



Stanislaus County Employees' Retirement Association

Actuarial Valuation as of June 30, 2015

Produced by Cheiron

April 2016

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April 11, 2016

Board of Retirement Stanislaus County Employees' Retirement Association 832 12th Street, Suite 600 Modesto, CA 95353

Dear Members of the Board:

At your request, we have conducted an actuarial valuation of the Stanislaus County Employees' Retirement Association (StanCERA, the Fund, the Plan) as of June 30, 2015. This report contains information on the Plan's assets and liabilities. This report also discloses employer contribution levels and required disclosures for the Plan's CAFR. Your attention is called to the Foreword in which we refer to the general approach employed in the preparation of this report.

The purpose of this report is to present the results of the annual actuarial valuation of StanCERA. This report is for the use of StanCERA and its auditors in preparing financial reports in accordance with applicable law and accounting requirements. Any other user of this report is not an intended user and is considered a third party.

Cheiron's report was prepared solely for StanCERA for the purposes described herein, except that the Plan auditor may rely on this report solely for the purpose of completing an audit related to the matters herein. It is not intended to benefit any third party, and Cheiron assumes no duty or liability to any such party.

To the best of our knowledge, this report and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained in this report. 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.

Sincerely, Cheiron

Graham A. Schmidt, ASA, EA, FCA, MAAA Consulting Actuary Jonathan Chipko, FSA, FCA, EA, MAAA Associate Actuary

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FOREWORD

Cheiron has performed the actuarial valuation of the Stanislaus County Employees' Retirement Association as of June 30, 2015. The valuation is organized as follows:

- In Section I, the **Executive Summary**, we describe the purpose of an actuarial valuation, summarize the key results found in this valuation and disclose important trends;
- The **Main Body** of the report presents details on the Plan's
 - Section II Assets
 - Section III Liabilities
 - Section IV- Contributions
 - o Section V- Required CAFR Exhibits
- In the **Appendices** we conclude our report with detailed information describing Plan membership (Appendix A), actuarial assumptions and methods employed in the valuation (Appendix B), a summary of pertinent Plan provisions (Appendix C), a glossary of key actuarial terms (Appendix D), and tables containing member contribution rates (Appendix E).

The results of this report rely on future Plan experience conforming to the underlying assumptions. To the extent that actual Plan experience deviates from the underlying assumptions, the results would vary accordingly.

In preparing our report, we relied on information (some oral and some written) supplied by the StanCERA staff. This information includes, but is not limited to, Plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23.



SECTION I -- EXECUTIVE SUMMARY

The primary purpose of the actuarial valuation and this report is to measure, describe, and identify the following as of the valuation date:

- The funded status of the Plan,
- Past and expected trends in the funding progress of the Plan, and
- Employer and employee contribution rates for Plan Year 2016-2017.

In the balance of this Executive Summary, we present (A) the basis upon which this year's valuation was completed, (B) the key findings of this valuation including a summary of all key results, (C) an examination of the historical trends, and (D) the projected outlook for the Plan.

A. Valuation Basis

This valuation determines the employer contributions required for the employers' fiscal years beginning July 1, 2016. The employers include the County of Stanislaus and related employers, the City of Ceres and other participating Special Districts.

The Plan's funding policy is to collect contributions from the employers and employees equal to the sum of:

- The Normal Cost under the Entry Age Normal Cost Method,
- Amortization of the Unfunded Actuarial Liability (UAL), and
- The Fund's expected administrative expenses.

The UAL payment is determined as the amount needed to fund the outstanding UAL as of June 30, 2015 over a period of 21 years as a level percentage of pay.

This valuation was prepared based on the Plan provisions shown in Appendix C.

Actuarial experience studies are performed every three years. This valuation was performed based on the economic and demographic assumptions that were determined in the Actuarial Experience Study performed by Cheiron as of June 30, 2015 and adopted by the Board on March 16, 2016. This valuation is the first to use the assumptions determined in the above experience study. A summary of the assumptions and methods used in the current valuation is shown in Appendix B.



SECTION I -- EXECUTIVE SUMMARY

B. Key Findings of this Valuation

The key results of the June 30, 2015 actuarial valuation are as follows:

- The actuarially determined employer contribution rate increased from 23.35% of payroll to 24.99% of payroll for the current valuation, reflecting a three-year phase-in of the impact of changes to the economic and demographic assumptions. Without the phase-in, the employer contribution rate would have increased to 30.86% of payroll for the current valuation.
- The Plan's funded ratio, the ratio of Actuarial Assets over Actuarial Liability, increased from 81.1% last year to 83.1% as of June 30, 2015 before any changes to the actuarial assumptions.
- The Plan's funded ratio decreased from 83.1% to 73.7% following the assumption changes. The main drivers of this decrease were the change in the mortality and discount rate assumptions.
- The Unfunded Actuarial Liability (UAL) is the excess of the Plan's Actuarial Liability over the Actuarial Value of Assets. The Plan experienced an increase in the UAL from \$382.3 million to \$627.9 million as of June 30, 2015. This increase in UAL was primarily due to the change in actuarial assumptions.
- During the year ended June 30, 2015, the return on Plan assets was 3.87% on a market value basis net of investment (but not administrative) expenses, as compared to the 7.75% assumption. The Actuarial Value of Assets recognizes 20% of the difference between the expected and actual return on the market value of assets (MVA). This method of smoothing the asset gains and losses returned 9.1% on the smoothed value of assets, an actuarial asset gain of \$20.6 million. The gain in the Actuarial Value of Assets reflected the continued recognition of past investment gains which offset the lower market return this year.
- During the 2014-15 Plan Year, the actuarial liabilities of the Plan increased slightly less than expected, partially due to COLA increases less than expected. These and other unexpected changes resulted in a small liability gain of \$5.6 million.
- The change in assumptions for this valuation led to an increase in the liabilities of \$269.8 million.
- Overall participant membership increased compared to last year. There were 549 new hires and rehires during 2014-2015 and the total active population increased from 3,992 to 4,144. Total projected payroll increased from \$235,092,377 to \$249,704,758.
- The Actuarial Experience Study as of June 30, 2015 recommended changes to many of the actuarial assumptions used in this valuation. The Retirement Board adopted these changes for the June 30, 2015 valuation. The Retirement Board decided to implement a three-year phase-



SECTION I -- EXECUTIVE SUMMARY

in of the impact of these changes on the employer contribution rates. The schedule of required employer contributions with and without the phase-in is shown in Table I-1.

Table I-1 Development of Phased Employer Contributions							
	Full Phased						
Plan Year	Contribution	Contribution					
2016-17	30.9%	25.0%					
2017-18	30.7%	27.8%					
2018-19	29.5%	29.9%					
2019-20	28.6%	29.3%					

The net impact of the phase-in is to reduce the employer contribution rate by about 5.9% and 2.9% from what it would have been without phase-in for 2016-17 and 2017-18, respectively. The employer contribution rate is fully phased-in by the 2018-19 plan year, when the rate is 0.4% higher than it would have been without the phase-in. This is followed by contributions higher than they would have been without phase-in by approximately 0.7% of pay in the years 2019-20 and later. The phase-in of rate increases is consistent with practices described by the California Actuarial Advisory Panel (CAAP), as well as other actuarial organizations.

In Tables I-2 and I-3, we summarize the key results of the valuation with respect to assets and liabilities, contribution and membership. We also include the employer contribution rate after the impact of the first year of the three-year phase-in. The results are presented and compared for both the current and prior Plan year.

Table I-2 Stanislaus County Employees' Retirement Association Summary of Key Valuation Results (in millions)						
Valuation Date	Jun		Ju	ne 30, 2015		
Fiscal Year End		2016		2017		
Actuarial Liability	\$	2,026.4	\$	2,391.5		
Actuarial Value of Assets*	\$	1,644.1	\$	1,763.6		
Unfunded Actuarial Liability (actuarial value)	\$	382.3	\$	627.9		
Funding Ratio (actuarial value)		81.1%		73.7%		
Net Employer Contribution Rate**		23.35%		30.86%		
Employer Contribution Rate after Phase-In		NA		24.99%		

^{*} Net of non-valuation reserves.



^{**} Prior to phase in of the assumption change.

SECTION I -- EXECUTIVE SUMMARY

Table I-3 Membership Total							
Item	J	une 30, 2014	J	une 30, 2015	% Change		
Actives		3,992		4,144	3.8%		
Current Inactives		962		979	1.8%		
Retired Members		3,385		3,539	<u>4.5%</u>		
Total Members		8,339		8,662	3.9%		
Ratio of Retired Members to Active Members		84.8%		85.4%			
Active Member Payroll (FYE 2015/2016)	\$	235,092,377	\$	249,704,758	6.2%		
Average Pay per Active	\$	58,891	\$	60,257	2.3%		

We note in Table I-3 that the ratio of retired members to active members continues to increase, indicating the ongoing maturation of the Plan.

Assets and Liabilities

Table I-4 presents a comparison between the June 30, 2014 and June 30, 2015 StanCERA assets, liabilities, Unfunded Actuarial Liability, and funding ratios, both on a market and smoothed basis.

	Table I-	4			
Asse	ts & Lial	oilities			
	(in millions)			
Item	Jun	e 30, 2014	Jun	e 30, 2015	% Change
Actuarial Liability					
Actives	\$	795.4	\$	939.3	18.1%
Current Inactives		86.2		114.4	32.7%
Retired Members		1,144.7		1,337.8	<u>16.9%</u>
Total Actuarial Liability	\$	2,026.4	\$	2,391.5	18.0%
Market Value of Assets (MVA)	\$	1,773.6	\$	1,812.6	2.2%
Actuarial Value of Assets (AVA)	\$	1,644.1	\$	1,763.6	7.3%
Unfunded Actuarial Liability - MVA	\$	252.8	\$	578.9	129.0%
Unfunded Actuarial Liability - AVA	\$	382.3	\$	627.9	64.2%
Funding Ratio - MVA		87.5%		75.8%	-11.7%
Funding Ratio - AVA		81.1%		73.7%	-7.4%



SECTION I -- EXECUTIVE SUMMARY

Table I-4 indicates that the Actuarial Liability increased by 18.0% and the Actuarial Value of Assets increased by 7.3%, resulting in a decrease in the funding ratio from 81.1% as of June 30, 2014 to 73.7% as of June 30, 2015. The increase in Actuarial Liability and accompanying decrease in the funded status is primarily due to the change in economic and demographic assumptions. StanCERA employs a commonly used actuarial smoothing method on the market value that dampens market volatility, so the Actuarial Value of Assets increased by more than the market value, because of the impact of deferred investment gains from prior years. The funding ratio measured on a market value of assets basis was 75.8% as of June 30, 2015.

Section II provides additional information explaining the development of the Actuarial Value of Assets.



SECTION I -- EXECUTIVE SUMMARY

Changes in UAL

The Unfunded Actuarial Liability (UAL) for StanCERA increased by \$245.6 million, from \$382.3 million to \$627.9 million. Table I-5 below presents the specific components of the change in the UAL.

As noted above, the return on the actuarial assets used to compute the UAL and the employer contribution rate was 9.1% during the 2014-15 Plan Year. Investment returns higher than the assumed rate of 7.75% decreased the UAL by \$20.6 million. Though the return was lower than expected on a market basis, this gain on an actuarial basis results from the recognition of prior investment gains to smooth market volatility.

Small liability gains decreased the UAL by \$5.6 million, mainly due to COLA increases less than expected, mortality gains and improvements to contingent beneficiary data. These gains were partially offset by losses due to new retirees, new entrants, and salary increases.

Assumption changes increased the UAL by \$269.8 million.

The expected change in the UAL due to the yearly amortization of the UAL balance – an increase of \$2.0 million, as a result of the amortization schedule for the current year – combined with the above UAL changes to produce an overall increase of \$245.6 million.

	Table I-5 Increase in Unfunded Actuarial Liability		
	Experience	in 1	millions
1.	Unfunded actuarial liability, 6/30/2014	\$	382.3
2.	Expected change in unfunded actuarial liability	\$	2.0
3.	Unfunded decrease due to investment gain		(20.6)
4.	Unfunded decrease due to liability gain		(5.6)
5.	Unfunded decrease due to change in actuarial cost method		0
6.	Unfunded increase due to assumption changes		269.8
7.	Total change in unfunded actuarial liability	\$	245.6
8.	Unfunded actuarial liability, 6/30/2015	\$	627.9



SECTION I -- EXECUTIVE SUMMARY

Changes in Employer Contributions

Thus far, the experience of the 2014-15 Plan year has been presented in terms of the UAL and funded ratio. Table I-6 below summarizes the impact of actuarial experience and changes in assumptions on the employer contribution rate.

Tab	ole I-6								
Employer Contribution Reconciliation									
Normal Normal									
Item	Total	Cost	Amortization	Expense					
FYE 2016 Net Employer Contribution Rate	23.35%	11.13%	11.33%	0.89%					
Change Due to Asset Gain	-0.61%	0.00%	-0.61%	0.00%					
Change Due to Contribution Excess	-0.05%	0.00%	-0.05%	0.00%					
Change Due to Demographic Gains	-0.30%	-0.19%	-0.11%	0.00%					
Change Due to Effect of Payroll on Amortization Change Due to Methods / Assumptions	-0.34%	0.00%	-0.32%	-0.02%					
Change due to Assumption Change	8.81%	1.30%	7.42%	0.09%					
FYE 2017 Net Employer Contribution Rate - Full	30.86%	12.24%	17.66%	0.96%					
Impact of Phase-in	5.87%	0.87%	4.95%	0.06%					
FYE 2017 Net Employer Contribution Rate - Phased	24.99%	11.37%	12.71%	0.90%					

A review of the changes in the employer contribution rate from the prior valuation reveals that Plan experience during the year – including demographic and salary changes, as well as asset experience – resulted in a net decrease in the employer contribution rate of 1.30% of pay before changes in the actuarial assumptions are taken into account:

• Asset experience produced an investment gain on a smoothed basis, as described earlier. The smoothed gain reduced the contribution rate by 0.61% of pay.

The ratio of actuarial to market value of assets is 97.3%. There are now \$49 million in net deferred gains as of June 30, 2015, as well as over \$17 million in a non-valuation Contingency Reserve.

- The Plan received a larger contribution than the actuarially determined amount. The net impact of the shortfall was a decrease in the cost by 0.05% of pay.
- The demographic experience of the Plan rates of retirement, death, disability, and termination, as well as salary and COLA changes caused a decrease in cost. Lower than expected Cost of Living Adjustments (COLAs) for current retirees along with mortality



SECTION I -- EXECUTIVE SUMMARY

gains and improvements in contingent beneficiary data contributed to this increase, offset by salary experience, new entrants and losses associated with new retirees.

• The largest impact was an increase of 8.81% of pay, due to updated economic and demographic assumptions. The effects of this increase will be phased-in over three years, as indicated by table I-1. In the first year, the phase-in reduces the contribution rate by 5.87%.

Plan Risk

Table I-7 below shows the ratio of assets to active member payroll for StanCERA.

Table I-7 Asset to Payroll Ratio as (of June 30, 2015
Active Member Payroll	249,704,758
Assets (Market Value)	1,812,596,686
Ratio of Assets to Payroll	7.26
Ratio with 100% Funding	9.58

One of the most important measures of a plan's risk is the ratio of plan assets to payroll. The table above shows StanCERA's 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 7.3 times covered payroll for the Plan; as a point of reference, the average asset-to-payroll ratio for the '37 Act systems as a whole is also currently around 7.3. As funding improves and the Plan reaches 100% funding, the ratio of asset to payroll will increase past 9 times payroll, perhaps higher depending on the Plan's future demographic makeup.

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 StanCERA. Suppose StanCERA's assets lose 10% of their value in a year. Since they are assumed to earn 7.25%, there is an actuarial loss of 17.25% of Plan assets. Based on the current ratio of asset to payroll (726%), that means the loss in assets is about 125% of active payroll (726% of the 17.25% loss). There is only one source of funding to make up for this loss: the employers. Consequently, barring future offsetting investment gains, the employer has to make up the asset loss in future contributions. In this example of a one-year loss of 10%, this shortfall will eventually require an additional annual amortization payment in the vicinity of 8.80% of payroll if amortized over 21 years.



SECTION I -- EXECUTIVE SUMMARY

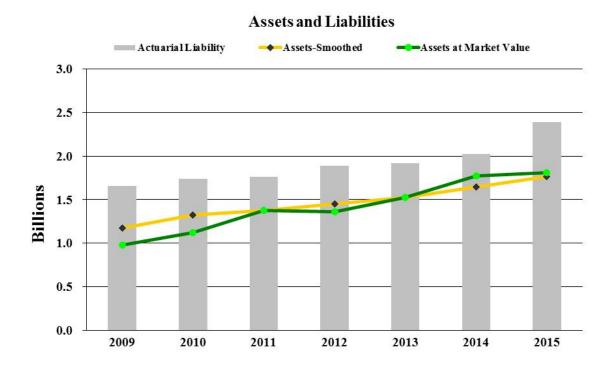
As the Plan matures and becomes better funded, the ratio of asset to payroll will increase. When assets are 958% of pay, the 10% loss discussed above will translate to a loss of over 165% of payroll, which when amortized over 21 years will increase the employer contribution by 11.61% of member pay. Therefore, the Plan is likely to become significantly more sensitive to market variation in the future than it is today.

C. Historical Trends

Despite the fact that for most retirement plans the greatest attention is given to the current valuation results and in particular the size of the current Unfunded Actuarial Liability and the employer contribution, it is important to remember that each valuation is merely a snapshot in the long-term progress of a pension fund. It is more important to judge a current year's valuation result relative to historical trends, as well as trends expected into the future.

Assets and Liabilities

The chart below compares the Market Value of Assets (MVA) and Actuarial Value of Assets (AVA) to the Actuarial Liabilities. The percentage shown in the table below the graph is the ratio of the Actuarial Value of Assets to the Actuarial Liability (the funded ratio). The funded ratio has increased from 70.9% in 2009 to 73.7% as of June 30, 2015, as a result of the recovery in the asset markets over the last few years, offset by changes in assumptions. The funded ratio has decreased from the 81.1% of last year because of the economic and demographic assumption changes, which increased liabilities.



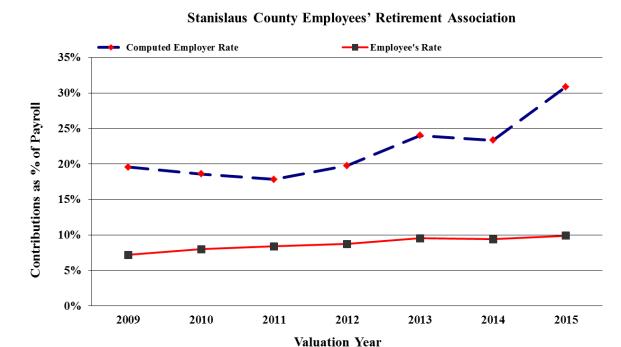


SECTION I -- EXECUTIVE SUMMARY

Valuation Year	2009	2010	2011	2012	2013	2014	2015
Funded Ratio	70.9%	76.3%	78.1%	76.9%	79.4%	81.1%	73.7%
UAL (Billions)	\$ 0.48	\$ 0.41	\$ 0.39	\$ 0.44	\$ 0.40	\$ 0.38	\$ 0.63

Contribution Trends

In the chart below, we present the historical trends for the StanCERA contribution rates. This chart shows contribution rates prior to any phase-ins. The employer contribution rates have risen since 2009 as result of the investment losses from 2008-2009, compounded by demographic losses and changes to the actuarial assumptions and methods. The impact of these changes was offset to some extent by an extension to the amortization period. The average employee contribution rates have also increased as the Plan's economic and demographic assumptions have changed.





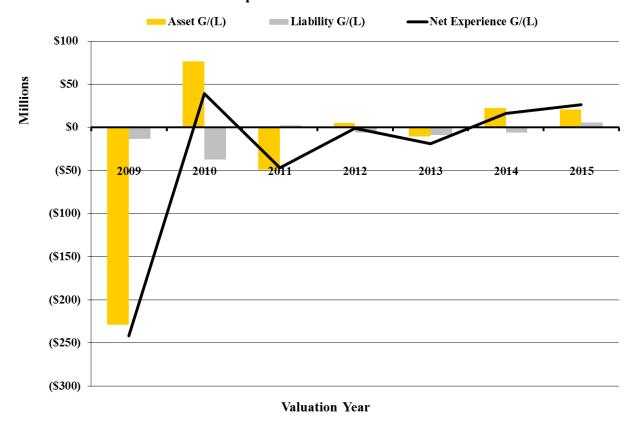
SECTION I -- EXECUTIVE SUMMARY

Gains and Losses

The following chart for StanCERA presents the pattern of annual gains and losses, broken into the investment and liability components. The investment gains and losses represent the changes on a smoothed basis (i.e. based on the Actuarial Value of Assets). The chart does not include any changes in StanCERA's assets and liabilities attributable to changes to actuarial methods, procedures or assumptions or Plan benefit changes.

The investment loss in 2008-2009 was by far the most significant gain or loss during the last seven years. Even though the Plan was using actuarial smoothing of the assets, there was a significant loss reflected in the June 30, 2009 valuation, because the amount of smoothing was limited by the 80/120% corridor around the market value of assets (the return on the smoothed value of assets for 2008-2009 was -9.6%). The Plan also experienced substantial liability losses in 2008 and 2010. The Plan did experience an asset gain for this year on a smoothed basis, the second such substantial gain since the 2010 plan year.

Experience Gains and Losses





SECTION I -- EXECUTIVE SUMMARY

D. Future Expected Financial Trends

The analysis of projected financial trends is an important component of this valuation. In this Section, we present our assessment of the implications of the June 30, 2015 valuation results in terms of benefit security (assets over liabilities). All the projections in this section are based on the current investment return assumption of 7.25%. We have assumed future total payroll increases of 3.25% per year.

The following graph shows the expected employer contribution rate based on achieving the 7.25% assumption **each year** for the next 20 years. This scenario is highly unlikely: even if the Plan does achieve an **average** return of 7.25% over this time period, the returns in each given year will certainly vary. The graph also includes the phase-in of the impact of the assumption change.

The contribution rate graph shows that employer contribution rates are expected to increase for the next two years, as the impact of assumption changes are phased-in, and then stay relatively stable over the rest of the period, as the current unfunded liability amortization period extends past the end of the projection period (21 years).

45% Member Rate Employer Contribution Rate 40% 35% 30% 25% 15% 10% 5% 2017 2021 2023 2025 2027 2029 2035

Projection of Contributions, 7.25% Return Each Year

The total contribution rate (employer plus employee) is approximately 35% of member payroll for the June 30, 2015 valuation; it is expected to increase over the next two years to approximately 40% and then decrease to about 36% if all actuarial assumptions are met over the next 21 years. The gradual decline is due to the expected hiring of new PEPRA members to replace the legacy employees as the retire, thus lowering the average normal cost of the Plan.

After 21 years, the employer contribution rate is expected to drop due to the end of the current unfunded liability amortization period, to a level around 10% of pay, representing the expected employer Normal Cost plus administrative expenses.



SECTION I -- EXECUTIVE SUMMARY

Asset and Liability Projections:

The following graph shows the projection of assets and liabilities assuming that assets will earn the 7.25% assumption each year during the projection period.

Projection of Assets And Liabilities, 7.25% Return Each Year (\$ millions)



The graph above shows that the projected funded status increases over the next 20 years to gradually approach 100%, as can be expected based on the amortization policy, assuming the actuarial assumptions are achieved.

However, as above, it is the **actual** return on Plan assets that will determine the future funding status and contribution rate to the Fund. The Actuarial Value of Assets and market value of assets are very close to each other as of June 30, 2015, and the two are assumed to be equal past 2018.



SECTION II — ASSETS

Pension Plan assets play a key role in the financial operation of the Plan and in the decisions the Board may make with respect to future deployment of those assets. The level of assets, the allocation of assets among asset classes, and the methodology used to measure assets will likely impact benefit levels, employer contributions, and the ultimate security of participants' benefits.

In this section, we present detailed information on Plan assets including:

- **Disclosure** of Plan assets as of June 30, 2014 and June 30, 2015;
- Statement of the **changes** in market values during the year;
- Development of the **Actuarial Value of Assets**;
- An assessment of historical investment performance versus inflation; and
- An allocation of the unfunded liability between the **valuation subgroups**.

Disclosure

There are two types of asset values disclosed in the valuation, the market value of assets, and the Actuarial Value of Assets. The market value represents "snap-shot" or "cash-out" values, which provide the principal basis for measuring financial performance from one year to the next. Market values, however, can fluctuate widely with corresponding swings in the marketplace. As a result, market values are usually not as suitable for long-range planning as are the Actuarial Value of Assets which reflect smoothing of annual investment returns.

Table II-1 on the next page discloses and compares each asset class as of June 30, 2014 and June 30, 2015.



SECTION II — ASSETS

Table II-1							
Statement of the Statem		at Market Value Fiscal Year ending]	Fiscal Year ending			
Assets		June 30, 2014		June 30, 2015			
Cash and Cash Equivalents	\$	44,078,286	\$	71,553,166			
Total Cash and Cash Equivalents	\$	44,078,286	\$	71,553,166			
Receivables:							
Interest and Dividends	\$	5,829,241		6,057,937			
Contributions		3,051,590		3,703,589			
Securities Transactions		18,263,280		34,794,799			
Total Receivables	\$	27,144,111	_	44,556,325			
Fixed Assets							
Capitalized Software	\$	348,278	\$	222,653			
Real Estate Occupied		1,726,876		1,707,899			
Real Estate Leased		1,151,479		1,138,825			
Other	_	442,380	_	438,357			
Total Fixed Assets	\$	3,669,013	\$	3,507,734			
Investments at Market Value:							
Fixed Income	\$	493,747,037	\$	453,889,853			
Equities		1,189,389,840		1,194,717,298			
Collateral on Loaned Securities		190,943,489		194,948,321			
Other	_	74,084,729	_	127,745,699			
Total Investments	\$	1,948,165,095	\$	1,971,301,171			
Liabilities							
Accounts Payable	\$	(10,031,091)	\$	(9,951,045)			
Security Transactions Payable		(30,566,509)		(52,845,683)			
Collateral Held for Loaned Securities		(190,507,537)		(194,948,321)			
Other	_	(642,089)	_	(569,143)			
Total Liabilities	\$	(231,747,226)	\$	(258,314,192)			
Market Value of Assets	\$	1,791,309,279	\$	1,832,604,204			



SECTION II — ASSETS

Changes in Market Value

The components of asset change are:

- Contributions (employers and employee)
- Benefit payments
- Expenses (investment and administrative)
- Investment income (realized and unrealized)

Table II-2 on the next page shows the components of change in the market value of assets during the fiscal years ending June 30, 2014 and June 30, 2015.



SECTION II — ASSETS

Ta	ble II-2							
Changes in Market Values								
	Fi	iscal Year ending	F	iscal Year ending				
Additions		<u>June 30, 2014</u>		<u>June 30, 2015</u>				
Contributions								
Employer's Contribution	\$	46,763,996	\$	53,849,031				
Members' Contributions		21,867,911		22,960,235				
Total Contributions	\$	68,631,907	\$	76,809,266				
Net Investment Income								
Net Appreciation/(Depreciation) in								
Fair Value of Investments	\$	238,280,563	\$	32,674,635				
Interest and Dividends		44,870,019		43,216,684				
Commission Recapture		31,360		45,354				
Other Investment Income		123,840		141,801				
Total Investment Income	<u> </u>	283,305,782	\$	76,078,474				
Investment Expense		(8,757,302)	·	(7,856,505)				
Net Investment Income	\$	274,548,480	\$	68,221,969				
Securities Lending Activities								
Securities Lending Income	\$	479,545	\$	714,891				
Expenses from Securities Lending Activities	4	(131,917)	•	(214,079)				
Net Securities Lending Income		347,628		500,812				
Total Net Investment Income	\$	274,896,108	\$	68,722,781				
Total Additions	\$	343,528,015	\$	145,532,047				
Deductions								
Benefits	\$	93,266,904	\$	100,099,055				
Refunds		1,515,567		1,759,101				
Administrative Costs		2,249,260	_	2,378,966				
Total Deductions	\$	97,031,731	\$	104,237,122				
Net Increase/(Decrease)	\$	246,496,284	\$	41,294,925				
Net Assets Beginning of Year	\$	1,544,812,995	\$	1,791,309,279				
Net Assets End of Year	\$	1,791,309,279	\$	1,832,604,204				
Approximate Return		17.96%		3.87%				



SECTION II — ASSETS

Actuarial Value of Assets (AVA)

The Actuarial Value of Assets represents a "smoothed" value developed by the actuary to reduce the volatile results which could develop due to short-term fluctuations in the market value of assets. For this Plan, the Actuarial Value of Assets is calculated on a modified market-related value. The market value of assets is adjusted to recognize, over a five year period, investment earnings which are greater than (or less than) the assumed investment return. However, in no event will the Actuarial Value of Assets be less than 80% or more than 120% of market value on the valuation date.

The Valuation Assets are the portion of the Actuarial Assets dedicated to funding the basic pension benefits. The Valuation Assets exclude the value of any non-valuation reserves, such as reserves established for legal contingencies. The Valuation Assets also exclude the value of any non-valuation contingency reserves, which have been established according to the Board's funding policy. In valuations prior to the June 30, 2014 valuation, reserve associated with the Burial Allowance was excluded from the valuation assets; both the assets and liabilities associated with this benefit are included in this valuation.

The following table shows the development of the Actuarial Asset and Valuation Assets values.



SECTION II — ASSETS

Table II-3 Development of Actuarial Value of Assets for 6/30/2015							
Item	101 0/30/201	S Total					
1. Market Value as of 6/30/2014 2. Non Investment Cosh Flow for 2014 2015	\$	1,791,309,279					
2. Non-Investment Cash Flow for 2014-20153. Expected Return in 2014-2015		(27,427,856) 137,783,471					
4. Expected Market Value as of 6/30/2015: (1 + 2 + 3)	\$	1,901,664,894					
5. Actual Return in 2014-2015		68,722,781					
6. Actual Return Above Expected in 2014-2015: (5 - 3)	ф	(69,060,690)					
7. Market Value as of 6/30/20158. Deferred Recognition of Returns Above Expected	\$	1,832,604,204					
8. Deferred Recognition of Returns Above Expected a. 2014-2015 (80% of -\$69,060,690)		(55,248,552)					
b. 2013-2014 (60% of \$156,253,060)		93,751,836					
c. 2012-2013 (40% of \$81,607,988)		32,643,195					
d. 2011-2012 (20% of -\$110,579,921)		(22,115,984)					
e. Total	\$	49,030,495					
9. Preliminary Actuarial Value of Assets: (7 - 8e)	\$	1,783,573,709					
10. Corridor Limita. 80% of Net Market Valueb. 120% of Net Market Value		1,466,083,363 2,199,125,045					
11. Actuarial Value after Corridor as of 6/30/201512. Rate of Return on Actuarial Value of Assets	\$	1,783,573,709 9.07%					
13. Ratio of Actuarial Value to Market Value: (11 ÷ 7)		97.3%					
14. Special (Non Valuation) Reserves: a. Health Insurance Reserves		0					
b. Special COL Reserve		0					
c. Legal Contingency Reserve		2,345,086					
d. Tier 3 Disability Reserve		2,567					
e. Contingency Reserves (Market Value)		17,659,865					
f. Total Special Reserves (Market Value)	Þ	20,007,518					
15. Adjusted Total Special Reserves (97.3% of Market, Exce Contingency)	ept \$	19,944,708					
16. Pension Reserves at Actuarial Value (Valuation Assets): (11 - 15)	\$	1,763,629,001					



SECTION II — ASSETS

Historical Investment Performance

The following table shows the historical annual asset returns on a market value, Actuarial Value, and valuation asset basis, as well in the increase in the Consumer Price Index (CPI) since 1996. Note that the returns prior to 2013 are expressed net of investment and administrative expenses; the returns for 2013 (and future years) are expressed net of investment expenses only.

Year Ended June 30	Net Return at Market Value	Net Return at Actuarial Value	Net Return at Valuation Assets	Increase in Consumer Price Index*
1996				2.8%
1997	20.4%			2.3%
1998	13.4%			1.7%
1999	10.6%			2.0%
2000	6.3%			3.7%
2001	7.0%			3.2%
2002	-4.5%			1.1%
2003	5.2%		4.9%	2.1%
2004	6.1%		6.3%	3.3%
2005	8.2%		5.5%	2.5%
2006	9.9%		10.8%	4.3%
2007	16.0%	10.8%	0.6%	2.7%
2008	-8.5%	8.0%	16.7%	5.0%
2009	-17.2%	-9.6%	-9.4%	-1.4%
2010	15.6%	13.0%	14.7%	1.1%
2011	22.1%	3.5%	4.2%	3.6%
2012	0.1%	6.4%	6.5%	1.7%
2013	13.9%	7.0%	7.2%	1.8%
2014	18.0%	9.4%	9.5%	2.1%
2015	3.9%	9.1%	9.0%	0.1%
5-Year Compound Average	5.9%	N/A	N/A	2.2%
0-Year Compound Average	6.6%	N/A	6.7%	2.1%
-Year Compound Average	11.3%	7.1%	7.3%	1.8%



SECTION II — ASSETS

Allocation of Unfunded Actuarial Liability by Valuation Subgroup

The following table shows the allocation of the Unfunded Actuarial Liability between the two valuation subgroups (County / Former County Members and City of Ceres / Special District Members). The Valuation Assets are reduced by the liability associated with the inactive members and the refundable contribution balances for active members, and the remaining assets are allocated to each subgroup based on their share of the active liability. These UAL balances are used to calculate each subgroup's amortization payment.

	Table II-5 Allocation of 6/30/2015 Unfunded Liability (in thousands)											
		Co	ounty and ner County		es and Other Districts		Total					
1.	Actuarial Value of Assets					\$	1,763,629					
2.	Accumulated Employee Contributions		183,725		12,349		196,074					
3.	Inactive Actuarial Liability					\$	1,452,214					
4.	Net Assets for Distribution [1 - 2 - 3]					\$	115,341					
5.	Active Actuarial Liability		879,305		60,003		939,308					
6.	Allocation of Remaining Assets		93.61%		6.39%		100.00%					
7.	Remaining Assets		107,973		7,368		115,341					
8.	Total Assets [2 + 7]		291,698		19,717		311,415					
9.	Active Funded Ratio [8 ÷ 5]		33.17%		32.86%		33.15%					
10.	Unfunded Actuarial Liability [5 - 8]	\$	587,608	\$	40,285	\$	627,893					



SECTION III -- LIABILITIES

In this section, we present detailed information on Plan liabilities including:

- **Disclosure** of Plan liabilities at June 30, 2014 and June 30, 2015;
- Statement of **changes** in these liabilities during the year.

Disclosure

Several types of liabilities are calculated and presented in this report. Each type is distinguished by the people ultimately using the figures and the purpose for which they are using them. Note that these liabilities are not applicable for settlement purposes, including the purchase of annuities and the payment of lump sums.

- **Present Value of Future Benefits:** Used for measuring all future Plan obligations, represents the amount of money needed today to fully fund all benefits of the Plan both earned as of the valuation date and those to be earned in the future by current Plan participants, under the current Plan provisions.
- Actuarial Liability: Used for funding calculations, this liability is calculated taking
 the Present Value of Future Benefits and subtracting the present value of future
 Member Contributions and future Employer Normal Costs under an acceptable
 actuarial funding method. The method used for this Plan is called the Entry Age
 Normal (EAN) funding method.
- **Unfunded Actuarial Liability:** The excess of the Actuarial Liability over the Valuation Assets.

Table III-1 on the following page discloses each of these liabilities for the current and prior valuations. With respect to each disclosure, a subtraction of the appropriate value of Plan assets yields, for each respective type, a **net surplus** or an **Unfunded Actuarial Liability**.



SECTION III -- LIABILITIES

Table III-1 Present Value of Future Benefits and Actuarial Liability (in thousands)											
		(III tillousu	iids)		Ju	ne 30, 2015	Ju	me 30, 2014			
Item		General		Safety		Total		Total			
Present Value of Future Benefits											
Actives	\$	979,480	\$	354,297	\$	1,333,777	\$	1,153,857			
Terminated Vested		78,769		35,664		114,433		86,231			
Retirees		878,482		250,453		1,128,934		967,865			
Disabled		50,599		73,427		124,026		103,945			
Beneficiaries		55,499		29,322		84,821		72,925			
Total StanCERA	\$	2,042,828	\$	743,163	\$	2,785,991	\$	2,384,822			
Actuarial Liability											
Total Present Value of Benefits	\$	2,042,828	\$	743,163	\$	2,785,991	\$	2,384,822			
Present Value of Future Normal Costs											
Employer Portion		176,152		81,789		257,941		216,329			
Employee Portion		99,112		37,416		136,529		142,123			
Actuarial Liability	\$	1,767,564	\$	623,958	\$	2,391,522	\$	2,026,371			
Actuarial Value of Assets	\$	1,306,445	\$	457,184	\$	1,763,629	\$	1,644,077			
Funded Ratio		73.9%		73.3%		73.7%		81.1%			
Unfunded Actuarial Liability/(Surplus)	\$	461,119	\$	166,773	\$	627,893	\$	382,294			



SECTION III -- LIABILITIES

The following table shows the Actuarial Liabilities for each of the valuation subgroups (General and Safety), split by members' status.

Table III-2 Liabilities by Group as of June 30, 2015 (in thousands)													
Actuarial Liability		General		Safety		Total							
Actuarial Liability													
Actives	\$	704,216	\$	235,092	\$	939,308							
Terminated Vested		78,769		35,664		114,433							
Retirees		878,482		250,453		1,128,934							
Disabled		50,599		73,427		124,026							
Beneficiaries		55,499		29,322		84,821							
Total	\$	1,767,564	\$	623,958	\$	2,391,522							



SECTION III -- LIABILITIES

Changes in Liabilities

Each of the Liabilities disclosed in the prior tables are expected to change at each valuation. The components of that change, depending upon which liability is analyzed, can include:

- New hires since the last valuation
- Benefits accrued since the last valuation
- Plan amendments increasing benefits
- Passage of time which adds interest to the prior liability
- Benefits paid to retirees since the last valuation
- Participants retiring, terminating, or dying at rates different than expected
- A change in actuarial or investment assumptions
- A change in the actuarial funding method

Unfunded liabilities will change because of all of the above, and also due to changes in Plan assets resulting from:

- Employer contributions different than expected
- Investment earnings different than expected
- A change in the method used to measure Plan assets

	Table III-3 Development of 2015 Experience Gain/(Loss) (in millions)	
	Item	Cost
1.	Unfunded Actuarial Liability at June 30, 2014	\$ 382.3
2.	Middle of year actuarial liability payment	(26.6)
3.	Interest to end of year on 1 and 2	 28.6
4.	Expected Unfunded Actuarial Liability at June 30, 2015 (1+2+3)	\$ 384.3
5.	Actual Unfunded Liability at June 30, 2015	 <u>627.9</u>
6.	Difference: (4 - 5)	\$ (243.6)
7.	Portion of difference due to:	
	a. Investment experience	\$ 20.6
	b. Contribution (shortfall)/excess	1.8
	d. Assumption changes	(269.8)
	e. Change in Actuarial Cost Method	0
	f. New entrant loss	(1.8)
	g. Other experience	 5.6
	h. Total	(243.6)



SECTION IV -- CONTRIBUTIONS

In the process of evaluating the financial condition of any pension plan, the actuary analyzes the assets and liabilities to determine what level of contributions is needed to properly maintain the funding status of the Plan. Typically, the actuarial process will use a funding technique that will result in a pattern of contributions that are both stable and predictable.

For this Plan, the actuarial funding method used to determine the Normal Cost and the Unfunded Actuarial Liability is the **Entry Age Normal (EAN)** cost method. There are three components to the total contribution: the **Normal Cost rate** (employee and employer), the **Unfunded Actuarial Liability rate** (UAL rate), and the **administrative expense** contribution.

The Normal Cost rate is determined in the following steps. First, an individual Normal Cost rate is determined by taking the value, as of entry age into the Plan, of each member's projected future benefits. This value is then divided by the value, also at entry age, of the member's expected future salary producing a Normal Cost rate that should remain relatively constant over a member's career.

The total Normal Cost is computed by adding the expected dollar amount of each active member's Normal Cost for the current year – known as the Individual Entry Age Method. The total Normal Cost is adjusted with interest to the middle of the year, to reflect the fact that the Normal Cost contributions are paid throughout the year as member payroll payments are made. Finally, the total Normal Cost rate is reduced by the member contribution rate to produce the employer Normal Cost rate. The member contribution rate for each subgroup is determined by adding the expected contributions for each member and dividing by the projected pay for each subgroup.

The Unfunded Actuarial Liability (UAL) is the difference between the EAN Actuarial Liability and the Actuarial Value of Assets. The UAL payment is determined as the amount needed to fund the UAL over a closed 21-year period as a level percentage of payroll.

Beginning with the June 30, 2012 actuarial valuation, the Board adopted a policy of adding an amount equal to the expected annual administrative expense to the employer's required contribution. Prior to the June 30, 2012 actuarial valuation, the administrative expenses were included as an offset to the assumed earnings rate, and were shared between the employees and employers. For the June 30, 2015 valuation, this amount is estimated to be \$2.4 million.

For this valuation, the Board adopted a three-year phase-in of the impact of the assumption changes on the employer contribution rate.



SECTION IV -- CONTRIBUTIONS

The table below presents the calculation of the contribution rates for the Plan for this valuation and compares the total contribution rate with the prior year rate. The tables on the following pages contain more details on the calculation of the UAL amortization payments, as well as details on the calculation of the contribution rates for each group and tier. This includes the first year of phase-in of the assumption change.

Table IV-1 Development of the Net Employer Contribution Rate as of June 30, 2015 for FYE 2017												
	June 30, 2015 General Safety COMPOSITE											
	County and Former County	Ceres and Other Districts	County and Former County	Ceres and Other Districts								
1. Total Normal Cost Rate	19.56%	20.78%	31.71%	33.16%	22.17%	20.52%						
2. Member Contribution Rate	9.06%	8.93%	<u>13.29%</u>	12.88%	<u>9.92%</u>	<u>9.39%</u>						
3. Employer Normal Cost Rate (1-2)	10.50%	11.85%	18.42%	20.28%	12.24%	11.13%						
4. UAL Amortization	16.34%	17.02%	22.82%	21.16%	17.66%	11.33%						
5. Administrative Expense Rate	0.86%	0.93%	1.33%	1.33%	<u>0.96%</u>	<u>0.89%</u>						
6. Net Employer Contribution Rate (3+4+5)	27.70%	29.80%	42.57%	42.77%	30.86%	23.35%						
7. Phase-In of Assumption Changes	<u>-5.44%</u>	<u>-5.44%</u>	<u>-7.59%</u>	<u>-7.59%</u>	<u>-5.87%</u>							
8. Final Employer Contribution Rate (6+7)	22.26%	24.36%	34.98%	35.18%	24.99%	23.35%						



SECTION IV -- CONTRIBUTIONS

Table IV-2 contains the details of the calculations of the UAL rates for the Plan.

Table IV-2 Development of UAL Amortization Rates														
		Ger	iera	1		Sai	fety	,		TOTAL				
		County and ormer County	Ce	eres and Other Districts		County and ormer County	C	eres and Other Districts						
Salary Scale:														
2016+		3.25%		3.25%		3.25%		3.25%		N/A				
Amortization Factor		14.2361		14.2361		14.2361		14.2361		N/A				
Payroll	\$	189,777,600	\$	8,099,797	\$	44,968,297	\$	6,859,064	\$	249,704,758				
Unfunded Actuarial Liability (actuarial value)	\$	441,492,227	\$	19,627,268	\$	146,115,362	\$	20,658,067	\$	627,892,923				
UAL Amortization	\$	31,012,198	\$	1,378,699	\$	10,263,734	\$	1,451,106	\$	44,105,737				
UAL Amortization Rate		16.34%		17.02%		22.82%		21.16%		17.66%				



SECTION IV -- CONTRIBUTIONS

Tables IV-3 and IV-4 contain the calculations of the employer contribution rates for each group and tier, and reflects the three-year phase-in of the assumption change.

Table IV-3 Development of the General Member Contribution Rate as of June 30, 2015 for FYE 2017										
Development of the General W.	Tier 1	Tier 2	Tier 3	Tier 4	Tier 5	PEPRA	TOTAL			
County and Former County										
A. Total Normal Cost Rate	21.66%	17.31%	3.21%	17.74%	20.73%	16.12%	19.56%			
B. Member Contribution Rate	<u>8.40</u> %	<u>8.04</u> %	<u>0.00</u> %	<u>1.08</u> %	<u>9.59</u> %	<u>8.06</u> %	<u>9.06%</u>			
C. Employer Normal Cost Rate (A-B)	13.26%	9.27%	3.21%	16.66%	11.14%	8.06%	10.50%			
D. UAL Amortization Rate	16.34%	16.34%	16.34%	16.34%	16.34%	16.34%	16.34%			
E. Administrative Expense Rate	<u>0.95</u> %	0.82%	0.63%	<u>1.06</u> %	0.88%	0.78%	<u>0.86%</u>			
F. Net June 30, 2015 Contribution Rate (C+D+E)	30.55%	26.43%	20.18%	34.06%	28.36%	25.18%	27.70%			
G. Impact of Phase-In of Assumption Changes	-5.44%	-5.44%	-5.44%	-5.44%	-5.44%	-5.44%	-5.44%			
H. Phase-In June 30, 2015 Contribution Rate (F+G)	25.11%	20.99%	14.74%	28.62%	22.92%	19.74%	22.26%			
Ceres and Other Districts										
A. Total Normal Cost Rate		16.25%		13.65%	21.78%	17.10%	20.78%			
B. Member Contribution Rate		<u>7.76</u> %		0.00%	9.22%	<u>8.55</u> %	<u>8.93%</u>			
C. Employer Normal Cost Rate (A-B)		8.49%		13.65%	12.56%	8.55%	11.85%			
D. UAL Amortization Rate		17.02%		17.02%	17.02%	17.02%	17.02%			
E. Administrative Expense Rate		0.82%		0.99%	<u>0.95</u> %	0.82%	<u>0.93%</u>			
F. Net June 30, 2015 Contribution Rate (C+D+E)		26.33%		31.66%	30.53%	26.39%	29.80%			
G. Impact of Phase-In of Assumption Changes		-5.44%		-5.44%	-5.44%	-5.44%	-5.44%			
H. Phase-In June 30, 2015 Contribution Rate (F+G)		20.89%		26.22%	25.09%	20.95%	24.36%			



SECTION IV -- CONTRIBUTIONS

	le IV-4				
Development of the Safety Member Contri					TOTAL
	Tier 2	Tier 4	Tier 5	PEPRA	TOTAL
County and Former County					
A. Total Normal Cost Rate	29.57%	36.05%	33.39%	26.15%	31.71%
B. Member Contribution Rate	<u>12.60</u> %	<u>5.85</u> %	<u>13.44</u> %	<u>13.07</u> %	<u>13.29%</u>
C. Employer Normal Cost Rate (A-B)	16.97%	30.20%	19.95%	13.08%	18.42%
D. UAL Amortization Rate	22.82%	22.82%	22.82%	22.82%	22.82%
E. Administrative Expense Rate	1.28%	1.70%	1.38%	<u>1.15</u> %	<u>1.33%</u>
F. Net June 30, 2015 Contribution Rate (C+D+E)	41.07%	5 4.72 %	44.15%	3 7.05 %	42.57%
G. Impact of Phase-In of Assumption Changes	-7.59%	-7.59%	-7.59%	-7.59%	-7.59%
H. Phase-In June 30, 2015 Contribution Rate (F+G)	33.48%	47.13%	36.56%	29.46%	34.98%
Ceres and Other Districts					
A. Total Normal Cost Rate			33.52%	28.59%	33.16%
B. Member Contribution Rate			12.76%	14.29%	<u>12.88%</u>
C. Employer Normal Cost Rate (A-B)			20.76%	14.30%	20.28%
D. UAL Amortization Rate			21.16%	21.16%	21.16%
E. Administrative Expense Rate			1.35%	1.14%	<u>1.33%</u>
F. Net June 30, 2015 Contribution Rate (C+D+E)			43.27%	3 6.60 %	42.77%
G. Impact of Phase-In of Assumption Changes			-7.59%	-7.59%	-7.59%
H. Phase-In June 30, 2015 Contribution Rate (F+G)			35.68%	29.01%	35.18%



SECTION V -- REQUIRED CAFR EXHIBITS

The GASB adopted Statement Nos. 67 and 68 which replaced GASB Statement Nos. 25 and 27. GASB 67 is effective for periods beginning after June 15, 2013 (first effective June 30, 2014 for the Plan) and GASB 68 is effective for fiscal years beginning after June 15, 2014 (first effective for the fiscal year July 1, 2014 to June 30, 2015 for the Employers). The disclosures needed to satisfy the new GASB requirements can be found in the StanCERA GASB 67/68 Report as of June 30, 2015.

In accordance with Government Finance Officers Association (GFOA) and their recommended checklist for Comprehensive Annual Financial Reports (CAFRs), we continue to prepare the Solvency Test disclosure and Actuarial Gain/Loss exhibit.

Solvency Test

The solvency test shows the portion of actuarial liabilities for active member contributions, inactive members, and the employer financed portion of the active members that are covered by the Actuarial Value of Assets.

The Actuarial Accrued Liability under GASB 25 is determined assuming that the Plan is ongoing and participants continue to terminate employment, retire, etc., in accordance with the actuarial assumptions. Beginning June 30, 2015, liabilities are discounted at the assumed valuation interest rate of 7.25%.



SECTION V -- REQUIRED CAFR EXHIBITS

Valuation Date June 30,	(1) Active Member Contributions	(2) Retirees And Beneficiaries	GASB SOL	Ne V-1 VENCY TEST thousands) Actuarial Accrued Liabilities	Valuation Assets	Liabil	n of Actua ities Cove ported Ass (2)	red
2003	\$ 176,622	\$ 455,784	\$ 325,689	\$ 958,095	\$ 928,022	100%	100%	91%
2004	166,806	518,922	349,617	1,035,345	993,180	100%	100%	88%
2005	205,556	551,810	358,994	1,116,310	1,049,691	100%	100%	81%
2006*	219,907	619,109	355,888	1,194,904	1,154,048	100%	100%	89%
2008 **	272,657	739,838	536,329	1,548,824	1,317,167	100%	100%	57%
2009	298,342	781,082	574,292	1,653,716	1,171,767	100%	100%	16%
2010	323,940	829,323	584,561	1,737,824	1,325,801	100%	100%	30%
2011	337,201	897,384	523,133	1,757,718	1,372,046	100%	100%	26%
2012	351,569	987,546	549,598	1,888,713	1,451,764	100%	100%	20%
2013 ***	191,968	1,065,792	661,466	1,919,227	1,524,076	100%	100%	40%
2014	193,301	1,144,734	688,335	2,026,371	1,644,077	100%	100%	44%
2015	196,074	1,328,846	850,510	2,375,430	1,763,629	100%	100%	28%

^{*} Results recalculated, reflecting Level 1 assumption changes (new retirement, termination and withdrawal decrements) & new EFI EAN methodology.



^{**} Reflects transfer as of June 30, 2008 of \$50 million from Non-Valuation to Valuation Reserves.

^{***} Reflects change to include only refundable contribution balance.

SECTION V -- REQUIRED CAFR EXHIBITS

Table V-2 displays the historical experience of gains and losses for the Plan. Each year there will be a gain or loss due to both assets and liabilities. In addition, there can be gains or losses due to changes in plan provisions or due to the adoption of new assumptions and methods. For example, this year, there is also a large loss due to the adoption of the assumptions determined in the Actuarial Experience Study for July 1, 2012 through June 30, 2015.

	Table V-2 Actuarial (Gains)/Losses (Change in UAAL beyond expected)												
Plan Year Ending	Asset Sources		AAL beyond exability Sources	ted) Total		Changes in Plan Provisions		Changes in Assumptions/Methods					
6/30/2004	\$ 8,536,049	\$	12,492,070	\$	21,028,119	\$	0		\$ (2,088,246)				
6/30/2005	26,573,640		11,238,430		37,812,070		0		0				
6/30/2006	(27,756,878)		21,366,204		(6,390,674)		0		(14,845,293)				
*6/30/2007	86,178,774		0		86,178,774		0		134,470,779				
6/30/2008	(50,709,169)		67,324,195		16,615,026		0		0				
6/30/2009	228,905,354		12,996,828		241,902,182		0		0				
6/30/2010	(76,507,113)		37,492,978		(39,014,135)		0		(51,743,766)				
6/30/2011	49,205,018		(2,387,353)		46,817,665		0		(72,085,966)				
6/30/2012	(5,283,786)		6,191,029		907,243		0		52,606,350				
6/30/2013	10,200,000		8,500,000		18,700,000		0		(63,400,000)				
6/30/2014	(22,600,000)		6,100,000		(16,500,000)		0		400,000				
6/30/2015	(20,600,000)		(5,600,000)		(26,200,000)		0		269,800,000				

^{*}Actuarial valuation was not performed for fiscal year ending June 30, 2007.



APPENDIX A -- MEMBERSHIP INFORMATION

The data for this valuation was provided by the StanCERA as of June 30, 2015. Cheiron did not audit any of the data; however, it was reviewed to ensure that it complies with generally accepted actuarial standards.

	General N	Iembers	Safety M	embers	Tot	al
	7/1/2014	7/1/2015	7/1/2014	7/1/2015	7/1/2014	7/1/2015
Active Participants						
Number	3,303	3,421	689	723	3,992	4,144
Average Age	45.99	45.45	38.76	38.08	44.74	44.17
Average Service	11.47	10.94	10.87	10.25	11.37	10.82
Average Pay (does not reflect	\$ 54,377	\$ 55,116	\$ 63,022	\$ 68,004	\$ 55,869	\$ 57,364
impact of furloughs)						
Service Retired						
Number	2,351	2,472	328	349	2,679	2,821
Average Age	69.33	69.46	64.57	64.57	68.74	68.85
Average Annual Total Benefit	\$ 27,500	\$ 28,315	\$ 50,096	\$ 51,627	\$ 30,266	\$ 31,199
Beneficiaries						
Number	314	323	85	87	399	410
Average Age	73.25	72.70	66.95	66.66	71.91	71.42
Average Annual Total Benefit	\$ 16,164	\$ 16,700	\$ 26,590	\$ 27,721	\$ 18,385	\$ 19,039
Duty Disabled						
Number	107	108	117	118	224	226
Average Age	66.22	67.01	57.55	57.88	61.69	62.24
Average Annual Total Benefit	\$ 23,358	\$ 23,941	\$ 35,924	\$ 36,607	\$ 29,921	\$ 30,554
Ordinary Disabled						
Number	77	75	6	7	83	82
Average Age	64.10	64.36	58.17	57.00	63.67	63.73
Average Annual Total Benefit	\$ 15,125	\$ 15,637	\$ 19,909	\$ 22,342	\$ 15,471	\$ 16,210
Total In Pay						
Number	2,849	2,978	536	561	3,385	3,539
Average Age	69.50	69.59	63.34	63.39	68.53	68.61
Average Annual Total Benefit	\$ 25,760	\$ 26,577	\$ 42,937	\$ 44,395	\$ 28,480	\$ 29,402
Terminated Vested						
Number	533	393	106	80	639	473
Average Age	49.82	50.07	44.11	43.33	48.88	48.93
Average Service	8.01	10.00	7.55	10.01	7.93	10.00
Transfers						
Number	226	367	97	139	323	506
Average Age	44.89	46.41	38.05	40.61	42.83	44.82
Average Service	7.51	6.30	8.00	6.81	7.66	6.44
Total Inactives						
Number	759	760	203	219	962	979
Average Age	48.35	48.31	41.22	41.60	46.85	46.81
Average Service	7.86	8.21	7.76	7.98	7.84	8.16



APPENDIX A -- MEMBERSHIP INFORMATION

Data pertaining to 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.

Plan Year Ending	Added During Year	A	Allowance Added	Removed During Year	Allowance Removed	At End of Year	Annual Allowance	% Increase in Retiree Allowance	A	verage Annual lowance
2008	369	\$	9,084,777	(148)	\$ (1,731,738)	2,666	\$ 63,296,000	19.18%	\$	23,742
2009	156	\$	2,168,425	(71)	\$ (647,870)	2,751	\$ 66,720,003	5.41%	\$	24,253
2010	159	\$	3,349,900	(80)	\$ (751,427)	2,830	\$ 71,464,735	7.11%	\$	25,334
2011	263	\$	4,724,416	(78)	\$ (1,194,042)	3,015	\$ 74,826,404	4.70%	\$	25,732
2012	226	\$	3,565,634	(99)	\$ (978,729)	3,142	\$ 80,157,222	7.12%	\$	26,737
2013	198	\$	6,036,138	(91)	\$ (1,144,584)	3,249	\$ 89,975,736	12.25%	\$	27,694
2014	222	\$	6,703,273	(86)	\$ (1,725,066)	3,385	\$ 96,405,454	7.15%	\$	28,480
2015	237	\$	7,778,716	(83)	\$ (2,043,313)	3,539	\$ 104,052,097	7.93%	\$	29,402



		County and Former County General Members Safety Members Total						Ceres and Other Districts General Members Safety Members Total					Total County and Former County, Ceres and Other Districts	
	General M	Iembers	Safety M	Iembers	To	tal	General I	Members	Safety M	lembers	To	tal		
	7/1/2014	7/1/2015	7/1/2014	7/1/2015	7/1/2014	7/1/2015	7/1/2014	7/1/2015	7/1/2014	7/1/2015	7/1/2014	7/1/2015	7/1/2014	7/1/2015
Active Participants														
Number	3,184	3,297	602	643	3,786	3,940	119	124	87	80	206	204	3,992	4,144
Average Age	46.00	45.43	38.94	38.09	44.88	44.24	45.56	45.96	37.56	38.03	42.18	42.85	44.74	44.17
Average Service	11.45	10.91	10.91	10.18	11.37	10.79	11.81	11.87	10.61	10.83	11.30	11.46	11.37	10.82
Average Pay*	\$ 54,186	\$ 54,846	\$ 61,146	\$ 66,311	\$ 55,293	\$ 56,717	\$ 59,466	\$ 62,276	\$ 76,005	\$ 81,614	\$ 66,451	\$ 69,859	\$ 55,869	\$ 57,364
Terminated Vested														
Number	519	380	93	68	612	448	14	13	13	12	27	25	639	473
Average Age	49.76	49.99	44.17	43.25	48.91	48.97	52.07	52.38	43.69	43.75	48.04	48.24	48.88	48.93
Average Service	7.97	10.00	7.67	9.96	7.93	10.00	9.33	9.98	6.66	10.28	8.04	10.12	7.93	10.00
Transfers														
Number	206	342	88	121	294	463	20	25	9	18	29	43	323	506
Average Age	45.12	46.66	37.72	40.21	42.90	44.97	42.50	43.08	41.33	43.28	42.14	43.16	42.83	44.82
Average Service	7.36	6.16	7.90	6.67	7.52	6.29	9.12	8.18	8.96	7.70	9.07	7.98	7.66	6.44
Total Inactives														
Number	725	722	181	189	906	911	34	38	22	30	56	68	962	979
Average Age	48.44	48.41	41.03	41.31	46.96	46.94	46.44	46.26	42.73	43.47	44.98	45.03	46.85	46.81
Average Service	7.80	8.18	7.78	7.86	7.80	8.11	9.20	8.80	7.60	8.73	8.57	8.77	7.84	8.16

^{*} All payroll figures shown are annual.



APPENDIX A -- MEMBERSHIP INFORMATION

County and Former County Members

County and Former C	ounty Mem	bers																
						General I	Members								Safety M	embers		
	Tie	r1	Tie	r 2	Tie	r3	Tie	r 4	Tie	r 5	PEP	RA	Tiers	1 & 4	Tiers	2 & 5	PEP	PRA .
	7/1/2014	7/1/2015	7/1/2014	7/1/2015	7/1/2014	7/1/2015	7/1/2014	7/1/2015	7/1/2014	7/1/2015	7/1/2014	7/1/2015	7/1/2014	7/1/2015	7/1/2014	7/1/2015	7/1/2014	7/1/2015
Active Participants																		
Number	1	1	267	247	17	17	48	36	2,410	2,227	441	769	2	2	517	480	83	161
Average Age	55.00	56.00	37.34	38.73	52.24	53.24	60.15	61.00	48.41	48.95	36.27	36.49	58.50	59.50	40.71	41.27	27.40	28.32
Average Service	13.20	16.76	2.93	4.09	16.82	17.75	33.94	34.73	13.88	14.61	0.72	1.12	25.57	26.57	12.49	13.16	0.75	1.08
Average Pay*	\$ 35,788	\$ 37,398	\$ 46,257	\$ 50,552	\$ 47,749	\$ 49,340	\$ 71,398	\$ 74,329	\$ 57,522	\$ 59,919	\$ 39,175	\$ 40,768	\$ 76,307	\$ 83,543	\$ 63,520	\$ 71,433	\$ 45,992	\$ 50,826
Terminated Vested																		
Number	22	17	167	66	28	22	1	1	301	274	0	0	1	0	92	68	0	0
Average Age	61.64	62.24	53.14	55.95	53.64	54.77	65.00	66.00	46.61	47.35	0.00	0.00	66.00	0.00	43.93	43.25	0.00	0.00
Average Service	10.51	10.47	5.14	8.85	10.65	12.15	5.55	5.55	9.12	10.09	0.00	0.00	6.08	0.00	7.69	9.96	0.00	0.00
Transfers																		
Number	6	4	30	118	10	13	2	2	154	193	4	12	0	1	85	114	3	6
Average Age	61.67	61.75	42.00	48.61	50.00	50.54	57.00	58.00	44.64	45.49	43.75	35.08	0.00	67.00	37.69	40.27	38.33	34.67
Average Service	8.04	10.81	3.06	2.49	19.42	15.86	14.33	14.33	7.47	7.89	0.45	1.04	0.00	6.08	8.15	6.97	0.82	1.17
Total Inactives																		
Number	28	21	197	184	38	35	3	3	455	467	4	12	1	1	177	182	3	6
Average Age	61.64	62.14	51.44	51.24	52.68	53.20	59.67	60.67	45.95	46.58	43.75	35.08	66.00	67.00	40.94	41.38	38.33	34.67
Average Service	9.98	10.53	4.82	4.77	12.96	13.53	11.41	11.41	8.56	9.18	0.45	1.04	6.08	6.08	7.91	8.09	0.82	1.17

^{*} All payroll figures shown are annual.

CERES and Other District Members

			General Members Tier 2 Tier 3 Tier 4 Tier 5 PEF											Safety Members				
	Tier	1	Tie	r 2	Tie	r3	Tie	r 4	Tie	r 5	PEP	RA	Tiers	1 & 4	Tiers	2 & 5	PEF	R A
	7/1/2014 7	/1/2015	7/1/2014	7/1/2015	7/1/2014	7/1/2015	7/1/2014	7/1/2015	7/1/2014	7/1/2015	7/1/2014	7/1/2015	7/1/2014	7/1/2015	7/1/2014	7/1/2015	7/1/2014	7/1/2015
Active Participants																		
Number	0	0	5	4	0	0	2	2	95	90	17	28	0	0	83	72	4	8
Average Age	0.00	0.00	47.20	44.00	0.00	0.00	60.00	61.00	46.78	48.40	36.59	37.32	0.00	0.00	38.02	38.89	28.00	30.25
Average Service	0.00	0.00	9.77	9.56	0.00	0.00	40.09	41.13	13.29	14.66	0.76	1.14	0.00	0.00	11.09	11.96	0.66	0.68
Average Pay*	\$ 0	\$ 0	\$ 45,197	\$ 48,436	\$ 0	\$ 0	\$ 62,973	\$ 62,454	\$ 63,961	\$ 68,978	\$ 38,135	\$ 42,695	\$ 0	\$ 0	\$ 77,336	\$ 84,047	\$ 48,382	\$ 59,711
Terminated Vested																		
Number	1	1	7	4	0	0	0	0	6	8	0	0	0	0	13	12	0	0
Average Age	60.00	61.00	52.43	55.25	0.00	0.00	0.00	0.00	50.33	49.88	0.00	0.00	0.00	0.00	43.69	43.75	0.00	0.00
Average Service	5.32	5.32	5.93	7.59	0.00	0.00	0.00	0.00	13.96	11.75	0.00	0.00	0.00	0.00	6.66	10.28	0.00	0.00
Transfers																		
Number	0	0	3	5	0	0	0	0	17	19	0	1	0	0	9	18	0	0
Average Age	0.00	0.00	50.00	50.00	0.00	0.00	0.00	0.00	41.18	41.79	0.00	33.00	0.00	0.00	41.33	43.28	0.00	0.00
Average Service	0.00	0.00	2.85	2.19	0.00	0.00	0.00	0.00	10.22	10.16	0.00	0.55	0.00	0.00	8.96	7.70	0.00	0.00
Inactives																		
Number	1	1	10	9	0	0	0	0	23	27	0	1	0	0	22	30	0	0
Average Age	60.00	61.00	51.70	52.33	0.00	0.00	0.00	0.00	43.57	44.19	0.00	33.00	0.00	0.00	42.73	43.47	0.00	0.00
Average Service	5.32	5.32	5.00	4.59	0.00	0.00	0.00	0.00	11.20	10.63	0.00	0.55	0.00	0.00	7.60	8.73	0.00	0.00

^{*} All payroll figures shown are annual.



Valuation Date	Plan Type	Number	Annual Payroll	Average Annual Salary	Increase in Average Pay
June 30, 2003	General	3,626	\$163,505,000	\$45,092	6.76%
	Safety	637	\$34,159,000	\$53,625	3.98%
	Total	4,263	\$197,664,000	\$46,367	5.23%
June 30, 2004	General	3,618	\$164,462,000	\$45,457	0.81%
	Safety	630	\$35,501,000	\$56,351	5.08%
	Total	4,248	\$199,963,000	\$47,072	1.52%
June 30, 2005	General	3,651	\$173,399,000	\$47,494	4.48%
	Safety	687	\$38,282,000	\$55,723	-1.11%
	Total	4,338	\$211,681,000	\$48,797	3.66%
June 30, 2006	General	3,702	\$179,767,000	\$48,559	2.24%
	Safety	689	\$40,001,000	\$58,057	4.19%
	Total	4,391	\$219,768,000	\$50,050	2.57%
June 30, 2008	General	3,719	\$230,942,000	\$62,098	27.88%
	Safety	731	\$44,638,000	\$61,064	5.18%
	Total	4,450	\$275,580,000	\$61,928	23.73%
June 30, 2009	General	3,627	\$201,144,000	\$55,457	-10.69%
	Safety	739	\$47,172,000	\$63,832	4.53%
	Total	4,366	\$248,316,000	\$56,875	-8.16%
June 30, 2010	General	3,464	\$202,200,198	\$58,372	5.26%
	Safety	685	\$46,630,275	\$68,073	6.64%
	Total	4,149	\$248,830,473	\$59,974	5.45%
June 30, 2011	General	3,232	\$184,906,498	\$57,211	-1.99%
	Safety	637	\$41,800,298	\$65,621	-3.60%
	Total	3,869	\$226,706,796	\$58,596	-2.30%
June 30, 2012	General	3,233	\$179,260,736	\$55,447	-3.08%
	Safety	661	\$41,657,273	\$63,022	-3.96%
	Total	3,894	\$220,918,009	\$56,733	-3.18%
June 30, 2013	General	3,230	\$176,437,755	\$54,625	-1.48%
	Safety	694	\$42,590,563	\$61,370	-2.62%
	Total	3,924	\$219,028,318	\$55,818	-1.61%
June 30, 2014		3,303	\$179,606,090	\$54,377	-0.45%
	Safety	689	\$43,422,198	\$63,022	2.69%
	Total	3,992	\$223,028,288	\$55,869	0.09%
June 30, 2015		3,421	\$188,550,804	\$55,116	1.36%
	Safety	723	\$49,166,923	\$68,004	7.91%
	Total	4,144	\$237,717,727	\$57,364	2.68%

^{*}Actuarial valuation was not performed for fiscal year ending June 30, 2007.



StanCERA Membership – Retired Members as of June 30, 2015

	C		TD.	.1						
			ormer Count				her Districts		Tot	al
	<u>General N</u>	<u> Iembers</u>	<u>Safety M</u>	<u>lembers</u>	<u>General N</u>	<u> Iembers</u>	Safety M	<u>lembers</u>		
		Annual		Annual		Annual		Annual		Annual
Age		Average		Average		Average		Average		Average
	Number	Benefit	Number	Benefit	Number	Benefit	Number	Benefit	Number	Benefit
35-39	0	\$ 0	0	\$ 0	0	\$ 0	0	\$0	0	\$ 0
40-44	0	\$ 0	0	\$ O	0	\$ 0	0	\$ 0	0	\$ 0
45-49	0	\$0	5	\$ 48,975	0	\$ 0	0	\$ 0	5	\$ 48,975
50-54	54	\$ 19,494	42	\$ 58,371	0	\$ 0	5	\$ 42,744	101	\$ 36,812
55-59	219	\$ 27,313	55	\$ 44,010	5	\$ 36,063	3	\$ 121,478	282	\$ 31,726
60-64	475	\$ 32,137	71	\$ 51,520	13	\$ 24,160	3	\$ 94,127	562	\$ 34,732
65-69	646	\$ 31,626	71	\$ 54,615	17	\$ 30,179	1	\$ 70,765	735	\$ 33,866
70-74	426	\$ 29,372	47	\$ 50,681	8	\$ 26,196	0	\$ 0	481	\$ 31,401
75-79	249	\$ 22,280	25	\$ 54,624	6	\$ 33,671	0	\$ 0	280	\$ 25,412
80-84	161	\$ 22,462	11	\$ 38,542	3	\$ 49,640	0	\$ 0	175	\$ 23,939
85-89	115	\$ 21,822	5	\$ 25,754	0	\$ 0	0	\$ 0	120	\$ 21,986
90-94	49	\$ 22,007	5	\$ 26,736	0	\$ 0	0	\$ 0	54	\$ 22,445
95+	26	\$ 16,621	0	\$ 0	0	\$ 0	0	\$ 0	26	\$ 16,621
All Ages	2,420	\$ 28,275	337	\$ 50,702	52	\$ 30,153	12	\$ 77,608	2,821	\$ 31,199



StanCERA Membership – Service-Connected Disabled Members as of June 30, 2015

	Co	unty and Fo	ormer Count	\mathbf{y}	C	eres and Ot	her Districts		Tot	al
	General N	<u>Iembers</u>	Safety M	<u>lembers</u>	General N	<u> Iembers</u>	Safety M	<u>embers</u>		
		Annual		Annual		Annual		Annual		Annual
Age		Average		Average		Average		Average		Average
	Number	Benefit	Number	Benefit	Number	Benefit	Number	Benefit	Number	Benefit
25-29	0	\$ 0	0	\$0	0	\$ 0	0	\$ 0	0	\$ 0
30-34	0	\$ 0	2	\$ 33,346	0	\$ 0	0	\$ 0	2	\$ 33,346
35-39	0	\$ 0	2	\$ 36,387	0	\$ 0	0	\$ 0	2	\$ 36,387
40-44	1	\$ 14,570	11	\$ 33,276	0	\$ 0	0	\$ 0	12	\$ 31,717
45-49	3	\$ 18,990	11	\$ 39,409	0	\$ 0	1	\$ 28,852	15	\$ 34,622
50-54	2	\$ 26,585	16	\$ 30,193	1	\$ 28,532	0	\$ 0	19	\$ 29,726
55-59	12	\$ 23,338	19	\$ 32,096	0	\$ 0	0	\$ 0	31	\$ 28,706
60-64	23	\$ 22,222	20	\$ 41,600	1	\$ 22,351	3	\$ 38,261	47	\$ 31,494
65-69	28	\$ 24,815	18	\$ 41,442	3	\$ 22,389	0	\$ 0	49	\$ 30,774
70-74	8	\$ 24,150	8	\$ 35,927	1	\$ 21,112	1	\$ 77,256	18	\$ 32,166
75-79	14	\$ 27,642	3	\$ 34,548	0	\$ 0	0	\$ 0	17	\$ 28,860
80-84	7	\$ 20,380	3	\$ 32,590	0	\$ 0	0	\$ 0	10	\$ 24,043
85-89	4	\$ 28,251	0	\$ 0	0	\$ 0	0	\$ 0	4	\$ 28,251
90-94	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0
95+	0	\$ 0	0	\$ 0	0	\$ 0	0	\$0	0	\$ 0
All Ages	102	\$ 23,985	113	\$ 36,272	6	\$ 23,194	5	\$ 44,178	226	\$ 30,554



StanCERA Membership - Nonservice-Connected Disabled Members as of June 30, 2015

	Co	unty and Fo	ormer Count	y	C	eres and Ot	her Districts		Tot	al
Age	<u>General N</u>	Annual Average	Safety M	Annual Average	General N	Annual Average	Safety M	Annual Average		Annual Average
	Number	Benefit	Number	Benefit	Number	Benefit	Number	Benefit	Number	Benefit
35-39	2	\$ 14,479	0	\$ 0	0	\$ O	0	\$ 0	2	\$ 14,479
40-44	1	\$ 15,335	1	\$ 21,608	0	\$ O	1	\$ 33,955	3	\$ 23,633
45-49	4	\$ 16,536	0	\$ 0	0	\$ 0	0	\$0	4	\$ 16,536
50-54	6	\$ 16,675	0	\$ 0	0	\$ 0	0	\$ 0	6	\$ 16,675
55-59	10	\$ 15,976	2	\$ 22,364	0	\$ 0	0	\$ 0	12	\$ 17,040
60-64	9	\$ 17,588	2	\$ 18,296	0	\$ 0	0	\$ 0	11	\$ 17,717
65-69	19	\$ 15,525	0	\$ 0	0	\$ 0	0	\$ 0	19	\$ 15,525
70-74	11	\$ 17,527	1	\$ 19,514	0	\$ 0	0	\$ 0	12	\$ 17,692
75-79	8	\$ 12,584	0	\$ 0	0	\$ 0	0	\$ 0	8	\$ 12,584
80-84	1	\$ 11,495	0	\$ 0	0	\$ 0	0	\$ 0	1	\$ 11,495
85-89	3	\$ 12,520	0	\$ 0	0	\$ 0	0	\$ 0	3	\$ 12,520
90-94	1	\$ 6,775	0	\$ 0	0	\$ 0	0	\$ 0	1	\$ 6,775
95+	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0
All Ages	75	\$ 15,637	6	\$ 20,407	0	\$ 0	1	\$ 33,955	82	\$ 16,210



StanCERA Membership – Beneficiaries as of June 30, 2015

	Co	unty and Fo	ormer Count	ty	C	eres and Ot	her Districts	S	Tot	al
	General N		Safety M		General N		Safety M			
Age	Number	Annual Average Benefit	Number	Annual Average Benefit	Number	Annual Average Benefit	Number	Annual Average Benefit	Number	Annual Average Benefit
0-24	1	\$ 29,362	2	\$ 17,266	0	\$ 0	0	\$0	3	\$ 21,298
25-29	0	\$0	0	\$ 0	0	\$0	0	\$0	0	\$ 0
30-34	1	\$ 35,494	0	\$ 0	0	\$0	0	\$0	1	\$ 35,494
35-39	3	\$ 8,881	0	\$ 0	0	\$0	0	\$0	3	\$ 8,881
40-44	4	\$ 8,887	1	\$ 37,615	0	\$0	0	\$0	5	\$ 14,633
45-49	10	\$ 12,280	3	\$ 24,190	0	\$0	0	\$0	13	\$ 15,028
50-54	12	\$ 10,173	6	\$ 25,921	0	\$0	0	\$0	18	\$ 15,423
55-59	14	\$ 12,234	9	\$ 21,669	0	\$0	1	\$ 34,022	24	\$ 16,680
60-64	33	\$ 16,693	15	\$ 22,970	0	\$0	0	\$0	48	\$ 18,654
65-69	56	\$ 16,023	13	\$ 33,795	1	\$ 10,854	0	\$0	70	\$ 19,250
70-74	39	\$ 19,440	6	\$ 27,678	0	\$0	0	\$0	45	\$ 20,539
75-79	39	\$ 20,463	18	\$ 32,895	0	\$ 0	0	\$0	57	\$ 24,389
80-84	42	\$ 19,478	9	\$ 29,794	0	\$ 0	0	\$0	51	\$ 21,298
85-89	34	\$ 16,348	3	\$ 23,760	0	\$ 0	0	\$0	37	\$ 16,949
90-94	23	\$ 15,223	1	\$ 936	0	\$ 0	0	\$0	24	\$ 14,627
95+	11	\$ 10,163	0	\$ 0	0	\$ 0	0	\$0	11	\$ 10,163
All Ages	322	\$ 16,719	86	\$ 27,647	1	\$ 10,854	1	\$ 34,022	410	\$ 19,039



APPENDIX A -- MEMBERSHIP INFORMATION

StanCERA Membership - Benefit Form Elections as of June 30, 2015

	County and Former County Ceres and Other Districts General Safety General Safety											
					Total							
Service Retired												
Option #0 (Unmodified 60% to Spouse)	1,996	297	40	10	2,343							
Option #1 (Cash Refund)	196	8	5	0	209							
Option #2 (100% Continuance)	198	31	7	2	238							
Option #3 (50% Continuance)	30	1	0	0	31							
Total Service Retired	2,420	337	52	12	2,821							
Ordinary Disability												
Option #0 (Unmodified 60% to Spouse)	65	4	0	1	70							
Option #1 (Cash Refund)	4	2	0	0	6							
Option #2 (100% Continuance)	6	0	0	0	6							
Option #3 (50% Continuance)	0	0	0	0	0							
Total Ordinary Disability	75	6	0	1	82							
Duty Disability												
Option #0 (Unmodified 60% to Spouse)	91	101	5	4	201							
Option #1 (Cash Refund)	2	1	1	0	4							
Option #2 (100% Continuance)	6	10	0	1	17							
Option #3 (50% Continuance)	3	1	0	0	4							
Total Duty Disability	102	113	6	5	226							
Total	2,597	456	58	18	3,129							



APPENDIX A -- MEMBERSHIP INFORMATION

Age & Service Distribution of Active Members by Count and Average Compensation as of June 30, 2015 General Members (County and Former County)

Count

ount													
						Years o	f Service						
Age	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over	Total Count
Under 20	0	0	0	0	0	0	0	0	0	0	0	0	0
20-24	26	9	0	0	0	0	0	0	0	0	0	0	35
25-29	96	64	26	23	3	13	1	0	0	0	0	0	226
30-34	80	77	48	43	6	93	20	0	0	0	0	0	367
35-39	75	48	31	32	0	136	115	28	0	0	0	0	465
40-44	42	40	19	21	10	111	122	78	11	0	0	0	454
45-49	28	21	14	17	6	95	106	119	49	11	0	0	466
50-54	32	22	14	6	3	72	97	122	68	54	7	0	497
55-59	10	9	10	10	2	63	103	94	55	44	16	8	424
60-64	3	6	1	7	3	48	59	57	38	28	7	16	273
65-69	1	0	2	0	0	13	26	14	13	8	2	3	82
70 & Over	0	0	0	0	0	1	3	3	1	0	0	0	8
Total Count	393	296	165	159	33	645	652	515	235	145	32	27	3,297

Compensation

						Years of	Service						
Age	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over	Avg. Comp.
Under 20	0	0	0	0	0	0	0	0	0	0	0	0	0
20-24	31,258	31,933	0	0	0	0	0	0	0	0	0	0	31,431
25-29	37,243	39,055	44,407	43,034	44,238	49,991	60,072	0	0	0	0	0	40,097
30-34	43,591	40,953	45,538	46,082	50,741	51,757	48,143	0	0	0	0	0	46,018
35-39	40,992	39,860	44,342	47,197	0	53,764	55,770	56,821	0	0	0	0	49,869
40-44	39,188	46,091	48,121	54,759	55,038	55,351	54,966	68,724	60,827	0	0	0	55,030
45-49	41,028	36,110	47,616	48,879	50,065	56,892	62,036	64,855	64,572	76,234	0	0	58,811
50-54	47,839	49,671	52,303	63,546	44,975	58,280	57,476	59,308	65,672	68,167	55,203	0	59,179
55-59	36,916	47,792	46,189	51,932	63,051	53,517	60,525	63,047	71,092	76,133	71,755	61,230	62,114
60-64	36,770	85,360	33,793	49,676	38,755	52,730	63,238	62,380	63,071	60,902	52,850	72,692	60,707
65-69	33,977	0	59,257	0	0	70,532	67,120	52,936	71,246	53,455	94,367	49,767	63,994
70 & Over	0	0	0	0	0	264,224	43,103	58,631	60,964	0	0	0	78,799
Average	40,175	42,198	46,318	48,496	50,461	55,200	58,486	62,726	66,352	68,982	65,412	66,748	54,846

Age & Service Distribution of Active Members by Count and Average Compensation as of June 30, 2015



APPENDIX A -- MEMBERSHIP INFORMATION

General Members (Ceres and Other Districts)

Count

						Years o	f Service						
Age	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over	Total Count
Under 20	0	0	0	0	0	0	0	0	0	0	0	0	0
20-24	2	2	0	0	0	0	0	0	0	0	0	0	4
25-29	5	1	1	0	0	0	0	0	0	0	0	0	7
30-34	2	1	3	4	0	4	0	0	0	0	0	0	14
35-39	1	2	1	0	0	2	7	1	0	0	0	0	14
40-44	1	0	0	2	0	5	5	1	1	0	0	0	15
45-49	2	0	1	0	0	5	4	2	1	2	0	0	17
50-54	1	0	0	0	2	4	3	4	3	2	0	1	20
55-59	1	1	0	0	0	4	3	4	2	2	0	0	17
60-64	0	2	1	0	0	1	1	0	2	1	2	0	10
65-69	0	0	0	0	0	3	1	0	0	0	0	1	5
70 & Over	0	0	0	0	0	1	0	0	0	0	0	0	1
Total Count	15	9	7	6	2	29	24	12	9	7	2	2	124

Compensation

	Age 0 1 2 3 4 5-9 10-14 15-19 20-24 25-29 30-34 35 & Over Avg. Comp. Under 20 <												
Age	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over	Avg. Comp.
Under 20	0	0	0	0	0	0	0	0	0	0	0	0	0
20-24	34,614	37,655	0	0	0	0	0	0	0	0	0	0	36,135
25-29	34,299	37,679	50,398	0	0	0	0	0	0	0	0	0	37,082
30-34	47,712	36,096	47,332	58,558	0	68,753	0	0	0	0	0	0	55,911
35-39	48,378	34,809	38,995	0	0	54,920	61,843	59,418	0	0	0	0	54,225
40-44	30,312	0	0	108,827	0	54,815	71,404	55,029	63,123	0	0	0	66,481
45-49	89,637	0	37,241	0	0	73,367	72,239	76,665	81,425	74,052	0	0	73,833
50-54	34,997	0	0	0	63,013	68,884	61,037	59,578	71,039	60,774	0	68,802	63,072
55-59	45,552	34,949	0	0	0	54,467	80,376	62,551	89,029	59,795	0	0	63,962
60-64	0	67,088	36,307	0	0	58,752	50,641	0	78,163	76,557	53,006	0	61,877
65-69	0	0	0	0	0	95,921	87,068	0	0	0	0	56,106	86,188
70 & Over	0	0	0	0	0	125,258	0	0	0	0	0	0	125,258
Average	44,977	43,092	43,563	75,314	63,013	68,653	68,368	63,024	76,894	66,543	53,006	62,454	62,276



APPENDIX A -- MEMBERSHIP INFORMATION

Age & Service Distribution of Active Members by Count and Average Compensation as of June 30, 2015 Safety Members (County and Former County)

Count

						Years o	f Service						
Age	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over	Total Count
Under 20	0	0	0	0	0	0	0	0	0	0	0	0	0
20-24	24	8	5	0	0	0	0	0	0	0	0	0	37
25-29	39	25	20	10	0	6	0	0	0	0	0	0	100
30-34	18	6	8	12	2	60	16	0	0	0	0	0	122
35-39	7	6	7	1	1	21	57	11	0	0	0	0	111
40-44	2	1	0	1	0	21	29	43	8	0	0	0	105
45-49	1	0	1	0	1	5	18	30	26	4	0	0	86
50-54	2	1	2	0	0	6	9	7	15	8	0	0	50
55-59	0	0	2	0	0	3	7	1	3	3	1	1	21
60-64	0	0	0	0	0	2	1	5	1	0	0	0	9
65-69	0	0	1	0	0	1	0	0	0	0	0	0	2
70 & Over	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Count	93	47	46	24	4	125	137	97	53	15	1	1	643

Compensation

						Years of	Service						
Age	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over	Avg. Comp.
Under 20	0	0	0	0	0	0	0	0	0	0	0	0	0
20-24	49,402	47,964	58,820	0	0	0	0	0	0	0	0	0	50,364
25-29	48,691	50,024	55,309	55,049	0	59,120	0	0	0	0	0	0	51,609
30-34	50,664	49,421	53,520	59,426	60,844	66,028	69,385	0	0	0	0	0	61,830
35-39	57,453	52,489	54,819	64,926	65,353	66,862	70,246	83,254	0	0	0	0	68,063
40-44	56,895	68,908	0	64,327	0	69,067	68,267	75,109	79,863	0	0	0	71,865
45-49	82,938	0	40,883	0	61,273	61,438	73,938	78,943	77,679	70,061	0	0	75,481
50-54	61,981	149,551	73,041	0	0	66,514	72,338	94,448	73,839	95,692	0	0	80,079
55-59	0	0	68,820	0	0	72,092	73,365	94,272	74,843	78,536	86,230	88,524	76,030
60-64	0	0	0	0	0	60,965	61,763	79,369	70,388	0	0	0	72,325
65-69	0	0	77,323	0	0	149,100	0	0	0	0	0	0	113,212
70 & Over	0	0	0	0	0	0	0	0	0	0	0	0	0
Average	50,747	52,430	56,828	58,035	62,078	66,916	70,446	79,031	76,624	85,426	86,230	88,524	66,311



APPENDIX A -- MEMBERSHIP INFORMATION

Age & Service Distribution of Active Members by Count and Average Compensation as of June 30, 2015 General Members (Ceres and Other Districts)

Count

						Years o	f Service						
Age	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over	Total Count
Under 20	0	0	0	0	0	0	0	0	0	0	0	0	0
20-24	2	0	1	0	0	0	0	0	0	0	0	0	3
25-29	2	2	3	1	0	2	0	0	0	0	0	0	10
30-34	1	1	2	0	2	9	3	0	0	0	0	0	18
35-39	0	0	0	0	1	5	2	4	0	0	0	0	12
40-44	1	0	0	1	0	4	6	5	1	0	0	0	18
45-49	1	0	0	0	0	2	2	3	3	1	0	0	12
50-54	1	0	0	0	0	0	0	2	1	0	0	0	4
55-59	0	0	0	0	0	0	0	0	0	1	1	0	2
60-64	0	0	0	0	0	1	0	0	0	0	0	0	1
65-69	0	0	0	0	0	0	0	0	0	0	0	0	0
70 & Over	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Count	8	3	6	2	3	23	13	14	5	2	1	0	80

Compensation

						Years of	f Service						
Age	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over	Avg. Comp.
Under 20	0	0	0	0	0	0	0	0	0	0	0	0	0
20-24	53,559	0	67,399	0	0	0	0	0	0	0	0	0	58,172
25-29	55,545	54,551	63,850	75,882	0	68,473	0	0	0	0	0	0	62,457
30-34	78,325	77,558	73,821	0	67,445	76,186	77,650	0	0	0	0	0	75,391
35-39	0	0	0	0	69,773	79,395	92,460	89,915	0	0	0	0	84,277
40-44	91,294	0	0	67,168	0	83,441	85,790	95,277	103,969	0	0	0	88,184
45-49	77,701	0	0	0	0	86,176	79,348	93,576	105,137	91,503	0	0	91,366
50-54	59,086	0	0	0	0	0	0	101,039	94,111	0	0	0	88,819
55-59	0	0	0	0	0	0	0	0	0	127,870	95,499	0	111,684
60-64	0	0	0	0	0	99,297	0	0	0	0	0	0	99,297
65-69	0	0	0	0	0	0	0	0	0	0	0	0	0
70 & Over	0	0	0	0	0	0	0	0	0	0	0	0	0
Average	65,577	62,220	67,765	71,525	68,221	79,348	83,947	94,203	102,698	109,686	95,499	0	81,614



APPENDIX A -- MEMBERSHIP INFORMATION

Reconciliation of Plan Membership Since Prior Valuation All Members

	Actives	Transfers	Non Vested Terminations due Refunds	Vested Terminations	Ordinary Disabled	Duty Disabled	Retired	Beneficiaries	Total
July 1, 2014	3,992	323	243	639	83	224	2,679	399	8,582
New Entrants	523	0	0	0	0	0	0	0	523
Rehires	26	(2)	(4)	(8)	0	0	0	0	12
Duty Disabilities	(2)	(1)	0	0	0	3	0	0	0
Ordinary Disabilities	(1)	0	0	(2)	3	0	0	0	0
Retirements	(148)	(8)	0	(44)	0	0	200	0	0
Retirements from General with Safety Service	0	0	0	0	0	0	0	0	0
Vested Terminations	(57)	(3)	0	60	0	0	0	0	0
Died, With Beneficiaries' Benefit Payable	(2)	0	0	0	(1)	(3)	(19)	25	0
Died, Without Beneficiary, and Other Terminations	(78)	(2)	74	(1)	(3)	(1)	(36)	0	(47)
Transfers	(26)	201	(10)	(155)	0	0	0	0	10
Beneficiary Deaths	0	0	0	0	0	0	0	(20)	(20)
Domestic Relations Orders	0	0	0	0	0	0	0	5	5
Withdrawals Paid	(83)	(4)	(25)	(11)	0	0	0	0	(123)
Member Reclassifications	0	2	5	(5)	0	3	(3)	1	3
July 1, 2015	4,144	506	283	473	82	226	2,821	410	8,945



APPENDIX A -- MEMBERSHIP INFORMATION

Reconciliation of Plan Membership Since Prior Valuation General Members (County and Former County)

	Actives	Transfers	Non Vested Terminations due Refunds	Vested Terminations	Ordinary Disabled	Duty Disabled	Retired	Beneficiaries	Total
July 1, 2014	3,184	206	202	519	77	101	2,302	313	6,904
New Entrants	409	0	0	0	0	0	0	0	409
Rehires	20	(1)	(3)	(6)	0	0	0	0	10
Duty Disabilities	(1)	0	0	0	0	1	0	0	0
Ordinary Disabilities	0	0	0	(2)	2	0	0	0	0
Retirements	(124)	(7)	0	(38)	0	0	169	0	0
Retirements from General with Safety Service	0	0	0	0	0	0	0	0	0
Vested Terminations	(36)	(2)	0	38	0	0	0	0	0
Died, With Beneficiaries' Benefit Payable	(2)	0	0	0	(1)	(1)	(15)	19	0
Died, Without Beneficiary, and Other Terminations	(61)	(1)	56	(1)	(3)	0	(35)	0	(45)
Transfers	(24)	150	(4)	(116)	0	0	0	0	6
Beneficiary Deaths	0	0	0	0	0	0	0	(15)	(15)
Domestic Relations Orders	0	0	0	0	0	0	0	4	4
Withdrawals Paid	(68)	(4)	(23)	(8)	0	0	0	0	(103)
Member Reclassifications	0	1	6	(6)	0	1	(1)	1	2
July 1, 2015	3,297	342	234	380	75	102	2,420	322	7,172



APPENDIX A -- MEMBERSHIP INFORMATION

Reconciliation of Plan Membership Since Prior Valuation Safety Members (County and Former County)

	Actives	Transfers	Non Vested Terminations due Refunds	Vested Terminations	Ordinary Disabled	Duty Disabled	Retired	Beneficiaries	Total
July 1, 2014	602	88	30	93	6	112	318	84	1,333
New Entrants	93	0	0	0	0	0	0	0	93
Rehires	3	(1)	(1)	(1)	0	0	0	0	0
Duty Disabilities	(1)	(1)	0	0	0	2	0	0	0
Ordinary Disabilities	0	0	0	0	0	0	0	0	0
Retirements	(22)	0	0	(4)	0	0	26	0	0
Retirements from General with Safety Service	0	0	0	0	0	0	0	0	0
Vested Terminations	(14)	(1)	0	15	0	0	0	0	0
Died, With Beneficiaries' Benefit Payable	0	0	0	0	0	(2)	(4)	6	0
Died, Without Beneficiary, and Other Terminations	(8)	(1)	9	0	0	(1)	(1)	0	(2)
Transfers	1	38	(3)	(32)	0	0	0	0	4
Beneficiary Deaths	0	0	0	0	0	0	0	(5)	(5)
Domestic Relations Orders	0	0	0	0	0	0	0	1	1
Withdrawals Paid	(11)	0	(2)	(3)	0	0	0	0	(16)
Member Reclassifications	0	(1)	0	0	0	2	(2)	0	(1)
July 1, 2015	643	121	33	68	6	113	337	86	1,407



APPENDIX A -- MEMBERSHIP INFORMATION

Reconciliation of Plan Membership Since Prior Valuation General Members (Ceres and Other Districts)

	Actives	Transfers	Non Vested Terminations due Refunds	Vested Terminations	Ordinary Disabled	Duty Disabled	Retired	Beneficiaries	Total
July 1, 2014	119	20	8	14	0	6	49	1	217
New Entrants	14	0	0	0	0	0	0	0	14
Rehires	1	0	0	0	0	0	0	0	1
Duty Disabilities	0	0	0	0	0	0	0	0	0
Ordinary Disabilities	0	0	0	0	0	0	0	0	0
Retirements	(1)	0	0	(2)	0	0	3	0	0
Retirements from General with Safety Service	0	0	0	0	0	0	0	0	0
Vested Terminations	(2)	0	0	2	0	0	0	0	0
Died, With Beneficiaries' Benefit Payable	0	0	0	0	0	0	0	0	0
Died, Without Beneficiary, and Other Terminations	(4)	0	4	0	0	0	0	0	0
Transfers	0	4	(2)	(2)	0	0	0	0	0
Beneficiary Deaths	0	0	0	0	0	0	0	0	0
Domestic Relations Orders	0	0	0	0	0	0	0	0	0
Withdrawals Paid	(3)	0	0	0	0	0	0	0	(3)
Member Reclassifications	0	1	(1)	1	0	0	0	0	1
July 1, 2015	124	25	9	13	0	6	52	1	230



APPENDIX A -- MEMBERSHIP INFORMATION

Reconciliation of Plan Membership Since Prior Valuation Safety Members (Ceres and Other Districts)

	Actives	Transfers	Non Vested Terminations due Refunds	Vested Terminations	Ordinary Disabled	Duty Disabled	Retired	Beneficiaries	Total
July 1, 2014	87	9	3	13	0	5	10	1	128
New Entrants	7	0	0	0	0	0	0	0	7
Rehires	2	0	0	(1)	0	0	0	0	1
Duty Disabilities	0	0	0	0	0	0	0	0	0
Ordinary Disabilities	(1)	0	0	0	1	0	0	0	0
Retirements	(1)	(1)	0	0	0	0	2	0	0
Retirements from General with Safety Service	0	0	0	0	0	0	0	0	0
Vested Terminations	(5)	0	0	5	0	0	0	0	0
Died, With Beneficiaries' Benefit Payable	0	0	0	0	0	0	0	0	0
Died, Without Beneficiary, and Other Terminations	(5)	0	5	0	0	0	0	0	0
Transfers	(3)	9	(1)	(5)	0	0	0	0	0
Beneficiary Deaths	0	0	0	0	0	0	0	0	0
Domestic Relations Orders	0	0	0	0	0	0	0	0	0
Withdrawals Paid	(1)	0	0	0	0	0	0	0	(1)
Member Reclassifications	0	1	0	0	0	0	0	0	1
July 1, 2015	80	18	7	12	1	5	12	1	136



APPENDIX B -- STATEMENT OF CURRENT ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the actuarial valuation as of July 1, 2015 are:

Actuarial Methods

1. Actuarial Cost Method

Annual contributions to the Stanislaus County Employees' Retirement Association (the Plan) are computed under the Entry Age Normal Actuarial Cost Method, computed to the final decrement.

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 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 Liability over Plan assets is the Unfunded Actuarial Liability, and the liability for each valuation group is amortized as a level percentage of payroll over a closed period (21 years as of the current valuation).

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

The total Plan cost is the sum of the Normal Cost (computed on an Individual basis), the amortization of the Unfunded Actuarial Liability, and the expected Administrative Expenses.

The increase in Plan cost due to the change in assumptions as a result of the Actuarial Experience Study Report for the period covering July 1, 2012 through June 30, 2015 is phased-in over three years, beginning with the cost calculated in the June 30, 2015 actuarial valuation.

2. Actuarial Value of Plan Assets

The Actuarial Value of Plan assets is a 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.

The detailed calculations of the Actuarial Value of Plan assets are shown in Section II.

3. Changes in Actuarial Methods

The Retirement Board adopted a three-year phase-in of the increase in Plan cost due to the change in assumptions as a result of Actuarial Experience Study Report for the period covering July 1, 2012 through June 30, 2015.



APPENDIX B -- STATEMENT OF CURRENT ACTUARIAL ASSUMPTIONS AND METHODS

Actuarial Assumptions

All actuarial assumptions are based on the Actuarial Experience Study Report for the period covering July 1, 2012 through June 30, 2015 report. The assumptions were adopted at the March 16, 2016 Board meeting.

4. Rate of Return

The annual rate of return on all Plan assets is assumed to be 7.25%, net of investment expenses.

5. Cost of Living

The cost of living as measured by the Consumer Price Index (CPI) will increase at the rate of 3.00% per year.

6. Administrative Expenses

An allowance of \$2,400,000 for Plan administrative expenses has been included in the annual cost calculated.

7. Interest Credited to Employee Accounts

The employee accounts are credited with 0.25% interest annually.

8. Increases in Pay

Base salary increase: 3.25%

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.



APPENDIX B -- STATEMENT OF CURRENT ACTUARIAL ASSUMPTIONS AND METHODS

Longevity & Promotion Increases						
Service	General	Safety				
0	6.00%	7.00%				
1	5.00%	6.00%				
2	4.00%	5.00%				
3	3.00%	4.00%				
4	2.00%	3.00%				
5	1.50%	2.00%				
6	1.00%	1.75%				
7	0.75%	1.50%				
8	0.50%	1.25%				
9	0.50%	1.00%				
10	0.50%	0.75%				
11+	0.50%	0.50%				

9. PEPRA Compensation Limit

The assumption used for increasing the compensation limit that applies to PEPRA members is 3.0%

10. Post Retirement COLA

100% of CPI up to 3% annually with banking, 2.7% annual increases assumed. Increases are assumed to occur on April 1.

11. Social Security Wage Base

General Plan 3 members have their benefits offset by an assumed Social Security Benefit. For projecting the Social Security Benefit, the annual Social Security Wage Base increase is assumed to be 3.25% per year.

12. Internal Revenue Code Section 415 Limit

The Internal Revenue Code Section 415 maximum benefit limitations are not reflected in the valuation for funding purposes. Any limitation is reflected in a member's benefit after retirement.

13. Internal Revenue Code Section 401(a)(17)

The Internal Revenue Code Section 401(a)(17) maximum compensation limitation is not reflected in the valuation for funding purposes. Any limitation is reflected in a member's benefit after retirement.



APPENDIX B -- STATEMENT OF CURRENT ACTUARIAL ASSUMPTIONS AND METHODS

14. Family Composition

Percentage married for all active members who retire, become disabled, or die during active service is shown in the following table.

Percentage Married				
Gender	Percentage			
Males	80%			
Females	50%			

Spouses of male members are assumed to be three years younger than the member and spouses of female members are assumed to be two years older than the member.

15. Accumulated Vacation Time Load

Active members' service retirement and related benefits are loaded by 3.0% for Safety Members and 3.5% for General Members for conversion of vacation time.

16. Rates of Separation

Rates of termination apply to all active Members who terminate their employment.

Separate rates of termination are assumed among Safety and General Members.

Te	Termination Rates						
Years of	General	Safety					
Service	All	All					
0	18.0%	18.0%					
1	14.0%	12.0%					
2	11.7%	9.0%					
3	9.4%	7.0%					
4	7.1%	6.0%					
5	5.0%	5.0%					
10	3.5%	5.0%					
15	2.9%	3.4%					
20	1.5%	0.0%					
25	1.3%	0.0%					
30+	0.0%	0.0%					

Termination rates do not apply once a member is eligible for retirement.



APPENDIX B -- STATEMENT OF CURRENT ACTUARIAL ASSUMPTIONS AND METHODS

17. 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, and are based on service. The rates do not overlap with the service retirement rates.

50% of all General Member terminations with less than 10 years of service are assumed to take a refund of contributions, as well as 20% of those with 10 or more years of service.

35% of all Safety Member terminations with less than 10 years of service are assumed to take a refund of contributions, and 10% of those with 10 or more years are assumed to take a refund.

18. Vested Termination and Reciprocal Transfers

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 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.

Reciprocal members are assumed to receive 4% annual pay increases from the date of transfer to the assumed retirement date.

19. Rates of Service-Connected Disability

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



APPENDIX B -- STATEMENT OF CURRENT ACTUARIAL ASSUMPTIONS AND METHODS

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

20. Rates of Nonservice-Connected Disability

Separate rates of ordinary disability are assumed among Safety and General Members. Rates of ordinary disability for Safety Members are assumed to follow the CalPERS Public Agency Police Non-Industrial Disability table; rates of ordinary disability for General Members are assumed to follow the CalPERS Public Agency Miscellaneous Non-Industrial Disability table. The rates shown are applied after five Years of Service. On the next page are sample rates:



APPENDIX B -- STATEMENT OF CURRENT ACTUARIAL ASSUMPTIONS AND METHODS

Rates	Rates of Non Service-Connected Disability						
	Gen	eral	Safety				
Age	Male	Female	All				
20	0.0170%	0.0100%	0.0100%				
25	0.0170%	0.0100%	0.0100%				
30	0.0190%	0.0240%	0.0200%				
35	0.0490%	0.0810%	0.0300%				
40	0.1220%	0.1550%	0.0400%				
45	0.1910%	0.2180%	0.0500%				
50	0.2130%	0.2290%	0.0800%				
55	0.2210%	0.1790%	0.1300%				
60	0.2220%	0.1350%	0.2000%				
65	0.2100%	0.1180%	0.2000%				
70	0.1800%	0.1140%	0.2000%				
75	0.1420%	0.1180%	0.2000%				
80	0.1420%	0.1180%	0.2000%				
81+	0.0000%	0.0000%	0.0000%				

21. Rates of Mortality for Non-Annuitants

Rates of ordinary death for active Members are specified by the CalPERS Pre-Retirement Non-Industrial Mortality table, adjusted by 100.3% for males and 98.8% for females, with generational mortality improvements projected from 2009 using Scale MP-2015. Duty related mortality rates are only applicable for Safety Active Members, and are based on the CalPERS Pre-Retirement Individual Death table without adjustment or projection.

The following table provides a sample of the base mortality rates including adjustments but prior to any projections for mortality improvements.



APPENDIX B -- STATEMENT OF CURRENT ACTUARIAL ASSUMPTIONS AND METHODS

	Mortality Rates						
	Ordinary Death - 0	General and Safety	Duty Death				
Age	Male	Female	Safety All				
20	0.0330%	0.0209%	0.0030%				
25	0.0426%	0.0241%	0.0070%				
30	0.0522%	0.0262%	0.0100%				
35	0.0607%	0.0368%	0.0120%				
40	0.0798%	0.0525%	0.0130%				
45	0.1129%	0.0745%	0.0140%				
50	0.1651%	0.1049%	0.0150%				
55	0.2428%	0.1508%	0.0160%				
60	0.3556%	0.2198%	0.0170%				
65	0.5107%	0.3233%	0.0180%				
70	0.7110%	0.4616%	0.0190%				

22. Rates of Mortality for Nonservice-Connected Disabled Retirees

Rates of mortality for current nonservice-connected disabled Members are specified by the CalPERS Non-Industrially Disabled Annuitant Mortality table, adjusted by 96.4% for males and 110.4% for females, with generational mortality improvements projected from 2009 using Scale MP-2015.

The following table provides a sample of the base mortality rates including adjustments but prior to any projections for mortality improvements.

Nonservice-Connected Disabled Mortality Rates						
Age	Male	Female				
45	1.250%	0.943%				
50	1.720%	1.358%				
55	2.020%	1.402%				
60	2.539%	1.667%				
65	3.008%	2.259%				
70	3.750%	3.107%				
75	5.204%	4.269%				
80	7.934%	6.642%				
85	12.692%	10.910%				
90	17.804%	17.755%				



APPENDIX B -- STATEMENT OF CURRENT ACTUARIAL ASSUMPTIONS AND METHODS

23. Rates of Mortality for Service-Connected Disabled Retirees

Rates of mortality for current service-connected disabled Members are specified by the CalPERS Industrially Disabled Annuitant Mortality table, adjusted by 100.2% for males and 100.1% for females, with generational mortality improvements projected from 2009 using Scale MP-2015.

The following table provides a sample of the base mortality rates including adjustments but prior to any projections for mortality improvements.

Service-Connected							
Disabled Mortality Rates							
Age	Male	Female					
45	0.339%	0.298%					
50	0.533%	0.496%					
55	0.637%	0.460%					
60	0.869%	0.634%					
65	1.431%	1.068%					
70	2.216%	1.777%					
75	3.842%	2.955%					
80	6.642%	4.983%					
85	10.410%	7.967%					
90	16.218%	12.347%					

24. Rates of Mortality for Emerging Disabled Retirees

Rates of mortality for future disabled retirees, both nonservice- and service-connected, are specified by mortality tables consisting of blends of the mortality assumptions for current nonservice- and service-connected disabled retirees. The blend for future disabled Safety retirees is 5% and 95%, respectively. The blend for future disabled General retirees is 75% and 25%, respectively. The proportions reflect the expected splits in future disabled retirees between nonservice- and service-connected disablement.

25. Rates of Mortality for Healthy Annuitants

Rates of mortality for retired Members and their beneficiaries are specified by the CalPERS Healthy Annuitant table, adjusted by 93.4% for males and 107.9% for females, with generational mortality improvements projected from 2009 using Scale MP-2015.

The following table provides a sample of the base mortality rates including adjustments but prior to any projections for mortality improvements.



APPENDIX B -- STATEMENT OF CURRENT ACTUARIAL ASSUMPTIONS AND METHODS

Healthy A	Healthy Annuitant Mortality Rates					
Age	Male	Female				
45	0.225%	0.229%				
50	0.497%	0.534%				
55	0.594%	0.496%				
60	0.763%	0.576%				
65	0.986%	0.807%				
70	1.649%	1.365%				
75	2.786%	2.366%				
80	4.928%	3.987%				
85	8.807%	7.202%				
90	15.118%	13.310%				

26. Mortality Improvement

As mentioned above, the mortality assumptions employ a fully generational mortality improvement projection from base year 2009 using Scale MP-2015.



APPENDIX B -- STATEMENT OF CURRENT ACTUARIAL ASSUMPTIONS AND METHODS

27. Rates of Retirement

Retirement is assumed to occur among eligible members in accordance with the table below:

	Rates of F	Retirement			Rates of R	Retirement	
	Gen	eral			Saf	ety	
	7	ears of Service	ce		Y	ears of Service	ee
Age	0-9	10-29	30+	Age	0-9	10-19	20+
40-44	0.00%	0.00%	0.00%	40-44	0.00%	0.00%	5.00%
45-49	0.00%	0.00%	10.00%	45-48	0.00%	0.00%	10.00%
50-54	0.00%	5.00%	10.00%	49	0.00%	0.00%	20.00%
55	0.00%	10.00%	25.00%	50	0.00%	10.00%	30.00%
56	0.00%	10.00%	25.00%	51	0.00%	10.00%	20.00%
57	0.00%	10.00%	25.00%	52	0.00%	10.00%	20.00%
58	0.00%	15.00%	25.00%	53	0.00%	10.00%	20.00%
59	0.00%	15.00%	25.00%	54	0.00%	10.00%	20.00%
60	0.00%	15.00%	25.00%	55	0.00%	10.00%	30.00%
61	0.00%	20.00%	25.00%	56	0.00%	10.00%	30.00%
62	0.00%	25.00%	40.00%	57	0.00%	10.00%	30.00%
63	0.00%	20.00%	25.00%	58	0.00%	10.00%	30.00%
64	0.00%	25.00%	25.00%	59	0.00%	10.00%	30.00%
65	0.00%	35.00%	35.00%	60	0.00%	25.00%	100.00%
66	0.00%	45.00%	45.00%	61	0.00%	25.00%	100.00%
67	0.00%	20.00%	25.00%	62	0.00%	25.00%	100.00%
68	0.00%	20.00%	25.00%	63	0.00%	25.00%	100.00%
69	0.00%	20.00%	25.00%	64	0.00%	25.00%	100.00%
70	50.00%	50.00%	100.00%	65	0.00%	100.00%	100.00%
71	50.00%	50.00%	100.00%	66	0.00%	100.00%	100.00%
72	50.00%	50.00%	100.00%	67	0.00%	100.00%	100.00%
73	50.00%	50.00%	100.00%	68	0.00%	100.00%	100.00%
74	50.00%	50.00%	100.00%	69	0.00%	100.00%	100.00%
75+	100.00%	100.00%	100.00%	70+	100.00%	100.00%	100.00%

28. Changes in Actuarial Assumptions

Details of all assumption changes can be found in the Actuarial Experience Study Report for the period covering July 1, 2012 through June 30, 2015. The assumptions were adopted at the March 16, 2016 Board meeting.



APPENDIX C -- SUMMARY OF PLAN PROVISIONS

All actuarial calculations are based on our understanding of the statutes governing the StanCERA as contained in the County Employees Retirement Law (CERL) of 1937, with provisions adopted by the County Board of Supervisors, a district Board of Directors, or the StanCERA Board, effective through June 30, 2015. The benefit and contribution provisions of this law are summarized briefly below, (along with corresponding references to the State Code). This summary does not attempt to cover all the detailed provisions of the law.

A. 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.

For Tier 6 (PEPRA) members, only pensionable compensation up to the Social Security Taxable Wage Base (\$117,020 for 2015) 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 (\$140,424 for 2015). 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 the benefit and contribution computations for PEPRA 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



APPENDIX C -- SUMMARY OF PLAN PROVISIONS

- **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, Tier 3, and Tier 6, 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.

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.

B. 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.



APPENDIX C -- SUMMARY OF PLAN PROVISIONS

Detailed membership eligibility according to Tier and membership date is shown in Table 1 on the following page.

C. Service Retirement

Eligibility:

Tier 3 General Members are eligible to retire at age 55 if they have earned 10 years of Credited Service. Tier 6 (PEPRA) General Members are eligible to retire at age 52 if they have earned five 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 10 years. Alternatively, General non-PEPRA 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 10 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. The 20-year Credited Service retirement eligibility is not applicable to Tier 6 (PEPRA) Safety Members.

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 35 years, the percentage of Final Compensation may not exceed 70% and for those with more than 35 years, it may not exceed 80%. For all other non-PEPRA 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.



APPENDIX C -- SUMMARY OF PLAN PROVISIONS

Table 1: Member Group Descriptions

	Open					Top	
	or		Max	Code		Retirement	
Group	Closed	FAP	Cola	Section	Description	Factor Age	Benefit Factor
General Tier I	Closed	1	3	31676.12	2% at 57	62	2.00%
General Tier II	Open	3	3	31676.1	2% at 62	65	1.67%
General Tier III	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 IV	Closed	1	3	31676.14	2% at 55	65	1.67%
General Tier V	Closed	1	3	31676.14	2% at 55	65	1.67%
General Tier VI	Open	3	3	7522.2	PEPRA	67	1.00%
Safety Tier II	Open	3	3	31664	2% at 50	50	2.00%
Safety Tier IV	Closed	1	3	31664.1	3% at 50	50	3.00%
Safety Tier V	Closed	1	3	31664.1	3% at 50	50	3.00%
Safety Tier VI	Open	3	3	7522.25 (2)	PEPRA	57	1.00%

	_		_
Tabl	e 2:	Age	Factors

Table 2: Age Factors Safety Safety Safety General General General General										
	2% at Age 50	3% at Age 50	PEPRA	2% at Age 62	2% at Age 57	2% at Age 55	2% at Age 65	PEPRA		
Age	CERL §: 31664				CERL §: 31676.12					
41	0.6258	0.6258	N/A	N/A	N/A	N/A	N/A	N/A		
42	0.6625	0.6625	N/A	N/A	N/A	N/A	N/A	N/A		
43	0.7004	0.7004	N/A	N/A	N/A	N/A	N/A	N/A		
44	0.7397	0.7397	N/A	N/A	N/A	N/A	N/A	N/A		
45	0.7805	0.7805	N/A	N/A	N/A	N/A	N/A	N/A		
46	0.8226	0.8226	N/A	N/A	N/A	N/A	N/A	N/A		
47	0.8678	0.8678	N/A	N/A	N/A	N/A	N/A	N/A		
48	0.9085	0.9085	N/A	N/A	N/A	N/A	N/A	N/A		
49	0.9522	0.9522	N/A	N/A	N/A	N/A	N/A	N/A		
50	1.0516	1.0000	2.0000	0.7091	0.6681	0.8850	N/A	N/A		
51	1.1078	1.0000	2.1000	0.7457	0.7056	0.9399	N/A	N/A		
52	1.1692	1.0000	2.2000	0.7816	0.7454	1.0000	N/A	1.0000		
53	1.2366	1.0000	2.3000	0.8181	0.7882	1.0447	N/A	1.1000		
54	1.3099	1.0000	2.4000	0.8556	0.8346	1.1048	N/A	1.2000		
55	1.3099	1.0000	2.5000	0.8954	0.8850	1.1686	0.3900	1.3000		
56	1.3099	1.0000	2.6000	0.9382	0.9399	1.2365	0.4300	1.4000		
57	1.3099	1.0000	2.7000	0.9846	1.0000	1.3093	0.4700	1.5000		
58	1.3099	1.0000	2.7000	1.0350	1.0447	1.3608	0.5100	1.6000		
59	1.3099	1.0000	2.7000	1.0899	1.1048	1.4123	0.5600	1.7000		
60	1.3099	1.0000	2.7000	1.1500	1.1686	1.4638	0.6100	1.8000		
61	1.3099	1.0000	2.7000	1.1947	1.2365	1.5153	0.6700	1.9000		
62	1.3099	1.0000	2.7000	1.2548	1.3093	1.5668	0.7400	2.0000		
63	1.3099	1.0000	2.7000	1.3186	1.3093	1.5668	0.8200	2.1000		
64	1.3099	1.0000	2.7000	1.3865	1.3093	1.5668	0.9000	2.2000		
65	1.3099	1.0000	2.7000	1.4593	1.3093	1.5668	1.0000	2.3000		
66	1.3099	1.0000	2.7000	1.4593	1.3093	1.5668	1.0000	2.4000		
67	1.3099	1.0000	2.7000	1.4593	1.3093	1.5668	1.0000	2.5000		

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



APPENDIX C -- SUMMARY OF PLAN PROVISIONS

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.

D. 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.

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.

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.



APPENDIX C -- SUMMARY OF PLAN PROVISIONS

E. 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.

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 onethird 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, 5, and 6 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 onethird 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 onethird 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.

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



APPENDIX C -- SUMMARY OF PLAN PROVISIONS

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.

F. 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.

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.

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.



APPENDIX C -- SUMMARY OF PLAN PROVISIONS

G. Withdrawal Benefits

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.

H. 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 10 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.

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.

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.



APPENDIX C -- SUMMARY OF PLAN PROVISIONS

I. 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 10 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.

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.

> 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.

J. 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



APPENDIX C -- SUMMARY OF PLAN PROVISIONS

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.

K. Member Contributions

Other than Tiers 3 and 6, all 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.

Tier 6 (PEPRA) Members must contribute half of the Normal Cost of the Plan. Contributions for these members will be based on the Normal Cost associated with their benefits; General and Safety members will pay different rates. Members will continue to contribute after earnings 30 years of 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 0.25%.

The employee contribution rates are shown in the Appendix E.

L. Changes in Plan Provisions

No change



APPENDIX D -- GLOSSARY

1. Actuarial Assumptions

Assumptions as to the occurrence of future events affecting pension costs such as mortality, withdrawal, disability, retirement, changes in compensation and rates of investment return.

2. Actuarial Cost Method

A procedure for determining the Actuarial Present Value of pension plan benefits and expenses and for developing an allocation of such value to each year of service, usually in the form of a Normal Cost and an Actuarial Liability.

3. Actuarial Gain (Loss)

The difference between actual experience and that expected based upon a set of Actuarial Assumptions during the period between two Actuarial Valuation dates, as determined in accordance with a particular Actuarial Cost Method.

4. Actuarial Liability

The portion of the Actuarial Present Value of Projected Benefits that will not be paid by future Normal Costs. It represents the value of the past Normal Costs with interest to the valuation date.

5. Actuarial Present Value (Present Value)

The value as of a given date of a future amount or series of payments. The Actuarial Present Value discounts the payments to the given date at the assumed investment return and includes the probability of the payment being made.

6. Actuarial Valuation

The determination, as of a specified date, of the Normal Cost, Actuarial Liability, Actuarial Value of Assets, and related Actuarial Present Values for a pension plan.

7. Actuarial Value of Assets

The value of cash, investments, and other property belonging to a pension plan as used by the actuary for the purpose of an Actuarial Valuation. The purpose of an Actuarial Value of Assets is to smooth out fluctuations in market values.



APPENDIX D -- GLOSSARY

8. Actuarially Equivalent

Of equal Actuarial Present Value, determined as of a given date, with each value based on the same set of actuarial assumptions.

9. Amortization Payment

The portion of the pension plan contribution, which is designed to pay interest and principal on the Unfunded Actuarial Liability in order to pay for that liability in a given number of years.

10. Entry Age Normal Actuarial Cost Method

A method under which the Actuarial Present Value of the Projected Benefits of each individual included in an Actuarial Valuation is allocated on a level basis over the earnings of the individual between entry age and assumed exit ages.

11. Funded Ratio

The ratio of the Actuarial Value of Assets to the Actuarial Liability.

12. Normal Cost

That portion of the Actuarial Present Value of pension plan benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method.

13. Projected Benefits

Those pension plan benefit amounts which are expected to be paid in the future under a particular set of Actuarial Assumptions, taking into account such items as increases in future compensation and service credits.

14. Unfunded Actuarial Liability

The excess of the Actuarial Liability over the Actuarial Value of Assets. The Unfunded Actuarial Liability is not appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling StanCERA's benefit obligation in the event of a plan termination or other similar action. However, it is an appropriate measure for assessing the need for or the amount of future contributions.



APPENDIX E -- MEMBER CONTRIBUTION RATES

Employee contribution rates vary by member Group and Tier. 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).

The rates were changed following the experience study covering the period June 30, 2012 through June 30, 2015. The current employee contribution rates are shown in the following tables.

Current rates were determined based on an interest rate of 7.25% per annum, an average salary increase of 3.25% per year, and the CalPERS mortality tables with adjustment as specified in the Appendix B and projected using Scale MP-2015 from 2009 to 2037 for General members and to 2039 for Safety members. The projection periods are based upon the duration of liabilities for the respective groups as of June 30, 2015. The rates are blended using a male/female weighting of 25% male / 75% female for General members, and 80% male / 20% female for Safety members. Basic and COLA rates were determined based on an assumption that members would cease making contributions after 30 years of service.

Employee contribution rates for Tier 6 (PEPRA) members are determined based on half the Normal Cost for the PEPRA members (computed separately for General and Safety members, and for County and Ceres / Other District members). Due to the passage of SB13, contribution rates for PEPRA members are not rounded, and are recomputed each year.



	General Tier 1				
Entry	Basic	Basic	COL	COL	
Age	First \$350	Over \$350	First \$350	Over \$350	
16	2.26%	3.40%	1.12%	1.68%	
17	2.26%	3.40%	1.12%	1.68%	
18	2.26%	3.40%	1.12%	1.68%	
19	2.26%	3.40%	1.12%	1.68%	
20	2.26%	3.40%	1.12%	1.68%	
21	2.28%	3.42%	1.15%	1.73%	
22	2.30%	3.45%	1.18%	1.77%	
23	2.31%	3.47%	1.21%	1.81%	
24	2.33%	3.49%	1.23%	1.85%	
25	2.34%	3.51%	1.27%	1.90%	
26	2.35%	3.52%	1.29%	1.94%	
27	2.35%	3.53%	1.33%	1.99%	
28	2.36%	3.54%	1.36%	2.04%	
29	2.36%	3.54%	1.39%	2.08%	
30	2.36%	3.54%	1.42%	2.13%	
31	2.41%	3.61%	1.45%	2.18%	
32	2.46%	3.69%	1.49%	2.23%	
33	2.51%	3.76%	1.52%	2.28%	
34	2.56%	3.83%	1.56%	2.34%	
35	2.61%	3.91%	1.60%	2.40%	
36	2.66%	3.99%	1.65%	2.47%	
37	2.71%	4.06%	1.69%	2.54%	
38	2.76%	4.14%	1.74%	2.61%	
39	2.82%	4.22%	1.79%	2.68%	
40	2.87%	4.31%	1.83%	2.75%	
41	2.93%	4.39%	1.87%	2.80%	
42	2.99%	4.48%	1.90%	2.85%	
43	3.05%	4.57%	1.93%	2.90%	
44	3.11%	4.66%	1.97%	2.95%	
45	3.17%	4.75%	1.99%	2.99%	
46	3.23%	4.85%	2.03%	3.04%	
47	3.30%	4.95%	2.05%	3.08%	
48	3.37%	5.05%	2.08%	3.12%	
49	3.44%	5.16%	2.09%	3.14%	
50	3.52%	5.28%	2.11%	3.16%	
51	3.60%	5.40%	2.11%	3.17%	
52	3.68%	5.52%	2.09%	3.13%	
53	3.75%	5.63%	2.05%	3.07%	
54	3.82%	5.73%	2.01%	3.02%	
55	3.88%	5.82%	1.97%	2.96%	
56	3.92%	5.88%	1.91%	2.86%	
57	3.93%	5.89%	1.78%	2.67%	
58	3.78%	5.67%	1.75%	2.62%	
59+	3.74%	5.61%	1.71%	2.57%	



		General Tier 2		
Entry	Basic	Basic	COL	COL
Age	First \$350	Over \$350	First \$350	Over \$350
16	3.56%	5.33%	0.91%	1.36%
17	3.56%	5.33%	0.91%	1.36%
18	3.56%	5.33%	0.91%	1.36%
19	3.56%	5.33%	0.91%	1.36%
20	3.56%	5.33%	0.91%	1.36%
21	3.58%	5.38%	0.93%	1.39%
22	3.61%	5.41%	0.95%	1.42%
23	3.63%	5.45%	0.97%	1.45%
24	3.65%	5.48%	0.99%	1.48%
25	3.67%	5.51%	1.01%	1.51%
26	3.69%	5.53%	1.03%	1.55%
27	3.70%	5.55%	1.06%	1.59%
28	3.71%	5.56%	1.09%	1.63%
29	3.71%	5.56%	1.11%	1.66%
30	3.71%	5.57%	1.13%	1.70%
31	3.78%	5.68%	1.16%	1.74%
32	3.86%	5.79%	1.19%	1.79%
33	3.94%	5.90%	1.23%	1.84%
34	4.01%	6.02%	1.25%	1.88%
35	4.09%	6.14%	1.29%	1.93%
36	4.17%	6.26%	1.33%	1.99%
37	4.25%	6.38%	1.36%	2.04%
38	4.34%	6.51%	1.40%	2.10%
39	4.42%	6.64%	1.43%	2.15%
40	4.51%	6.77%	1.47%	2.21%
41	4.60%	6.90%	1.50%	2.25%
42	4.69%	7.04%	1.53%	2.29%
43	4.78%	7.17%	1.55%	2.33%
44	4.88%	7.32%	1.57%	2.36%
45	4.98%	7.46%	1.60%	2.40%
46	5.08%	7.62%	1.62%	2.43%
47	5.18%	7.77%	1.65%	2.47%
48	5.29%	7.94%	1.67%	2.51%
49	5.40%	8.11%	1.69%	2.54%
50	5.52%	8.28%	1.71%	2.57%
51	5.63%	8.45%	1.73%	2.59%
52	5.74%	8.61%	1.73%	2.60%
53	5.83%	8.75%	1.73%	2.60%
54	5.90%	8.85%	1.73%	2.59%
55	5.94%	8.91%	1.70%	2.55%
56	5.94%	8.90%	1.64%	2.46%
57	5.90%	8.85%	1.54%	2.31%
58	6.03%	9.04%	1.51%	2.26%
59+	6.24%	9.36%	1.48%	2.22%



		General Tier 4		
Entry	Basic	Basic	COL	COL
Age	First \$350	Over \$350	First \$350	Over \$350
16	2.05%	3.07%	1.21%	1.81%
17	2.05%	3.07%	1.21%	1.81%
18	2.05%	3.07%	1.21%	1.81%
19	2.05%	3.07%	1.21%	1.81%
20	2.05%	3.07%	1.21%	1.81%
21	2.05%	3.08%	1.24%	1.86%
22	2.06%	3.09%	1.27%	1.90%
23	2.06%	3.10%	1.30%	1.95%
24	2.07%	3.10%	1.33%	1.99%
25	2.07%	3.10%	1.35%	2.03%
26	2.11%	3.16%	1.39%	2.08%
27	2.15%	3.23%	1.41%	2.12%
28	2.19%	3.29%	1.44%	2.16%
29	2.24%	3.35%	1.47%	2.20%
30	2.28%	3.42%	1.50%	2.25%
31	2.33%	3.49%	1.53%	2.30%
32	2.37%	3.56%	1.57%	2.35%
33	2.42%	3.63%	1.61%	2.41%
34	2.47%	3.70%	1.65%	2.47%
35	2.51%	3.77%	1.69%	2.53%
36	2.56%	3.84%	1.73%	2.60%
37	2.61%	3.92%	1.78%	2.67%
38	2.67%	4.00%	1.83%	2.74%
39	2.72%	4.08%	1.87%	2.81%
40	2.77%	4.16%	1.93%	2.89%
41	2.83%	4.24%	1.96%	2.94%
42	2.89%	4.33%	1.99%	2.98%
43	2.95%	4.42%	2.02%	3.03%
44	3.01%	4.52%	2.05%	3.07%
45	3.08%	4.62%	2.07%	3.11%
46	3.15%	4.72%	2.10%	3.15%
47	3.22%	4.83%	2.11%	3.17%
48	3.29%	4.93%	2.13%	3.20%
49	3.35%	5.02%	2.14%	3.21%
50	3.40%	5.10%	2.14%	3.21%
51	3.43%	5.14%	2.13%	3.20%
52	3.44%	5.16%	2.11%	3.16%
53	3.31%	4.96%	2.06%	3.09%
54+	3.28%	4.91%	2.03%	3.05%



	General Tier 5					
Entry	Basic	Basic	COL	COL		
Age	First \$350	Over \$350	First \$350	Over \$350		
16	4.09%	6.14%	1.21%	1.81%		
17	4.09%	6.14%	1.21%	1.81%		
18	4.09%	6.14%	1.21%	1.81%		
19	4.09%	6.14%	1.21%	1.81%		
20	4.09%	6.14%	1.21%	1.81%		
21	4.11%	6.16%	1.24%	1.86%		
22	4.12%	6.18%	1.27%	1.90%		
23	4.13%	6.19%	1.30%	1.95%		
24	4.13%	6.20%	1.33%	1.99%		
25	4.14%	6.20%	1.35%	2.03%		
26	4.22%	6.33%	1.39%	2.08%		
27	4.30%	6.45%	1.41%	2.12%		
28	4.39%	6.58%	1.44%	2.16%		
29	4.47%	6.71%	1.47%	2.20%		
30	4.56%	6.84%	1.50%	2.25%		
31	4.65%	6.98%	1.53%	2.30%		
32	4.74%	7.11%	1.57%	2.35%		
33	4.84%	7.25%	1.61%	2.41%		
34	4.93%	7.40%	1.65%	2.47%		
35	5.03%	7.54%	1.69%	2.53%		
36	5.13%	7.69%	1.73%	2.60%		
37	5.23%	7.84%	1.78%	2.67%		
38	5.33%	8.00%	1.83%	2.74%		
39	5.44%	8.16%	1.87%	2.81%		
40	5.55%	8.32%	1.93%	2.89%		
41	5.66%	8.49%	1.96%	2.94%		
42	5.78%	8.66%	1.99%	2.98%		
43	5.90%	8.84%	2.02%	3.03%		
44	6.02%	9.03%	2.05%	3.07%		
45	6.16%	9.23%	2.07%	3.11%		
46	6.30%	9.45%	2.10%	3.15%		
47	6.44%	9.65%	2.11%	3.17%		
48	6.57%	9.86%	2.13%	3.20%		
49	6.69%	10.04%	2.14%	3.21%		
50	6.80%	10.19%	2.14%	3.21%		
51	6.86%	10.29%	2.13%	3.20%		
52	6.88%	10.31%	2.11%	3.16%		
53	6.62%	9.93%	2.06%	3.09%		
54+	6.55%	9.83%	2.03%	3.05%		



		Safety Tier 2		
Entry	Basic	Basic	COL	COL
Age	First \$350	Over \$350	First \$350	Over \$350
20	4.90%	7.35%	1.83%	2.75%
21	5.00%	7.50%	1.91%	2.87%
22	5.10%	7.65%	1.97%	2.96%
23	5.21%	7.81%	2.04%	3.06%
24	5.31%	7.97%	2.10%	3.15%
25	5.42%	8.13%	2.17%	3.25%
26	5.53%	8.29%	2.23%	3.35%
27	5.64%	8.46%	2.30%	3.45%
28	5.75%	8.63%	2.37%	3.55%
29	5.87%	8.81%	2.44%	3.66%
30	5.99%	8.99%	2.52%	3.78%
31	6.12%	9.18%	2.60%	3.90%
32	6.24%	9.37%	2.68%	4.02%
33	6.38%	9.56%	2.77%	4.15%
34	6.51%	9.77%	2.84%	4.26%
35	6.65%	9.98%	2.92%	4.38%
36	6.80%	10.20%	2.99%	4.48%
37	6.95%	10.42%	3.05%	4.58%
38	7.10%	10.64%	3.13%	4.69%
39	7.23%	10.85%	3.21%	4.81%
40	7.36%	11.05%	3.30%	4.95%
41	7.49%	11.23%	3.34%	5.01%
42	7.61%	11.41%	3.37%	5.06%
43	7.70%	11.55%	3.41%	5.11%
44	7.76%	11.64%	3.43%	5.14%
45	7.77%	11.66%	3.43%	5.15%
46	7.74%	11.60%	3.46%	5.19%
47	7.65%	11.48%	3.48%	5.22%
48	7.83%	11.75%	3.50%	5.25%
49+	8.10%	12.15%	3.52%	5.28%



		Safety Tier 4		
Entry	Basic	Basic	COL	COL
Age	First \$350	Over \$350	First \$350	Over \$350
20	2.59%	3.89%	2.49%	3.74%
21	2.64%	3.97%	2.60%	3.90%
22	2.70%	4.05%	2.68%	4.02%
23	2.75%	4.13%	2.75%	4.13%
24	2.81%	4.21%	2.83%	4.24%
25	2.87%	4.30%	2.90%	4.35%
26	2.92%	4.39%	2.97%	4.46%
27	2.98%	4.47%	3.05%	4.57%
28	3.04%	4.57%	3.12%	4.68%
29	3.11%	4.66%	3.19%	4.79%
30	3.17%	4.75%	3.23%	4.85%
31	3.24%	4.85%	3.28%	4.92%
32	3.30%	4.95%	3.35%	5.03%
33	3.37%	5.06%	3.43%	5.14%
34	3.44%	5.17%	3.51%	5.26%
35	3.52%	5.28%	3.59%	5.39%
36	3.60%	5.39%	3.66%	5.49%
37	3.68%	5.52%	3.74%	5.61%
38	3.76%	5.65%	3.83%	5.74%
39	3.85%	5.77%	3.92%	5.88%
40	3.93%	5.89%	4.03%	6.04%
41	4.00%	6.00%	4.02%	6.03%
42	4.07%	6.11%	4.01%	6.02%
43	4.15%	6.22%	4.02%	6.03%
44	4.22%	6.33%	4.02%	6.03%
45	4.26%	6.39%	4.02%	6.03%
46	4.28%	6.42%	4.05%	6.07%
47	4.27%	6.41%	4.07%	6.10%
48	4.11%	6.17%	4.09%	6.13%
49+	4.05%	6.08%	4.11%	6.16%



	Safety Tier 5					
Entry	Basic	Basic	COL	COL		
Age	First \$350	Over \$350	First \$350	Over \$350		
20	5.18%	7.78%	2.49%	3.74%		
21	5.29%	7.93%	2.60%	3.90%		
22	5.40%	8.10%	2.68%	4.02%		
23	5.51%	8.26%	2.75%	4.13%		
24	5.62%	8.43%	2.83%	4.24%		
25	5.73%	8.60%	2.90%	4.35%		
26	5.85%	8.77%	2.97%	4.46%		
27	5.97%	8.95%	3.05%	4.57%		
28	6.09%	9.13%	3.12%	4.68%		
29	6.21%	9.32%	3.19%	4.79%		
30	6.34%	9.51%	3.23%	4.85%		
31	6.47%	9.71%	3.28%	4.92%		
32	6.60%	9.91%	3.35%	5.03%		
33	6.74%	10.12%	3.43%	5.14%		
34	6.89%	10.33%	3.51%	5.26%		
35	7.04%	10.56%	3.59%	5.39%		
36	7.19%	10.79%	3.66%	5.49%		
37	7.36%	11.03%	3.74%	5.61%		
38	7.53%	11.29%	3.83%	5.74%		
39	7.69%	11.54%	3.92%	5.88%		
40	7.85%	11.78%	4.03%	6.04%		
41	8.00%	12.00%	4.02%	6.03%		
42	8.15%	12.22%	4.01%	6.02%		
43	8.29%	12.44%	4.02%	6.03%		
44	8.43%	12.65%	4.02%	6.03%		
45	8.52%	12.78%	4.02%	6.03%		
46	8.56%	12.84%	4.05%	6.07%		
47	8.54%	12.81%	4.07%	6.10%		
48	8.22%	12.33%	4.09%	6.13%		
49+	8.10%	12.15%	4.11%	6.16%		



PEPRA Rates					
	General		Safety		
	County and Ceres and		County and	Ceres and	
	Former County	Other Districts	Former County	Other Districts	
	8.06%	8.55%	13.07%	14.29%	
Assumptions:					
Interest:	7.25%				
Salary:	2015 Valuation Scale	(Service based, include	les wage inflation at 3.	25%)	
Mortality:	Because the PEPRA contributions rates are based on 50% of the actual Normal Cost, the mortality rates are the same as those used in the Actuarial Valuation (CalPERS mortality tables with adjustments based on StanCERA experience projected generationally from 2009 using Scale MP-2015)				



