Stanislaus County Employees' Retirement Association

Actuarial Review and Analysis as of June 30, 2012

Final Report - February 8, 2013 With Auditor Correction T2 Safety Employee COL Rates Corrected & Amended 8/8/13

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Analysis of Results

Executive Summary

This Report presents the results of an actuarial review and analysis of the Stanislaus County Employees' Retirement Association (StanCERA, the Plan) as of June 30, 2012. Employer contribution rates for the Fiscal Year beginning July 1, 2013 have been determined based on demographic and asset information as of June 30, 2012.

The employer contribution rates shown in this Report are as follows:

Valuation Date	Employer Contribution Rate as % of Pay for Next Fiscal Year	Estimated Employer Cost Based on Estimated 2012-13 Payroll of Current Members
June 30, 2011	FY 2012-13	
Final Results	17.83%	\$39,510,911
June 30, 2012	FY 2013-14	
Final Results	20.73%	\$44,571,163

A summary of the current status of the StanCERA Plan as a whole is as follows:

	June 30, 2011	June 30, 2012	
Plan Membership			
Active	3,869	3,894	
Inactive	868	902	
Receiving Benefits	3,015	3,142	
Total	7,752	7,938	
Average Pay	\$58,596	\$56,733	
Assets (\$ millions)			
Market Value	\$1,418.7	\$1,386.2	
Actuarial Value of Assets	\$1,418.7	\$1,474.6	
Valuation Assets	\$1,372.0	\$1,451.8	
Valuation Results (\$ millions)			
Actuarial Accrued Liability (AAL)	\$1,757.7	\$1,888.7	
Unfunded AAL (AAL – Valuation Assets)	\$ 385.7	\$ 436.9	
Funded Ratio (Valuation Assets)	78.1%	76.9%	
Funded Ratio (Market Value of Assets, excluding Special Reserves)	78.1%	72.2%	



More detailed information on the contributions by Class and Tier, as well as a description of the reasons for the changes in cost, is shown in both this section and in the detailed cost calculations shown later in the Report.

The main points discussed in this Report are as follows:

- The net impact of the demographic changes during the past year was a moderate increase in the contribution rate.
- Transfers from non-valuation to valuation assets offset recognized investment losses and resulted in a small decrease in the cost of the Plan.
- The Board approved the implementation of a number of assumption changes as part of the Experience Study covering the period from July 1, 2009 through June 30, 2012. The changes in demographic assumptions had little impact on Plan costs, while the changes in economic assumptions increased Plan cost by a modest amount.



Purpose of the Report

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

The purposes of this Report are:

- To review the experience of the Plan over the past year and discuss reasons for changes in Plan cost;
- To compute the annual contribution rate as a percentage of payroll required during the 2013-14 fiscal year to fund the Plan in accordance with actuarial principles;
- To discuss other issues associated with the determination of Plan and Tier costs; and
- To present those items required for disclosure under Statement No. 25 of the Governmental Accounting Standards Board (GASB).

Organization of the Report

This Report is organized in five sections:

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



Actuarial Valuation as of June 30, 2012

The employer contribution rate increased from 17.83% of payroll as of June 30, 2011 to 20.73% one year later, due primarily to changes in economic assumptions. The narrative and table below summarize the impact of actuarial experience and other changes on Plan cost.

	Next Fiscal Year Contribution Rate (% Payroll)	Estimated Employer Cost Based on Current Payroll (\$ in Millions)
June 30, 2011	17.83%	\$39.5
Demographic Experience	(0.27%)	(1.7)
New Entrants to the Plan	0.32%	1.4
Amortization Payroll	0.38%	0.0
Investment Experience and Reserve Transfer	(0.17%)	(0.4)
Demographic Assumption Changes	(0.15%)	(0.3)
Economic Assumption Changes	2.79%	6.1
Employer Cost as of June 30, 2012	20.73%	\$44.6

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

Demographic experience caused a decrease in the contribution rate.

Demographic experience includes rates of retirement, disability, termination, and death – as well as other factors, such as pay increases, transfers, and cost of living increases. The demographic experience of the Plan was more positive than was assumed in the actuarial assumptions used in the prior actuarial valuation, producing actuarial gains and a decrease in the employer contribution rate of 0.27% of pay.

• New members entered the Plan.

Although the total number of active members in the Plan increased by 25 members from June 30, 2011 to June 30, 2012, there were approximately 330 new hires (or rehires) entering the Plan to replace departing members.

These new hires were not included the prior valuation cost calculations. They increased the employer contribution rate by 0.32% of payroll, and increased the cost of the plan by \$1.4 million in dollar terms due to the added payroll.

Changes in the valuation assets produced an actuarial gain.

The return on the *market* value of assets was 0.1% (net of expenses) over the fiscal year 2011-2012. The return on the *actuarial* value of assets was 6.4%, while the return on the *valuation* assets



(excluding the non-valuation reserves) was 6.5%.

The higher return on the actuarial value of assets compared to market (6.4% versus 0.1%) is a result of the actuarial smoothing policy selected by the Board, in which only 20% of the gains or losses occurring in a given year are recognized in that year — with the remaining portion recognized over the next four years at 20% per year.

Valuation assets are lower than the actuarial value because special non-valuation reserves are excluded. However, the Board transferred a portion of the non-valuation assets into the valuation assets during FY 2012, which more than offset the impact of the recognized investment losses during the year. This produced an actuarial gain that reduced Plan costs by 0.17% of active member payroll, or about \$0.4 million.

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

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

In the prior valuation, we included an assumption that there would be no overall payroll growth for the current year in the calculation of the amortization payment. This offset the impact described above – where the cost as a percentage of pay will increase if payroll does not grow. However, if – as was the case this year – the payroll base actually *decreased* then the amortization payment will still be larger as a percentage of pay, though the dollar amount is the same. This increased the employer contribution rate by 0.38% of pay.

The above sources of actuarial gains and losses combined to increase Plan cost by 0.26% of payroll from 2011 to 2012, as noted in the table above.

In addition to the gains and losses described above, there were several other changes that affected Plan cost:

Changes were made to demographic and economic assumptions.

The Board approved the implementation of a number of assumption changes as part of the Experience Study covering the period from July 1, 2009 through June 30, 2012. These changes include modifications to the demographic rates of retirement, disability, termination withdrawal, and terminal pay for Safety members, reductions in the economic assumptions (assumed rates of inflation, payroll growth and nominal investment return), and an explicit administrative expense

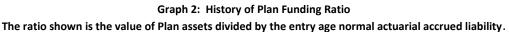


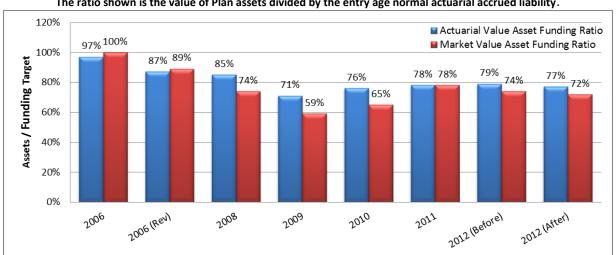
assumption. An additional change was made to the demographic assumptions used in calculating the employee contribution rates, and is described in Appendix II. The changes in demographic assumptions, excluding the changes affecting the employee contribution rates, increased the cost by 0.03% of Member payroll, and the changes to the employee contribution rates reduced cost by 0.18%, for a net reduction in cost of 0.15%. The changes in economic assumptions increased Plan cost by 2.79% of Member payroll.

Graphs 1 and 2 below show the history of Plan costs and funding status since 2006. The last two columns in Graph 1 show the employer contribution rate both before and after the recommended assumption changes.



Graph 1: History of the Employer Contribution Rate as a Percentage of Member Payroll







The ratios shown in Graph 2 are based on the actuarial value of Plan assets divided by the actuarial accrued liability (blue bars), as well as the market value of assets divided by the same liability (red bars). As in Graph 1, we have shown the funded ratios for the current valuation both before and after the recommended assumption changes.

Future Cost Trends and Other Issues

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

- There are still investment losses that have been deferred by the actuarial smoothing method and have not been recognized in the valuation assets. The ratio of the actuarial value of Plan assets to the market value is current 106%; this means that 6% of the Plan assets used to compute employer contributions actually represents investment losses that have yet to be recognized. If the cost of the plan were determined using the market value of valuation assets (rather than the actuarial value), the cost of the Plan would increase by about 2.8% of pay to 23.5% or pay, or \$51 million.
- The Government Account Standards Board (GASB) has issued revised accounting standards
 governing the financial statements of public pension plans and the employers. Some of the major
 changes include putting the unfunded liability on the employer's balance sheet, shortening
 amortization periods, and changes to the allowable actuarial cost methods.
 - Note these changes would not necessarily affect Plan funding, as they are accounting standards only. However, in order to maintain consistency between accounting and funding calculations, it may be advisable to incorporate some of these changes such as a change to the Entry Age Normal funding methodology that was recommended as part of the experience study prior to the applicability date of the new standards. As described in the Experience Study report, these changes may result in a higher level of initial contributions, but a lower level in future years.
- Subsequent to the valuation date, the California Public Employees' Pension Reform Act of 2013
 (AB340) was passed by the Legislature. This legislation makes significant changes for public pension
 plans in California, including new benefit formulas and compensation limits for new hires, changes
 to the pay to be included in the calculation of benefits, and changes to cost sharing provisions.
 - This report does not reflect any of the new provisions provided under AB340. In general, it is expected that the impact of AB340 will be to reduce benefits for new hires and increase contribution rates for the employees (and thus reduce employer contributions), but the Plan will not be significantly affected by the new provisions until a substantial number of new members have been hired.
- One of the most important measures of a plan's risk is the ratio of plan assets to payroll. The table below shows StanCERA assets as a percentage of active member payroll. This ratio indicates the sensitivity of the Plan to the returns earned on Plan assets. We note in the table that Plan assets currently are over six times covered payroll for the Plan; as funding improves and the Plan reaches



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

	June 30, 2012
Active Member Payroll	215,057,468
Assets (Market Value Net of Non-Valuation Reserves)	1,363,840,293
Ratio of Assets to Payroll	6.34
Ratio with 100% Funding	8.78

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 were assumed to earn 8.0%, there is an actuarial loss of 18.0% of plan assets. Based on the current ratio of asset to payroll (634%), that means the loss in assets is about 114% of active payroll (634% of the 18.0% loss). There is only one place for the loss to come from: The employers. Consequently, barring future offsetting investment gains, the employer has to make up the asset loss in future contributions. This shortfall will require an amortization payment in the vicinity of 7.8% of member pay for the multiple years of the amortization period.

As the funding of the Plan improves, the impact of investment gains or losses will increase. A 10% loss, representing 114% of payroll now, will be about 158% of payroll when the Plan is fully funded (878% of the 18.0% loss). At that time, this shortfall will require an amortization payment of about 10.8% of member pay.

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

Actuarial Certification

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

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

Actuarial funding is based on the Entry Age Normal Cost Method. Under this method, the employer contribution rate provides for current cost (normal cost) plus a level percentage of payroll to amortize



the unfunded actuarial accrued liability (UAAL). As of the valuation date, the amortization period is 24 years.

The funding objective of the Plan is to accumulate sufficient assets over each Member's working life to provide for Plan benefits after termination of employment or retirement. For actuarial valuation purposes, Plan assets are valued at Actuarial Value. Under this method, the assets used to determine employer contribution rates take into account market value by spreading all investment gains and losses (returns above or below expected returns) over a period of five years. As of June 30, 2011, the Actuarial Value of Assets was reset to equal the market value.

Our firm has prepared all of the schedules presented in the actuarial report. We reviewed the actuarial assumptions shown in the schedules and found them to be reasonably appropriate for use under the Plan. The assumptions used in this report reflect the results of an Experience Study performed by EFI covering the period from July 1, 2009 through June 30, 2012, and approved by the Board. The assumptions used in the most recent valuation are intended to produce results that, in the aggregate, reasonably approximate the anticipated future experience of the Plan. The next experience analysis is expected to cover the years through 2015.

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

We certify that the valuation was performed in accordance with generally accepted actuarial principles and practices. In particular, the assumptions and methods used for funding purposes meet the parameters of the Governmental Accounting Standards Board Statement No. 25. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein. This report does not address any contractual or legal issues. We are not attorneys, and our firm does not provide any legal services or advice.

Respectfully Submitted,

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Section 1:

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



1.1: Brief Outline of Plan Provisions

Definitions

Compensation

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

Credited Service

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

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

- Prior Part-time Service: If a Member worked for an employer within the Association on a
 part-time or 'extra help' basis before his membership in the Retirement Association, the
 Member may buyback this service.
- Intermittent Part-time Service
- Prior full time Service: Member may buyback full time service that may have been cashed out upon termination.
- Leave of Absence (Including absence with State Disability or Worker's Compensation): No unpaid leave of absence can be bought back except for absence due to medical reasons of up to one year.
- Public Service: Only Tier 1 and 4 Members may buy back this service.
- Military Time: Only Tier 1 and 4 Members may buy back this service.
- Enhance Prior Tier Service: Applies to certain active and deferred Members with Tier 1, 2 or 3 service.
- Military "call up"
- AB 2766: Only Safety Employees can buy back this service.

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



Final Compensation

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

General Member

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

Safety Member

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

Membership

Eligibility

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

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

Service Retirement

Eligibility

Tier 3 General Members are eligible to retire at age 55 if they have earned ten years of Credited Service. All other General Members are eligible to retire at age 50 if they have earned five years of Credited Service and have been an Association member for at least ten years. Alternatively, General Members are eligible to retire at any age after having earned 30 years of Credited Service, or upon reaching age 70 with no service requirement.

Safety Members are eligible to retire at age 50 if they have earned five years of Credited Service and have been an Association member for at least ten years. Alternatively, Safety Members are eligible to retire at any age after having earned 20 years of Credited Service, or upon reaching age 70 with no service requirement.

Benefit Amount

The Service Retirement Benefit payable to the Member is equal to the Member's Final Compensation multiplied by credited service, the benefit factor from Table 1 and the age factor from Table 2 corresponding to the Member's code section. The appropriate code sections for each group are listed in Table 1.

For Tier 3 Members with Credited Service up to thirty five years, the percentage of Final Compensation may not exceed 70% and for those with more than thirty five years, it may not



exceed 80%. For all other Members, the percentage of Final Compensation may not exceed 100%. For those members integrated with Social Security (other than Tier 3), Retirement Benefits based on the first \$350 of monthly Final Average Compensation are reduced by one-third.

Table 1: Member Group Descriptions

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

Table 2: Age Factors

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

¹ This valuation does not reflect the impact of AB340, which will require new benefit provisions for those hired on or after January 1, 2013



Form of Benefit

The Service Retirement Benefit will be paid monthly beginning at retirement and for the life of the Member. If the member selects the unmodified benefit form, in the event of the Member's death 60% of the benefit will continue for the life of the Member's spouse or to the age of majority of dependent minor children if there is no spouse. For Tier 3 Members, the benefit payable to beneficiary is limited to 50%. In the event there is no surviving spouse or minor children, any unpaid remainder of the Member's accumulated contributions will be paid to the Member's designated beneficiary.

Actuarially equivalent optional benefit forms are also available.

Annually on April 1, benefits for all retired members other than those in Tier 3 are adjusted to reflect changes in the CPI for the San Francisco Bay Area since the prior year. Benefits may be increased or decreased, but the cumulative changes shall never reduce the benefit below the original monthly allowance. Annual increases may not exceed the COLA figures shown in Table 1, but CPI increases above this figure are "banked" and used for future increases when the CPI increases by less than the figures shown.

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

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

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.

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 one-third of Final Compensation; or
- If the Member is eligible at disability for a Service Retirement Benefit, the Service Retirement Benefit accrued on the date of disability.

The Nonservice-Connected Disability Retirement Benefit payable to Tiers 2, 4 and 5 General Members is equal to the greatest of:

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

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

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

Form of Benefit

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



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

Actuarially equivalent optional benefit forms and COLA adjustments (as described for the Service Retirement benefit) are also available. A lump sum benefit of \$5,000 will be payable upon the death of the member.

Death Benefit

Eligibility

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

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.

Withdrawal Benefit

Eligibility

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



Benefit Amount

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

Form of Benefit

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

Deferred Vested Benefit

Eligibility

A Member is eligible for a Deferred Vested Benefit upon termination of employment after earning five years of Credited Service, including reciprocity service from another system. For Tier 3 Members, the vesting requirement is ten years of Credited Service.

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

Benefit Amount

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

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.

Reciprocal Benefit

Eligibility

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



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

Benefit Amount

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

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.

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
- A reduced retirement allowance payable during his life with the provision that after his death the reduced allowance will be continued for life to the beneficiary designated by him at the time of his retirement; or
- 3. A reduced retirement allowance payable during his life with the provision that after his death an allowance of one-half of his reduced allowance will be continued for life to the beneficiary designated by him at the time of his retirement.

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



Member Contributions

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

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

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

The employee contribution rates are shown in the Appendix II.

Changes in Plan Provisions

There have been no changes in Plan provisions since the prior review.



1.2: Participant Data as of July 1, 2012

Maluation				Average	0/ 1/2 2/2 2/2 2/2
Valuation Date	Plan Type	Number	Annual Salary	Annual Salary	% Increase in Average Salary
6/30/2003	General	3,626	163,505,000	45,092	6.76%
0/30/2003	Safety	637	34,159,000	53,625	3.98%
	Total	4,263	197,664,000	46,367	5.23%
6/30/2004	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%
6/30/2005	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%
6/30/2006	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%
6/30/2008	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%
6/30/2009	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%)
6/30/2010	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%
6/30/2011	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%)
6/30/2012	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%)

Actuarial valuation was not performed for fiscal year June 30, 2007



	Gen	eral	Sa	fety	To	otal
	7/1/11	7/1/12	7/1/11	7/1/12	7/1/11	7/1/12
Active Participants						
Number	3,232	3,233	637	661	3,869	3,894
Average Age	46.52	46.36	39.59	39.14	45.38	45.14
Average Service	11.80	11.76	11.22	11.01	11.70	11.63
Average Pay (does not reflect impact of furloughs)	\$57,211	\$55,447	\$65,621	\$63,022	\$58,596	\$56,733
Service Retired						
Number	2,052	2,148	272	295	2,324	2,443
Average Age	69.09	69.01	64.33	64.05	68.53	68.41
Average Annual Total Benefit	\$24,766	\$25,759	\$49,097	\$48,952	\$27,614	\$28,559
Beneficiaries						
Number	311	311	77	84	388	395
Average Age	73.46	73.20	66.48	64.81	72.07	71.42
Average Annual Total Benefit	\$14,084	\$15,069	\$25,661	\$25,373	\$16,381	\$17,261
Duty Disabled						
Number	110	108	109	112	219	220
Average Age	64.39	65.06	55.83	56.51	60.13	60.70
Average Annual Total Benefit	\$21,304	\$22,137	\$32,380	\$34,076	\$26,817	\$28,215
Ordinary Disabled						
Number	78	78	6	6	84	84
Average Age	63.51	64.51	55.15	56.15	62.92	63.92
Average Annual Total Benefit	\$13,682	\$14,092	\$18,488	\$19,043	\$14,025	\$14,446
Total In Pay						
Number	2,551	2,645	464	497	3,015	3,142
Average Age	69.25	69.21	62.57	62.39	68.22	68.13
Average Annual Total Benefit	\$ 22,976	\$ 24,010	\$ 40,885	\$ 41,253	\$ 25,732	\$ 26,737
Terminated Vested						
Number	536	554	108	99	644	653
Average Age	49.90	49.82	43.19	43.66	48.77	48.89
Average Service	7.53	7.59	6.36	6.34	7.33	7.40
Transfers	7.00	7.00	0.00	0.0 .	7.00	71.10
Number	148	180	76	69	224	249
Average Age	47.53	45.68	35.44	37.46	43.43	43.40
Average Service	5.99	5.41	4.75	6.20	5.57	5.63
Total Inactive						
Number	684	734	184	168	868	902
Average Age	49.38	48.81	39.99	41.11	47.39	47.37
Average Service	7.20	7.06	5.69	6.29	6.88	6.91



County, Ceres and Other Districts Active and Vested Participant Data as of July 1, 2012

			Соι	ınty					Ceres and O	ther District	5		Total County, and Other Dis	
	<u>Ge</u> n	<u>ieral</u>	<u>Saf</u>	et <u>y</u>	<u>To</u>	tal	Gen	<u>eral</u>	<u>Saf</u>	ety	<u>Tc</u>	<u>tal</u>		
	7/1/11	7/1/12	7/1/11	7/1/12	7/1/11	7/1/12	7/1/11	7/1/12	7/1/11	7/1/12	7/1/11	7/1/12	7/1/11	7/1/12
Active														
Participants														
Number	3,114	3,113	556	578	3,670	3,691	118	120	81	83	199	203	3,869	3,894
Average Age	46.56	46.39	39.99	39.36	45.56	45.29	45.64	45.66	36.87	37.66	42.07	42.39	45.38	45.14
Average Service	11.80	11.76	11.42	11.08	11.75	11.66	11.57	11.69	9.81	10.53	10.86	11.22	11.70	11.63
Average Pay*	\$ 57,126	\$ 55,233	\$ 63,114	\$ 59,879	\$ 58,033	\$ 55,961	\$ 59,452	\$ 61,014	\$ 82,823	\$ 84,909	\$ 68,965	\$ 70,784	\$ 58,596	\$ 56,734
Terminated														
Vested														
Number	520	536	95	87	615	623	16	18	13	12	29	30	644	653
Average Age	49.90	49.86	43.29	43.74	48.88	49.01	49.73	48.61	42.44	43.06	46.46	46.39	48.77	48.89
Average Service	7.58	7.60	6.38	6.32	7.39	7.42	5.92	7.35	6.20	6.50	6.04	7.01	7.33	7.40
Transfers														
Number	136	167	68	61	204	228	12	13	8	8	20	21	224	249
Average Age	47.96	45.77	34.95	37.04	43.63	43.44	42.59	44.48	39.60	40.60	41.39	43.00	43.43	43.40
Average Service	6.06	5.45	4.55	6.17	5.56	5.64	5.18	4.94	6.43	6.43	5.68	5.51	5.57	5.63
Total Inactive														
Number	656	703	163	148	819	851	28	31	21	20	49	51	868	902
Average Age	49.50	48.89	39.81	40.98	47.57	47.52	46.67	46.88	41.36	42.07	44.39	44.99	47.39	47.37
Average Service	7.26	7.09	5.62	6.26	6.94	6.94	5.60	6.34	6.28	6.47	5.89	6.39	6.88	6.91

^{*}All payroll figures shown are annual



County Active and Vested Participant Data as of July 1, 2012

					Gen	eral						Safe	ety	
	Tie	r 1	Tie	r 2	Tie	r 3	Tie	r 4	Tie	r 5	Tier	1/4	Tier	2/5
	7/1/11	7/1/12	7/1/11	7/1/12	7/1/11	7/1/12	7/1/11	7/1/12	7/1/11	7/1/12	7/1/11	7/1/12	7/1/11	7/1/12
Active														
Participants														
Number	0	0	4	246	22	19	93	75	2,995	2,773	2	2	554	576
Average Age	0.00	0.00	41.76	35.60	50.89	50.99	57.90	58.63	46.18	46.99	55.37	56.37	39.93	39.30
Average Service	0.00	0.00	0.32	0.81	14.44	15.15	29.97	31.89	11.24	12.17	22.61	23.61	11.38	11.04
Average Pay*	\$0	\$0	\$79,469	\$40,558	\$48,668	\$46,242	\$67,545	\$65,919	\$56,835	\$56,307	\$71,968	\$70,618	\$63,082	\$59,841
Terminated														
Vested														
Number	47	41	193	186	27	29	3	2	250	278	4	2	91	85
Average Age	59.24	60.17	51.02	51.74	51.98	52.40	61.14	62.00	46.92	46.74	57.58	58.00	42.66	43.41
Average Service	10.19	10.63	4.97	4.68	10.77	10.50	14.61	5.31	8.68	8.82	9.02	6.50	6.26	6.32
Transfers														
Number	16	10	17	20	10	8	2	3	91	126	0	0	68	61
Average Age	59.37	58.93	54.29	52.77	45.58	45.88	54.11	54.86	44.90	43.40	0	0	34.95	37.04
Average Service	6.00	5.71	4.19	3.70	10.75	11.70	14.33	19.56	5.72	4.97	0.00	0.00	4.55	6.17
Total Inactive														
Number	63	51	210	206	37	37	5	5	341	404	4	2	159	146
Average Age	59.28	59.93	51.29	51.84	50.25	50.99	58.33	57.72	46.38	45.69	57.58	58.00	39.37	40.75
Average Service	9.13	9.66	4.89	4.59	10.76	10.76	14.50	13.86	7.89	7.62	9.02	6.50	5.53	6.26

^{*}All payroll figures shown are annual

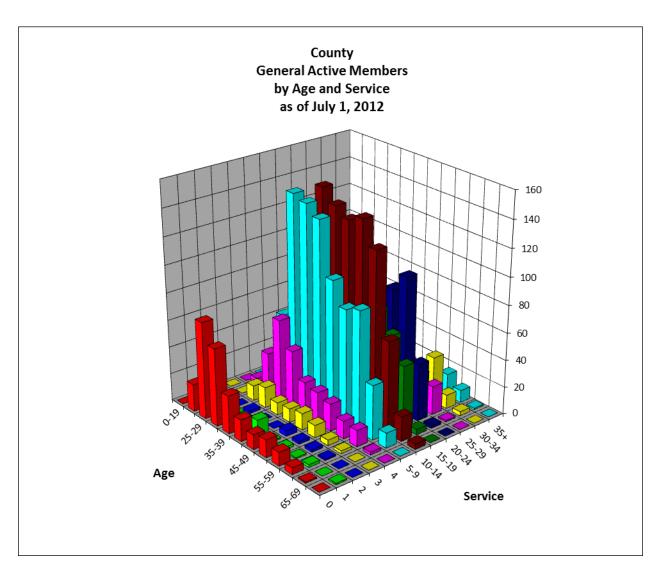


Ceres and Other Districts Active and Vested Participant Data as of July 1, 2012

					Safe	ety								
	Tier	1	Tier	· 2	Tie	r 3	Tie	r 4	Tie	r 5	Tier	1/4	Tier	2/5
	7/1/11	7/1/12	7/1/11	7/1/12	7/1/11	7/1/12	7/1/11	7/1/12	7/1/11	7/1/12	7/1/11	7/1/12	7/1/11	7/1/12
Active														
Participants														
Number	1	1	5	5	0	0	4	3	108	111	1	1	80	82
Average Age	73.28	74.28	44.12	45.12	0	0	59.99	57.45	44.92	45.11	54.59	55.59	36.64	37.44
Average Service	36.43	38.85	6.95	9.35	0.00	0.00	35.60	36.98	10.67	10.86	31.24	32.20	9.55	10.26
Average Pay*	\$52,418	\$55,190	\$39,518	\$39,238	\$0	\$0	\$63,430	\$65,399	\$60,293	\$61,929	\$145,515	\$141,292	\$82,039	\$84,221
Terminated														
Vested														
Number	1	1	10	10	0	0	0	0	5	7	0	0	13	12
Average Age	57.13	58.13	48.54	49.54	0.00	0.00	0.00	0.00	50.64	45.93	0.00	0.00	42.44	43.06
Average Service	5.32	5.32	5.29	5.29	0.00	0.00	0.00	0.00	7.30	10.59	0.00	0.00	6.20	6.50
Transfers														
Number	0	0	2	2	0	0	0	0	10	11	0	0	8	8
Average Age	0.00	0.00	48.30	49.30	0.00	0.00	0.00	0.00	41.45	43.60	0.00	0.00	39.60	40.60
Average Service	0.00	0.00	3.12	3.12	0.00	0.00	0.00	0.00	5.59	5.27	0.00	0.00	6.43	6.43
Total Inactive														
Number	1	1	12	12	0	0	0	0	15	18	0	0	21	20
Average Age	57.13	58.13	48.50	49.50	0.00	0.00	0.00	0.00	44.51	44.51	0.00	0.00	41.36	42.07
Average Service	5.32	5.32	4.93	4.93	0.00	0.00	0.00	0.00	6.16	7.34	0.00	0.00	6.28	6.47

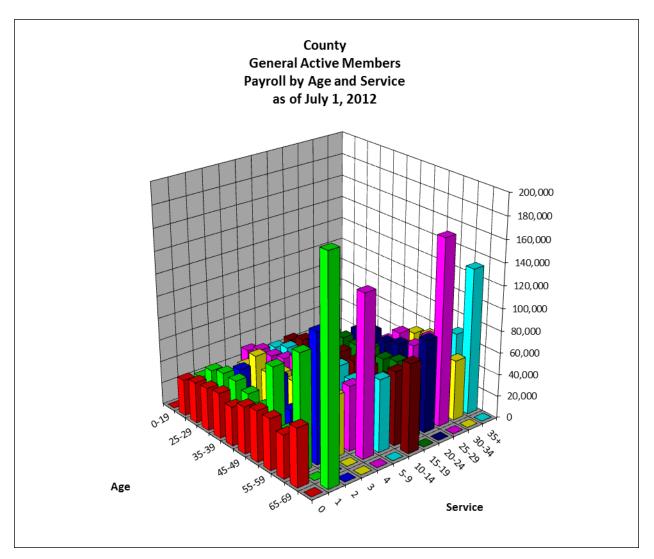
^{*}All payroll figures shown are annual





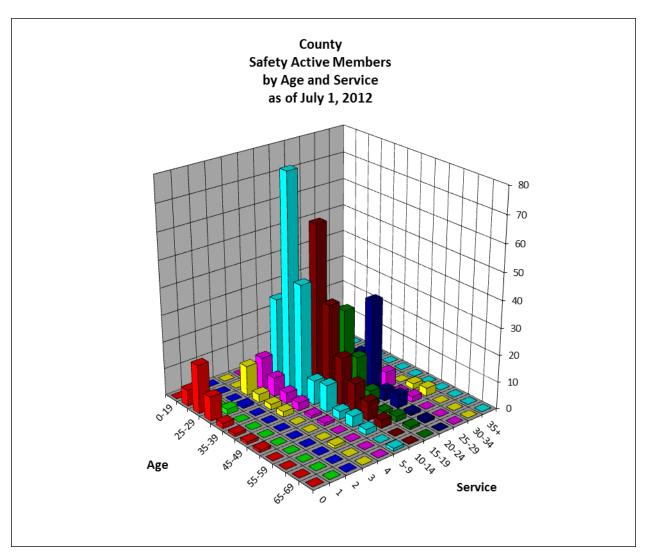
Service / Age	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35+	Total
		_		_	_	_							
0-19	0	0	0	0	0	0	0	0	0	0	0	0	0
20-24	20	3	0	0	7	0	0	0	0	0	0	0	30
25-29	71	10	0	11	31	56	3	0	0	0	0	0	182
30-34	57	4	2	15	61	148	39	0	0	0	0	0	326
35-39	28	4	0	9	43	145	153	17	0	0	0	0	399
40-44	16	11	0	10	25	138	144	77	16	0	0	0	437
45-49	11	1	4	12	23	100	138	95	65	21	0	0	470
50-54	13	2	2	9	20	84	143	76	87	30	19	0	485
55-59	10	1	2	4	13	88	126	62	100	25	33	16	480
60-64	5	2	1	2	12	40	67	45	42	21	10	9	256
65-69	1	0	0	0	2	11	18	4	2	1	3	1	43
70+	0	1	0	0	0	0	4	0	0	0	0	0	5
Total	232	39	11	72	237	810	835	376	312	98	65	26	3,113





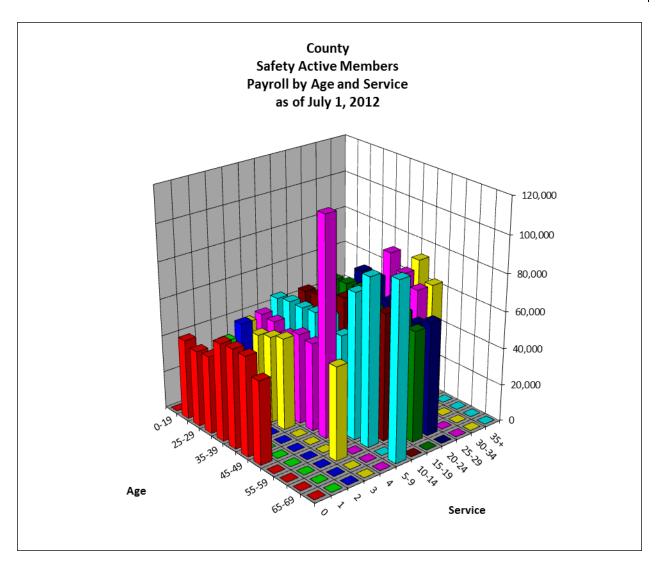
Service / Age	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35+	Average
0-19	0	0	0	0	0	0	0	0	0	0	0	0	0
20-24	32,896	30,290	0	0	39,198	0	0	0	0	0	0	0	34,106
25-29	37,227	42,955	0	36,580	45,766	43,214	45,136	0	0	0	0	0	40,930
30-34	38,884	46,994	44,724	51,997	46,739	49,092	51,368	0	0	0	0	0	47,220
35-39	41,023	46,622	0	42,841	50,638	49,484	55,174	59,282	0	0	0	0	51,435
40-44	35,504	41,777	0	48,989	57,727	51,071	60,491	60,643	62,119	0	0	0	55,795
45-49	42,725	36,113	57,722	48,613	47,118	54,636	59,072	59,997	66,948	53,851	0	0	57,876
50-54	46,135	79,103	34,680	57,548	43,962	57,819	56,671	62,967	63,341	66,836	61,597	0	59,086
55-59	46,400	29,698	53,843	36,889	41,024	51,431	57,911	59,870	67,935	61,375	65,531	65,784	59,083
60-64	39,129	104,025	116,031	55,536	58,548	56,043	54,010	63,859	54,640	74,712	77,033	67,797	59,812
65-69	52,607	0	0	0	144,551	65,445	66,841	55,365	83,967	167,730	54,751	131,952	72,513
70+	0	197,431	0	0	0	0	80,428	0	0	0	0	0	103,829
Average	38,863	50,870	55,765	47,468	49,168	51,502	57,470	61,089	64,463	65,378	65,653	69,026	55,233





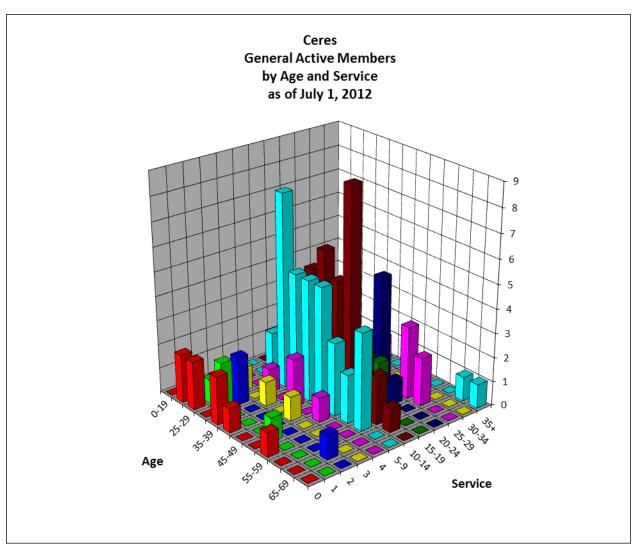
Service / Age	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35+	Total
0-19	0	0	0	0	0	0	0	0	0	0	0	0	0
20-24	6	0	0	0	0	0	0	0	0	0	0	0	6
,	_		~	~									
25-29	18	0	0	11	12	32	0	0	0	0	0	0	73
30-34	9	2	1	3	7	80	22	0	0	0	0	0	124
35-39	2	0	0	2	4	42	62	19	0	0	0	0	131
40-44	1	0	0	2	3	9	35	31	13	0	0	0	94
45-49	1	0	0	0	1	10	18	16	35	6	0	0	87
50-54	1	0	0	0	1	3	11	6	4	1	2	0	29
55-59	0	0	0	0	0	4	7	1	5	2	3	0	22
60-64	0	0	0	1	0	2	3	2	1	0	0	0	9
65-69	0	0	0	0	0	0	0	1	1	0	0	0	2
70+	0	0	0	0	0	1	0	0	0	0	0	0	1
Total	38	2	1	19	28	183	158	76	59	9	5	0	578





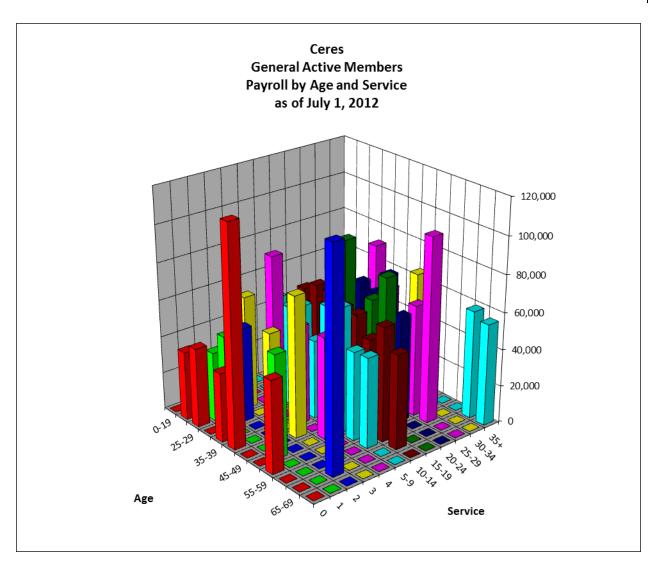
Service / Age	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35+	Average
0-19	0	0	0	0	0	0	0	0	0	0	0	0	0
20-24	43,243	0	0	0	0	0	0	0	0	0	0	0	43,243
25-29	41,073	0	0	47,689	49,181	55,029	0	0	0	0	0	0	49,520
30-34	42,095	47,192	53,466	44,396	48,695	56,696	59,600	0	0	0	0	0	55,223
35-39	52,789	0	0	46,903	44,870	56,803	60,881	66,064	0	0	0	0	59,499
40-44	53,842	0	0	49,658	48,921	57,815	61,930	67,582	71,497	0	0	0	63,961
45-49	53,842	0	0	0	47,736	59,381	66,162	68,221	70,684	81,849	0	0	68,309
50-54	44,980	0	0	0	117,415	52,595	61,283	60,870	61,738	74,068	78,456	0	63,360
55-59	0	0	0	0	0	78,759	64,046	61,228	58,865	68,468	68,277	0	66,394
60-64	0	0	0	50,267	0	90,045	68,416	65,658	56,974	0	0	0	69,322
65-69	0	0	0	0	0	0	0	59,679	61,219	0	0	0	60,449
70+	0	0	0	0	0	95,262	0	0	0	0	0	0	95,262
Average	43,049	47,192	53,466	47,429	50,801	57,621	61,848	66,569	68,862	78,011	72,349	0	59,879





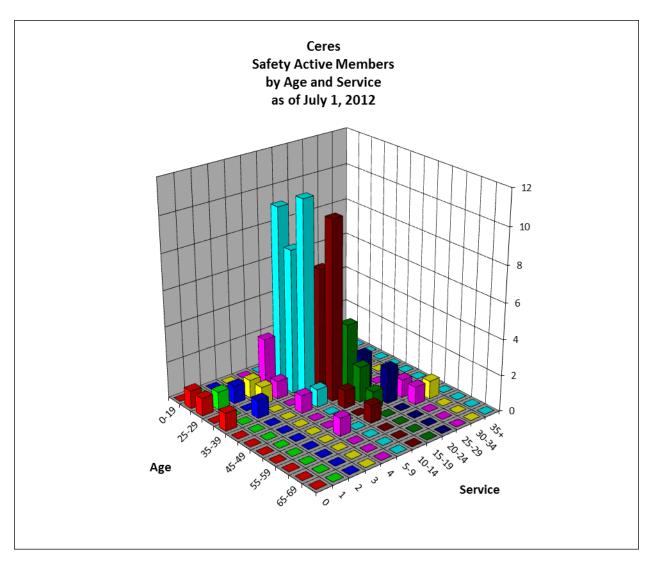
Service / Age	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35+	Total
0-19	0	0	0	0	0	0	0	0	0	0	0	0	0
20-24	2	0	0	0	0	0	0	0	0	0	0	0	2
25-29	2	1	1	1	0	2	0	0	0	0	0	0	7
30-34	0	2	2	0	1	8	4	0	0	0	0	0	17
35-39	2	0	0	1	0	5	5	1	0	0	0	0	14
40-44	1	0	0	0	2	5	6	2	1	1	0	0	18
45-49	0	0	0	1	0	5	5	1	1	2	0	0	15
50-54	0	1	0	0	1	3	9	2	5	0	1	0	22
55-59	1	0	0	0	0	2	3	2	1	3	1	0	13
60-64	0	0	0	0	0	4	2	0	0	2	0	0	8
65-69	0	0	1	0	0	0	1	0	0	0	0	1	3
70+	0	0	0	0	0	0	0	0	0	0	0	1	1
Total	8	4	4	3	4	34	35	8	8	8	2	2	120





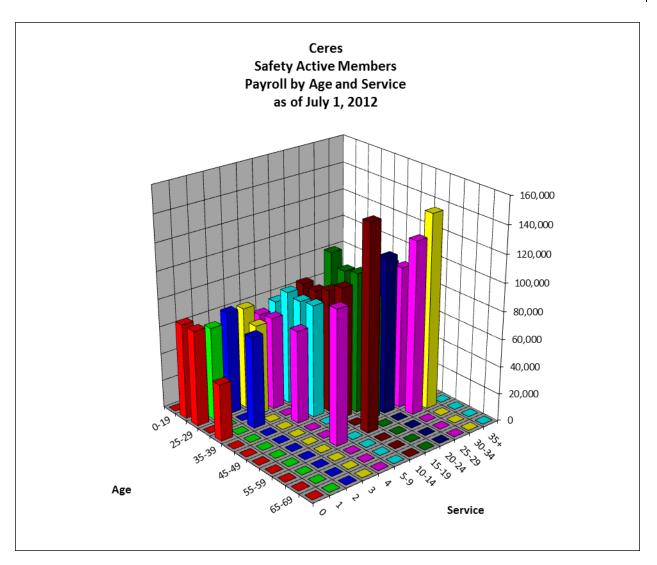
Service	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35+	Average
/ Age													
0-19	0	0	0	0	0	0	0	0	0	0	0	0	0
20-24	37,203	0	0	0	0	0	0	0	0	0	0	0	37,203
25-29	42,840	37,440	41,854	61,790	0	55,900	0	0	0	0	0	0	48,366
30-34	0	49,955	51,157	0	84,109	54,183	61,422	0	0	0	0	0	56,793
35-39	37,355	0	0	49,356	0	58,136	66,465	66,464	0	0	0	0	58,110
40-44	118,152	0	0	0	53,504	42,702	65,943	91,024	65,859	82,889	0	0	64,729
45-49	0	0	0	76,282	0	64,978	61,319	52,423	63,181	63,045	0	0	63,297
50-54	0	55,773	0	0	55,043	67,728	60,991	65,976	76,056	0	71,195	0	65,743
55-59	49,681	0	0	0	0	48,019	51,322	80,998	57,525	60,418	66,347	0	58,985
60-64	0	0	0	0	0	48,775	61,760	0	0	100,018	0	0	64,832
65-69	0	0	118,492	0	0	0	51,014	0	0	0	0	58,654	76,053
70+	0	0	0	0	0	0	0	0	0	0	0	55,190	55,190
													0
Average	51,831	40,791	72,047	62,011	50,774	56,368	56,303	76,634	57,669	79,119	65,608	54,657	61,014





Service / Age	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35+	Total
0-19	0	0	0	0	0	0	0	0	0	0	0	0	0
20-24	1	0	0	0	0	0	0	0	0	0	0	0	1
25-29	1	1	1	1	3	10	0	0	0	0	0	0	17
30-34	0	0	0	1	1	8	3	0	0	0	0	0	13
35-39	1	0	1	0	0	11	7	2	0	0	0	0	22
40-44	0	0	0	0	1	1	10	4	2	0	0	0	18
45-49	0	0	0	0	0	0	1	2	0	1	0	0	4
50-54	0	0	0	0	0	0	0	1	2	1	0	0	4
55-59	0	0	0	0	1	0	1	0	0	1	1	0	4
60-64	0	0	0	0	0	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	3	1	2	2	6	30	22	9	4	3	1	0	83





Service / Age	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35+	Average
0-19	0	0	0	0	0	0	0	0	0	0	0	0	0
20-24	69,099	0	0	0	0	0	0	0	0	0	0	0	69,099
25-29	69,393	67,402	74,381	73,587	65,319	70,888	0	0	0	0	0	0	69,976
30-34	0	0	0	65,734	67,326	82,209	84,721	0	0	0	0	0	80,377
35-39	41,116	0	66,524	0	0	80,410	83,972	107,948	0	0	0	0	81,630
40-44	0	0	0	0	67,531	81,935	88,600	98,994	93,222	0	0	0	89,883
45-49	0	0	0	0	0	0	95,057	101,570	0	101,307	0	0	99,876
50-54	0	0	0	0	0	0	0	88,201	113,280	102,698	0	0	104,365
55-59	0	0	0	0	97,563	0	148,531	0	0	125,740	141,292	0	128,282
60-64	0	0	0	0	0	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0	0	0	0	0	0	0
Average	59,869	67,402	70,453	69,661	71,396	77,767	89,616	100,357	103,251	109,915	141,292	0	84,909



Changes in Plan Membership: County General

					·	•			
	Actives	Transfers	Non Vested Terminations due Refunds	Vested Terminations	Ordinary Disabled	Duty Disabled	Retired	Beneficiaries	Total
July 1, 2011	3,114	136	180	520	78	105	2,013	311	6,457
New Entrants	254	-	-	-	-	-	-	-	254
Rehires	22	(1)	(5)	(6)	-	-	-	-	10
Duty Disabilities	-	-	-	-	-	-	-	-	0
Ordinary Disabilities	-	-	-	-	-	-	-	-	0
Retirements	(121)	(7)	-	(26)	-	-	153	-	(1)
Retirements from									
Safety with General									
Service	-	-	-	-	-	-	-	-	0
Vested Terminations	(57)	-	-	57	-	-	-	-	0
Died, With									
Beneficiaries' Benefit									
Payable	(4)	-	-	-	-	(1)	(16)	21	0
Died, Without									
Beneficiary, and Other									
Terminations	(39)	-	36	-	-	(3)	(43)	-	(49)
Transfers	(29)	41	(5)	(7)	-	-		-	0
Beneficiary Deaths	-	-	-	-	-	-	-	(23)	(23)
Domestic Relations									
Orders	-	-	-	-	-	-	-	2	2
Withdrawals Paid	(27)	(1)	(13)	(6)	-	-	-		(47)
Member									
Reclassifications	-	(1)	(4)	4	-	1	-	(1)	(1)
July 1, 2012	3,113	167	189	536	78	102	2,107	310	6,602



Changes in Plan Membership: County Safety

	Actives	Transfers	Non Vested Terminations due Refunds	Vested Terminations	Ordinary Disabled	Duty Disabled	Retired	Beneficiaries	Total
July 1, 2011	556	68	31	95	6	103	267	77	1,203
New Entrants	37	-	-	-	-	-	-	-	37
Rehires	10	-	(5)	(2)	-	-	-	-	3
Duty Disabilities	(2)	-	-	-	-	2	-	-	0
Ordinary Disabilities	-	-	-	-	-	-	-	-	0
Retirements	(25)	(1)	-	(5)	-		31		0
Retirements from									
General with Safety									
Service	-	-	-	-	-	-	-	-	0
Vested Terminations	(6)	-	-	6	-	-	-	-	0
Died, With									
Beneficiaries' Benefit									
Payable	-	-	-	-	-	(1)	(2)	4	1
Died, Without									
Beneficiary, and Other									
Terminations	(4)	-	3	-	-	-	(5)	-	(6)
Transfers	17	(6)	(3)	(6)	-	-	-	-	2
Beneficiary Deaths		-	-	-	-	-	-	(2)	(2)
Domestic Relations									
Orders	-	-	-	-	-	-	-	3	3
Withdrawals Paid	(5)	-	(4)	(1)	-	-	-		(10)
Member Reclassifications	-	-	-	-	-	2	(2)	2	2
July 1, 2012	578	61	22	87	6	106	289	84	1,233



Changes in Plan Membership: Ceres and Other Districts General

	Actives	Transfers	Non Vested Terminations due Refunds	Vested Terminations	Ordinary Disabled	Duty Disabled	Retired	Beneficiaries	Total
July 1, 2011	118	12	6	16	0	5	39	0	196
New Entrants	7	-	-	-	-	-	-	-	7
Rehires	2	-	-	-	-	-	-	-	2
Duty Disabilities	(1)	-	-	-	-	1	-	-	0
Ordinary Disabilities	-	-	-	-	-	-	-	-	0
Retirements	(1)	(1)	-	(1)	-	-	3	-	0
Retirements from									
General with Safety									
Service	-	-	-	-	-	-	-	-	0
Vested Terminations	(4)	-	-	4	-	-	-	-	0
Died, With									
Beneficiaries' Benefit									
Payable	-	-	-	-	-	-	-	-	0
Died, Without									
Beneficiary, and Other									
Terminations	(1)	-	1	-	-	-	(1)	-	(1)
Transfers	-	1	(1)	-	-	-	-	-	0
Beneficiary Deaths	-	-	-	-	-	-	-	-	0
Domestic Relations									
Orders	-	-	-	-	-	-	-	1	1
Withdrawals Paid	-		-	(1)	-	-	-	-	(1)
Member									
Reclassifications	-	1	-	-	-	-	-	-	1
July 1, 2012	120	13	6	18	0	6	41	1	205



Changes in Plan Membership: Ceres and Other Districts Safety

	Actives	Transfers	Non Vested Terminations due Refunds	Vested Terminations	Ordinary Disabled	Duty Disabled	Retired	Beneficiaries	Total
July 1, 2011	81	8	1	13	0	6	5	0	114
New Entrants	3	-	-	-	-	-	-	-	3
Rehires	-	-	-	-	-	-	-	-	0
Duty Disabilities	-	-	-	-	-	-	-	-	0
Ordinary Disabilities	-	-	-	-	-	-	-	-	0
Retirements	-	-	-	(1)	_	-	1	-	0
Retirements from									
General with Safety									
Service	-	-	-	-	-	-	-	-	0
Vested Terminations	-	-	-	-	-	-	-	-	0
Died, With									
Beneficiaries' Benefit									
Payable	-	-	-	-	-	-	-	-	0
Died, Without									
Beneficiary, and Other	(1)		1						0
Terminations	(1)	-	1	-	-	-	-	-	0
Transfers	-	-	-	-	-	-	-	-	0
Beneficiary Deaths	-	-	-	-	-	-	-	-	0
Domestic Relations									
Orders	-	-	-	-	-	-	-	-	0
Withdrawals Paid	-	-	-	-	-	-	-	-	0
Member									
Reclassifications	-	-	-	-	-	-	-	-	0
July 1, 2012	83	8	2	12	0	6	6	0	117



Changes in Plan Membership: All Groups

	Actives	Transfers	Non Vested Terminations due Refunds	Vested Terminations	Ordinary Disabled	Duty Disabled	Retired	Beneficiaries	Total
July 1, 2011	3,869	224	218	644	84	219	2,324	388	7,970
New Entrants	301	0	0	0	0	0	0	0	301
Rehires	34	(1)	(10)	(8)	0	0	0	0	15
Duty Disabilities	(3)	0	0	0	0	3	0	0	0
Ordinary Disabilities	0	0	0	0	0	0	0	0	0
Retirements	(147)	(9)	0	(33)	0	0	188	0	(1)
Retirements from									
General with Safety									
Service	0	0	0	0	0	0	0	0	0
Vested Terminations	(67)	0	0	67	0	0	0	0	0
Died, With									
Beneficiaries' Benefit									
Payable	(4)	0	0	0	0	(2)	(18)	25	1
Died, Without									
Beneficiary, and Other									
Terminations	(45)	0	41	0	0	(3)	(49)	0	(56)
Transfers	(12)	36	(9)	(13)	0	0	0	0	2
Beneficiary Deaths	0	0	0	0	0	0	0	(25)	(25)
Domestic Relations									
Orders	0	0	0	0	0	0	0	6	6
Withdrawals Paid	(32)	(1)	(17)	(8)	0	0	0	0	(58)
Member									
Reclassifications	0	0	(4)	4	0	3	(2)	1	2
July 1, 2012	3,894	249	219	653	84	220	2,443	395	8,157



Service Retired

		Cou	inty		Ceres and Other Districts				Total	
	Gen	<u>eral</u>	Saf	et <u>y</u>	Gen	<u>eral</u>	Sa	fet <u>y</u>		
		Annual		Annual		Annual		Annual		Annual
		Average		Average		Average		Average		Average
Age	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	\$0	0	\$0	0	\$0	0	\$0
45-49	0	\$0	3	\$73,954	0	\$0	1	\$5,130	4	\$56,748
50-54	75	\$18,362	36	\$41,462	0	\$0	1	\$110,494	112	\$26,609
55-59	223	\$29,744	62	\$48,764	7	\$20,552	2	\$110,182	294	\$34,084
60-64	502	\$30,944	68	\$55,241	13	\$27,338	2	\$69,722	585	\$33,821
65-69	485	\$28,204	55	\$53,057	11	\$26,240	0	\$0	551	\$30,645
70-74	323	\$22,087	35	\$43,584	6	\$29,956	0	\$0	364	\$24,284
75-79	190	\$20,297	14	\$43,926	4	\$37,325	0	\$0	208	\$22,215
80-84	162	\$21,879	6	\$28,826	0	\$0	0	\$0	168	\$22,127
85-89	92	\$17,983	10	\$23,954	0	\$0	0	\$0	102	\$18,569
90-94	49	\$14,471	0	\$0	0	\$0	0	\$0	49	\$14,471
95+	6	\$15,194	0	\$0	0	\$0	0	\$0	6	\$15,194
All Ages	2,107	\$25,730	289	\$48,323	41	\$27,242	6	\$79,238	2,443	\$28,559

Duty Disabled

		Cou	inty			Ceres and O	ther District	:S	Total		
	<u>Gen</u>	<u>eral</u>	<u>Saf</u>	et <u>y</u>	<u>Gen</u>	<u>eral</u>	<u>Sa</u>	fety			
		Annual		Annual		Annual		Annual		Annual	
		Average		Average		Average		Average		Average	
Age	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	0	\$0	0	\$0	0	\$0	0	\$0	
35-39	1	\$13,596	3	\$29,108	0	\$0	0	\$0	4	\$25,230	
40-44	2	\$20,456	13	\$34,594	0	\$0	1	\$26,923	16	\$32,347	
45-49	2	\$24,808	13	\$32,080	1	\$26,625	0	\$0	16	\$30,830	
50-54	6	\$19,385	19	\$27,574	0	\$0	1	\$31,748	26	\$25,845	
55-59	20	\$21,405	21	\$37,378	1	\$20,857	3	\$35,704	45	\$29,800	
60-64	21	\$22,624	16	\$39,638	1	\$25,197	0	\$0	38	\$29,856	
65-69	19	\$22,029	13	\$32,949	3	\$19,060	1	\$72,092	36	\$27,115	
70-74	16	\$24,537	4	\$25,914	0	\$0	0	\$0	20	\$24,813	
75-79	6	\$20,713	4	\$37,385	0	\$0	0	\$0	10	\$27,382	
80-84	8	\$23,022	0	\$0	0	\$0	0	\$0	8	\$23,022	
85-89	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	
90-94	1	\$17,697	0	\$0	0	\$0	0	\$0	1	\$17,697	
95+	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	
All Ages	102	\$22,166	106	\$33,761	6	\$21,643	6	\$39,646	220	\$28,215	



Ordinary Disabled

		Cou	nty		Ceres and Other Districts				Total		
	Gen	<u>eral</u>	<u>S</u> af	et <u>y</u>	Gen	eral	Sa	fet <u>y</u>			
		Annual		Annual		Annual		Annual		Annual	
		Average		Average		Average		Average		Average	
Age	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	1	\$20,163	0	\$0	0	\$0	1	\$20,163	
45-49	7	\$15,159	0	\$0	0	\$0	0	\$0	7	\$15,159	
50-54	7	\$16,124	1	\$23,001	0	\$0	0	\$0	8	\$16,983	
55-59	11	\$15,508	2	\$20,004	0	\$0	0	\$0	13	\$16,199	
60-64	18	\$13,635	1	\$12,876	0	\$0	0	\$0	19	\$13,595	
65-69	14	\$17,271	1	\$18,210	0	\$0	0	\$0	15	\$17,334	
70-74	10	\$11,462	0	\$0	0	\$0	0	\$0	10	\$11,462	
75-79	3	\$8,814	0	\$0	0	\$0	0	\$0	3	\$8,814	
80-84	6	\$11,633	0	\$0	0	\$0	0	\$0	6	\$11,633	
85-89	2	\$5,774	0	\$0	0	\$0	0	\$0	2	\$5,774	
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	78	\$14,092	6	\$19,043	0	\$0	0	\$0	84	\$14,446	

Surviving Beneficiaries (all benefit types)

		Cou	inty		Ceres and Other Districts				Total		
	Gen	<u>eral</u>	<u>Saf</u>	ety	<u>Gen</u>	<u>eral</u>	<u>Sa</u>	<u>fety</u>			
		Annual		Annual		Annual		Annual		Annual	
		Average		Average		Average		Average		Average	
Age	Number	Benefit	Number	Benefit	Number	Benefit	Number	Benefit	Number	Benefit	
0-24	0	\$0	3	\$13,840	0	\$0	0	\$0	3	\$13,840	
25-29	1	\$33,121	0	\$0	0	\$0	0	\$0	1	\$33,121	
30-34	2	\$7,655	0	\$0	0	\$0	0	\$0	2	\$7,655	
35-39	1	\$5,296	1	\$35,101	0	\$0	0	\$0	2	\$20,199	
40-44	7	\$12,533	2	\$19,705	0	\$0	0	\$0	9	\$14,127	
45-49	7	\$8,377	3	\$39,510	0	\$0	0	\$0	10	\$17,717	
50-54	13	\$11,018	9	\$16,546	0	\$0	0	\$0	22	\$13,279	
55-59	17	\$12,319	9	\$18,382	0	\$0	0	\$0	26	\$14,418	
60-64	40	\$15,337	13	\$27,172	1	\$10,129	0	\$0	54	\$18,090	
65-69	35	\$17,430	9	\$33,559	0	\$0	0	\$0	44	\$20,729	
70-74	38	\$20,184	15	\$27,432	0	\$0	0	\$0	53	\$22,235	
75-79	35	\$16,008	10	\$34,180	0	\$0	0	\$0	45	\$20,046	
80-84	41	\$16,190	5	\$18,645	0	\$0	0	\$0	46	\$16,457	
85-89	46	\$13,731	2	\$18,307	0	\$0	0	\$0	48	\$13,922	
90-94	20	\$10,893	2	\$11,686	0	\$0	0	\$0	22	\$10,965	
95+	7	\$8,518	1	\$20,676	0	\$0	0	\$0	8	\$10,038	
All Ages	310	\$15,085	84	\$25,373	1	\$10,129	0	\$0	395	\$17,261	



Benefit Form Elections

	Cou	unty	Ceres and O	ther Districts	Total
	<u>General</u>	<u>Safety</u>	General	<u>Safety</u>	
Service Retired					
Option #0 (Unmodified 60% to Spouse)	1,770	259	34	5	2,068
Option #1 (Cash Refund)	145	5	1	0	151
Option #2 (100% Continuance)	166	25	6	1	198
Option #3 (50% Continuance)	26	0	0	0	26
Total Service Retired	2,107	289	41	6	2,443
Ordinary Disability					
Option #0 (Unmodified 60% to Spouse)	74	4	0	0	78
Option #1 (Cash Refund)	2	2	0	0	4
Option #2 (100% Continuance)	2	0	0	0	2
Option #3 (50% Continuance)	0	0	0	0	0
Total Ordinary Disability	78	6	0	0	84
Duty Disability					
Option #0 (Unmodified 100% to Spouse)	91	96	5	5	197
Option #1 (Cash Refund)	1	0	1	0	2
Option #2 (100% Continuance)	6	9	0	1	16
Option #3 (50% Continuance)	4	1	0	0	5
Total Duty Disability	102	106	6	6	220
Total	2,287	401	47	12	2,747



1.3: Actuarial Methods and Assumptions

Actuarial Method

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

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

The excess of the Actuarial Accrued Liability over Plan assets is the Unfunded Actuarial Accrued Liability, and the liability for each valuation group is amortized as a level percentage of payroll over a closed period (24 years as of the current valuation). For the current valuation, payroll is not expected to grow for the first two years of the amortization schedule.

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

The total Plan cost is the sum of the Normal Cost (computed on an Aggregate basis) and the amortization of the Unfunded Actuarial Accrued Liability.

Actuarial Value of Plan Assets

The actuarial value of Plan assets is modified market-related value. The market value of assets is adjusted to recognize, over a five-year period, differences between actual investment earnings and the assumed investment return. The actuarial value of assets is limited to no less than 80% and no more than 120% of the market value. As of June 30, 2011, the actuarial value was reset to equal market value.

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

Actuarial Assumptions

The assumptions shown below are based on an experience studies conducted as of June 30, 2012 for the period covering July 1, 2009 through June 30, 2012, performed by EFI.



Summary of Actuarial Assumptions

Valuation Date All assets and liabilities are computed as of June 30, 2012.

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

investment expenses.

Administrative

Expenses

An allowance of \$2,100,000 for Plan administrative expenses has been included

in the annual cost calculated.

Interest Credited to **Employee Accounts**

The employee accounts are credited with 0.00% interest annually.

Cost of Living The cost of living as measured by the Consumer Price Index (CPI) will increase

at the rate of 3.25% per year.

Increases in Pay Current Rate: 3.50% Base salary increases.

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

Service	General	Safety
0	3.75%	7.75%
1	3.75%	6.75%
2	3.75%	5.75%
3	3.75%	4.75%
4	3.75%	3.75%
5-9	1.75%	1.75%
10-19	0.75%	0.75%
20-29	0.25%	0.75%
30+	0.25%	0.25%



Mortality Improvement

No mortality improvement is explicitly assumed; however we build a margin in our mortality assumption between the actual and expected number of deaths in order to assume some future mortality improvements. The experience study report for the period covering July 1, 2009 to June 30, 2012 contains a full description of these margins.

Active Member Mortality

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

Representative Rates

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



Retired Member Mortality

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

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



Disabled Member Mortality

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

Representative Rates

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



Service Retirement

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

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



Service-Connected Disability

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

Representative Rates

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



Non Service-Connected Disability

Separate rates of ordinary disability are assumed among Safety and General Members; rates for both sexes for Safety Members are combined. The rates shown are applied after five Years of Service. Below are sample rates:

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

Termination (all types)

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

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

Service	<u>Safety</u>	<u>General</u>	
Service	All	Female	Male
0	15.0%	14.0%	24.0%
1	15.0%	9.4%	14.0%
2	10.5%	7.9%	11.7%
3	10.0%	7.9%	9.4%
4	6.0%	7.1%	7.1%
5	3.7%	5.0%	5.0%
10	3.4%	3.5%	3.5%
15	1.9%	2.9%	2.9%
20	0.0%	1.5%	1.5%
25	0.0%	1.3%	1.3%
30	0.0%	0.0%	0.0%



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 ten years of service are assumed to take a refund of contributions, as well as 20% of those with ten or more years of service.

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

Vested Termination

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

Vested terminated 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.

Family Composition

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

Accumulated Vacation
Time Load

Active members' service retirement and disability benefits are loaded by 2.5% for Safety Members and 3.5% for General Members for conversion of vacation time.



Participant Data

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



1.4: Glossary of Actuarial Terms

Actuarial Accrued Liability

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

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

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

Actuarial Assumptions

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

Actuarial Funding Policy

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

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

Actuarial Value of Assets

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

Actuarial Present Value of Benefits

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



Investment Gains and Losses

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

Normal Cost

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

Unfunded Actuarial Accrued Liabilities

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



Section 2:

Asset Information



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

	June 30, 2011	June 30, 2012
Cash and Equivalents	49,487,217	39,960,025
Receivables		
Interest and Dividends	7,068,358	6,288,878
Contributions	1,599,785	1,814,176
Income and Miscellaneous	11,139,390	40,078,393
Total Receivables	19,807,533	48,181,447
Fixed Assets		
Capitalized Software	725,153	599,528
Real Estate Occupied	1,783,805	1,764,829
Real Estate Leased	1,189,439	1,176,787
Other	62,179	219,695
Total Receivables	3,760,576	3,760,839
Investments		
Fixed Income	502,229,675	515,494,956
Equities	865,824,739	830,965,033
Collateral on Loaned Securities	138,824,720	112,214,531
Other	0	0
Total Investments	1,506,879,134	1,458,674,520
Liabilities		
Accounts Payable	(7,736,755)	(8,241,988)
Security Transactions Payable	(8,593,470)	(39,036,066)
Collateral Held for Loaned Securities	(144,453,289)	(116,551,048)
Other	(405,000)	(572,483)
Total Liabilities	(161,188,514)	(164,401,585)
Market Value	\$1,418,745,946	\$1,386,175,246



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

		(a)	(b)	(c)	(d)	(e) = (d) - (c)	(f) Percentage	$(g) = (e) \times (f)$	
				Expected	Actual	Additional	Not	Unrecognized	
		Contributions	Benefits	Return ¹	Return	Earnings	Recognized	Dollars	
	2009	44,333,858	74,399,189	(223,111,526)	(223,111,526)	0	20%	0	
	2010	42,560,605	73,196,706	162,746,408	162,746,408	0	40%	0	
	2011	45,453,781	76,732,557	259,805,325	259,805,325	0	60%	0	
	2012	47,839,327	81,990,033	112,159,927	1,580,006	(110,579,921)	80%	(88,463,937)	
(1)	Total U	nrecognized Dolla	nrs						(88,463,937)
(2)	Market	Value of Assets a	s of June 30, 201	12					1,386,175,246
(3)	Actuari	al Value of Assets	as of June 30, 20	012 [(2) - (1)]					1,474,639,183
(4)	Corrido	or Limits							
	a. 80%	of Net Market Val	lue						1,108,940,197
	b. 120%	% of Net Market V	alue						1,663,410,295
(5)	Actuari	al Value of Assets	after Corridor						1,474,639,183
(6)	5) Ratio of Actuarial Value to Market Value [(5) ÷ (2)]							106.4%	
(7)	7) Special (Non Valuation) Reserves:								
	\$5,0	00 Death Benefits	;					5,855,000	
	Heal	lth Insurance Rese	erve					117	
	Spec	cial COL Reserve						0	
	Lega	al Contingency Res	serve					2,609,033	
	Tier	3 Disability Reserv	ve					7,996	
	Conf	tingency Reserve						13,862,807	
	Total S	pecial Reserves (M	larket Value)						22,334,953
(8)		Adjusted Total	Special Reserves	(106.4% of Marke	t, Except Continger	ncy)			22,875,635
(9)	Pension	n Reserves at Actu	ıarial Value (Valu	ation Assets) [(5) -	- (8)]				1,451,763,548

¹ The Actuarial Value of Assets was reset to equal the Market Value as of June 30, 2011. This was done by eliminating the prior gain/loss bases (i.e. by setting the expected returns equal to the actual returns).



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

	June 30, 2011	June 30, 2012
Additions		
Contributions		
Employer's Contribution	\$26,256,729	\$27,314,032
Members' Contributions	19,197,052	20,525,295
Total Contributions	\$45,453,781	<u>\$47,839,327</u>
Investment Income		
Net Appreciation/(Depreciation) in Fair Value of Investments	229,909,853	(29,202,695)
Interest and Dividends	36,699,779	37,434,050
Commission Recapture	39,220	37,189
Other Investment Income	<u>16,849</u>	<u>571</u>
Total Investment Income	<u>\$266,665,701</u>	<u>\$8,269,115</u>
Investment Expenses	<u>(5,268,156)</u>	(4,937,605)
Net Investment Income	<u>\$261,397,545</u>	<u>\$3,331,510</u>
Securities Lending Activities		
Securities Lending Income	463,269	713,368
Depreciation in Securities Lending Collateral	122,907	(106,208)
Expenses from Securities Lending Activities	(141,229)	(213,916)
Net Securities Lending Income	\$444,947	\$393,244
Total Net Investment Income	\$261,842,492	<u>\$3,724,754</u>
Total Additions	<u>\$307,296,273</u>	<u>\$51,564,081</u>
Deductions		
Benefits	74,826,404	80,157,222
Other Benefits (Ventura)	0	0
Refunds	1,906,153	1,832,811
Administrative Costs	2,037,167	2,144,748
Other Admin Costs (Ventura)	<u>0</u>	<u>0</u>
Total Deductions	<u>\$78,769,724</u>	<u>\$84,134,781</u>
Net increase (Decrease)	\$228,526,549	(\$32,570,700)
Net Assets Beginning of Year	\$1,190,219,397	\$1,418,745,946
Net Assets End of Year	\$1,418,745,946	\$1,386,175,246



2.4: Historical Returns

Year Ended June 30	Annualized Rate of Return	Annualized Rate of Return	Annualized Rate of Return	Increase in
	(Market Value)	(Actuarial Value)	(Valuation Assets)	CPI*
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%
Compounded 15 Year Average	5.5%	N/A	N/A	2.4%
Compounded 10 Year Average	5.1%	N/A	5.8%	2.5%
Compounded 5 Year Average	1.4%	4.0%	6.1%	2.0%

^{*} Based on All Urban Consumers - U.S. City Average, June indices.





Section 3:

Actuarial Computations



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

	Final Valuation
Active Fully Projected Liability	1,044,489,233
Active Entry Age Normal Accrued Liability	796,900,503
Inactive Fully Projected Liability	960,817,008
Total Fully Projected Liability	2,005,306,241
Total Actuarial Accrued Liability	1,757,717,511
Valuation Assets	1,372,046,240
Total Unfunded Actuarial Accrued Liability (UAAL)	385,671,271
Ceres / Other District UAAL	23,286,239
County UAAL	362,385,032
Projected Pay (Ceres / Other Districts)	13,443,396
Projected Pay (County)	208,097,612
Projected Pay (Total Current Members)	221,541,008
Total Normal Cost (% of Payroll)	14.22%
Employer Normal Cost	5.82%
Ceres / Other District UAAL Amortization	11.95%
County UAAL Amortization	12.02%
Ceres / Other District Employer Contribution	2,585,737
County Employer Contribution	36,925,174
Total Employer Contribution	39,510,911
Total Employer Cost (% Pay)	17.83%



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

	Final Valuation
Active Fully Projected Liability	1,084,875,385
Active Entry Age Normal Accrued Liability	827,767,943
Inactive Fully Projected Liability	1,060,945,261
Total Fully Projected Liability	2,145,820,646
Total Actuarial Accrued Liability	1,888,713,204
Valuation Assets	1,451,763,548
Total Unfunded Actuarial Accrued Liability (UAAL)	436,949,656
Ceres / Other District UAAL	30,692,540
County UAAL	406,257,116
Projected Pay (Ceres / Other Districts)	14,068,852
Projected Pay (County)	200,988,616
Projected Pay (Total Current Members)	215,057,468
Total Normal Cost (% of Payroll)	14.62%
Employer Normal Cost	5.88%
Ceres / Other District UAAL Amortization	14.89%
County UAAL Amortization	13.80%
Ceres Administrative Expense ³	1.08%
County / Other District Administrative Expense	0.97%
Ceres / Other District Employer Contribution	3,228,369
County Employer Contribution	41,342,794
Total Employer Contribution	44,571,163
Total Employer Cost (% Pay)	20.73%

³ The administrative expense load (\$2.1M for the current year) has been allocated between the various valuation groups based on their share of the total employer cost.



3.3: Computation of Funding Ratios as of June 30, 2012

	Portion of Accrued Liabilities Covered by Valuation Assets							
Valuation Date	(1) Active Member Contributions	(2) Retirees and Beneficiaries	(3) Active and Terminated Members	Actuarial Accrued Liabilities	Valuation Assets	(1)	(2)	(3)
6/30/2003	\$176,622,000	\$455,784,000	\$325,689,000	\$958,095,000	\$928,022,000	100%	100%	91%
6/30/2004	\$166,806,000	\$518,922,000	\$349,617,000	\$1,035,345,000	\$993,180,000	100%	100%	88%
6/30/2005	\$205,556,000	\$551,810,000	\$358,994,000	\$1,116,310,000	\$1,049,691,000	100%	100%	81%
6/30/2006	\$219,907,000	\$619,109,000	\$355,888,000	\$1,194,904,000	\$1,154,048,000	100%	100%	89%
6/30/20064	\$219,907,000	\$614,576,000	\$494,892,000	\$1,329,375,000	\$1,154,048,000	100%	100%	65%
6/30/2008	\$272,657,000	\$739,838,000	\$536,329,000	\$1,548,824,000	\$1,267,167,000	100%	100%	47%
6/30/2008 ⁵	\$272,657,000	\$739,838,000	\$536,329,000	\$1,548,824,000	\$1,317,167,000	100%	100%	57%
6/30/2009	\$298,342,000	\$781,082,000	\$574,292,000	\$1,653,716,000	\$1,171,767,000	100%	100%	16%
6/30/2010	\$323,940,000	\$829,323,000	\$584,561,000	\$1,737,824,000	\$1,325,801,000	100%	100%	30%
6/30/2011	\$337,201,000	\$897,384,000	\$523,133,000	\$1,757,718,000	\$1,372,046,000	100%	100%	26%
6/30/2012	\$351,569,000	\$987,546,000	\$549,598,000	\$1,888,713,000	\$1,451,764,000	100%	100%	20%

⁴ Results recalculated, reflecting Level 1 assumption changes (new retirement, termination and withdrawal decrements) & new EFI EAN methodology.



⁵ Reflects transfer as of June 30, 2008 of \$50 million from Non-Valuation to Valuation Reserves.

3.4: Actuarial Analysis of Financial Experience

Valuation Date	Asset Sources	Liability Sources	Total	Changes in Plan Provisions	Changes in Assumptions / Methods
6/30/2003	\$33,037,561	\$9,931,697	\$42,969,258	\$0	(\$2,088,246)
6/30/2004	\$8,536,049	\$12,492,070	\$21,028,119	\$0	\$0
6/30/2005	\$26,573,640	\$11,238,430	\$37,812,070	\$0	\$0
6/30/2006	(\$27,756,878)	\$21,366,204	\$21,366,204	\$0	(\$14,845,293)
6/30/2007 ⁶	\$86,178,774	\$0	\$86,178,774	\$0	\$134,470,779
6/30/2008	(\$50,709,169)	\$67,324,195	\$67,324,195	\$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	\$37,492,978	\$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 Actuarial valuation was not performed for fiscal year ending June 30, 2007

3.5: Detailed Calculation of Costs as of June 30, 2012 - By Class and Tier

General Tiers				<u>Safety Tiers</u>							
Tier:	1	2	3	4	5	4	5	2/6	General	Safety	Total
Total PVB	193,889,070	68,213,675	3,505,613	300,471,690	1,021,914,986	158,785,193	371,158,259	27,882,160	1,587,995,034	557,825,612	2,145,820,646
Total AAL	193,888,987	54,997,730	3,373,293	299,475,983	852,477,792	158,752,932	301,865,545	23,880,942	1,404,213,785	484,499,419	1,888,713,204
Assets									1,087,516,975	364,246,573	1,451,763,548
Total UAL									316,696,810	120,252,846	436,949,656
Ceres/Other UAL									12,369,353	18,323,188	30,692,540
County UAL									304,327,458	101,929,658	406,257,116
PV Payroll	26,717	96,333,499	6,011,062	18,289,140	1,271,146,734	653,744	327,088,309	16,477,723	1,391,807,154	344,219,776	1,736,026,930
PVFNC	83	13,215,945	132,320	995,707	169,437,194	32,261	69,292,714	4,001,218	183,781,249	73,326,193	257,107,442
Total NC	0.31%	13.72%	2.20%	5.44%	13.33%	4.93%	21.18%	24.28%	13.08%	21.21%	14.62%
Ceres Pay	27,733	188,503	-	180,087	6,726,620	129,584	6,816,325	-	7,122,943	6,945,909	14,068,852
Ceres PVPay	26,717	1,626,191	-	869,845	56,357,670	342,824	60,862,806	-	58,880,424	61,205,630	120,086,054
Ceres UAL Pmt									844,465	1,250,938	2,095,403
Ceres UAL %									11.86%	18.01%	14.89%
Ceres Admin Exp	0.60%	0.91%	0.00%	0.86%	0.84%	1.13%	1.33%	0.00%	0.85%	1.32%	1.08%
Ceres Total Rate	12.77%	26.49%	0.00%	18.16%	26.03%	24.08%	40.52%	0.00%	25.79%	40.21%	32.91%
Ceres PVEECont	-	115,231	-	-	4,572,822	-	7,525,146	-	4,688,053	7,525,146	12,213,199
Ceres EECont	0.00%	7.09%	0.00%	0.00%	8.11%	0.00%	12.36%	0.00%	7.85%	12.13%	9.96%
Ceres ER Cont	12.77%	19.40%	0.00%	18.16%	17.92%	24.08%	28.16%	0.00%	17.94%	28.08%	22.95%
Ceres ER Cont	3,541	36,575	-	32,695	1,205,087	31,203	1,919,268	-	1,277,898	1,950,471	3,228,369
County Pay	-	9,432,370	846,481	4,531,961	152,346,984	124,766	32,092,425	1,613,629	167,157,796	33,830,820	200,988,616
County PVPay	-	94,707,309	6,011,062	17,419,295	1,214,789,064	310,920	266,225,504	16,477,723	1,332,926,730	283,014,146	1,615,940,876
County UAL Pmt									20,776,662	6,958,814	27,735,476
County UAL %									12.43%	20.57%	13.80%
County Admin Exp	0.00%	0.94%	0.72%	0.84%	0.87%	1.08%	1.46%	1.63%	0.87%	1.46%	0.97%
County Total Rate	0.00%	27.09%	15.35%	18.72%	26.63%	26.58%	43.21%	46.48%	26.38%	43.30%	29.23%
County PVEECont	-	6,814,477	-	140,870	99,989,760	11,599	32,791,680	1,950,955	106,945,107	34,754,234	141,699,341
County EECont	0.00%	7.20%	0.00%	0.81%	8.23%	3.73%	12.32%	11.84%	7.93%	12.26%	8.66%
County ER Cont	0.00%	19.89%	15.35%	17.91%	18.39%	22.85%	30.89%	34.64%	18.45%	31.04%	20.57%
County ER Cont	-	1,876,113	129,969	811,615	28,023,428	28,509	9,914,127	559,032	30,841,126	10,501,668	41,342,795
Total ER											
Contribution	3,541	1,912,688	129,969	844,311	29,228,515	59,712	11,833,395	559,032	32,119,024	12,452,139	44,571,163
Total ER Rate	12.77%	19.88%	15.35%	17.92%	18.37%	23.48%	30.41%	34.64%	18.43%	30.54%	20.73%



3.6: Actuarial Balance Sheet

	Assets	
1.	Actuarial value of assets	\$1,474,639,000
2.	Present value of future contributions by members	153,912,000
3.	Present value of future employer contributions for normal cost	103,195,000
4.	Present value of other future employer contributions (UAAL)	436,950,000
5.	Total actuarial assets	\$2,168,696,000
	Liabilities	
6.	Present value of retirement allowances payable to retired/disabled members and their survivors	\$987,546,000
7.	Present value of service retirement allowances payable to presently active members and their survivors	980,808,000
8.	Present value of allowances payable to current and future vested terminated and their survivors	90,574,000
9.	Present value of disability retirement allowances payable to presently active members and their survivors	60,027,000
10.	Present value of death benefits payable on behalf of presently active members	18,986,000
11.	Present value of members' contributions to be returned upon withdrawal	7,879,000
12.	Special Reserves (Actuarial Value)	22,876,000
13.	Total actuarial liabilities	\$2,168,696,000



Section 4:

Disclosure Information



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

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

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

Actuarial Valuation Date	Valuation Assets ⁷	Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability	Funded Ratio	Covered Payroll	Unfunded Liability as a Percent of Payroll
6/30/2000	679,421	666,114	(13,307)	102.0%	157,010	(8.5%)
6/30/2001	784,114	781,495	(2,619)	100.3%	174,595	(1.5%)
6/30/2002	878,821	870,768	(8,053)	100.9%	196,471	(4.1%)
6/30/2003	937,797	958,095	20,298	97.9%	197,664	10.3%
6/30/2004	993,180	1,035,345	42,165	95.9%	199,963	21.1%
6/30/2005	1,049,691	1,116,310	66,619	94.0%	211,681	31.5%
6/30/2006	1,154,048	1,194,904	40,856	96.6%	219,768	18.6%
6/30/2006 (Rev)	1,154,048	1,329,375 ⁸	175,327	86.8%	212,011	82.7%
6/30/2008	1,317,167 ⁹	1,548,824	231,657	85.0%	242,009	95.7%
6/30/2009	1,171,767	1,653,716	481,949	70.9%	248,316	194.1%
6/30/2010	1,325,801	1,737,824	412,023	76.3%	231,538	178.0%
6/30/2011	1,372,046	1,757,717	385,671	78.1%	221,541	174.1%
6/30/2012	1,451,764	1,888,713	436,950	76.9%	215,057	203.2%

⁹ Includes \$50 million transferred from Non-Valuation to Valuation Reserves as of 6/30/2008.



⁷ Excludes value of non-valuation reserves.

⁸ The Accrued Liability as of June 30, 2006 was recomputed to reflect the change in Actuary and in the retirement, termination and refund assumptions.

Schedule of Employer Contributions (Dollar Amounts in Thousands)						
Year Ending	Annual Required Contribution	Actual Contribution	Percentage Contributed			
6/30/2000	5,899	5,899	100%			
6/30/2001	7,509	7,509	100%			
6/30/2002	11,341	11,341	100%			
6/30/2003	16,208	16,208	100%			
6/30/2004	17,114	17,114	100%			
6/30/2005	19,793	19,793	100%			
6/30/2006	22,549	22,549	100%			
6/30/2007	32,563	32,563	100%			
6/30/2008	22,555	22,555	100%			
6/30/2009	23,411	23,411	100%			
6/30/2010	31,814	31,814 ¹⁰	100%			
6/30/2011	47,657	47,657 ¹¹	100%			
6/30/2012	41,614	41,614 ¹²	100%			

 $^{^{12}}$ The Actual Contribution was comprised of a \$27,314,032 payment by the employers, plus an additional \$14,300,000 in assets transferred from the non-valuation to valuation reserves.



¹⁰ The Actual Contribution was comprised of a \$21,814,194 payment by the employers, plus an additional \$10,000,000 in assets transferred from the non-valuation to valuation reserves.

¹¹ The Actual Contribution was comprised of a \$26,256,729 payment by the employers, plus an additional \$21,400,000 in assets transferred from the non-valuation to valuation reserves.

The table below summarizes certain information about this actuarial report.

Valuation date June 30, 2012

Actuarial cost method Entry Age Normal to Decrement

Aggregate Normal Cost

Amortization method Level % of Pay, Closed

Remaining amortization period 24 Years

Asset valuation method Actuarial value: Excess earnings smoothed over five

years, 80%/120% corridor around market

Actuarial assumptions:

Mortality improvement

Investment rate of return* 7.75%

Projected salary increases* 3.50%, plus service-based rates

*Includes inflation at 3.25%

Cost of living adjustments 100% of CPI up to 3% annually with banking, 2.7%

annual increases assumed

No mortality improvement is explicitly assumed; however we build a margin in our mortality assumption between the actual and expected number of deaths in order to assume some future mortality improvements. The experience study report for the period covering July 1, 2009 to June 30, 2012 contains a full description of these margins.



Appendix I:

Employer Contribution Rates



Employer Contribution Rates for County / Former County Members

Separate rates for General and Safety members by Tier are shown below.

		<u>General</u>				<u>Safety</u>		
	Tier 1	Tier 2	Tier 3	Tier 4	Tier 5	Tier 2	Tier 4	Tier 5
Employer Normal Cost	N/A	6.52%	2.20%	4.64%	5.09%	12.44%	1.20%	8.86%
UAAL Amortization Cost	N/A	12.43%	12.43%	12.43%	12.43%	20.57%	20.57%	20.57%
Administrative Expense	N/A	0.94%	0.72%	0.84%	0.87%	1.63%	1.08%	1.46%
Total Cost	N/A	19.89%	15.35%	17.91%	18.39%	34.64%	22.85%	30.89%

Employer Contribution Rates for Ceres / Other District Members

	<u>General</u>					<u>Safety</u>		
	Tier 1	Tier 2	Tier 3	Tier 4	Tier 5	Tier 2	Tier 4	Tier 5
Employer Normal Cost	0.31%	6.63%	N/A	5.44%	5.22%	N/A	4.94%	8.82%
UAAL Amortization Cost	11.86%	11.86%	N/A	11.86%	11.86%	N/A	18.01%	18.01%
Administrative Expense	0.60%	0.91%	N/A	0.86%	0.84%	N/A	1.13%	1.33%
Total Cost	12.77%	19.40%	N/A	18.16%	17.92%	N/A	24.08%	28.16%



Appendix II:

Employee Contribution Rates



Employee 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 an experience study. The current employee contribution rates are shown in the following tables.

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

For the current valuation, we included the value of the expected cost of providing a COLA benefit to an eligible surviving spouse when determining the member's contribution to fund the COLA. To do so, we added an assumption that Service Retirement and Nonservice-Connected Disability benefits will have a 60% continuance to the surviving spouse, and Service-Connected Disability benefits will have a 100% continuance to the surviving spouse. 50% of female members and 90% of male members are assumed to be married at retirement, and male spouses are assumed to be three years older than their wives, consistent with the valuation assumptions.



General Tier 1 Employee Contribution Rates

	Basic	Basic	COL	COL
Entry Age	First \$350	Over \$350	First \$350	Over \$350
16	2.08%	3.12%	1.14%	1.71%
17	2.08%	3.12%	1.14%	1.71%
18	2.08%	3.12%	1.14%	1.71%
19	2.08%	3.12%	1.14%	1.71%
20	2.08%	3.12%	1.14%	1.71%
21	2.10%	3.15%	1.16%	1.74%
22	2.12%	3.18%	1.18%	1.77%
23	2.14%	3.21%	1.20%	1.80%
24	2.16%	3.24%	1.22%	1.83%
25	2.17%	3.26%	1.24%	1.86%
26	2.19%	3.28%	1.26%	1.89%
27	2.20%	3.30%	1.28%	1.92%
28	2.21%	3.31%	1.30%	1.95%
29	2.22%	3.32%	1.32%	1.99%
30	2.22%	3.33%	1.35%	2.02%
31	2.27%	3.41%	1.37%	2.05%
32 33	2.32%	3.48% 3.56%	1.39% 1.42%	2.09% 2.13%
34	2.37% 2.43%	3.64%	1.45%	2.13%
35	2.48%	3.73%	1.48%	2.21%
36	2.54%	3.81%	1.50%	2.25%
37	2.60%	3.90%	1.53%	2.30%
38	2.66%	3.99%	1.56%	2.34%
39	2.72%	4.08%	1.59%	2.39%
40	2.77%	4.16%	1.62%	2.43%
41	2.73%	4.09%	1.64%	2.46%
42	2.78%	4.17%	1.67%	2.50%
43	2.83%	4.25%	1.69%	2.53%
44	2.89%	4.33%	1.71%	2.56%
45	2.94%	4.42%	1.73%	2.59%
46	3.00%	4.51%	1.75%	2.62%
47	3.07%	4.60%	1.76%	2.64%
48	3.13%	4.70%	1.77%	2.66%
49	3.20%	4.80%	1.78%	2.67%
50	3.24%	4.86%	1.78%	2.68%
51	3.29%	4.93%	1.77%	2.66%
52	3.33%	5.00%	1.75%	2.63%
53 54	3.39%	5.08%	1.69%	2.54% 2.47%
54 55	3.44% 3.45%	5.17%	1.65%	2.41%
56	3.45%	5.17% 5.17%	1.61% 1.53%	2.41%
57	3.45%	5.17%	1.48%	2.23%
58	3.45%	5.18%	1.44%	2.16%
59+	3.45%	5.18%	1.41%	2.11%
JJT	3.43/0	J.10/0	1.41/0	2.11/0



General Tier 2 Employee Contribution Rates

	Basic	Basic	COL	COL
Entry Age	First \$350	Over \$350	First \$350	Over \$350
16	3.26%	4.89%	0.93%	1.40%
17	3.26%	4.89%	0.93%	1.40%
18	3.26%	4.89%	0.93%	1.40%
19	3.26%	4.89%	0.93%	1.40%
20	3.26%	4.89%	0.93%	1.40%
21	3.29%	4.94%	0.94%	1.42%
22	3.32%	4.99%	0.96%	1.44%
23	3.35%	5.03%	0.97%	1.46%
24	3.38%	5.07%	0.99%	1.48%
25	3.40%	5.11%	1.00%	1.50%
26	3.43%	5.14%	1.01%	1.52%
27	3.44%	5.17%	1.03%	1.54%
28	3.46%	5.19%	1.05%	1.57%
29 30	3.47%	5.21%	1.06%	1.59%
	3.48%	5.22%	1.08%	1.62%
31 32	3.56% 3.64%	5.34% 5.46%	1.10% 1.12%	1.65% 1.68%
33	3.72%	5.58%	1.12%	1.71%
34	3.81%	5.71%	1.14%	1.71%
35	3.89%	5.84%	1.18%	1.74%
36	3.98%	5.97%	1.21%	1.81%
37	4.07%	6.11%	1.23%	1.85%
38	4.16%	6.24%	1.26%	1.88%
39	4.24%	6.37%	1.28%	1.92%
40	4.32%	6.48%	1.30%	1.96%
41	4.35%	6.53%	1.32%	1.99%
42	4.44%	6.65%	1.34%	2.02%
43	4.52%	6.78%	1.36%	2.05%
44	4.61%	6.91%	1.38%	2.07%
45	4.70%	7.05%	1.40%	2.09%
46	4.79%	7.19%	1.41%	2.12%
47	4.89%	7.34%	1.43%	2.14%
48	4.98%	7.47%	1.44%	2.16%
49	5.06%	7.58%	1.45%	2.18%
50	5.12%	7.68%	1.46%	2.19%
51	5.19%	7.79%	1.46%	2.19%
52	5.27%	7.90%	1.46%	2.19%
53	5.32%	7.98%	1.45%	2.17%
54	5.34%	8.01%	1.43%	2.14%
55 56	5.35%	8.02% 8.02%	1.40% 1.34%	2.10% 2.00%
56	5.35% 5.35%	8.02%	1.34%	1.94%
58	5.55%	8.32%	1.26%	1.89%
59+	5.76%	8.63%	1.23%	1.85%
⊃ " †	J./0%	0.05%	1.25%	1.03%



General Tier 4 Employee Contribution Rates

	Basic	Basic	COL	COL
Entry Age	First \$350	Over \$350	First \$350	Over \$350
16	1.93%	2.90%	1.21%	1.81%
17	1.93%	2.90%	1.21%	1.81%
18	1.93%	2.90%	1.21%	1.81%
19	1.93%	2.90%	1.21%	1.81%
20	1.93%	2.90%	1.21%	1.81%
21	1.94%	2.91%	1.23%	1.84%
22	1.95%	2.93%	1.25%	1.88%
23	1.96%	2.94%	1.27%	1.91%
24	1.97%	2.95%	1.29%	1.94%
25	1.97%	2.96%	1.32%	1.97%
26	2.02%	3.03%	1.34%	2.00%
27	2.06%	3.10%	1.36%	2.04%
28	2.11%	3.17%	1.38%	2.07%
29	2.16%	3.24%	1.40%	2.10%
30	2.21%	3.31%	1.42%	2.14%
31	2.26%	3.39%	1.45%	2.17%
32	2.31%	3.47%	1.47%	2.21%
33	2.36%	3.55%	1.50%	2.25%
34	2.42%	3.63%	1.53%	2.29%
35	2.46%	3.70%	1.56%	2.33%
36	2.43%	3.64%	1.58%	2.38%
37	2.47%	3.71%	1.61%	2.42%
38	2.52%	3.78%	1.64%	2.46%
39	2.57%	3.85%	1.67%	2.51%
40	2.62%	3.93%	1.70%	2.55%
41	2.67%	4.00%	1.72%	2.58%
42	2.72%	4.09%	1.74%	2.62%
43	2.78%	4.17%	1.76%	2.65%
44	2.84%	4.27%	1.78%	2.67%
45	2.88%	4.32%	1.80%	2.70%
46	2.92%	4.38%	1.81%	2.71%
47	2.96%	4.44%	1.81%	2.72%
48	3.01%	4.51%	1.82%	2.73%
49	3.06%	4.59%	1.82%	2.73%
50	3.06%	4.59%	1.81%	2.72%
51	3.06%	4.60%	1.79%	2.69%
52	3.07%	4.60%	1.77%	2.65%
53	3.07%	4.60%	1.70%	2.56%
54+	3.07%	4.60%	1.66%	2.49%



General Tier 5 Employee Contribution Rates

	Basic	Basic	COL	COL
Entry Age	First \$350	Over \$350	First \$350	Over \$350
16	3.86%	5.79%	1.21%	1.81%
17	3.86%	5.79%	1.21%	1.81%
18	3.86%	5.79%	1.21%	1.81%
19	3.86%	5.79%	1.21%	1.81%
20	3.86%	5.79%	1.21%	1.81%
21	3.89%	5.83%	1.23%	1.84%
22	3.91%	5.86%	1.25%	1.88%
23	3.92%	5.89%	1.27%	1.91%
24	3.94%	5.91%	1.29%	1.94%
25	3.95%	5.92%	1.32%	1.97%
26	4.04%	6.06%	1.34%	2.00%
27	4.13%	6.19%	1.36%	2.04%
28	4.22%	6.33%	1.38%	2.07%
29	4.32%	6.48%	1.40%	2.10%
30	4.42%	6.62%	1.42%	2.14%
31	4.52%	6.77%	1.45%	2.17%
32	4.62%	6.93%	1.47%	2.21%
33	4.73%	7.09%	1.50%	2.25%
34	4.84%	7.26%	1.53%	2.29%
35	4.93%	7.39%	1.56%	2.33%
36	4.85%	7.28%	1.58%	2.38%
37	4.94%	7.41%	1.61%	2.42%
38	5.04%	7.55%	1.64%	2.46%
39	5.13%	7.70%	1.67%	2.51%
40	5.23%	7.85%	1.70%	2.55%
41	5.34%	8.01%	1.72%	2.58%
42	5.45%	8.17%	1.74%	2.62%
43	5.56%	8.35%	1.76%	2.65%
44	5.69%	8.53%	1.78%	2.67%
45	5.76%	8.64%	1.80%	2.70%
46	5.84%	8.76%	1.81%	2.71%
47	5.93%	8.89%	1.81%	2.72%
48	6.02%	9.03%	1.82%	2.73%
49	6.12%	9.18%	1.82%	2.73%
50	6.13%	9.19%	1.81%	2.72%
51	6.13%	9.19%	1.79%	2.69%
52	6.13%	9.20%	1.77%	2.65%
53	6.14%	9.20%	1.70%	2.56%
54+	6.14%	9.21%	1.66%	2.49%



Safety Tier 2 **Employee Contribution Rates**

	Basic	Basic	COL	COL
Entry Age	First \$350	Over \$350	First \$350	Over \$350
20	4.83%	7.24%	2.05%	3.08%
21	4.92%	7.38%	2.11%	3.17%
22	5.01%	7.51%	2.16%	3.23%
23	5.10%	7.65%	2.20%	3.30%
24	5.20%	7.79%	2.24%	3.35%
25	5.29%	7.94%	2.28%	3.41%
26	5.39%	8.09%	2.32%	3.47%
27	5.49%	8.24%	2.36%	3.53%
28	5.60%	8.39%	2.40%	3.60%
29	5.70%	8.55%	2.44%	3.66%
30	5.81%	8.71%	2.48%	3.72%
31	5.87%	8.81%	2.53%	3.80%
32	5.99%	8.98%	2.58%	3.87%
33	6.10%	9.15%	2.63%	3.95%
34	6.22%	9.34%	2.69%	4.03%
35	6.35%	9.53%	2.74%	4.11%
36	6.48%	9.72%	2.80%	4.20%
37	6.62%	9.93%	2.85%	4.28%
38	6.75%	10.12%	2.91%	4.37%
39	6.86%	10.29%	2.97%	4.45%
40	6.96%	10.45%	3.03%	4.55%
41	7.07%	10.61%	3.08%	4.62%
42	7.20%	10.79%	3.12%	4.69%
43	7.29%	10.93%	3.16%	4.74%
44	7.33%	11.00%	3.19%	4.78%
45	7.32%	10.97%	3.20%	4.80%
46	7.26%	10.88%	3.21%	4.82%
47	7.15%	10.73%	3.23%	4.85%
48	7.41%	11.11%	3.24%	4.86%
49+	7.68%	11.52%	3.23%	4.84%



Safety Tier 4 **Employee Contribution Rates**

	Basic	Basic	COL	COL
Entry Age	First \$350	Over \$350	First \$350	Over \$350
20	2.56%	3.85%	2.68%	4.02%
21	2.61%	3.92%	2.76%	4.14%
22	2.66%	3.99%	2.81%	4.21%
23	2.71%	4.06%	2.86%	4.28%
24	2.76%	4.14%	2.90%	4.35%
25	2.81%	4.22%	2.94%	4.41%
26	2.86%	4.29%	2.98%	4.47%
27	2.92%	4.37%	3.01%	4.52%
28	2.97%	4.46%	3.05%	4.57%
29	3.03%	4.54%	3.08%	4.62%
30	3.08%	4.63%	3.11%	4.66%
31	3.07%	4.60%	3.16%	4.73%
32	3.13%	4.69%	3.21%	4.81%
33	3.19%	4.78%	3.26%	4.90%
34	3.25%	4.88%	3.32%	4.98%
35	3.32%	4.98%	3.38%	5.07%
36	3.39%	5.08%	3.45%	5.17%
37	3.46%	5.19%	3.51%	5.27%
38	3.54%	5.30%	3.57%	5.36%
39	3.62%	5.43%	3.64%	5.46%
40	3.67%	5.51%	3.71%	5.57%
41	3.73%	5.60%	3.70%	5.56%
42	3.79%	5.69%	3.70%	5.56%
43	3.87%	5.80%	3.71%	5.56%
44	3.95%	5.93%	3.71%	5.57%
45	3.98%	5.97%	3.71%	5.57%
46	3.98%	5.97%	3.72%	5.59%
47	3.96%	5.94%	3.74%	5.61%
48	3.91%	5.86%	3.75%	5.62%
49+	3.84%	5.76%	3.74%	5.60%



Safety Tier 5 Employee Contribution Rates

	Basic	Basic	COL	COL
Entry Age	First \$350	Over \$350	First \$350	Over \$350
20	5.13%	7.69%	2.68%	4.02%
21	5.22%	7.83%	2.76%	4.14%
22	5.32%	7.98%	2.81%	4.21%
23	5.42%	8.13%	2.86%	4.28%
24	5.52%	8.28%	2.90%	4.35%
25	5.62%	8.43%	2.94%	4.41%
26	5.73%	8.59%	2.98%	4.47%
27	5.83%	8.75%	3.01%	4.52%
28	5.94%	8.91%	3.05%	4.57%
29	6.05%	9.08%	3.08%	4.62%
30	6.17%	9.25%	3.11%	4.66%
31	6.13%	9.20%	3.16%	4.73%
32	6.25%	9.38%	3.21%	4.81%
33	6.38%	9.56%	3.26%	4.90%
34	6.50%	9.75%	3.32%	4.98%
35	6.63%	9.95%	3.38%	5.07%
36	6.77%	10.16%	3.45%	5.17%
37	6.92%	10.38%	3.51%	5.27%
38	7.07%	10.61%	3.57%	5.36%
39	7.24%	10.86%	3.64%	5.46%
40	7.35%	11.02%	3.71%	5.57%
41	7.46%	11.19%	3.70%	5.56%
42	7.59%	11.38%	3.70%	5.56%
43	7.73%	11.60%	3.71%	5.56%
44	7.90%	11.85%	3.71%	5.57%
45	7.96%	11.93%	3.71%	5.57%
46	7.96%	11.94%	3.72%	5.59%
47	7.91%	11.87%	3.74%	5.61%
48	7.82%	11.73%	3.75%	5.62%
49+	7.68%	11.52%	3.74%	5.60%



Appendix III:

Prior Employee Contribution Rates



Employee Contribution Rates

Employee contribution rates vary by member Group and Tier. The rates were changed following an experience study. The prior employee contribution rates are shown in the following tables.

Rates in the prior valuation were determined by EFI based on an interest rate of 8.00% per annum, an average salary increase of 3.75% per year, and the Retired Pensioners (RP) 2000 tables published by the Society of Actuaries (projected from 2000 to 2020 using Scale AA) with no age adjustment. The rates were blended with a male/female weighting of 25% male / 75% female for General members, and 80% male / 20% female for Safety members.



General Tier 1 Prior Employee Contribution Rates

	Basic	Basic	COL	COL
Entry Age	First \$350	Over \$350	First \$350	Over \$350
16	2.04%	3.06%	1.02%	1.53%
17	2.04%	3.06%	1.02%	1.53%
18	2.04%	3.06%	1.02%	1.53%
19	2.04%	3.06%	1.02%	1.53%
20	2.04%	3.06%	1.02%	1.53%
21	2.06%	3.09%	1.03%	1.55%
22	2.08%	3.12%	1.05%	1.57%
23	2.10%	3.15%	1.06%	1.60%
24	2.12%	3.17%	1.08%	1.62%
25	2.13%	3.20%	1.10%	1.64%
26	2.14%	3.22%	1.11%	1.67%
27	2.16%	3.23%	1.13%	1.69%
28	2.17%	3.25%	1.15%	1.72%
29	2.17%	3.26%	1.16%	1.75%
30	2.18%	3.27%	1.18%	1.77%
31	2.23%	3.34%	1.20%	1.80%
32	2.28%	3.41%	1.22%	1.84%
33	2.33%	3.49%	1.25%	1.87%
34	2.38%	3.57%	1.27%	1.91%
35	2.43%	3.65%	1.30%	1.95%
36	2.49%	3.74%	1.33%	1.99%
37	2.55%	3.82%	1.36%	2.04%
38	2.61%	3.91%	1.39%	2.08%
39	2.67%	4.00%	1.42%	2.13%
40	2.72%	4.07%	1.45%	2.18%
41	2.67%	4.01%	1.47%	2.21%
42	2.72%	4.09%	1.49%	2.24%
43	2.78%	4.16%	1.51%	2.27%
44	2.83%	4.24%	1.53%	2.29%
45	2.88%	4.33%	1.55%	2.32%
46	2.94%	4.41%	1.56%	2.34%
47	3.00%	4.50%	1.57%	2.36%
48	3.07%	4.60%	1.58%	2.38%
49	3.13%	4.70%	1.59%	2.39%
50	3.17%	4.76%	1.59%	2.39%
51	3.22%	4.83%	1.58%	2.37%
52	3.26%	4.90%	1.56%	2.34%
53	3.32%	4.97%	1.51%	2.26%
54	3.37%	5.06%	1.47%	2.20%
55	3.37%	5.06%	1.43%	2.15%
56	3.38%	5.06%	1.36%	2.05%
57	3.38%	5.07%	1.32%	1.98%
58	3.38%	5.07%	1.28%	1.92%
59+	3.38%	5.07%	1.25%	1.87%



General Tier 2 Prior Employee Contribution Rates

	Basic	Basic	COL	COL
Entry Age	First \$350	Over \$350	First \$350	Over \$350
16	3.19%	4.79%	0.83%	1.25%
17	3.19%	4.79%	0.83%	1.25%
18	3.19%	4.79%	0.83%	1.25%
19	3.19%	4.79%	0.83%	1.25%
20	3.19%	4.79%	0.83%	1.25%
21	3.23%	4.84%	0.84%	1.26%
22	3.25%	4.88%	0.85%	1.28%
23	3.28%	4.92%	0.86%	1.29%
24	3.31%	4.96%	0.87%	1.31%
25	3.33%	5.00%	0.88%	1.32%
26	3.35%	5.03%	0.89%	1.34%
27	3.37%	5.05%	0.91%	1.36%
28	3.38%	5.08%	0.92%	1.38%
29	3.40%	5.09%	0.93%	1.40%
30	3.40%	5.11%	0.95%	1.42%
31	3.48%	5.22%	0.96%	1.45%
32	3.56%	5.34%	0.98%	1.47%
33	3.64%	5.46%	1.00%	1.50%
34	3.72%	5.58%	1.02%	1.53%
35	3.81%	5.71%	1.04%	1.56%
36	3.89%	5.84%	1.07%	1.60%
37	3.98%	5.97%	1.09%	1.64%
38	4.07%	6.10%	1.12%	1.67%
39	4.15%	6.22%	1.14%	1.71%
40	4.23%	6.34%	1.17%	1.75%
41	4.26%	6.38%	1.19%	1.78%
42	4.34%	6.50%	1.20%	1.81%
43	4.42%	6.63%	1.22%	1.83%
44	4.50%	6.76%	1.23%	1.85%
45	4.59%	6.89%	1.25%	1.87%
46	4.68%	7.02%	1.26%	1.89%
47	4.78%	7.17%	1.27%	1.91%
48	4.87%	7.30%	1.28%	1.93%
49	4.94%	7.41%	1.29%	1.94%
50	5.01%	7.51%	1.30%	1.95%
51	5.07%	7.61%	1.30%	1.95%
52	5.15%	7.72%	1.30%	1.95%
53	5.20%	7.79%	1.29%	1.93%
54	5.22%	7.83%	1.27%	1.90%
55	5.22%	7.83%	1.24%	1.87%
56	5.22%	7.84%	1.19%	1.78%
57	5.23%	7.84%	1.15%	1.73%
58	5.43%	8.14%	1.12%	1.68%
59+	5.63%	8.45%	1.09%	1.64%



General Tier 4 Prior Employee Contribution Rates

	Basic	Basic	COL	COL
Entry Age	First \$350	Over \$350	First \$350	Over \$350
16	1.89%	2.84%	1.08%	1.62%
17	1.89%	2.84%	1.08%	1.62%
18	1.89%	2.84%	1.08%	1.62%
19	1.89%	2.84%	1.08%	1.62%
20	1.89%	2.84%	1.08%	1.62%
21	1.90%	2.85%	1.10%	1.64%
22	1.91%	2.87%	1.11%	1.67%
23	1.92%	2.88%	1.13%	1.69%
24	1.93%	2.89%	1.15%	1.72%
25	1.93%	2.90%	1.16%	1.74%
26	1.98%	2.96%	1.18%	1.77%
27	2.02%	3.03%	1.20%	1.79%
28	2.07%	3.10%	1.21%	1.82%
29	2.11%	3.17%	1.23%	1.85%
30	2.16%	3.24%	1.25%	1.88%
31	2.21%	3.31%	1.27%	1.91%
32	2.26%	3.39%	1.29%	1.94%
33	2.31%	3.47%	1.32%	1.98%
34	2.37%	3.55%	1.34%	2.01%
35	2.41%	3.62%	1.37%	2.05%
36	2.37%	3.56%	1.40%	2.10%
37	2.42%	3.63%	1.43%	2.14%
38	2.46%	3.69%	1.46%	2.19%
39	2.51%	3.77%	1.49%	2.24%
40	2.56%	3.84%	1.52%	2.28%
41	2.61%	3.92%	1.54%	2.31%
42	2.66%	4.00%	1.56%	2.34%
43	2.72%	4.08%	1.58%	2.37%
44	2.78%	4.17%	1.59%	2.39%
45	2.82%	4.23%	1.61%	2.41%
46	2.86%	4.28%	1.62%	2.42%
47	2.90%	4.35%	1.62%	2.43%
48	2.94%	4.41%	1.63%	2.44%
49	2.99%	4.49%	1.62%	2.44%
50	2.99%	4.49%	1.62%	2.42%
51	3.00%	4.49%	1.60%	2.39%
52	3.00%	4.50%	1.57%	2.36%
53	3.00%	4.50%	1.52%	2.28%
54+	3.00%	4.50%	1.48%	2.21%



General Tier 5 Prior Employee Contribution Rates

	Basic	Basic	COL	COL
Entry Age	First \$350	Over \$350	First \$350	Over \$350
16	3.78%	5.67%	1.08%	1.62%
17	3.78%	5.67%	1.08%	1.62%
18	3.78%	5.67%	1.08%	1.62%
19	3.78%	5.67%	1.08%	1.62%
20	3.78%	5.67%	1.08%	1.62%
21	3.80%	5.71%	1.10%	1.64%
22	3.83%	5.74%	1.11%	1.67%
23	3.84%	5.76%	1.13%	1.69%
24	3.85%	5.78%	1.15%	1.72%
25	3.86%	5.80%	1.16%	1.74%
26	3.95%	5.93%	1.18%	1.77%
27	4.04%	6.06%	1.20%	1.79%
28	4.13%	6.20%	1.21%	1.82%
29	4.22%	6.34%	1.23%	1.85%
30	4.32%	6.48%	1.25%	1.88%
31	4.42%	6.63%	1.27%	1.91%
32	4.52%	6.78%	1.29%	1.94%
33	4.62%	6.94%	1.32%	1.98%
34	4.73%	7.10%	1.34%	2.01%
35	4.82%	7.23%	1.37%	2.05%
36	4.74%	7.12%	1.40%	2.10%
37	4.83%	7.25%	1.43%	2.14%
38	4.93%	7.39%	1.46%	2.19%
39	5.02%	7.53%	1.49%	2.24%
40	5.12%	7.68%	1.52%	2.28%
41	5.22%	7.83%	1.54%	2.31%
42	5.33%	7.99%	1.56%	2.34%
43	5.44%	8.16%	1.58%	2.37%
44	5.56%	8.34%	1.59%	2.39%
45	5.63%	8.45%	1.61%	2.41%
46	5.71%	8.57%	1.62%	2.42%
47	5.79%	8.69%	1.62%	2.43%
48	5.88%	8.83%	1.63%	2.44%
49	5.99%	8.98%	1.62%	2.44%
50	5.99%	8.98%	1.62%	2.42%
51	5.99%	8.99%	1.60%	2.39%
52	5.99%	8.99%	1.57%	2.36%
53	6.00%	8.99%	1.52%	2.28%
54+	6.00%	9.00%	1.48%	2.21%



Safety Tier 2 **Prior Employee Contribution Rates**

	Basic	Basic	COL	COL
Entry Age	First \$350	Over \$350	First \$350	Over \$350
20	4.69%	7.03%	1.70%	2.55%
21	4.77%	7.16%	1.73%	2.59%
22	4.86%	7.29%	1.77%	2.66%
23	4.95%	7.42%	1.81%	2.71%
24	5.04%	7.56%	1.83%	2.75%
25	5.13%	7.70%	1.86%	2.80%
26	5.23%	7.84%	1.89%	2.84%
27	5.33%	7.99%	1.92%	2.89%
28	5.43%	8.14%	1.96%	2.93%
29	5.53%	8.29%	1.99%	2.98%
30	5.63%	8.45%	2.02%	3.03%
31	5.72%	8.58%	2.06%	3.09%
32	5.83%	8.75%	2.10%	3.15%
33	5.95%	8.92%	2.14%	3.21%
34	6.07%	9.10%	2.19%	3.28%
35	6.19%	9.28%	2.23%	3.35%
36	6.32%	9.48%	2.28%	3.42%
37	6.45%	9.68%	2.33%	3.49%
38	6.58%	9.86%	2.38%	3.56%
39	6.69%	10.03%	2.43%	3.64%
40	6.78%	10.18%	2.48%	3.72%
41	6.89%	10.34%	2.51%	3.77%
42	7.01%	10.51%	2.55%	3.82%
43	7.10%	10.65%	2.57%	3.86%
44	7.14%	10.71%	2.59%	3.88%
45	7.13%	10.69%	2.59%	3.89%
46	7.07%	10.60%	2.55%	3.83%
47	6.96%	10.45%	2.52%	3.78%
48	7.22%	10.83%	2.49%	3.74%
49+	7.49%	11.24%	2.47%	3.70%



Safety Tier 4 **Prior Employee Contribution Rates**

	Basic	Basic	COL	COL
Entry Age	First \$350	Over \$350	First \$350	Over \$350
20	2.47%	3.70%	2.22%	3.32%
21	2.51%	3.77%	2.25%	3.38%
22	2.56%	3.84%	2.32%	3.48%
23	2.61%	3.91%	2.35%	3.53%
24	2.66%	3.99%	2.38%	3.58%
25	2.71%	4.06%	2.41%	3.62%
26	2.76%	4.13%	2.44%	3.66%
27	2.81%	4.21%	2.47%	3.70%
28	2.86%	4.29%	2.49%	3.73%
29	2.91%	4.37%	2.51%	3.77%
30	2.97%	4.45%	2.54%	3.81%
31	3.00%	4.49%	2.57%	3.85%
32	3.05%	4.58%	2.61%	3.92%
33	3.11%	4.67%	2.66%	3.99%
34	3.18%	4.76%	2.71%	4.07%
35	3.24%	4.86%	2.77%	4.15%
36	3.31%	4.96%	2.82%	4.23%
37	3.38%	5.07%	2.88%	4.31%
38	3.45%	5.18%	2.93%	4.40%
39	3.53%	5.30%	3.00%	4.49%
40	3.59%	5.38%	3.06%	4.59%
41	3.64%	5.46%	3.05%	4.57%
42	3.70%	5.56%	3.04%	4.56%
43	3.77%	5.66%	3.03%	4.55%
44	3.86%	5.78%	3.03%	4.55%
45	3.88%	5.82%	3.03%	4.54%
46	3.88%	5.83%	2.98%	4.47%
47	3.86%	5.79%	2.93%	4.40%
48	3.82%	5.72%	2.90%	4.35%
49+	3.75%	5.62%	2.87%	4.31%



Safety Tier 5 Prior Employee Contribution Rates

	Basic	Basic	COL	COL
Entry Age	First \$350	Over \$350	First \$350	Over \$350
20	4.94%	7.41%	2.22%	3.32%
21	5.03%	7.54%	2.25%	3.38%
22	5.12%	7.68%	2.32%	3.48%
23	5.22%	7.83%	2.35%	3.53%
24	5.31%	7.97%	2.38%	3.58%
25	5.41%	8.12%	2.41%	3.62%
26	5.51%	8.27%	2.44%	3.66%
27	5.62%	8.42%	2.47%	3.70%
28	5.72%	8.58%	2.49%	3.73%
29	5.83%	8.74%	2.51%	3.77%
30	5.94%	8.91%	2.54%	3.81%
31	5.99%	8.99%	2.57%	3.85%
32	6.11%	9.16%	2.61%	3.92%
33	6.23%	9.34%	2.66%	3.99%
34	6.35%	9.53%	2.71%	4.07%
35	6.48%	9.72%	2.77%	4.15%
36	6.61%	9.92%	2.82%	4.23%
37	6.76%	10.13%	2.88%	4.31%
38	6.91%	10.36%	2.93%	4.40%
39	7.07%	10.60%	3.00%	4.49%
40	7.17%	10.76%	3.06%	4.59%
41	7.28%	10.93%	3.05%	4.57%
42	7.41%	11.11%	3.04%	4.56%
43	7.55%	11.32%	3.03%	4.55%
44	7.71%	11.57%	3.03%	4.55%
45	7.77%	11.65%	3.03%	4.54%
46	7.77%	11.65%	2.98%	4.47%
47	7.72%	11.59%	2.93%	4.40%
48	7.63%	11.45%	2.90%	4.35%
49+	7.49%	11.24%	2.87%	4.31%



Appendix IV:

Prior Assumptions



Summary of Actuarial Assumptions

The assumptions shown below were used in the prior valuation. They were based on an experience study conducted by EFI Actuaries for the period covering July 1, 2006 till June 30, 2009.

Rate of The annual rate of return on all Plan assets is assumed to be 8.00%, net of investment and administrative expenses.

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

Cost of Living The cost of living as measured by the Consumer Price Index (CPI) will increase at

the rate of 3.50% per year.

Increases in Pay Current Rate: 3.75% Base salary increases.

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

Service	General	Safety
0	4.00%	8.00%
1	4.00%	7.00%
2	4.00%	6.00%
3	4.00%	5.00%
4	4.00%	4.00%
5-9	2.00%	2.00%
10-19	1.00%	1.00%
20-29	0.50%	1.00%
30+	0.50%	0.50%



Mortality Improvement No mortality improvement is explicitly assumed; however we build a margin in our mortality assumption between the actual and expected number of deaths in order to assume some future mortality improvements. The experience study report for the period covering July 1, 2006 to June 30, 2009 contains a full description of these margins.

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

Representative Rates

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



Retired Member Mortality

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

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



Disabled Member Mortality

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

Representative Rates

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



Service Retirement

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

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



Service-Connected Disability

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

Representative Rates

	<u>Safety</u>	Gen	<u>eral</u>
Age	All	Female	Male
20	0.0759%	0.0007%	0.0065%
25	0.1932%	0.0013%	0.0153%
30	0.3457%	0.0025%	0.0316%
35	0.5309%	0.0071%	0.0426%
40	0.7426%	0.0168%	0.0602%
45	1.1297%	0.0303%	0.0920%
50	1.5092%	0.0486%	0.1345%
55	1.7230%	0.0746%	0.1840%
60	0.0000%	0.1048%	0.2456%
65	0.0000%	0.0000%	0.0000%



Non Service-**Connected Disability** Separate rates of ordinary disability are assumed among Safety and General Members; rates for both sexes for Safety Members are combined. The rates shown are applied after five Years of Service. Below are sample rates:

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

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.

Service	Safety	General
0	8.000%	13.500%
1	6.000%	9.000%
2	5.000%	6.375%
3	4.000%	4.875%
4	3.000%	4.125%
5	1.238%	2.025%
10	0.945%	1.470%
15	0.680%	0.850%
20	0.000%	0.336%
25	0.000%	0.072%
30	0.000%	0.000%



Vested Termination

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

Vested terminated 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.

Separate rates of termination are assumed among Safety and General Members. The rates shown do not overlap with the service retirement rates.

Service	Safety	General
0	5.000%	5.000%
1	4.500%	5.000%
2	4.000%	3.000%
3	3.500%	3.000%
4	3.000%	3.000%
5	2.500%	3.000%
10	2.500%	2.000%
15	1.250%	2.000%
20	0.000%	1.200%
25	0.000%	1.200%
30+	0.000%	0.000%

Family Composition

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

Accumulated Vacation Time Load

Active members' service retirement and disability benefits are loaded by 1.0% for Safety Members and 3.5% for General Members for conversion of vacation time.

