November 2003

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Actuarial Valuation Report as of June 30, 2003

City of San Jose Police and Fire Department Retirement Plan

MERCER Human Resource Consulting



Marsh & McLennan Companies

November 25, 2003

Board of Retirement City of San Jose Police and Fire Department Retirement Plan 1737 North First Street, Suite 580 San Jose, CA 95112

Dear Members of the Board:

We are pleased to present the actuarial valuation for the City of San Jose Police and Fire Department Retirement Plan prepared as of June 30, 2003 by Mercer Human Resource Consulting. The report includes:

- (1) a determination of the City contribution rates under the current and recommended actuarial methods and assumptions;
- (2) a determination of the Employee contribution rates under the current and recommended actuarial methods and assumptions; and
- (3) an exhibit showing a 30-year amortization schedule for funding the Unfunded Actuarial Accrued Liability.

This report conforms to the requirements of the governing state and local statutes, accounting rules, and generally accepted actuarial principles and practices.

The following undersigned actuaries are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained therein.

We look forward to presenting this report at the Board meeting in December.

Sincerely,

Moe M. Tun, FSA, MAAA

Marcia L. Chapm

Marcia L. Chapman, FSA, EA, MAAA

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Actuarial Certification

The actuarial valuation required for the City of San Jose Police and Fire Retirement Plan has been prepared as of June 30, 2003 by Mercer Human Resource Consulting. In preparing this valuation, we have employed generally accepted actuarial methods and assumptions to evaluate the System's assets, liabilities and future contribution requirements. Our calculations are based upon member data and financial information provided to us by the System's staff. This information has not been audited by us, but it has been reviewed and found to be consistent, both internally and with prior years' information.

The contribution requirements are determined as a percentage of payroll. Employer rates provide for both normal cost and a contribution to amortize any unfunded or over-funded actuarial accrued liabilities. The Board elected to amortize the System's unfunded actuarial accrued liability over a 40-year period, beginning in 1977, with 14 years remaining as of the June 30, 2003 valuation date.

The actuarial value of assets used for the purposes of this valuation reflects the Supplemental Retiree Benefits Reserve (SRBR) program. The SRBR program reduced the value of the assets by \$19,695,306 as of June 30, 2003.

The ratio of actuarial value of assets to actuarial accrued liabilities decreased from 114.8% to 100.2% as a result of this valuation. The primary causes of the decrease were the lower than expected investment return on the System's assets and the higher than expected salary increases.

The Board has adopted new non-economic assumptions following the experience study of the System as of June 30, 2003.

In our opinion, the recommended assumptions and methods, when applied in combination, fairly represent past and anticipated future experience of the System.

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Future contribution requirements may differ from those determined in the valuation because of:

- (1) differences between actual experience and anticipated experience;
- (2) changes in actuarial assumptions or methods;
- (3) changes in statutory provisions; and
- (4) differences between the contribution rates determined by the valuation and those adopted by the Board.

This report conforms with the requirements of the governing state and local statutes, accounting rules, and generally accepted actuarial principles and practices. The following undersigned actuaries are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Marcia L. Chapm

Marcia L. Chapman, FSA, EA, MAAA

November 25, 2003

Date

Moe M. Tun, FSA, MAAA

Mercer Human Resource Consulting, Inc. 3 Embarcadero Center, Suite 1500 San Francisco, CA 94111-4015 415 743 8700 November 25, 2003 Date

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Board Member Summary of Valuation Results

Summary of Recommendations

City Contribution Rates ⁽¹⁾	June 30, 2003	June 30, 2001	I	ncrease/Decrease
Normal Cost Rate:	21.91%	22.35%		-0.44%
Rate of Contribution to Unfunded		22,5070		-0.4470
Actuarial Accrued Liability:	-0.14%	-10.34%		10.20%
Medical Insurance:	2.70%	1.61%		1.09%
Dental Insurance:	0 5770/	0.60%		<u>-0.03%</u>
Total City Rate: 10.82 mor	25.04%			10.82%
Estimated Annual Amount:	\$ 50,637,000	\$ 28,756,000	\$	21,881,000
Employee Contribution Rates ⁽¹⁾	June 30, 2003	June 30, 2001	Ir	crease/Decrease
Normal Cost Rate:	8.21%	8 3.8%		0 179/
	8.21%	8.38%		-0.17%
Normal Cost Rate: Rate of Contribution to Unfunded Actuarial Accrued Liability:	8.21% 0.06%			
Rate of Contribution to Unfunded Actuarial Accrued Liability: Medical Insurance;		0.06%		0.00%
Rate of Contribution to Unfunded Actuarial Accrued Liability: Medical Insurance: Dental Insurance:	0.06%	0.06% 1.61%		0.00% 1.09%
Rate of Contribution to Unfunded Actuarial Accrued Liability: Medical Insurance;	0.06% 2.70%	0.06%		0.00%

(1)

Annual amounts based on total annual salaries as of June 30, 2003 of

\$202,222,000

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The total City contribution rate of 25.04% will be adjusted during 2004-2005 for a charge to SRBR due to the increase in the City's contribution rate due to poor market investment returns. The City contribution rate for the 2004–2005 and 2005–2006 periods will be 24.59% and 25.04% respectively.

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Summary of Recommendations (continued)

Actuarial Assumptions	T AB ABB BBBBBBBBBBBBB		
for Retirement Plan	June 30, 2003 ⁽¹⁾	June 30, 2001	Increase/Decrease
Annual Inflation Rate:	3.00%	4.50%	-1,50%
Annual Investment Return:	8.00%	8.00%	0.00%
Real Across-the-board Increases:	1.50%	0.00%	1.50%
Annual Salary Increases:			
First 5 years of service	10.10%	10.30%	-0.20%
After 5 years of service			
Age 25-29	9.80%	10.10%	-0,30%
Age 30-34	7.50%	7.80%	-0.30%
Age 35-39	5.80%	6.20%	-0.40%
Age 40-44	5.40%	5.50%	-0.10%
Age 45-49	5.00%	5.20%	-0,20%
Age 50-54	4.80%	4.90%	-0.10%
Age 55-59	4.80%	4.80%	0.00%
Age 60-64	4.70%	4.60%	0.10%
Age 65-69	4.70%	4.50%	0.20%
Age 70 and over	4.50%	4.50%	0.00%

Actuarial Assumptions for Medical and Dental Plans

Annual Increase in Medical and Dental		June 30, 2003	June 30, 2003	June 30, 2003
Plan costs over the next 10 years:	Fiscal Year	Medical	Medical with Medicare Risk Component	Dental
	2003-2004	16.00%	16.00%	8.00%
	2004-2005	14.50%	14.50%	7.00%
	2005-2006	13.00%	13.00%	5,50%
	2006-2007	11.50%	11.50%	5.50%
	2007-2008	10.00%	10.00%	5.50%
	2008-2009	9.00%	9.00%	5.50%
	2009-2010	8.00%	8.00%	5.50%
	2010-2011	7.00%	7.00%	5.50%
	2011-2012 and later	6.00%	6.00%	5.50%

(1)

Other assumptions are based upon the June 30, 2003 experience analysis.

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Summary of Significant Actuarial Statistics and Measures

System Membership	June 30, 2003	June 30, 2001	Increas
Active Members			
1. Number of Members	2,104	2,107	-0.1%
2. Total Active Payroll	\$202,222,000	\$171,779,000	17.7%
3. Average Monthly Salary	\$8,009	\$6,794	17.9%
Retired Members			
1. Number of Members			
Service Retirement	364	313	16.3%
Disability Retirement	729	680	7.2%
Beneficiaries	178	171	4.1%
2. Total Retired Payroll	\$62,314,025	\$49,993,000	24.6%
3. Average Monthly Pension	\$4,086	\$3,579	14.2%
Inactive Vested Members			
1. Number of Members	58	36	61.1%
Asset Values (Net)			<u>;;;;;</u>
Market Value ⁽¹⁾	\$1,680,731,000	\$1,671,430,000	0.444
Return on Market Value ⁽²⁾	1.38%	. , ,	0.6%
Actuarial Value ⁽¹⁾		3.36%	
	\$1,878,989,048	\$1,765,284,000	6.4%
Return on Actuarial Value ⁽²⁾	4.21%	10.33%	
Actuarial Value After Allowing for			
SRBR Program ^{(1), (3)}	\$1,859,294,000	\$1,743,409,000	
Liability Values		<u> </u>	
Actuarial Accrued Liability	\$1,856,207,000	\$1,522,329,000	01 00/
Unfunded Actuarial Accrued Liability (UAAL)	(\$3,087,000)	\$1,322,329,000 (\$221,080,000)	21.9% 98.6%
		(4241,000,000)	90.076
Funding Ratios GASB No. 25	100.2%	114.8%	-14.6%

(1) Includes Value of Health Insurance Reserve.

⁽²⁾ Annualized Rate of Return for the two-year period.

⁽³⁾ Supplemental Retiree Benefit Reserve (SRBR) as of June 30, 2003 was \$19,695,306.

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Explanation of Changes in Actuarial Values

City Contribution Rates

The components of the change in City and employee contribution rates are approximately as follows: Ma^{3}

		Xer			,	Xer	
Retirement Plan	Cit	y Contr	ibuti	D ri	Memb	oution	
•	/% of Payroll	h]	Oollar Impact	% of Payroll]	Dollar Impact
June 30, 2001 Rate	12.01%	1	\$	24,287,000	8.44%	\$	17,068,000
Before Assumption Change							,
Investment return less than expected	5.94%	(1)	\$	12,012,000			
Contributions greater than expected	-1.20%	(2)	\$	(2,427,000)			
Payroll growth greater than expected	4.27%	(3)	\$	8,635,000			
SRBR Program	0.17%	(4)	\$	344,000			
Miscellaneous (gains)/ losses	0.37%	(5)	\$	748,000	0.00%	\$	-
Subtotal	9.55%		\$	19,312,000	0.00%	\$	•
June 30, 2003 Rate (Before Assum. Change)	21.56%		<u>\$</u>	43,599,000	<u>8.44%</u>	5	17.068.000
After Assumption Change							
Change in Actuarial Assumptions	0.21%	(6)	\$	425,000	-0.17%	(6) \$	(344,000
Subtotal	0.21%	. ,	\$	425,000	-0.17%	() <u></u> \$	(344,000)
June 30, 2003 Rate	21.77%		\$	44,024,000	8.27%	\$	16,724,000

Medical and Dental Plans	City	Employee Contribution						
	% of Payroll	-	D	ollar Impact	% of Payroll)	D	ollar Impact
June 30, 2001 Rate	2.21%		\$	4,469,000	1.81%	/	\$	3,660,000
Before Assumption Change	L				- and the second			
			\$	-				
Other (gains) / losses	<u>0.12</u> %	(7)	\$	243,000	<u>0.14</u> %	(7)	\$	283,000
June 30, 2003 Rate (Before Assum. Change)	<u>2.33</u> %		<u>\$</u> `	4,712,000	<u>1.95</u> %		<u>\$</u>	3,943,000
After Assumption Change								
Change in Actuarial Assumptions	0.94%	(8)	\$	1,901,000	0.94%	(8)	5	1,901,000
June 30, 2003 Rate	(3.27%)		\$	6,613,000	2.89%			
			φ.	0,013,000	14.89%		\$	5,844,000
Retirement, Medical and Dental Plans	City	Contri	butio	ı	Employee	Cont	tribu	tion
	% of Payroll		Da	ollar Impact	% of Payroll			llar Impact
June 30, 2001 Rate - Current Rate	14.22%		\$	28,756,000	10.25%		\$	20,728,000
June 30, 2003 Rate - Before Assumption Change	23.89%		\$	48,311,000	10.39%		ŝ	21,011,000
June 30, 2003 Rate - After Assumption Change	25.04%		\$	50,637,000	11,16%		š	22,568,000

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Explanation of Gain/Loss Items

- 1. <u>Investment Return Less Than Expected</u> The average return on the Systems actuarial valuation assets (after allowing for SRBR) over the last two years was approximately 4% which was less than 8% expected.
- 2. <u>Contributions Greater Than Expected</u> This results from the delayed implementation of lower employer and member rates calculated in the June 30, 2001 valuation.
- 3. <u>Payroll Growth Greater Than Expected</u> The System's payroll increased at an annual rate of 9.9% versus the 4.5% assumed. This results in a dilution of the System's Prefunded Actuarial Accrued Liability as a percentage of payroll, hence a lower City normal cost offset.
- <u>SRBR Program</u> This is the City rate impact of the SRBR. Distributions of \$2,762,713 were made on April 30, 2002 and \$829,241 was made on December 31, 2002. During 2004-2005, this impact will be mitigated due to the charge to the SRBR.
- 5. <u>Miscellaneous (Gains)/Losses</u> Other rate changes with untraced sources.
- 6. <u>Change in Actuarial Assumptions (Retirement Plan)</u> This is primarily due to improvement in post-retirement life expectancies for retirees.
- 7. <u>Other (Gains)/Losses</u> This includes higher than expected medical premium increases.
- 8. <u>Change in Actuarial Assumptions (Medical and Dental Plans)</u> This is primarily due to higher expected medical premium increases for the next several years.

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City and Member Contribution Rates Determined in June 30, 2003 Valuation

	Ci	ity	Me	embers		
	<u>% of Pay</u>	Amount *	% of Pay	Amount *		
June 30, 2001 Rates			•			
Retirement Plan Cost	12.01% ⁽¹⁾	\$24,287,000	8.44%	\$17,068,000		
Medical Plan Cost	1.61%	\$3,256,000	1.61%	\$3,256,000		
Dental Plan Cost	<u>0.60%</u>	\$1,213,000	0.20%	\$404,000		
Total	14.22%	\$28,756,000	10.25%	\$20,728,000		
June 30, 2003 Rates						
Before Assumption Change						
Retirement Plan Cost	21.56% ⁽¹⁾	\$43,599,000	8.44%	\$17,068,000		
Medical Plan Cost	2.01%	\$4,065,000	2.01%	\$4,065,000		
Dental Plan Cost	0.57%	<u>\$1,153,000</u>	0.19%	\$3 <u>84</u> ,000		
Total	24.14%	\$48,817,000	10.64%	\$21,517,000		
After Assumption Change						
Retirement Plan Cost	21.77% ⁽¹⁾	\$44,024,000	8.27%	\$16,724,000		
Medical Plan Cost	2.70%	\$5,460,000	2.70%	\$5,460,000		
Dental Plan Cost	0.57%	<u>\$1,153,000</u>	0.19%	<u>\$384,000</u>		
Total	25.04% ⁽²⁾	\$50,637,000	11.16%	\$22,568,000		
Net Impact of Assumption Change						
Retirement Plan Cost:	0.21%	\$425,000	-0.17%	(\$344,000)		
Medical Plan Cost	0.69%	\$1,395,000	0.69%	\$1,395,000		
Dental Plan Cost	0.00%	\$0	0.00%	\$1,375,000		
Total	0.90%	\$1,820,000	0.52%	\$1,051,000		
Contribution rate for the 2004/2005 fiscal year	after reflecting th	e increase in the				
City's contribution rate and the charge to the S	SRBR					
Retirement Plan Cost	21.32%	\$43,114,000	8.27%	\$16,724,000		
Medical Plan Cost	2.70%	\$5,460,000	2.70%	\$5,460,000		
Dental Plan Cost	0.57%	<u>\$1,153,000</u>	0.19%	\$384,000		
Total	24.59% ⁽²⁾	\$49,727,000	11.16%	\$22,568,000		
* Based on July 1, 2003 annual payroll of		\$202,222,000				

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NOTES

- 1. As of June 30, 2003 the Plan has assets which are approximately \$3 million in excess of Actuarial Accrued Liabilities. Consistent with the June 30, 2001 actuarial valuation, this amount is treated identical to an Unfunded Actuarial Accrued Liability, reducing only City contributions.
- 2. A charge will be made to the SRBR because there is an increase in the City's contribution rate due to poor market/investment returns. This resulted in a reduction of 0.45% in the City's 2004/2005 contribution rate. The contribution rate will revert back to 25.04% for the 2005/2006 fiscal year.

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Assumption Changes

Mercer is recommending changes to some of the assumptions. The following are the most significant:

- Withdrawal Withdrawal rates are increased for members with service less than 5 years and decreased for members with more than 5 but less then 10 years of service. This reduced costs.
- Vested Terminations Termination rates are increased. This reduced costs.
- Service Retirement Service Retirement rates are decreased. This reduced costs.
- Inflation Inflation assumption is changed from 4.5% to 3%. However, the COLA is subject to a maximum of 3% and, hence, there was impact on the costs.
- Salary Increase The merit and longevity component of the salary increase assumption is changed to reflect the actual merit and longevity increases over the last two years. This decreased costs.

We propose to introduce an across-the-board salary increase assumption of 1.5%. Combined with the inflation assumption of 3%, we will maintain the salary increase assumption of 4.5% before applying the merit and longevity increases.

- Post-Retirement Mortality We recommend that the Board adopt a setback (i.e., a mortality improvement) to the current mortality table used for service and disability retirees to reflect the Plan's mortality experience when compared to the standard table that was adopted. The change increased costs.
- Medical and Dental Premium Increases Short-term premium increases are raised to reflect anticipated experience. This increased costs.

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Actuarial Assumptions

Economic Actuarial Assumptions

Economic actuarial assumptions are of three types:

- <u>Inflation</u> Reflects expected increases in future prices of goods and services. Inflationary increases are closely tied to employee salary increases, retiree cost-of-living increases and the returns that investors demand from securities markets and other investments. For those reasons the inflation assumption underlies all economic actuarial assumptions. We propose to decrease the inflation assumption from 4.5% to 3%. This reflects changes in expectations for the future and the fact that California inflation rates will begin to approach national inflation expectations. As the cost of living increases to retirees are subject to a maximum of 3%, this does not impact the costs.
- 2. <u>Investment Return</u> Has a powerful influence on a retirement system's cost to employers and members. The more money that is earned from investments, the less that needs to be contributed. Assuming a typical new member's pension is funded over a 25 year career and that employee receives pension checks for 20 years after retirement, a 1% higher rate of investment return will reduce required contributions by about 20% (all else remaining equal). For this reason, setting the investment return assumption is an important decision. This year we are introducing a new approach to determining the appropriate investment return. This approach utilizes the relationships between your asset classes to develop a reasonable range of assumptions, with the related probability that the return would be realized. We believe this approach to developing forward-looking, long-term projections. We recommend continued use of an investment return assumption of 8%.

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Actuarial Valuation Report

3. <u>Salary Increases</u> – Have a significant impact on determining the benefit that members will receive at retirement. This assumption contains two components — wage inflation plus pay raises that members receive as a result of promotions and step increases. For the June 30, 2003 valuation, we propose to introduce an across the board increase assumption of 1.5%. Combined with the inflation assumption of 3%, we will maintain the wage inflation assumption of 4.5% before applying the merit and longevity increases. This assumption also determines the rate at which payments go to the Unfunded Actuarial Accrued Liability increase each year. The average merit and longevity increase assumed for a participant is 2% per annum over his/her working lifetime.

The full development of our actuarial assumptions is contained in our Experience Analysis report dated October, 2003.

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Medical and Dental Premium Increases

Coverage

After retirement, members receive both medical and dental coverage through the following plans:

Medical Plan Choices

- Kaiser
- BlueShield
- PacifiCare

Dental Plan

- Delta Dental
- Enhanced Delta Dental

Payment for this coverage is made from the Police and Fire Retirement Fund. The Fund also picks up the cost of Medicare Part B up to the difference between the health plan selected by the retiree and the Lowest Cost Plan. The responsibility for funding these medical benefits is equally shared by the City and the members. For dental, the City contributes 75% of the cost and the member contributes 25%.

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Actuarial Valuation Report

Premium Increase Assumptions

Contribution rates are calculated to provide prefunding for the next 10 years expected premium requirements. This requires a projection of the expected premium increases over the next 10 years.

Setting premium increase assumptions is difficult due to the complexities of the U.S. health care economy and the rapid change being experienced in the health care industry. However, guidelines for the establishment of future health care cost trends have evolved primarily from the application of Financial Accounting Standard No. 106. Although this standard does not apply to public entities some of its principles are directly applicable to prefunding arrangements like the Police and Fire's.

The following assumptions have been developed in consultation with Mercer's retiree health care actuarial practice. Although the following rates may not reflect the rate increases experienced in the past few years due to short-term volatility in health care costs, they are consistent with the 3% long-term inflation assumption recommendation. It is also expected that the health care cost increases will stabilize over the next ten years.

Fiscal Year	Medical	Dental
2003-2004	16.0%	8.0%
2004-2005	14.5%	7.0%
2005-2006	13.0%	5.5%
2006-2007	11.5%	5.5%
2007-2008	10.0%	5.5%
2008-2009	9.0%	5.5%
2009-2010	8.0%	5.5%
2010-2011	7.0%	5.5%
2011-2012 and later	6.0%	5.5%

The above medical assumptions are also used for those medical plans with a Medicare risk component. Annual increases of 6% were used for the Medicare Part B component.



Actuarial Valuation Methods

Actuarial Funding Method

Responsibility of the Actuary

A retirement system is a long term proposition. It contains benefit promises that extend many decades into the future. The fiduciaries responsible for funding the System cannot wait until these promises become due before seeking out the money needed to pay for them. The actuary's primary responsibility is to assist the Board to structure a financial plan to advance fund the benefit promises of the System and to monitor its performance. This financial plan is more commonly referred to as an actuarial funding method.

City Contributions

City contributions consist of two components:

- 1. Normal Cost -- That annual contribution rate which, if paid annually from a member's first year of membership through the year of retirement, would accumulate to the amount necessary to fully fund the member's retirement-related benefits. Accumulation includes annual crediting of interest at the assumed investment earnings rate. The contribution rate is expressed as a percentage of the member's compensation.
- 2. Contribution to the Unfunded Actuarial Accrued Liability (UAAL) - That annual contribution rate which, if paid annually over the UAAL amortization period, would accumulate to the amount necessary to fully fund the UAAL. Accumulation includes annual crediting of interest at the assumed investment earnings rate. The contribution is calculated to remain as a level percentage of future active member payroll (including payroll of new members as they enter the

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System) assuming a constant number of active members. In order to remain as a level percentage of payroll, amortization payments are scheduled to increase at the annual salary inflation rate along with expected payroll. The UAAL is being funded over the 40-year period beginning in 1977, with 14 years remaining from the June 30, 2003 valuation date.

A more complete definition of the Unfunded Actuarial Accrued Liability and other actuarial terms is provided in the Glossary of Actuarial Terms which can be found in Appendix E.

The actuarial funding method, which is specified in the Municipal Code, is called the Entry Age Normal Funding Method.

Employee Contributions

The members' contribution rates are recalculated on an actuarial basis at each actuarial study and equals to 3/11ths of the Normal Cost. The members presently contribute at the rate of 10.25% of pay.

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Actuarial Value of Assets

Background

Under the Entry Age Normal Actuarial Funding Method, a determination is made of the assets the System would have on hand if the current levels of employer normal cost and member contribution rates had been paid from each member's entry age through the actuarial valuation date and credited with the current actuarial interest rate assumption. This target value of assets is called the Actuarial Accrued Liability (AAL). The Unfunded Actuarial Accrued Liability (UAAL) is equal to the AAL less the Actuarial Value of Assets as of the actuarial valuation date.

Actuarial Standards

In 1993, the Actuarial Standards Board issued Standard of Practice (SOP) No. 4 entitled Measuring Pension Obligations. Section 5.2.6 of SOP No. 4 states, in part, that the Actuarial Value of Assets should generally reflect some function of market value; however, it may be appropriate to use methods which smooth out the effects of short-term volatility in market value.

In Mercer's opinion, the use of smoothing methods are especially important for employers with limited budgetary flexibility, such as governmental entities.

Determination of Actuarial Value of Assets

The Retirement Board uses a smoothing method for valuing the Plan's assets in the actuarial valuation. Under this approach, 20% of the deviation of total market return from the 8.00% return target is recognized in any one year. This smoothes these "unexpected" returns over a five year period and allows gains (relative to the 8% target) to offset losses.

Following is the calculation of the Actuarial Value of Assets under this method.

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Determination of Actuarial Value of Assets

12	Months Ending:	G	Total ontributions	Т	otal Benefits		Market Value	Average Value	(1) Total Market Return (Net)	1	(2) Expected Market Return (Net)		(1-2) Investment Gain (Loss)	Deferred Pactor	E	Deferred Return
	6/30/1994					Ş	799,701,000						Guin (LOSS)	ractor		
	6/30/1995	\$	35,987,000	\$	26,626,000	\$	941,786,000	\$ 804,381,500	132,724,000	\$	64,350,520	ŝ	68,373,480	0.000	\$	_
	6/30/1996	\$	36,393,000	\$	30,031,000	\$	1,079,090,000	\$ 944,967,000	130,942,000		75,597,360		55,344,640	0.000	ŝ	-
	6/30/1997	\$	38,490,000	\$	33,572,000	\$	1,252,614,000	\$ 1,081,549,000	168,606,000	\$	86,523,920	\$	82,082,080	0.000	ŝ	-
	6/30/1998	\$	39,117,000	\$	37,923,000	\$	1,445,932,000	\$ 1,253,211,000	192,124,000	\$	100,256,880		91,867,120	0.000	ŝ	•
	6/30/1999	\$	40,711,000	\$	43,061,000	\$	1,579,385,000	\$ 1,444,757,000	135,803,000	\$	115,580,560		20,222,440	0.000	\$	· _
	6/30/2000	\$	45,561,000		47,506,000	\$	1,691,332,000	\$ 1,578,412,500	113,892,000	\$	126,273,000		(12,381,000)	0.200	ŝ	(2,476,200)
	6/30/2001	\$	40,214,000	\$	53,771,000	\$	1,671,430,000	\$ 1,684,553,500	(6,345,000)	\$	134,764,280		(141,109,280)	0.400	ŝ	(56,443,712)
	6/30/2002	\$	45,966,000		63,142,000	\$	1,620,129,000	\$ 1,662,842,000	(34,125,000)	\$	133,027,360	-	(167,152,360)	0.600	ŝ	(100,291,416)
	6/30/2003	\$	17,699,000	\$	67,122,000	\$	1,680,731,000	\$ 1,610,417,500	80,025,000	\$	128,833,400		(48,808,400)	0.800	\$	(39,046,720)
2. Marke	thed Market Val	ue (Ite	em 2 - Item 1))					•						\$	(198,258,048) ⁽¹⁾ 1,680,731,000 1,878,989,048
a. 8 b. 1 5a. Total 5b. Resert 5c. Total 6. Ratio 7. Marke 8. Actuar 9. Marke 10. Actuar 11. Percer 12. Actuar 13. Percer	0% of Net Marke 20% of Net Mark Actuarial Value (ve for SRBR prog Actuarial Value a of Actuarial to M. et Value of Defin ital Value of Poster rial Value of Poster rial Value of Poster rial Value of Post riage Medical/ rial Value of Med bage Dental	ket Va (Item gram Ifter a larket ed Be ined I mploy templ	due 3 after corride Jowing for Si Value (Item 5 enefit Assets Benefit Assets Benefit Assets Assets (Item 11	RBR f 5a / li (lten care f hcare	program (Item tem 2) n 7 X Item 6 - Plan Assets Plan Assets (I em 10)	ltem	5b)								\$ \$ \$	1,344,584,800 2,016,877,200 1,878,989,048 19,695,306 1,859,293,742 1.117959 1,651,207,000 1,826,287,108 29,524,000 ,33,006,634 87,33% 28,824,693 12.67%
14. Actuar	ial Value of Deni	tal As	sets (Item 13	X lte	m 10)										\$	4,181,941
(i) Defe-	ad Base of B															

(i) Deferred Return to Be Recognized During the Next 4 Years

Date	Amount to Be Recognized
6/30/2004	\$ (73,890,208)
6/30/2005	\$ (71,414,008)
6/30/2006	\$ (43,192,152)
6/30/2007	\$ (9,761,680)
Total	\$ (198,258,048)

(2)

Actuarial Value of Defined Benefit Assets including Expected Contributions from members to UAAL =

\$ 1,827,649,788

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Determination of Charge to Supplemental Retiree Benefits Reserve (SRBR)

Background

The SRBR program provides additional benefits to the System's current retirees based upon the System's regular earnings (currently up to 8% per annum) plus 10% of the System's excess earnings (earnings in excess of 8% per annum).

Methodology

The following is a description of how the value of SRBR is determined as of June 30, 2003.

- 1. In each plan year, the amount allocated to the SRBR will be increased with interest at the "smoothed" market rate of return earned by the System, but only to the extent such returns are positive, except under the circumstance described in 3. The principal portion of the SRBR on which interest will be applied is equal to the average monthly remaining balance in the SRBR after the payment of supplemental benefits.
- 2. At the end of each plan year, 10% of the System's "excess" earnings (remaining after interest has been credited to the SRBR and other reserves) is credited to the SRBR. No reductions to the SRBR can occur from "negative excess" earnings, except under the circumstance described in 3.
- 3. The SRBR will generally be credited with positive regular and excess returns described in items 1 and 2. However, if the City's contribution rate is going to increase in any biennial valuation as a result of poor market/investment returns of the Fund, then the SRBR accrued principal amount would be charged with 10% of the City's increased contribution rate. The charge may not exceed 5% of the accrued principal balance of the SRBR fund.

As the City's contribution rate will increase as a result of poor market/investment returns, there will be a charge to the SRBR for the twelve months beginning July 1, 2004. The SRBR accrued principal amount would be charged with 10% of the City's increase contribution rate, not exceeding 5% of the accrued principal balance of the SRBR fund.

Following is the calculation of the charge to SRBR, and the decrease in the City's contribution for the twelve months effective July 1, 2004 as a result of this charge.

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Actuarial Valuation Report

Determination of Charge to SRBR

1. Total Actuarial Value after allowing for SRBR program at 6/30/2001		
2. Total Contributions for 12 Months Ending 6/30/2002	\$	1,743,408,753
3. Total Benefits for 12 Months Ending 6/30/2002	\$	45,966,000
4. SRBR Benefits made on 4/30/2002	\$	63,142,000
5. Expected investment income for 12 Months Ending 6/30/2002 based on 8%	\$	2,762,713
$(7. \times 8\% + 2. \times 4\% - (3 4.) \times 4\% - 4. \times 1.3\%)$	\$	138,859,333
6. Expected Total Actuarial Value after allowing for SRBR program at 6/30/2002		
(1. + 2 3. + 5.)	\$	1,865,092,086
7. Total Contributions for 12 Months Ending 6/30/2003	,	
8. Total Benefits for 12 Months Ending 6/30/2003	\$	47,699,000
9. SRBR Benefits made on 12/31/2002	\$	67,122,000
10. Expected investment income for 12 Months Ending 6/30/2003 based on 8%	\$	829,241
$(6. \times 8\% + 7. \times 4\% - (8 9.) \times 4\% - 9. \times 4\%)$	\$	148,430,447
11. Expected Total Actuarial Value after allowing for SRBR program at 6/30/2003		
(6. + 7 8. + 10.)	\$	1,994,099,532
12. Actual Total Actuarial Value after allowing for SRBR program at 6/30/2003		
13. Investment Gain/(Loss) for the period 6/30/2001 to 6/30/2003	\$	1,859,293,742
10. Increase in Unfunded Actuarial Accrued Liability due to investment loss for the period 6/30/2001 to 6/30/2003	\$	(134,805,790)
11. Amoruzation factor	\$	134,805,790
12. July 1, 2003 annual payroll		0.08904
13. Increase in City contribution rate effective July 1, 2004 to the UAAL due to investment loss for the period 6/30/2001 to 6/30/2003 (10. x 11. / 12.)	ş	202,221,709
14. Projected July 1, 2004 annual payroll (12. x 1.045)		5.94%
15. Projected dollar amount of 10% of the City's increased contribution rate for 12 months effective July 1, 2004 (10% x 13. x 14.)	\$	211,321,686
16. SRBR Principal (10% x 13. x 14.)	\$	1,255,251
17. 5% of SRBR Principal	\$	19,110,300
18. Charge to SRBR (Minimum of 15. and 17.)	\$	955,515
19. Decrease in the City's contribution for 12 months effective July 1, 2004 (18. / 14.)	\$	955,515
		0.45%

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Actuarial Valuation Results

City and Employee Contribution Rates

The following Table 1 provides a comparison of the City and Employee contribution rates and estimated annual contribution amounts under the recommended actuarial assumptions. The estimated annual contribution amounts are based upon the annual payroll as of June 30, 2003.

Table 1

Contribution Rates and Estimated Annual Contributions

Valuation Basis (Salary Inflation/Investment	<u>City Contributions</u> Return)	Employee Contributions
Current Rates (4.5%/8.0%)	<u>Rate Annual Amount*</u> 14.22% \$ 28,756,000	<u>Rate Annual Amount*</u> 10.25% \$ 20,728,000
Recommended Rates (4.5%/8.0%)	25.04% \$ 50,637,000	11.16% \$ 22,568,000

* Annual amounts based on total annual salaries as of June 30, 2003 of

G:\Retire\SJP\2003\Val2003\VALSum_SVC_NEWdec.xls)Table 2

The component parts of the above City and employee contribution rates broken down among the various benefit categories can be found in Tables 2 and 3.

Details supporting the medical and dental rate calculations can be found on Tables 4 and 5.

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\$202,222,000

Explanation of Contribution Rate Changes

City Contribution Rates

The components of the change in City and employee contribution rates are approximately as follows:

Retirement Plan	nent Plan City Contribution			Member Contribution				
	% of Payroll		Dollar Impact		% of Payroll		Dollar Impact	
June 30, 2001 Rate	12.01%		\$	24,287,000	8.44%	\$	17,068,000	
Before Assumption Change								
Investment return less than expected	5.94%	(1)	\$	12,012,000				
Contributions greater than expected	-1.20%	(2)	ŝ	(2,427,000)				
Payroll growth greater than expected	4.27%	(3)	ŝ	8,635,000				
SRBR Program	0.17%	(4)	Ŝ	344,000				
Miscellaneous (gains)/ losses	0.37%	(5)	\$	748,000	0.00%	¢		
Subtotal	9.55%	.,	\$	19,312,000	0.00%	\$		
June 30, 2003 Rate (Before Assum. Change)	<u>21.56%</u>		<u>s</u>	43,599,000	<u>8.44%</u>	<u>\$</u>	17,068,000	
After Assumption Change								
Change in Actuarial Assumptions	0.21%	(6)	\$	425,000	-0.17%	(6) 8	(244,000)	
Subtotal	0.21%	(*)	\$	425,000	-0.17%	(6) <u>\$</u> \$	<u>(344,000)</u> (344,000)	
June 30, 2003 Rate	21.77%		\$	44.024.000	8.27%	\$	16,724,000	

Medical and Dental Plans	City Contribution			Employee Contribution				
	% of Payroll		Dollar Impact		% of Payroll		Dollar Impact	
June 30, 2001 Rate	2.21%		\$	4,469,000	1.81%		\$	3,660,000
Before Assumption Change								
Other (gains) / losses	0.12%	(7)	\$ ¢	-	0.1407		-	
	0.1278	0)	<u>ə</u>	243,000	<u>0.14</u> %	(7)	<u>\$</u>	283,000
June 30, 2003 Rate (Before Assum. Change)	2.33%		<u>s</u>	4,712,000	<u>1.95</u> %		<u>\$</u>	3,943,000
After Assumption Change								
Change in Actuarial Assumptions	<u>0.94%</u>	(8)	<u>\$</u>	1,901,000	<u>0.94</u> %	(8)	<u>\$</u>	1,901,000
June 30, 2003 Rate	3.27%		\$	6,613,000	2.89%		\$	5,844,000
Retirement, Medical and Dental Plans	014	<u></u>						
theorem and benear a laus	City Contribution		Employee Contribution					
June 30, 2001 Rate - Current Rate	<u>% of Payroll</u>			llar Impact	% of Payroll		Do	llar Impact
	14.22%		\$	28,756,000	10.25%		\$	20,728,000
June 30, 2003 Rate - Before Assumption Change	23.89%		\$	48,311,000	10.39%		\$	21,011,000
June 30, 2003 Rate - After Assumption Change	25.04%		\$	50,637,000	11.16%		\$	22,568,000

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Explanation of Gain/Loss Items

- (1) <u>Investment Return Less Than Expected</u> The average return on the Systems actuarial valuation assets (after allowing for SRBR) over the last two years was approximately 4% which was less than 8% expected.
- (2) <u>Contributions Greater Than Expected</u> This results from the delayed implementation of lower employer and member rates calculated in the June 30, 2001 valuation.
- (3) <u>Payroll Growth Greater Than Expected</u> The System's payroll increased at an annual rate of 9.9% versus the 4.5% assumed. This results in a dilution of the System's Prefunded Actuarial Accrued Liability as a percentage of payroll, hence a lower City normal cost offset.
- (4) <u>SRBR Program</u> This is the City rate impact of the SRBR. Distributions of \$2,762,713 were made on April 30, 2002 and \$829,241 was made on December 31, 2002. During 2004-2005, this impact will be mitigated due to the charge to the SRBR.
- (5) <u>Miscellaneous (Gains)/Losses</u> Other rate changes with untraced sources.
- (6) <u>Change in Actuarial Assumptions (Retirement Plan)</u> This is primarily due to improvement in post-retirement life expectancies for retirees.
- (7) <u>Other (Gains)/Losses</u> This includes higher than expected medical premium increases.
- (8) <u>Change in Actuarial Assumptions (Medical and Dental Plans)</u> This is primarily due to higher expected medical premium increases for the next several years.

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	City		Members		
Terre 30, 3001 D. /	<u>% of Pay</u>	Amount *	<u>% of Pay</u>	Amount *	
June 30, 2001 Rates					
Retirement Plan Cost	12.01% ⁽¹⁾	\$24,287,000	8.44%	\$17,068,000	
Medical Plan Cost	1.61%	\$3,256,000	1.61%	\$3,256,000	
Dental Plan Cost	<u>0.60%</u>	\$1,213,000	<u>0.20%</u>	\$404,000	
Total	14.22%	\$28,756,000	10.25%	\$20,728,000	
June 30, 2003 Rates Before Assumption Change					
Retirement Plan Cost	21.56% ⁽¹⁾	\$43,599,000	8.44%	\$17,068,000	
Medical Plan Cost	2.01%	\$4,065,000	2.01%	\$4,065,000	
Dental Plan Cost	0.57%	<u>\$1,153,000</u>	0.19%	\$384.000	
Total	24.14%	\$48,817,000	10.64%	\$21,517,000	
After Assumption Change					
Retirement Plan Cost	21.77% ⁽¹⁾	\$44,024,000	8.27%	\$16,724,000	
Medical Plan Cost	2.70%	\$5,460,000	2.70%	\$5,460,000	
Dental Plan Cost	0.57%	\$1,153,000	<u>0.19%</u>	<u>\$384,000</u>	
Total	25.04% ⁽²⁾	\$50,637,000	11.16%	\$22,568,000	
Net Impact of Assumption Change					
Retirement Plan Cost:	0.21%	\$425,000	-0.17%	(\$344,000)	
Medical Plan Cost	0.69%	\$1,395,000	0.69%	\$1,395,000	
Dental Plan Cost	0.00%	<u>\$0</u>	0.00%	\$1,575,000 \$0	
Total	0.90%	\$1,820,000	0.52%	\$1,051,000	
Contribution rate for the 2004/2005 fiscal year	after reflecting	the increase in the			
City's contribution rate and the charge to the S	SRBR				
Retirement Plan Cost	21.32%	\$43,114,000	8.27%	\$16,724,000	
Medical Plan Cost	2.70%	\$5,460,000	2.70%	\$5,460,000	
Dental Plan Cost	<u>0.57%</u>	\$1,153,000	0.19%	\$384,000	
Total	24.59% ⁽²⁾	\$49,727,000	11.16%	\$22,568,000	
* Based on July 1, 2003 annual payroll of		\$202,222,000		· · · -	

San Jose Police and Fire City and Member Contribution Rates Determined in the June 30, 2003 Valuation

NOTES

- 1. As of June 30, 2003 the Plan has assets which are approximately \$3 million in excess of Actuarial Accrued Liabilities. Consistent with the June 30, 2001 actuarial valuation, this amount is treated identical to an Unfunded Actuarial Accrued Liability, reducing only City contributions.
- 2. A charge will be made to the SRBR because there is an increase in the City's contribution rate due to poor market/investment returns. This resulted in a reduction of 0.45% in the City's 2004/2005 contribution rate. The contribution rate will revert back to 25.04% for the 2005/2006 fiscal year.

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Table 2

Employee Contribution Rate Detail

Total Employee Contribution Rates

		New	ν,	Current		
		(8% Interest, 4.5% Salar	y Inflation)	(8% Interest, 4.5% Salary Inflation)		
			nnual	% of	Annual	
		Payroll An	nount*	Payroll [Variable]	Amount*	
a.	Basic	-				
	Normal Cost	5.85%	\$11,831,000	6.05%	\$12,235,000	
	UAAL	0.05% / >	\$101,000	0.05%	\$101,000	
b.	COL	N			,	
	Normal Cost	2.36% 7.3	\$4,772,000	2.33%	\$4,712,000	
	UAAL	0.01%/	\$20,000	0.01%	\$20,000	
с.	Medical Insurance	2.70% 2.8°	\$5,460,000	1.61%	\$3,256,000	
d.	Dental Insurance	<u>0.19%</u>	<u>\$384,000</u>	0.20%	\$404,000	
e.	Total	11.16%	\$22,568,000	10.25%	\$20,728,000	

* Annual amounts based on total annual salaries as of June 30, 2003 of

\$202,222,000

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Table 3

City Contribution Rate Detail

Total City Contribution Rates

		New (8% Interest, 4.5% S		Curr (8% Interest, 4.5%	
		% of Payroll	Annual Amount*	% of Payroll	Annual Amount*
a.	Basic		1 HILVIII	<u>x ayıon</u>	Amount
	Normal Cost	(15.60%	\$31,547,000	16.14%	\$32,639,000
	UAAL	\8 ^{°°} (0.86%	(\$1,739,000)	-8.13%	(\$16,441,000)
ь.	COL	· /			(410,111,000)
	Normal Cost	0.03 (6.31%	\$12,760,000	6.21%	\$12,558,000
	UAAL	.) (0.72%	\$1,456,000	-2.21%	(\$4,469,000)
c.	Medical Insurance	2.70%	\$5,460,000	1.61%	\$3,256,000
d.	Dental Insurance	2^{-2} $\sqrt{2.57\%}$	<u>\$1,153,000</u>	<u>0.60%</u>	\$1,213,000
e.	Total	25.04% 24.54 04-05	\$50,637,000	14.22%	\$28,756,000

Annual amounts based on total annual salaries as of June 30, 2003 of * Jug Stature

\$202,222,000

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Table 4

Retiree Health Insurance 10-Year Cost Projection

Medical Benefits

	(1)	(2)	(3)	(4)	(5)	(6)
						centage of Payroll
	Annual Cost	Number of		Total	Actual	Level Funded
Year	Per Retiree	Insured Retirees	Annual Cost	Covered Payroll	Percentage	Percentage
			(1) x (2)		(3)/(4)	[(7) - (8)]/(9)
7/1/2003	6,389	1,189	7,597,000	202,221,709	3.75%	
7/1/2004	7,375	1,272	9,383,000	211,322,000	4.44%	
7/1/2005	8,412	1,361	11,451,000	220,831,000	5.18%	5.40%
7/1/2006	9,477	1,457	13,804,000	230,768,000	5.98%	5.40%
7/1/2007	10,543	1,559	16,431,000	241,153,000	6.82%	5.40%
7/1/2008	11,579	1,668	19,310,000	252,005,000	7.66%	5.40%
7/2/2009	12,606	1,784	22,494,000	263,345,000	8.54%	5.40%
7/3/2010	13,605	1,909	25,975,000	275,196,000	9.44%	5.40%
7/4/2011	14,551	2,043	29,728,000	287,580,000	10.34%	5.40%
7/1/2012	15,425	2,186	33,717,000	300,521,000	11.22%	5.40%
	/alue of Future d Reserve of As		119,836,000			

(8) Estimated Reserve of Assets	
Available for Medical Premiums:	28,824,693
(9) Present Value of Future Salaries:	1,685,290,000

Actuarial assumptions:

Investment Yield:	8.00%
Growth in Covered Payroll:	4.50%
Growth in Retiree Rolls:	7.00%
Funding:	10 year

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Table 5

Retiree Health Insurance 10-Year Cost Projection

Dental Benefits

	(1)	(2)	(3)	(4)	(5)	(6)
					Cost as a Per	centage of Payroll
	Annual Cost	Number of		Total	Actual	Level Funded
Year	Per Retiree	Insured Retirees	Annual Cost	Covered Payroll	Percentage	Percentage
			(1) x (2)		(3)/(4)	[(7) - (8)]/(9)
7/1/2003	1,136	1,213	1,378,000	202,221,709	0.68%	0.76%
7/1/2004	1,227	1,298	1,593,000	211,322,000	0.75%	0.76%
7/1/2005	1,313	1,389	1,823,000	220,831,000	0.83%	0.76%
7/1/2006	1,385	1,486	2,058,000	230,768,000	0.89%	0.76%
7/1/2007	1,461	1,590	2,323,000	241,153,000	0.96%	0.76%
7/1/2008	1,541	1,701	2,622,000	252,005,000	1.04%	0.76%
7/2/2009	1,626	1,820	2,960,000	263,345,000	1.12%	0.76%
7/3/2010	1,715	1,948	3,340,000	275,196,000	1.21%	0.76%
7/4/2011	1,809	2,084	3,770,000	287,580,000	1.31%	0.76%
7/1/2012	1,908	2,230	4,255,000	300,521,000	1.42%	0.76%

(7) Present Value of Future Benefits:	16,859,000
(8) Estimated Reserve of Assets	

Available for Medical Premiums:4,181,941(9) Present Value of Future Salaries:1,685,290,000

Actuarial assumptions:

Investment Yield:	8.00%
Growth in Covered Payroll:	4.50%
Growth in Retiree Rolls:	7.00%
Funding:	10 year

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Funding Status

Evaluation of Funding Status

Background

The evaluation of the System's funding status is simply the comparison of its actual value of assets to a target value of assets. There are two funding status measures calculated for the System:

Funding Status Measure	Target Assets	Actual Assets	Purpose
Funding Progress (GASB No. 25)	Actuarial Accrued Liability	Actuarial Value of Assets	Progress toward funding UAAL

This section of the report provides the System's funding status under each of these measures, followed by an exhibit which summarizes the System's funding history.

Funding Progress — GASB No. 25

The GASB issued two statements; Accounting for Pensions by State and Local Government Employers (GASB Statement No. 27); and Financial Reporting for Defined Benefit and Note Disclosures for Defined Contribution Plans (GASB Statement No. 25). These statements, effective for plan years 1998 and 1997, respectively, require funding status to be measured based upon the actuarial funding method adopted by the Board of Retirement, i.e., the Entry Age Normal Funding Method. Thus, the target value of assets is equal to the Actuarial Accrued Liability (AAL) and the actual value of assets is the Actuarial Value of Assets developed earlier in this report.

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Actuarial Valuation Report

The funding ratios for the bi-annual valuations as of June 30, 1993 through June 30, 2003 are as follows:

Actuarial Valuation <u>Date</u>	Actuarial Value of Assets ⁽¹⁾ (a)	Entry Age Actuarial Accrued Liability (AAL) ⁽²⁾ (b)	Unfunded AAL (UAAL) <u>(b-a)</u>	Funded Ratio	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a)/c)
6/30/1993 6/30/1995	\$714,592,000 \$854,414,000	\$716,123,000 \$828,739,000	\$1,531,000 (\$25,675,000)	99.8% 103.1%	\$98,831,000	2%
6/30/1997 ⁽³⁾	\$1,124,294,000	\$996,646,000	(\$23,673,000) (\$127,648,000)	112.8%	\$109,196,000 \$129,850,000	-24% -98%
6/30/1999 ⁽⁴⁾	\$1,440,117,000	\$1,276,364,000	(\$163,753,000)	112.8%	\$144,125,000	-114%
6/30/2001 ⁽⁵⁾	\$1,713,812,000	\$1,492,732,000	(\$221,080,000)	114.8%	\$171,779,000	-129%
6/30/2003	\$1,826,287,000	\$1,823,200,000	(\$3,087,000)	100.2%	\$202,222,000	-2%

⁽¹⁾Excludes accounts payable and postemployment healthcare plan assets.

⁽²⁾ Excludes postemployement healthcare liability.

(3) After reflection of the Arbitrator Decision to improve Retirement and Health Benefits in 1998, including the impact of FLSA pay.

⁽⁴⁾ After reflection of benefit improvements effective February 4, 2000.

⁽⁵⁾ After reflection of adoption of SRBR program.

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Actuarial Balance Sheet

The purpose of the Actuarial Balance Sheet is to compare assets with liabilities in order to define the portion of the liabilities which need to be funded by the City and Employee in the future.

System liabilities equal the present value of all future benefits expected to be paid to current and future pensioners and beneficiaries of the System.

System assets are equal to the sum of:

- the assets currently available to pay benefits,
- the present value of future contributions expected to be made by current active members, and
- the present value of future contributions expected to be made by the city.

The last item, the present value of future City contributions, is made up of two parts:

- 1. The Present Value of Future City Normal Costs: Using the Entry Age Normal Cost Method, the City budgets a certain percentage of payroll which will be sufficient to fund benefits for members from their entry into the Plan. The Normal Cost is the level percentage of salary each year that is necessary to fund Members' benefits under the current benefit provisions. Normal Cost is funded from a Member's date of employment to the expected retirement date. An adjustment is made for the deductions which will be made from the future salaries of Plan members. For this valuation, the Normal Cost percentage is 21.91% to the Retirement Plan and 3.27% to the medical and dental plans.
- 2. The Unfunded Actuarial Accrued Liability: The portion of the present value of future City contributions which will not be funded by the future Entry Age Normal Cost Mercer Human Resource Consulting 30

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contributions is the (Prefunded)/Unfunded Actuarial Accrued Liability (UAAL). The UAAL arises from prior contributions that were less than the current Normal Cost. This usually results from benefits and assumption changes and the net effect of prior gains and losses. If the City had always contributed the current Normal Cost, if there were no prior benefit or assumption changes and if actual experience exactly matched the actuarial assumptions, the Normal Cost would be sufficient to fund all benefits and there would be no UAAL. The UAAL percentage is (0.14%).

Actuarial Balance Sheet as of June 30, 2003

Assets

	BASIC	COL	TOTAL
1. Total Actuarial Value of Assets	\$1,422,254,284	\$590,342,764	\$2,012,597,048
2. Present Value of Future Contributions by Members			
a. Retirement	\$122,028,271	\$51,266,311	\$173,294,582
b. Unfunded Actuarial Accrued Liability	\$922,197	\$440,483	\$1,362,680
c. Medical and Dental	(\$64,132,750) <	\$0	\$64,132,750
2. Present Value of Future Contributions by the City:	Section >)		
a. Normal Cost	\$325,408,722	\$136,710,164	\$462,118,886
 b. Unfunded Actuarial Accrued Liability 	(\$19,508,575)	\$16,421,437	(\$3,087,138)
c. Medical and Dental	\$39,555,616	\$0	\$39,555,616
4. Total Actuarial Assets	\$1,954,793,265	\$795,181,160	\$2,749,974,424
Liabilities			
5. Present Value of Retirement Allowances			
Payable to Present Retired Members	\$522,815,983	\$348,437,084	\$871,253,068
6. Present Value of Retirement Allowances to be Granted:	·····,····,····	40 103 10 1300 1	<i>4071,203,000</i>
a. Service Retirement	\$576,001,812	\$223,755,364	\$799,757,176
b. Disability Retirement	\$557,424,787	\$219,985,846	\$777,410,633
7. Present Value of Death Benefits to be Granted	\$5,642,866	\$2,424,073	\$8,066,939
8. Present Value of Members' Contributions		+-,	40,000,755
to be Returned upon Withdrawal before Retirement	\$2,909,510	\$578,794	\$3,488,304
9. Present Value of Medical and Dental Benefits	\$136,695,000	\$0	\$136,695,000
10. Supplemental Retiree Benefits Reserve	\$19,695,306	\$0	\$19,695,306
11. Accounts Payable	\$133,608,000	\$0	\$133,608,000
12. Total Actuarial Liabilities	\$1,954,793,264	\$795,181,161	\$2,749,974,425

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System Assets

The following asset information was provided to us by the System's staff. We have not audited or verified these figures. These assets are at market value and actuarial value.

	June 30, 2003	June 30, 2001	Percent Change
Actuarial Value (1), (2)	\$1,878,989,000	\$1,765,284,000	6.4%
Market Value (1)	\$1,680,731,000	\$1,671,430,000	0.6%

⁽¹⁾ Before allowing for SRBR program.

(2) After allowing for SRBR program, the actuarial value of assets as of June 30, 2001 and June 30, 2003 were \$1,743,409,000 and \$1,859,294,000, respectively.

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Actuarial Valuation Report

The approximate rates of return on plan assets are shown below, based on the following analysis.

	Market Value	Actuarial Value \$1,765,284,000	
Value of Assets at 6/30/2001 ⁽¹⁾	\$1,671,430,000		
Contributions:			
Employer	55,877,000	55,877,000	
Members	37,788,000	37,788,000	
Benefits Paid to Participants	130,264,000	130,264,000	
Expenses Paid	16,672,000	16,672,000	
Investment Earnings	62,572,000	166,976,048	
Value of Assets at 6/30/2003 ⁽¹⁾	\$1,680,731,000	\$1,878,989,048 (2)	
ANNUALIZED NET RATE OF RETURN	1.38%	4.21%	
(Net of Expenses)			

⁽¹⁾ Before allowing for SRBR program.

⁽²⁾ After allowing for SRBR program, the actuarial value of assets as of June 30, 2003 was \$1,859,294,000.

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The 4.21% annualized rate of return on the actuarial value of assets over the two years ending June 30, 2003 is less than the 8% rate assumed in the June 30, 2001 actuarial valuation. This resulted in an actuarial loss which increased the budgeted contribution for the City.

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System Accounting Assets, Reserves and Other Liabilities

Investment of Retirement Plan (in thousands)

	1	Retirement <u>Fund</u>	Cost-of-Living <u>Fund</u>		Total						
	ASSETS										
Securities	\$	1,242,486,000	\$482,368,000		\$1,724,854,000						
Securities Lending Collateral Receivable from City of San Jose		1,203,000	472,000		1,675,000						
Employee Contributions		270,000	104,000		374.000						
Employer Contributions		351,000	341,000		692,000						
Accrued Investment Income		6,287,000	2,452,000		8,739,000						
Due from Brokers and Others	••••••	32,944,000	13,207,000		46,151,000						
Subtotal	\$	1,283,541,000	\$498,944,000		\$1,782,485,000						
	LIABILITI	ES									
Due to Brokers	\$	90,719,000	\$ 35,569,000	\$	126,288,000						
Securities Lending Collateral		1,203,000	472,000		1,675,000						
Other Liabilities		2,443,000	872,000		3,315,000						
Subtotal		\$94,365,000	\$36,913,000		\$131,278,000						
Net Assets Available for Benefits	\$	1,189,176,000	\$462,031,000		\$1,651,207,000						

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System Accounting Assets, Reserves and Other Liabilities

Investment of Post-Employment Healthcare Plans (in thousands)

	Retirement <u>Fund</u>	Cost-of-Living <u>Fund</u>	Total
	ASSETS		
Securities	\$30,679,000	-	\$30,679,000
Securities Lending Collateral Receivable from City of San Jose	30,000	-	30,000
Employee Contributions	80,000	-	80,000
Employer Contributions	97,000	-	97,000
Accrued Investment Income	155,000	-	155,000
Due from Brokers and Others	813,000		813,000
Subtotal	\$31,854,000	-	\$31,854,000
		V	
	LIABILITIES		
Due to Brokers	\$2,240,000	-	\$2,240,000
Securities Lending Collateral	30,000	-	30,000
Other Liabilities	60,000	-	60,000
Subtotal	\$2,330,000	-	\$2,330,000
Net Assets Available for Benefits	\$29,524,000	-	\$29,524,000
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Alternative Amortization Schedule for Funding of UAAL

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Amortization of the Unfunded Actuarial Accrued Liability

Over 30-Year Period Beginning in 2003

City Contribution Rates ⁽¹⁾	June 30, 2003	
Normal Cost Rate:	21.91%	
Rate of Contribution to Unfunded		
Actuarial Accrued Liability:	-0.10%	
Medical Insurance:	2.70%	
Dental Insurance:	0.57%	
Total City Rate:	25.08%	
Estimated Annual Amount:	\$ 50,717,000	
Employee Contribution Rates "	June 30, 2003	
	June 30, 2003	
Normal Cost Rate:	June 30, 2003 8.21%	
Normal Cost Rate: Rate of Contribution to Unfunded	8.21%	
Normal Cost Rate: Rate of Contribution to Unfunded Actuarial Accrued Liability:	8.21% 0.06%	
Employee Contribution Rates ⁽¹⁾ Normal Cost Rate: Rate of Contribution to Unfunded Actuarial Accrued Liability: Medical Insurance:	8.21% 0.06% 2.70%	
Normal Cost Rate: Rate of Contribution to Unfunded Actuarial Accrued Liability: Medical Insurance: Dental Insurance:	8.21% 0.06% 2.70% <u>0.19%</u>	
Normal Cost Rate: Rate of Contribution to Unfunded Actuarial Accrued Liability: Medical Insurance:	8.21% 0.06% 2.70%	

(1) Annual amounts based on total annual salaries as of June 30, 2003 of

\$202,222,000

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The total City contribution rate of 25.08% will be adjusted for a charge to SRBR due to the increase in the City's contribution rate due to poor market investment returns. The City contribution rate for the 2004–2005 and 2005–2006 periods will be 24.63% (25.08% – 0.45%, see the charge to SRBR section) and 25.08%, respectively.

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Appendices

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APPENDIX A MAJOR PROVISIONS OF THE RETIREMENT PLAN

Briefly summarized below are the major provisions of the 1961 San Jose Police and Fire Department Retirement Plan, as amended through June 30, 2003.

Final Average Salary (FAS)

Final average salary is defined as the highest 12 consecutive months of compensation earned, not to exceed 108% of compensation paid to the member during the 12 months immediately preceding the last 12 months of service. FAS excludes overtime pay and expense allowances.

Return of Contributions

If a member should resign or die before becoming eligible for retirement, his or her contributions plus 2% interest per annum will be refunded.

Service Retirement Benefit

Members with 20 years of service who have attained age 55 are eligible to retire. Members age 70 (no service requirement) and members with 30 years of service, regardless of age, are also eligible to retire.

The normal service retirement benefit is 2.5% of FAS per year of service up to 20 years of service, 3.0% of FAS per year of service for the next 5 years of service, and 4.0% of FAS per year of service over 25, not to exceed 85% of FAS.

A special study was performed by the plan's prior actuary in 1992 (and subsequently adopted by the Board) which allows members with 25 years of service to retire at age 50 with unreduced benefits. Otherwise, members age 50 with 20 years of service receive their accrued service retirement benefit, reduced for interest below age 55.

Ten years of service are required for vesting purposes.

Disability Benefit

Nonservice-Connected

Members with 2 years of service, regardless of age, are eligible for nonservice-connected disability. The benefit is 32% of FAS for the first 2 years of service plus 1% of FAS for each successive year. The maximum benefit is 50% of FAS. For members with 20 or more years of service, the benefit is the same as that for the Service Retirement Benefit.

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Actuarial Valuation Report

Service-Connected

Members may retire regardless of length of service, and the benefit is 50% of FAS. For members with service of more than 20 years, the additional benefit for each year of service is 3.0% of FAS for 21-25 years of service and 4.0% of FAS for 26-30 years of service (subject to a maximum of 85% of FAS).

Death Benefit (before and after retirement)

Nonservice-Connected

Eligibility is based on 2 years of service, regardless of age. The spouse receives 24% of FAS for the first 2 years of service plus 0.75% of FAS for each successive year. The maximum benefit is the greater of 50% of the member's benefit and 37.5% of FAS.

If a member has eligible dependent children (under age 18, or age 22 if a full time student), the benefits are as follows:

1 child	25% of FAS
2 children	37.5% of FAS
3 or more children	50% of FAS

The total benefits payable to a family shall not exceed 75% of FAS.

If a member does not have a spouse nor dependent children at death, a lump sum equal to the greater of the member's contributions or \$1,000 is paid to the estate.

These benefits are payable for active member deaths and deaths after nonserviceconnected disability retirement.

Service-Connected

The spouse receives the greater of 50% of the member's benefit and 37.5% of FAS. Eligible dependent children receive 25% of FAS per child. The total benefits payable to a family shall not exceed 75% of FAS.

These benefits are payable for active member deaths and deaths after service-connected disability retirement and service retirement.

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Death Benefit – Inactive Members (After Retirement)

The spouse receives 1.875% of FAS per year of service, not to exceed 37.5% of FAS or 42.5% of FAS if retirement is after 2000. Eligible dependent children receive the following:

1 child	1.25% of FAS per year of service
2 children	1.875% of FAS per year of service
3 or more children	2.5% of FAS per year of service

The total benefits payable to a family shall not exceed 75% of FAS.

Cost-of-Living

The increase in retirement allowance is subject to a maximum of 3% a year.

Post-Retirement Health and Dental

Retirees and survivors with 15 years of service, or receiving a benefit of at least 37.5% of FAS, receive the same medical coverage that the City pays for an active member. Members must have retired from active service to be eligible.

Members' Retirement Contributions

The members' contribution rates are recalculated on an actuarial basis at each actuarial study and equal to 3/11ths of the Normal Cost. The members presently contribute at the rate of 10.25% of pay.

City's Retirement Contributions

The City presently contributes at a rate of 14.22% of pay for all members. The City rate is the percentage of salary necessary, on an actuarial basis, to provide for the payment of the benefits promised, also taking into account the contributions being made by the members and the assets on hand. These rates are changed in accordance with the results of each actuarial study.

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APPENDIX B SUMMARY OF ASSUMPTIONS AND FUNDING METHOD

Assumptions									
Valuation Interest Rate	8%								
Inflation Rate	3%								
Real Across-the-Board Salary Increase	1.5%								
Post-Retirement Mortality	· · · ·								
(a) Service									
Males	1994 Male Group Annuity Mortality Table								
Females	(set back 4 years) 1994 Female Group Annuity Mortality Table (set forward 1 year)								
(b) Disability	PERS Industrial Disability Table 88-92 (set back 5 years)								
Pre-Retirement Mortality	Based upon the 6/30/2003 Experience Analysis								
Withdrawal Rates	Based upon the 6/30/2003 Experience Analysis								
Disability Rates	Based upon the 6/30/2003 Experience Analysis								
Service Retirement Rates	Based upon the 6/30/2003 Experience Analysis								
Salary Scales	10.1% for the first five years of service. Graded increases thereafter ranging from 9.8% at age 25 to 4.7% at ages 60 and over. Of the total salary increases, 4.5% is for inflation and real across-the-board salary increase.								
Percentage of Members Married	85%								
Reciprocity	75% of all terminated vested members are assumed to be employed by a reciprocal entity.								
Assets	Five-year smoothed recognition of total market return that differs from the 8% return target.								

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Actuarial Valuation Report

Funding Method

The System's liability is being funded on the Entry Age Normal Cost method with the Unfunded Actuarial Accrued Liability being amortized over a period of 40 years beginning in 1977, with 14 years remaining on the June 30, 2003 valuation date.

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Actuarial Valuation Report

APPENDIX C Probabilities of Separation

Prior to Retirement

Age	withdrawal	0-1 withdrawal 1-2	withdrawal 2-3	withdrawal 3-4	withdrawal 4-5	withdrawal 5-10	withdrawal 10+	deterred	ordinary disab.	duty disability	ordinary death	duty death	retirement
<= 20	0.080	0.0200	0.0200	0.0200	0.0130	0.0065	0.0020	0 0000					
	21 0.080	0.0200	0.0200	0.0200	0.0130	0.0065	0.0020	0.0080	0.0000	0.0000	0.0001	0.0000	0.0000
	22 0.080	0.0200	0.0200	0.0200	0.0130	0.0065	0.0020	0.0080	0.0000	0.0001	0.0001	0.0000	0.0000
	23 0.080	0 0.0200 -	0.0200	0.0200	0.0130	0.0065		0.0080	0.0000	0.0001	0.0001	0.0000	0.0000
	24 0.080	0 0.0200	0.0200	0.0200	0.0130	0.0065	0.0020 0.0020	0.0080	0.0000	0.0001	0.0001	0.0000	0.0000
	25 0.080	0 0.0200	0.0260	0.0200	0.0130	0.0065		0.0080	0.0000	0.0001	0.0001	0.0000	0.0000
	26 0.080	0.0200	0.0200	0.0200	0.0130	0.0065	6.0020 0.0020	0.0080	0.0000	0.0002	0.0001	0.0000	0.000
	27 0.080	0,0200	0.0200	0.0200	0.0130	0.0065	0.0020	0.0080	0.0001	0.0002	0.0001	0.0001	0.0000
	28 0.080	0 0.0200	0.0200	0.0200	0.0130	0.0065	0.0020	0.0080	0.0001	0.0003	0.0001	0.0001	0.0000
	29 0.080	0.0200	0.0200	0.0200	0.0130	0.0065	0.0020	0.0080	0.0001	0.0002	0.0001	0.0001	0.0000
	30 0.080	0 0.0200	0.0200	0.0200	0,0130	0.0065	0.0020	0.0080 0.6070	1000.0	0.0002	0.0001	0.0001	0.0000
	31 0.080	0 0.0200	0.0200	0.0200	0.0130	0.0065	0.0020	0.0070	0.0001	0.0007	0.0001	0.0001	0.0000
	32 0.080	0 0.0200	0.0200	0.0200	0.0130	0.0065	0.0020	0.0070	0.0001	0.0005	0.0001	0.0001	0.0000
	33 0.080	0 0.0200	0.0200	0.0200	0.0130	0.0065	0.0020	0,0070	1000.0	0.0003	0.0001	0.0001	0.0000
	34 0.080	0 0.0200	0.0200	0.0200	0.0130	0.0065	0.0020	0.0070	0.0001	0.0008	0,0002	0,0002	0.0000
	35 0.080	0 0.0200	0.0200	0,0200	0.0130	0.0065	0.0020	0.0070	0.0002	0.0015	0.0002	0.0002	0.0000
	36 0,080	0 0.0200	0.0200	0.0200	0.0130	0.0065	0.0020	0.0070	0.0004 0.0006	0.0015	0.0002	0.0002	0.0000
	37 0.080		0.6200	0,0200	0.0130	0.0065	0.0020	0.0070	0.0008	0.0015	0.0002	0.0002	0.0000
	38 0.080		0.0200	0,0200	0.0130	0.0065	0.0020	0.0070		0.0018	9.0002	0.0002	0.0000
	39 0.080		0.0200	0.0200	0.0130	0.0065	0.0020	0.0070	0.0010 0.0012	0.0019	0.0002	0.0002	0.0000
	40 0.080		0.0200	0.0200	0.0130	0.0065	0.0020	0.0070	0.0012	0.0020 0.0020	0.0002	0.0002	0.0000
	41 0.080		0.0200	0.0200	0.0130	0.0065	0.0020	0.0070	0.0014		0.0002	0.0003	0.0000
	42 0.080		0.0200	0.0200	0,0130	0.0065	0.0020	0.0070	0.0016	0.0020 0.0021	0.0002	0.0003	0.0000
	43 0.080		0.0200	0.0200	0.0130	0,0065	0.0020	0.0070	0.0016	0.0021	0.0002	0.0003	0.0000
	44 0.080		0.0200	0.0200	0.0130	0.0065	0.0020	0.0070	0.0016	0.0029	0.0002 0.0003	0.0003	0.0000
	45 0.0800		0.0200	0.0200	0.0130	0.0065	0.0020	0.0050	0.0014	0.0063	0.0003	0.0003 0.0003	0.0000
	46 0.0800		0.0200	0.0200	0.0139	0.0065	0.0020	0.0045	0.0012	0.0080	0.0003	0.0003	0.0000
	47 0.0800		0.0200	0.0200	0.0130	0,0065	0.0020	0.0040	0,0010	0,0102	0,0003	0.0004	0.0000
	48 0.0800		0.0200	0.0200	0.0130	0.0065	0.0020	0.0030	0.0010	0.0129	0.0003	0.0004	0.0000 0.0000
	49 0.0800		0.0200	0.0200	0.0130	0.0065	0.0020	0.0030	0.0010	0.0163	0.0003	0.0004	0.0000
	50 0.0000 51 0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0010	0.0300	0.0004	0.0004	0.0900
			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0010	0.0450	0.0004	0.0004	0.0700
		414044	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0010	0.0600	0.0004	0.0005	0.0700
	53 0.0000 54 0.0000		0.0000	0,0000	0.0000	0.0000	0.0000	0.0000	0100.0	0.0677	0.0005	0.0005	0.0700
	55 0.0000		0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0,0010	0.0750	0,0005	0.0006	0.1000
	56 0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.1200	0.0005	0.0006	0.1700
	57 0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.1500	0.0006	0.0007	0.1500
	58 0.0000		0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.1800	0.0006	0.0008	0.1300
	59 0.0000		0,0000 0,0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.1900	0,0007	0.0008	0.1300
	60 0,0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.2000	0.0008	0.0009	0.1800
	51 0.0000		0.0000	0.0000 0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.2200	0.0009	0.0010	0,2200
	62 0.0000		0.0000	0.0000	0.0000	0.0009	0.0000	0.0000	0.0000	0.2400	0.0010	0.0010	0.2600
	63 0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.2600	0.0011	0.0011	0.2600
4	64 0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.2600	0.0012	0.0012	0.3600
	55 0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.2600	0.0014	0.0012	0.4700
	6 0.0000		0.0000	0.0000	0.0000	0,0800	0.0000	0,0000	0.0000	0.0000	0.0000	0.0000	1.0000
	57 0.0000	0.0000	0.0660	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000
(68 0.0000	0.0000	0.6000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000
	9 0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000
-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000 0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000
					0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000

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APPENDIX C

YEARS OF LIFE EXPECTANCY AFTER SERVICE RETIREMENT

<u>Age</u>	<u>Member</u>	Beneficiary	Age	Member	<u>Beneficiary</u>
50	33.74	33.29	80	10.08	0.20
51	32.80	32.34	81	9.52	9.30 8.74
52	31.87	31.40	82	8.98	8.20
53	30.94	30.47	83	8.46	8.20 7.68
54	30.01	29.53	84	7.97	7.08
55	29.09	28.61	85	7.51	6.71
56	28.18	27.68	86	7.07	6.25
57	27.28	26.77	87	6.65	5.83
58	26.38	25.86	. 88	6.24	5.42
59	25.49	24.97	89	5.86	5.05
60	24.61	24.09	90	5.48	4.70
61	23.74	23.22	91	5.12	4.37
62	22.88	22.36	92	4.78	4.07
63	22.04	21.52	93	4.45	3.79
64	21.20	20.69	94	4.15	3.53
65	20.38	19.88	. 95	3.87	3.28
66	19.57	19.09	96	3.61	3.06
67	18.78	18.30	97	3.37	2.85
68	18.01	17.53	98	3.15	2.65
69	17.26	16.77	99	2.95	2.48
70	16.53	16.01	100	2.77	2.31
71	15.81	15.26	101	2.60	2.16
72	15.11	14.53	102	2.46	2.02
73	14.43	13.81	103	2.33	1.89
74	13.77	13.11	104	2.20	1.78
75	13.11	12.43	105	2.09	1.70
76	12.48	11.76	106	1.97	1.63
77	11.85	11.11 ·	107	1.87	1.57
78	11.25	10.49	108	1.76	1.53
79	10.66	9.88	109	1.67	1.50
			110	1.60	1.47

<u>Member</u> 94 GAM Male -4

Beneficiary 94 GAM Female +1

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APPENDIX C YEARS OF LIFE EXPECTANCY AFTER DISABILITY RETIREMENT

<u>Age</u>	<u>Member</u>	<u>Age</u>	<u>Member</u>	Age	<u>Member</u>
20	59.71	50	31.30	80	9.80
21	58.74	51	30.41	81	9.32
22	57.76	52	29.53	82	8.86
23	56.78	53	28.66	83	8.42
24	55.81	54	27.79	84	8.00
25	54.84	55	26:93	85	7.61
26	53.86	56	26.07	86	7.23
27	52.89	57	25.22	87	6.87
28	51.92	58	24.39	88	6.51
29	50.95	59	23.56	89	6.16
30	49.98	60	22.75	90	5.82
31	49.02	61	21.94	91	5.48
32	48.05	62	21.16	92	5.15
33	47.09	63	20.38	93	4.81
34	46.13	64	19.62	94	4.48
35	45.18	65	18.88	95	4.16
36	44.22	66	18.15	96	3.86
37	43.27	67	17.44	97	3.57
38	42.32	68	16.75	98	3.30
39	41.38	69	16.08	99	3.04
40	40.43	70	15.43	100	2.79
41	39.49	71	14.80	101	2.56
42	38.56	72	14.18	102	2.35
43	37.63	73	13.58	103	2.15
44	36.71	74	13.00	104	1.95
45	35.79	75	12.43	105	1.77
46	34.88	76	11.87	106	1.61
47	33.98	77	11.33	107	1.45
48	33.08	78	10.81	108	1.30
49	32.18	79	10.30	109	1.17

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APPENDIX D System Membership and Benefit Statistics

		Active Members	June 30, 2001	Percent Change
		June 30, 2003 2,104	2,107	-0.1%
A.	Number	40.00	39.61	1.0%
B.	Average Age	12.52	12.33	1.5%
C.	Average Years of Service	12.34	14.55	1.570
D.	Annual Salary	\$202,222,000	\$171,799,000	17.7%
	i. Total	\$202,222,000	\$81,537	17.9%
	ii. Average	\$90,115	ψ01,007	11.570
	Retired	and Inactive Vester	I Members	
		June 30, 2003	June 30, 2001	Percent Change
Ret	ired Members			
A.	Service Retirement			
	i. Number	364	313	16.3%
•	ii. Annual Allowance			
	Basic Only	\$18,934,837	\$14,406,117	31.4%
	COLA	\$3,276,025	\$2,218,688	47.7%
	Total	\$22,210,862	\$16,624,805	33.6%
	Average Monthly Amount	\$5,085	\$4,426	14.9%
В.	Disability Retirement			
	i. Number	729	680	7.2%
	ii. Annual Allowance			
	Basic Only	\$27,411,246	\$22,869,909	19.9%
	COLA	\$8,488,478	\$6,878,486	23.4%
	Total	\$35,899,724	\$29,748,395	20.7%
	Average Monthly Amount	\$4,104	\$3,646	12.6%
C.	Beneficiaries			
	i. Number	178	171	4.1%
	ii. Annual Allowance			
	Basic Only	\$2,566,012	\$2,202,992	16.5%
	COLA	\$1,637,427	\$1,417,113	15.5%
	Total	\$4,203,439	\$3,620,105	16.1%
	Average Monthly Amount	\$1,968	\$1,764	11.5%
Ina	ctive Vested Members	1	1	· · · · · · · · · · · · · · · · · · ·
A.	Number	58	36	61.1%

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APPENDIX D Schedule of Active Member Valuation Data

Valuation Date	Number	Annual Payroll		Monthly erage Pay	% Increase in Average Pay *
6/30/1993	1,785	\$	98,831,000	\$ 4,614	Not Calculated
6/30/1995	1,812	\$	109,196,000	\$ 5,022	8.84%
6/30/1997	1,954	\$	129,850,000	\$ 5,538	10.27%
6/30/1999	1,953	\$	144,125,000	\$ 6,150	11.05%
6/30/2001	2,107	\$	171,799,000	\$ 6,795	10.49%
6/30/2003	2,104	\$	202,222,000	\$ 8,009	17.88%

* Reflects the increase in average salary for members at the beginning of the period versus those at the end of the period, it does not reflect the average salary increases received by members who worked the full period.

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Actuarial Valuation Report

APPENDIX D

Retirees and Beneficiaries Added to and Removed from Retiree Payroll

		Added	Damanad			unual Retiree		N 995		nual Retiree			% Increase in														
	At Beginning			Payroll as of the At End of beginning of		rujion us or the runtu												Annual Retiree Payroll Payroll Added Removed During				Annual Retiree				Average Annual	
Time Period	of Period	Period	Period	Period		Period		ring Period*	2001	Period		nd of Period	Payroll		llowance												
6/30/1993-6/30/1995	700	157	33	824	\$	18,958,000	\$	7,264,000	\$	639,000	\$	25,583,000	31.94%	\$	31.047												
6/30/1995-6/30/1997	824	145	29	940	\$	25,583,000	\$	7,059,000	\$	652,000	\$	31,990,000	25.04%	•	34.032												
6/30/1997-6/30/1999	940	156	36	1,060	\$	31,990,000	\$	9,962,000	\$	880,000	\$	41.072.000	28,39%	\$	38,747												
6/30/1999-6/30/2001	1060	145	41	1,164	\$	41,072,000	\$`	10,272,000	\$	1,351,000	\$	49,993,000	21.72%		42,949												
6/30/2001-6/30/2003	1164	159	52	1,271	\$	49,993,000	\$	13,806,000	\$	1,485,000	\$	62,314,000	24.65%	\$	49.028												

* Includes the Plan's annual cost-of-living adjustment as well as payroll for new retirees.

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APPENDIX D ACTIVE MEMBERS

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Age Group	0-4	5-9	10-14	15-19	RS OF SER 20-24	25-29	30-34	35-39	40+	TOTAL
0-19										
20-24	20									20
	66,266									20 66,260
25-29	142	42	2							. 180
	73,987	88,126	**							77,221
30-34	139 79,424	247 92,329	28	! **						415
25.20			97,889							88,389
35-39	72 84,196	215 93,990	160 98,585	25 102,009	l **					473
40-44	12	66	114	118	46					94,500
	**	92,900	97,505	104,521	110,011					356 100,128
45-49	5	14	32	81	147	34				313
	**	**	95,961	104,156	106,937	111,340				104,745
50-54	1 **	2 **	7 **	27	96	91	17			241
* = = = =	••			106,274	104,692	113,583	**			108,465
55-59		2 **	3 **	9 **	20 105,191	32 108,359	19 **	4		89
50-64				1						107,316
				1 **	1 **	2 **	2 **	3 **	1 **	10 **
55-69								1		1
								**		**
70-74				i						
15+										
OTAL	391 77,761	588 92,743	346	262	311	159	38	8	1	2,104
	77,701	94,743	97,765	104,128	106,560	111,829	114,435	**	**	96,113
				'otal Salary verage Age		\$202,222,000 40.00				
				verage Ser		12.52				

** Note, cells with fewer than 20 people have salary information withheld for confidentiality purposes.

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APPENDIX D SERVICE RETIREMENT

Age Group	0-4	5-9	10-14	15-19	S OF RETIR 20-24	25-29	30-34	35-39	40+	TOTAL
BELOW 30					20.24	23-23	30-34	33-39	40+	IUIAL
30-34										
35-39										
40-44										
15-49										
50-54	40									4
	74,403									74,40
5-59	71 71,861	58 59,191								12 66,16
50-64	12 **	61 51,461	31 63,046							10 57,92
5-69	5 **	18 **	39 47,736							6 54,01
0-74		1	7 **	9 **	2 **					1
5-79					I					*
					**					*:
0-84					1 . **	3 **				*:
5-89						2	2			4
						**	**			**
0+									! **	ا بەنبە
OTAL	128 73,478	138 56,118	77 54,541	9 **	4 **	5 **	. 2	0	1	364
	12,110	20,110	J7,J71		**	**	7¥		**	61,019
			A	otal Retired verage Age verage Year			\$22,210,862 61,10 6.93			

** Note, cells with fewer than 20 people have benefit information withheld for confidentiality purposes.

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APPENDIX D DISABLED RETIREES

Ann Cana	0.1			YEARS	OF RETIRE					
Age Group	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
BELOW 30										
30-34	1									
	**									*
35-39	2	ı								-
	**	**								**
40-44	8 **	6 **	2							16
			**							**
45-49	6 **	3 **	5 **	1 **	1 **					16
					+2					**
50-54	31 62,933	13 **	2 **	5 **		1 **				52
55-59										54,223
77-79	70 71,643	62 57,690	11 **	10 ++	7 **	8 **	3 **			171
60-64	29	79	36	15	-					57,009
00.01	67,238	57,920	49,089	15 **	5 **	б **	2 **			172 52,942
65-69	3	15	46	30	14	7	5			
	**	**	58,276	43,748	**	**	3 **	1 **		121 47,371
70-74		3	15	43	14	5	5	2		87
		**	**	49,413	**	**	**	**		43,677
75-79			2	9	33	8	3	2		57
•			**	**	35,481	**	**	**		37,253
80-84					7	11	3			21
					**	**	**			36,557
85-89					۱ **	4	5			10
					**	**	**			**
90+							1 **		1	2
Fotal									**	**
lotat	150 65,407	182 55,711	119 51,247	113 43,113	82 32,527	50 28,266	27 29,196	5 **	1	729
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,		151115	54,041	20,200	29,190	**	••	49,245
				Te	otal Retired	Benefit	5	35,899,724		
					verage Age	- 19 - 41 J		63.43		
				A	verage Year	s Kettred		12.42		

** Note, cells with fewer than 20 people have benefit information withheld for confidentiality purposes.

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APPENDIX D BENEFICIARIES

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			·	YEAR	S OF RETIR	EMENT		<u> </u>		-
Age Group	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	5 **	1	1							
20-24	2									•
	*#									*
25-29										
30-34										
35-39] **		1 **				,			*
10-44	<u> </u> **	1 **	1 **							; ak
15-49	1 **	2 **		2 **						• • *:
50-54	4 **	3 **	3 **	3 **						13
5-59	7 **	4 **	5 **	2 **		1 **				19 **
0-64	5 **	8 **	5 **	5 **						23 22,818
5-69	8 **	7 **	5 **	1 **	3 **	3 **				27 22,252
0-74	5 **	5 **	6 **	6 **			**		·	23 26,177
5-79	6 **	1 **	4 **	4 **	3 **	3 **	! **			22 21,508
)-84	5 **	5 **	3 **	2 **	2 **	 **] **			19 **
5-89	2 **	1 **	1 **	3 **		2 **	1 **			10 **
}+				1 **	2 **					3 **
DTAL	52 24,794	38 24,327	35 24,535	29 23,072	10 **	10	4 **	0	0	178 23,615
				A	otal Retired verage Age verage Year		1	64,203,440 65.47 10.68		

** Note, cells with fewer than 20 people have benefit information withheld for confidentiality purposes.

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APPENDIX E GLOSSARY OF ACTUARIAL TERMINOLOGY

AAL: See Actuarial (Accrued Liability).

Accrued Benefit: The amount of an individual's benefit (whether or not vested) as of a specified date, determined in accordance with the terms of a pension plan and based on compensation (if applicable) and service to that date.

Actuarial Accrued Liability: "Target assets" which would be on hand were the System's current level of benefits to have been funded by normal costs from date of entry into the System by all current members and interest at the current investment return assumption were credited each year. It also includes the actuarial present value of all retired members and beneficiaries future benefits.

Actuarial Asset Value: The value of Assets used by the actuary in the actuarial valuation. In order to reduce the impact of assets value fluctuation and to capture the long term intrinsic value of the System's assets, actuaries sometimes use smoothing methods. These methods usually reflect the current market value of assets in some manner.

Actuarial Assumptions: Those assumptions such as interest (investment return), salary increases, termination from service and mortality needed by the actuary to complete an actuarial valuation.

Actuarial Gain (Loss): The difference between actual experience and actuarial assumption anticipated experience during the period between two actuarial valuation dates.

Actuarial Present Value: The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions. For purposes of this standard, each such amount or series of amounts is:

(a) adjusted for the probable financial effect of certain intervening events (such as changes in compensation levels, Social Security, marital status, etc.)

(b) multiplied by the probability of the occurrence of an event (such as survival, death, disability, termination of employment, etc.) on which the payment is conditioned, and

(c) discounted according to an assumed rate (or rates) of return to reflect the time value of money.

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

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Actuary: A business mathematician trained in mathematics, risk analysis and finance. An actuary is assigned the task of determining the contribution required to maintain financial balance as to inflow and outflow from a retirement system.

Assets: Underlying funds available to provide for the System's benefits. It reflects the accumulation of all contributions and investment earnings.

Contribution to the Unfunded Actuarial Accrued Liability (UAAL): That annual contribution rate which, if paid annually over the UAAL amortization period, would accumulate to the amount necessary to fully fund the UAAL. Accumulation includes annual crediting of interest at the assumed investment earnings rate. The contribution is calculated to remain as a level percentage of future active member payroll (including payroll of new members as they enter the System) assuming a constant number of active members. In order to remain as a level percentage of payroll, amortization payments are scheduled to increase at the annual inflation rate.

GASB: The Government Accounting Standards Board...which promulgates financial reporting and disclosure requirements for governmental entities, including public retirement systems.

GASB Statement No. 25: A set of disclosures promulgated by GASB to provide users of financial statements information as to the funding status of a public retirement system.

Investment Return Assumption: The average rate of investment earnings which is assumed will be earned by System funds.

Normal Cost: That annual contribution which, if paid annually from a member's first year of membership through the year of retirement, would accumulate to the amount necessary to fully fund the member's retirement benefits. Accumulation includes annual crediting of interest at the assumed investment earnings rate. The contribution rate is expressed as a percentage of the member's compensation.

Pension Benefit Obligation: A standardized disclosure measure of the present value of pension benefits, adjusted for the effects of projected salary increases, estimated to be payable in the future as a result of employee service to date.

Entry Age Normal Actuarial Funding Method: An Actuarial method for prefunding future retirement benefits. Under this method which the member contribution stream plus the employer contribution stream is determined as that level of percentage of payroll sufficient to finance benefits and employee contribution refunds for new entrant.

UAAL: (See Unfunded Actuarial Accrued Liability).

Unfunded Actuarial Accrued Liability: Actuarial Accrued Liability minus the Actuarial Value of Assets.

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