

**Merced County  
Employees' Retirement Association**

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

March 5, 2013



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## Summary of Results

This Actuarial Review and Analysis (Report) of the Merced County Employees' Retirement Association (MCERA, the Plan) has produced an increase in the recommended employer contribution rate. A summary of the status of the Plan is as follows:

	<i>June 30, 2011</i>	<i>June 30, 2012</i>
<b>Plan Membership</b>		
Active	1,980	1,901
Inactive	609	594
Receiving Benefits	1,885	1,996
Total	4,474	4,491
Average Pay	\$57,952	\$57,786
<b>Assets (\$ millions)</b>		
Market Value	\$511.7	\$505.1
Actuarial Value	\$526.7	\$528.7
Valuation Assets	\$524.0	\$528.7
<b>Valuation Results (\$ millions)</b>		
Actuarial Accrued Liability (AAL)	\$933.9	\$975.6
AAL – Including Non-Valuation Liabilities	\$936.7	\$975.6
Unfunded Accrued Liability (UAAL)	\$409.9	\$446.9
Funding Ratio (Valuation)	56.1%	54.2%
Funded Ratio (Market, Valuation)	54.8%	51.8%
Funded Ratio (Actuarial, Including Non-Valuation Liabilities/Reserves)	56.2%	54.2%
Funded Ratio (Inactive-Only)	63.7%	68.4%
Employer Contribution Rate	40.05%	44.10%
Estimated Employer Cost (Based on Estimated Payroll of Current Members)	\$44.6	\$47.0

The recommended employer contribution rate has increased by a little over 4% of active member payroll. The benefit provisions of the Plan remained unchanged from the prior valuation, notwithstanding changes resulting from the addition of new tiers after the valuation date. The increase in the contribution rate over the past year was the net result of several factors:

- The demographic experience of the Plan – rates of retirement, disability, termination, and death – was more negative than was assumed in the actuarial assumptions. Consequently, the net effect of demographic changes was an increase in cost as a percentage of pay and dollar amount.
- Salaries for continuing active Plan members were less than expected, decreasing the cost as a percentage of payroll.
- New entrants joined the Plan to replace terminating and retiring members, increasing covered payroll and the contribution rate.
- The contribution rates (as a percentage of payroll) have increased due to a decline in the payroll base over which the unfunded liability is amortized.
- Costs increased due to lower than expected returns on the actuarial (smoothed) value of Plan assets, caused by the recognition of deferred investment gains and losses from prior years. This was compounded by the cost impact of the one year delay in application of actuarial contribution rates.
- Changes were made in mortality assumptions and employee contribution assumptions which lowered both employer and employee contribution rates.

There are a number of factors that can be expected to impact costs in the future:

- The liabilities and contribution rates determined in this Valuation are based on a set of actuarial assumptions. Despite the care and effort expended in determining the most accurate possible set of assumptions, the future experience of the Plan will certainly differ from what we assume. As a result, actuarial gains or losses will occur annually, and the employer contribution rate will fluctuate.
- There are investment losses that are deferred by the actuarial smoothing method and not included in the actuarial value of assets used to determine the employer contribution rate. The ratio of the actuarial value of Plan assets to the market value is 105%: about 5% of Plan actuarial assets are in fact losses that have yet to be recognized. This is likely to cause a cost increase over the next year as these losses are recognized in the actuarial value of assets.
- Based on the assumptions and cost method, Plan assets are currently below the target level of assets determined by the cost method; consequently, there is an unfunded actuarial accrued liability. As a result, the employer contribution consists of two components: The normal cost and the amortization of the unfunded actuarial accrued liability.

The employer normal cost of 10.0% of payroll represents the cost of the additional benefits earned each year by active Plan members. The balance of the employer contribution rate represents the amortization of the unfunded liability, which is a payment designed to bring the Plan's assets up to the target level set by the actuarial cost method.

## Purpose of the Report

This Report presents the results of an actuarial review and analysis of the Merced County Employees' Retirement Association as of June 30, 2012. This Report is for the use of MCERA and its auditors in preparing financial reports in accordance with applicable law and accounting requirements. This Report was prepared exclusively for MCERA for the purposes described herein. This report is not intended to benefit any third party, and we assume no duty or liability to any such party.

The purposes of this Report are:

- To review the experience of the Plan over the past year and to discuss reasons for changes in Plan cost;
- To compute the annual contribution required to fund the Plan in accordance with actuarial principles;
- To discuss and project any emerging trends in Plan costs; and
- To present those items required for disclosure under Statement No. 25 of the Governmental Accounting Standards Board (GASB).

## Organization of the Report

This Report is organized in five sections:

- This Summary presents the conclusions of the Report and discusses the reasons for changes since the last valuation.
- Section 1 below contains an outline of the Plan provisions on which our calculations are based, statistical data concerning Plan participants, and a summary of the actuarial assumptions used to compute liabilities and costs. A glossary of actuarial terms is also included.
- Section 2 presents information concerning Plan assets, including balance sheets and income statements from June 30, 2011 to June 30, 2012. The actuarial value of Plan assets is also computed in this Section.
- Section 3 contains the calculation of actuarial liabilities and the employer contribution rate, as well as the actuarial balance sheet and development of gain and loss.
- Section 4 contains pension plan information required under Statement No. 25 of the Governmental Accounting Standards Board.
- The Appendices contains employee and employer contribution rates by Group, Class and Tier, as well as additional information necessary for completing the Plan's Comprehensive Annual Financial Report (CAFR).

### Change in Plan Cost from June 30, 2011 to June 30, 2012

The table below summarizes the impact of actuarial experience and changes in assumptions and funding policy on Plan cost, starting from the results as of June 30, 2011.

	<i>Employer Cost</i>	<i>Next Fiscal Year Employer Contribution Rate (% Payroll)</i>
<b>June 30, 2011</b>	<b>\$44,594,704</b>	<b>40.05%</b>
Change in Cost Due to:		
Demographic Experience during 2011-2012	1,204,568	1.70%
Salary Experience during 2011-2012	(1,194,836)	(0.78%)
New Entrants to the Plan	615,290	0.08%
Investment Experience during 2011-2012	2,888,374	2.71%
Impact of 12-month delay in contribution rates and contribution shortfall	365,546	0.34%
Amortization Payroll	0	1.38%
Assumption Changes	(1,466,404)	(1.38%)
<b>Total Cost as of June 30, 2012</b>	<b>\$47,007,242</b>	<b>44.10%</b>

The changes affecting the cost from 2011 to 2012 are described below:

- Demographic experience caused an increase in the contribution rate.

The actual demographic experience of the Plan – rates of retirement, death, disability, and termination, as well as other factors, such as sick leave credit and cost of living assumptions – was less favorable than was predicted by the actuarial assumptions in aggregate. There were less than half as many withdrawals (26) as were expected (64,) and nearly twice as many retirements (122) as expected (71). These deviations from the assumed experience produced actuarial losses and an increase in the employer contribution rate of 1.70% of pay, or approximately \$1,200,000.

- Pay increases were lower than expected.

Increases in pay among active members during 2011-2012 were below those anticipated by the actuarial assumptions, decreasing the cost as a dollar amount by almost \$1.2 million and by 0.78% as a percentage of payroll.



- New members entered the Plan.

While the total number of active members in the Plan decreased by 79 members from June 30, 2011 to June 30, 2012, there were 128 new hires and rehires entering the Plan to replace departing members.

These new hires were not included in the prior valuation cost calculations. The impact of the new hires was to increase the employer contribution rate by 0.08% of payroll, and the addition of these new members increased member payroll by \$5.2 million, increasing the Plan cost in dollar terms by about \$0.6 million.

- The one year contribution rate delay and the shortfall in the FY2012 contribution caused a cost increase.

We have calculated the impact of the one year delay in the contribution rate (i.e. the use of the June 30, 2010 contribution rate for the computation of the FY2012 contribution). Given that the amount the employer actually contributed for FY2012 (\$40.3 million) was less than the actuarial cost (\$44.6 million), there was a loss. This phenomenon caused the employer cost to increase by 0.34% of pay, or about \$0.4 million.

This type of loss will occur in any year in which the contribution rate has increased. Conversely, a decrease in the contribution rate will result in a gain in the following year.

- Changes in the payroll used to amortize the unfunded liability increased the cost as a percentage of payroll.

Under the level percentage of payroll amortization method that is currently part of the funding policy, the amortization payment is generally determined based on an assumption that total payroll will increase each year (by 3.75% under the assumptions in place as of the prior valuation). The amortization payment is recalculated each year, based on the unfunded liability determined as of the valuation date, and then divided by the current year projected payroll to compute the amortization amount as a percentage of pay. If pay does not increase by the projected salary growth assumed in the amortization calculation, the amortization payment will be larger as a percentage of pay, though the dollar amount is the same.

In the prior valuation, we included an assumption that there would be no overall payroll growth for the current year in the calculation of the amortization payment. This offset the impact described above – where the cost as a percentage of pay will increase if payroll does not grow. However, if – as was the case this year – the payroll base actually decreased, then the amortization payment will still be larger as a percentage of pay, though the dollar amount is the same. This increased the employer contribution rate by 1.38% of pay.

- Growth in the valuation assets produced an actuarial loss.

The return on the *market* value of assets was -1.6% (net of expenses) over the fiscal year 2012. The return on the *actuarial* value of assets was 0.56%. The return on the actuarial value of the *valuation assets* (excluding the non-valuation reserves) was 0.96%.

The higher return on the market value of assets (-1.6% versus 0.6%) is a result of the delayed recognition of asset losses and gains from prior years. Under the actuarial smoothing policy previously implemented by the Board, only 20% of the gains or losses occurring in a given year are recognized in that year – with the remaining portion recognized over the next four years at 20% per year.

The difference between the return on valuation assets and the return on the actuarial value of assets (1.0% versus 0.6%) is a result of the impact of the small reserves - the Ad-hoc COLA reserve and the 401(h) reserve - that were excluded in the June 30, 2011 actuarial valuation, but are no longer present in the June 30, 2012 actuarial valuation.

The actuarial assumption from the prior valuation provides that the valuation assets are assumed to earn 7.75% each year. Thus the lower-than-expected return of 0.56% on the valuation assets produced an actuarial loss that increased Plan costs by 2.71% of active member payroll, or about \$2.9 million.

The above sources of actuarial gains and losses combined to increase Plan cost by 5.43% of payroll from 2011 to 2012, or \$3.9 million. In addition to the gains and losses described above, there were other changes that affected Plan cost:

- The assumptions for female mortality were updated.

We noticed during a review of the prior year's valuation that female mortality was not fully updated following the experience study. We have updated the female mortality rates from the 1994 GAM female table to a more current table – the Retired Pensioners (RP) 2000 Combined Healthy female table. This reduced the employer cost by 1.34% of payroll.

- An assumption used for calculating employee contributions changed.

For Tier 1 employees, the calculation of the cost of providing 50% of the cost of the COL adjustments now includes the value of the Joint & Survivor (J&S) portion of their benefits. Previously, these members were assumed to contribute the amount necessary to fund the cost of a straight life annuity. This reduced the employer cost by 0.04% of payroll.

The net impact of these changes decreased the current year employer contribution by 1.38% of payroll, or \$1.5 million. The total net change in employer cost was a 4.05% increase as a percentage of payroll.

## Future Trends

There are a number of factors that can be expected to affect costs in the future:

- The liabilities and contribution rates determined in this Report are based on a set of actuarial assumptions. Despite the care and effort expended in determining the most accurate possible set of assumptions, the future experience of the Plan will certainly differ from what we assume.
- Subsequent to the valuation date, the California Public Employees' Pension Reform Act of 2013 (AB340) was passed by the Legislature. This legislation makes significant changes for public pension plans in California, including new benefit formulas and compensation limits for new hires, changes to the pay to be included in the calculation of benefits, and changes to cost sharing provisions.

This report does not reflect any of the new provisions provided under AB340. In general, it is expected that the impact of AB340 will be to reduce benefits for new hires and increase contribution rates for the employees (and thus reduce employer contributions), but the Plan will not be significantly affected by the new provisions until a substantial number of new members have been hired.

- One of the most important measures of a plan's risk is the ratio of plan assets to payroll. The table below shows MCERA assets as a percentage of active member payroll. This ratio indicates the sensitivity of the Plan to the returns earned on Plan assets. We note in the table that Plan assets currently are over six times covered payroll for the Plan; as funding improves and the Plan reaches

100% funding, the ratio of asset to payroll will increase to almost nine times payroll, perhaps higher depending on the Plan's demographic makeup.

June 30, 2012	
Active Member Payroll	106,580,933
Assets (Market Value)	505,132,599
Ratio of Assets to Payroll	4.74
Ratio with 100% Funding	9.15

To appreciate the impact of the ratio of assets to payroll on plan cost, consider the situation for a new plan with almost no assets. Even if the assets suffer a bad year of investment returns, the impact on the plan cost is nil, because the assets are so small.

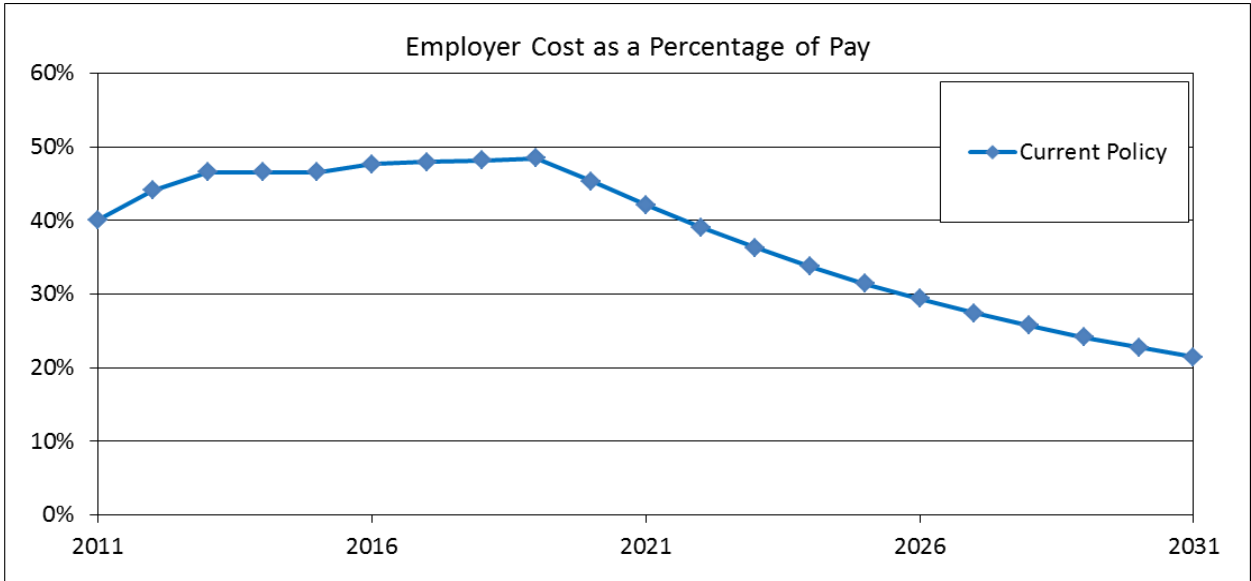
On the other hand, consider the situation for MCERA. Suppose MCERA's assets lose 10% of their value in a year. Since they are assumed to earn 7.75%, there is an actuarial loss of 17.75% of plan assets. Based on the current ratio of asset to payroll (474%), that means the loss in assets is about 84% of active payroll (474% of the 17.75% loss). There is only one place for the loss to come from: The employers. Consequently, barring future offsetting investment gains, the employer has to make up the asset loss in future contributions. This shortfall will require an annual amortization payment in the vicinity of 6.8% of member pay for the multiple years of the amortization period.

As the funding of the Plan improves, the impact of investment gains or losses will increase. A 10% loss, representing 84% of payroll now, will be about 162% of payroll when the Plan is fully funded (915% of the 17.75% loss). At that time, this shortfall will require an amortization payment of about 13.2% of member pay each year.

Therefore, as the Plan matures and becomes better funded, the uncertainty attached to the employer contribution will increase.

- There are investment losses that are deferred by the actuarial smoothing method and have not been recognized in the actuarial value of assets used to determine the employer contribution rate. The ratio of the actuarial value of Plan assets to the market value is now 104.7%; that means that almost 5% of Plan assets (or approximately \$24 million) actually represents investment losses that have yet to be recognized. If the cost of the Plan were determined using the market value of valuation assets (rather than the actuarial value), the cost of the Plan would increase by nearly 2% of pay, to 45.9%, or \$48.9 million.

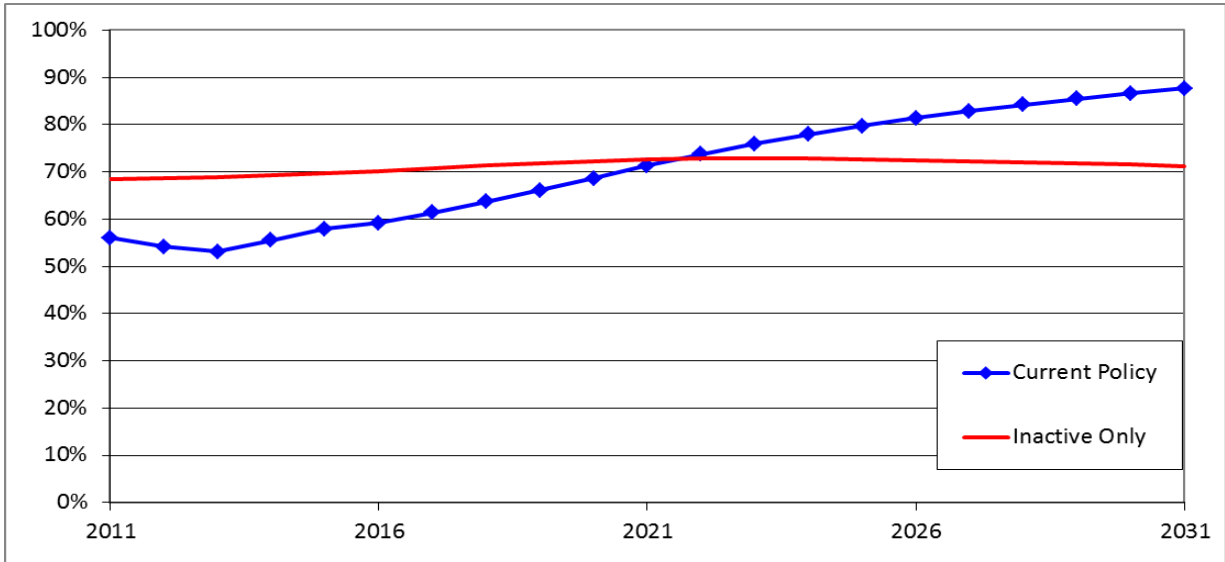
The graph below shows a projection of the actuarial employer cost of the Plan over the next 20 years. The current projection uses a 17 year amortization period for 2012, declining by one year until the minimum period of 10 years is reached. A 7.75% return on the market value of Plan assets is assumed for all future years.



We note in the graph above that the assumed Plan cost increases moderately in the next year, as the final portion of the deferred losses from FY2009 are recognized, and then remains fairly stable for several years before the cost begins to decline as the unfunded liability is amortized. The actual cost of the Plan in future years will be determined largely by the investment return produced on Plan assets.

The graph below shows a projection of the funded ratio using the smoothed valuation assets over the same time period, again assuming a 7.75% return on the market value of Plan assets for all future years and the same amortization policy.

The red line represents the portion of the total actuarial liability that is based on benefits for inactive participants only. Since the Plan's funded ratio has dropped below the Inactive Funded Ratio, it indicates that liabilities for inactive members are not fully funded, and moreover that no Plan assets have been set aside to fund future benefits for current active employees.



We note in the above graph that, even if all actuarial assumptions are met, it will be 10 years before the liability for inactive members (retired and disabled members, terminated vested members, and beneficiaries) is funded. Only then will assets be accumulated to pre-fund retirement benefits for active members.

## Actuarial Certification

This report presents the results of the annual actuarial review of the MCERA Retirement Plan as of June 30, 2012. The prior review was conducted as of June 30, 2011.

Data on active and inactive Members and their beneficiaries as of the valuation date was supplied by the Plan Administrator on electronic media. As is usual in studies of this type, Member data was neither verified nor audited. However, we conducted an examination of all participant data for reasonableness and consistency. The financial information provided by the Plan Administrator included the Statement of Changes in Plan Net Assets Available for Benefits and Statement of Plan Net Assets Available for Benefits, both of which are included in the Plan's Comprehensive Annual Financial Report.

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 the valuation date, the amortization period is 17 years.

The funding objective of the Plan is to accumulate assets during the working lifetime of each member so that, at retirement, sufficient assets will be on hand to provide the member the promised benefit. For actuarial valuation purposes, Plan assets are valued at Actuarial Value with adjustments for certain Special Reserves. Under this method, the assets used to determine employer contribution rates take into account market value by spreading all investment gains and losses (returns above or below

expected returns) over a period of five years, limited by a corridor that restrains the Actuarial Value to within 30% of the Market Value of assets.

The actuarial assumptions were developed by the EFI and approved by the Board during the course of an analysis of experience which covered the period from July 1, 2007 through June 30, 2010. The assumptions used in the most recent valuation are intended to produce results that will reasonably approximate the anticipated future experience of the Plan. The next experience analysis is expected to cover the years 2010 through 2013.

Our firm has prepared all of the schedules presented in the actuarial report.

GASB Statement No. 25 requires preparation of trend data schedules of funding status and employer contributions. To produce the required schedules, we have relied upon information from our files and contained in the reports of other actuaries employed by the sponsor in completing the schedules.

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 Statement No. 25. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein. This report does not address any contractual or legal issues. We are not attorneys, and our firm does not provide any legal services or advice.

Respectfully Submitted,



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## **Section 1:**

### **Summary of Plan Provisions, Member Statistics, and Actuarial Assumptions**

## 1.1: Brief Outline of Plan Provisions<sup>1</sup>

### Definitions

#### *Compensation*

Compensation means the cash remuneration for services paid by the employer. It includes base pay and certain differential, incentive, and special pay allowances defined by the Board of Retirement. Overtime is excluded, with the exception of overtime paid under the Fair Labor Standards Act that is regular and recurring.

#### *Credited Service*

In general, Credited Service is earned for the period during which Member Contributions are paid. One year of service credit is earned for each 2,080 hours worked (not including overtime), not to exceed one year of service per year.

Temporary service for which the Member was not credited, or service for which the Member withdrew his or her Member Contributions, may be purchased by paying or repaying the Member Contributions with interest. The categories of services for which credit may be purchased are listed below:

- **Prior Part-time Service:** If a Member worked for an employer within the Association on a part-time or 'extra help' basis before his membership in the Retirement Association, the Member may buyback this service.
- **Intermittent Part-time Service**
- **Prior full time Service:** Member may buyback full time service that may have been cashed out upon termination.
- **Leave of Absence (Including absence with State Disability or Worker's Compensation):** No unpaid leave of absence can be bought back except for absence due to medical reasons of up to one year.
- **Public Service:** Members may purchase service credit for prior service in the following public agencies: Federal Civil Service, Military Service and some public employers in California. This service is only eligible for purchase when the Board of Supervisors opens the window for purchase.
- **Military Time:** Members who resign or obtain a leave of absence to enter the military may purchase service credit for the period of military service. Members must re-enter

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<sup>1</sup> This valuation does not reflect the impact of AB340, which will require new benefit provisions for those hired on or after January 1, 2013. It also does not reflect the impact of any other new benefit tiers that may apply to members hired on or after the valuation date.

employment within one year of terminating military service to be eligible to purchase service.

At retirement, Members have the option to convert 100% of sick leave time into retirement years of service credit. Unrepresented management and Unit 7 will instead have some or all of their sick leave contributed to the Post Employment Health Plan.

### ***Final Compensation***

For Tier 1 Members, Final Compensation means the highest average Compensation earned during any 26 consecutive pay periods of the Member's employment. For Tier 2 Members, Final Compensation means the highest average Compensation earned during any 78 consecutive pay periods of the Member's employment.

The following compensation may be included in the Final Compensation computation:

- Loyalty Bonus
- Up to 160 hours of vacation payoff
- Sick Leave sold back during 25<sup>th</sup> pay period
- Vacation sold back during 25<sup>th</sup> pay period (management only)

### ***General Member***

Any Member who is not a Safety Member is a General Member.

### ***Public Service***

During designated periods of time authorized by the County Board of Supervisors, Members may elect to purchase Public Service for time spent while employed in another recognized public agency. The public agency must have a reciprocal agreement with the Plan or be one of several specified municipalities, counties, special districts, or State and Federal agencies. Public Service cannot be purchased if it is used for eligibility for another pension.

The cost to purchase Public Service is twice the Member Contributions and interest applicable for the period of time purchased. Public Service is used to compute benefits, but does not count toward eligibility for benefits or vesting.

### ***Safety Member***

Any sworn Member engaged in law enforcement or as a probation officer is a Safety Member.

## **Membership**

### ***Eligibility***

All full-time, and variable-shift permanent employees of Merced County and other participating employers become Members on their first date of service. Membership is mandatory; only elected officials and those entering employment at age 60 or older who are not reciprocal members of another system may choose not to participate.

**Member Contributions**

Each Member contributes a percentage of Compensation to the Plan through a pre-tax payroll deduction. The percentage contributed depends on the Member's age upon joining the Plan. Representative rates are shown in Table 1 below (full rate table in appendix).

Members covered by Social Security have their contributions reduced by one-third on the first \$161.54 of biweekly Compensation. General Members who joined the Plan prior to March 7, 1973 and who have earned 30 years of Credited Service do not contribute; Safety Members do not contribute after earning 30 years of Credited Service.

Interest is credited semiannually to each Member's accumulated contributions. The crediting rate is set by the Board, and will fluctuate between zero and two percent less than the assumed rate of return (currently 7.75% - 2.00% = 5.75%), based in part on the investment earnings during that period.

**Table 1 (a): General Member Contribution Rates**

Entry Age	Basic Rate – Tier 1		Basic Rate – Tier 2		Cost of Living Rate – Tier 1	
	1 <sup>st</sup> \$350/month	Over \$350	1 <sup>st</sup> \$350/month	Over \$350	1 <sup>st</sup> \$350/month	Over \$350
20	4.35%	6.53%	4.01%	6.02%	1.34%	2.01%
25	4.93%	7.40%	4.55%	6.82%	1.47%	2.20%
30	5.60%	8.40%	5.17%	7.75%	1.63%	2.44%
35	6.35%	9.52%	5.80%	8.70%	1.85%	2.78%
40	6.91%	10.36%	6.25%	9.38%	2.01%	3.02%
45	7.26%	10.89%	6.57%	9.86%	2.12%	3.18%
50	7.68%	11.52%	6.91%	10.37%	2.08%	3.12%

**Table 1 (b): Safety Member Contribution Rates**

Entry Age	Basic Rate – Tier 1		Basic Rate – Tier 2		Cost of Living Rate – Tier 1	
	1 <sup>st</sup> \$350/month	Over \$350	1 <sup>st</sup> \$350/month	Over \$350	1 <sup>st</sup> \$350/month	Over \$350
20	5.35%	8.02%	4.91%	7.37%	2.89%	4.33%
25	5.94%	8.92%	5.46%	8.19%	3.09%	4.64%
30	6.64%	9.95%	6.09%	9.14%	3.27%	4.91%
35	7.38%	11.07%	6.68%	10.02%	3.29%	4.94%
40	7.83%	11.75%	7.09%	10.63%	3.34%	5.02%
45	8.22%	12.34%	7.33%	11.00%	3.50%	5.26%
50	8.17%	12.26%	7.82%	11.73%	3.53%	5.30%

## **Service Retirement**

### ***Eligibility***

Tier 1 General Members are eligible to retire at age 50 if they have earned ten years of Credited Service. Members hired prior to December 31, 1978 may retire upon reaching age 65 with no service requirement.

Tier 2 General Members are eligible to retire at age 55 if they have earned ten years of Credited Service or upon reaching age 70 with no service requirement.

Alternatively, all General Members are eligible to retire at any age after having earned 30 years of Credited Service, or upon reaching age 70 with no service requirement.

Safety Members are eligible to retire at age 50 if they have earned ten years of Credited Service. Alternatively, Safety Members are eligible to retire at any age after having earned 20 years of Credited Service, or upon reaching age 70 with no service requirement. Members hired prior to December 31, 1978 may retire upon reaching age 65 with no service requirement.

### ***Benefit Amount***

The Service Retirement Benefit payable to the Member is equal to the Member's Final Compensation multiplied by credited service, the benefit factor from Table 2 and the age factor from Table 3 corresponding to the Member's code section. The appropriate code sections for each group are listed in Table 2. For General members in the Merced County Cemetery District and those in Deferred Inactive Reciprocity status prior to March 15, 2005, benefits are calculated using the formula in Government Code Section 31676.11 or 31676.1.

For all Members, the percentage of Final Compensation may not exceed 100%. For those members integrated with Social Security, Retirement Benefits based on the first \$350 of monthly Final Average Compensation are reduced by one-third.

**Table 2: Member Group Descriptions**

Group	Open or Closed	FAP	Max COLA	Code Section	Description	Top	
						Retirement Factor	Age Benefit Factor
General Tier 1	Closed <sup>2</sup>	1	3	31676.17	3% at 60	60	3.00%
General Tier 2	Open	3	0	31676.17	3% at 60	60	3.00%
Safety Tier 1	Closed <sup>1</sup>	1	3	31664.1	3% at 50	50	3.00%
Safety Tier 2	Open	3	0	31664.1	3% at 50	50	3.00%

**Table 3: Age Factors**

Age	Safety	General	General
	3% at Age 50 CERL §: 31664.1	3% at Age 60 CERL §: 31676.17	2% at Age 58 ½ CERL §: 31676.11
41.00	0.6258	N/A	N/A
42.00	0.6625	N/A	N/A
43.00	0.7004	N/A	N/A
44.00	0.7397	N/A	N/A
45.00	0.7805	N/A	N/A
46.00	0.8226	N/A	N/A
47.00	0.8678	N/A	N/A
48.00	0.9085	N/A	N/A
49.00	0.9522	N/A	N/A
50.00	1.0000	1.0000	0.7454
51.00	1.0000	1.0500	0.7882
52.00	1.0000	1.1000	0.8346
53.00	1.0000	1.1500	0.8850
54.00	1.0000	1.2000	0.9399
55.00	1.0000	1.2500	1.0000
56.00	1.0000	1.3000	1.0447
57.00	1.0000	1.3500	1.1048
58.00	1.0000	1.4000	1.1686
59.00	1.0000	1.4500	1.2365
60.00	1.0000	1.5000	1.3093
61.00	1.0000	1.5000	1.3608
62.00	1.0000	1.5000	1.4123
63.00	1.0000	1.5000	1.4638
64.00	1.0000	1.5000	1.5153
65.00	1.0000	1.5000	1.5668

<sup>2</sup> Open for "A" Level management only.

### ***Form of Benefit***

The Service Retirement Benefit will be paid monthly beginning at retirement and for the life of the Member. If the member selects the unmodified benefit form, in the event of the Member's death 60% of the benefit will continue for the life of the Member's eligible spouse or domestic partner or to the age of majority of dependent minor children if there is no eligible spouse or domestic partner. To be eligible to receive this benefit, a surviving spouse or domestic partner must be married or state-registered at least one year prior to retirement. In the event there is no eligible surviving spouse, domestic partner or minor children, any unpaid remainder of the Member's accumulated contributions will be paid to the Member's designated beneficiary.

Actuarially equivalent optional benefit forms are also available.

Annually on April 1, Tier 1 benefits are increased to reflect increases in the CPI for the San Francisco Bay Area. Annual increases may not exceed 3%, but CPI increases above this figure are "banked" and used for future increases when the CPI increases by less than 3%.

A lump sum benefit of \$3,000 will be payable upon the death of a retired member.

### **Service-Connected Disability**

#### ***Eligibility***

Members are eligible for Service-Connected Disability Retirement benefits at any age if they are permanently disabled as a result of injuries or illness sustained in the line of duty.

#### ***Benefit Amount***

The Service-Connected Disability Retirement Benefit payable to Members is equal to the greater of 50% of their Final Compensation or – if the Member is eligible at disability for a Service Retirement Benefit – the Service Retirement Benefit accrued on the date of disability.

Members who return to work at a different position with lower pay may receive a Supplemental Disability Allowance that, when added to their new pay, may bring the Member's total income up to his or her pay prior to becoming disabled. The Supplemental Disability Allowance may not exceed the Service-Connected Disability Retirement benefit.

### ***Form of Benefit***

The Service-Connected Disability Retirement Benefit will be paid monthly beginning at the effective date of disability retirement and for the life of the Member; in the event of the Member's death, 100% of the benefit will continue for the life of the Member's eligible spouse or domestic partner or to the age of majority of dependent minor children if there is no eligible spouse or domestic partner. In the event there is no eligible surviving spouse, domestic partner or minor children, any unpaid remainder of the Member's accumulated contributions will be paid to the Member's designated beneficiary.

Actuarially equivalent optional benefit forms are also available.

Annually on April 1, Tier 1 benefits are increased to reflect increases in the CPI for the San Francisco Bay Area. Annual increases may not exceed 3%, but CPI increases above this figure are “banked” and used for future increases when the CPI increases by less than 3%.

A lump sum benefit of \$3,000 will be payable upon the death of a retired member.

## **Nonservice-Connected Disability**

### ***Eligibility***

Members are eligible to for Nonservice-Connected Disability Retirement benefits if they are permanently disabled at any age after earning five years of Credited Service or after becoming eligible for a deferred vested benefit.

### ***Benefit Amount***

The Nonservice-Connected Disability Retirement Benefit payable to General Members is equal to the greatest of:

- 1.5% of Final Compensation at disability multiplied by years of Credited Service at disability;
- 1.5% of Final Compensation at disability multiplied by years of Credited Service projected to age 65, but not to exceed one-third of Final Compensation
- If the Member is not eligible at disability for a Service Retirement Benefit, the 90% of the Service Retirement Benefit accrued on the date of disability; or
- If the Member is eligible at disability for a Service Retirement Benefit, the Service Retirement Benefit accrued on the date of disability.

The Nonservice-Connected Disability Retirement Benefit payable to Safety Members is equal to the greatest of:

- 1.8% of Final Compensation at disability multiplied by years of Credited Service at disability;
- 1.8% of Final Compensation at disability multiplied by years of Credited Service projected to age 55, but not to exceed one-third of Final Compensation;
- If the Member is not eligible at disability for a Service Retirement Benefit, the 90% of the Service Retirement Benefit accrued on the date of disability; or
- If the Member is eligible at disability for a Service Retirement Benefit, the Service Retirement Benefit accrued on the date of disability.

Members who return to work at a different position with lower pay may receive a Supplemental Disability Allowance that, when added to their new pay, may bring the Member's total income up to his or her pay prior to becoming disabled. The Supplemental Disability Allowance may not exceed the Nonservice-Connected Disability Retirement benefit.



### ***Form of Benefit***

The Nonservice-Connected Disability Retirement Benefit will be paid monthly beginning at the effective date of disability retirement, and for the life of the Member; in the event of the Member's death, 60% of the benefit will continue for the life of the Member's eligible spouse or domestic partner or to the age of majority of dependent minor children if there is no eligible spouse or domestic partner. In the event there is no eligible surviving spouse, domestic partner or minor children, any unpaid remainder of the Member's accumulated contributions will be paid to the Member's designated beneficiary.

Actuarially equivalent optional benefit forms are also available.

Annually on April 1, Tier 1 benefits are increased to reflect increases in the CPI for the San Francisco Bay Area. Annual increases may not exceed 3%, but CPI increases above this figure are "banked" and used for future increases when the CPI increases by less than 3%.

A lump sum benefit of \$3,000 will be payable upon the death of a retired member.

### **Service-Connected Death**

#### ***Eligibility***

A Member's survivors are eligible to receive Service-Connected Death benefits if the Member's death resulted from injury or illness sustained in connection with the Member's duties.

#### ***Benefit Amount***

The Service-Connected Death benefit payable to an eligible surviving spouse, domestic partner or minor children will be 50% of the Member's Final Compensation.

Furthermore, for Safety Members who die in the performance of duty, there will be an additional lump sum benefit of 12 months of pay at the time of death. An additional benefit of 25% of the above basic benefit will be paid for the first minor child, 15% for the second, and 10% for the third.

### ***Form of Benefit***

The Service-Connected Death Benefit will be paid monthly beginning at the Member's death and for the life of an eligible surviving spouse or domestic partner, or to the age of majority of dependent minor children if there is no eligible spouse or domestic partner.

Annually on April 1, Tier 1 benefits are increased to reflect increases in the CPI for the San Francisco Bay Area. Annual increases may not exceed 3%, but CPI increases above this figure are "banked" and used for future increases when the CPI increases by less than 3%.

### **Nonservice-Connected Death**

#### ***Eligibility***

A Member's survivors are eligible to receive Nonservice-Connected Death benefits if the Member's death arose from causes unrelated to the Member's duties.

### ***Benefit Amount***

In the event the Member had earned fewer than five years of Credited Service and has no or insufficient reciprocity service from another system, the Nonservice-Connected Death benefit will be a refund of the Member's accumulated contributions with interest plus a payment of one month of Final Compensation for each year of Credited Service, not to exceed six months.

In the event the Member had earned five or more years of Credited Service, the Nonservice-Connected Death benefit payable to an eligible surviving spouse, domestic partner or minor children will be 60% of the amount the Member would have received as a Nonservice-Connected Disability Retirement Benefit on the date of death.

### ***Form of Benefit***

For Members who had earned fewer than five years of Credited Service at death, the benefit will be paid as a lump sum.

For Members with five or more years of Credited Service, the Nonservice-Connected Death Benefit will be paid monthly beginning at the Member's death and for the life of an eligible surviving spouse or domestic partner or to the age of majority of dependent minor children if there is no eligible spouse or domestic partner.

Annually on April 1, Tier 1 benefits are increased to reflect increases in the CPI for the San Francisco Bay Area. Annual increases may not exceed 3%, but CPI increases above this figure are "banked" and used for future increases when the CPI increases by less than 3%.

## **Withdrawal Benefit**

### ***Eligibility***

A Member is eligible for a Withdrawal Benefit upon termination of employment.

### ***Benefit Amount***

The Withdrawal Benefit is a refund of the Member's accumulated Contributions with interest. Upon receipt of the Withdrawal Benefit the Member forfeits all Credited Service.

### ***Form of Benefit***

The Withdrawal Benefit is paid in a lump sum upon election by the Member.

## **Deferred Vested Benefit**

### ***Eligibility***

A Member is eligible for a Deferred Vested Benefit upon termination of employment after earning five years of Credited Service, including reciprocity service from another system. The Member must leave his or her Member Contributions with interest on deposit with the Plan.

### ***Benefit Amount***

The Deferred Vested Benefit is computed in the same manner as the Service Retirement Benefit, but it is based on Credited Service and Final Compensation on the date of termination.

Tables 2 and 3 are extended for service under ten years using benefit multipliers of one-fiftieth per year of Credited Service at age 50 (General) or 3% per year of Credited Service at age 50 (Safety), with adjustments for earlier or later retirement under Sections 31676.17 and 31664.1, respectively, of the County Employees Retirement Law of 1937.

### ***Form of Benefit***

The Deferred Vested Benefit will be paid monthly beginning at retirement and for the life of the Member; in the event of the Member's death, 60% of the benefit will continue for the life of the Member's eligible spouse or domestic partner or to the age of majority of dependent minor children if there is no eligible spouse or domestic partner. In the event there is no eligible surviving spouse, domestic partner or minor children, any unpaid remainder of the Member's accumulated contributions will be paid to the Member's designated beneficiary.

Actuarially equivalent optional benefit forms are also available.

Annually on April 1, Tier 1 benefits are increased to reflect increases in the CPI for the San Francisco Bay Area. Annual increases may not exceed 3%, but CPI increases above this figure are "banked" and used for future increases when the CPI increases by less than 3%.

A lump sum benefit of \$3,000 will be payable upon the death of a retired member.

### **Reciprocal Benefit**

#### ***Eligibility***

A Member is eligible for a Reciprocal Benefit upon termination of employment and entry, within a specified period of time, into another retirement system recognized as a reciprocal system by the Plan. In addition, the Member must leave his or her Member Contributions with interest on deposit with the Plan.

#### ***Benefit Amount***

The Reciprocal Benefit is computed in the same manner as the Service Retirement Benefit, but it is based on Credited Service on the date of termination and Final Compensation on the date of retirement; Final Compensation is based on the highest of the Compensation earned under this Plan or the reciprocal plan.

#### ***Form of Benefit***

The Reciprocal Benefit will be paid monthly beginning at retirement and for the life of the Member; in the event of the Member's death, 60% of the benefit will continue for the life of the Member's eligible spouse or domestic partner or to the age of majority of dependent minor children if there is no eligible spouse or domestic partner. In the event there is no eligible surviving spouse, domestic partner or minor children, any unpaid remainder of the Member's accumulated contributions will be paid to the Member's designated beneficiary.

Actuarially equivalent optional benefit forms are also available.

Annually on April 1, Tier 1 benefits are increased to reflect increases in the CPI for the San Francisco Bay Area. Annual increases may not exceed 3%, but CPI increases above this figure are “banked” and used for future increases when the CPI increases by less than 3%.

A lump sum benefit may be payable upon the death of a retired Member by the last system the Member worked under.

## 1.2: Participant Data as of July 1, 2012: Total Plan

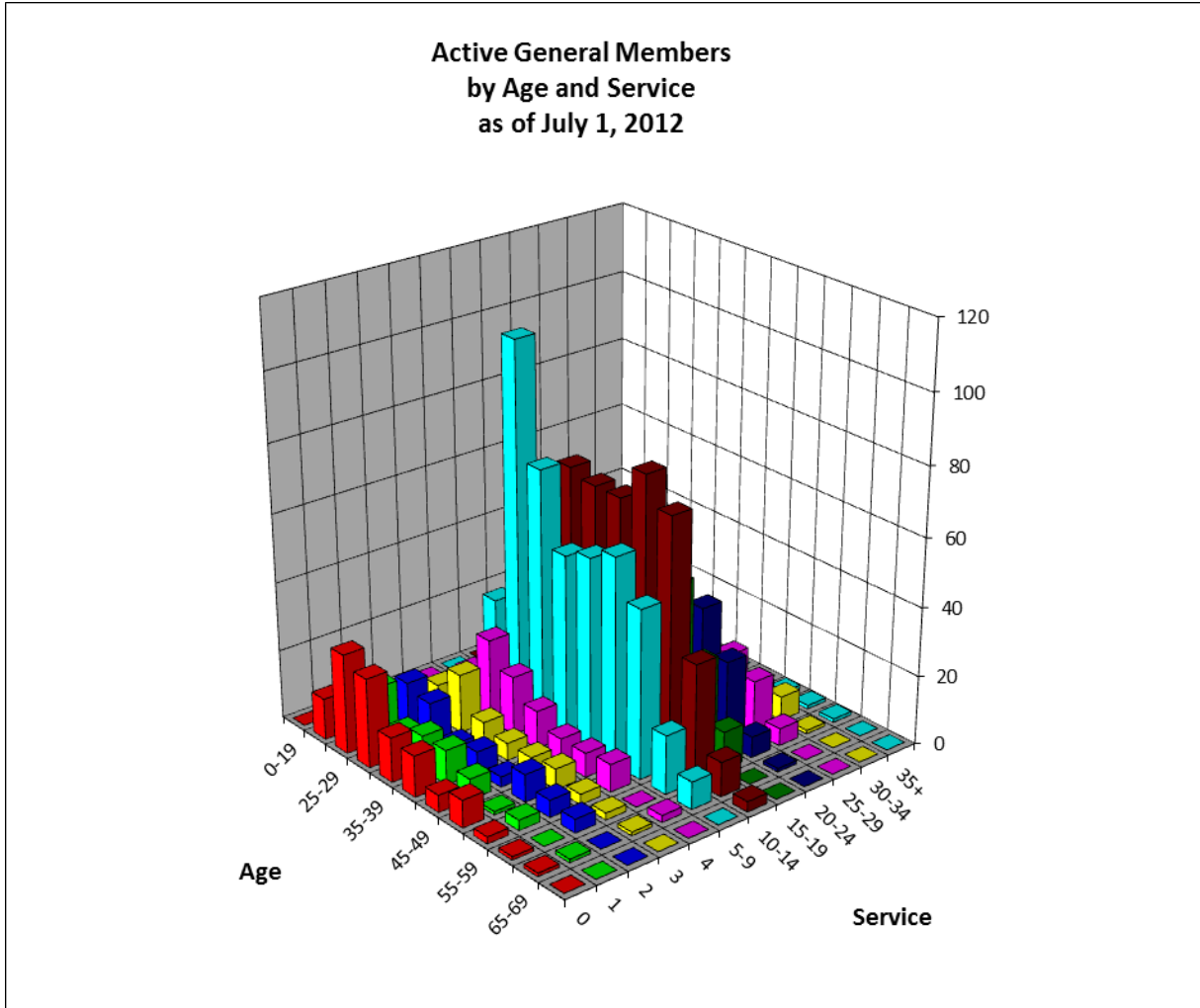
	General	Safety	Total
<b>Active Participants</b>			
Number	1,596	305	1,901
Average Age	45.08	38.25	43.98
Average Service	10.31	9.70	10.21
Average Pay	\$56,834	\$62,771	\$57,786
<b>Service Retired</b>			
Number	1,376	168	1,544
Average Age	69.03	64.60	68.55
Average Annual Total Benefit	\$28,030	\$37,681	\$29,080
<b>Beneficiaries</b>			
Number	217	53	270
Average Age	74.11	68.38	72.98
Average Annual Total Benefit	\$12,315	\$21,028	\$14,025
<b>Duty Disabled</b>			
Number	53	81	134
Average Age	68.48	60.38	63.58
Average Annual Total Benefit	\$21,158	\$29,504	\$26,203
<b>Non-Duty Disabled</b>			
Number	46	2	48
Average Age	67.86	54.19	67.29
Average Annual Total Benefit	\$14,127	\$20,016	\$14,373
<b>Total Receiving Benefits</b>			
Number	1,692	304	1,996
Average Age	69.63	64.06	68.78
Average Annual Total Benefit	\$25,421	\$32,483	\$26,497
<b>Terminated Vested</b>			
Number	196	16	212
Average Age	51.43	42.82	50.78
Average Service	9.51	9.28	9.49
<b>Transfers</b>			
Number	210	62	272
Average Age	49.90	42.04	48.11
Average Service	5.37	5.12	5.32
<b>Funds on Account</b>			
Number	99	11	110
Average Age	44.47	33.09	43.33
Average Service	1.45	0.89	1.39
<b>Total Inactive</b>			
Number	505	89	594
Average Age	49.43	41.07	48.18
Average Service	6.21	5.35	6.08

**Participant Data as of July 1, 2012: General Members**

	General Tier 1	General Tier 2	General Total
<b>Active Participants</b>			
Number	221	1,375	1,596
Average Age	52.89	43.82	45.08
Average Service	21.94	8.44	10.31
Average Pay	\$71,159	\$54,531	\$56,834
<b>Service Retired</b>			
Number	1,243	133	1,376
Average Age	69.43	65.27	69.03
Average Annual Total Benefit	\$29,411	\$15,124	\$28,030
<b>Beneficiaries</b>			
Number	202	15	217
Average Age	75.53	54.94	74.11
Average Annual Total Benefit	\$12,656	\$7,720	\$12,315
<b>Duty Disabled</b>			
Number	47	6	53
Average Age	69.62	59.53	68.48
Average Annual Total Benefit	\$21,157	\$21,170	\$21,158
<b>Non-Duty Disabled</b>			
Number	40	6	46
Average Age	68.59	63.03	67.86
Average Annual Total Benefit	\$15,058	\$7,927	\$14,127
<b>Total Receiving Benefits</b>			
Number	1,532	160	1,692
Average Age	70.22	64.00	69.63
Average Annual Total Benefit	\$26,574	\$14,386	\$25,421
<b>Terminated Vested</b>			
Number	95	101	196
Average Age	55.22	47.87	51.43
Average Service	10.80	8.30	9.51
<b>Transfers</b>			
Number	77	133	210
Average Age	54.31	47.35	49.90
Average Service	6.76	4.57	5.37
<b>Funds on Account</b>			
Number	8	91	99
Average Age	59.62	43.13	44.47
Average Service	1.50	1.44	1.45
<b>Total Inactive</b>			
Number	180	325	505
Average Age	55.03	46.33	49.43
Average Service	8.66	4.85	6.21

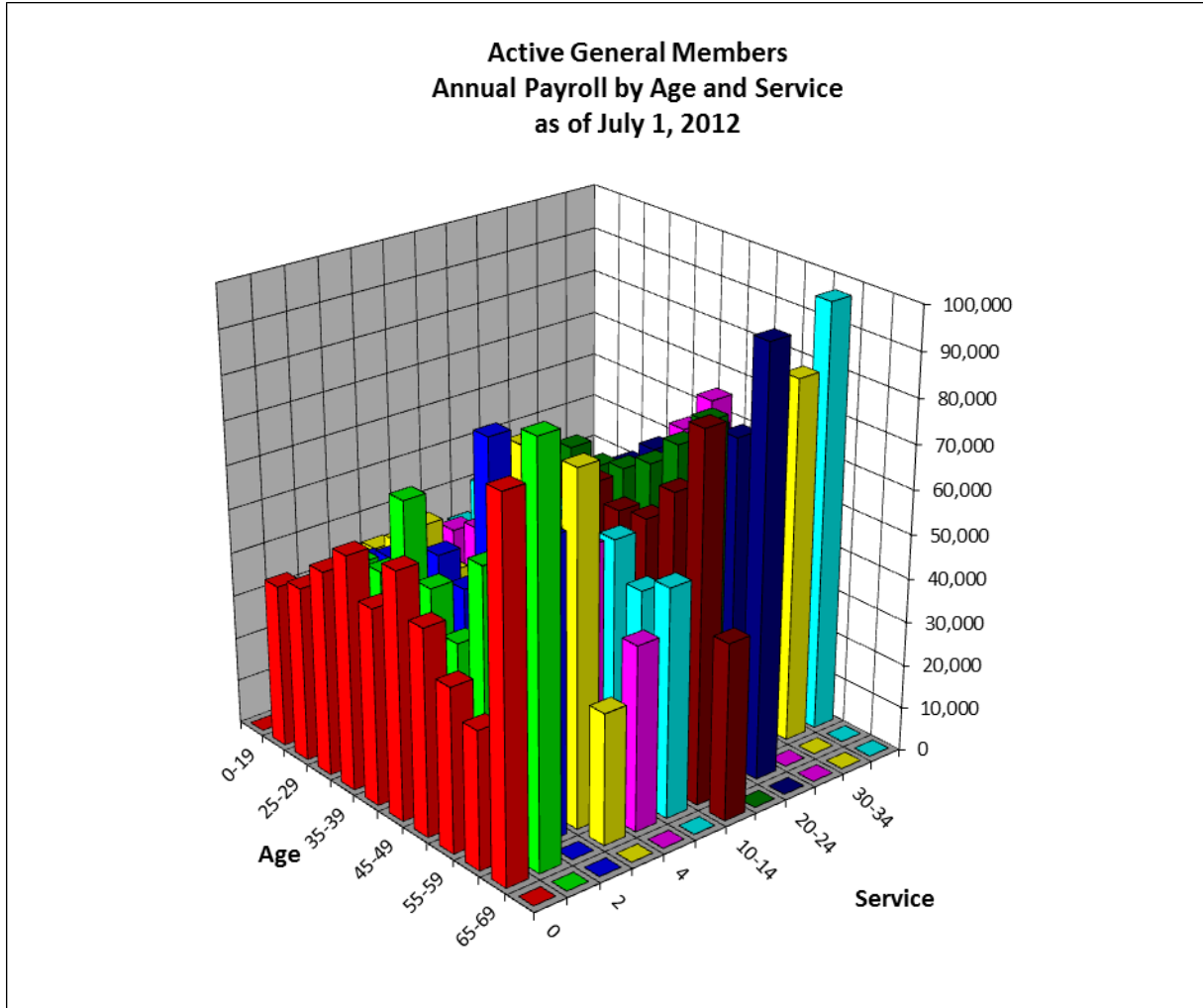
**Participant Data as of July 1, 2012: Safety Members**

	Safety Tier 1	Safety Tier 2	Safety Total
<b>Active Participants</b>			
Number	51	254	305
Average Age	47.39	36.41	38.25
Average Service	20.62	7.51	9.70
Average Pay	\$79,201	\$59,472	\$62,771
<b>Service Retired</b>			
Number	164	4	168
Average Age	64.73	59.05	64.60
Average Annual Total Benefit	\$38,190	\$16,820	\$37,681
<b>Beneficiaries</b>			
Number	52	1	53
Average Age	68.90	41.34	68.38
Average Annual Total Benefit	\$21,273	\$8,311	\$21,028
<b>Duty Disabled</b>			
Number	70	11	81
Average Age	61.97	50.27	60.38
Average Annual Total Benefit	\$30,371	\$23,986	\$29,504
<b>Non-Duty Disabled</b>			
Number	2	0	2
Average Age	54.19	0.00	54.19
Average Annual Total Benefit	\$20,016	0	\$20,016
<b>Total Receiving Benefits</b>			
Number	288	16	304
Average Age	64.74	51.91	64.06
Average Annual Total Benefit	\$33,109	\$21,214	\$32,483
<b>Terminated Vested</b>			
Number	5	11	16
Average Age	52.31	38.50	42.82
Average Service	12.83	7.67	9.28
<b>Transfers</b>			
Number	23	39	62
Average Age	50.43	37.09	42.04
Average Service	5.80	4.72	5.12
<b>Funds on Account</b>			
Number	0	11	11
Average Age	0.00	33.09	33.09
Average Service	0.00	0.89	0.89
<b>Total Inactive</b>			
Number	28	61	89
Average Age	50.77	36.62	41.07
Average Service	7.05	4.56	5.35

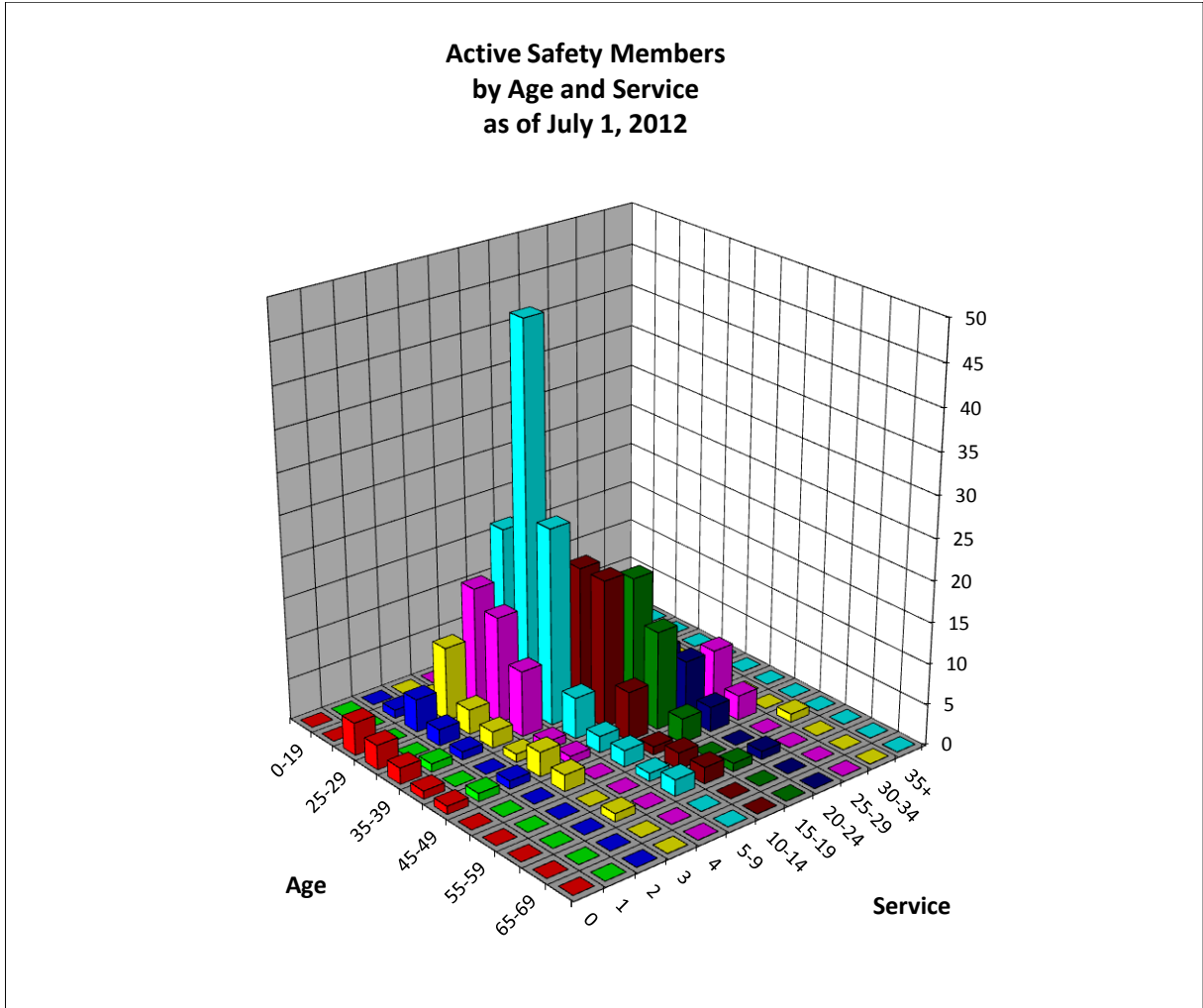


Service / Age	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35+	Total
0-19	0	0	0	0	0	0	0	0	0	0	0	0	0
20-24	12	2	1	2	2	0	0	0	0	0	0	0	19
25-29	29	16	14	10	11	29	0	0	0	0	0	0	109
30-34	26	7	12	17	24	107	33	0	0	0	0	0	226
35-39	13	10	4	7	17	74	72	10	0	0	0	0	207
40-44	12	10	6	5	11	53	70	32	10	0	0	0	209
45-49	5	6	3	5	7	56	70	34	26	10	1	0	223
50-54	8	1	8	6	7	60	80	46	36	19	6	1	278
55-59	2	3	5	3	8	49	72	27	24	15	7	1	216
60-64	1	0	4	2	0	17	34	11	6	5	1	1	82
65-69	1	1	0	1	2	8	10	0	1	0	0	0	24
70+	0	0	0	0	0	0	3	0	0	0	0	0	3
<b>Total</b>	<b>109</b>	<b>56</b>	<b>57</b>	<b>58</b>	<b>89</b>	<b>453</b>	<b>444</b>	<b>160</b>	<b>103</b>	<b>49</b>	<b>15</b>	<b>3</b>	<b>1,596</b>



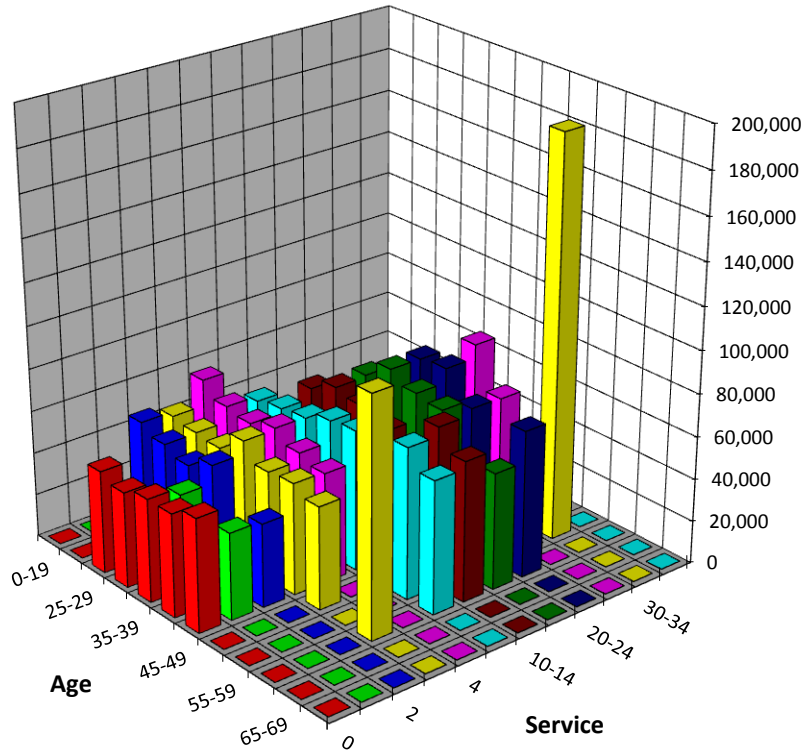


Service / Age	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35+	Average
0-19	0	0	0	0	0	0	0	0	0	0	0	0	0
20-24	37,165	27,926	30,132	38,418	33,060	0	0	0	0	0	0	0	35,522
25-29	39,799	41,484	40,771	42,938	42,225	41,969	0	0	0	0	0	0	41,281
30-34	46,621	45,865	44,884	49,535	46,092	53,817	52,476	0	0	0	0	0	50,930
35-39	53,286	47,095	43,182	41,892	49,283	57,447	57,369	60,687	0	0	0	0	55,343
40-44	44,677	65,692	51,300	35,842	49,086	55,383	58,081	59,136	57,379	0	0	0	55,919
45-49	56,044	49,572	46,863	61,143	50,926	57,005	60,507	61,410	63,367	65,650	47,697	0	59,408
50-54	46,831	40,712	82,370	78,366	49,511	52,622	57,218	65,237	66,691	74,648	63,984	71,791	60,797
55-59	37,263	60,645	67,568	63,013	56,878	56,217	58,285	72,090	73,359	68,447	76,946	52,178	62,565
60-64	31,283	0	66,827	79,192	0	47,954	66,932	79,785	74,039	82,538	82,418	96,904	66,607
65-69	84,198	92,810	0	29,716	41,807	51,743	83,158	0	96,904	0	0	0	68,032
70+	0	0	0	0	0	0	40,092	0	0	0	0	0	40,092
Average	44,826	49,668	53,066	51,273	47,823	54,073	58,930	65,076	67,223	71,719	70,176	73,624	56,834



Service / Age	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35+	Total
0-19	0	0	0	0	0	0	0	0	0	0	0	0	0
20-24	0	0	1	1	1	0	0	0	0	0	0	0	3
25-29	4	0	4	9	15	21	0	0	0	0	0	0	53
30-34	3	0	2	3	13	47	7	0	0	0	0	0	75
35-39	2	1	1	2	8	24	18	2	0	0	0	0	58
40-44	1	0	0	1	1	5	18	17	7	0	0	0	50
45-49	1	1	1	3	1	2	6	12	7	7	0	0	41
50-54	0	0	0	2	0	2	1	3	3	3	0	0	14
55-59	0	0	0	0	0	1	2	0	0	0	1	0	4
60-64	0	0	0	1	0	2	2	1	1	0	0	0	7
65-69	0	0	0	0	0	0	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>11</b>	<b>2</b>	<b>9</b>	<b>22</b>	<b>39</b>	<b>104</b>	<b>54</b>	<b>35</b>	<b>18</b>	<b>10</b>	<b>1</b>	<b>0</b>	<b>305</b>

**Active Safety Members  
 Annual Payroll by Age and Service  
 as of July 1, 2012**



Service / Age	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35+	Average
0-19	0	0	0	0	0	0	0	0	0	0	0	0	0
20-24	0	0	54,503	52,192	64,411	0	0	0	0	0	0	0	57,035
25-29	48,277	0	50,330	50,620	57,841	55,258	0	0	0	0	0	0	54,303
30-34	44,928	0	46,697	49,587	55,968	57,765	62,360	0	0	0	0	0	56,747
35-39	48,630	44,970	53,325	59,389	60,073	59,515	68,976	69,737	0	0	0	0	62,143
40-44	48,630	0	0	51,248	54,783	64,496	66,734	78,554	78,344	0	0	0	71,244
45-49	53,373	40,789	39,237	52,446	51,605	66,116	60,707	73,272	79,837	86,029	0	0	70,223
50-54	0	0	0	48,391	0	61,548	56,351	71,506	67,081	66,547	0	0	63,688
55-59	0	0	0	0	0	71,161	75,284	0	0	0	188,492	0	102,555
60-64	0	0	0	112,154	0	62,531	65,800	54,683	68,946	0	0	0	70,349
65-69	0	0	0	0	0	0	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0	0	0	0	0	0	0
Average	47,923	42,880	49,087	54,220	57,605	58,440	66,334	74,953	76,525	80,184	188,492	0	62,771

**Changes in Plan Membership: All Groups**

	<i>Actives</i>	<i>Transfers</i>	<i>Non-Vested Terminations</i>	<i>Vested Terminations</i>	<i>Non- Duty Disabled</i>	<i>Duty Disabled</i>	<i>Retired</i>	<i>Beneficiaries</i>	<i>Total</i>
<b>July 1, 2011</b>	<b>1,980</b>	<b>266</b>	<b>128</b>	<b>215</b>	<b>50</b>	<b>130</b>	<b>1,445</b>	<b>260</b>	<b>4,474</b>
New Entrants	112	0	0	0	0	0	0	0	112
Rehires	16	(1)	(4)	(3)	0	0	0	0	8
Duty Disabilities	(3)	0	0	0	0	3	0	0	0
Non-Duty Disabilities	(1)	0	0	0	1	0	0	0	0
Retirements	(122)	(5)	0	(18)	0	0	145	0	0
Dual Service Retirements	0	0	0	0	0	0	0	0	0
Vested Terminations	(26)	(2)	0	28	0	0	0	0	0
Died, With Beneficiaries' Benefit Payable	0	0	0	0	(2)	0	(17)	19	0
Died, Without Beneficiary, and Other Terminations	(10)	0	10	(1)	0	(1)	(28)	0	(30)
Transfers	(12)	16	(1)	(1)	0	0	0	0	2
Beneficiary Deaths	0	0	0	0	0	0	0	(16)	(16)
Domestic Relations Orders	0	0	0	0	0	0	0	5	5
Withdrawals Paid	(33)	(3)	(22)	(9)	0	0	0	0	(67)
Data Corrections	0	1	(1)	1	(1)	2	(1)	2	3
<b>July 1, 2012</b>	<b>1,901</b>	<b>272</b>	<b>110</b>	<b>212</b>	<b>48</b>	<b>134</b>	<b>1,544</b>	<b>270</b>	<b>4,491</b>

**Changes in Plan Membership: General**

	<i>Actives</i>	<i>Transfers</i>	<i>Non-Vested Terminations</i>	<i>Vested Terminations</i>	<i>Non- Duty Disabled</i>	<i>Duty Disabled</i>	<i>Retired</i>	<i>Beneficiaries</i>	<i>Total</i>
<b>July 1, 2011</b>	<b>1,659</b>	<b>206</b>	<b>113</b>	<b>199</b>	<b>49</b>	<b>51</b>	<b>1,282</b>	<b>208</b>	<b>3,767</b>
New Entrants	103	0	0	0	0	0	0	0	103
Rehires	16	(1)	(4)	(3)	0	0	0	0	8
Duty Disabilities	(1)	0	0	0	0	1	0	0	0
Non-Duty Disabilities	0	0	0	0	0	0	0	0	0
Retirements	(113)	(3)	0	(18)	0	0	134	0	0
Retirements from Safety with General Service	0	0	0	0	0	0	0	0	0
Vested Terminations	(25)	(2)	0	27	0	0	0	0	0
Died, With Beneficiaries' Benefit Payable	0	0	0	0	(2)	0	(14)	16	0
Died, Without Beneficiary, and Other Terminations	(8)	0	8	(1)	0	0	(26)	0	(27)
Transfers	(9)	13	(1)	(1)	0	0	0	0	2
Beneficiary Deaths	0	0	0	0	0	0	0	(11)	(11)
Domestic Relations Orders	0	0	0	0	0	0	0	2	2
Withdrawals Paid	(26)	(3)	(16)	(8)	0	0	0	0	(53)
Data Corrections	0	0	(1)	1	(1)	1	0	2	2
<b>July 1, 2012</b>	<b>1,596</b>	<b>210</b>	<b>99</b>	<b>196</b>	<b>46</b>	<b>53</b>	<b>1,376</b>	<b>217</b>	<b>3,793</b>

**Changes in Plan Membership: Safety**

	<i>Actives</i>	<i>Transfers</i>	<i>Non-Vested Terminations</i>	<i>Vested Terminations</i>	<i>Non- Duty Disabled</i>	<i>Duty Disabled</i>	<i>Retired</i>	<i>Beneficiaries</i>	<i>Total</i>
<b>July 1, 2011</b>	<b>321</b>	<b>60</b>	<b>15</b>	<b>16</b>	<b>1</b>	<b>79</b>	<b>163</b>	<b>52</b>	<b>707</b>
New Entrants	9	0	0	0	0	0	0	0	9
Rehires	0	0	0	0	0	0	0	0	0
Duty Disabilities	(2)	0	0	0	0	2	0	0	0
Non-Duty Disabilities	(1)	0	0	0	1	0	0	0	0
Retirements	(9)	(2)	0	0	0	0	11	0	0
Retirements from Safety with General Service	0	0	0	0	0	0	0	0	0
Vested Terminations	(1)	0	0	1	0	0	0	0	0
Died, With Beneficiaries' Benefit Payable	0	0	0	0	0	0	(3)	3	0
Died, Without Beneficiary, and Other Terminations	(2)	0	2	0	0	(1)	(2)	0	(3)
Transfers	(3)	3		0	0	0	0	0	0
Beneficiary Deaths	0	0	0	0	0	0	0	(5)	(5)
Domestic Relations Orders	0		0	0	0	0	0	3	3
Withdrawals Paid	(7)	0	(6)	(1)	0	0	0	0	(14)
Data Corrections	0	1	0	0	0	1	(1)	0	1
<b>July 1, 2012</b>	<b>305</b>	<b>62</b>	<b>11</b>	<b>16</b>	<b>2</b>	<b>81</b>	<b>168</b>	<b>53</b>	<b>698</b>

**Service Retired**

Age	General		Safety		Total	
	Number	Annual Average Benefit	Number	Annual Average Benefit	Number	Annual Average Benefit
0-24	0	\$0	0	\$0	0	\$0
25-29	0	\$0	0	\$0	0	\$0
30-34	0	\$0	0	\$0	0	\$0
35-39	0	\$0	0	\$0	0	\$0
40-44	0	\$0	0	\$0	0	\$0
45-49	0	\$0	2	\$21,103	2	\$21,103
50-54	43	\$28,930	24	\$41,064	67	\$33,276
55-59	162	\$33,984	26	\$34,723	188	\$34,086
60-64	318	\$35,422	45	\$47,328	363	\$36,898
65-69	314	\$28,473	33	\$28,000	347	\$28,428
70-74	215	\$24,041	18	\$33,703	233	\$24,787
75-79	135	\$20,837	8	\$44,602	143	\$22,167
80-84	96	\$20,123	6	\$29,117	102	\$20,652
85-89	52	\$19,307	4	\$38,832	56	\$20,702
90-94	35	\$16,740	2	\$26,304	37	\$17,257
95+	6	\$18,653	0	\$0	6	\$18,653
<b>All Ages</b>	<b>1,376</b>	<b>\$28,030</b>	<b>168</b>	<b>\$37,681</b>	<b>1,544</b>	<b>\$29,080</b>

**Duty Disabled**

Age	General		Safety		Total	
	Number	Annual Average Benefit	Number	Annual Average Benefit	Number	Annual Average Benefit
0-24	0	\$0	0	\$0	0	\$0
25-29	0	\$0	0	\$0	0	\$0
30-34	0	\$0	2	\$19,531	2	\$19,531
35-39	1	\$37,628	2	\$28,895	3	\$31,806
40-44	0	\$0	1	\$32,624	1	\$32,624
45-49	0	\$0	7	\$35,932	7	\$35,932
50-54	3	\$20,388	6	\$32,987	9	\$28,787
55-59	5	\$17,141	17	\$24,647	22	\$22,941
60-64	14	\$23,477	16	\$33,005	30	\$28,559
65-69	7	\$18,913	17	\$28,235	24	\$25,516
70-74	7	\$23,213	13	\$29,523	20	\$27,315
75-79	7	\$16,188	0	\$0	7	\$16,188
80-84	7	\$18,830	0	\$0	7	\$18,830
85-89	1	\$55,928	0	\$0	1	\$55,928
90-94	1	\$12,275	0	\$0	1	\$12,275
95+	0	\$0	0	\$0	0	\$0
<b>All Ages</b>	<b>53</b>	<b>\$21,158</b>	<b>81</b>	<b>\$29,504</b>	<b>134</b>	<b>\$26,203</b>

**Non-Duty Disabled**

Age	General		Safety		Total	
	Number	Annual Average Benefit	Number	Annual Average Benefit	Number	Annual Average Benefit
0-24	0	\$0	0	\$0	0	\$0
25-29	0	\$0	0	\$0	0	\$0
30-34	0	\$0	0	\$0	0	\$0
35-39	0	\$0	0	\$0	0	\$0
40-44	0	\$0	1	\$25,334	1	\$25,334
45-49	2	\$14,708	0	\$0	2	\$14,708
50-54	3	\$14,978	0	\$0	3	\$14,978
55-59	5	\$14,013	0	\$0	5	\$14,013
60-64	8	\$16,634	0	\$0	8	\$16,634
65-69	9	\$10,382	1	\$14,699	10	\$10,813
70-74	5	\$14,461	0	\$0	5	\$14,461
75-79	10	\$15,840	0	\$0	10	\$15,840
80-84	3	\$14,006	0	\$0	3	\$14,006
85-89	1	\$6,213	0	\$0	1	\$6,213
90-94	0	\$0	0	\$0	0	\$0
95+	0	\$0	0	\$0	0	\$0
<b>All Ages</b>	<b>46</b>	<b>\$14,127</b>	<b>2</b>	<b>\$20,016</b>	<b>48</b>	<b>\$14,373</b>

**Surviving Beneficiaries (all benefit types)**

Age	General		Safety		Total	
	Number	Annual Average Benefit	Number	Annual Average Benefit	Number	Annual Average Benefit
0-24	0	\$0	0	\$0	0	\$0
25-29	0	\$0	0	\$0	0	\$0
30-34	0	\$0	0	\$0	0	\$0
35-39	1	\$1,527	1	\$37,913	2	\$19,720
40-44	2	\$5,569	2	\$9,318	4	\$7,443
45-49	6	\$9,263	0	\$0	6	\$9,263
50-54	11	\$10,733	4	\$18,202	15	\$12,725
55-59	13	\$11,340	3	\$18,504	16	\$12,683
60-64	18	\$11,903	11	\$19,608	29	\$14,826
65-69	19	\$11,714	11	\$20,173	30	\$14,815
70-74	34	\$15,245	6	\$33,468	40	\$17,978
75-79	32	\$13,828	6	\$20,647	38	\$14,905
80-84	35	\$10,989	4	\$23,228	39	\$12,244
85-89	31	\$11,329	3	\$19,246	34	\$12,028
90-94	11	\$11,242	2	\$8,342	13	\$10,796
95+	4	\$20,353	0	\$0	4	\$20,353
<b>All Ages</b>	<b>217</b>	<b>\$12,315</b>	<b>53</b>	<b>\$21,028</b>	<b>270</b>	<b>\$14,025</b>



## Benefit Form Elections

	General Tier 1	General Tier 2	Safety Tier 1	Safety Tier 2	Total
<b>Service Retired</b>					
Unmodified (No Continuance)	287	45	15	0	347
Unmodified (60% to Spouse)	683	61	104	3	851
Option #1 (Cash Refund)	40	3	2	0	45
Option #2 (100% Continuance)	103	13	20	0	136
Option #3 (50% Continuance)	17	4	2	1	24
Option #4 (Multiple Survivors)	4	0	1	0	5
Unmodified (No Continuance) w/SS	29	4	3	0	36
Unmodified (60% to Spouse) w/SS	74	1	17	0	92
Option #1 (Cash Refund) w/SS	4	0	0	0	4
Option #2 (100% Continuance) w/SS	2	2	0	0	4
Option #3 (50% Continuance) /SS	0	0	0	0	0
<b>Total Service Retirement</b>	<b>1,243</b>	<b>133</b>	<b>164</b>	<b>4</b>	<b>1,544</b>
<b>Non-Duty Disability</b>					
Unmodified (No Continuance)	17	4	0	0	21
Unmodified (60% to Spouse)	21	2	2	0	25
Option #1 (Cash Refund)	0	0	0	0	0
Option #2 (100% Continuance)	0	0	0	0	0
Option #3 (50% Continuance)	2	0	0	0	2
<b>Total Non-Duty Disability</b>	<b>40</b>	<b>6</b>	<b>2</b>	<b>0</b>	<b>48</b>
<b>Duty Disability</b>					
Unmodified (No Continuance)	13	3	9	1	26
Unmodified (60% to Spouse)	29	3	53	10	95
Option #1 (Cash Refund)	3	0	5	0	8
Option #2 (100% Continuance)	1	0	2	0	3
Option #3 (50% Continuance)	1	0	1	0	2
<b>Total Duty Disability</b>	<b>47</b>	<b>6</b>	<b>70</b>	<b>11</b>	<b>134</b>
<b>Total</b>	<b>1,330</b>	<b>145</b>	<b>236</b>	<b>15</b>	<b>1,726</b>

## Retirement Eligibility

Plan	<u>Number of Actives Reaching Retirement Eligibility in Year(s)</u>								Total, Years 0 - 10
	Total Current Actives	Eligible	1	2	3	4	5	6-10	
General Tier 1	221	150	11	15	9	6	5	22	218
General Tier 2	1,375	143	42	38	54	57	59	233	626
Safety Tier 1	51	31	4	3	6	5	1	1	51
Safety Tier 2	254	7	5	7	4	4	5	60	92
<b>Total</b>	<b>1,901</b>	<b>331</b>	<b>62</b>	<b>63</b>	<b>73</b>	<b>72</b>	<b>70</b>	<b>316</b>	<b>987</b>

## 1.3: Summary of Actuarial Methods and Assumptions

### Actuarial Method

Annual contributions to the Merced County Employees' Retirement Association (the Plan) are computed under the Entry Age Normal Actuarial Cost Method, computed to the last expected retirement age.

Under this Cost Method, the Normal Cost is calculated as the amount necessary to fund Members' benefits as a level percentage of total payroll over their projected working lives. At each valuation date, the Actuarial Accrued Liability is equal to the difference between the liability for the Members' total projected benefit and the present value of future Normal Cost contributions.

The excess of the Actuarial Accrued Liability over Plan assets is the Unfunded Actuarial Accrued Liability, and the liability for each valuation group is amortized as a level percentage of payroll over a closed period (17 years as of the current valuation). For the current valuation, payroll is not expected to grow for the first year of the amortization schedule.

Amounts may be added to or subtracted from the Unfunded Actuarial Accrued Liability due to Plan amendments or changes in actuarial assumptions.

The total Plan cost is the sum of the Normal Cost (computed for each individual members) and the amortization of the Unfunded Actuarial Accrued Liability.

### Actuarial Value of Plan Assets

The actuarial value of Plan assets is modified market-related value. The market value of assets is adjusted to recognize, over a five-year period, differences between actual investment earnings and the assumed investment return. The actuarial value of assets is limited to no less than 70% and no more than 130% of the market value.

The detailed calculations of the actuarial value of Plan assets are shown in Section 2.

### Actuarial Assumptions

The assumptions shown below are based on an experience studies conducted as of June 30, 2010 for the period covering July 1, 2007 through June 30, 2010, performed by EFI.

Valuation Date	All assets and liabilities are computed as of June 30, 2012.
Rate of Return	The annual rate of return on all Plan assets is assumed to be 7.75%, net of investment and administrative expenses.

**Cost of Living** The cost of living, or inflation rate, as measured by the Consumer Price Index (CPI) will increase at the rate of 3.75% per year.

**Post Retirement COLA** COLAs at the rate of 2.7% are assumed for Tier 1 members.

**Increases in Pay** 3.75% base salary increases. Assumed pay increases for active Members consist of increases due to base salary adjustments (as noted above), plus service-based increases due to longevity and promotion, as shown below.

Years of Service	General	Safety
0-1	4.00%	5.00%
2	3.00%	5.00%
3	2.50%	3.00%
4-6	2.00%	3.00%
7-14	2.00%	2.00%
15-19	1.00%	0.50%
20+	0.00%	0.50%

**Mortality Improvement** No mortality improvement is explicitly assumed; however we build a margin in our mortality assumption between the actual and expected number of deaths in order to assume some future mortality improvements. The experience study report for the period covering July 1, 2007 to June 30, 2010 contains a full description of these margins.

**Retired Member and Beneficiary Mortality** Rates of mortality for retired Members and all beneficiaries are specified by the Combined Healthy Retired Pensioners (RP) 2000 tables published by the Society of Actuaries, with a two year setback for male members.

**Disabled Member Mortality** Rates of mortality for disabled Members and are specified by the Retired Pensioners (RP) 2000 tables published by the Society of Actuaries, with a three year set-forward for male and female members.

Active Member Mortality

Duty related mortality rates are only applicable for Safety Active Members and remain the same as in the prior valuation. Sample rates:

Age	Safety Active Duty-Related Death
20	0.0300%
25	0.0400%
30	0.0600%
35	0.1000%
40	0.1700%
45	0.2200%
50	0.2700%
55	0.3100%
60	0.0000%

Rates of non-duty mortality for active Members are specified by the Combined Healthy Retired Pensioners (RP) 2000 tables published by the Society of Actuaries, with a two year setback for male members and no adjustment for females.

Service-Connected Disability

Separate rates of duty disability are assumed among Safety and General Members; rates for both sexes for Safety Members are combined. Below are sample rates:

Age	Safety	General	
	All	Female	Male
20	0.3250%	0.0040%	0.0040%
25	0.3625%	0.0075%	0.0080%
30	0.4190%	0.0115%	0.0200%
35	0.5063%	0.0150%	0.0360%
40	0.6375%	0.0190%	0.0480%
45	0.7815%	0.0340%	0.0720%
50	0.9940%	0.0600%	0.0960%
55	1.2625%	0.1050%	0.1200%
60	0.0000%	0.1575%	0.1680%
65	0.0000%	0.0000%	0.0000%

Service Retirement

Retirement rates have changed due to the most recent experience study, and are assumed to occur among eligible members in accordance with the table below.

**General Rates**

Age	<u>(By Service)</u>		
	10-19	20-29	30+
50	2.50%	5.00%	7.50%
51	2.50%	5.00%	7.50%
52	5.00%	10.00%	15.00%
53	5.00%	10.00%	15.00%
54	5.00%	10.00%	15.00%
55	9.00%	18.00%	27.00%
56	7.50%	15.00%	22.50%
57	7.50%	15.00%	22.50%
58	7.50%	15.00%	22.50%
59	7.50%	15.00%	22.50%
60	25.00%	25.00%	37.50%
61	25.00%	25.00%	37.50%
62	25.00%	25.00%	37.50%
63	25.00%	25.00%	37.50%
64	25.00%	25.00%	37.50%
65	40.00%	40.00%	40.00%
66	45.00%	45.00%	45.00%
67	50.00%	50.00%	50.00%
68	60.00%	60.00%	60.00%
69	80.00%	80.00%	80.00%
70	100.00%	100.00%	100.00%

Service Retirement Continued **Safety Rates**

<b>(By Service)</b>		
<b>Age</b>	<b>10-19 Yrs</b>	<b>20+ Yrs</b>
40-44	0.00%	2.50%
45	0.00%	5.00%
46	0.00%	5.00%
47	0.00%	5.00%
48	0.00%	5.00%
49	0.00%	5.00%
50	7.50%	25.00%
51-52	7.50%	25.00%
53-54	7.50%	25.00%
55	7.50%	25.00%
56-57	7.50%	25.00%
58	7.50%	25.00%
59	7.50%	25.00%
60+	100.00%	100.00%

Non Service-Connected  
 Disability

Separate rates of ordinary disability are assumed among Safety and General Members; rates for both sexes for Safety Members are combined. Below are sample rates:

<b>Age</b>	<b>Safety</b>	<b>General</b>	
	<b>All</b>	<b>Female</b>	<b>Male</b>
20	0.0000%	0.0000%	0.0000%
25	0.0200%	0.0100%	0.0400%
30	0.0300%	0.0200%	0.0800%
35	0.0400%	0.0300%	0.0800%
40	0.0600%	0.0400%	0.1300%
45	0.0900%	0.0900%	0.1900%
50	0.1200%	0.1800%	0.2400%
55	0.1600%	0.2800%	0.3200%
60	0.0000%	0.4600%	0.4200%
65	0.0000%	0.0000%	0.0000%

Withdrawal

Rates of withdrawal apply to active Members who terminate their employment and withdraw their member contributions, forfeiting entitlement to future Plan benefits. Separate rates of withdrawal are assumed among Safety and General Members. No members are assumed to withdraw their contributions once eligible for a service retirement benefit.

Service	Safety	General
	All	All
0	25.00%	33.00%
1	12.50%	15.00%
2	5.00%	10.00%
3-4	5.00%	7.00%
5-6	2.50%	3.00%
7	2.50%	1.50%
8-9	1.00%	1.50%
10-19	0.00%	1.50%
20-29	0.00%	0.50%
30+	0.00%	0.00%



**Vested Termination**

Rates of vested termination apply to active Members who terminate their employment after five years of service and leave their member contributions on deposit with the Plan. Alternatively, those who terminate their employment with less than five years of service can leave their member contributions with the Plan and transfer to a reciprocal employer, therefore retaining entitlement to future Plan benefits.

Vested terminated General Members are assumed to begin receiving benefits at age 59; terminated Safety Members are assumed to begin receiving benefits at age 53.

Fifty percent of vested terminated Safety members and twenty-five percent of vested terminated General members are assumed to be reciprocal.

Service	Safety	General	
	All	Female	Male
0-4	1.50%	0.00%	1.00%
5-9	4.50%	4.00%	3.30%
10-14	3.00%	2.50%	5.50%
15-19	0.50%	2.50%	5.50%
20-29	0.00%	2.50%	2.00%
30+	0.00%	0.00%	0.00%

**Family Composition**

50% of female General members, 80% of male General members, and 90% of Safety members are assumed to be married at retirement. Male spouses are assumed to be three years older than their wives.

**Final Average Compensation Load**

The final average compensation (FAC) for members projected to receive a service retirement benefit has been increased based on the assumption that members will have elements of pay included in their FAC which are not included in the annual pay provided to the Actuary (Ventura decision pays). The FAC for Tier 1 members has been increased by 6.92%, and the FAC for Tier 2 members by 2.31%.

**Participant Data**

Data on active and inactive Members and their beneficiaries as of the valuation date was supplied by the Plan Administrator on electronic media. As is usual in studies of this type, Member data was neither verified nor audited.

## 1.4: Glossary of Actuarial Terms

### Actuarial Accrued Liability

A plan's actuarial accrued liability is the level of assets estimated by the system actuary to be needed as of the valuation date to

- Finance all previously earned benefits for actively employed members of the plan (and their beneficiaries, if applicable) for when they eventually retire, die or terminate with deferred vested benefits, and
- Finance all currently payable benefits of current pensioners and their beneficiaries (if applicable).

It is important to note that the Actuarial Accrued Liability is not a debt; instead, it is an asset target set by the actuarial cost method to produce an orderly accumulation of assets to pay for the plan's obligations.

### Actuarial Assumptions

The actuarial assumptions are the actuary's anticipated rates of future termination, death, disability and retirement for each member of the plan as well as the actuary's anticipated rate of investment return on underlying assets. To the extent that these assumptions are not in exact accord with actual events (which they never are), actuarial gains and losses will materialize.

### Actuarial Value of Assets

The actuarial value of assets, used for funding purposes, is computed using an asset smoothing technique in which investment gains and losses are not fully recognized in the year they occur, but are spread out. Use of an actuarial value of assets (rather than market value) helps avoid large fluctuations in recognized value of the underlying assets and, in turn, avoids large fluctuations in required contribution rates.

### Actuarial Present Value of Benefits

The actuarial present value of benefits is the Actuarial Accrued Liability plus actuarial present value of future Normal Costs. The actuarial present value of benefits is also the actuarial present value of all future benefits expected to be paid to the Plan's current members, whether accrued on the valuation data or after.

### Actuarial Funding Policy

The plan's actuarial funding policy is the scheduled program of accumulating assets to fund the plan's obligations, typically, but not necessarily, as a level percentage of payroll. The funding policy includes:

- The Normal Cost, and
- Amortization of the Unfunded or Overfunded Actuarial Accrued Liability (whichever is applicable).

#### Investment Gains and Losses

When the investment return on assets exceeds the assumed rate of return (the actuarial assumption as to investment return), this difference is identified as an investment gain. Correspondingly, when the returns are less than expected, this difference is identified as an investment loss. These investment gains and losses are either recognized immediately to produce the market value of assets or are spread out to produce the Actuarial Value of Assets.

#### Normal Cost

The Normal Cost is calculated as the amount necessary to fund each Member's benefits from that Member's Plan entry date to the end of his or her projected working life.

#### Unfunded Actuarial Accrued Liabilities

When the actuarial value of assets is below the Actuarial Accrued Liability, there is an Unfunded Actuarial Accrued Liability which must be paid off or amortized on a schedule. When the actuarial value of assets is in excess of the Actuarial Accrued Liability, this can lead to a reduction in future contributions on an amortization schedule.



**Section 2:**

**Asset Information**

## 2.1: Balance Sheet as of June 30, 2010, June 30, 2011 and June 30, 2012

	June 30, 2010	June 30, 2011	June 30, 2012
<b>Cash and Equivalents</b>	34,941,260	30,278,397	25,188,295
<b>Receivables</b>			
Interest	1,513,478	1,478,209	1,401,923
Dividends	157,968	246,860	289,399
Contributions	1,417,791	1,806,062	2,072,500
Income and Miscellaneous	452,045	2,248,893	2,254,016
Total Receivables	3,541,282	5,780,024	6,017,838
<b>Investments</b>			
Government Bonds	67,069,066	67,859,377	65,234,069
Corporate Bonds	73,770,270	72,878,775	81,128,495
Domestic Fixed Income (Index Fund)	0	0	0
Common Stocks	93,212,816	71,856,011	60,514,754
Invesco (International Equity Fund)	83,547,325	131,716,069	130,298,562
Mellon Capital (Index Fund)	34,406,700	91,767,260	83,161,093
Real Estate	29,408,722	34,114,016	36,004,799
Alternative Investments	21,843,405	27,000,610	27,276,452
Other	0	0	0
Total Investments	403,258,304	497,192,118	483,618,224
<b>Prepaid Expense</b>	1,575	0	2,614
<b>Property, Fixtures and Equipment</b>			
Net of Accumulated Depreciation of \$68,129, \$69,364, and \$70,509 respectively	444,314	901,056	1,242,758
Total Property, Fixtures and Equipment	444,314	901,056	1,242,758
<b>Liabilities</b>			
Accounts Payable	1,158,348	459,780	498,795
Securities Lending Obligations	18,538,246	18,145,491	8,147,698
Securities Purchased	2,627,128	1,152,094	2,257,264
Other	184,620	33,373	33,373
Total Liabilities	22,508,342	19,790,738	10,937,130
<b>Market Value</b>	<b>\$419,678,393</b>	<b>\$514,360,857</b>	<b>\$505,132,599</b>

## 2.2: Computation of Actuarial Value of Assets as of June 30, 2012

	(a)	(b)	(c)	(d)	(e) = (d) - (c)	(f)	(g) = (e) x (f)
	Contributions	Benefits	Expected Return	Actual Return	Additional Earnings	Percentage Unrecognized	Unrecognized Dollars
2009	37,798,955	38,089,689	39,371,923	(106,756,131)	(146,128,054)	20%	(29,225,611)
2010	39,000,865	42,452,269	30,510,472	47,535,092	17,024,620	40%	6,809,848
2011	46,416,971	46,438,796	32,524,230	94,704,289	62,180,059	60%	37,308,036
2012	50,679,182	51,624,769	39,826,325	(8,282,671)	(48,108,996)	80%	(38,487,197)
(1) Total Unrecognized Dollars							(23,594,924)
(2) Market Value of Assets as of June 30, 2012							505,132,599
(3) Actuarial Value of Assets as of June 30, 2012 before corridor adjustment [(2) - (1)]							528,727,523
(4) Corridor Limits							
a. 70% of Net Market Value							353,592,819
b. 130% of Net Market Value							656,672,379
(5) Actuarial Value of Assets after Corridor							528,727,523
(6) Ratio of Actuarial Value to Market Value [(5) ÷ (2)]							104.7%
(7) Special (Non Valuation) Reserves:							
Health Insurance Reserve [401(h)]							0
Special COL Reserve							0
Total Special Reserves							0
Total Special Reserves at Actuarial Value (Total x (6))							0
(8) Pension Reserves at Actuarial Value (Valuation Assets) [(5) - (7)]							528,727,523

### 2.3: Income Statement for the Years Ending June 30, 2011 and June 30, 2012

	<u>June 30, 2011</u>	<u>June 30, 2012</u>
<b><u>Additions</u></b>		
Contributions		
Employer's Contribution	\$36,662,122	\$40,262,881
Members' Contributions	9,754,849	10,416,301
Other Contributions	<u>0</u>	<u>0</u>
<b>Total Contributions</b>	<b><u>\$46,416,971</u></b>	<b><u>\$50,679,182</u></b>
Investment Income		
Net Appreciation/(Depreciation) in Fair Value of Investments	85,841,436	(16,743,755)
Interest and Dividends	12,359,833	11,746,737
Commission Recapture	0	0
Other Investment Income	<u>9,035</u>	<u>15,783</u>
<b>Total Investment Income</b>	<b><u>\$98,210,304</u></b>	<b><u>(\$4,981,235)</u></b>
Investment Expenses	<u>(2,233,790)</u>	<u>(2,177,833)</u>
<b>Net Investment Income</b>	<b><u>\$95,976,514</u></b>	<b><u>(\$7,159,068)</u></b>
Securities Lending Activities		
Securities Lending Income	62,410	30,172
Expenses from Securities Lending Activities	<u>(7,406)</u>	<u>89,620</u>
<b>Net Securities Lending Income</b>	<b><u>\$55,004</u></b>	<b><u>\$119,792</u></b>
<b>Total Net Investment Income</b>	<b><u>\$96,031,518</u></b>	<b><u>(\$7,039,276)</u></b>
<b>Total Additions</b>	<b><u>\$142,448,489</u></b>	<b><u>\$43,639,906</u></b>
<b><u>Deductions</u></b>		
Benefits	45,022,104	49,839,653
Refunds	766,692	1,051,526
Administrative Costs	1,189,030	1,180,083
Actuarial Expense	138,200	63,312
401(h) distribution to County	<u>650,000</u>	<u>733,590</u>
<b>Total Deductions</b>	<b><u>\$47,766,026</u></b>	<b><u>\$52,868,164</u></b>
<b>Net increase (Decrease)</b>	<b><u>\$94,682,463</u></b>	<b><u>(\$9,228,258)</u></b>
Net Assets Beginning of Year	<b><u>\$419,678,394</u></b>	<b><u>\$514,360,857</u></b>
Net Assets End of Year	<b><u>\$514,360,857</u></b>	<b><u>\$505,132,599</u></b>



## 2.4: Historical Returns

<i>Year Ended June 30</i>	<i>Annualized Rate of Return (Market Value)</i>	<i>Annualized Rate of Return (Actuarial Value)</i>	<i>Annualized Rate of Return (Valuation Assets)</i>	<i>Increase in CPI*</i>
1995		4.4%		3.0%
1996	9.8%	9.8%		2.8%
1997	16.7%	11.6%		2.3%
1998	13.9%	12.7%		1.7%
1999	10.0%	12.3%		2.0%
2000	9.1%	11.5%		3.7%
2001	-3.6%	8.6%		3.2%
2002	-5.6%	4.9%		1.1%
2003	4.6%	3.3%		2.1%
2004	12.6%	3.3%		3.3%
2005	8.7%	2.5%		2.5%
2006	7.6%	4.7%		4.3%
2007	16.3%	8.9%		2.7%
2008	-6.7%	1.2%		5.0%
2009	-22.1%	-4.9%	2.7%**	(1.4%)
2010	12.7%	7.0%	6.0%	1.1%
2011	22.6%	2.6%	2.7%	3.6%
2012	-1.6%	0.6%	1.0%	1.7%
Compounded 15 Year Average	4.6%	5.2%	N / A	2.4%
Compounded 10 Year Average	4.7%	2.9%	N / A	2.5%
Compounded 5 Year Average	-0.2%	1.2%	N / A	2.0%

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

\*\* Return on Valuation Assets was -5.2% prior to expansion of corridor from 20% to 30%



### **Section 3:**

## **Actuarial Computations**

### 3.1: Computation of Annual Contribution Rate as of June 30, 2011

(1) Fully Projected Liability	
Active	503,986,173
Inactive	36,156,111
Receiving Benefits	558,483,150
Total	1,098,625,434
(2) Actuarial Accrued Liability	
Active	339,277,422
Inactive	36,156,111
Receiving Benefits	558,483,150
Total	933,916,683
(3) Projected Payroll	111,341,814
(4) Total Normal Cost (% Pay)	19.41%
(5) Employee Contribution (% Pay)	9.08%
(6) Employer Normal Cost (% Pay) [(4) - (5)]	10.33%
(7) Valuation Assets	523,980,432
(8) Unfunded Actuarial Accrued Liability [(2) - (7)]	409,936,251
(9) Amortization of Unfunded Liability	33,092,818
(10) Amortization of Unfunded Liability (% Pay) [(9) ÷ (3)]	29.72%
(11) Total Employer Cost (% Pay) [(6) + (10)]	40.05%
(12) Total Employer Cost (% Pay) [(11) x (3)]	44,594,074
(13) Projected Payroll FY 2012-2013 [(3) x (1.0000)] <sup>3</sup>	111,341,814
(14) Projected Employer Cost FY 2012-2013 [(13) x (11)]	44,594,074

<sup>3</sup> No general wage increase is assumed for the FY 2012-2013

### 3.2: Computation of Annual Contribution Rate as of June 30, 2012

(1) Fully Projected Liability	
Active	469,867,534
Inactive	35,168,749
Receiving Benefits	632,318,639
Total	1,137,354,922
(2) Actuarial Accrued Liability	
Active	308,120,271
Inactive	35,168,749
Receiving Benefits	632,318,639
Total	975,607,659
(3) Projected Payroll	106,580,933
(4) Total Normal Cost (% Pay)	18.92%
(5) Employee Contribution (% Pay)	8.87%
(6) Employer Normal Cost (% Pay) [(4) - (5)]	10.04%
(7) Valuation Assets	528,727,523
(8) Unfunded Actuarial Accrued Liability [(2) - (7)]	446,880,136
(9) Amortization of Unfunded Liability	36,303,766
(10) Amortization of Unfunded Liability (% Pay) [(9) ÷ (3)]	34.06%
(11) Total Employer Cost (% Pay) [(6) + (10)]	44.10%
(12) Total Employer Cost (% Pay) [(11) x (3)]	47,007,242
(13) Projected Payroll FY 2013-2014 [(3) x (1.0000)] <sup>4</sup>	106,580,933
(14) Projected Employer Cost FY 2013-2014 [(13) x (11)]	47,007,242

<sup>4</sup> No general wage increase is assumed for the FY 2013-2014

### 3.3: Actuarial Balance Sheet

<b>Assets</b>	
1. Actuarial value of assets	\$528,727,523
2. Present value of future contributions by members	69,912,502
3. Present value of future employer contributions for normal cost	91,834,761
4. Present value of other future employer contributions (UAAL)	446,880,136
<b>5. Total actuarial assets</b>	<b>\$1,137,354,922</b>
<b>Liabilities</b>	
6. Present value of retirement allowances payable to retired/disabled members and their survivors	\$632,318,639
7. Present value of service retirement allowances payable to presently active members and their survivors	410,061,926
8. Present value of allowances payable to current and future vested terminated and their survivors	57,638,982
9. Present value of disability retirement allowances payable to presently active members and their survivors	22,348,401
10. Present value of death benefits payable on behalf of presently active members	7,760,482
11. Present value of members' contributions to be returned upon withdrawal	7,226,492
12. Special Reserves (Measured at Actuarial Value)	0
<b>13. Total actuarial liabilities</b>	<b>\$1,137,354,922</b>

### 3.4: Actuarial Gain and Loss

1. Unfunded actuarial accrued liability as of June 30, 2011		409,936,251
2. Change due to contributions:		
(a) Normal Cost	20,817,127	
(b) Interest on (a)	1,613,327	
(c) Interest on (1)	31,770,059	
(d) Total contributions	(50,679,182)	
(e) Interest on (d)	(1,963,818)	
(f) Net change [(a) + (b) + (c) + (d) + (e)]		1,557,513
3. Expected unfunded actuarial accrued liability as of June 30, 2012 [(1) + (2)]		411,493,764
4. Change due to experience:		
(a) Actuarial (gain)/loss from liabilities	11,401,112	
(b) Actuarial (gain)/loss from assets	40,054,032	
(c) Net change [(a) + (b)]		51,455,144
5. Unfunded actuarial accrued liability before changes [(3) + (4)]		462,948,908
6. Change in actuarial assumptions		(16,068,772)
7. Change in plan provisions		0
8. Change in actuarial assumptions		0
9. Unfunded actuarial accrued liability as of June 30, 2012 [(5) + (6) + (7) + (8)]		446,880,136





## **Section 4:**

### **Disclosure Information**

## 4.1: Schedules of Funding Status and Employer Contributions Required Under GASB Statement No. 25

The Governmental Accounting Standards Board (GASB) Statements No. 25 and 27 relate to the disclosure of pension liabilities on a public employer's financial statements. For accounting periods beginning after June 15, 1996, information required under these statements must be prepared for a public employer who seeks compliance with generally accepted accounting principles (GAAP) on behalf of its public employee retirement system.

GASB Statement No. 25 requires preparation of schedules of funding status and employer contributions, as well as the disclosure of plan provisions, actuarial assumptions, and other information. The required schedules are shown below. In each case, we have relied upon information from our files and contained in the reports of other actuaries employed by the employer in completing the schedules. While we have no reason to believe the information in our files or in other actuaries' reports is inaccurate, we strongly recommend that employer personnel verify the schedules below before they are included in Plan or employer financial statements.

<b>Schedule of Funding Status</b>						
<b><i>(Dollar Amounts in Thousands)</i></b>						
<b>Actuarial Valuation Date</b>	<b>Actuarial Value of Assets</b>	<b>Actuarial Accrued Liability</b>	<b>Unfunded Actuarial Accrued Liability</b>	<b>Funded Ratio</b>	<b>Covered Payroll</b>	<b>Unfunded Liability as a Percent of Payroll</b>
7/1/1998	260,884	333,771	72,887	78.2%	57,854	126.0%
7/1/1999	354,467	351,252	(3,215)	100.9%	62,521	(5.1%)
7/1/2000	N/A	N/A	N/A	N/A	N/A	N/A
7/1/2001	411,710	404,316	(7,394)	101.8%	76,015	(9.7%)
7/1/2002	424,613	421,435	(3,178)	100.8%	83,001	(3.8%)
7/1/2003	428,959	451,181	22,222	95.1%	88,586	25.1%
7/1/2004	430,054	531,938	101,884	80.8%	89,516	113.8%
7/1/2005	428,813	589,794	160,891	72.7%	97,507	165.1%
7/1/2006	439,309	619,644	180,335	71.1%	101,137	178.3%
7/1/2007	480,517	652,482	171,965	73.6%	100,589	171.0%
7/1/2008	488,347	692,252	203,906	70.5%	109,253	186.6%
7/1/2009	483,145	809,681	326,536	59.7%	114,984	284.0%
7/1/2010	509,561	930,832	421,271	54.7%	115,384	365.1%
7/1/2011	523,980	933,917	409,936	56.1%	111,342	368.2%
7/1/2012	528,728	975,608	446,880	54.2%	106,581	419.3%

Schedule of Employer Contributions (Dollar Amounts in Thousands)		
Year Ending	Annual Required Contribution	Percentage Contributed
6/30/1999	69,919	100%
6/30/2000	6,259	100%
6/30/2001	6,927	100%
6/30/2002	7,731	100%
6/30/2003	7,201	100%
6/30/2004	7,269	100%
6/30/2005	8,931	100%
6/30/2006	14,750	100%
6/30/2007	23,232	100%
6/30/2008	23,751	100%
6/30/2009	27,883	100%
6/30/2010	29,137	100%
6/30/2011	36,662	100%
6/30/2012	40,263	100%

The table below summarizes certain information about this actuarial report.

Valuation date	June 30, 2012
Actuarial cost method	Entry Age Normal (to Final Decrement)
Amortization method	Level percentage of payroll closed
Remaining amortization period	17 Years
Asset valuation method	Actuarial value: Excess earnings smoothed over five years, 70%/130% corridor around market value
Actuarial assumptions:	
Investment rate of return*	7.75%
Projected salary increases*	3.75%, plus service-based rates
*Includes inflation at	3.75%
Cost of living adjustments	For Tier 1, 100% of CPI to 3% annually with banking, assumed to be 2.7% annually



## **Appendix I:**

### **General and Safety Contribution Rates, Solvency Test, Individual Member Contribution Rates**

## Employer Contribution Rates for General and Safety

Separate rates for General and Safety members are shown below.

	<u>Tier I</u>		<u>Tier II</u>		<u>Total</u>	
	Prior	Recommended	Prior	Recommended	Prior	Recommended
<b>General</b>						
Employer Normal Cost	11.44%	11.08%	8.54%	8.40%	9.17%	8.85%
UAAL Amortization Cost	29.25%	33.05%	29.25%	33.05%	29.25%	33.05%
<b>Total Cost</b>	40.69%	44.13%	37.79%	41.45%	38.42%	41.91%
<b>Safety</b>						
Employer Normal Cost	20.44%	19.96%	14.48%	14.51%	15.85%	15.63%
UAAL Amortization Cost	31.94%	38.79%	31.94%	38.79%	31.94%	38.79%
<b>Total Cost</b>	52.38%	58.75%	46.42%	53.30%	47.79%	54.42%
<b>General and Safety</b>						
Employer Normal Cost						<b>10.04%</b>
UAAL Amortization Cost						<b>34.06%</b>
<b>Total Cost</b>						<b>44.10%</b>

### Employee Contribution Rates for General and Safety

Sample rates (for pay over \$350 per month) are shown for various entry ages, as well as the average rate for each Tier (weighted by dollars of contributions and total payroll).

Entry Age	25	35	45	Population Average (Dollar Weighted)
General Tier I	9.60%	12.30%	14.07%	10.82%
General Tier II	6.82%	8.70%	9.86%	8.31%
General				8.74%
Safety Tier I	13.56%	16.01%	17.59%	12.98%
Safety Tier II	8.19%	10.02%	11.00%	8.61%
Safety				9.50%
Total				8.87%

### Employer Contribution Rates – Cemetery Members Only

Only the rates for Tier II general members are shown below, as this is the only Tier with active Cemetery Members.

General Tier II	Prior	Recommended
Employer Normal Cost	7.05%	7.32%
UAAL Amortization Cost	9.37%	11.25%
Total Cost	16.42%	18.57%

## Solvency Test

As part of the information required for financial reporting, a solvency test and history of such is shown in the table below. Historical information (prior to 6/30/2009) was taken from the actuarial valuation report as of June 30, 2008.

Valuation Date	Actuarial Accrued Liability			Total Actuarial Accrued Liability	Valuation Assets	Portion of Accrued Liabilities Covered by Assets		
	Active Member Contributions	Retirees and Beneficiaries	Active Members <sup>5</sup>			Active Member Contributions	Retirees and Beneficiaries	Active Members
6/30/1999	43,736,000	187,535,000	119,981,000	351,252,000	354,469,000	100%	100%	100%
6/30/2001	49,481,000	211,439,000	143,396,000	404,316,000	411,710,000	100%	100%	100%
6/30/2002	50,941,000	212,359,000	158,135,000	421,435,000	424,613,000	100%	100%	100%
6/30/2003	48,379,000	238,727,000	164,075,000	451,181,000	428,959,000	100%	100%	86%
6/30/2004	48,708,000	265,193,000	218,037,000	531,938,000	430,054,000	100%	100%	53%
6/30/2005	49,162,000	281,246,000	259,386,000	589,794,000	428,813,000	100%	100%	38%
6/30/2006	54,826,000	305,589,000	263,918,000	624,333,000	443,999,000	100%	100%	32%
6/30/2007	59,299,000	358,644,000	234,539,000	652,482,000	480,517,000	100%	100%	28%
6/30/2008	66,865,000	370,764,000	254,623,000	692,252,000	488,347,000	100%	100%	20%
6/30/2009	65,126,000	448,231,000	296,324,000	809,681,000	483,145,000	100%	93%	0%
6/30/2010	64,917,000	532,695,000	333,220,000	930,832,000	509,561,000	100%	83%	0%
6/30/2011	65,723,000	558,483,000	309,711,000	933,917,000	523,980,000	100%	82%	0%
6/30/2012	66,407,000	632,319,000	276,882,000	975,608,000	528,728,000	100%	73%	0%

<sup>5</sup> Includes terminated vested members



## Individual Employee Contribution Rates

Employee contribution rates vary by member Group and Tier. The basic rates are determined based on Government Code Section 31621.8 for General members (31621.1 for members under benefit section 31676.11) and Section 31639.25 for Safety members. The COLA rates for members in Tier 1 are determined based on 50% of the normal cost associated with the expected COLA benefits, including joint and survivor benefits, determined for each individual entry age.

The current rates were determined by EFI based on an interest rate of 7.75% per annum, an average salary increase of 3.75% per year (plus service-based increases for merit/longevity), and the Retired Pensioners (RP) 2000 tables published by the Society of Actuaries with a two-year setback for male employees and no age adjustment for female employees. The rates are blended based on a male/female weighting of 33 1/3% male / 66 2/3% female for General members, and 75% male / 25% female for Safety members.

### General Members

Entry Age	Tier 1				Tier 2	
	Basic Rate		COL Rate		Basic Rate	
	1 <sup>st</sup> \$350	Over \$350	1 <sup>st</sup> \$350	Over \$350	1 <sup>st</sup> \$350	Over \$350
16	4.35%	6.53%	1.34%	2.01%	4.01%	6.02%
17	4.35%	6.53%	1.34%	2.01%	4.01%	6.02%
18	4.35%	6.53%	1.34%	2.01%	4.01%	6.02%
19	4.35%	6.53%	1.34%	2.01%	4.01%	6.02%
20	4.35%	6.53%	1.34%	2.01%	4.01%	6.02%
21	4.46%	6.69%	1.37%	2.05%	4.12%	6.17%
22	4.57%	6.86%	1.40%	2.10%	4.22%	6.33%
23	4.69%	7.03%	1.42%	2.13%	4.33%	6.49%
24	4.81%	7.21%	1.44%	2.16%	4.44%	6.66%
25	4.93%	7.40%	1.47%	2.20%	4.55%	6.82%
26	5.06%	7.59%	1.50%	2.24%	4.67%	7.00%
27	5.19%	7.78%	1.53%	2.29%	4.79%	7.18%
28	5.32%	7.98%	1.56%	2.34%	4.91%	7.36%
29	5.46%	8.19%	1.59%	2.39%	5.04%	7.56%
30	5.60%	8.40%	1.63%	2.44%	5.17%	7.75%
31	5.75%	8.63%	1.67%	2.50%	5.31%	7.96%
32	5.91%	8.86%	1.71%	2.56%	5.45%	8.17%
33	6.07%	9.10%	1.76%	2.63%	5.58%	8.37%
34	6.23%	9.35%	1.80%	2.71%	5.70%	8.55%
35	6.35%	9.52%	1.85%	2.78%	5.80%	8.70%
36	6.46%	9.69%	1.88%	2.83%	5.91%	8.86%
37	6.58%	9.87%	1.92%	2.88%	6.02%	9.02%
38	6.71%	10.06%	1.95%	2.93%	6.11%	9.17%
39	6.84%	10.26%	1.99%	2.98%	6.19%	9.28%
40	6.91%	10.36%	2.01%	3.02%	6.25%	9.38%
41	6.97%	10.46%	2.04%	3.06%	6.31%	9.47%
42	7.04%	10.57%	2.07%	3.10%	6.38%	9.56%
43	7.11%	10.67%	2.09%	3.13%	6.44%	9.66%
44	7.19%	10.78%	2.11%	3.16%	6.51%	9.76%
45	7.26%	10.89%	2.12%	3.18%	6.57%	9.86%
46	7.34%	11.01%	2.12%	3.17%	6.64%	9.96%
47	7.42%	11.12%	2.11%	3.17%	6.71%	10.07%
48	7.50%	11.25%	2.10%	3.15%	6.79%	10.18%
49	7.59%	11.38%	2.09%	3.14%	6.86%	10.28%
50	7.68%	11.52%	2.08%	3.12%	6.91%	10.37%
51	7.76%	11.63%	2.02%	3.03%	6.93%	10.40%
52	7.81%	11.71%	1.96%	2.93%	6.94%	10.41%
53	7.80%	11.70%	1.90%	2.84%	7.19%	10.79%
54	7.80%	11.69%	1.84%	2.76%	7.46%	11.19%
55	7.70%	11.56%	1.78%	2.67%	7.37%	11.06%
56	7.61%	11.41%	1.71%	2.57%	7.28%	10.92%
57	7.50%	11.26%	1.64%	2.46%	7.18%	10.77%
58	7.40%	11.09%	1.57%	2.35%	7.08%	10.62%
59+	7.28%	10.93%	1.50%	2.25%	6.97%	10.46%

**General Members – Tier 2 (31676.11 – Cemetery Only)**

Entry Age	Basic Rates	
	1 <sup>st</sup> \$350	Over \$350
16	3.35%	5.02%
17	3.35%	5.02%
18	3.35%	5.02%
19	3.35%	5.02%
20	3.35%	5.02%
21	3.43%	5.15%
22	3.52%	5.28%
23	3.61%	5.41%
24	3.70%	5.55%
25	3.79%	5.69%
26	3.89%	5.83%
27	3.99%	5.98%
28	4.09%	6.14%
29	4.20%	6.30%
30	4.31%	6.46%
31	4.42%	6.63%
32	4.54%	6.81%
33	4.65%	6.97%
34	4.75%	7.12%
35	4.83%	7.25%
36	4.92%	7.38%
37	5.01%	7.52%
38	5.09%	7.64%
39	5.16%	7.74%
40	5.21%	7.81%
41	5.26%	7.89%
42	5.31%	7.97%
43	5.37%	8.05%
44	5.42%	8.13%
45	5.48%	8.22%
46	5.53%	8.30%
47	5.59%	8.39%
48	5.66%	8.48%
49	5.71%	8.57%
50	5.76%	8.64%
51	5.78%	8.67%
52	5.78%	8.67%
53	5.99%	8.99%
54	6.22%	9.33%
55	6.14%	9.21%
56	6.06%	9.10%
57	5.98%	8.97%
58	5.90%	8.85%
59+	5.81%	8.71%

### Safety Members

Entry Age	Tier 1				Tier 2	
	Basic Rate		COL Rate		Basic Rate	
	1 <sup>st</sup> \$350	Over \$350	1 <sup>st</sup> \$350	Over \$350	1 <sup>st</sup> \$350	Over \$350
20	5.35%	8.02%	2.89%	4.33%	4.91%	7.37%
21	5.46%	8.19%	2.94%	4.41%	5.01%	7.52%
22	5.58%	8.37%	2.97%	4.46%	5.12%	7.68%
23	5.70%	8.54%	3.01%	4.52%	5.23%	7.85%
24	5.82%	8.73%	3.05%	4.58%	5.34%	8.01%
25	5.94%	8.92%	3.09%	4.64%	5.46%	8.19%
26	6.07%	9.11%	3.13%	4.70%	5.58%	8.37%
27	6.21%	9.31%	3.17%	4.75%	5.70%	8.55%
28	6.35%	9.52%	3.20%	4.80%	5.83%	8.74%
29	6.49%	9.73%	3.24%	4.86%	5.96%	8.94%
30	6.64%	9.95%	3.27%	4.91%	6.09%	9.14%
31	6.79%	10.19%	3.27%	4.90%	6.24%	9.35%
32	6.95%	10.43%	3.27%	4.90%	6.38%	9.58%
33	7.12%	10.68%	3.27%	4.91%	6.51%	9.76%
34	7.30%	10.95%	3.28%	4.92%	6.61%	9.91%
35	7.38%	11.07%	3.29%	4.94%	6.68%	10.02%
36	7.46%	11.20%	3.30%	4.95%	6.76%	10.14%
37	7.55%	11.33%	3.31%	4.96%	6.83%	10.25%
38	7.64%	11.46%	3.32%	4.98%	6.91%	10.37%
39	7.73%	11.60%	3.33%	4.99%	7.00%	10.50%
40	7.83%	11.75%	3.34%	5.02%	7.09%	10.63%
41	7.94%	11.91%	3.36%	5.04%	7.16%	10.74%
42	8.05%	12.08%	3.37%	5.06%	7.22%	10.83%
43	8.10%	12.15%	3.42%	5.13%	7.27%	10.90%
44	8.16%	12.24%	3.47%	5.20%	7.32%	10.97%
45	8.22%	12.34%	3.50%	5.26%	7.33%	11.00%
46	8.31%	12.46%	3.51%	5.26%	7.31%	10.97%
47	8.26%	12.39%	3.52%	5.27%	7.27%	10.91%
48	8.22%	12.32%	3.52%	5.28%	7.54%	11.31%
49+	8.17%	12.26%	3.53%	5.30%	7.82%	11.73%

## **Appendix II:**

### **Information for Completing Consolidated Annual Financial Report (CAFR)**

## Active Member Data

Valuation at Year End	Plan Type	Member Count	Annual Payroll	Average Annual Salary	Average Salary Increase
2003	General	1,930	76,971,000	39,881	6.24%
	Safety	262	11,615,000	44,332	6.14%
	<b>Total</b>	<b>2,192</b>	<b>88,586,000</b>	<b>40,413</b>	<b>6.29%</b>
2004	General	1,824	77,023,000	42,228	5.89%
	Safety	268	12,493,000	46,616	5.15%
	<b>Total</b>	<b>2,092</b>	<b>89,516,000</b>	<b>42,790</b>	<b>5.88%</b>
2005	General	1,892	83,166,000	43,957	4.09%
	Safety	295	14,341,000	48,614	4.29%
	<b>Total</b>	<b>2,187</b>	<b>97,507,000</b>	<b>44,585</b>	<b>4.19%</b>
2006	General	1,919	85,864,000	44,744	1.79%
	Safety	310	15,274,000	49,271	1.35%
	<b>Total</b>	<b>2,229</b>	<b>101,138,000</b>	<b>45,374</b>	<b>1.77%</b>
2007	General	1,917	85,308,000	44,501	-0.54%
	Safety	318	15,281,000	48,053	-2.47%
	<b>Total</b>	<b>2,235</b>	<b>100,589,000</b>	<b>45,006</b>	<b>-0.81%</b>
2008	General	1,921	92,116,000	47,952	7.75%
	Safety	339	17,137,000	50,552	5.20%
	<b>Total</b>	<b>2,260</b>	<b>109,253,000</b>	<b>48,342</b>	<b>7.41%</b>
2009	General	1,848	99,266,589	53,716	12.02%
	Safety	342	19,363,697	56,619	12.00%
	<b>Total</b>	<b>2,190</b>	<b>118,630,286</b>	<b>54,169</b>	<b>12.05%</b>
2010	General	1,708	94,915,436	55,571	3.45%
	Safety	330	19,692,515	59,674	5.40%
	<b>Total</b>	<b>2,038</b>	<b>114,607,951</b>	<b>56,236</b>	<b>3.82%</b>
2011	General	1,659	94,976,978	57,250	3.02%
	Safety	321	19,768,859	61,585	3.20%
	<b>Total</b>	<b>1,980</b>	<b>114,745,837</b>	<b>57,952</b>	<b>3.05%</b>
2012	General	1,596	90,706,280	56,834	-0.73%
	Safety	305	19,145,091	62,771	1.93%
	<b>Total</b>	<b>1,901</b>	<b>109,851,371</b>	<b>57,786</b>	<b>-0.29%</b>

**Schedule of Retirees and Beneficiaries Valuation Data**

Valuation at Year End	Beginning of Year	Added During Year	Allowances Added	Removed During Year	Allowances Removed	End of Year	Annual Retirement Payroll	Average Allowance Percentage Increase	Average Annual Allowance
2003	1,295	N/A	N/A	N/A	N/A	1,348	20,369,000	15.25%	15,111
2004	1,348	124	2,807,000	31	396,000	1,441	22,780,000	11.84%	15,808
2005	1,441	109	2,445,000	49	450,000	1,477	24,867,000	9.16%	16,836
2006	1,477	98	2,007,000	53	785,000	1,521	27,297,000	9.77%	17,947
2007	1,521	136	4,419,000	38	560,000	1,620	31,823,000	16.58%	19,644
2008	1,620	105	2,757,000	67	902,000	1,658	34,603,000	8.74%	20,870
2009	1,658	105	3,402,523	52	812,828	1,711	37,747,525	9.09%	22,062
2010	1,711	171	6,097,956	56	981,465	1,826	43,653,374	15.65%	23,907
2011	1,826	103	2,627,234	44	781,283	1,885	46,116,686	5.64%	24,465
2012	1,885	175	6,484,652	64	960,185	1,996	52,887,845	14.68%	26,497





## Appendix III:

### Prior General and Safety Contribution Rates

## Individual Employee Contribution Rates for the Prior Valuation

Employee contribution rates vary by member Group and Tier. The basic rates are determined based on Government Code Section 31621.8 for General members (31621.1 for members under benefit section 31676.11) and Section 31639.25 for Safety members. The COLA rates for members in Tier 1 are determined based on 50% of the normal cost associated with the expected COLA benefits, not including joint and survivor benefits, determined for each individual entry age.

The current rates were determined by EFI based on an interest rate of 7.75% per annum, an average salary increase of 3.75% per year (plus service-based increases for merit/longevity), and the Retired Pensioners (RP) 2000 tables published by the Society of Actuaries with a two-year setback for male employees and by the 1994 GAM tables with no age adjustment for female employees. The rates are blended based on a male/female weighting of 33 1/3% male / 66 2/3% female for General members, and 75% male / 25% female for Safety members.

### General Members

Entry Age	Tier 1				Tier 2	
	Basic Rate		COL Rate		Basic Rate	
	1 <sup>st</sup> \$350	Over \$350	1 <sup>st</sup> \$350	Over \$350	1 <sup>st</sup> \$350	Over \$350
16	4.40%	6.59%	1.30%	1.95%	4.06%	6.08%
17	4.40%	6.59%	1.30%	1.95%	4.06%	6.08%
18	4.40%	6.59%	1.30%	1.95%	4.06%	6.08%
19	4.40%	6.59%	1.30%	1.95%	4.06%	6.08%
20	4.40%	6.59%	1.30%	1.95%	4.06%	6.08%
21	4.51%	6.76%	1.33%	1.99%	4.16%	6.24%
22	4.62%	6.93%	1.36%	2.03%	4.26%	6.40%
23	4.74%	7.11%	1.38%	2.07%	4.37%	6.56%
24	4.86%	7.29%	1.40%	2.10%	4.48%	6.72%
25	4.98%	7.47%	1.42%	2.13%	4.60%	6.90%
26	5.11%	7.66%	1.45%	2.17%	4.71%	7.07%
27	5.24%	7.86%	1.48%	2.22%	4.84%	7.25%
28	5.38%	8.06%	1.51%	2.26%	4.96%	7.44%
29	5.52%	8.27%	1.54%	2.31%	5.09%	7.63%
30	5.66%	8.49%	1.57%	2.36%	5.22%	7.83%
31	5.81%	8.72%	1.61%	2.41%	5.36%	8.04%
32	5.97%	8.95%	1.65%	2.47%	5.51%	8.26%
33	6.13%	9.19%	1.69%	2.54%	5.64%	8.46%
34	6.30%	9.45%	1.74%	2.60%	5.76%	8.63%
35	6.41%	9.62%	1.78%	2.67%	5.86%	8.79%
36	6.53%	9.79%	1.81%	2.71%	5.97%	8.95%
37	6.65%	9.98%	1.84%	2.76%	6.08%	9.12%
38	6.78%	10.17%	1.87%	2.81%	6.17%	9.26%
39	6.91%	10.36%	1.90%	2.85%	6.25%	9.38%
40	6.98%	10.47%	1.93%	2.89%	6.32%	9.47%
41	7.05%	10.57%	1.95%	2.93%	6.38%	9.57%
42	7.12%	10.67%	1.98%	2.96%	6.44%	9.66%
43	7.19%	10.78%	2.00%	3.00%	6.51%	9.76%
44	7.26%	10.89%	2.01%	3.02%	6.57%	9.86%
45	7.34%	11.00%	2.02%	3.04%	6.64%	9.96%
46	7.41%	11.12%	2.02%	3.03%	6.71%	10.06%
47	7.49%	11.24%	2.02%	3.02%	6.78%	10.17%
48	7.58%	11.36%	2.01%	3.01%	6.86%	10.29%
49	7.66%	11.50%	2.00%	2.99%	6.93%	10.39%
50	7.76%	11.64%	1.98%	2.97%	6.98%	10.47%
51	7.84%	11.75%	1.92%	2.88%	7.01%	10.51%
52	7.89%	11.83%	1.86%	2.79%	7.01%	10.51%
53	7.88%	11.82%	1.80%	2.71%	7.27%	10.90%
54	7.88%	11.82%	1.75%	2.62%	7.54%	11.31%
55	7.79%	11.68%	1.70%	2.54%	7.45%	11.18%
56	7.69%	11.54%	1.63%	2.44%	7.36%	11.04%
57	7.60%	11.39%	1.56%	2.34%	7.27%	10.90%
58	7.49%	11.24%	1.50%	2.25%	7.17%	10.76%
59+	7.39%	11.08%	1.43%	2.15%	7.07%	10.60%

**General Members – Tier 2 (31676.11 – Cemetery Only)**

Entry Age	Basic Rates	
	1 <sup>st</sup> \$350	Over \$350
16	3.38%	5.07%
17	3.38%	5.07%
18	3.38%	5.07%
19	3.38%	5.07%
20	3.38%	5.07%
21	3.47%	5.20%
22	3.55%	5.33%
23	3.64%	5.46%
24	3.74%	5.60%
25	3.83%	5.75%
26	3.93%	5.89%
27	4.03%	6.04%
28	4.13%	6.20%
29	4.24%	6.36%
30	4.35%	6.53%
31	4.47%	6.70%
32	4.59%	6.88%
33	4.70%	7.05%
34	4.80%	7.19%
35	4.88%	7.32%
36	4.97%	7.46%
37	5.06%	7.60%
38	5.14%	7.72%
39	5.21%	7.82%
40	5.26%	7.89%
41	5.32%	7.97%
42	5.37%	8.05%
43	5.42%	8.13%
44	5.48%	8.22%
45	5.53%	8.30%
46	5.59%	8.39%
47	5.65%	8.48%
48	5.71%	8.57%
49	5.77%	8.66%
50	5.82%	8.73%
51	5.84%	8.76%
52	5.84%	8.76%
53	6.06%	9.08%
54	6.28%	9.42%
55	6.21%	9.32%
56	6.14%	9.20%
57	6.06%	9.09%
58	5.98%	8.96%
59+	5.89%	8.84%

### Safety Members

Entry Age	Tier 1				Tier 2	
	Basic Rate		COL Rate		Basic Rate	
	1 <sup>st</sup> \$350	Over \$350	Over \$350	1 <sup>st</sup> \$350	1 <sup>st</sup> \$350	Over \$350
20	5.36%	8.04%	2.65%	3.98%	4.92%	7.39%
21	5.48%	8.21%	2.70%	4.05%	5.03%	7.54%
22	5.59%	8.39%	2.73%	4.09%	5.14%	7.70%
23	5.71%	8.57%	2.76%	4.14%	5.25%	7.87%
24	5.83%	8.75%	2.79%	4.19%	5.36%	8.04%
25	5.96%	8.94%	2.82%	4.24%	5.47%	8.21%
26	6.09%	9.14%	2.85%	4.28%	5.59%	8.39%
27	6.22%	9.34%	2.88%	4.33%	5.72%	8.57%
28	6.36%	9.54%	2.91%	4.37%	5.84%	8.76%
29	6.51%	9.76%	2.94%	4.41%	5.97%	8.96%
30	6.66%	9.98%	2.97%	4.45%	6.11%	9.17%
31	6.81%	10.22%	2.95%	4.43%	6.25%	9.38%
32	6.97%	10.46%	2.95%	4.42%	6.40%	9.60%
33	7.14%	10.71%	2.94%	4.42%	6.53%	9.79%
34	7.32%	10.98%	2.95%	4.42%	6.63%	9.94%
35	7.40%	11.10%	2.95%	4.42%	6.70%	10.05%
36	7.49%	11.23%	2.95%	4.42%	6.78%	10.16%
37	7.57%	11.36%	2.94%	4.42%	6.85%	10.28%
38	7.66%	11.49%	2.95%	4.42%	6.93%	10.40%
39	7.75%	11.63%	2.95%	4.42%	7.02%	10.53%
40	7.85%	11.78%	2.96%	4.43%	7.11%	10.66%
41	7.96%	11.94%	2.96%	4.44%	7.18%	10.77%
42	8.08%	12.11%	2.97%	4.45%	7.24%	10.86%
43	8.13%	12.19%	3.00%	4.49%	7.29%	10.93%
44	8.18%	12.27%	3.03%	4.55%	7.34%	11.01%
45	8.25%	12.37%	3.05%	4.58%	7.35%	11.03%
46	8.33%	12.49%	3.05%	4.57%	7.33%	11.00%
47	8.28%	12.43%	3.05%	4.57%	7.29%	10.94%
48	8.24%	12.36%	3.04%	4.56%	7.56%	11.34%
49+	8.19%	12.29%	3.04%	4.56%	7.84%	11.76%