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Actuarial Valuation Report

City of San Jose
Police and Fire Department
Retirement Plan

As of June 30, 2001

November 2001

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William M. Mercer, Incorporated
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WILLIAM M.
MERCER

November 28, 2001

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, 2001 by William M. Mercer, Incorporated. The report includes:

(1) a determination of the city contribution rates under the current and recommended actuarial methods and assumptions; and

(2) a determination of the employee contribution rates under the current and recommended actuarial methods and assumptions.

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

The undersigned is a member 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 December Board meeting.

Sincerely,

Andy Yeung

Andy Yeung, ASA, 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, 2001 by William M. Mercer, Incorporated. 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 overfunded actuarial accrued liabilities. The Board elected to amortize the System's unfunded actuarial accrued liability over a 40-year period, beginning in 1977, with 16 years remaining as of the June 30, 2001 valuation date.

The actuarial value of assets used for the purposes of this valuation anticipates the adoption of the Supplemental Retiree Benefits Reserve (SRBR) program. The adoption of this program reduced the value of the assets by $21,874,871 as of June 30, 2001.

The ratio of actuarial value of assets to actuarial accrued liabilities increased from 112.8% to 114.8% as a result of this valuation. The primary cause of the increase was the greater than expected investment return on the System's assets.

The Board has adopted new non-economic assumptions following the experience study of the System as of June 30, 2001.

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

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 undersigned is a member of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

William M. Mercer, Incorporated

Andy Yeung

Andy Yeung, ASA, EA, MAAA

11/28/2001

Date

Board Member Summary of Valuation Results

Summary of Recommendations

City Contribution Rates [1]	June 30, 2001	June 30, 1999 [2]	Increase/Decrease
Normal Cost Rate:	22.35%	22.35%	0.00%
Rate of Contribution to Unfunded Actuarial Accrued Liability:	-10.34%	-8.35%	-1.99%
Medical Insurance:	1.61%	1.24%	0.37%
Dental Insurance:	0.60%	0.36%	0.24%
Total City Rate:	14.22%	15.60%	-1.38%
Estimated Annual Amount:	$ 24,428,000	$ 26,797,000	$ (2,369,000)

Employee Contribution Rates [1]	June 30, 2001	June 30, 1999 [2]	Increase/Decrease
Normal Cost Rate:	8.38%	8.37%	0.01%
Rate of Contribution to Unfunded Actuarial Accrued Liability:	0.06%	0.06%	0.00%
Medical Insurance:	1.61%	1.24%	0.37%
Dental Insurance:	0.20%	0.12%	0.08%
Total Employee Rate:	10.25%	9.79%	0.46%
Estimated Annual Amount	$ 17,608,000	$ 16,817,000	$ 791,000

(1) Annual amounts based on total annual salaries as of June 30, 2001 of $171,779,000

(2) After reflection of benefit improvement for active members effective February 4, 2000

SUMMARY OF RECOMMENDATIONS (CONT'D)

Actuarial Assumptions for Retirement Plan	June 30, 2001 [1]	June 30, 1999	Increase/Decrease
Annual Inflation Rate:	4.50%	4.50%	0.00%
Annual Investment Return:	8.00%	8.00%	0.00%
Annual Salary Increases:			
First 5 years of service	10.30%	10.50%	-0.20%
After 5 years of service			
Age 25-29	10.10%	9.90%	0.20%
Age 30-34	7.80%	7.70%	0.10%
Age 35-39	6.20%	6.20%	0.00%
Age 40-44	5.50%	5.50%	0.00%
Age 45-49	5.20%	5.20%	0.00%
Age 50-54	4.90%	4.90%	0.00%
Age 55-59	4.80%	4.90%	-0.10%
Age 60 and over	4.60%	4.60%	0.00%

Actuarial Assumptions for Medical and Dental Plans

Annual Increase in Medical and Dental Plan costs over the next 10 years:	Fiscal Year	June 30, 2001 Medical	June 30, 2001 Medical with Medicare Risk Component	June 30, 2001 Dental
	2001-2002	12.00%	4.20%	9.00%
	2002-2003	11.00%	3.40%	8.00%
	2003-2004	10.00%	3.90%	7.00%
	2004-2005	9.00%	4.60%	5.50%
	2005-2006	8.00%	4.30%	5.50%
	2006-2007	7.00%	4.30%	5.50%
	2007-2008	6.00%	6.00%	5.50%
	2008-2009	6.00%	6.00%	5.50%
	2009-2010 and later	6.00%	6.00%	5.50%

[1] Other assumptions are based upon the June 30, 2001 experience analysis.

Summary of Significant Actuarial Statistics and Measures

System Membership	June 30, 2001	June 30, 1999 [4]	Increase
Active Members			
1. Number of Members	2,107	1,953	7.9%
2. Total Active Payroll	$ 171,779,000	$ 144,125,000	19.2%
3. Average Monthly Salary	$ 6,794	$ 6,150	10.5%
Retired Members			
1. Number of Members			
Service Retirement	313	273	14.7%
Disability Retirement	680	630	7.9%
Beneficiaries	171	157	8.9%
2. Total Retired Payroll	$ 49,993,000	$ 41,072,000	21.7%
3. Average Monthly Pension	$ 3,579	$ 3,229	10.8%
Inactive Vested Members			
1. Number of Members	36	35	2.9%
Asset Values (Net)			
Market Value [1]	$ 1,671,430,000	$ 1,579,385,000	5.8%
Return on Market Value [2]	3.36%	12.33%	
Actuarial Value [1]	$ 1,765,284,000	$ 1,464,185,000	20.6%
Return on Actuarial Value [2]	10.33%	13.41%	
Actuarial Value after allowing for implementation of SRBR program [1], [3]	$ 1,743,409,000	n/a	
Liability Values			
Actuarial Accrued Liability	$ 1,522,329,000	$ 1,301,412,000	17.0%
Unfunded Actuarial Accrued Liability (UAAL)	$ (221,080,000)	$ (163,753,000)	-35.0%
Funding Ratios			
GASB No. 25	114.8%	112.8%	2.0%

(1) Includes Value of Health Insurance Reserve.

(2) Annualized Rate of Return.

(3) Supplemental Retiree Benefit Reserve (SRBR) as of June 30, 2001 was $21,874,871.

(4) After reflection of benefit improvement for active members effective February 4, 2000

Explanation of Changes in Actuarial Values

City Contribution Rates

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

Retirement Plan	City Contribution			Member Contribution		
	% of Payroll		Dollar Impact	% of Payroll		Dollar Impact
June 30, 1999 Rate	**14.00%**		**$ 24,049,000**	**8.43%**		**$ 14,481,000**
Before Assumption Change						
Investment return greater than expected	-3.30%	(1)	$ (5,669,000)			
Contributions greater than expected	-0.78%	(2)	$ (1,339,000)			
Payroll growth greater than expected	1.02%	(3)	$ 1,752,000			
Implementation of SRBR Program	1.02%	(4)	$ 1,752,000			
Miscellaneous (gains)/ losses	-0.67%	(5)	$ (1,151,000)	-0.04%		$ (69,000)
Subtotal	-2.71%		$ (4,655,000)	-0.04%		$ (69,000)
June 30, 2001 Rate (Before Assum. Change)	**11.29%**		**$ 19,394,000**	**8.39%**		**$ 14,412,000**
After Assumption Change						
Change in Actuarial Assumptions	0.72%	(6)	$ 1,237,000	0.05%	(6)	$ 86,000
Subtotal	0.72%		$ 1,237,000	0.05%		$ 86,000
June 30, 2001 Rate	**12.01%**		**$ 20,631,000**	**8.44%**		**$ 14,498,000**

Medical and Dental Plans	City Contribution			Employee Contribution		
	% of Payroll		Dollar Impact	% of Payroll		Dollar Impact
June 30, 1999 Rate	**1.60%**		**$ 2,748,000**	**1.36%**		**$ 2,336,000**
Before Assumption Change						
Investment and other (gains) / losses	0.31%	(7)	$ 533,000	0.17%	(7)	$ 292,000
June 30, 2001 Rate (Before Assum. Change)	**1.91%**		**$ 3,281,000**	**1.53%**		**$ 2,628,000**
After Assumption Change						
Change in Actuarial Assumptions	0.30%	(8)	$ 516,000	0.28%	(8)	$ 482,000
June 30, 2001 Rate	**2.21%**		**$ 3,797,000**	**1.81%**		**$ 3,110,000**

Retirement, Medical and Dental Plans	City Contribution		Employee Contribution	
	% of Payroll	Dollar Impact	% of Payroll	Dollar Impact
June 30, 1999 Rate - Current Rate	15.60%	$ 26,797,000	9.79%	$ 16,817,000
June 30, 2001 Rate - Before Assumption Change	13.20%	$ 22,675,000	9.92%	$ 17,040,000
June 30, 2001 Rate - After Assumption Change	14.22%	$ 24,428,000	10.25%	$ 17,608,000

Explanation of Gain/ Loss Items

(1) Investment return greater than expected - The average return on the System's actuarial valuation assets over the last two years was in excess of 8%.

(2) Contributions greater than expected - This results from the delayed implementation of lower employer and member rates calculated in the June 30, 1999 valuation.

(3) Payroll growth greater than expected - The System's payroll increased at an annual rate of 9.2% 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) Implementation of SRBR Program - This is the City rate impact of the SRBR implementation. Please refer to the following page for detail.

(5) Miscellaneous (gains) / losses - This includes correction in marital status for certain retirees plus other rate changes with untraced sources.

(6) Change in Actuarial Assumptions (Retirement Plan) - This is primarily due to improvement in post-retirement life expectancies expected for disabled retirees.

(7) Investment and other (gains)/losses - This includes investment gains plus additional cost of dental benefit improvement.

(8) Change in Actuarial Assumptions (Medical and Dental Plans) - This is primarily due to higher expected medical premium increases for the next several years.

Impact of SRBR

	City		Members	
	% of Pay	Amount *	% of Pay	Amount *
June 30, 1999 Rates				
Retirement Plan Cost	14.00%	$24,049,000	8.43%	$14,481,000
Medical Plan Cost	1.24%	$2,130,000	1.24%	$2,130,000
Dental Plan Cost	0.36%	$618,000	0.12%	$206,000
Total	15.60%	$26,797,000	9.79%	$16,817,000
June 30, 2001 Rates				
New Assumptions Before SRBR				
Retirement Plan Cost	10.99%	$18,879,000	8.44%	$14,498,000
Medical Plan Cost	1.61%	$2,766,000	1.61%	$2,766,000
Dental Plan Cost	0.60%	$1,031,000	0.20%	$344,000
Total	13.20%	$22,676,000	10.25%	$17,608,000
New Assumptions With SRBR				
Retirement Plan Cost	12.01%	$20,631,000	8.44%	$14,498,000
Medical Plan Cost	1.61%	$2,766,000	1.61%	$2,766,000
Dental Plan Cost	0.60%	$1,031,000	0.20%	$344,000
Total	14.22%	$24,428,000	10.25%	$17,608,000
Net Impact of SRBR Addition				
Retirement Plan Cost:	1.02%	$1,752,000	0.00%	$0
Medical Plan Cost	0.00%	$0	0.00%	$0
Dental Plan Cost	0.00%	$0	0.00%	$0
Total	1.02%	$1,752,000	0.00%	$0

* Based on July 1, 2001 annual payroll of $171,779,000

Assumption Changes

Changes were made to some of the assumptions. Following were the most significant:

- Disability — Duty disability rates are decreased. This reduces costs.
- Service Retirement — Service Retirement rates are decreased. This reduces costs.
- Salary Increase — The merit and longevity salary increase assumption is changed to reflect actual salary increases over the last two years. This increases costs.
- Post-Retirement Mortality — The new mortality table includes a setback (i.e., a mortality improvement) for disability retirees to reflect the Plan's mortality experience when compared to the standard table that was adopted. The change increases costs.
- Medical and Dental Premium Increases — Short-term premium increases are raised to reflect anticipated experience. This increases costs.

Actuarial Assumptions

Economic Actuarial Assumptions

Introduction

Economic actuarial assumptions are of three types:

1. Inflation — 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. This assumption also determines the rate at which payments to the Unfunded Actuarial Accrued Liability increase each year.

2. Investment Return — 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.

3. Salary Increases — Have a significant impact on determining the benefit that members will receive at retirement. This assumption contains two components — cost-of-living (inflation) plus pay raises that members receive as a result of promotions and step increases.

Setting Economic Assumptions

The Actuarial Standards Board has issued a practice standard entitled "Selection of Economic Assumptions for Measuring Pension Obligations". This Actuarial Standard of Practice (SOP) is designed to provide pension actuaries guidance in the setting of economic assumptions. Section 3.4 of the SOP provides the following general steps for selecting economic assumptions for a specific measurement:

1. Identify components, if any, of each assumption and evaluate relevant data;

2. Develop a best-estimate range for each economic assumption required for the measurement, reflecting appropriate measurement-specific factors; and

3. Further evaluate measurement-specific factors and select a specific point within the best-estimate range.

After completing these steps for each assumption, the actuary should review the set of economic assumptions for reasonableness and consistency and make any needed changes.

The relevant data referred to in step 1 should consist of appropriate historical and recent economic data. In Section 3.3, the SOP recommends that the actuary consider recent economic data, "however, the actuary should not give undue weight to recent experience."

The remainder of this Section provides the analytical development behind each of the three economic assumptions.

Inflation

Recommendation

We recommend that the Board retain the current inflation assumption of 4.50%.

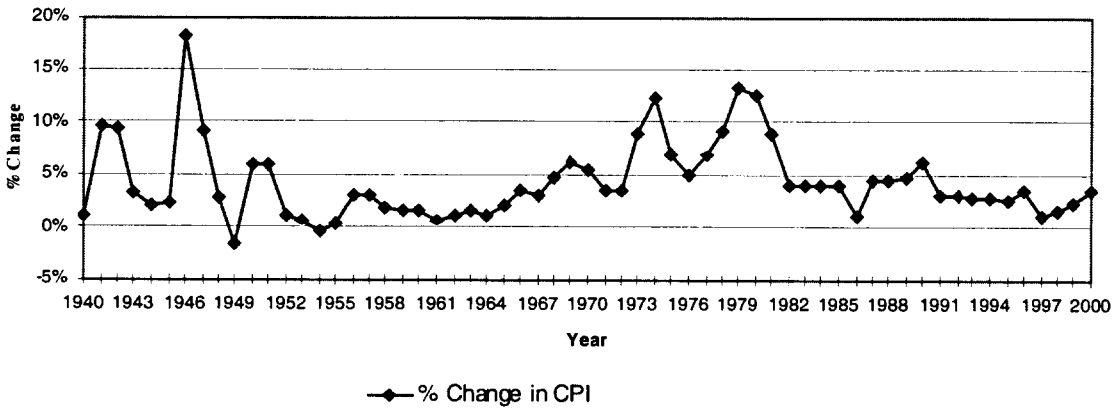
The analysis supporting our recommendation follows.

Setting the Assumption

The rate of inflation has varied significantly over time. The following chart shows the annual increases in the Consumer Price Index over the last 60 years:

Chart 1

Annual Increase in CPI (1941 Through 2000)



The actuarial SOP specifies the following data to be considered in setting the inflation assumption (Section 3.5.1):

- Consumer Price Indices (CPI)
- The Gross Domestic Product Implicit Price Deflator (IPD)
- Forecasts of inflation
- Yields on government securities of various maturities

Because the CPI and IPD have not differed significantly over the last 60 years, we will focus our analysis on the CPI.

CPI History

Table 1 provides the annualized increases in the Consumer Price Index for recent and extended periods over the last 60 years.

Table 1
History of CPI Increases
Expressed as an Annualized Average [1]

Number of Years Ending 12/31/00:	CPI
10	2.55%
20	3.51%
30	5.00%
40	4.48%
50	3.93%
60	4.26%

[1] Geometric average. CPI data is based upon US All City Average, CPI-U for years after 1979.

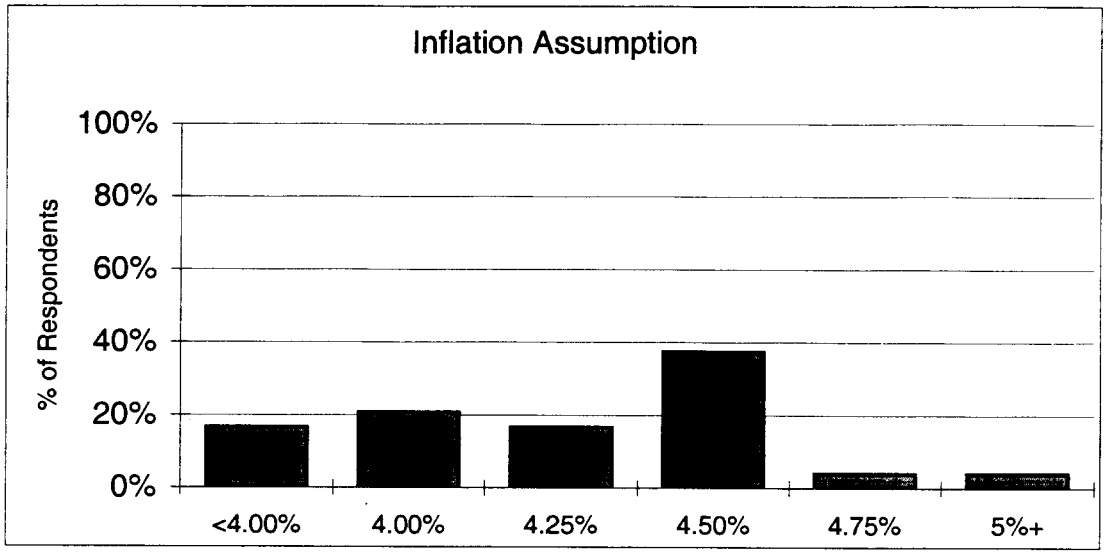
With the exception of the last 30 year period, which is heavily influenced by the high inflationary period between 1972 and 1981, inflation has typically ranged between about 3.00% and 4.50%. On the other hand, the last ten years have produced inflation at the low end of this range. After considering both long-term historical and recent trends, we have concluded that an appropriate range for long-term inflation is 3.50% to 4.50%.

Forecasts of Inflation

We believe it is valuable to examine inflation assumptions adopted by similarly situated public retirement systems as an indicator of their long-term inflation expectations. Charts 2 and 3 provide the inflation assumptions used by the 24 California public retirement systems who responded to Mercer's 2001 survey of economic actuarial assumptions, and the 7 chartered city respondents, respectively.

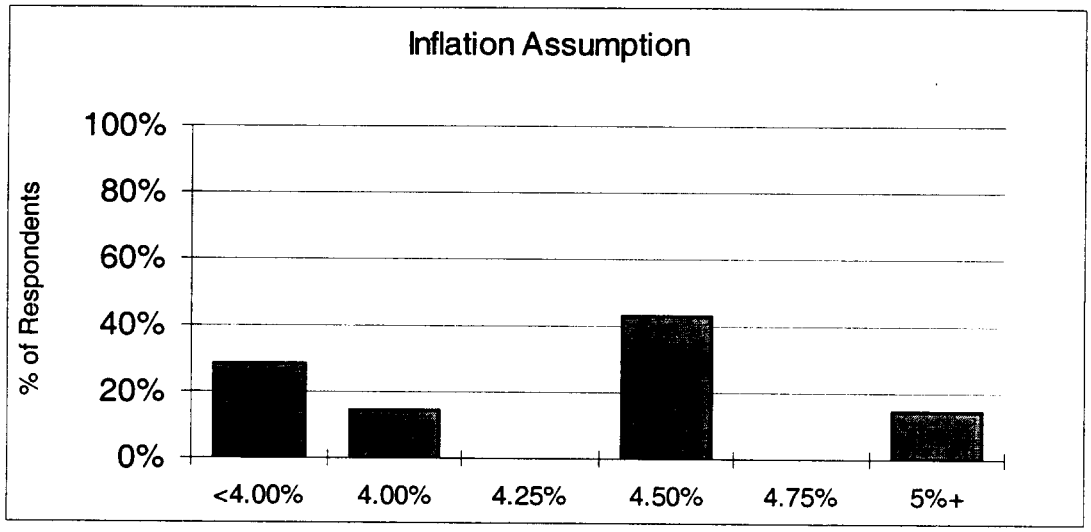
Based on this survey, the average inflation assumptions for the 24 California public retirement systems and the 7 chartered city respondents are 4.20% and 4.14%, respectively.

Chart 2 - Comparisons of Economic Actuarial Assumptions
All Respondents
(based on 24 responses)



Average	4.20%
25th Percentile	4.00%
50th Percentile	4.25%
75th Percentile	4.50%

Chart 3 - Comparison of Economic Actuarial Assumptions
Chartered City Respondents
(based on 7 responses)



Average	4.14%
25th Percentile	3.75%
50th Percentile	4.50%
75th Percentile	4.50%

Treasury Yield Curves

Inflation expectations implicit in Treasury yield curves can vary widely over a relatively short period of time. One might average Treasury yield data over some period of time; however, we question whether utilizing inflation expectations implicit in two- to three-year-old Treasury yields would be meaningful. Also, the usefulness of this data is hampered by the Federal Reserve's use of interest rates as a means of controlling the economy.

Summary

We conclude from our analysis that:

1. National historical inflation data can generally support an assumption in the range of 3.5% to 4.5% and Bay Area CPI has been in excess of the National CPI by about 1% over the last five years;

2. Inflation forecasts inherent in inflation assumptions adopted by similarly situated retirement systems are about 4.20%; and

3. Future inflation expectations in recent Treasury yield curves have been too volatile to use as an indicator of future inflation.

Based on this data, we believe a 4.50% long-term inflation assumption remains reasonable.

Investment Return

Recommendation

Based on the following analysis, we believe the Board should continue to use an investment return assumption of 8.00%.

Setting the Assumption

The actuarial SOP specifies that in addition to historical plan performance, the following data may be considered in setting the investment return assumption (Section 3.6.1):

- Forecasts of inflation
- Historical risk-free returns
- Real return or risk premium for each asset class
- Yields to maturity on fixed income government securities and corporate bonds

The first item has already been addressed as part of the development of the inflation assumption. The second item is the historical return on short term Treasury bills, such as 30 days, and is used to develop risk premiums for other asset classes. Our analysis will focus on the third item.

Section 3.6.3 of the actuarial SOP includes the following measurement-specific factors that should be considered in selecting the investment return assumption:

- Investment policy or asset allocation
- Expenses
- Investment manager performance

Each of these items will be addressed in the context of our analysis.

Real Rate of Return on Investments

The real rate of return on investments is a function of:

- The real rates of return on individual classes of assets within the investment portfolio;
- The relative proportion of the fund's total investments held in each class of securities (the "Asset Allocation");
- Expenses to be paid from earnings; and
- Reasonable risk (variability) adjustments.

Each of these four components are addressed separately.

Real Returns on Classes of Securities

Empirical studies of total real rates of return are available on most classes of securities in which the System invests. These studies are used as a resource upon which to develop historical average real rates of return. These historical averages are adjusted considering any fundamental changes in the economy, changes in government regulation, and any other factors that might affect the continued applicability of the historical averages.

Table 2

Ibbotson Associates
Real Rates of Return of Investments
(Geometric Mean)

	(1926 – 2000)
Common Stocks	7.7%
Small Stocks	9.0%
Long-term government bonds	2.2%
Long-term corporate bonds	2.5%
Intermediate government bonds	2.2%
Treasury bills	0.7%

Since this data is entirely historical it does not necessarily reflect future expectations. It also does not cover some types of investments common in the System's portfolio, Mercer has developed the following more detailed rate of return assumption by asset class. These expected real rates of return are taken from a number of sources which do include consideration of future expectations.

Table 3
Asset Class Returns Net of Inflation (Real)

Asset Class	Total Real Return
Large Cap Stocks	6.1%
Small Cap Stocks	7.0%
International Stocks	6.7%
Long-Term Bonds	3.9%
Intermediate Bonds	3.5%
Real Estate	5.2%
Money Market	1.8%

Asset Allocation

The Plan employs a third-party investment consultant to assist in establishing its target asset allocation and investment policy. The target asset allocation reflects the consultant's professional opinion on expected returns, the Plan's risk profile, prudent diversification, asset/liability matching, cash flow needs and other investment considerations. This target allocation is designed as a guidepost for balancing investments among asset classes. As such, it is the best indicator for the Plan's actual long-term asset allocation. The target asset allocation will be combined with the real rates of return on classes of securities to develop the expected gross real rate of return assumption for the System's portfolio.

The Plan's current and target asset allocations as of June 30, 2001 are shown in Table 4.

Table 4
Plan Asset Allocation as of 6/30/2001
At Market Value

	Current	Target (to be implemented in 2002)
Domestic Stocks	37%	35%
International Stocks	11%	20%
Bonds and Fixed Income*	42%	35%
Real Estate	10%	10%
Cash Equivalents and Short-Term	0%	0%

* Includes both U.S. and global fixed income

Applying the target asset allocation to be implemented in 2002 (Table 4) to the information in Table 3 results in a real return of approximately 5.26%. There are a number of additional factors which must be considered before arriving at an appropriate level for actuarial valuation purposes. These are discussed below.

Expenses to be Paid from Earnings

The expected gross real rate of return must be reduced to reflect expenses to be charged against investment earnings. To the extent such charges are expected to be made in the future, the expense margin will be sufficient to cover:

a) Administrative expenses;
b) The cost of actuarial valuations;
c) The cost of bank custodial services;
d) Fees related to investment in deeds of trust or mortgages;
e) Investment expenses; and
f) The cost of legal counsel.

The Plan's actual expenses over the last 5 years (coupled with any expected changes in future expense levels) is used to develop the expense charge. This expected future charge is applied against the expected gross real rate of return to produce a net real rate of return assumption.

Table 5 provides the expenses of the fund as a percentage of assets for each of the 5 fiscal years preceding June 30, 2001.

Table 5
Administrative and Investment Expenses as a Percentage of Average Assets at Actuarial Value

Fiscal Year End	
1997	0.46%
1998	0.41%
1999	0.45%
2000	0.41%
2001	0.46%
Average	0.44%

A percentage of 0.45% was used as an estimate of future expenses.

Risk Adjustment

The net real rate of return assumption should reflect the risk associated with not achieving expectations. This is developed by considering:

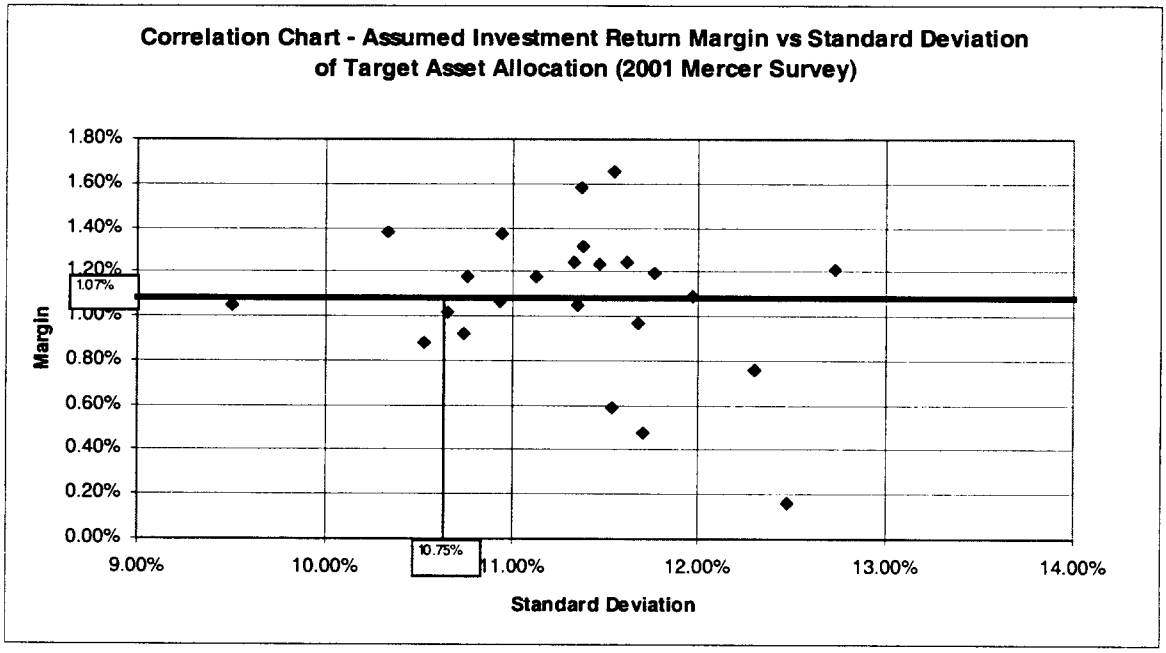
- The probability that actual future returns within asset classes will deviate statistically from historical averages;

- The effect that asset diversification will have on dampening statistical fluctuations of future returns; and
- The expectation that fund managers will underperform or outperform the general market indices upon which the real rates of return on individual classes of securities are measured.

Annual real rates of return have varied substantially over the years. For example, even if we expect the averages displayed in Table 3 to be a reasonable estimate of real returns in the future, we know there is some likelihood that future real rates will be more or less than historical averages. The risk lies in setting too high an investment earnings assumption, which leads to future losses and higher employer contributions. The risk adjustment helps protect against such an occurrence.

As an aid in setting an appropriate risk adjustment, Chart 4 presents a distribution diagram developed from Mercer's 2001 survey of economic assumptions of 24 California public retirement systems. From this survey we are able to identify the risk adjustment implicit within a system's investment return assumption versus the system's risk level as measured by the standard deviation of their current asset allocation. The diagram in Chart 4 provides that relationship. The chart also includes a regression line which, given a system's risk level, can be used to identify a risk adjustment consistent with the survey data.

Chart 4



As you can see from the chart, the Plan's risk adjustment so calculated would be approximately 1.07%, based on our calculation of the portfolio's annual standard deviation of 10.75%. This standard deviation is determined from Mercer's market simulation model reflecting the target asset allocation in Table 4.

There are other considerations which the Board should include in the determination of an appropriate risk adjustment. Those considerations are:

- Funding level — The Plan's funding level is approximately 115%. This indicates that the risk associated with the assumed rate is a reduction in prefunded liabilities as opposed to an increase in unfunded liability.
- History of Risk Adjustment — The following table provides a history of the risk adjustments implied in the System's investment return assumptions for the last few valuations.

Actuarial Valuation Dates	System Risk Adjustment
6/30/1993	0.9%
6/30/1995	0.9%
6/30/1997	1.0%
6/30/1999	1.0%
Average	0.95%

This year's calculated risk adjustment of 1.07% is comparable with the Plan's past few years' risk adjustments. Therefore, we believe that 1.07% risk adjustment is reasonable for use by the Plan.

Investment Manager Performance

Section 3.6.3.e. of the actuarial SOP states that:

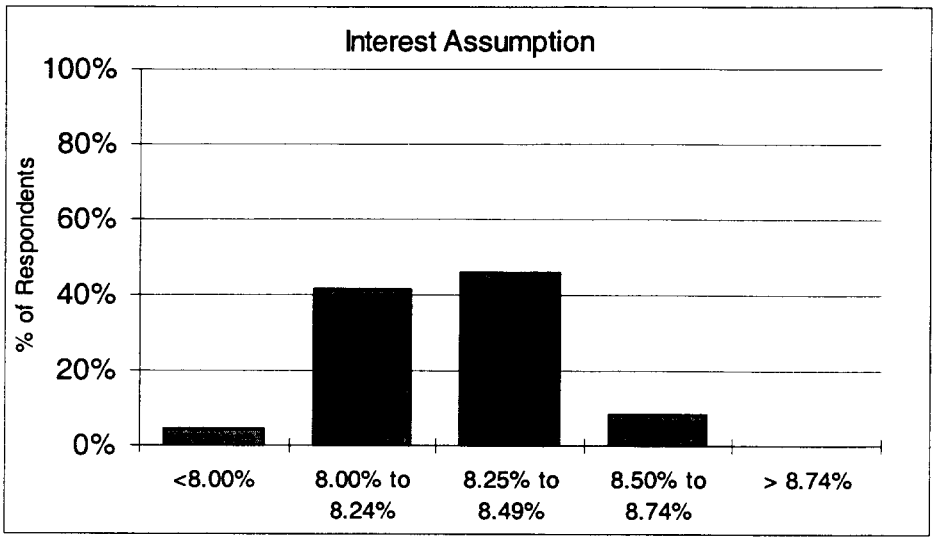
> Anticipating superior (or inferior) investment manager performance may be unduly optimistic (or pessimistic). Few investment managers consistently achieve significant above-market returns net of expenses over long periods. The plan sponsor may replace managers who consistently underperform market indices.

We concur with this statement, thus do not make any provision within our investment return assumption for superior or inferior performance relative to the market.

Comparison with Similarly Situated Systems

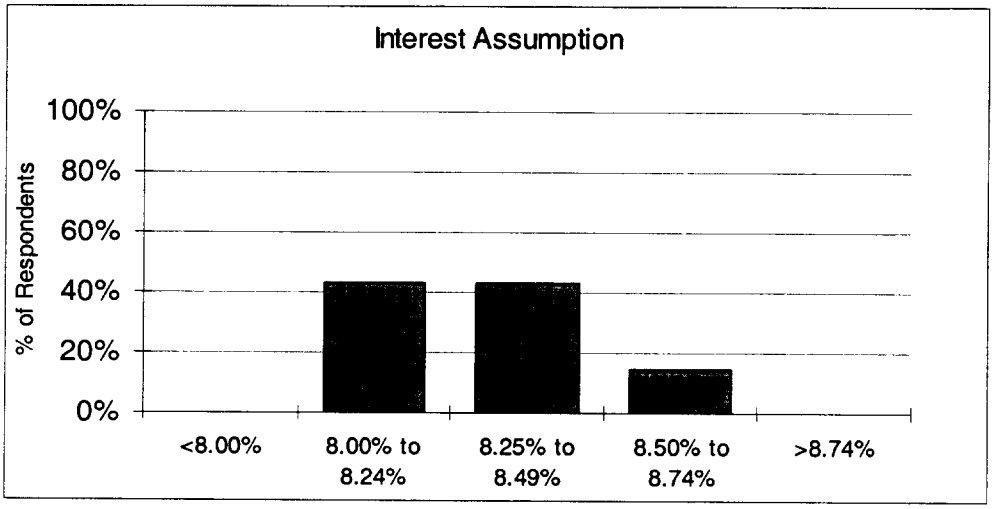
Charts 5 and 6 provide the investment return assumptions used by the 24 California public retirement systems who responded to Mercer's 2001 survey of the economic actuarial assumptions, and the 7 chartered city respondents, respectively.

Chart 5 - Comparison of Economic Actuarial Assumptions
All Respondents
(based on 24 responses)



Average	8.15%
25th Percentile	8.00%
50th Percentile	8.25%
75th Percentile	8.25%

Chart 6 - Comparison of Economic Actuarial Assumptions
Chartered City Respondents
(based on 7 responses)



Average	8.18%
25th Percentile	8.00%
50th Percentile	8.25%
75th Percentile	8.25%

Development of Recommendation

Based on the above analysis, we arrive at a real rate of return assumption of 3.74% (average gross rate of return of 5.26% minus 0.45% expenses minus risk adjustment of 1.07%). Combining this rate and the inflation assumption of 4.50% results in an expected return of 8.24%. However, in light of the current investment market conditions, we would not recommend changing the investment return assumption to a rate above 8.00%, which was adopted for the 1999 valuation. Thus, the continued use of an investment return assumption of 8.00% is recommended.

Salary Increase Assumptions

Recommendations

Salary Increase Assumptions

The Plan's salary increase assumptions are comprised of two components:

- Inflation Rate
- Salary Scale

Salary increases are provided to employees in the form of cost-of-living adjustments to offset the debasement of pay levels caused by inflation. In addition to inflationary increases, active members will receive "real" salary increases (i.e., over inflation) as they advance through salary grades and receive promotions over their career.

As part of our analysis we have reviewed real salary increases received by members over the two years ending June 30, 2001. Members were grouped by service and age to determine how salary increases vary across these groups. We also reviewed the merit and longevity assumptions for other similarly situated public retirement systems as a scale of reasonableness for the new assumptions. We recommend that the Board adopt the following changes to the annual real salary increase assumptions:

Real Salary Increase Assumptions

First 5 years of service	5.8%
After 5 years of service	
Age 25-29	5.6%
Age 30-34	3.3%
Age 35-39	1.7%
Age 40-44	1.0%
Age 45-49	0.7%
Age 50-54	0.4%
Age 55-59	0.3%
Age 60 and Over	0.1%

Setting the Assumption

The Actuarial Standards Board has issued a Standard of Practice (SOP) for setting economic assumptions in valuations of pension benefits. The actuarial SOP specifies the following data be considered in setting the salary increase assumption (Section 3.7.2)

- Employer's current compensation practice and any anticipated changes in this practice;
- Current compensation distributions by service or age;

- Historical compensation increases of employer and other employers in the same industry or geographic area; and
- Historical national wage and productivity increases.

In addition, the SOP states that the actuary should consider employer-specific compensation data, but the actuary must carefully weigh the credibility of this data when selecting the salary increase assumption.

The methodology used to construct the assumption is to utilize the inflation assumption as a base salary increase assumption. There is a sound economic reason for doing this. This is a long-term assumption and represents the expected annual increases in the cost of goods and services. In order for a member to maintain the same standard of living in the future as he or she does today, wages must at least keep up with inflation. If they do not, members will suffer a continuously eroding standard of living, which in turn will increase member turnover as workers seek jobs elsewhere that offer more competitive salaries. This creates obvious instability, which may occur for a short while, but eventually will have to return to equilibrium if the City is to continue as an ongoing operating entity.

Once the inflation component of the salary increase assumption is set, the process turns to the selection of the real (inflation-free) salary increase assumption component.

Real Salary Increases

In addition to inflation, member salaries are expected to increase due to:

- General increases which exceeded inflation ("Real Across-the-Board Salary Increases"); and
- Merit and longevity increases.

Real Across-the-Board Salary Increases

These are generally categorized as productivity increases because, in theory, they are generated from any activity that allows workers to produce goods and services more efficiently, thus more cheaply. If these efficiencies result in increased revenues to the employer and are passed along as salary increases, Real Across-the-Board Salary Increases will result. There is currently no Real Across-the-Board Salary Increase assumption for the Plan.

Merit and Longevity Salary Increases

Merit and longevity increases reflect the promotional grade increase an individual member is expected to receive over his or her career. This assumption is based on observed experience of real salary increases by category of member, by age group and/or service group. This assumption is reviewed at the time of the experience investigation.

The following are the average nominal (inflation plus real) annual salary increases received by members over the two years ending June 30, 2001.

Members with less than 5 years of service: 8.47%
Members with 5 or more years of service:

Age Bracket	Annual Increase
25-29	12.32%
30-34	9.34%
35-39	6.67%
40-44	5.93%
45-49	5.68%
50-54	5.45%
55-59	4.56%
60-64	3.15%

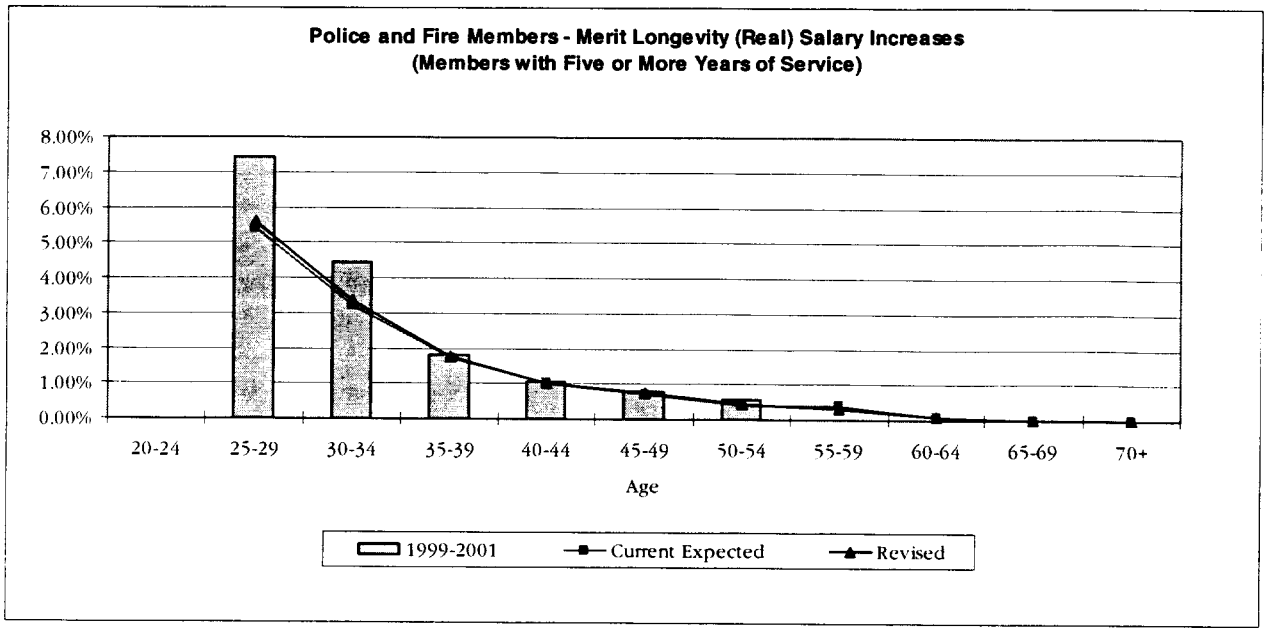
The actual average annual salary increase for active members over this two year period was 4.88%. This was derived from the change in average salary for all active members between July 1, 1999 and June 30, 2001. Netting this average increase (as a proxy for actual wage inflation over the two-year period) from the above nominal increases yields the following real wage increases:

Members with less than 5 years of service: 3.59%
Members with 5 or more years of service:

Age Bracket	Annual Increase
25-29	7.44%
30-34	4.46%
35-39	1.79%
40-44	1.05%
45-49	0.80%
50-54	0.56%
55-59	–
60-64	–

In light of this experience, the merit and longevity assumption was modified using the detailed methodology at the beginning of this section. The following graph summarize the current and the actual real salary increase over the July 1, 1999 and June 30, 2001 period.

Chart 7



When we add the recommended real salary increases to the assumed 4.50% inflation rate, we get the following total annual salary increase rates.

	Real Salary Increase	Inflation	Total
Members with less than 5 years of service:	5.8%	4.5%	10.30%
Members with 5 or more years of service:			
Ages 25-29	5.6%	4.5%	10.10%
Ages 30-34	3.3%	4.5%	7.80%
Ages 35-39	1.7%	4.5%	6.20%
Ages 40-44	1.0%	4.5%	5.50%
Ages 45-49	0.7%	4.5%	5.20%
Ages 50-54	0.4%	4.5%	4.90%
Ages 55-59	0.3%	4.5%	4.80%
Ages 60 and over	0.1%	4.5%	4.60%

Medical and Dental Premium Increases

Coverage

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

Medical Plan Choices
- Kaiser
- Lifeguard
- 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%.

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 4.50% 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
2001-2002	12.0%	9.0%
2002-2003	11.0%	8.0%
2003-2004	10.0%	7.0%
2004-2005	9.0%	5.5%
2005-2006	8.0%	5.5%
2006-2007	7.0%	5.5%
2007-2008	6.0%	5.5%
2008-2009	6.0%	5.5%
2009-2010 and later	6.0%	5.5%

These assumptions are modified for those medical plans with a Medicare risk component to reflect recent Federal law changes. The following annual increases were used for the Medicare component.

Fiscal Year	Medicare Increase
2001-2002	4.20%
2002-2003	3.40%
2003-2004	3.90%
2004-2005	4.60%
2005-2006	4.30%
2006-2007	4.30%
2007-2008	6.00%
2008-2009	6.00%
2009-2010	6.00%
2010-2011 and later	6.00%

The Medicare risk plans will experience more rapid cost increases as the plan is required to pick up more of what Medicare now reimburses.

The ten year funding approach has a "pay-as-you-go" element whereby, as the number of retirees grows relative to the number of active members, a higher contribution rate is required. Also, it is expected that medical and dental price inflation will outpace the rate of growth in active payroll beyond the current 10 year funding period – again causing an increase in rates over time. This may become a more pressing issue in the next few years as the Government Accounting Standards Board is scheduled to prepare a statement on accounting for post-retirement health benefits. This statement may require the City to accrue a health benefits expense on its financial statements reflecting a longer term funding horizon, although such an accounting statement would not technically require a higher cash contribution requirement. We will keep the Board apprised of these developments.

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 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 along with expected payroll. The UAAL is being funded over the 40-year period beginning in 1977, with 16 years remaining from the June 30, 2001 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 has been adopted by the Board, is called the Entry Age Normal Funding Method.

Employee Contributions

The members' contribution rates are recalculated on an actuarial basis at each actuarial study. The members presently contribute at the rate of 9.79% of pay.

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 8.00% target) to offset losses.

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

Determination of Actuarial Value of Assets

12 Months Ending:	Total Contributions	Total Benefits	Market Value	Average Value	(1) Total Market Return (Net)	(2) Expected Market Return (Net)	(1-2) Investment Gain (Loss)	Deferred Factor	Deferred Return
6/30/1994			$ 799,701,000						
6/30/1995	$ 35,987,000	$ 26,626,000	$ 941,786,000	$ 804,381,500	132,724,000	$ 64,350,520	$ 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	$ -
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	$ -
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	0.200	$ 18,373,424
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	0.400	$ 8,088,976
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)	0.600	$ (7,428,600)
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)	0.800	$ (112,887,424)

1. Total deferred return	$	(93,853,624) [1]
2. Market Value		1,671,430,000
3. Smoothed Market Value (Item 2 - Item 1)		1,765,283,624
4. Corridor Limit		
a. 80% of Net Market Value		1,337,144,000
b. 120% of Net Market Value		2,005,716,000
5a. Total Actuarial Value (Item 3 after corridor applied)		1,765,283,624
5b. Reserve for adoption of SRBR program		21,874,871
5c. Total Actuarial Value after allowing for adopting of SRBR program (Item 5a - Item 5b)		1,743,408,753
6. Ratio of Actuarial to Market Value (Item 5a / Item 2)		1.056152
7. Market Value of Defined Benefit Assets		1,643,407,000
8. Actuarial Value of Defined Benefit Assets (Item 7 X Item 6 - Item 5b)	$	1,713,812,214
9. Market Value of Postemployment Healthcare Plan Assets		28,023,000
10. Actuarial Value of Postemployment Healthcare Plan Assets (Item 9 X Item 6)	$	29,596,539
11. Percentage Medical		87.55%
12. Actuarial Value of Medical Assets (Item 11 X Item 10)	$	25,911,770
13. Percentage Dental		12.45%
14. Actuarial Value of Dental Assets (Item 13 X Item 10)	$	3,684,769

[1] Deferred Return to Be Recognized During the Next 4 Years

Date	Amount to Be Recognized
6/30/2002	$ (8,280,144)
6/30/2003	$ (26,653,568)
6/30/2004	$ (30,698,056)
6/30/2005	$ (28,221,856)
Total	$ (93,853,624)

Actuarial Valuation Results

City and Employee Contribution Rates

The following Table 7 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, 2001.

Table 7
Contribution Rates and Estimated Annual Contributions

Valuation Basis (Inflation/Investment Return)	City Contributions		Employee Contributions	
	Rate	Annual Amount*	Rate	Annual Amount*
Current Rates (4.50%/8.0%)	15.60%	$ 26,797,000	9.79%	$ 16,817,000
Recommended Rates (4.50%/8.0%)	14.22%	$ 24,428,000	10.25%	$ 17,608,000

* Annual amounts based on total annual salaries as of June 30, 2001 of $171,779,000

The component parts of the above City and employee contribution rates broken down among the various benefit categories can be found in Table 8 and Table 9.

Details supporting the medical and dental rate calculations can be found on Table 10 and 11.

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	City Contribution			Member Contribution		
	% of Payroll		Dollar Impact	% of Payroll		Dollar Impact
June 30, 1999 Rate	**14.00%**		**$ 24,049,000**	**8.43%**		**$ 14,481,000**
Before Assumption Change						
Investment return greater than expected	-3.30%	(1)	$ (5,669,000)			
Contributions greater than expected	-0.78%	(2)	$ (1,339,000)			
Payroll growth greater than expected	1.02%	(3)	$ 1,752,000			
Implementation of SRBR Program	1.02%	(4)	$ 1,752,000			
Miscellaneous (gains)/ losses	-0.67%	(5)	$ (1,151,000)	-0.04%		$ (69,000)
Subtotal	-2.71%		$ (4,655,000)	-0.04%		$ (69,000)
June 30, 2001 Rate (Before Assum. Change)	**11.29%**		**$ 19,394,000**	**8.39%**		**$ 14,412,000**
After Assumption Change						
Change in Actuarial Assumptions	0.72%	(6)	$ 1,237,000	0.05%	(6)	$ 86,000
Subtotal	0.72%		$ 1,237,000	0.05%		$ 86,000
June 30, 2001 Rate	**12.01%**		**$ 20,631,000**	**8.44%**		**$ 14,498,000**

Medical and Dental Plans	City Contribution			Employee Contribution		
	% of Payroll		Dollar Impact	% of Payroll		Dollar Impact
June 30, 1999 Rate	**1.60%**		**$ 2,748,000**	**1.36%**		**$ 2,336,000**
Before Assumption Change						
Investment and other (gains) / losses	0.31%	(7)	$ 533,000	0.17%	(7)	$ 292,000
June 30, 2001 Rate (Before Assum. Change)	**1.91%**		**$ 3,281,000**	**1.53%**		**$ 2,628,000**
After Assumption Change						
Change in Actuarial Assumptions	0.30%	(8)	$ 516,000	0.28%	(8)	$ 482,000
June 30, 2001 Rate	**2.21%**		**$ 3,797,000**	**1.81%**		**$ 3,110,000**

Retirement, Medical and Dental Plans	City Contribution		Employee Contribution	
	% of Payroll	Dollar Impact	% of Payroll	Dollar Impact
June 30, 1999 Rate - Current Rate	15.60%	$ 26,797,000	9.79%	$ 16,817,000
June 30, 2001 Rate - Before Assumption Change	13.20%	$ 22,675,000	9.92%	$ 17,040,000
June 30, 2001 Rate - After Assumption Change	14.22%	$ 24,428,000	10.25%	$ 17,608,000

Explanation of Gain/ Loss Items

(1) Investment return greater than expected - The average return on the System's actuarial valuation assets over the last two years was in excess of 8%.

(2) Contributions greater than expected - This results from the delayed implementation of lower employer and member rates calculated in the June 30, 1999 valuation.

(3) Payroll growth greater than expected - The System's payroll increased at an annual rate of 9.2% 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) Implementation of SRBR Program - This is the City rate impact of the SRBR implementation. Please refer to the following page for detail.

(5) Miscellaneous (gains) / losses - This includes correction in marital status for certain retirees plus other rate changes with untraced sources.

(6) Change in Actuarial Assumptions (Retirement Plan) - This is primarily due to improvement in post-retirement life expectancies expected for disabled retirees.

(7) Investment and other (gains)/losses - This includes investment gains plus additional cost of dental benefit improvement.

(8) Change in Actuarial Assumptions (Medical and Dental Plans) - This is primarily due to higher expected medical premium increases for the next several years.

Impact of SRBR

	City		Members	
	% of Pay	Amount *	% of Pay	Amount *
June 30, 1999 Rates				
Retirement Plan Cost	14.00%	$24,049,000	8.43%	$14,481,000
Medical Plan Cost	1.24%	$2,130,000	1.24%	$2,130,000
Dental Plan Cost	0.36%	$618,000	0.12%	$206,000
Total	15.60%	$26,797,000	9.79%	$16,817,000
June 30, 2001 Rates				
New Assumptions Before SRBR				
Retirement Plan Cost	10.99%	$18,879,000	8.44%	$14,498,000
Medical Plan Cost	1.61%	$2,766,000	1.61%	$2,766,000
Dental Plan Cost	0.60%	$1,031,000	0.20%	$344,000
Total	13.20%	$22,676,000	10.25%	$17,608,000
New Assumptions With SRBR				
Retirement Plan Cost	12.01%	$20,631,000	8.44%	$14,498,000
Medical Plan Cost	1.61%	$2,766,000	1.61%	$2,766,000
Dental Plan Cost	0.60%	$1,031,000	0.20%	$344,000
Total	14.22%	$24,428,000	10.25%	$17,608,000
Net Impact of SRBR Addition				
Retirement Plan Cost:	1.02%	$1,752,000	0.00%	$0
Medical Plan Cost	0.00%	$0	0.00%	$0
Dental Plan Cost	0.00%	$0	0.00%	$0
Total	1.02%	$1,752,000	0.00%	$0

* Based on July 1, 2001 annual payroll of $171,779,000

Assumption Changes

Changes were made to some of the assumptions. Following were the most significant:

- Disability — Duty disability rates are decreased. This reduces costs.
- Service Retirement — Service Retirement rates are decreased. This reduces costs.
- Salary Increase — The merit and longevity salary increase assumption is changed to reflect actual salary increases over the last two years. This increases costs.
- Post-Retirement Mortality — The new mortality table includes a setback (i.e., a mortality improvement) for disability retirees to reflect the Plan's mortality experience when compared to the standard table that was adopted. The change increases costs.
- Medical and Dental Premium Increases — Short-term premium increases are raised to reflect anticipated experience. This increases costs.

Table 8
Employee Contribution Rate Detail
Total Employee Contribution Rates

	New (8% Interest, 4.50% Inflation)		Current (8% Interest, 4.50% Inflation)	
	% of Payroll	Annual Amount*	% of Payroll	Annual Amount*
a. Basic				
Normal Cost	6.05%	$10,393,000	6.05%	$10,393,000
UAAL	0.05%	$86,000	0.05%	$86,000
b. COL				
Normal Cost	2.33%	$4,002,000	2.32%	$3,985,000
UAAL	0.01%	$17,000	0.01%	$17,000
c. Medical Insurance	1.61%	$2,766,000	1.24%	$2,130,000
d. Dental Insurance	0.20%	$344,000	0.12%	$206,000
e. Total	10.25%	$17,608,000	9.79%	$16,817,000

* Annual amounts based on total annual salaries as of June 30, 2001 of $171,779,000

Table 9
City Contribution Rate Detail
Total City Contribution Rates

	New (8% Interest, 4.50% Inflation)		Current (8% Interest, 4.50% Inflation)	
	% of Payroll	Annual Amount*	% of Payroll	Annual Amount*
a. Basic				
Normal Cost	16.14%	$27,725,000	16.12%	$27,691,000
UAAL	-8.13%	($13,965,000)	-6.57%	($11,286,000)
b. COL				
Normal Cost	6.21%	$10,667,000	6.23%	$10,702,000
UAAL	-2.21%	($3,796,000)	-1.78%	($3,058,000)
c. Medical Insurance	1.61%	$2,766,000	1.24%	$2,130,000
d. Dental Insurance	0.60%	$1,031,000	0.36%	$618,000
e. Total	14.22%	$24,428,000	15.60%	$26,797,000

* Annual amounts based on total annual salaries as of June 30, 2001 of $171,779,000

Table 10
Retiree Health Insurance 10-Year Cost Projection
Medical Benefits

Year	(1) Annual Cost Per Retiree	(2) Number of Insured Retirees	(3) Annual Cost (1) x (2)	(4) Total Covered Payroll	(5) Cost as a Percentage of Payroll Actual Percentage (3) / (4)	(6) Cost as a Percentage of Payroll Level Funded Percentage [(7) - (8)]/(9)
7/1/2001	4,863	1,072	5,213,000	171,779,301	3.04%	3.22%
7/1/2002	5,434	1,147	6,234,000	179,509,000	3.47%	3.22%
7/1/2003	6,009	1,227	7,374,000	187,587,000	3.94%	3.22%
7/1/2004	6,572	1,313	8,631,000	196,028,000	4.40%	3.22%
7/1/2005	7,118	1,405	10,002,000	204,849,000	4.88%	3.22%
7/1/2006	7,632	1,504	11,475,000	214,067,000	5.37%	3.22%
7/1/2007	8,090	1,609	13,015,000	223,700,000	5.81%	3.22%
7/1/2008	8,575	1,721	14,761,000	233,767,000	6.31%	3.22%
7/1/2009	9,090	1,842	16,743,000	244,287,000	6.85%	3.22%
7/1/2010	9,635	1,971	18,990,000	255,280,000	7.44%	3.22%

(7) Present Value of Future Benefits:	71,861,000
(8) Estimated Reserve of Assets Available for Medical Premiums:	25,911,770
(9) Present Value of Future Salaries:	1,431,584,000

Actuarial assumptions:

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

Table 11
Retiree Health Insurance 10-Year Cost Projection
Dental Benefits

Year	(1) Annual Cost Per Retiree	(2) Number of Insured Retirees	(3) Annual Cost (1) x (2)	(4) Total Covered Payroll	(5) Cost as a Percentage of Payroll Actual Percentage (3) / (4)	(6) Cost as a Percentage of Payroll Level Funded Percentage [(7) - (8)]/(9)
7/1/2001	1,108	1,097	1,215,000	171,779,301	0.71%	0.80%
7/1/2002	1,196	1,174	1,404,000	179,509,000	0.78%	0.80%
7/1/2003	1,280	1,256	1,608,000	187,587,000	0.86%	0.80%
7/1/2004	1,350	1,344	1,814,000	196,028,000	0.93%	0.80%
7/1/2005	1,424	1,438	2,048,000	204,849,000	1.00%	0.80%
7/1/2006	1,502	1,539	2,311,000	214,067,000	1.08%	0.80%
7/1/2007	1,585	1,646	2,609,000	223,700,000	1.17%	0.80%
7/1/2008	1,672	1,762	2,945,000	233,767,000	1.26%	0.80%
7/1/2009	1,764	1,885	3,325,000	244,287,000	1.36%	0.80%
7/1/2010	1,861	2,017	3,753,000	255,280,000	1.47%	0.80%

(7) Present Value of Future Benefits:	14,867,000
(8) Estimated Reserve of Assets Available for Medical Premiums:	3,684,769
(9) Present Value of Future Salaries:	1,431,584,000

Actuarial assumptions:

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

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.

The funding ratios for the bi-annual valuations as of June 30, 1993 through June 30, 2001 are as follows:

Actuarial Valuation Date	Actuarial Value of Assets [1] (a)	Entry Age Actuarial Accrued Liability (AAL) [2] (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a)/c)
6/30/1993	$714,592,000	$716,123,000	$1,531,000	99.8%	$98,831,000	2%
6/30/1995	$854,414,000	$828,739,000	($25,675,000)	103.1%	$109,196,000	-24%
6/30/1997 [3]	$1,124,294,000	$996,646,000	($127,648,000)	112.8%	$129,850,000	-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%

[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.

Actuarial Balance Sheet

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 22.35% to the Retirement Plan and 2.21% 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 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 (10.34%).

Actuarial Balance Sheet
As of June 30, 2001

	BASIC	COL	TOTAL
Assets			
1. Total Actuarial Value of Assets	$1,502,369,194	$544,017,430	$2,046,386,624
2. Present Value of Future Contributions by Members			
a. Retirement	$112,775,393	$43,322,001	$156,097,394
b. Unfunded Actuarial Accrued Liability	$876,077	$407,423	$1,283,500
c. Medical and Dental	$39,723,250	$0	$39,723,250
2. Present Value of Future Contributions by the City:			
a. Normal Cost	$300,734,382	$115,525,336	$416,259,718
b. Unfunded Actuarial Accrued Liability	($173,739,046)	($47,341,065)	($221,080,111)
c. Medical and Dental	$17,560,211	$0	$17,560,211
4. Total Actuarial Assets	$1,800,299,460	$655,931,125	$2,456,230,585
Liabilities			
5. Present Value of Retirement Allowances Payable to Present Retired Members	$418,285,292	$277,746,003	$696,031,295
6. Present Value of Retirement Allowances to be Granted:			
a. Service Retirement	$506,403,964	$193,174,176	$699,578,140
b. Disability Retirement	$478,064,658	$182,518,767	$660,583,425
7. Present Value of Death Benefits to be Granted	$4,921,839	$2,049,439	$6,971,278
8. Present Value of Members' Contributions to be Returned upon Withdrawal before Retirement	$2,765,836	$442,740	$3,208,576
9. Present Value of Medical and Dental Benefits	$86,880,000	$0	$86,880,000
10. Supplemental Retiree Benefits Reserve	$21,874,871	$0	$21,874,871
11. Accounts Payable	$281,103,000	$0	$281,103,000
12. Total Actuarial Liabilities	$1,800,299,460	$655,931,125	$2,456,230,585

System Assets

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, 2001	June 30, 1999	Percent Change
Actuarial Value [1], [2]	$1,765,284,000	$1,464,185,000	20.6%
Market Value [1]	$1,671,430,000	$1,579,385,000	5.8%

[1] Before adoption of SRBR program

[2] After allowing for adoption of SRBR program, the actuarial value of assets as of June 30, 2001 was $1,743,409,000.

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

	Market Value	Actuarial Value
Value of Assets at 6/30/1999	$1,579,385,000	$1,464,185,000
Contributions:		
Employer	54,859,000	54,859,000
Members	30,916,000	30,916,000
Benefits Paid to Participants	101,277,000	101,277,000
Expenses Paid	14,043,000	14,043,000
Investment Earnings	121,590,000	330,644,000
Value of Assets at 6/30/2001 [1]	**$1,671,430,000**	**$1,765,284,000 [2]**
ANNUALIZED NET RATE OF RETURN (Net of Expenses)	**3.36%**	**10.33%**

[1] Before adoption of SRBR program

[2] After allowing for adoption of SRBR program, the actuarial value of assets as of June 30, 2001 was $1,743,409,000.

The 10.33% annualized rate of return on the actuarial value of assets over the two years ending June 30, 2001 is more than the 8% rate assumed in the June 30, 1999 actuarial valuation. This resulted in an actuarial gain which reduced the budgeted contribution for the City.

SYSTEM ACCOUNTING ASSETS, RESERVES AND OTHER LIABILITIES
Investment of Retirement Plan

	Retirement Fund	Cost-of-Living Fund	Total
ASSETS			
Securities	$1,216,473,000	$452,662,000	$1,669,135,000
Securities Lending Collateral	159,428,000	60,185,000	219,613,000
Receivable from City of San Jose			
Employee Contributions	208,000	80,000	288,000
Employer Contributions	247,000	195,000	442,000
Accrued Investment Income	7,155,000	2,664,000	9,819,000
Due from Brokers and Others	14,800,000	5,724,000	20,524,000
Subtotal	$1,398,311,000	$521,510,000	$1,919,821,000
LIABILITIES			
Due to Brokers	$ 38,439,000	$ 14,511,000	$ 52,950,000
Securities Lending Collateral	159,428,000	60,185,000	219,613,000
Other Liabilities	3,062,000	789,000	3,851,000
Subtotal	$200,929,000	$75,485,000	$276,414,000
Net Assets Available for Benefits	$1,197,382,000	$446,025,000	$1,643,407,000

SYSTEM ACCOUNTING ASSETS, RESERVES AND OTHER LIABILITIES
Investment of Postemployment Healthcare Plans

	Retirement Fund	Cost-of-Living Fund	Total
ASSETS			
Securities	$28,392,000	-	$28,392,000
Securities Lending Collateral	3,721,000	-	3,721,000
Receivable from City of San Jose			
Employee Contributions	46,000	-	46,000
Employer Contributions	41,000	-	41,000
Accrued Investment Income	167,000	-	167,000
Due from Brokers and Others	345,000	-	345,000
Subtotal	$32,712,000	-	$32,712,000
LIABILITIES			
Due to Brokers	$897,000	-	$897,000
Securities Lending Collateral	3,721,000	-	3,721,000
Other Liabilities	71,000	-	71,000
Subtotal	$4,689,000	-	$4,689,000
Net Assets Available for Benefits	$28,023,000	-	$28,023,000

Appendices

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, 2001.

Final Average Salary (FAS)

Final average salary is defined as the highest 12 consecutive months of compensation earnable, 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.

Service-connected

Members may retire regardless of length of service, and the benefit is the greater of 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 (maximum 85% of FAS) or 50% 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 nonservice-connected 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.

Death Benefit - Inactive Members (after retirement)

The spouse receives 1.875% of FAS per year of service, not to exceed 37.5% of FAS. 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 set at 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. The members presently contribute at the rate of 9.79% of pay.

City's Retirement Contributions

The City presently contributes at a rate of 15.60% 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.

APPENDIX B
SUMMARY OF ASSUMPTIONS AND FUNDING METHOD

Assumptions

Valuation Interest Rate	8%
Inflation Rate	4.50%
Post-Retirement Mortality	
(a) Service	
Males	1994 Male Group Annuity Mortality Table (set back 3 years)
Females	1994 Female Group Annuity Mortality Table set forward 1 year
(b) Disability	PERS Industrial Disability Table 88-92 (set back 4 years)
Pre-Retirement Mortality	Based upon the 6/30/2001 Experience Analysis
Withdrawal Rates	Based upon the 6/30/2001 Experience Analysis
Disability Rates	Based upon the 6/30/2001 Experience Analysis
Service Retirement Rates	Based upon the 6/30/2001 Experience Analysis
Salary Scales	10.30% for the first five years of service. Graded increases thereafter ranging from 10.10% at age 25 to 4.60% at ages 60 and over. Of the total salary increases, 4.50% is for inflation.
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.

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 16 years remaining on the June 30, 2001 valuation date.

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+	deferred	ordinary disab.	duty disability	ordinary death	duty death	retirement AgeSv
<= 20	0.0600	0.0130	0.0130	0.0130	0.0130	0.0085	0.0020	0.0070	0.0000	0.0000	0.0001	0.0000	0.0000
21	0.0600	0.0130	0.0130	0.0130	0.0130	0.0085	0.0020	0.0070	0.0000	0.0001	0.0001	0.0000	0.0000
22	0.0600	0.0130	0.0130	0.0130	0.0130	0.0085	0.0020	0.0070	0.0000	0.0001	0.0001	0.0000	0.0000
23	0.0600	0.0130	0.0130	0.0130	0.0035	0.0085	0.0020	0.0070	0.0000	0.0001	0.0001	0.0000	0.0000
24	0.0600	0.0130	0.0130	0.0130	0.0070	0.0085	0.0020	0.0070	0.0000	0.0001	0.0001	0.0000	0.0000
25	0.0600	0.0130	0.0130	0.0130	0.0130	0.0085	0.0020	0.0068	0.0000	0.0002	0.0001	0.0000	0.0000
26	0.0600	0.0130	0.0130	0.0130	0.0130	0.0085	0.0020	0.0066	0.0001	0.0002	0.0001	0.0001	0.0000
27	0.0600	0.0130	0.0130	0.0130	0.0130	0.0085	0.0020	0.0065	0.0001	0.0003	0.0001	0.0001	0.0000
28	0.0600	0.0130	0.0130	0.0130	0.0130	0.0085	0.0020	0.0064	0.0001	0.0002	0.0001	0.0001	0.0000
29	0.0600	0.0130	0.0130	0.0130	0.0130	0.0085	0.0020	0.0062	0.0001	0.0002	0.0001	0.0001	0.0000
30	0.0600	0.0130	0.0130	0.0130	0.0130	0.0085	0.0020	0.0060	0.0001	0.0007	0.0001	0.0001	0.0000
31	0.0600	0.0130	0.0130	0.0130	0.0130	0.0085	0.0020	0.0058	0.0001	0.0006	0.0001	0.0001	0.0000
32	0.0600	0.0130	0.0130	0.0130	0.0130	0.0085	0.0020	0.0056	0.0001	0.0003	0.0001	0.0001	0.0000
33	0.0600	0.0130	0.0130	0.0130	0.0130	0.0085	0.0020	0.0054	0.0001	0.0008	0.0002	0.0002	0.0000
34	0.0600	0.0130	0.0130	0.0130	0.0130	0.0085	0.0020	0.0052	0.0002	0.0015	0.0002	0.0002	0.0000
35	0.0600	0.0130	0.0130	0.0130	0.0130	0.0085	0.0020	0.0050	0.0004	0.0015	0.0002	0.0002	0.0000
36	0.0600	0.0130	0.0130	0.0130	0.0130	0.0085	0.0020	0.0050	0.0006	0.0015	0.0002	0.0002	0.0000
37	0.0600	0.0130	0.0130	0.0130	0.0130	0.0085	0.0020	0.0050	0.0008	0.0018	0.0002	0.0002	0.0000
38	0.0600	0.0130	0.0130	0.0130	0.0130	0.0085	0.0020	0.0050	0.0010	0.0019	0.0002	0.0002	0.0000
39	0.0600	0.0130	0.0130	0.0130	0.0130	0.0085	0.0020	0.0050	0.0012	0.0020	0.0002	0.0002	0.0000
40	0.0600	0.0130	0.0130	0.0130	0.0130	0.0085	0.0020	0.0050	0.0014	0.0020	0.0002	0.0003	0.0000
41	0.0600	0.0130	0.0130	0.0130	0.0130	0.0085	0.0020	0.0050	0.0016	0.0020	0.0002	0.0003	0.0000
42	0.0600	0.0130	0.0130	0.0130	0.0130	0.0085	0.0020	0.0050	0.0016	0.0021	0.0002	0.0003	0.0000
43	0.0600	0.0130	0.0130	0.0130	0.0130	0.0085	0.0020	0.0050	0.0016	0.0029	0.0002	0.0003	0.0000
44	0.0600	0.0130	0.0130	0.0130	0.0130	0.0085	0.0020	0.0050	0.0016	0.0041	0.0003	0.0003	0.0000
45	0.0600	0.0130	0.0130	0.0130	0.0130	0.0085	0.0020	0.0040	0.0014	0.0063	0.0003	0.0003	0.0000
46	0.0600	0.0130	0.0130	0.0130	0.0130	0.0085	0.0020	0.0035	0.0012	0.0080	0.0003	0.0004	0.0000
47	0.0600	0.0130	0.0130	0.0130	0.0130	0.0085	0.0020	0.0030	0.0010	0.0102	0.0003	0.0004	0.0000
48	0.0600	0.0130	0.0130	0.0130	0.0130	0.0085	0.0020	0.0020	0.0010	0.0129	0.0003	0.0004	0.0000
49	0.0600	0.0130	0.0130	0.0130	0.0130	0.0085	0.0020	0.0020	0.0010	0.0163	0.0003	0.0004	0.0000
50	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0010	0.0300	0.0004	0.0004	0.1000
51	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0010	0.0450	0.0004	0.0004	0.0800
52	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0010	0.0600	0.0004	0.0005	0.0800
53	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0010	0.0677	0.0005	0.0005	0.0900
54	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0010	0.0750	0.0005	0.0006	0.0900
55	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.1200	0.0005	0.0006	0.1700
56	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.1500	0.0006	0.0007	0.1500
57	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.1800	0.0006	0.0008	0.1300
58	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
59	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.2000	0.0008	0.0009	0.1800
60	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
61	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.2400	0.0010	0.0010	0.2600
62	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.2600	0.0011	0.0011	0.2600
63	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.2600	0.0012	0.0012	0.3600
64	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.2600	0.0014	0.0012	0.4700
65	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
66	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
67	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
68	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
69	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
70	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

YEARS OF LIFE EXPECTANCY AFTER SERVICE RETIREMENT
San Jose Police and Fire

Age	Member	Beneficiary	Age	Member	Beneficiary
50	32.80	33.29	80	9.52	9.30
51	31.87	32.34	81	8.98	8.74
52	30.94	31.40	82	8.46	8.20
53	30.01	30.47	83	7.97	7.68
54	29.09	29.53	84	7.51	7.18
55	28.18	28.61	85	7.07	6.71
56	27.28	27.68	86	6.65	6.25
57	26.38	26.77	87	6.24	5.83
58	25.49	25.86	88	5.86	5.42
59	24.61	24.97	89	5.48	5.05
60	23.74	24.09	90	5.12	4.70
61	22.88	23.22	91	4.78	4.37
62	22.04	22.36	92	4.45	4.07
63	21.20	21.52	93	4.15	3.79
64	20.38	20.69	94	3.87	3.53
65	19.57	19.88	95	3.61	3.28
66	18.78	19.09	96	3.37	3.06
67	18.01	18.30	97	3.15	2.85
68	17.26	17.53	98	2.95	2.65
69	16.53	16.77	99	2.77	2.48
70	15.81	16.01	100	2.60	2.31
71	15.11	15.26	101	2.46	2.16
72	14.43	14.53	102	2.33	2.02
73	13.77	13.81	103	2.20	1.89
74	13.11	13.11	104	2.09	1.78
75	12.48	12.43	105	1.97	1.70
76	11.85	11.76	106	1.87	1.63
77	11.25	11.11	107	1.76	1.57
78	10.66	10.49	108	1.67	1.53
79	10.08	9.88	109	1.60	1.50
			110	1.53	1.47

Member
94 GAM Male -3

Beneficiary
94 GAM Female +1

YEARS OF LIFE EXPECTANCY AFTER DISABILITY RETIREMENT
San Jose Police and Fire

Age	Member	Age	Member	Age	Member
20	58.74	50	30.41	80	9.32
21	57.76	51	29.53	81	8.86
22	56.78	52	28.66	82	8.42
23	55.81	53	27.79	83	8.00
24	54.84	54	26.93	84	7.61
25	53.86	55	26.07	85	7.23
26	52.89	56	25.22	86	6.87
27	51.92	57	24.39	87	6.51
28	50.95	58	23.56	88	6.16
29	49.98	59	22.75	89	5.82
30	49.02	60	21.94	90	5.48
31	48.05	61	21.16	91	5.15
32	47.09	62	20.38	92	4.81
33	46.13	63	19.62	93	4.48
34	45.18	64	18.88	94	4.16
35	44.22	65	18.15	95	3.86
36	43.27	66	17.44	96	3.57
37	42.32	67	16.75	97	3.30
38	41.38	68	16.08	98	3.04
39	40.43	69	15.43	99	2.79
40	39.49	70	14.80	100	2.56
41	38.56	71	14.18	101	2.35
42	37.63	72	13.58	102	2.15
43	36.71	73	13.00	103	1.95
44	35.79	74	12.43	104	1.77
45	34.88	75	11.87	105	1.61
46	33.98	76	11.33	106	1.45
47	33.08	77	10.81	107	1.30
48	32.18	78	10.30	108	1.17
49	31.30	79	9.80	109	1.04

88' - 92' PERS Industrial Disability -4

System Membership and Benefit Statistics

Active Members	June 30, 2001	June 30, 1999	Percent Change
A. Number	2,107	1,953	7.9%
B. Average Age	39.61	39.86	-0.6%
C. Average Years of Service	12.33	12.82	-3.8%
D. Annual Salary			
i. Total	$ 171,799,000	$ 144,125,000	19.2%
ii. Average	$ 81,537	$ 73,797	10.5%

Retired and Inactive Vested Members	June 30, 2001	June 30, 1999	Percent Change
Retired Members			
A. Service Retirement			
i. Number	313	273	14.7%
ii. Annual Allowance			
Basic Only	$14,406,117	$11,548,137	24.7%
COLA	$2,218,688	$1,491,171	48.8%
Total	$16,624,805	$13,039,308	27.5%
Average Monthly Amount	$4,426	$3,980	11.2%
B. Disability Retirement			
i. Number	680	630	7.9%
ii. Annual Allowance			
Basic Only	$22,869,909	$19,413,166	17.8%
COLA	$6,878,486	$5,549,404	23.9%
Total	$29,748,395	$24,962,570	19.2%
Average Monthly Amount	$3,646	$3,302	10.4%
C. Beneficiaries			
i. Number	171	157	8.9%
ii. Annual Allowance			
Basic Only	$2,202,992	$1,898,951	16.0%
COLA	$1,417,113	$1,171,641	21.0%
Total	$3,620,105	$3,070,592	17.9%
Average Monthly Amount	$1,764	$1,630	8.2%
Inactive Vested Members			
A. Number	36	35	2.9%

Schedule of Active Member Valuation Data

Valuation Date	Number	Annual Payroll	Monthly Average 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%

* 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.

Retirants and Beneficiaries Added To and Removed from Retiree Payroll

Time Period	At Beginning of Period	Added During Period	Removed During Period	At End of Period	Annual Retiree Payroll as of the beginning of Period	Annual Retiree Payroll Added During Period*	Annual Retiree Payroll Removed During Period	Annual Retiree Payroll as of the End of Period	% Increase in Annual Retiree Payroll	Average Annual Allowance
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

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

CITY OF SAN JOSE - POLICE AND FIRE
ACTIVE MEMBERS

	YEARS OF SERVICE									
Age Group	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19										
20-24	28									28
	57,510									57,510
25-29	165	49	1							215
	62,339	75,301	57,404							65,270
30-34	178	247	44							469
	67,372	77,817	83,679							74,403
35-39	69	149	149	41	1					409
	68,432	78,908	84,602	90,414	95,920					80,410
40-44	14	50	74	135	52					325
	72,202	79,622	83,942	89,024	95,911					86,797
45-49	3	9	25	99	134	44				314
	70,822	82,343	83,173	89,650	90,939	94,771				90,013
50-54	2	3	7	32	70	128	9			251
	69,275	82,027	82,594	87,727	91,066	94,666	96,217			92,143
55-59	1	1	2	3	17	46	16	3		89
	73,240	95,920	82,671	91,381	89,900	91,682	85,845	135,313		91,390
60-64						2	1	4		7
						85,599	83,582	95,920		91,208
65-69										
70-74										
75+										
Total	460	508	302	310	274	220	26	7		2,107
	65,316	78,213	84,038	89,297	91,869	93,981	89,348	112,803		81,537

Total Salary	**$**	**171,799,165**
Average Age		**39.61**
Average Service		**12.33**

CITY OF SAN JOSE - POLICE AND FIRE

SERVICE RETIREMENT

YEARS OF RETIREMENT

Age Group	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
BELOW 30										
30-34										
35-39										
40-44										
45-49										
50-54	53									53
	62,095									62,095
55-59	60	49								109
	54,927	56,018								55,417
60-64	18	60	9							87
	59,245	52,392	52,400							53,811
65-69	4	15	20	1						40
	58,227	53,179	33,162	37,556						43,285
70-74		1	2	4	3					10
		52,136	47,363	55,251	21,337					43,188
75-79					2	1				3
					30,105	13,191				24,467
80-84					1	5				6
					71,781	32,880				39,364
85-89						2	1			3
						33,983	24,546			30,837
90+								2		2
								23,183		23,183
Total	135	125	31	5	6	8	1	2		313
	58,415	53,906	39,663	51,712	32,667	30,695	24,546	23,183		53,114

Total Retired Benefit	**$**	**16,624,805**
Average Age		**60.66**
Average Years Retired		**6.52**

CITY OF SAN JOSE - POLICE AND FIRE

DISABLED RETIREES

YEARS OF RETIREMENT

Age Group	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
BELOW 30										
30-34										
35-39	1	3	1							5
	35,353	31,925	27,442							31,714
40-44	4	5	1							10
	36,150	34,175	30,479							34,595
45-49	8	4	4	1	1					18
	39,892	32,344	30,917	19,881	18,538					33,922
50-54	39	10	7	3	1	1				61
	56,287	37,938	30,223	28,332	21,593	21,783				47,779
55-59	76	61	11	9	13	5	2			177
	59,057	48,775	36,598	28,665	21,374	19,379	19,177			48,233
60-64	23	71	29	20	4	2	1			150
	62,150	50,645	46,170	32,394	21,946	18,713	21,016			47,722
65-69	2	21	40	19	10	6	7			105
	69,308	57,105	45,408	37,222	25,512	22,744	18,119			41,712
70-74		2	18	30	17	4	3	1		75
		50,682	51,500	42,938	29,511	21,502	19,369	15,224		39,700
75-79		1		11	27	8	4	1		52
		68,783		36,164	33,265	29,347	24,704	20,064		33,046
80-84					4	17	1			22
					35,280	34,111	61,595			35,572
85-89						2	1			3
						28,876	61,702			39,818
90+						1			1	2
						30,112			15,328	22,720
Total	153	178	111	93	77	46	19	2	1	680
	57,194	48,965	43,946	36,601	28,596	27,850	24,549	17,644	15,328	43,748

Total Retired Benefit	**$**	**29,748,395**
Average Age		**62.8**
Average Years Retired		**11.91**

CITY OF SAN JOSE - POLICE AND FIRE

BENEFICIARIES

YEARS OF RETIREMENT

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							7
	13,580	17,170	14,282							14,193
20-24	1			1						2
	17,579			7,788						12,684
25-29										
30-34										
35-39		1	1							2
		33,277	16,077							24,677
40-44	1	1								2
	18,704	26,311								22,508
45-49	1	1	1	1						4
	26,373	53,975	45,950	21,238						36,884
50-54	4	5	6	1	1					17
	26,015	24,263	21,512	20,601	11,785					22,755
55-59	6	9	4	1						20
	22,719	26,367	21,906	20,184						24,071
60-64	3	7	6	4	1					21
	10,783	27,241	15,981	16,069	15,550					18,988
65-69	7	8	3	1	2	1				22
	27,246	19,476	20,923	22,999	12,242	4,500				20,968
70-74	2	6	6	4	3	3				24
	18,736	23,543	24,668	18,948	21,593	22,409				22,273
75-79	6	3	3	2	1	4				19
	19,390	26,470	18,387	16,686	17,443	28,204				21,818
80-84	3	3	2	2	2	1				13
	17,029	17,670	28,549	21,871	17,004	18,182				19,779
85-89	4	2	3	3	3	1				16
	17,003	16,773	14,786	17,867	12,223	17,957				15,884
90+			1	1						2
			40,541	24,273						32,407
Total	43	47	37	21	13	10				171
	20,161	24,321	21,536	18,470	15,748	22,068				21,170

Total Retired Benefit	**$**	**3,620,105**
Average Age		**64.81**
Average Years Retired		**10.2**

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.

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.

Projected Unit Credit Actuarial Funding Method: An actuarial method for pre-funding future retirement benefits. Under this method the member contribution stream plus the employer contribution stream is determined as a pro-rata portion of the amount necessary to finance future benefits for current members. The pro-ration is based on the pattern by which benefits accrue to member by age and service.

UAAL: (See Unfunded Actuarial Accrued Liability).

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