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 Seattle, WA 98112
 (206) 328-8628 Phone | (206) 726-0224 Fax
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ROBERT T. MCCRORY | Executive Vice President

December 4, 2012

Mr. Rick Santos
 Executive Director
 Stanislaus County Employees' Retirement Association
 832 12th Street, Suite 600
 Modesto, CA 95354

Re: PEPRA Plan Revisions and Costs

Dear Rick:

As you know, the California legislature has passed, and Governor Brown has signed into law, the California Public Employees' Pension Reform Act (PEPRA, the Act). PEPRA mandates a new benefit formula for the employees of almost all political subdivisions in the State. Benefit provisions regarding eligibility and amounts are largely prescribed by the Act for general service employees; benefits for safety employees must be based on one of three permissible formula.

The funding of pension benefits is also changed by PEPRA: Members joining any public plan on and after January 1, 2013 (Members of StanCERA Tier 6) are required to contribute half of the normal cost of the revised plan as computed by the plan actuary. The purpose of this letter is to describe briefly the effects of PEPRA on the Stanislaus County Employees' Retirement Association (the Plan) and to provide an estimate of the member contribution that will be required of those joining the Plan during 2013. We have computed the Tier 6 normal cost using the member data from the Actuarial Valuation of the Plan as of July 1, 2011. The results of our computations are shown in Table 1 below.

Table 1: Employer and Employee Contribution Rates – Tier 6

	General (All Members)	General (Hired Within Ten Years, Recommended)	Safety (All Members)	Safety (Hired Within Ten Years, Recommended)
Number of Members	3,232	1,361	637	284
Average Age at Entry	34.7	35.7	28.2	28.4
Plan Normal Cost	14.41%	15.21%	26.04%	26.09%
Average New Member Employee Contribution Rate	7.25%	7.50%	13.00%	13.00%
New Member Employer Normal Cost	7.16%	7.71%	13.04%	13.09%
New Member Employer Total Cost	17.92%	18.47%	30.59%	30.64%

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In the costs shown above, the Total and Normal Cost rates and the Employee Contribution Rates are assumed to apply only to pensionable compensation for the new Tier 6 Members, which is expected to exclude compensation above the Social Security Taxable Wage Base (120% of the Wage Base for those not participating in Social Security).

The normal cost is computed using the PEPRA mandated benefit formulas for General (Non-Safety) and Safety members. The formula for Safety members is the Safety Option Plan Two (2.7% @ 57), as described in 7522.25(d) of the Act. The Plan as revised by the Act is outlined in the attachment, with the PEPRA changes highlighted. Many requirements of the Act are still open to question, and legal clarifications will be coming in 2012 and 2013. Therefore, the Plan provisions outlined here must be regarded as tentative and subject to change, and should be reviewed by Staff and Counsel.

The same proviso extends to the actuarial assumptions we have used. The actuarial experience that will emerge from the new Plan provisions is unknown. Our approach here has been to stay as close as possible to the actuarial assumptions suggested by the most recent experience study. There are a several areas in which we have modified assumptions from the July 1, 2011 actuarial valuation. We have made the following changes specifically for this letter:

- Rates of retirement below age 52 for General members – the youngest retirement age allowed by PEPRA – have been set to zero.
- Those eligible for retirement under the new PEPRA benefits (i.e. age 52 for General members, age 50 for Safety members) are no longer assumed to withdraw their contributions or take a deferred vested benefit if they have at least five years of service.
- PEPRA does not allow for employees to use accumulated leave time to increase their compensation included in their retirement benefit, therefore the pay load for accumulated leave time has been removed from Tier 6 calculations.

We have also recommended the following preliminary assumption changes as part of our ongoing experience study:

- The rate of return, inflation and salary increase assumptions were lowered from 8.00%, 3.50% and 3.75%, respectively, to 7.75%, 3.25% and 3.50%.
- Rates of retirement were lowered for some Safety members.
- Total rates of termination were changed for employees with lower amounts of service.
- Non service-connected disability rates were lowered for General members.

Thus, all the usual actuarial disclaimers apply, plus a few more. The Plan normal cost and the employee contribution rate will start coming into focus in the July 1, 2013 valuation, when we will have at least some Tier 6 Members with PEPRA benefits. Retirement rates for these Members will not arise for at least five to ten years.

Age at Entry

In Table 1 above, we notice that there is a small increase in the Plan normal cost for General Members, and the related employee contribution rate, when we look at members who entered the Plan during the past ten years. As a general rule, the normal cost of a pension plan is higher for members who are older when they enter the plan. The average plan entry age of all Plan members is 34.7 years for General and 28.2 years for Safety, but among those who have entered the Plan during the past ten years the entry age is 35.7 years for General and 28.4 years for Safety.

Accordingly, the Plan General normal cost increases from 14.41% for all members to 15.21% for members joining the Plan over the last ten years, while the associated employee contribution rate rises from 7.25% to 7.50%. The Safety normal cost increases from 26.04% for all members to 26.09%, while the associated employee contribution rate stays level at 13.00%. The age at hire for public employers has been increasing over time, so this result is not surprising.

We expect that the ages of Tier 6 Members will be similar to those observed over the past ten years. Accordingly, we recommend use of the 15.21% total normal cost / 7.50% employee contribution rates for General Members and 26.09% total normal cost / 13.00% employee contribution rates for Safety Members.

Age at Retirement

Similarly, as a general rule, the normal cost of a pension plan is lower if members decide to defer their retirement to an age after they first become eligible. The normal cost reduction occurs when the additional benefits earned by delaying retirement are not as valuable as the benefits forgone by continuing to work. This is particularly true for plans that provide a post-retirement COLA. The impact of the choice of retirement date will be muted, however, if the benefit formula provides a reduced benefit at earlier retirement ages, especially if the reduction approaches actuarial equivalence.

Some people have speculated that the reduction in the benefit accruals under the new PEPRA tiers will lead to members voluntarily deferring their retirements until later ages, in order to accumulate a more substantial benefit. To test the impact of this factor, and estimate any potential savings from delayed retirements, we have recomputed the results under an alternative set of retirement assumptions. Rates of retirement were reduced by 20%, across the board, at all ages except the maximum age at which all members are expected to retire (age 70 for General, age 60 for Safety).

Table 2 below demonstrates the impact of the alternative retirement assumptions on the cost, and on the average retirement age for those members who are expected to receive a service retirement benefit. We note that the impact on the total normal cost for a change in the retirement behavior is relatively small.

Table 2: Tier 6 Contribution Rates, Alternative Retirement Assumptions

Members hired within Ten Years	Current Retirement Rates	Reduce Retirement Rates by 20%
Plan Normal Cost (General)	15.21%	15.20%
Average Retirement Age	60.1	61.0
Plan Normal Cost (Safety)	26.09%	26.15%
Average Retirement Age	54.5	54.8

We also computed the costs using the retirement rates developed by the CalPERS actuarial staff for participating public agency employers who will be subject to the same benefit formulas as the StanCERA Tier 6 Members. The total normal cost for the Plan decreased from 17.37% to 15.44%, with the Safety Members seeing a larger total normal cost decrease, from 26.09% to 20.55%.

As we stated above, our preferred approach here has been to stay as close as possible to the actuarial assumptions currently in place, so we recommend that the initial contribution rates for the new members be based on the current retirement assumptions. We do not currently recommend adopting the CalPERS retirement assumptions, as the current StanCERA retirement rates already deviate from the CalPERS assumptions, due to differences in populations and behavior. As new members join Tier 6, experience with respect to entry ages and retirement ages will emerge, and employee and employer contribution rates will be adjusted accordingly.

Normal Cost Methodology

There are two methods for computing Entry Age Normal Cost: Entry-Age-to-Decrement and Entry-Age-to-Final-Decrement. The Plan currently uses the Entry-Age-to-Decrement methodology. While both methodologies are acceptable methods for determining an actuarially sufficient funding contribution, the Government Accounting Standards Board has made changes to pension accounting standards that will require the use of the traditional, career-length approach of Entry-Age-to-Final-Decrement.

Table 3 shows a comparison of the results under both methodologies:

Table 3: Entry Age Methodology Comparison

	General (to Decrement)	General (to Final, Recommended)	Safety (to Decrement)	Safety (to Final, Recommended)
Plan Normal Cost	15.24%	15.21%	25.08%	26.09%
Average New Member Employee Contribution Rate	7.50%	7.50%	12.50%	13.00%
New Member Employer Normal Cost	7.74%	7.71%	12.58%	13.09%
New Member Employer Total Cost	18.50%	18.47%	30.13%	30.64%

We recommend the use of the Entry-Age-to-Final-Decrement for determining the Normal Cost for the Tier 6 members. The difference in cost is small for new entrants, and we will be recommending to the Board that they adopt this funding methodology for the Plan as a whole in the future to bring the funding liabilities into agreement with the accounting results.

Alternate Safety Plan Formulas

The 2.7% @ 57 benefit (Option Plan Two) is the baseline requirement for new Safety members under AB340, given the current benefit structure provided by the Plan. Employers have the ability to negotiate one of two other lower benefit formulas – the Basic Safety Plan (2.0% at 57), and Safety Option Plan One (2.5% at 57). Table 4 below shows a cost comparison among the three Safety plans:

Table 4: Safety Employer and Employee Contribution Rates – Tier 6

	Safety Option Plan Two (2.7% @ 57)	Basic Safety Plan (2% @ 57)	Safety Option Plan One (2.5% @ 57)
Plan Normal Cost	26.09%	20.95%	25.15%
Average New Member Employee Contribution Rate	13.00%	10.50%	12.50%
New Member Employer Normal Cost	13.09%	10.45%	12.65%
New Member Employer Total Cost	30.64%	28.00%	30.20%

The Basic Safety Plan offers savings of 2.64% of pay to the employer, while Safety Option Plan One saves 0.44% of pay. Note that we have not modified our retirement assumptions in these comparisons. The level of savings may be greater if the Basic or Plan One formulas were to result in later Safety retirements. We also reviewed the costs of the alternative Safety plans using the CalPERS retirement assumptions for these benefit formulas; the reductions in the employer normal costs were similar.

Employee Contribution Rates

As stated earlier, PEPRA requires that new members after January 1, 2013 contribute half of the normal cost of their benefits. Currently, the employee contribution rate for StanCERA members is based on their age at hire, with higher rates charged to those with later entry ages. However, the CERL allows Plans to charge a single employee contribution rate for each group, rather than one based on entry age, upon the advice of their actuary. We recommend that StanCERA adopts this approach for the new Tier 6 members, as it should simplify administration of the system.

We hope this is helpful. Please feel free to call with your questions and comments.

Sincerely,



Robert T. McCrory, FSA
Executive Vice President



Graham A Schmidt, ASA
Senior Vice President

1.1: Brief Outline of Plan Provisions

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.

PEPRA: For members joining the Plan on and after January 1, 2013 (Tier 6 Members), only base compensation up to the Social Security Taxable Wage Base (\$113,700 for 2013) will count for computing Plan benefits and employee contributions and employer contributions for those participating in Social Security. For those not participating in Social Security, the compensation cap is 120% of the Taxable Wage Base (\$136,440 for 2013.) In addition, it is possible that some sources of compensation, such as any payments deemed to be terminal or special pays, may be excluded from benefit and contribution computations for Tier 6 Members.

Credited Service

In general, Credited Service is earned for the period during which Member Contributions are paid. Since Tier 3 Members participate in a non-contributory Plan, their Credited Service is calculated based on their date of Membership only.

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 that credit may be purchased for 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:** Only Tier 1 and 4 Members may buy back this service.
- **Military Time:** Only Tier 1 and 4 Members may buy back this service.

- Enhance Prior Tier Service: Applies to certain active and deferred Members with Tier 1, 2 or 3 service.
- Military “call up”
- AB 2766: Only Safety Employees can buy back this service.

A percentage of credited sick leave may be credited according to the Member’s applicable bargaining unit.

Final Compensation

For Members belonging to Tier 2 and Tier 3, Final Compensation means the highest Compensation earned during any thirty six consecutive months of the Member’s employment. For all others, it is the highest Compensation earned during any twelve months of employment.

PEPRA: For Tier 6 Members, highest average Compensation will be based on the highest thirty-six consecutive months for all Members.

General Member

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

Safety Member

Any sworn Member engaged in law enforcement, probation, or fire suppression is a Safety Member.

Membership

Eligibility

All full-time, permanent employees of Stanislaus County, City of Ceres, Stanislaus County Superior Court, Salida Sanitary District, East Side Mosquito Abatement, Keyes Community Services, Hills Ferry Cemetery and StanCOG hired on or after October 1, 1988 become Members on their date of appointment. All others hired before October 1, 1988 became Members on the first day of the calendar month following their date of appointment.

Detailed membership eligibility according to Tier and membership date is shown in Table 1.

PEPRA: A New Member is any Member joining the Plan for the first time on or after January 1, 2013. Employees who transfer from and are eligible for reciprocity with another public employer will not be Tier 6 Members if their service in the reciprocal system was under a pre-PEPRA tier. Employees who were Members of StanCERA prior to January 1, 2013 and experienced a break in service of more than six months and then were reemployed by a different StanCERA-participating employer on or after January 1, 2013 will be considered Tier 6 Members for all subsequent service.

Service Retirement

Eligibility

Tier 3 General Members are eligible to retire at age 55 if they have earned ten years of Credited Service. All other General Members are eligible to retire at age 50 if they have earned five years of Credited Service and have been an Association member for at least ten years. Alternatively, 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 five years of Credited Service and have been an Association member for at least ten years. 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.

PEPRA: Tier 6 General Members are eligible to retire upon attaining age 52 and completing five or more years of service. Tier 6 Safety Members are eligible to retire upon attaining age 50 and completing five or more years of service. Tier 6 Members are not eligible to retire, regardless of age, after attaining twenty (Safety) or thirty (General) years of service.

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 1 and the age factor from Table 2 corresponding to the Member's code section. The appropriate code sections for each group are listed in Table 1.

For Tier 3 Members with Credited Service up to thirty five years, the percentage of Final Compensation may not exceed 70% and for those with more than thirty five years, it may not exceed 80%. For all other Members, the percentage of Final Compensation may not exceed 100%. For those members integrated with Social Security (other than Tiers 3 and 6), Retirement Benefits based on the first \$350 of monthly Final Average Compensation are reduced by one-third.

Table 1: Member Group Descriptions

Group	Open or Closed	FAP	COLA	Code Section	Description	Top Retirement Factor Age	Benefit Factor
General Tier 1	Closed	1	3	31676.12	2% at 57	62	2.00%
General Tier 2	Open	3	3	31676.1	2% at 62	65	1.67%
General Tier 3	Closed	3	0	31499.14	Non-Contributory	65	First 35 Years: 2.0% of FAS less 1/35 th of Social Security benefit at age 65. Next 10 Years: 1% of FAS
General Tier 4	Closed	1	3	31676.14	2% at 55	65	1.67%
General Tier 5	Closed	1	3	31676.14	2% at 55	65	1.67%
Safety Tier 2	Open	3	3	31664	2% at 50	50	2.00%
Safety Tier 4	Closed	1	3	31664.1	3% at 50	50	3.00%
Safety Tier 5	Closed	1	3	31664.1	3% at 50	50	3.00%

Table 2: Age Factors

Age	Safety 2% at Age 50 CERL §: 31664	Safety 3% at Age 50 CERL §: 31664.1	General 2% at Age 62 CERL §: 31676.1	General 2% at Age 57 CERL §: 31676.12	General 2% at Age 55 CERL §: 31676.14	General 2% at Age 65 CERL §: 31499.14
41.00	0.6258	0.6258	N/A	N/A	N/A	N/A
42.00	0.6625	0.6625	N/A	N/A	N/A	N/A
43.00	0.7004	0.7004	N/A	N/A	N/A	N/A
44.00	0.7397	0.7397	N/A	N/A	N/A	N/A
45.00	0.7805	0.7805	N/A	N/A	N/A	N/A
46.00	0.8226	0.8226	N/A	N/A	N/A	N/A
47.00	0.8678	0.8678	N/A	N/A	N/A	N/A
48.00	0.9085	0.9085	N/A	N/A	N/A	N/A
49.00	0.9522	0.9522	N/A	N/A	N/A	N/A
50.00	1.0516	1.0000	0.7091	0.6681	0.8850	N/A
51.00	1.1078	1.0000	0.7457	0.7056	0.9399	N/A
52.00	1.1692	1.0000	0.7816	0.7454	1.0000	N/A
53.00	1.2366	1.0000	0.8181	0.7882	1.0447	N/A
54.00	1.3099	1.0000	0.8556	0.8346	1.1048	N/A
55.00	1.3099	1.0000	0.8954	0.8850	1.1686	0.3900
56.00	1.3099	1.0000	0.9382	0.9399	1.2365	0.4300
57.00	1.3099	1.0000	0.9846	1.0000	1.3093	0.4700
58.00	1.3099	1.0000	1.0350	1.0447	1.3608	0.5100
59.00	1.3099	1.0000	1.0899	1.1048	1.4123	0.5600
60.00	1.3099	1.0000	1.1500	1.1686	1.4638	0.6100
61.00	1.3099	1.0000	1.1947	1.2365	1.5153	0.6700
62.00	1.3099	1.0000	1.2548	1.3093	1.5668	0.7400
63.00	1.3099	1.0000	1.3186	1.3093	1.5668	0.8200
64.00	1.3099	1.0000	1.3865	1.3093	1.5668	0.9000
65.00	1.3099	1.0000	1.4593	1.3093	1.5668	1.0000

PEPRA: For Tier 6 General Members, the benefit multiplier will be 1% at age 52, increasing by 0.1% for each year of age to 2.5% at 67. For Tier 6 Safety Members, the benefit multiplier will be 2% at age 50, increasing by 0.1% for each year of age to 2.7% at age 57. In between exact ages, the multiplier will increase by 0.025% for each quarter year increase in age.

We assume the benefits for the Tier 6 Members are not integrated with Social Security, nor subject to the 100% cap of Final Compensation.

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 spouse or to the age of majority of dependent minor children if there is no spouse. For Tier 3 Members, the benefit payable to beneficiary is limited to 50%. In the event there is no surviving spouse 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, benefits for all retired members other than those in Tier 3 are adjusted to reflect changes in the CPI for the San Francisco Bay Area since the prior year. Benefits may be increased or decreased, but the cumulative changes shall never reduce the benefit below the original monthly allowance. Annual increases may not exceed the COLA figures shown in Table 1, but CPI increases above this figure are “banked” and used for future increases when the CPI increases by less than the figures shown.

In addition, ad hoc cost of living adjustments have been granted in the past and may be granted in the future.

A lump sum benefit of \$5,000 will be payable upon the death of a retired member. No death benefit is payable for Tier 3 retired members.

PEPRA: No change.

Service-Connected Disability

Eligibility

All non-Tier 3 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. Tier 3 Members are not eligible to receive disability benefits.

PEPRA: The Act is silent on eligibility requirements for benefits other than retirement. For now, we will assume that the Plan’s rules will continue to apply to Tier 6 Members.

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.

PEPRA: The Act did modify “Industrial” disabilities for CalPERS Safety Members. However, we have assumed that these changes will not apply to SACRS systems. The Service-Connected Disability Retirement Benefit for Tier 6 Members will be based on the new definitions of Compensation and Final Compensation applicable to Tier 6 members.

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 spouse or to the age of majority of dependent minor children if there is no spouse. In the event there is no surviving spouse 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 and COLA adjustments (as described for the Service Retirement benefit) are also available. A lump sum benefit of \$5,000 will be payable upon the death of the member.

Nonservice-Connected Disability

Eligibility

Tier 3 Members are not eligible to receive disability benefits. All other Members are eligible for Nonservice-Connected Disability Retirement benefits if they are permanently disabled at any age after earning five years of Credited Service.

PEPRA: The Act is silent on eligibility requirements for benefits other than retirement. For now, we will assume that the Plan's rules will continue to apply to Tier 6 Members.

Benefit Amount

The Nonservice-Connected Disability Retirement Benefit payable to Tier 1 General 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 62, but not to exceed one-third of 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.

The Nonservice-Connected Disability Retirement Benefit payable to Tiers 2, 4 and 5 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; 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; or
- If the Member is eligible at disability for a Service Retirement Benefit, the Service Retirement Benefit accrued on the date of disability.

PEPRA: The Nonservice-Connected Disability Retirement Benefit for Tier 6 Members will be based on the new definitions of Compensation and Final Compensation applicable to Tier 6 Members.

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 spouse or to the age of majority of dependent minor children if there is no spouse. In the event there is no surviving spouse 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 and COLA adjustments (as described for the Service Retirement benefit) are also available. A lump sum benefit of \$5,000 will be payable upon the death of the member.

Death Benefit

Eligibility

A Tier 3 Member's survivors are not eligible to receive death benefits. All other Members' survivors are eligible to receive different Death benefits dependent on the Member's cause of death and retirement eligibility.

PEPRA: The Act is silent on eligibility requirements for benefits other than retirement. For now, we will assume that the Plan's rules will continue to apply to Tier 6 Members.

Benefit Amount

In the event the Member's death resulted from injury or illness sustained in connection with the Member's duties, the Death Benefit payable to a surviving spouse, domestic partner or eligible dependent children will be the greater of 50% of the Member's Final Compensation at the time of death or the Service Retirement Benefit.

In the event the Member's death did not result from injury or illness sustained in connection with the Member's duties and at the time of death, the Member was eligible for Service Retirement or Non-Service Connected Disability (i.e. the employee was employed at least five years), the Death Benefit payable to the spouse, partner or children will be 60% of the survivor benefit based on benefit due on Member's date of death.

In all other cases, the designated beneficiary (not necessarily a spouse/partner/child) will receive a refund of the Member's contributions with interest plus one month of Final Compensation for each year of service to a maximum of six years.

PEPRA: The Death Benefit for Tier 6 Members will be based on the new definitions of Compensation and Final Compensation applicable to Tier 6 Members.

Form of Benefit

Annuity death benefits will be paid monthly beginning at the Member's death and for the life of the surviving spouse/partner or to the age of majority of dependent minor children if there is no spouse/partner. Lump sum benefits will be paid as described above.

COLA adjustments (as described for the annuity benefits) are also available.

Withdrawal Benefit

Eligibility

Tier 3 Members are not eligible to receive withdrawal benefits. All other Members are eligible for a Withdrawal Benefit upon termination of employment, if not eligible to receive or electing to waive a monthly benefit.

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. For Tier 3 Members, the vesting requirement is ten years of Credited Service.

The Member must leave his or her Member Contributions with interest on deposit with the Plan. This requirement does not apply to Tier 3 Members since they participate in a non-contributory 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.

PEPRA: For Tier 6 Members, the Deferred Vested Benefit will be based on the new benefit formulas, and will be based on the new definitions of Compensation and Final Compensation applicable to Tier 6 Members.

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 spouse or to the age of majority of dependent minor children if there is no spouse. For Tier 3 Members, the benefit payable to beneficiary is limited to 50%. In the event there is no surviving spouse or minor children, any unpaid remainder of the Member's accumulated contributions will be paid to the Member's designated beneficiary.

PEPRA: For Tier 6 Members, the Deferred Vested Benefit may commence at the new service retirement eligibility criteria (age 52 for General, age 50 for Safety.)

Actuarially equivalent optional benefit forms and COLA adjustments (as described for the Service Retirement benefit) are also available. A lump sum benefit of \$5,000 will be payable upon the death of the member. No death benefit is payable for Tier 3 retired members.

Reciprocal Benefit

Eligibility

A Member is eligible for a Reciprocal Benefit upon termination of employment after earning five years of Credited Service and entry, within a specified period of time, into another retirement system recognized as a reciprocal system by the Plan. For Tier 3 Members, the vesting requirement is ten years of Credited Service.

The Member must leave his or her Member Contributions with interest on deposit with the Plan. This requirement does not apply to Tier 3 Members since they participate in a non-contributory 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.

PEPRA: For Tier 6 Members, the Reciprocal Benefit will be based on the new benefit formulas, and will be based on the new definitions of Compensation and Final Compensation applicable to Tier 6 Members.

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 spouse or to the age of majority of dependent minor children if there is no spouse. For Tier 3 Members, the benefit payable to beneficiary is limited to 50%. In the event there is no surviving

spouse or minor children, any unpaid remainder of the Member's accumulated contributions will be paid to the Member's designated beneficiary.

PEPRA: For Tier 6 Members, the Reciprocal Benefit may commence at the new service retirement eligibility criteria (age 52 for General, age 50 for Safety.)

Actuarially equivalent optional benefit forms and COLA adjustments (as described for the Service Retirement benefit) are also available.

A lump sum benefit of \$5,000 will be payable upon the death of the member. No death benefit is payable for Tier 3 retired members.

Optional Benefit Forms

Prior to retirement, a member may elect to convert his retirement allowance into a benefit of equivalent actuarial value in accordance with one of the optional forms described below.

1. A reduced retirement allowance payable during his life with the provision that on his death the excess, if any, of his accumulated deductions at the time of retirement over the annuity payments made to him will be paid to his designated beneficiary or estate; or
2. A reduced retirement allowance payable during his life with the provision that after his death the reduced allowance will be continued for life to the beneficiary designated by him at the time of his retirement; or
3. A reduced retirement allowance payable during his life with the provision that after his death an allowance of one-half of his reduced allowance will be continued for life to the beneficiary designated by him at the time of his retirement.

In addition, a member participating in Social Security may elect to receive an increased monthly allowance before age 62 (earliest possible receipt of Social Security benefits) and then take a reduced monthly allowance at age 62 and after. This option will not affect any monthly payments payable to a beneficiary. This option is not available to those receiving a disability benefit.

Member Contributions

All non Tier 3 Members contribute a percentage of Compensation to the Plan through payroll deduction. The percentage contributed depends on the Member's nearest age upon joining the Plan. Members do not contribute after earning 30 years of Credited Service, **except for Tier 6 members, who continue to contribute after earning 30 years of Credited Service.**

City of Ceres members in Tiers 1 and 4 pay the Tier 2 and 5 rates ("Full" rates), rather than the rates for their respective Tiers ("Half" rates).

Interest is credited semiannually to each Member's accumulated contributions. The crediting rate is set by the Board; the current annual rate is 0.00%.

The employee contribution rates are shown in the Section 1.3.

1.2: Actuarial Methods and Assumptions

Actuarial Method

Annual contributions to the Stanislaus County Employees' Retirement Association (the Plan) are computed under the Entry Age Normal Actuarial Cost Method, computed to each decrement. **The Entry Age Normal Actuarial Cost Method, computed to the final decrement, has been used for the Tier 6 members.**

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 (25 years).

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 on an Aggregate basis) 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 80% and no more than 120% of the market value. As of June 30, 2011, the actuarial value has been reset to equal market value.

Actuarial Assumptions

The assumptions shown below are the proposed rates based on an experience studies conducted as of June 30, 2012 for the period covering July 1, 2009 till June 30, 2012, performed by EFI. These rates are preliminary, pending Board review and approval of the experience study.

Summary of Actuarial Assumptions

Rate of Return The annual rate of return on all Plan assets is assumed to be 7.75%, net of investment expenses.

Interest Credited to Employee Accounts The employee accounts are credited with 0.00% interest annually.

Cost of Living The cost of living as measured by the Consumer Price Index (CPI) will increase at the rate of 3.25% per year.

Increases in Pay Current Rate: 3.50% 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.

Service	General	Safety
0	4.00%	8.00%
1	4.00%	7.00%
2	4.00%	6.00%
3	4.00%	5.00%
4	4.00%	4.00%
5-9	2.00%	2.00%
10-19	1.00%	1.00%
20-29	0.50%	1.00%
30+	0.50%	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, 2006 to June 30, 2009 contains a full description of these margins.

Active Member Mortality Rates of mortality for active Members are specified by the Retired Pensioners (RP) 2000 tables published by the Society of Actuaries (projected from 2000 to 2020 using Scale AA). Duty related mortality rates are only applicable for Safety Active Members. Sample rates are as follows:

Representative Rates

Age	Duty Death	Ordinary Death – General and Safety	
	Safety All	Female	Male
20	0.0150%	0.0138%	0.0235%
25	0.0189%	0.0156%	0.0308%
30	0.0254%	0.0216%	0.0402%
35	0.0357%	0.0381%	0.0699%
40	0.0564%	0.0522%	0.0919%
45	0.0885%	0.0814%	0.1161%
50	0.0703%	0.1189%	0.1487%
55	0.1055%	0.2314%	0.2469%
60	0.0000%	0.4573%	0.4887%
65	0.0000%	0.8780%	0.9607%
70	0.0000%	1.5145%	1.6413%

Retired Member
Mortality

Rates of mortality for retired Members and their beneficiaries are specified by the Retired Pensioners (RP) 2000 tables published by the Society of Actuaries (projected from 2000 to 2020 using Scale AA). Sample rates are shown below.

Age	Female	Male
45	0.081%	0.116%
50	0.119%	0.149%
55	0.231%	0.247%
60	0.457%	0.489%
65	0.868%	0.961%
70	1.514%	1.641%
75	2.393%	2.854%
80	3.987%	5.265%
85	6.866%	9.624%
90	12.400%	16.928%

Disabled Member
Mortality

Rates of mortality for disabled Members are specified by the Retired Pensioners (RP) 2000 tables published by the Society of Actuaries (projected from 2000 to 2020 using Scale AA) set forward 7 years. Sample rates are as follows:

Representative Rates

Age	Female	Male
45	0.152%	0.178%
50	0.315%	0.333%
55	0.602%	0.647%
60	1.100%	1.237%
65	1.832%	2.016%
70	2.963%	3.611%
75	4.892%	6.854%
80	8.892%	12.062%
85	14.843%	20.397%
90	21.098%	28.808%

Service Retirement Retirement is assumed to occur among eligible members in accordance with the table below. **PEPRA: For Tier 6 Members we assume that the current retirement rates will apply, but that no General Members will retire before age 52, and no Safety Members will retire before age 50.**

Age	Safety	General
40-44	5.00%	0.00%
45-49	5.00%	0.00%
50	15.00%	5.00%
51	15.00%	4.00%
52	15.00%	4.00%
53	15.00%	5.00%
54	15.00%	6.00%
55	15.00%	10.00%
56	15.00%	10.00%
57	20.00%	10.00%
58	30.00%	12.00%
59	30.00%	15.00%
60	100.00%	18.00%
61	100.00%	18.00%
62	100.00%	30.00%
63	100.00%	25.00%
64	100.00%	25.00%
65	100.00%	40.00%
66	100.00%	30.00%
67	100.00%	30.00%
68	100.00%	30.00%
69	100.00%	30.00%
70	100.00%	100.00%

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:

Representative Rates

Age	Safety	General	
	All	Female	Male
20	0.0759%	0.0002%	0.0043%
25	0.1932%	0.0004%	0.0102%
30	0.3457%	0.0008%	0.0211%
35	0.5309%	0.0024%	0.0284%
40	0.7426%	0.0056%	0.0401%
45	1.1297%	0.0101%	0.0613%
50	1.5092%	0.0162%	0.0897%
55	1.7230%	0.0249%	0.1227%
60	0.0000%	0.0349%	0.1637%
65	0.0000%	0.0000%	0.0000%

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. The rates shown are applied after five Years of Service. Below are sample rates:

Age	Safety		General	
	All	Female	Male	
20	0.0173%	0.0025%	0.0130%	
25	0.0409%	0.0050%	0.0307%	
30	0.0421%	0.0100%	0.0316%	
35	0.0568%	0.0281%	0.0426%	
40	0.0802%	0.0446%	0.0602%	
45	0.1227%	0.0808%	0.0920%	
50	0.1793%	0.1295%	0.1345%	
55	0.2453%	0.1990%	0.1840%	
60	0.0000%	0.2794%	0.2456%	
65	0.0000%	0.0000%	0.0000%	

Termination (all types)

Rates of termination apply to all active Members who terminate their employment. Separate rates of termination are assumed among Safety and General Members, and are based on service. The rates do not overlap with the service retirement rates.

Service	Safety		General	
	Safety	Female	Male	
0	15.000%	14.000%	24.000%	
1	15.000%	9.400%	14.000%	
2	10.500%	7.900%	11.700%	
3	10.000%	7.900%	9.400%	
4	6.000%	7.125%	7.125%	
5	3.738%	5.025%	5.025%	
10	3.445%	3.470%	3.470%	
15	1.930%	2.850%	2.850%	
20	0.000%	1.536%	1.536%	
25	0.000%	1.272%	1.272%	
30	0.000%	0.000%	0.000%	

Withdrawal	<p>Rates of withdrawal apply to active Members who terminate their employment and withdraw their member contributions, forfeiting entitlement to future Plan benefits.</p> <p>50% of all General Member terminations with less than ten years of service are assumed to take a refund of contributions, as well as 20% of those with ten or more years of service.</p> <p>35% of all Safety Member terminations with less than ten years of service are assumed to take a refund of contributions, as well as 10% of those with ten or more years are assumed to take a refund.</p>
Vested Termination	<p>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.</p> <p>50% of all General Member terminations with less than ten years of service are assumed to leave their contributions on deposit , as well as 80% of those with ten or more years of service.</p> <p>65% of all Safety Member terminations with less than ten years of service are assumed to leave their contributions on deposit, as well as 90% of those with ten or more years of service.</p> <p>Vested terminated Tier 3 General Members are assumed to begin receiving benefits at age 65 while all other General Members are assumed to begin at age 58; terminated Safety Members are assumed to begin receiving benefits at age 53. 25% of vested terminated General Members are assumed to be reciprocal; 50% of vested terminated Safety Members are assumed to be reciprocal.</p>
Family Composition	<p>50% of female members and 90% of male members are assumed to be married at retirement. Male spouses are assumed to be three years older than their wives.</p>
Accumulated Vacation Time Load	<p>Active members' service retirement and disability benefits are loaded by 2.5% for Safety Members and 3.5% for General Members for conversion of vacation time. These loads are not applied to the benefits for the Tier 6 Members.</p>

1.3: Employee Contribution Rates

Employee contribution rates vary by member Group and Tier. The following rates for current members were changed to use the proposed assumptions from our ongoing experience study. As the PEPRAs benefit formulas apply only to new entrants, we have provided the employee contribution rates for Tier 2, the only tier open to new employees.

The rates were determined by EFI based on an interest rate of 7.75% per annum, an average salary increase of 3.50% per year, and the Retired Pensioners (RP) 2000 tables published by the Society of Actuaries (projected from 2000 to 2020 using Scale AA) with no age adjustment. The rates are blended a male/female weighting of 25% male / 75% female for General members, and 80% male / 20% female for Safety members.

The rates for the new Tier 6 members do not differ above and below the first \$350 of earnings, since neither the benefits nor contributions for the Tier 6 members are assumed to be integrated with Social Security. We have assumed that contributions for the Tier 6 members will only be collected up to the amount of the annual Social Security Wage Base (120% of the Wage Base for those not participating in Social Security).

**General Tier 2
Employee Contribution Rates**

Entry Age	Basic	Basic	COL	COL
	First \$350	Over \$350	First \$350	Over \$350
16	3.26%	4.89%	0.88%	1.32%
17	3.26%	4.89%	0.88%	1.32%
18	3.26%	4.89%	0.88%	1.32%
19	3.26%	4.89%	0.88%	1.32%
20	3.26%	4.89%	0.88%	1.32%
21	3.29%	4.94%	0.89%	1.34%
22	3.32%	4.99%	0.90%	1.36%
23	3.35%	5.03%	0.92%	1.37%
24	3.38%	5.07%	0.93%	1.39%
25	3.40%	5.11%	0.94%	1.41%
26	3.43%	5.14%	0.96%	1.43%
27	3.44%	5.17%	0.97%	1.45%
28	3.46%	5.19%	0.98%	1.47%
29	3.47%	5.21%	1.00%	1.50%
30	3.48%	5.22%	1.01%	1.52%
31	3.56%	5.34%	1.03%	1.55%
32	3.64%	5.46%	1.05%	1.57%
33	3.72%	5.58%	1.07%	1.60%
34	3.81%	5.71%	1.09%	1.63%
35	3.89%	5.84%	1.11%	1.66%
36	3.98%	5.97%	1.13%	1.69%
37	4.07%	6.11%	1.15%	1.73%
38	4.16%	6.24%	1.17%	1.76%
39	4.24%	6.37%	1.20%	1.79%
40	4.32%	6.48%	1.22%	1.82%
41	4.35%	6.53%	1.23%	1.85%
42	4.44%	6.65%	1.25%	1.88%
43	4.52%	6.78%	1.27%	1.90%
44	4.61%	6.91%	1.28%	1.92%
45	4.70%	7.05%	1.30%	1.94%
46	4.79%	7.19%	1.31%	1.96%
47	4.89%	7.34%	1.32%	1.98%
48	4.98%	7.47%	1.33%	2.00%
49	5.06%	7.58%	1.34%	2.01%
50	5.12%	7.68%	1.34%	2.02%
51	5.19%	7.79%	1.35%	2.02%
52	5.27%	7.90%	1.34%	2.02%
53	5.32%	7.98%	1.33%	1.99%
54	5.34%	8.01%	1.31%	1.97%
55	5.35%	8.02%	1.28%	1.92%
56	5.35%	8.02%	1.22%	1.84%
57	5.35%	8.03%	1.19%	1.78%
58	5.55%	8.32%	1.15%	1.73%
59+	5.76%	8.63%	1.13%	1.69%

**Safety Tier 2
Employee Contribution Rates**

Entry Age	Basic	Basic	COL	COL
	First \$350	Over \$350	First \$350	Over \$350
20	4.83%	7.24%	2.32%	3.49%
21	4.83%	7.24%	2.32%	3.49%
22	4.83%	7.24%	2.32%	3.49%
23	4.83%	7.24%	2.32%	3.49%
24	4.83%	7.24%	2.32%	3.49%
25	4.92%	7.38%	2.39%	3.58%
26	5.01%	7.51%	2.42%	3.63%
27	5.10%	7.65%	2.46%	3.68%
28	5.20%	7.79%	2.49%	3.73%
29	5.29%	7.94%	2.51%	3.77%
30	5.39%	8.09%	2.54%	3.81%
31	5.49%	8.24%	2.56%	3.84%
32	5.60%	8.39%	2.58%	3.87%
33	5.70%	8.55%	2.60%	3.90%
34	5.81%	8.71%	2.62%	3.93%
35	5.87%	8.81%	2.66%	3.99%
36	5.99%	8.98%	2.70%	4.06%
37	6.10%	9.15%	2.75%	4.12%
38	6.22%	9.34%	2.79%	4.19%
39	6.35%	9.53%	2.84%	4.25%
40	6.48%	9.72%	2.88%	4.33%
41	6.62%	9.93%	2.93%	4.40%
42	6.75%	10.12%	2.98%	4.46%
43	6.86%	10.29%	3.02%	4.53%
44	6.96%	10.45%	3.07%	4.60%
45	7.07%	10.61%	3.05%	4.57%
46	7.20%	10.79%	3.03%	4.55%
47	7.29%	10.93%	3.02%	4.52%
48	7.33%	11.00%	3.00%	4.50%
49+	7.32%	10.97%	2.99%	4.48%

**Proposed Tier 6
Employee Contribution Rates**

Entry Age	General	Safety
All Ages	7.50%	13.00%