and actual market returns, net of expenses, over a 10-year period. The net market value of assets was \$1,001,315,160 and the net current actuarial value of assets under this method was \$969,635,647, not including the Supplemental Retiree Benefit Reserve or the Contingency Reserve.

Actuarial Balance Sheet

The actuarial balance sheet compares the present value of all future benefits anticipated to be paid for the current membership with the sources of funds to be used to provide these benefits. It illustrates that if recommended contribution levels made in the future prove out over time, current assets plus future employer and member contributions will be adequate to meet future benefit payments for the current membership.

Interest Crediting Policy

The Retirement Board has adopted an interest crediting policy following the provisions of Section 5.5 of the 1937 Act. The target interest rate for reserves is the actuarially assumed rate. Reserves are first credited with the rate of return on the actuarial value of assets each six months, but no more than the actuarial assumption. Next, any actuarially determined returns in excess of the actuarial assumption are split 50-50 between the regular reserves and the Supplemental Retiree Benefits Reserve.

Section 2: Assets

Assets	The following discussion focuses on the assets of the Tulare County Employees' Retirement Association, which is a key component in the determination of the Association's funding status.
Financial Exhibits	<p>Exhibit 2.1 presents a statement of net Plan assets at Market Value</p> <p>Exhibit 2.2 presents a statement of changes in net Plan assets</p> <p>Exhibit 2.3 presents the derivation of the Actuarial Value of Assets</p> <p>Exhibit 2.4 presents the derivation of the asset gain and loss for the year</p> <p>Exhibit 2.5 presents the historical returns on the Association's assets</p>
Market Value of Assets	Represents the fair market value of assets as of June 30, 2011 as reported by the System.
Actuarial Value of Assets	The Board has adopted an actuarial value of assets method that recognizes the difference between expected and actual market returns, net of expenses, over a 10-year period. The net market value of assets was \$1,001,315,160 and the net current actuarial value of assets under this method was \$969,635,647, not including the Supplemental Retiree Benefit Reserve or the Contingency Reserve.
Valuation Assets	Represents the actuarial value of the fund, less the value of any special reserves that have been set aside for benefits that are to be funded outside the actuarially determined contribution rates. As of the valuation date, there are two special reserves: the Supplemental Retiree Benefits Reserve and the Contingency Reserve.
Asset Returns	During the twelve months ended June 30, 2011, the Association assets had an investment return of 21.83% on a market value basis and 3.78% on an actuarial value basis, compared to the actuarial assumption of 7.90%.

Section 2: Assets

EXHIBIT 2.1 – STATEMENT OF PLAN NET ASSETS AS OF JUNE 30, 2011

	<u>June 30 2011</u>
ASSETS	<u>Combined</u>
Current Assets	
Checking/Savings	
1110 · Cash in County Treasury	4,986,539.86
1120 · Cash in Custodial Account	86,340.21
1130 · Short Term Investments	17,980,916.25
1140 · Securities Lending Collateral	70,233,560.74
1150 · Impaired Assets	43,787.90
Total Checking/Savings	<u>98,317,684.82</u>
Other Current Assets	
1310 · Fixed Income – Market	254,339,974.16
1340 · Equities – Market	583,239,339.06
1370 · Real Estate – Market	
1371 · Accrued Performance Fees	-686,955.00
1370 · Real Estate – Market – Other	12,528,758.57
Total 1370 · Real Estate – Market	11,841,803.57
1375 – Real Estate – REIT	81,337,870.59
1385 – Hedge Funds	28,185,564.00
1386 – Private Equity	28,329,291.00
1390 – Futures Overlay	4,566,630.46
Total Other Current Assets	<u>991,840,472.84</u>
Total Current Assets	1,085,171,617.80
Fixed Assets	
1501 · Building and Improvements	888,983.47
1505 · Office Equipment & Computer Sys	237,257.03
1506 · Project in Process CPAS	1,798,282.26
1511 · Allowance for Depreciation	-409,623.22
1512 · Land	370,345.69
Total Fixed Assets	<u>2,885,245.23</u>
Other Assets	
1710 · Open Trades Sales	51,112,240.83
1730 · Investment Income Receivable	4,416,390.24
1735 · Real Estate Income Receivable	7,960.00
1750 · Members Contribution Receivable	636,526.56
1770 · County Contribution Receivable	93,401.79
1780 · Advances Rec- Holding Corp	1,075,591.00
Total Other Assets	<u>57,342,110.42</u>
TOTAL ASSETS	<u><u>1,145,398,973.45</u></u>

Section 2: Assets

EXHIBIT 2.1 – STATEMENT OF PLAN NET ASSETS AS OF JUNE 30, 2011

LIABILITIES & EQUITY

Liabilities

Current Liabilities

Other Current Liabilities

2010 · Sec Lndg Collateral Payable	70,233,560.74
2020 · Open Trades – Purchases	69,372,276.75
2030 · Accounts Payable – Inv	1,037,219.85
2040 · Refunds Payable	1,171,156.16
2050 · Other Payables	24,223.36
2100 · Advances Payable-TCERA	25,656.70

Total Other Current Liabilities **141,864,093.56**

Total Current Liabilities **141,864,093.56**

Long Term Liabilities

2060 · Accrual For Benefits At Termination	82,674.11
2070 · Advances Payable – TCERA	1,075,591.00

Total Long Term Liabilities **1,158,265.11**

Total Liabilities **143,022,358.67**

Equity

3110 · Member Deposit Reserve	228,274,766.96
3120 · Other Reserves – Unapportioned	825,968.33
3210 · County Advanced Reserves	
3210.1 · County Advanced Reserves	413,257,383.44
Total 3210 · County Advanced Reserves	413,257,383.44
3310 · Retiree Reserves	328,173,735.93
3320 · Supp. Retiree Benefit Reserve	117,758,517.84
3410 · Contingency Reserve	34,265,837.85
3510 · Market Stabilization	-120,344,843.00
3900 · Retained earnings	-169,154,303.80
Net Income	169,319,551.23

Total Equity **1,002,376,614.78**

TOTAL LIABILITIES & EQUITY **1,145,398,973.45**

Assets Received October 13, 2011

Section 2: Assets

EXHIBIT 2.2 – STATEMENT OF CHANGES IN PLAN NET ASSETS

Ordinary Income/Expense	
Income	
4110 · Interest Income (TCERA & TCERA Prop)	6,471,452.93
4120 · Dividend Income	7,247,355.09
4130 · Real Estate Income	4,275,174.04
4140 · Other Investment Income	393,750.91
4200 · Lease Payments from TCERA	54,518.04
4310 · Commission Rebates	42,036.78
4410 · Securities Lending Income	210,265.53
4510 · Realized Gains/Losses	43,036,803.96
4530 · Gn/Ls Disposal of Fixed Asset	0.00
4610 · Employee Contributions	17,799,366.01
4620 · Employer Contributions	23,434,239.50
Total Income	<u>102,964,962.79</u>
Expense	
5110 · Benefit Payments	50,430,014.15
5120 · Refunds	3,351,823.25
5210 · Investment Management Fees	3,491,926.07
5250 · Inv.Consultant/Custodial Fees	405,221.94
5270 · Securities Lending Expense	29,953.27
5275 · Real Estate Investment Expense	0.00
5276 · Real Estate Mgr Fees	0.00
5280 · Other Investment Expense	124,359.28
5310 · Legal Fees	0.00
5410 · Actuarial Study Fees	63,189.00
5420 · Ret. Information System Exp.	0.00
5450 · Compensated Benefit Expense	7,939.78
5500 · Administrative Expense	1,560,053.67
5750 · TCERA Property Admin. Expense	25,664.61
5910 · Depreciation of Fixed Assets	38,095.43
Total Expense	<u>59,528,240.45</u>
Net Ordinary Income	43,436,722.34
Other Income/Expense	
Other Income	
4520 · Unrealized Gains/Losses	125,881,733.89
4525 · Unrealized Gains/Losses – Build/Land	0.00
5000 · Other Income	1,095.00
Total Other Income	<u>125,882,828.89</u>
Net Other Income	<u>125,882,828.89</u>
Net Income	<u><u>169,319,551.23</u></u>

Assets Received October 13, 2011

Section 2: Assets

EXHIBIT 2.3 – ACTUARIAL VALUE OF ASSETS

<u>Six Month Period From</u>	<u>Six Month Period To</u>	<u>Total Actual Market Return (net)</u>	<u>Expected Market Return (net)</u>	<u>Investment Gain (Loss)</u>	<u>Deferred Factor</u>	<u>Deferred Return</u>
7/06	12/06	92,320,721	34,876,170	57,444,551	0	0
1/07	6/07	70,966,904	38,054,052	32,912,851	0.10	3,291,285
7/07	12/07	(8,184,032)	41,163,240	(49,347,273)	0.20	(9,869,455)
1/08	6/08	(73,673,654)	40,424,031	(114,097,685)	0.30	(34,229,305)
7/08	12/08	(206,287,879)	37,876,305	(244,164,185)	0.70	(170,914,929)
1/09	6/09	5,932,310	29,502,818	(23,570,509)	0.75	(17,677,881)
7/09	12/09	111,719,499	29,390,608	82,328,891	0.80	65,863,113
1/10	6/10	(33,675,854)	33,673,605	(67,349,458)	0.85	(57,247,040)
7/10	12/10	130,581,862	32,462,428	98,119,434	0.90	88,307,491
1/11	6/11	49,953,925	37,183,527	12,770,398	0.95	12,131,878
1. Total deferred return						(120,344,843)
2. Market Value of Assets as of June 30, 2011*						1,001,315,160
3. Actuarial Value of Assets including Reserves as of June 30, 2011 (2) – (1)						1,121,660,003
4. Non-valuation reserves and designations:						
Supplemental Retiree Benefit Reserve						117,758,518
Reserve for Interest Fluctuation (Contingency Reserve)						34,265,838
Total						152,024,356
5. Final Actuarial Value of Assets excluding Reserves as of June 30, 2011 (3) – (4)						969,635,647

* The market value of assets is equal to the total equity amount on page 7 (\$1,002,376,614.78) plus adjustments since the September 15th date of interest approval and posting.

Section 2: Assets

EXHIBIT 2.4 – ASSET GAIN/LOSS

		<u>Market Value</u>		<u>Actuarial Value</u>
Total as of June 30, 2010	\$	833,327,605	\$	946,640,331
Changes During the Year				
Employer Contributions		23,434,240		23,434,240
Member Contributions		17,799,366		17,799,366
Benefit Payments		(50,430,014)		(50,430,014)
Refunds		(3,351,823)		(3,351,823)
Investment Expenses		(4,122,589)		(4,122,589)
Administrative Expenses		(1,623,814)		(1,623,814)
Investment Return		186,282,189		41,289,950
Total assets as of June 30, 2011	\$	1,001,315,160	\$	969,635,647
Expected Investment Return	\$	65,337,226	\$	74,288,931
Expected Assets	\$	886,116,599	\$	1,008,381,030
Asset Gain/(Loss)	\$	115,198,561	\$	(38,745,383)
Gross Return	\$	186,282,190	\$	41,289,951
Net of Expenses	\$	180,535,787	\$	35,543,548
Gross of Expenses		22.60%		4.40%
Net of Expenses		21.83%		3.78%

Section 2: Assets

EXHIBIT 2.5 – HISTORICAL RETURNS ON ASSOCIATION ASSETS

Year Ended June 30,	Annualized Rate of Return at Market Value	Annualized Rate of Return at Actuarial Value	Increase in Consumer Price Index**
2007	18.35%	10.48%	2.70%
2008	-7.80%	10.12%	5.00%
2009	-20.79%	5.09%	-1.40%
2010	10.29%	3.62%	1.10%
2011	21.83%	3.78%	3.60%
Compound Average*	2.53%	5.45%	1.81%

* Since 2007

** Based on All Urban Consumer - U.S. City Average, June indices

Section 3: Liabilities

Liabilities	This section focuses on the Association's actuarial liabilities and the cost components that are derived from those liabilities.
Actuarial Value of Assets	Represents the amount of assets already accumulated by the Association at Actuarial Value (item 1 in Exhibit 3.1).
Present Value of Future Member Contributions	Represents the present value of the contributions anticipated to be received in the future from the current members (item 2 in Exhibit 3.1).
Present Value of Future Employer Normal Cost Contributions	Represents the present value of future employer normal costs with respect to current members (item 3 in Exhibit 3.1).
Unfunded Actuarial Accrued Liability (Surplus)	Represents the difference between the present value of the benefits to be paid from the Association and the total of the existing assets plus the present value of the future normal costs and future member contributions. In the text we will abbreviate it as UAAL. The UAAL is amortized as a level percentage of payroll over a rolling 15-year period.
Total Actuarial Assets	Represents the total of all current assets at actuarial value plus the value of all future member and employer contributions for normal cost plus current and future employer costs to amortize the UAAL (item 5 in Exhibit 3.1).
Present Value of Benefits	The valuation determines the amount and timing of all future payments that will be made by the Association. For active members, the present value of benefits includes the value of all benefits earned to date and all benefits to be earned in the future. For all members, the present value of benefits includes the value of benefits payable to members and survivors over their remaining lifetimes. The present value is then determined by discounting these payments at the assumed interest rate to June 30, 2011, the date of the valuation. The present value of supplemental benefits is shown at reserve values (items 6 to 12 in Exhibit 3.1).

Section 3: Liabilities

Actuarial Accrued Liability

Employer contributions have been determined under the Entry Age Normal Actuarial Cost Method, permitted by Government Code Section 31453.5. The Entry Age Normal method defines the Normal Cost as the level percentage of salary necessary to fund the projected future benefit over the period from the date of entry to the date of separation from active service. The Actuarial Accrued Liability is the cost allocated to years prior to the actuarial valuation date; it is the excess of the total value of benefits over the value of future member contributions and the value of future employer Normal Costs. The difference between the Actuarial Accrued Liability and the actuarial value of assets is called the Unfunded Actuarial Accrued Liability.

Unfunded Actuarial Accrued Liability

The valuation compares the actuarial value of assets to the Actuarial Accrued Liabilities. The shortfall, if any, is called the Unfunded Actuarial Accrued Liability (UAAL) and is amortized as a level percentage of payroll over a rolling 15-year period.

Actuarial Gain and Loss

The difference between the UAAL and the expected UAAL is an actuarial gain or loss. The actuarial gain and loss comprises two components: a liability gain and loss (from other sources, such as salary growth, turnover and retirement patterns and life expectancies different from expected) and an asset gain or loss (from investment experience different from expected).

Funded Ratio

Measures the portion of the AAL already funded by the current assets at actuarial value.

Supplemental Retiree Benefits Reserve (Article 5.5)

The financial provisions of Article 5.5 of the 1937 Act have been adopted by the County. This Article provides that a specific portion of the Association's investment earnings be allocated to a Supplemental Retiree Benefits Reserve (SRBR). Amounts allocated to the SRBR are to be used for the benefit of retired members and beneficiaries pursuant to Government Code Section 31618.

Level One: \$18.00 per month for each of the first 20 years of service (some benefit grandfathering applies).

Section 3: Liabilities

Benefit is subject to a vesting schedule of 50% after 10 years of service, uniformly grading up to 100% at 20 years of service.

Level Two: 85% Purchasing Power COLA based on COLA accumulation banks.

We have made the following assumptions in our valuation of the Level Two benefits.

- Future increases in the CPI will be sufficient to trigger the automatic COLA guaranteed under the Tier the member is in (that is 3% for Tier 1 and 2% for Tier 2). Liabilities will be greater if future increases are in excess of the guaranteed COLA.
- This higher cost exposure would be offset (fully or partially) by any future excess earnings that are credited to the SRBR. We did not assume any offset of the purchasing power by benefits received under Level One.

Level Three: 60% survivor benefit for retirees who marry after retirement, have been married for at least two years at time of death to a spouse, at least age 55 at time of retiree's death and if the member elected the Unmodified Allowance retirement option.

Section 3: Liabilities

EXHIBIT 3.1 – ACTUARIAL BALANCE SHEET

<u>ASSETS</u>	
1. Actuarial value of assets (including special reserves)	\$ 1,121,660,003
2. Present value of future contributions by members	177,877,282
3. Present value of future employer contributions for normal cost	184,643,701
4. Present value of other future employer contributions (UAAL)	102,508,591
5. Total actuarial assets	\$ 1,586,689,577
<u>LIABILITIES</u>	
6. Present value of retirement allowances payable to retired members and their survivors	\$ 546,553,057
7. Present value of service retirement allowances payable to presently active members and their survivors	693,716,563
8. Present value of allowances payable to current and future vested terminated members and their survivors	84,384,393
9. Present value of disability retirement allowances payable to presently active members and their survivors	73,587,116
10. Present value of death benefits payable on behalf of presently active members	21,813,110
11. Present value of members' contributions to be returned upon withdrawal	14,610,982
12. Special Reserves	34,265,838
13. SRBR	117,758,518
14. Miscellaneous Liabilities	0
15. Total actuarial liabilities	\$ 1,586,689,577

EXHIBIT 3.2 – ACTUARIAL ACCRUED LIABILITY

16. Present value of future benefits (items 6 to 11)	\$ 1,434,665,221
17. Present value of future contributions by members and employers (items 2 and 3)	362,520,983
18. Actuarial accrued liability (item 16 minus item 17)	1,072,144,238
19. Actuarial value of assets (excluding special reserves)	969,635,647
20. Unfunded actuarial accrued liability (UAAL) (item 18 minus item 19)	\$ 102,508,591
21. Funded ratio	90.40%

Section 3: Liabilities

EXHIBIT 3.3 – ACTUARIAL GAIN AND LOSS

1.	Unfunded actuarial accrued liability as of July 1, 2010	\$	86,570,284
2.	Change due to contributions:		
	(a) Normal cost	\$	36,204,425
	(b) Interest on (a)		1,430,075
	(c) Interest on (1)		6,839,052
	(d) Contributions (member and employer)		(41,233,606)
	(e) Interest on (d)		<u>(1,628,727)</u>
	(f) Net change: (a)+(b)+(c)+(d)+(e)	\$	1,611,219
3.	Expected unfunded actuarial accrued liability: (1)+(2)	\$	88,181,503
4.	Change due to actuarial (gain)/loss from asset sources	\$	38,745,383
5.	Liability (gain)/loss	\$	(8,770,947)
6.	Assumption changes	\$	<u>(15,647,348)</u>
7.	Unfunded actuarial accrued liability as of June 30, 2011: (3)+(4)+(5)+(6)	\$	102,508,591

EXHIBIT 3.4 – SUPPLEMENTAL RETIREE BENEFITS RESERVE

We show below the June 30, 2011, present value of the supplemental retiree benefits payable on behalf of all currently retired members and future retired members from the current active and inactive membership.

Present Value of Benefits For		June 30, 2011	
Level One			
1.	Current Retirees	\$	55,857,670
2.	Inactive Members		5,637,389
3.	Active members		<u>54,774,886</u>
4.	Subtotal	\$	116,269,945
Level Two			
5.	Supplemental COLA for those who have lost at least 15% of Purchasing Power	\$	2,187,584
Level Three			
6.	Supplemental Spousal Death Benefit	\$	746,954
7.	Total SRBR Combined Liability: (4)+(5)+(6)	\$	119,204,483
8.	Supplemental Retiree Benefits Reserve (SRBR)	\$	117,758,518
9.	Net Reserve: (8)-(7)	\$	<u>(1,445,965)</u>

Section 4: Member Contribution Rates

A summary of the current and recommended average employee contribution rates is provided below.

Member Contributions

This section focuses on the determination of the member contribution rates to the Association.

Member Basic Contributions

Government Code Sections 31621.5 (Tier 1) and 31621.2 (Tiers 2 and 3) set forth the basis for the determination of the normal rates of contribution for General members. Government Code Section 31639.5 (Tier 1) and 31639.25 (Tier 2 and Tier 3) set forth the basis for the normal rates of contribution for Safety members.

The law further provides that the contribution rates of members will be based on the age nearest birthday at the time of entrance into the Retirement Association. Section 31453 states that no adjustment will be included in the rates of contribution for time prior to the effective date of any revisions.

Member Basic Contributions are based on entry age into the Association and the following actuarial assumptions:

1. Actuarial investment return (7.90%)
2. Salary increase (see Section 8)
3. Life expectancy

The basic employee contribution rates for General members were calculated on a unisex basis using the RP-2000 Generational Mortality Table (weighted 30% male and 70% female), with no collar or age adjustment. The Safety basic employee rates were based upon the RP-2000 Generational Mortality Table (weighted 75% male and 25% female), with adjustment for blue-collar workers.

Cost-of-Living Contributions

The employee portion of the cost-of-living provision is expressed as a percentage of the employees' contribution rates ignoring the cost-of-living provision. The percentages are:

	<u>Tier 1</u>	<u>Tiers 2 and 3</u>
2010 Actual	35.85%	16.09%
2011 Recommended	58.15%	18.96%

Section 4: Member Contribution Rates

A summary of the current and recommended average employee contribution rates is provided below:

2010 Actual	Average Member Basic and Cost of Living Contribution Rates			
	General		Safety	
	<u>Tier 1</u>	<u>Tier 2 & 3</u>	<u>Tier 1</u>	<u>Tier 2 & 3</u>
Recommended Rates	3.88%	7.48%	4.60%	8.93%

2011 Recommended	Average Member Basic and Cost of Living Contribution Rates			
	General		Safety	
	<u>Tier 1</u>	<u>Tier 2 & 3</u>	<u>Tier 1</u>	<u>Tier 2 & 3</u>
Recommended Rates	4.76%	7.62%	6.71%	9.87%

Section 4: Member Contribution Rates

Recommended employee rates at sample ages are shown below.

RECOMMENDED MEMBER CONTRIBUTION RATES

Sample General Member Contribution Rates* Benefits Under Section 31676.12				
	Basic	With 3% Automatic Cost of Living Increases	Basic	With 2% Automatic Cost of Living Increases
Entry Age	<u>Tier 1</u>	<u>Tier 1</u>	<u>Tier 2 & 3</u>	<u>Tier 2 & 3</u>
25	2.94%	4.65%	5.64%	6.71%
35	3.63%	5.74%	6.95%	8.27%
45	4.46%	7.05%	8.45%	10.05%

*These are the full rates payable by the member. Contribution rates for the first \$161.54 of bi-weekly salary are one-third lower for members covered by Social Security.

Sample Safety Member Contribution Rates*				
	Basic	With 3% Automatic Cost of Living Increases	Basic	With 2% Automatic Cost of Living Increases
Entry Age	<u>Tier 1</u>	<u>Tier 1</u>	<u>Tier 2 & 3</u>	<u>Tier 2 & 3</u>
25	4.30%	6.80%	8.24%	9.80%
35	5.00%	7.91%	9.46%	11.25%
45	5.49%	8.69%	10.37%	12.34%

*These are the full rates payable by the member. Contribution rates for the first \$161.54 of bi-weekly salary are one-third lower for members covered by Social Security.

The following pages set forth the complete set of members' contribution rates with and without the automatic cost of living benefit. The interest rate, mortality table, inflation rate and cost of living benefit are indicated on the bottom of the table.

Section 4: Member Contribution Rates

GENERAL TIER 1 MEMBERS' RECOMMENDED CONTRIBUTION RATES (expressed as a percentage of bi-weekly compensation) Benefits Under Section 31676.12

Entry Age	Total		Entry Age	Total	
	First \$161.54	Over \$161.54		First \$161.54	Over \$161.54
16	2.56%	3.84%	38	4.06%	6.10%
17	2.63%	3.94%	39	4.16%	6.25%
18	2.67%	4.02%	40	4.25%	6.37%
19	2.74%	4.10%	41	4.35%	6.52%
20	2.80%	4.19%	42	4.44%	6.67%
21	2.86%	4.29%	43	4.54%	6.82%
22	2.91%	4.36%	44	4.65%	6.97%
23	2.97%	4.46%	45	4.70%	7.05%
24	3.04%	4.55%	46	4.76%	7.13%
25	3.10%	4.65%	47	4.81%	7.21%
26	3.16%	4.74%	48	4.86%	7.29%
27	3.24%	4.86%	49	4.92%	7.37%
28	3.31%	4.95%	50	4.97%	7.45%
29	3.37%	5.06%	51	5.01%	7.53%
30	3.45%	5.17%	52	5.08%	7.61%
31	3.51%	5.27%	53	5.12%	7.69%
32	3.59%	5.38%	54	5.19%	7.78%
33	3.67%	5.50%	55	5.23%	7.86%
34	3.75%	5.61%	56	5.30%	7.94%
35	3.83%	5.74%	57	5.35%	8.02%
36	3.91%	5.85%	58	5.39%	8.10%
37	3.99%	5.98%	59	5.46%	8.18%

The employee portion of the cost-of-living provision is 58.15% of the employee's normal contribution rate.

Interest:	7.90%
Inflation:	4.00%
COLA:	3.00%
Mortality:	RP 2000 Generational Mortality, with no collar adjustment or age adjustment (weighted 30% male and 70% female)

Section 4: Member Contribution Rates

GENERAL TIER 2 AND TIER 3 MEMBERS' RECOMMENDED CONTRIBUTION RATES (expressed as a percentage of bi-weekly compensation) Benefits Under Section 31676.12

Entry Age	Total		Entry Age	Total	
	First \$161.54	Over \$161.54		First \$161.54	Over \$161.54
16	3.70%	5.56%	38	5.88%	8.81%
17	3.78%	5.67%	39	6.01%	9.01%
18	3.87%	5.79%	40	6.14%	9.21%
19	3.95%	5.92%	41	6.27%	9.41%
20	4.03%	6.04%	42	6.41%	9.62%
21	4.12%	6.17%	43	6.53%	9.80%
22	4.20%	6.30%	44	6.63%	9.95%
23	4.29%	6.44%	45	6.70%	10.05%
24	4.39%	6.58%	46	6.78%	10.17%
25	4.47%	6.71%	47	6.85%	10.28%
26	4.57%	6.85%	48	6.92%	10.39%
27	4.66%	6.99%	49	7.01%	10.50%
28	4.77%	7.15%	50	7.08%	10.61%
29	4.87%	7.29%	51	7.15%	10.73%
30	4.96%	7.45%	52	7.22%	10.84%
31	5.07%	7.60%	53	7.30%	10.96%
32	5.17%	7.77%	54	7.39%	11.08%
33	5.29%	7.93%	55	7.46%	11.18%
34	5.40%	8.10%	56	7.53%	11.30%
35	5.51%	8.27%	57	7.60%	11.41%
36	5.63%	8.45%	58	7.89%	11.84%
37	5.75%	8.62%	59+	8.20%	12.30%

The employee portion of the cost-of-living provision is 18.96% of the employee's normal contribution rate.

Interest:	7.90%
Inflation:	4.00%
COLA:	2.00%
Mortality:	RP 2000 Generational Mortality, with no collar adjustment or age adjustment (weighted 30% male and 70% female)

Section 4: Member Contribution Rates

SAFETY TIER 1 MEMBERS' RECOMMENDED CONTRIBUTION RATES (expressed as a percentage of bi-weekly compensation) Benefits Under Section 31664

Entry Age	Total		Entry Age	Total	
	First \$161.54	Over \$161.54		First \$161.54	Over \$161.54
20	4.05%	6.09%	35	5.28%	7.91%
21	4.14%	6.22%	36	5.33%	7.99%
22	4.24%	6.36%	37	5.38%	8.07%
23	4.33%	6.50%	38	5.43%	8.14%
24	4.43%	6.64%	39	5.47%	8.22%
25	4.53%	6.80%	40	5.53%	8.30%
26	4.63%	6.96%	41	5.58%	8.38%
27	4.74%	7.12%	42	5.63%	8.46%
28	4.86%	7.29%	43	5.69%	8.54%
29	4.98%	7.46%	44	5.74%	8.62%
30	5.03%	7.54%	45	5.79%	8.69%
31	5.08%	7.61%	46	5.85%	8.76%
32	5.12%	7.69%	47	5.90%	8.84%
33	5.17%	7.76%	48	5.95%	8.92%
34	5.22%	7.84%	49+	5.99%	8.98%

The employee portion of the cost-of-living provision is 58.15% of the employee's normal contribution rate.

Interest:	7.90%
Inflation:	4.00%
COLA:	3.00%
Mortality:	RP 2000 Generational Mortality Table, with blue collar adjustment (weighted 75% male and 25% female)

Section 4: Member Contribution Rates

SAFETY TIER 2 AND TIER 3 MEMBERS' RECOMMENDED CONTRIBUTION RATES (expressed as a percentage of bi-weekly compensation) Benefits Under Section 31664

Entry Age	Total		Entry Age	Total	
	First \$161.54	Over \$161.54		First \$161.54	Over \$161.54
20	5.84%	8.77%	35	7.50%	11.25%
21	5.97%	8.96%	36	7.57%	11.36%
22	6.10%	9.16%	37	7.64%	11.47%
23	6.25%	9.36%	38	7.71%	11.57%
24	6.39%	9.58%	39	7.79%	11.68%
25	6.53%	9.80%	40	7.86%	11.79%
26	6.69%	10.03%	41	7.93%	11.90%
27	6.84%	10.27%	42	8.01%	12.01%
28	6.97%	10.46%	43	8.08%	12.12%
29	7.08%	10.61%	44	8.15%	12.23%
30	7.14%	10.72%	45	8.22%	12.34%
31	7.21%	10.81%	46	8.29%	12.44%
32	7.28%	10.92%	47	8.36%	12.54%
33	7.35%	11.03%	48	8.67%	13.01%
34	7.42%	11.15%	49+	9.01%	13.51%

The employee portion of the cost-of-living provision is 18.96% of the employee's normal contribution rate.

Interest:	7.90%
Inflation:	4.00%
COLA:	2.00%
Mortality:	RP 2000 Generational Mortality Table, with blue collar adjustment (weighted 75% male and 25% female)

Section 5: Employer Contribution Rates

Employer Contributions

This section focuses on the determination of the employer contribution rates to the Association.

Employer Contribution rates

Employer contributions have been determined under the Entry Age Normal Actuarial Cost Method, permitted by Government Code Section 31453.5. The Entry Age Normal method defines the Normal Cost as the level percentage of salary necessary to fund the projected future benefit over the period from the date of entry to the date of separation from active service. The Actuarial Accrued Liability is the cost allocated to years prior to the actuarial valuation date; it is the excess of the total value of benefits over the value of future member contributions and the value of future Normal Costs. The difference between the Actuarial Accrued Liability and the plan assets is called the Unfunded Actuarial Accrued Liability and is funded (amortized) as a level percentage of payroll over a rolling 15-year period.

The contribution rates reflect the current economic and noneconomic assumptions. During the year, the return on the actuarial value of assets was 3.78%, 4.12% less than the actuarial assumption of 7.90%, in addition there was a loss in actuarial liability which resulted in an overall increase in the recommended County contribution rate from 12.39% as of June 30, 2010, to 12.55% as of June 30, 2011.

The average employer contribution rate increased from 12.39% as of June 30, 2010, to 12.55% as of June 30, 2011, for the following reasons:

June 30, 2010, Recommended Employer Rate	12.39%
Changes during the year due to:	
Asset gain/loss	1.53%
Change in actuarial liability	-1.08%
Change in actuarial assumptions	-.51%
Change due to audit	.22%
Total changes	0.16%
June 30, 2011, Recommended Employer Rate	12.55%

The following charts specify the recommended employer contributions and components thereof (expressed as a level percentage of payroll) for this valuation. A breakdown between normal cost and UAAL is provided.

Section 5: Employer Contribution Rates

NORMAL COST AND UAAL RATE BREAKDOWN (% OF PAYROLL)

2010	Current and Recommended Contribution Rate Breakdown					
	Tier 1 Members		Tier 2 & 3 Members		All Members	
	<u>Current</u>	<u>Recommended*</u>	<u>Current</u>	<u>Recommended*</u>	<u>Current</u>	<u>Recommended*</u>
General						
Normal Cost	6.42%	7.75%	6.98%	6.50%	6.96%	6.54%
UAAL Amortization	<u>2.40%</u>	<u>2.95%</u>	<u>2.40%</u>	<u>2.95%</u>	<u>2.40%</u>	<u>2.95%</u>
Total Cost	8.82%	10.70%	9.38%	9.45%	9.36%	9.49%
Safety						
Normal Cost	20.19%	20.46%	12.02%	13.49%	12.23%	13.61%
UAAL Amortization	<u>2.96%</u>	<u>8.31%</u>	<u>2.96%</u>	<u>8.31%</u>	<u>2.96%</u>	<u>8.31%</u>
Total Cost	23.15%	28.77%	14.98%	21.80%	15.19%	21.92%
*Weighted by June 30, 2010 payroll.						
Average Rate for Total Group:			Current		10.67%	
			Recommended		12.39%	

2011: New	Current and Recommended Contribution Rate Breakdown					
	Tier 1 Members		Tier 2 & 3 Members		All Members	
	<u>Current</u>	<u>Recommended*</u>	<u>Current</u>	<u>Recommended*</u>	<u>Current</u>	<u>Recommended*</u>
General						
Normal Cost	7.75%	10.86%	6.50%	7.21%	6.54%	7.32%
UAAL Amortization	<u>2.95%</u>	<u>3.28%</u>	<u>2.95%</u>	<u>3.28%</u>	<u>2.95%</u>	<u>3.28%</u>
Total Cost	10.70%	14.14%	9.45%	10.49%	9.49%	10.60%
Safety						
Normal Cost	20.46%	15.09%	13.49%	12.27%	13.61%	12.32%
UAAL Amortization	<u>8.31%</u>	<u>6.53%</u>	<u>8.31%</u>	<u>6.53%</u>	<u>8.31%</u>	<u>6.53%</u>
Total Cost	28.77%	21.62%	21.80%	18.80%	21.92%	18.85%
*Weighted by June 30, 2011 payroll.						
Average Rate for Total Group:			Current		12.39%	
			Recommended		12.55%	

Section 5: Employer Contribution Rates

NORMAL COST AND UAAL RATE BREAKDOWN (BY \$ AMOUNT)

2010						
Current and Recommended Contribution Breakdown *						
	Tier 1 Members		Tier 2 & 3 Members		All Members	
	<u>Current</u>	<u>Recommended</u>	<u>Current</u>	<u>Recommended</u>	<u>Current</u>	<u>Recommended</u>
General						
Normal Cost	471,000	454,000	11,776,000	10,475,000	12,247,000	10,929,000
UAAL Amortization	176,000	173,000	4,049,000	4,754,000	4,225,000	4,927,000
Total Cost	647,000	627,000	15,825,000	15,229,000	16,472,000	15,856,000
Safety						
Normal Cost	267,000	184,000	6,003,000	6,732,000	6,270,000	6,916,000
UAAL Amortization	39,000	75,000	1,478,000	4,147,000	1,517,000	4,222,000
Total Cost	306,000	258,000	7,481,000	10,878,000	7,787,000	11,136,000
*Weighted by June 30, 2010 payroll.						
Total Contribution for Total Group:				Current	24,259,000	
				Recommended	26,992,000	

2011: New						
Current and Recommended Contribution Breakdown *						
	Tier 1 Members		Tier 2 & 3 Members		All Members	
	<u>Current</u>	<u>Recommended</u>	<u>Current</u>	<u>Recommended</u>	<u>Current</u>	<u>Recommended</u>
General						
Normal Cost	454,000	537,000	10,475,000	11,749,000	10,929,000	12,286,000
UAAL Amortization	173,000	163,000	4,754,000	5,345,000	4,927,000	5,508,000
Total Cost	627,000	700,000	15,229,000	17,094,000	15,856,000	17,794,000
Safety						
Normal Cost	184,000	142,000	6,732,000	6,259,000	6,916,000	6,401,000
UAAL Amortization	75,000	61,000	4,147,000	3,330,000	4,222,000	3,391,000
Total Cost	258,000	203,000	10,878,000	9,589,000	11,136,000	9,792,000
*Weighted by June 30, 2011 payroll.						
Total Contribution for Total Group:				Current	26,992,000	
				Recommended	27,586,000	

Section 5: Employer Contribution Rates

Tulare County Employees' Retirement Association
Recommended Employer Contribution rates from the June 30, 2011 Actuarial Valuation
Rates to be Effective July 1, 2012

General – Includes 31676.12 Benefits	Tier 1	Tiers 2 & 3	Total
Aggregate Normal Cost Rate	10.86%	7.21%	7.32%
Rate on first \$161.54 of Biweekly Compensation	7.41%	4.95%	5.01%
Rate on Biweekly Compensation in excess of first \$161.54	11.11%	7.42%	7.53%
Aggregate UAAL Rate	3.28%	3.28%	3.28%
Rate on first \$161.54 of Biweekly Compensation	2.24%	2.25%	2.25%
Rate on Biweekly Compensation in excess of first \$161.54	3.35%	3.38%	3.38%
Total Rate	14.14%	10.49%	10.60%
Rate on first \$161.54 of Biweekly Compensation	9.65%	7.20%	7.26%
Rate on Biweekly Compensation in excess of first \$161.54	14.46%	10.80%	10.91%

Safety	Tier 1	Tiers 2 & 3	Total
Aggregate Normal Cost Rate	15.09%	12.27%	12.32%
Rate on first \$161.54 of Biweekly Compensation	10.21%	8.36%	8.38%
Rate on Biweekly Compensation in excess of first \$161.54	15.32%	12.55%	12.60%
Aggregate UAAL Rate	6.53%	6.53%	6.53%
Rate on first \$161.54 of Biweekly Compensation	4.42%	4.45%	4.45%
Rate on Biweekly Compensation in excess of first \$161.54	6.63%	6.68%	6.68%
Total Rate	21.62%	18.80%	18.85%
Rate on first \$161.54 of Biweekly Compensation	14.63%	12.81%	12.83%
Rate on Biweekly Compensation in excess of first \$161.54	21.95%	19.23%	19.28%

Section 5: Employer Contribution Rates

Tulare County Employees' Retirement Association
Recommended Employer Contribution rates from the June 30, 2011 Actuarial Valuation
Rates to be Effective July 1, 2012

General and Safety - Includes 31676.12 Benefits	Tier 1	Tiers 2 & 3	Total
Aggregate Normal Cost Rate	11.54%	8.42%	8.50%
Rate on first \$161.54 of Biweekly Compensation	7.72%	5.62%	5.66%
Rate on Biweekly Compensation in excess of first \$161.54	11.80%	8.66%	8.75%
Aggregate UAAL Rate	3.80%	4.05%	4.05%
Rate on first \$161.54 of Biweekly Compensation	2.48%	2.68%	2.68%
Rate on Biweekly Compensation in excess of first \$161.54	3.88%	4.18%	4.17%
Aggregate Rate	15.34%	12.47%	12.55%
Rate on first \$161.54 of Biweekly Compensation	10.20%	8.30%	8.34%
Rate on Biweekly Compensation in excess of first \$161.54	15.68%	12.84%	12.92%

General and Safety - Includes 31676.12 Benefits	Tier 1	Tiers 2 & 3	Total
Aggregate Normal Cost Dollars	679,630	18,008,504	18,688,134
Dollars on first \$161.54 of Biweekly Compensation	28,875	969,211	998,086
Dollars on Biweekly Compensation in excess of first \$161.54	650,755	17,039,293	17,690,048
Aggregate UAAL Dollars	223,590	8,683,091	8,906,681
Dollars on first \$161.54 of Biweekly Compensation	9,289	462,500	471,789
Dollars on Biweekly Compensation in excess of first \$161.54	214,301	8,220,591	8,434,892
Aggregate Dollars	903,220	26,691,595	27,594,815
Dollars on first \$161.54 of Biweekly Compensation	38,164	1,431,711	1,469,875
Dollars on Biweekly Compensation in excess of first \$161.54	865,056	25,259,884	26,124,940

Section 5: Employer Contribution Rates

Tulare County Employees' Retirement Association

Recommended Employer Contribution rates from the June 30, 2011 Actuarial Valuation

Rates to be Effective July 1, 2012

Strathmore Public Utility District – Includes 31676.12 Benefit	Tier 1	Tiers 2 & 3	Total
Aggregate Normal Cost Rate	10.86%	7.21%	7.32%
Rate on first \$161.54 of Biweekly Compensation	7.41%	4.95%	5.01%
Rate on Biweekly Compensation in excess of first \$161.54	11.11%	7.42%	7.53%
Aggregate UAAL Rate	5.34%	5.34%	5.34%
Rate on first \$161.54 of Biweekly Compensation	3.61%	3.61%	3.61%
Rate on Biweekly Compensation in excess of first \$161.54	5.41%	5.41%	5.41%
Total Rate	16.20%	12.55%	12.66%
Rate on first \$161.54 of Biweekly Compensation	11.02%	8.56%	8.62%
Rate on Biweekly Compensation in excess of first \$161.54	16.52%	12.83%	12.94%

Section 6: Recommendations

Recommendations

We recommend that the current inflation rate assumption remain at 4.00% and the current investment return assumption remain at 7.90%.

We recommend that the Board adopt the member and employer contribution rates as of June 30, 2011, as shown in the prior sections. These rates, which reflect the current economic assumptions, are based on the Entry Age Normal Actuarial Cost Method and the actuarial value of assets, with an unfunded Actuarial Accrued Liability amortized as a level percentage of payroll over a rolling 15-year period.

This combination of assumptions and methods reflects our best judgment of future long-term experience for the Association.

Section 7: GASB Disclosures and CAFR Information



A Xerox Company

November 16, 2011

Board of Retirement
Tulare County
Employees' Retirement Association
136 N. Akers
Visalia, CA 93291

Members of the Board:

Buck Consultants, LLC is the Consulting Actuary for the Tulare County Employees' Retirement Association (TCERA). The date of the most recent actuarial valuation was June 30, 2011. We perform valuations for TCERA annually, and in performing each valuation, we conduct an examination of all participant data for reasonableness.

Actuarial funding is based on the Entry Age Normal Cost Method. Under this method, the employer contribution rate provides for current cost (normal cost) plus a level percentage of payroll to amortize the unfunded actuarial accrued liability (UAAL). As of June 30, 2011, the remaining amortization period for the UAAL was 15 years. The funding objective of the Plan is to establish contribution rates that, over time, will remain as a level percentage of payroll and will fully fund the liability for each participant by the participant's retirement date.

For actuarial valuation purposes, Plan assets are valued at Actuarial Value. Under this method, the assets used to determine employer contribution rates take into account the expected market value, and spread all gains and losses (returns above or below expected returns) over ten years. The Association's financial statements are audited by an outside auditor.

Our firm has prepared all of the schedules presented in the actuarial report. TCERA staff members extract, summarize, and reformat our schedules for the Comprehensive Annual Financial Report. The actuarial assumptions shown in the schedules were selected by Buck as being appropriate for use under the Plan and Buck is solely responsible for the trend schedules presented in this report. An analysis of the Plan's noneconomic experience was performed as of June 30, 2008 to establish the validity of these assumptions. The assumptions used this valuation produce results that, in the aggregate, reasonably approximate the anticipated future experience of the Plan. The next experience analysis is due to be performed as of June 30, 2011.

We certify that the valuation was performed in accordance with generally accepted actuarial principles and practices. In particular, the assumptions and methods used for funding purposes meet the parameters of the Governmental Accounting Standards Board Statements No. 25 and 43, to the extent applicable. I am an Enrolled Actuary and a Member of the American Academy of Actuaries. I meet the qualification standards of the American Academy of Actuaries to render the actuarial opinions contained in this report. This report has been prepared in accordance with all applicable Actuarial Standards of Practice.

Respectfully submitted,

A handwritten signature in cursive script that reads "Charlie E. Chittenden".

Charlie Chittenden, FSA, EA, MAAA
Principal and Consulting Actuary

Section 7: GASB Disclosures and CAFR Information

GASB and CAFR Information	This section focuses on the required GASB disclosures and the required CAFR information.
GASB 25 Schedule of Funding Progress	GASB 25 established reporting and disclosures for defined benefit pension plans. The required Schedule of Funding Progress shows a historical comparison of the Association's assets and liabilities, using the same actuarial method used for funding the Association.
GASB 25 Schedule of Employer Contributions	The required Schedule of Employer Contributions compares the actual employer contributions to the "Annual Required Contributions" (ARC). The ARC is the employer contribution determined under GASB 25 standards (normal cost and amortization of unfunded actuarial accrued liabilities) using the actuarial funding method used for funding the Association.
Actuarial Analysis of Financial Experience	The annual CAFR requires the disclosure of historical sources of actuarial gains and losses.
Retiree and Beneficiary Experience	The annual CAFR requires the disclosure of historical summary data for retired members.
Solvency Test	The annual CAFR requires the disclosure of a "Solvency Test." This test compares actuarial assets to actuarial accrued liabilities, applying assets to active member contributions first, then to inactive and retired members and then to the remaining active member liabilities.

Section 7: GASB Disclosures and CAFR Information

EXHIBIT 7.1 – GASB 25 SCHEDULE OF FUNDING PROGRESS (\$ in Thousands)

<u>Actuarial Valuation Date</u>	<u>Actuarial Value of Assets*</u>	<u>Actuarial Accrued Liability (AAL)</u>	<u>Unfunded AAL (UAAL)</u>	<u>Funded Ratio</u>	<u>Covered Payroll</u>	<u>UAAL as a Percent of Covered Payroll</u>
6/30/00	517,197	470,141	(47,056)	110.0%	143,211	(32.9)%
6/30/01	574,417	491,228	(83,189)	116.9%	142,970	(58.2)%
6/30/02	612,469	561,377	(51,092)	109.1%	158,263	(32.3)%
6/30/03	634,249	608,505	(25,744)	104.2%	162,397	(15.9)%
6/30/04	665,244	649,649	(15,595)	102.4%	158,032	(9.9)%
6/30/05	681,618	714,656	33,038	95.4%	164,777	20.1%
6/30/06	729,899	792,844	62,945	92.1%	186,949	33.7%
6/30/07	800,967	846,030	45,063	94.7%	204,803	22.0%
6/30/08	879,051	946,414	67,363	92.9%	226,836	29.7%
6/30/09	919,179	996,747	77,568	92.2%	227,306	34.1%
6/30/10	946,640	1,033,211	86,570	91.6%	217,811	39.7%
6/30/11	969,681	1,072,144	102,509	90.4%	219,854	46.6%

*Amounts prior to 6/30/05 supplied by previous actuaries.

EXHIBIT 7.2 – GASB 25 SCHEDULE OF EMPLOYER CONTRIBUTIONS

<u>Year Ended</u>	<u>Annual Required Contribution</u>	<u>Percentage Contributed</u>
6/30/00	20,790	100%
6/30/01	18,872	100%
6/30/02	6,186	100%
6/30/03	5,245	100%
6/30/04	9,595	100%
6/30/05	10,502	100%
6/30/06	12,443	100%
6/30/07	17,975	100%
6/30/08	22,692	100%
6/30/09	22,431	100%
6/30/10	25,339	100%
6/30/11	23,434	100%

Section 7: GASB Disclosures and CAFR Information

EXHIBIT 7.3 - ACTUARIAL ANALYSIS OF FINANCIAL EXPERIENCE (DOLLARS IN THOUSANDS)

<u>Plan Year Ending</u>	<u>Actuarial (Gains)/Losses</u>			<u>Changes in Plan Provisions</u>	<u>Changes in Assumptions/Methods</u>	<u>Total (Gain)/Loss</u>
	<u>Asset Sources</u>	<u>Liability Sources</u>	<u>Total</u>			
6/30/2008	(17,758)	64,991	47,233	0	(21,636)	25,597
6/30/2009	178,344	(16,730)	161,614	0	(153,681)	7,933
6/30/2010	39,254	(32,639)	6,615	0	0	6,615
6/30/2011	38,745	(8,771)	29,974	0	(15,647)*	14,327

* Includes changes due to Audit correction

EXHIBIT 7.4 - RETIREE AND BENEFICIARY EXPERIENCE

<u>Plan Year Ending</u>	<u>At Beginning of Year</u>	<u>At End of Year</u>	<u>Retiree Payroll</u>	<u>% Increase in Retiree Payroll</u>	<u>Average Annual Allowances</u>
6/30/2008	1,913	2,007	\$34,244,000	10.4%	\$17,062
6/30/2009	2,007	2,099	\$37,486,000	9.5%	\$17,859
6/30/2010	2,099	2,181	\$41,495,000	10.7%	\$19,026
6/30/2011	2,181	2,313	\$45,224,000	9.0%	\$19,552

EXHIBIT 7.5 - SOLVENCY TEST (Dollars In Thousands)

<u>Valuation Date</u>	<u>Actuarial Accrued Liabilities For</u>			<u>Actuarial Accrued Liabilities</u>	<u>Valuation Assets</u>	<u>Portion of Accrued Liabilities Covered by Valuation Assets</u>		
	<u>(1) Active Member Contributions</u>	<u>(2) Retirees and Beneficiaries</u>	<u>(3) Active Members</u>			<u>(1)</u>	<u>(2)</u>	<u>(3)</u>
6/30/2008	207,652	415,349	323,413	946,414	879,051	100%	100%	79.2%
6/30/2009	208,638	453,205	334,904	996,747	919,179	100%	100%	76.8%
6/30/2010	223,373	506,035	303,803	1,033,211	946,640	100%	100%	71.5%
6/30/2011	228,275	546,553	297,316	1,072,144	969,636	100%	100%	65.5%

Section 8: Summary of Actuarial Assumptions

Actuarial Assumptions

This section focuses on the actuarial assumptions used to perform the valuation.

Actuarial Assumptions

To carry out an actuarial valuation of the assets and liabilities of the Association, the actuary must first adopt assumptions with respect to each of the following items:

Noneconomic assumptions

- ◆ The probabilities of members separating from active service on account of nonvested and vested withdrawal, retirement for service, death and disability, and
- ◆ The mortality rates to be experienced among retired persons.

Economic assumptions

- ◆ Interest earnings to be realized on the funds over many years in the future, and
- ◆ The relative increases in a member's salary from the date of the valuation to the date of separation from active service.

Noneconomic Assumptions

Rates of Separation from Active Service

We performed an experience study for the period from July 1, 2008, to June 30, 2011. On the basis of this study we adjusted the probabilities of separation from service. These adjusted probabilities were incorporated in our 2011 valuation. This report reflects the same probabilities of separation.

A complete list of the current rates of separation from active service can be found in Exhibits 8.1 – 8.6. These rates should be viewed in the aggregate rather than examining each of them separately. This is due to the interdependency of the rates. For example, if turnover were to increase, there would be fewer retirements.

Section 8: Summary of Actuarial Assumptions

Economic Assumptions

Inflation

In setting the economic assumptions, we take a building block approach. Specifically, we first look at the rate of inflation, which underlies both the total rate of return and the salary scale assumptions. To aid us in determining an appropriate inflation rate for the Association, we have reviewed long-term historical inflation averages, recent trends, and the assumptions adopted by other public retirement systems. It should be noted that we have placed more emphasis on long-term historical averages and long-term future predictions than on the more recent, short-term trends. This helps to minimize fluctuations, which are more apparent in short term trends.

The rate of inflation is an important assumption used in valuing the Association's liabilities. This assumption underlies both the investment return assumption and the salary increase assumption. These in turn directly impact the employer and employee contribution rates.

If the pattern of inflation during the last 90-year period is analyzed, it may be extrapolated that the current low rates will not continue into the future indefinitely.

Because of the cyclical nature of inflation and the long-term nature of the Association's liabilities, we believe that it is appropriate to assume that the average inflation rate to be experienced over the next 30 to 50 years (which is approximately the lifetime of the Association's present obligations) will be between 3.50% and 4.50%.

Based on the information presented in the economic assumption section of our experience study, we recommend that the current inflation rate assumption remain at 4.00%.

Section 8: Summary of Actuarial Assumptions

Economic Assumptions

Real Rate of Return

In an effort to forecast the expected long-term rate of return on the assets, we use a capital market model (Described in Schedule 5 of the Experience Report) in which individual asset class returns are estimated under a wide variety of simulated economic environments based on their underlying relationships to key economic variables, and then rolled up into a forecast of the performance of a portfolio invested in accordance with the target allocation. The model is calibrated to current economic and market conditions, and trends to a state of equilibrium. Over a 20-year period, the 50th percentile rate of return forecast for such a portfolio is approximately 7.9%.

Applying the Association's target asset allocation to the our model's real rates of return produces a real rate of return of approximately 4.85%. After adjusting for expenses and potential adverse future experience, we believe that a real rate of return of 3.75% provides a reasonable degree of conservatism when used with a 4.00% inflation rate. Thus, we recommend that the 7.75% investment return assumption be continued. In addition, since the reserves are credited semi-annually, the 7.75% rate of investment return is compounded to an effective rate of 7.90%.

Section 8: Summary of Actuarial Assumptions

Economic Assumptions

Salary Scale

The salary scale assumption is developed in a similar manner. The inflation rate is combined with merit and longevity increases to produce a total salary scale assumption.

Merit and Longevity Increases

The merit and longevity component of the total salary scale assumption reflects increases in members' salaries due to promotions, advances in pay grades, etc. These increases are dependent on an individual's membership and are graded downward as members' age.

The overall effect of the merit and longevity increases is to add approximately 1.80% to the total salary scale assumption.

Section 8: Summary of Actuarial Assumptions

The Entry Age Normal Actuarial Cost Method was used in conjunction with the following actuarial assumptions. The UAAL is being funded as a level percentage of payroll over a rolling 15 year period.

1. Interest: 7.90% per annum (7.75% compounded semi-annually).
2. Interest Credited to Employee Accounts: 7.90% per annum (7.75% compounded semi-annually).
3. Inflation: 4.00% per annum.
4. Asset Valuation: Smoothed actuarial value (over 10 years) beginning with fiscal 2009, with no corridor around market value.
5. Salary Scale: See Exhibit 8.7
6. Spouses and Dependents: 88% of General male, 75% of General female and 95% of Safety male, 80% of Safety female active employees assumed married at retirement, with wives assumed three years younger than husbands.
7. Rates of Termination of Employment: See Exhibits 8.1 – 8.3
8. Years of Life Expectancy After Retirement (Exhibit 8.4):
 - General Males - RP-2000 Generational Mortality Table for Males, with no collar of age adjustment.
 - General Females - RP-2000 Generational Mortality Table for Females, with no collar of age adjustment.
 - Safety - RP-2000 Generational Mortality Table for Males, with blue-collar adjustment, and no setback.

Section 8: Summary of Actuarial Assumptions

9. Years of Life Expectancy After Disability Retirement (Exhibits 8.5 and 8.6):
- General Males - RP-2000 Disabled Annuitant Mortality Table for Males, with no setback.
 - General Females - RP-2000 Disabled Annuitant Mortality Table for Females, with no setback.
 - Safety Males - RP-2000 Disabled Annuitant Mortality Table for Males, with a 2-year setback.
 - Safety Females - RP-2000 Disabled Annuitant Mortality Table for Females, with a 2-year setback
 -
10. Life Expectancy After Retirement for Employee Contribution Rate Purposes
- The basic employee contribution rates for General members were calculated on a unisex basis using the RP-2000 Mortality Table projected to 2021 (weighted 30% male and 70% female), with no collar or age adjustment.
 - The basic employee contribution rates for Safety members were based upon the RP-2000 Mortality Table projected to 2021 (weighted 75% male and 25% female), with adjustment for blue-collar workers.
11. Reciprocity Assumption: 65% of members who terminate with a vested benefit are assumed to enter a reciprocal system.
12. Deferral Age for Vested Terminations: Age 60 for General members; age 53 for Safety members.

Section 8: Summary of Actuarial Assumptions

EXHIBIT 8.1 – PROBABILITIES OF SEPARATION FROM ACTIVE SERVICE GENERAL MEMBERS – MALES, RECOMMENDED ASSUMPTIONS

Age	Total Death	Percent Duty	Withdrawal svc < 3	Withdrawal svc 3 to 5	Withdrawal* svc>5	Ordinary Disability	Duty Disability	Service Ret.*
20	0.000345	36.59%	0.15000	0.09000	0.05000	0.00000	0.00000	0.00000
21	0.000357	36.59%	0.15000	0.09000	0.05000	0.00000	0.00010	0.00000
22	0.000366	36.59%	0.15000	0.09000	0.05000	0.00000	0.00010	0.00000
23	0.000373	36.59%	0.15000	0.09000	0.05000	0.00000	0.00010	0.00000
24	0.000376	36.59%	0.15000	0.09000	0.05000	0.00000	0.00010	0.00000
25	0.000376	42.22%	0.15000	0.09000	0.05000	0.00010	0.00010	0.00000
26	0.000378	42.22%	0.15000	0.09000	0.05000	0.00010	0.00010	0.00000
27	0.000382	42.22%	0.15000	0.09000	0.05000	0.00010	0.00010	0.00000
28	0.000393	42.22%	0.15000	0.09000	0.05000	0.00010	0.00010	0.00000
29	0.000412	42.22%	0.15000	0.09000	0.05000	0.00010	0.00010	0.00000
30	0.000444	42.22%	0.15000	0.09000	0.04000	0.00020	0.00010	0.00000
31	0.000499	45.83%	0.15000	0.09000	0.04000	0.00020	0.00010	0.00000
32	0.000562	45.83%	0.15000	0.09000	0.04000	0.00020	0.00010	0.00000
33	0.000631	45.83%	0.15000	0.09000	0.04000	0.00020	0.00010	0.00000
34	0.000702	45.45%	0.15000	0.09000	0.04000	0.00020	0.00010	0.00000
35	0.000773	49.15%	0.15000	0.10000	0.03000	0.00030	0.00010	0.00000
36	0.000841	49.15%	0.15000	0.10000	0.03000	0.00030	0.00020	0.00000
37	0.000904	48.48%	0.15000	0.10000	0.03000	0.00030	0.00020	0.00000
38	0.000964	48.48%	0.15000	0.10000	0.03000	0.00040	0.00020	0.00000
39	0.001021	50.72%	0.15000	0.10000	0.03000	0.00040	0.00030	0.00000
40	0.001079	48.28%	0.09000	0.10000	0.02000	0.00040	0.00040	0.00000
41	0.001142	50.33%	0.09000	0.10000	0.02000	0.00050	0.00050	0.00000
42	0.001215	50.33%	0.09000	0.10000	0.02000	0.00050	0.00060	0.00000
43	0.001299	50.00%	0.09000	0.10000	0.02000	0.00060	0.00070	0.00000
44	0.001397	52.33%	0.09000	0.10000	0.02000	0.00060	0.00080	0.00000
45	0.001508	51.61%	0.09000	0.07500	0.01000	0.00080	0.00100	0.00000
46	0.001616	53.61%	0.09000	0.07500	0.01000	0.00090	0.00120	0.00000
47	0.001734	53.14%	0.09000	0.07500	0.01000	0.00100	0.00140	0.00000
48	0.001860	56.11%	0.09000	0.07500	0.01000	0.00110	0.00160	0.00000
49	0.001995	56.79%	0.09000	0.07500	0.01000	0.00120	0.00180	0.00000
50	0.002138	57.58%	0.09000	0.07500	0.00700	0.00140	0.00200	0.03000
51	0.002449	57.14%	0.09000	0.07500	0.00700	0.00160	0.00250	0.03000
52	0.002667	57.81%	0.09000	0.07500	0.00700	0.00180	0.00300	0.03000
53	0.002916	57.41%	0.09000	0.07500	0.00700	0.00200	0.00350	0.03000
54	0.003196	57.99%	0.09000	0.07500	0.00700	0.00220	0.00400	0.03000
55	0.003624	59.24%	0.09000	0.07500	0.00450	0.00240	0.00450	0.08000
56	0.004200	60.45%	0.09000	0.07500	0.00450	0.00260	0.00500	0.08000
57	0.004693	61.36%	0.09000	0.07500	0.00450	0.00280	0.00550	0.08000
58	0.005273	62.28%	0.09000	0.07500	0.00450	0.00300	0.00600	0.08000
59	0.005945	62.96%	0.09000	0.07500	0.00450	0.00320	0.00650	0.08000
60	0.006747	0.00%	0.09000	0.07500	0.00300	0.00340	0.00700	0.14000
61	0.007676	0.00%	0.09000	0.07500	0.00300	0.00360	0.00750	0.14000
62	0.008757	0.00%	0.09000	0.07500	0.00300	0.00380	0.00800	0.14000
63	0.010012	0.00%	0.09000	0.07500	0.00300	0.00400	0.00850	0.14000
64	0.011280	0.00%	0.09000	0.07500	0.00300	0.00420	0.00900	0.14000
65	0.012737	0.00%	0.00000	0.00000	0.00000	0.00000	0.00000	0.20000
66	0.014409	0.00%	0.00000	0.00000	0.00000	0.00000	0.00000	0.20000
67	0.016075	0.00%	0.00000	0.00000	0.00000	0.00000	0.00000	0.20000
68	0.017871	0.00%	0.00000	0.00000	0.00000	0.00000	0.00000	0.20000
69	0.019802	0.00%	0.00000	0.00000	0.00000	0.00000	0.00000	0.20000
70	0.022206	0.00%	0.00000	0.00000	0.00000	0.00000	0.00000	0.30000
71	0.024570	0.00%	0.00000	0.00000	0.00000	0.00000	0.00000	0.30000
72	0.027281	0.00%	0.00000	0.00000	0.00000	0.00000	0.00000	0.30000
73	0.030387	0.00%	0.00000	0.00000	0.00000	0.00000	0.00000	0.30000
74	0.033900	0.00%	0.00000	0.00000	0.00000	0.00000	0.00000	0.30000
75	0.037834	0.00%	0.00000	0.00000	0.00000	0.00000	0.00000	1.00000

* Rates are also adjusted for service.

Section 8: Summary of Actuarial Assumptions

EXHIBIT 8.2 – PROBABILITIES OF SEPARATION FROM ACTIVE SERVICE GENERAL MEMBERS – FEMALES, RECOMMENDED ASSUMPTIONS

Age	Total Death	Percent Duty	Withdrawal svc<3	Withdrawal svc 3 to 5	Withdrawal* svc>5	Ordinary Disability	Duty Disability	Service Ret.*
20	0.000191	36.59%	0.13000	0.10000	0.04000	0.00000	0.00010	0.00000
21	0.000192	36.59%	0.13000	0.10000	0.04000	0.00000	0.00010	0.00000
22	0.000194	36.59%	0.13000	0.10000	0.04000	0.00000	0.00010	0.00000
23	0.000197	36.59%	0.13000	0.10000	0.04000	0.00000	0.00010	0.00000
24	0.000201	36.59%	0.13000	0.10000	0.04000	0.00000	0.00010	0.00000
25	0.000207	42.22%	0.13000	0.10000	0.04000	0.00010	0.00010	0.00000
26	0.000214	42.22%	0.13000	0.10000	0.04000	0.00010	0.00010	0.00000
27	0.000223	42.22%	0.13000	0.10000	0.04000	0.00010	0.00010	0.00000
28	0.000235	42.22%	0.13000	0.10000	0.04000	0.00010	0.00010	0.00000
29	0.000248	42.22%	0.13000	0.10000	0.04000	0.00010	0.00010	0.00000
30	0.000264	42.22%	0.13000	0.10000	0.04000	0.00010	0.00010	0.00000
31	0.000307	45.83%	0.13000	0.10000	0.04000	0.00010	0.00010	0.00000
32	0.000350	45.83%	0.13000	0.10000	0.04000	0.00010	0.00010	0.00000
33	0.000394	45.83%	0.13000	0.10000	0.04000	0.00010	0.00010	0.00000
34	0.000435	45.45%	0.13000	0.10000	0.04000	0.00010	0.00010	0.00000
35	0.000475	49.15%	0.13000	0.10000	0.02500	0.00070	0.00010	0.00000
36	0.000514	49.15%	0.13000	0.10000	0.02500	0.00070	0.00010	0.00000
37	0.000554	48.48%	0.13000	0.10000	0.02500	0.00070	0.00010	0.00000
38	0.000598	48.48%	0.13000	0.10000	0.02500	0.00110	0.00010	0.00000
39	0.000648	50.72%	0.13000	0.10000	0.02500	0.00110	0.00010	0.00000
40	0.000706	48.28%	0.09000	0.09000	0.01500	0.00120	0.00010	0.00000
41	0.000774	50.33%	0.09000	0.09000	0.01500	0.00130	0.00010	0.00000
42	0.000852	50.33%	0.09000	0.09000	0.01500	0.00140	0.00010	0.00000
43	0.000937	50.00%	0.09000	0.09000	0.01500	0.00140	0.00010	0.00000
44	0.001029	52.33%	0.09000	0.09000	0.01500	0.00150	0.00020	0.00000
45	0.001124	51.61%	0.09000	0.09000	0.01500	0.00160	0.00020	0.00000
46	0.001223	53.61%	0.09000	0.09000	0.01500	0.00180	0.00030	0.00000
47	0.001326	53.14%	0.09000	0.09000	0.01500	0.00200	0.00030	0.00000
48	0.001434	56.11%	0.09000	0.09000	0.01500	0.00240	0.00040	0.00000
49	0.001550	56.79%	0.09000	0.09000	0.01500	0.00260	0.00050	0.00000
50	0.001676	57.58%	0.09000	0.09000	0.01400	0.00280	0.00060	0.05000
51	0.001852	57.14%	0.09000	0.09000	0.01000	0.00300	0.00070	0.05000
52	0.002018	57.81%	0.09000	0.09000	0.01000	0.00320	0.00080	0.05000
53	0.002207	57.41%	0.09000	0.09000	0.01000	0.00340	0.00100	0.05000
54	0.002424	57.99%	0.09000	0.09000	0.01000	0.00380	0.00110	0.05000
55	0.002717	59.24%	0.09000	0.09000	0.01000	0.00420	0.00120	0.07000
56	0.003090	60.45%	0.09000	0.09000	0.01000	0.00440	0.00130	0.07000
57	0.003478	61.36%	0.09000	0.09000	0.01000	0.00460	0.00140	0.07000
58	0.003923	62.28%	0.09000	0.09000	0.01000	0.00480	0.00150	0.07000
59	0.004441	62.96%	0.09000	0.09000	0.01000	0.00500	0.00160	0.07000
60	0.005055	0.00%	0.09000	0.09000	0.00000	0.00520	0.00180	0.13000
61	0.005814	0.00%	0.09000	0.09000	0.00000	0.00540	0.00200	0.13000
62	0.006657	0.00%	0.09000	0.09000	0.00000	0.00580	0.00220	0.13000
63	0.007648	0.00%	0.09000	0.09000	0.00000	0.00600	0.00240	0.13000
64	0.008619	0.00%	0.09000	0.09000	0.00000	0.00620	0.00260	0.13000
65	0.009706	0.00%	0.00000	0.00000	0.00000	0.00000	0.00000	0.22000
66	0.010954	0.00%	0.00000	0.00000	0.00000	0.00000	0.00000	0.22000
67	0.012163	0.00%	0.00000	0.00000	0.00000	0.00000	0.00000	0.22000
68	0.013445	0.00%	0.00000	0.00000	0.00000	0.00000	0.00000	0.22000
69	0.014860	0.00%	0.00000	0.00000	0.00000	0.00000	0.00000	0.22000
70	0.016742	0.00%	0.00000	0.00000	0.00000	0.00000	0.00000	0.30000
71	0.018579	0.00%	0.00000	0.00000	0.00000	0.00000	0.00000	0.30000
72	0.020665	0.00%	0.00000	0.00000	0.00000	0.00000	0.00000	0.30000
73	0.022970	0.00%	0.00000	0.00000	0.00000	0.00000	0.00000	0.30000
74	0.025458	0.00%	0.00000	0.00000	0.00000	0.00000	0.00000	0.30000
75	0.028106	0.00%	0.00000	0.00000	0.00000	0.00000	0.00000	1.00000

* Rates are also adjusted for service.

Section 8: Summary of Actuarial Assumptions

EXHIBIT 8.3 – PROBABILITIES OF SEPARATION FROM ACTIVE SERVICE SAFETY MEMBERS, RECOMMENDED ASSUMPTIONS

Age	Total Death	Percent Duty	Withdrawal svc < 1	Withdrawal svc 1 to 5	Withdrawal* svc >5	Ordinary Disability	Duty Disability	Service Ret.*
20	0.000345	36.59%	0.20000	0.08000	0.04500	0.00000	0.00110	0.00000
21	0.000357	36.59%	0.20000	0.08000	0.04500	0.00000	0.00120	0.00000
22	0.000366	36.59%	0.20000	0.08000	0.04500	0.00000	0.00130	0.00000
23	0.000373	36.59%	0.20000	0.08000	0.04500	0.00000	0.00150	0.00000
24	0.000376	36.59%	0.20000	0.08000	0.04500	0.00000	0.00180	0.00000
25	0.000376	42.22%	0.20000	0.08000	0.04500	0.00050	0.00230	0.00000
26	0.000378	42.22%	0.20000	0.08000	0.04500	0.00050	0.00280	0.00000
27	0.000382	42.22%	0.20000	0.08000	0.04500	0.00050	0.00320	0.00000
28	0.000393	42.22%	0.20000	0.08000	0.04500	0.00050	0.00320	0.00000
29	0.000412	42.22%	0.20000	0.08000	0.04500	0.00050	0.00400	0.00000
30	0.000726	42.22%	0.20000	0.08000	0.03500	0.00070	0.00500	0.00000
31	0.000800	45.83%	0.20000	0.08000	0.03500	0.00070	0.00570	0.00000
32	0.000875	45.83%	0.20000	0.08000	0.03500	0.00070	0.00600	0.00000
33	0.000949	45.83%	0.20000	0.08000	0.03500	0.00070	0.00620	0.00000
34	0.001019	45.45%	0.20000	0.08000	0.03500	0.00070	0.00640	0.00000
35	0.001087	49.15%	0.20000	0.08000	0.03400	0.00090	0.00640	0.00000
36	0.001150	49.15%	0.20000	0.08000	0.01000	0.00090	0.00650	0.00000
37	0.001206	48.48%	0.20000	0.08000	0.01000	0.00090	0.00660	0.00000
38	0.001262	48.48%	0.20000	0.08000	0.01000	0.00090	0.00670	0.00000
39	0.001315	50.72%	0.20000	0.08000	0.01000	0.00090	0.00670	0.00000
40	0.001371	48.28%	0.20000	0.08000	0.01000	0.00120	0.00680	0.00000
41	0.001434	50.33%	0.20000	0.08000	0.01000	0.00120	0.00690	0.00000
42	0.001508	50.33%	0.20000	0.08000	0.01000	0.00120	0.00690	0.00000
43	0.001591	50.00%	0.20000	0.08000	0.01000	0.00140	0.00700	0.00000
44	0.001686	52.33%	0.20000	0.08000	0.01000	0.00160	0.00710	0.00000
45	0.001793	51.61%	0.10000	0.06000	0.01000	0.00190	0.00980	0.10000
46	0.001894	53.61%	0.10000	0.06000	0.01000	0.00210	0.00980	0.10000
47	0.002006	53.14%	0.10000	0.06000	0.01000	0.00260	0.00980	0.10000
48	0.002128	56.11%	0.10000	0.06000	0.01000	0.00300	0.00980	0.10000
49	0.002264	56.79%	0.10000	0.06000	0.01000	0.00350	0.00980	0.10000
50	0.002412	57.58%	0.10000	0.06000	0.00000	0.00400	0.01000	0.10000
51	0.002758	57.14%	0.10000	0.06000	0.00000	0.00440	0.01250	0.10000
52	0.003000	57.81%	0.10000	0.06000	0.00000	0.00490	0.01500	0.10000
53	0.003283	57.41%	0.10000	0.06000	0.00000	0.00540	0.01750	0.10000
54	0.003599	57.99%	0.10000	0.06000	0.00000	0.00580	0.02000	0.05000
55	0.004081	59.24%	0.05000	0.06000	0.00000	0.00650	0.02250	0.20000
56	0.004717	60.45%	0.05000	0.06000	0.00000	0.00750	0.02380	0.12800
57	0.005242	61.36%	0.05000	0.06000	0.00000	0.00840	0.02510	0.12800
58	0.005853	62.28%	0.05000	0.06000	0.00000	0.00960	0.02650	0.12800
59	0.006545	62.96%	0.05000	0.06000	0.00000	0.01100	0.02810	0.15000
60	0.007361	0.00%	0.00000	0.00000	0.00000	0.00000	0.00000	0.20000
61	0.008282	0.00%	0.00000	0.00000	0.00000	0.00000	0.00000	0.20000
62	0.009344	0.00%	0.00000	0.00000	0.00000	0.00000	0.00000	0.20000
63	0.010563	0.00%	0.00000	0.00000	0.00000	0.00000	0.00000	0.20000
64	0.011776	0.00%	0.00000	0.00000	0.00000	0.00000	0.00000	0.50000
65	0.013170	0.00%	0.00000	0.00000	0.00000	0.00000	0.00000	0.50000
66	0.014769	0.00%	0.00000	0.00000	0.00000	0.00000	0.00000	0.50000
67	0.016364	0.00%	0.00000	0.00000	0.00000	0.00000	0.00000	0.50000
68	0.018068	0.00%	0.00000	0.00000	0.00000	0.00000	0.00000	1.00000
69	0.019901	0.00%	0.00000	0.00000	0.00000	0.00000	0.00000	1.00000
70	0.022206	0.00%	0.00000	0.00000	0.00000	0.00000	0.00000	1.00000

* Rates are also adjusted for service.

Section 8: Summary of Actuarial Assumptions

Recommended retirement rates shown above are in the same format (based on age) that we have used before. We recommend incorporating a service element in the rates by applying the following factors, which are based on the experience of retirements by service in the last three plan years:

	Years of Service at Retirement		
	10 – 14.99	15 – 19.99	20 and Over
General Males	1.0	.8	1.1
General Females	.6	1.0	1.0
Safety	.3	.5	1.3

Also, rates of termination among members who elect a deferred pension are a percentage of the withdrawal rates given above by age. The percentages vary by service as shown below:

	Years of Service at Termination			
	5 - 9.99	10 – 14.99	15 – 19.99	20 and Over
General Males	5%	5%	25%	75%
General Females	5%	5%	30%	80%
Safety	5%	10%	50%	100%

Section 8: Summary of Actuarial Assumptions

EXHIBIT 8.4 – YEARS OF LIFE EXPECTANCY AFTER SERVICE RETIREMENT RECOMMENDED ASSUMPTIONS

Age	General		Safety		Age	General		Safety	
	Male	Female	Male	Female		Male	Female	Male	Female
20	60.98	63.57	60.60	63.58	55	27.26	29.49	27.14	29.65
21	60.00	62.58	59.62	62.59	56	26.34	28.56	26.23	28.73
22	59.02	61.59	58.64	61.60	57	25.43	27.64	25.33	27.82
23	58.03	60.60	57.66	60.61	58	24.53	26.73	24.44	26.91
24	57.05	59.61	56.67	59.62	59	23.64	25.83	23.56	26.01
25	56.07	58.62	55.69	58.63	60	22.75	24.94	22.68	25.12
26	55.09	57.63	54.71	57.64	61	21.88	24.05	21.82	24.24
27	54.11	56.64	53.73	56.65	62	21.02	23.18	20.97	23.37
28	53.13	55.65	52.75	55.66	63	20.17	22.33	20.13	22.51
29	52.15	54.66	51.77	54.67	64	19.34	21.49	19.31	21.65
30	51.17	53.67	50.79	53.68	65	18.52	20.66	18.50	20.81
31	50.19	52.68	49.82	52.70	66	17.72	19.85	17.71	19.98
32	49.21	51.70	48.86	51.71	67	16.94	19.05	16.93	19.16
33	48.24	50.71	47.90	50.73	68	16.17	18.26	16.17	18.35
34	47.27	49.73	46.94	49.75	69	15.41	17.49	15.41	17.55
35	46.30	48.75	45.99	48.77	70	14.67	16.73	14.67	16.76
36	45.33	47.77	45.03	47.79	71	13.94	15.99	13.94	15.99
37	44.37	46.79	44.08	46.82	72	13.22	15.27	13.22	15.27
38	43.40	45.81	43.13	45.84	73	12.52	14.56	12.52	14.56
39	42.44	44.84	42.18	44.87	74	11.84	13.86	11.84	13.86
40	41.48	43.86	41.23	43.90	75	11.17	13.18	11.17	13.18
41	40.52	42.89	40.28	42.93	76	10.53	12.52	10.53	12.52
42	39.56	41.92	39.34	41.97	77	9.90	11.87	9.90	11.87
43	38.61	40.95	38.39	41.00	78	9.30	11.24	9.30	11.24
44	37.65	39.98	37.44	40.04	79	8.72	10.62	8.72	10.62
45	36.70	39.01	36.50	39.09	80	8.16	10.02	8.16	10.02
46	35.74	38.05	35.55	38.13	81	7.63	9.45	7.63	9.45
47	34.79	37.09	34.61	37.18	82	7.12	8.88	7.12	8.88
48	33.84	36.13	33.67	36.23	83	6.65	8.34	6.65	8.34
49	32.89	35.17	32.73	35.28	84	6.19	7.82	6.19	7.82
50	31.95	34.21	31.79	34.33	85	5.77	7.32	5.77	7.32
51	31.00	33.26	30.85	33.38	86	5.36	6.85	5.36	6.85
52	30.06	32.31	29.92	32.44	87	4.98	6.41	4.98	6.41
53	29.13	31.36	28.99	31.51	88	4.63	6.01	4.63	6.01
54	28.19	30.42	28.06	30.57	89	4.31	5.64	4.31	5.64
					90	4.02	5.30	4.02	5.30

General Males: RP 2000 Generational Mortality Table for Males, with no collar and age adjustment

General Females: RP 2000 Generational Mortality Table for Females, with no collar and age adjustment

Safety Males: RP 2000 Mortality Table for Males, with blue collar adjustment, and no setback

Safety Females: RP 2000 Mortality Table for Females, with blue collar adjustment, and no setback

Section 8: Summary of Actuarial Assumptions

**EXHIBIT 8.5 – YEARS OF LIFE EXPECTANCY AFTER DISABILITY RETIREMENT
GENERAL MEMBERS – CURRENT ASSUMPTIONS**

Age	Years of Life Expectancy		Age	Years of Life Expectancy	
	Male	Female		Male	Female
20	31.51	47.16	55	15.98	21.73
21	30.51	46.16	56	15.55	21.09
22	30.20	45.50	57	15.12	20.46
23	29.89	44.84	58	14.70	19.83
24	29.57	44.17	59	14.27	19.22
25	29.24	43.50	60	13.86	18.62
26	28.90	42.82	61	13.44	18.02
27	28.55	42.14	62	13.03	17.43
28	28.20	41.45	63	12.62	16.85
29	27.84	40.76	64	12.21	16.27
30	27.47	40.06	65	11.80	15.70
31	27.09	39.36	66	11.39	15.14
32	26.71	38.65	67	10.99	14.58
33	26.31	37.94	68	10.59	14.04
34	25.90	37.22	69	10.20	13.50
35	25.49	36.49	70	9.81	12.98
36	25.07	35.76	71	9.43	12.46
37	24.63	35.03	72	9.05	11.96
38	24.19	34.28	73	8.69	11.47
39	23.73	33.54	74	8.33	11.00
40	23.27	32.79	75	7.99	10.53
41	22.80	32.03	76	7.65	10.09
42	22.31	31.26	77	7.33	9.65
43	21.81	30.49	78	7.02	9.23
44	21.30	29.72	79	6.72	8.81
45	20.78	28.94	80	6.43	8.42
46	20.25	28.15	81	6.16	8.03
47	19.73	27.38	82	5.89	7.66
48	19.23	26.62	83	5.63	7.29
49	18.73	25.88	84	5.38	6.94
50	18.25	25.15	85	5.14	6.61
51	17.78	24.44	86	4.90	6.28
52	17.32	23.74	87	4.66	5.97
53	16.86	23.06	88	4.41	5.67
54	16.42	22.39	89	4.16	5.39
			90	3.90	5.12

Males: RP 2000 Disabled Annuitant Mortality Table for Males, and no setback

Females: RP 2000 Disabled Annuitant Mortality Table for Females, and no setback

Section 8: Summary of Actuarial Assumptions

EXHIBIT 8.6 – YEARS OF LIFE EXPECTANCY AFTER DISABILITY RETIREMENT SAFETY MEMBERS – CURRENT ASSUMPTIONS

Age	Years of Life Expectancy		Age	Years of Life Expectancy	
	Male	Female		Male	Female
20	33.51	49.16	55	16.86	23.06
21	32.51	48.16	56	16.42	22.39
22	31.51	47.16	57	15.98	21.73
23	30.51	46.16	58	15.55	21.09
24	30.20	45.50	59	15.12	20.46
25	29.89	44.84	60	14.70	19.83
26	29.57	44.17	61	14.27	19.22
27	29.24	43.50	62	13.86	18.62
28	28.90	42.82	63	13.44	18.02
29	28.55	42.14	64	13.03	17.43
30	28.20	41.45	65	12.62	16.85
31	27.84	40.76	66	12.21	16.27
32	27.47	40.06	67	11.80	15.70
33	27.09	39.36	68	11.39	15.14
34	26.71	38.65	69	10.99	14.58
35	26.31	37.94	70	10.59	14.04
36	25.90	37.22	71	10.20	13.50
37	25.49	36.49	72	9.81	12.98
38	25.07	35.76	73	9.43	12.46
39	24.63	35.03	74	9.05	11.96
40	24.19	34.28	75	8.69	11.47
41	23.73	33.54	76	8.33	11.00
42	23.27	32.79	77	7.99	10.53
43	22.80	32.03	78	7.65	10.09
44	22.31	31.26	79	7.33	9.65
45	21.81	30.49	80	7.02	9.23
46	21.30	29.72	81	6.72	8.81
47	20.78	28.94	82	6.43	8.42
48	20.25	28.15	83	6.16	8.03
49	19.73	27.38	84	5.89	7.66
50	19.23	26.62	85	5.63	7.29
51	18.73	25.88	86	5.38	6.94
52	18.25	25.15	87	5.14	6.61
53	17.78	24.44	88	4.90	6.28
54	17.32	23.74	89	4.66	5.97
			90	4.41	5.67

Males: RP 2000 Disabled Annuitant Mortality Table for Males, with a 2-year setback

Females: RP 2000 Disabled Annuitant Mortality Table for Females, with a 2-year setback

Section 8: Summary of Actuarial Assumptions

EXHIBIT 8.7 – SALARY INCREASE ASSUMPTION

Years of Service	General Members	Safety Members
0	6.00%	6.30%
1	5.80%	6.15%
2	5.80%	6.15%
3	5.75%	6.10%
4	5.75%	6.10%
5	5.75%	6.00%
6	5.75%	6.00%
7	5.75%	6.00%
8	5.70%	6.00%
9	5.70%	6.00%
10	5.70%	6.00%
11	5.70%	6.00%
12	5.70%	6.00%
13	5.70%	5.95%
14	5.70%	5.95%
15	5.70%	5.95%
16	4.35%	5.95%
17	4.35%	5.95%
18	4.35%	5.95%
19	4.35%	5.95%
20 or more	4.35%	4.40%

Note: Salary scale assumption reflects 4.00% for inflation and graded merit and longevity.

Section 9: Member Data

The June 30, 2011, actuarial valuation of the Association was based on the following data. For comparison, we also show a summary of the June 30, 2010, statistical information.

SUMMARY OF RETIRED MEMBERSHIP			
	<u>June 30, 2010</u>	<u>June 30, 2011</u>	<u>Percentage Change During the Period</u>
GENERAL			
Number	1,846	1,961	6.2%
Total Annual Allowance	\$31,098,752	\$34,253,416	10.1%
Average Total Monthly Allowance	1,404	1,456	3.7%
SAFETY			
Number	335	352	5.1%
Total Annual Allowance	\$10,396,467	\$10,970,852	5.5%
Average Total Monthly Allowance	2,586	2,597	0.4%
TOTAL			
Number	2,181	2,313	6.1%
Total Annual Allowance	\$41,495,219	\$45,224,268	9.0%
Average Total Monthly Allowance	\$1,585	\$1,629	2.8%

SUMMARY OF INACTIVE MEMBERSHIP*			
	<u>June 30, 2010</u>	<u>June 30, 2011</u>	<u>Percentage Change During the Period</u>
GENERAL			
Number	1,549	1,554	0.3%
SAFETY			
Number	217	207	-4.6%
TOTAL			
Number	1,766	1,761	-0.3%

*Includes unclaimed accounts.

Section 9: Member Data

SUMMARY OF ACTIVE MEMBERSHIP			
	<u>June 30, 2010</u>	<u>June 30, 2011</u>	Percentage Change During the Period
GENERAL TIER 1			
Number	94	79	(16.0)%
Annual Payroll*	\$5,862,660	\$4,949,279	(15.6)%
Average Monthly Salary	\$5,197	\$5,221	0.4%
Average Age	58.17	58.92	1.3%
Average Service	29.88	30.90	3.4%
GENERAL TIER 2 & 3			
Numbers	3,319	3,304	(0.5)%
Annual Payroll*	\$161,150,572	\$162,955,607	1.1%
Average Monthly Salary	\$4,046	\$4,110	1.6%
Average Age	43.94	43.88	(0.1)%
Average Service	8.87	9.13	2.9%
SAFETY TIER 1			
Number	10	10	0.0%
Annual Payroll*	\$897,763	\$941,177	4.8%
Average Monthly Salary	\$7,481	\$7,843	4.8%
Average Age	56.92	57.92	1.8%
Average Service	31.22	32.22	3.2%
SAFETY TIER 2 & 3			
Number	818	804	(1.7)%
Annual Payroll*	\$49,900,359	\$51,007,551	2.2%
Average Monthly Salary	\$5,084	\$5,287	4.0%
Average Age	38.10	38.74	1.7%
Average Service	8.70	9.45	8.6%
TOTAL			
Number	4,241	4,197	(1.0)%
Annual Payroll*	\$217,811,354	\$219,853,614	0.9%
Average Monthly Salary	\$4,280	\$4,365	2.0%
Average Age	43.16	43.21	0.1%
Average Service	9.36	9.65	3.1%

* Represents the annualization of active members' pay rates on June 30.

Section 9: Member Data

**AGE AND SERVICE DISTRIBUTION WITH ANNUAL AVERAGE SALARY
OF ACTIVE GENERAL MEMBERS
AS OF JUNE 30, 2011
TIER 1 – MALES**

Current Age	Years of Service							TOTAL
	0-4	5-9	10-14	15-19	20-24	25-29	30 & OVER	
Below 19	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
40-44	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
45-49	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
50-54	0	0	0	0	0	0	2	2
	0	0	0	0	0	0	52,932	52,932
55-59	0	0	0	0	0	0	12	12
	0	0	0	0	0	0	73,801	73,801
60-64	0	0	0	0	2	0	9	11
	0	0	0	0	77,063	0	92,217	89,461
65-69	0	0	0	0	0	0	2	2
	0	0	0	0	0	0	64,840	64,840
70 & Over	0	0	0	0	0	0	1	1
	0	0	0	0	0	0	53,434	53,434
Total	0	0	0	0	2	0	26	28
	0	0	0	0	77,063	0	77,097	77,095

Section 9: Member Data

**AGE AND SERVICE DISTRIBUTION WITH ANNUAL AVERAGE SALARY
OF ACTIVE GENERAL MEMBERS
AS OF JUNE 30, 2011
TIER 1 – FEMALES**

Current Age	Years of Service							TOTAL
	0-4	5-9	10-14	15-19	20-24	25-29	30 & OVER	
Below 19	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
40-44	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
45-49	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
50-54	0	1	0	1	0	1	11	14
	0	39,973	0	51,301	0	40,695	54,193	52,006
55-59	0	1	0	2	2	3	14	22
	0	58,546	0	44,953	74,147	48,872	65,196	61,641
60-64	0	0	0	0	0	1	11	12
	0	0	0	0	0	38,837	48,624	47,808
65-69	0	0	0	0	0	0	3	3
	0	0	0	0	0	0	44,243	44,243
70 & Over	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
Total	0	2	0	3	2	5	39	51
	0	49,260	0	47,069	74,147	45,230	55,806	54,718

Section 9: Member Data

**AGE AND SERVICE DISTRIBUTION WITH ANNUAL AVERAGE SALARY
OF ACTIVE GENERAL MEMBERS
AS OF JUNE 30, 2011
TIER 2 & 3 – MALES**

Current Age	Years of Service							TOTAL
	0-4	5-9	10-14	15-19	20-24	25-29	30 & OVER	
Below 19	1	0	0	0	0	0	0	1
	28,914	0	0	0	0	0	0	28,914
20-24	27	1	0	0	0	0	0	28
	32,159	33,560	0	0	0	0	0	32,209
25-29	61	17	0	0	0	0	0	78
	38,901	47,109	0	0	0	0	0	40,690
30-34	83	47	12	0	0	0	0	142
	52,351	55,060	51,428	0	0	0	0	53,170
35-39	62	31	15	5	0	0	0	113
	51,128	57,443	52,227	75,051	0	0	0	54,065
40-44	30	33	24	12	0	0	0	99
	43,719	61,271	61,903	51,224	0	0	0	54,888
45-49	41	39	22	17	11	0	0	130
	47,950	65,421	64,888	62,499	71,122	0	0	59,921
50-54	35	28	29	11	21	9	0	133
	56,375	56,405	60,832	53,337	89,462	71,675	0	63,361
55-59	25	27	27	17	15	9	8	128
	51,656	63,077	64,764	61,020	67,349	68,431	71,513	62,333
60-64	15	24	20	6	6	4	1	76
	51,333	61,927	62,486	52,310	77,894	87,473	208,025	63,751
65-69	7	10	4	3	2	1	0	27
	91,165	48,776	50,398	69,382	57,508	129,534	0	65,933
70 & Over	3	1	2	1	0	0	0	7
	74,040	31,587	38,600	32,817	0	0	0	51,960
Total	390	258	155	72	55	23	9	962
	48,609	58,389	60,355	58,768	77,339	75,669	86,681	56,530

Section 9: Member Data

**AGE AND SERVICE DISTRIBUTION WITH ANNUAL AVERAGE SALARY
OF ACTIVE GENERAL MEMBERS
AS OF JUNE 30, 2011
TIER 2 & 3 – FEMALES**

Current Age	Years of Service							TOTAL
	0-4	5-9	10-14	15-19	20-24	25-29	30 & OVER	
Below 19	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
20-24	64	1	0	0	0	0	0	65
	31,723	35,476	0	0	0	0	0	31,781
25-29	199	61	0	0	0	0	0	260
	39,850	38,412	0	0	0	0	0	39,512
30-34	169	150	45	0	0	0	0	364
	41,138	47,680	47,368	0	0	0	0	44,604
35-39	104	98	109	19	0	0	0	330
	41,255	49,965	48,670	46,292	0	0	0	46,581
40-44	89	79	83	37	10	0	0	298
	42,617	47,465	45,313	46,718	48,328	0	0	45,354
45-49	65	73	80	44	28	4	0	294
	47,820	47,160	46,411	51,163	52,502	54,152	0	48,305
50-54	38	71	84	40	42	15	6	296
	43,255	48,114	49,437	57,169	55,751	51,025	75,376	50,873
55-59	32	47	64	35	23	11	1	213
	45,786	52,139	51,045	47,574	60,308	60,837	209,367	52,175
60-64	23	42	50	32	21	3	3	174
	42,775	44,841	51,211	42,856	54,521	72,315	46,015	47,696
65-69	3	13	12	6	6	2	1	43
	34,638	47,020	50,476	66,112	60,984	46,817	48,117	51,749
70 & Over	1	2	1	0	0	1	0	5
	29,762	36,768	35,834	0	0	74,647	0	42,756
Total	787	637	528	213	130	36	11	2,342
	41,081	47,181	48,356	49,668	55,329	56,567	77,071	46,359

Section 9: Member Data

**AGE AND SERVICE DISTRIBUTION WITH ANNUAL AVERAGE SALARY
OF ACTIVE SAFETY MEMBERS
AS OF JUNE 30, 2011
TIER 1 – TOTAL**

Current Age	Years of Service							TOTAL
	0-4	5-9	10-14	15-19	20-24	25-29	30 & OVER	
Below 19	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
40-44	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
45-49	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
50-54	2	0	0	0	0	0	0	2
	77,982	0	0	0	0	0	0	77,982
55-59	2	0	0	0	0	2	2	6
	67,423	0	0	0	0	106,354	111,344	95,041
60-64	1	0	0	0	0	0	0	1
	122,234	0	0	0	0	0	0	122,234
65-69	1	0	0	0	0	0	0	1
	92,735	0	0	0	0	0	0	92,735
70 & Over	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
Total	6	0	0	0	0	2	2	10
	84,297	0	0	0	0	106,354	111,344	94,118

Section 9: Member Data

**AGE AND SERVICE DISTRIBUTION WITH ANNUAL AVERAGE SALARY
OF ACTIVE SAFETY MEMBERS
AS OF JUNE 30, 2011
TIER 2 & 3 – TOTAL**

Current Age	Years of Service							TOTAL
	0-4	5-9	10-14	15-19	20-24	25-29	30 & OVER	
Below 19	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
20-24	26	0	0	0	0	0	0	26
	47,817	0	0	0	0	0	0	47,817
25-29	119	32	0	0	0	0	0	151
	53,295	64,332	0	0	0	0	0	55,634
30-34	107	39	14	0	0	0	0	160
	55,662	64,768	70,172	0	0	0	0	59,151
35-39	67	29	34	4	0	0	0	134
	54,647	68,002	75,793	80,984	0	0	0	63,689
40-44	48	19	34	23	6	0	0	130
	59,384	68,715	70,294	72,371	86,701	0	0	67,160
45-49	33	9	18	12	18	4	0	94
	61,530	71,566	67,290	81,367	86,442	96,181	0	72,371
50-54	16	2	8	5	12	4	1	48
	59,086	66,580	67,781	82,900	76,145	94,360	121,168	71,826
55-59	19	8	4	4	3	4	1	43
	66,938	81,917	68,330	63,103	78,623	83,674	85,514	72,301
60-64	7	3	3	1	1	0	0	15
	66,066	69,740	66,914	71,762	67,148	0	0	67,423
65-69	2	1	0	0	0	0	0	3
	101,790	59,828	0	0	0	0	0	87,803
70 & Over	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
Total	444	142	115	49	40	12	2	804
	56,232	67,351	71,103	75,582	82,323	91,405	103,341	63,442

Section 9: Member Data

**AVERAGE ANNUAL BENEFIT AND MEMBERSHIP DISTRIBUTION
OF RETIRED GENERAL MEMBERS
AS OF JUNE 30, 2011
TOTAL**

Current Age	Years of Retirement							TOTAL
	0-4	5-9	10-14	15-19	20-24	25-29	30 & OVER	
Below 45	4	1	1	0	0	0	0	6
	12,689	16,404	14,704	0	0	0	0	13,644
45-49	5	2	2	0	0	0	0	9
	19,811	14,746	17,066	0	0	0	0	18,076
50-54	41	6	4	1	1	0	0	53
	14,230	18,633	5,616	6,911	5,538	0	0	13,776
55-59	141	60	8	3	0	0	0	212
	20,606	12,367	12,048	8,095	0	0	0	17,774
60-64	219	111	53	7	1	1	2	394
	23,705	15,496	10,667	14,534	5,960	4,205	5,525	19,289
65-69	143	154	87	32	6	4	5	431
	23,475	21,865	15,363	10,380	10,834	9,103	8,083	19,802
70-74	42	95	78	37	20	3	2	277
	16,043	23,192	16,132	12,593	12,257	11,022	10,614	17,692
75-79	5	13	65	64	42	30	5	224
	19,136	11,006	16,148	18,716	10,123	11,876	11,686	14,848
80-84	2	2	7	45	61	38	14	169
	42,103	13,206	20,806	15,330	19,264	13,964	10,135	16,531
85 & Over	1	0	2	9	21	66	87	186
	41,308	0	5,938	8,720	15,480	15,962	9,717	12,664
Total	603	444	307	198	152	142	115	1,961
	21,695	18,828	14,772	14,632	14,783	14,183	9,725	17,467

Section 9: Member Data

**AVERAGE ANNUAL BENEFIT AND MEMBERSHIP DISTRIBUTION
OF RETIRED SAFETY MEMBERS
AS OF JUNE 30, 2011
TOTAL**

Current Age	Years of Retirement							TOTAL
	0-4	5-9	10-14	15-19	20-24	25-29	30 & OVER	
Below 45	5	7	2	0	0	0	0	14
	28,183	18,903	21,302	0	0	0	0	22,560
45-49	6	7	2	4	0	0	0	19
	24,114	21,534	24,285	21,583	0	0	0	22,649
50-54	19	4	2	3	0	1	0	29
	25,274	17,186	24,906	22,596	0	27,884	0	23,946
55-59	30	17	4	7	3	2	1	64
	47,452	25,399	23,883	21,563	25,304	31,924	20,043	35,338
60-64	14	35	9	8	2	1	0	69
	54,366	48,947	26,785	25,527	25,435	25,107	0	43,414
65-69	8	24	24	18	2	1	2	79
	27,369	40,481	32,472	22,628	22,068	1,745	15,517	31,064
70-74	0	0	4	12	9	3	6	34
	0	0	31,273	24,832	22,453	20,593	16,151	23,054
75-79	0	0	1	9	8	4	2	24
	0	0	12,723	31,954	33,683	25,354	17,774	29,448
80-84	0	0	0	0	4	2	7	13
	0	0	0	0	22,033	14,137	11,377	15,081
85 & Over	0	0	0	0	1	1	5	7
	0	0	0	0	654	18,802	22,596	18,920
Total	82	94	48	61	29	15	23	352
	38,652	36,897	29,057	24,626	25,215	21,924	16,355	31,167

Section 9: Member Data

**AVERAGE ANNUAL BENEFIT AND MEMBERSHIP DISTRIBUTION
OF RETIRED GENERAL AND SAFETY MEMBERS
AS OF JUNE 30, 2011
TOTAL**

Current Age	Years of Retirement							TOTAL
	0-4	5-9	10-14	15-19	20-24	25-29	30 & OVER	
Below 45	9	8	3	0	0	0	0	20
	21,297	18,591	19,103	0	0	0	0	19,885
45-49	11	9	4	4	0	0	0	28
	22,158	20,026	20,676	21,583	0	0	0	21,179
50-54	60	10	6	4	1	1	0	82
	17,727	18,054	12,046	18,675	5,538	27,884	0	17,373
55-59	171	77	12	10	3	2	1	276
	25,315	15,244	15,993	17,523	25,304	31,924	20,043	21,847
60-64	233	146	62	15	3	2	2	463
	25,548	23,516	13,007	20,397	18,943	14,656	5,525	22,884
65-69	151	178	111	50	8	5	7	510
	23,682	24,375	19,062	14,789	13,643	7,632	10,207	21,547
70-74	42	95	82	49	29	6	8	311
	16,043	23,192	16,870	15,591	15,422	15,808	14,767	18,278
75-79	5	13	66	73	50	34	7	248
	19,136	11,006	16,096	20,348	13,893	13,461	13,425	16,261
80-84	2	2	7	45	65	40	21	182
	42,103	13,206	20,806	15,330	19,434	13,972	10,549	16,427
85 & Over	1	0	2	9	22	67	92	193
	41,308	0	5,938	8,720	14,806	16,004	10,417	12,891
Total	685	538	355	259	181	157	138	2,313
	23,725	21,985	16,704	16,986	16,455	14,923	10,830	19,552

Section 9: Member Data

SUMMARY OF ANNUAL RETIREMENT ALLOWANCES AS OF JUNE 30, 2011

GENERAL MEMBERS

	<u>Number</u>	<u>Annual Allowance</u>
Service		
Males	657	\$ 15,149,253
Females	900	13,881,563
Total	<u>1,557</u>	<u>\$ 29,030,815</u>
Disability		
Males	54	\$ 929,443
Females	98	1,584,681
Total	<u>152</u>	<u>\$ 2,514,124</u>
Beneficiaries		
Males	59	\$ 467,755
Females	193	2,240,722
Total	<u>252</u>	<u>\$ 2,708,477</u>
Total	<u>1,961</u>	<u>\$ 34,253,416</u>

SAFETY MEMBERS

	<u>Number</u>	<u>Annual Allowance</u>
Service		
Males	187	\$ 7,219,209
Females	29	797,550
Total	<u>216</u>	<u>\$ 8,016,759</u>
Disability		
Males	67	\$ 1,655,810
Females	20	407,959
Total	<u>87</u>	<u>\$ 2,063,769</u>
Beneficiaries		
Males	3	\$ 22,695
Females	46	867,629
Total	<u>49</u>	<u>\$ 890,324</u>
Total	<u>352</u>	<u>\$ 10,970,852</u>

Section 10: Summary of Major Plan Provisions

Eligibility	First pay period following date of employment.
Final Average Salary	Highest 12 consecutive months of compensation earnable for Tier 1 members and highest 36 consecutive months of compensation earnable for Tier 2 and Tier 3 members.
Service Retirement	<p>Early retirement</p> <p>Age 50 and 10 years or 30 years for General and 20 years for Safety. Any member who reaches age 70 may retire regardless of service.</p> <p>Benefit</p> <p><i>General Members:</i> For service prior to July 1, 2005: Benefits under Section 31676.11 (Tier 1) and Section 31676.1 (Tier 2 and Tier 3): 1/60 of final average salary times years of service times factor in the table on the following page.</p> <p>For service after June 30, 2005: Benefits under Section 31676.12 (all Tiers): 1/50 of final average salary times years of service times factor in the table on the following page.</p> <p><i>Safety Members:</i> Benefits under Section 31664: 2% of final average salary times years of service times factor in the table on the following page.</p>

Section 10: Summary of Major Plan Provisions

Benefit Factors	General	General	General	Safety
	Tier 1	Tiers 2 & 3	All Tiers	
<u>Age</u>	<u>31676.11</u>	<u>31676.1</u>	<u>31676.12</u>	<u>31664</u>
41				.6258
42				.6625
43				.7004
44				.7397
45				.7805
46				.8226
47				.8678
48				.9085
49				.9522
50	.7454	.7091	.6681	1.0000
51	.7882	.7457	.7056	1.0516
52	.8346	.7816	.7454	1.1078
53	.8850	.8181	.7882	1.1692
54	.9399	.8556	.8346	1.2366
55	1.0000	.8954	.8850	1.3099
56	1.0447	.9382	.9399	1.3099
57	1.1048	.9846	1.0000	1.3099
58	1.1686	1.0350	1.0447	1.3099
59	1.2365	1.0899	1.1048	1.3099
60	1.3093	1.1500	1.1686	1.3099
61	1.3608	1.1947	1.2365	1.3099
62	1.4123	1.2548	1.3093	1.3099
63	1.4638	1.3186	1.3093	1.3099
64	1.5153	1.3865	1.3093	1.3099
65	1.5668	1.4593	1.3093	1.3099

Non Service Connected Disability Retirement 20% if 5 years of service plus 2% for each of the next ten years or service retirement benefit (if eligible).

Service Connected Disability Retirement Greater of 50% of final average salary or service retirement benefit (if eligible).

Integration with Social Security All members' benefits are integrated with Social Security. Benefits based on the first \$161.54 of bi-weekly final average salary are reduced by 1/3.

Section 10: Summary of Major Plan Provisions

Death Before Retirement	<p>If non-service connected before eligible to retire, this benefit is a refund of contributions plus 1/12 of last year's salary per year of service up to 6 years.</p> <p>If eligible for non-service connected disability or service retirement the benefit is 60% of member's accrued allowance.</p> <p>If service connected death, the benefit is 50% of salary.</p>
Death After Retirement	<p>For service retirement or non-service connected disability, the benefit is 60% of member's allowance payable to an eligible spouse.</p> <p>For service connected disability, the benefit is 100% of member's allowance payable to an eligible spouse.</p> <p>\$5,000 lump sum benefit payable to member's beneficiary.</p>
Vesting	<p>After five years of Service</p> <p>Must leave contributions on deposit.</p>
Member Contributions	<p>Based on entry age. Members with 30 or more years of service do not pay member contributions.</p>
Maximum Benefit	<p>100% of final average salary</p>
Cost-Of-Living Benefits	<p>Payable April 1. Up to 3% COLA for Tier 1 members (2% for Tier 2 and Tier 3 members), depending on CPI (Los Angeles–Riverside–Orange) changes for the prior calendar year.</p>

Section 10: Summary of Major Plan Provisions

Supplemental Retiree Benefits Reserve

Level One

A monthly benefit of up to \$360 is provided for members with 20 or more years of service. For members with less than 20 years of service, the benefit is provided in the following schedule:

Years of Service	% of \$360 Full Benefit	Years of Service	% of \$360 Full Benefit
Less than 10	0.00%	15	75.0%
10	50.0%	16	80.0%
11	55.0%	17	85.0%
12	60.0%	18	90.0%
13	65.0%	19	95.0%
14	70.0%	20 +	100.0%

Only years of service with Tulare County are considered. After a member's death, a continuance will be paid to an eligible spouse at one half of the amount payable to the retired member.

The changing of the SRBR benefits created the possibility that some of the current retirees would receive a lower benefit. This possibility was avoided by setting the new SRBR benefit to be no less than the prior benefit.

Level Two

In addition to the \$360 benefit described above, the Board authorized that the SRBR provide a supplemental COLA for retirees and beneficiaries who have lost at least 15% of their purchasing power as measured by their COLA banks.

This program is designed to maintain retiree purchasing power at a minimum of 85% of its original value. For example, Tier 1 members, who retired on or before April 1, 1974, have lost 66% of their original purchasing power (as measured by their COLA bank). These members would receive a Level Two benefit equal to 51% (66% minus 15%) of their benefit.

Level Three

60% survivor benefits to a spouse not married to the member at retirement. To be eligible this spouse must be at least age 55 at the date of the retired members death, be married for at least two years and the member must have elected the Unmodified Allowance retirement option.

Section 11: Glossary of Terms

Following is a glossary of some of the commonly used actuarial terms.

<i>Actuarial Accrued Liability</i>	The portion, as determined by a particular cost method, of the total present value of benefits that is attributable to past service credit.
<i>Actuarial Gain (Loss)</i>	A measure of the difference between actual and expected experience based upon a set of actuarial assumptions. Examples include higher than expected salary increases (loss) and a higher return on fund assets than anticipated (gain).
<i>Actuarial Present Value</i>	Also referred to as the present value of benefits. It is the value, as of a specified date, of an amount payable in the future, where the amount has been adjusted to reflect both the time value of money and the probability that the payment is actually made.
<i>Amortization or UAAL Payment</i>	That portion of the pension plan contribution which is designed to pay off (amortize) the unfunded actuarial accrued liability in a systematic fashion. Equivalently, it is a series of periodic payments required to pay off a debt.
<i>Annual Amount</i>	Estimated contributions due for the year in order to ensure the orderly funding of the pension plan (equal to the contribution rate multiplied by the annual payroll). The annual amount is comprised of normal cost and UAAL payments.
<i>Entry Age Actuarial Cost Method</i>	This method assumes that the annual costs are the level premiums needed from entry age until retirement age to fund the ultimate retirement benefit. These premiums are expressed as a percentage of salary. The portion of this actuarial present value allocated to a valuation year is called the normal cost.
<i>Final Average Salary</i>	The average amount of compensation earned over a specified number of consecutive months preceding retirement during which compensation was highest.
<i>Funding Policy</i>	The policy for the amounts and timing of contributions to be made by the employer, members and any other sources to provide the benefits promised by the pension plan.

Section 11: Glossary of Terms

<i>Noneconomic Actuarial Assumptions</i>	Probabilities that members will separate from active service for causes such as retirement, disability, death and withdrawal, as well as rates of post-retirement mortality. The probabilities reflect the experience of the Association membership.
<i>Normal Cost</i>	The ongoing annual cost allocated to the system by a particular actuarial cost method for providing benefits (future cost). Normal cost payments are made during the working lifetime of the member.
<i>Unfunded Actuarial Accrued Liability</i>	The excess of the actuarial accrued liability over the actuarial value of assets.
<i>Vested Benefit</i>	The benefit an employee is entitled to even if the employee separates from active service prior to normal retirement age.

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