MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION City of San Rafael ANNUAL ACTUARIAL VALUATION

June 30, 2005



City of San Rafael

June 30, 2005 Actuarial Valuation

TABLE OF CONTENTS

Introduction	i
Comments & Recommendations on Actuarial Valuation	1
Financial Principles and Operational Techniques	3
Valuation Results	6
Funding Progress	12
Summary of Benefit Provisions	15
Reported Asset Information	19
Retired Member Data	23
Active Member Data	28
Valuation Methods & Assumptions	32
Definitions of Technical Terms	42
Disclosures Required by Statements 25 & 27 of GASB	44
Appendix A – Member Contribution Rates	46
Appendix B – Retirement Age Factor	49



GABRIEL, ROEDER, SMITH & COMPANY CONSULTANTS & ACTUARIES

9171 Towne Centre Drive ◆ Suite 440 ◆ San Diego, California 92122 ◆ 858-535-1300 ◆ FAX 858-535-1415

November 30, 2005

Board of Retirement Marin County Employees' Retirement Association 3501 Civic Center Drive, Room 408 San Rafael, CA 94903

Members of the Board:

Results of the Annual <u>Actuarial Valuation as of June 30, 2005</u> for the City of San Rafael members of the Marin County Employees' Retirement Association are summarized. The valuation is intended to provide a measure of the funding status of the retirement system. This valuation also forms the basis for the contribution rates for the year beginning July 1, 2006.

	Police	Fire	Miscellaneous	Overall
Normal Costs	18.35%	16.03%	14.29%	15.70%
Unfunded Amortization	28.88%	27.61%	13.91%	20.82%
TOTAL	47.23%	43.64%	28.20%	36.52%

The member statistical data on which the valuation was based was furnished by staff, together with pertinent data on financial operations. Data was reviewed for reasonableness, but was not audited by the actuary.

There was an overall actuarial loss of \$8.54 million, which reflects 3.4% of related actuarial accrued liabilities as of June 30, 2004.

The cooperation of staff in furnishing materials requested for this valuation is deeply acknowledged with appreciation.

Respectfully submitted,

Rick Roeden

GABRIEL, ROEDER, SMITH & COMPANY

Rick A. Roeder, E.A., F.S.A., M.A.A.

Jay D. Hirsch, E.A. F.S.A.

Jago busil

Marin County Employees' Retirement Association City of San Rafael

Summary of Significant Valuation Results

	June 30, 2004	June 30, 2005	Percent Change
I. Total Membership			
A. Active Members	407	393	(3.4)%
B. Pensioners & Beneficiaries	309	338	9.4%
C. Vested Deferreds	<u>133</u>	<u>154</u>	15.8%
D. Total	849	885	4.2%
II. Salaries at June 30			
A. Total Annual Payroll	\$29,299,290	\$28,357,316	(3.2)%
B. Average Annual Compensation	\$71,988	\$72,156	0.2%
III. Benefits to Current Pensioners and			
Beneficiaries			
A. Total Annual Benefits	\$8,051,911	\$10,062,454	25.0%
B. Average Monthly Benefit Amount	\$2,171	\$2,481	14.3%
IV. Total Assets			
A. Actuarial Value	\$188,955,939	\$195,697,862	3.6%
B. Market Value	\$181,901,594	\$197,724,816	8.7%
V. Unfunded Actuarial Accrued	\$59,709,387	\$69,507,032	16.4%
Liability/(Surplus)			
VI. Budget Items	FY 2005-2006	FY 2006-2007	
A. Normal Cost as a Percent of Pay	15.10%	15.70%	4.0%
B. Amortization of UAAL	17.31%	20.82%	20.3%
C. Total Contribution	32.41%	36.52%	12.7%
VII. Funded Ratio (Based on Actuarial			
Value of Assets)	76%	74%	(2.6)%
VIII. Funded Ratio (Based on Market			
Value of Assets)	73%	75%	2.7%

Marin County Employees' Retirement Association Contribution Reconciliation for June 30, 2005 Valuation

City of San Rafael

June 30, 2005 Valuation Payroll Projected Payroll for 2006-2007	\$28,357,316 \$30,184,169					
Contribution Reconciliation	Expected Unfunded				Contribution	Rate
Based on Rate from 2004 Valuation	\$61,459,157				\$9,782,689	32.41 %
Elimination of Subventions	Change in Unfunded Accrued Liability (\$493,799)	Change in Normal Cost \$90,533	Change in Rate 0.15%	2006-2007 <u>Contribution</u> \$45,276	\$9,827,965	32.56%
Gains and Losses Investment losses COLA gains Pay increase gains Retirant mortality and data refinement losses Other demographic losses Subtotal	\$7,691,926 (\$662,756) (\$1,164,760) \$754,607 <u>\$1,922,657</u> \$8,541,674	\$0 \$0 \$0 \$0 \$0 \$0	2.30 (0.20) (0.35) 0.23 0.58 2.56	\$694,236 (\$60,368) (\$105,645) \$69,424 <u>\$175,068</u> \$772,715	\$10,600,680	35.12%
Other Factors Miscellaneous¹ Change in Normal Cost due to demographic factors Subtotal	* <u>\$0</u> *	\$0 <u>\$90,553</u> \$90,553	1.10 <u>0.30</u> 1.40	\$332,026 _\$90,553 \$422,578	\$11,023,258	36.52%
Total from 2005 Valuation	\$69,507,032	\$181,086	4.11%	\$1,240,569	\$11,023,258	36.52 %

¹ Reflects impact of contribution rate lag and impact of unexpected changes in payroll on amortization contribution

* Included in Expected Unfunded

City of San Rafael

Comments & Recommendations

June 30, 2005

COMMENT A: The City contribution rate significantly increased from 32.41% last year to 36.52% of payroll this year. Page (iii) of this report details the primary reasons for the increase. Of the 3.96% increase, 1.40% is due to the changes in the demographics of the workforce and the one-year lag in the employer contribution rate used to fund the Plan.

Investment losses, using the actuarial value of assets, accounted for 2.30% of the remaining increase. The smoothed actuarial value of assets still reflects some of the impact of the 2000-02 bear market.

COMMENT B: The good news in the valuation is that the System's \$42 million deferred loss (the excess of actuarial value over market value) in the 2004 valuation was eliminated. This reflects the market returns in excess of the assumed rate of 8.25% for FYE2005. There is now a deferred gain of \$12 million. The City's share of this deferred gain is roughly \$2 million.

COMMENT C: The overall funded ratio decreased from 76% to 74% using the actuarial value of assets. Using market value of assets, the funded ratio increased from 73% to 75%.

COMMENT D: Of 288 retirees, 36 retired within the last year, reflecting 12.5% of total current payees. The average pension for these 36 was over 178% of the average pension for the other 252 retirees, due, in large part, to a recent benefit increase. This unusual demographic resulted from higher than expected number of retirements. One result of this was a decrease in both number of active participants and total payroll. This indirectly leads to an increase in the employer contribution rate since the Unfunded Actuarial Accrued Liability is now being amortized over a lower payroll base.

COMMENT E: We have again used an open 16-year amortization period for financing of unfunded liabilities.

City of San Rafael

Comments & Recommendations

June 30, 2005

COMMENT F: We have an elaborate estimation procedure to estimate the allocation of assets between General, Fire and Police employees. We would encourage the creation of accounting processes to more accurately track allocated assets if the highest degree of accuracy is desired.

COMMENT G: This valuation reflects the cessation of a 3% pick up (subvention) of employee contributions. Picked up contributions were non-refundable. There will now be more projected payments for refunds with the elimination of the pick up. This had the impact of increasing the computed rate from 36.37% to 36.52%.

COMMENT H: The City elected not to not phase in contribution increases pursuant to changes in actuarial assumptions for the current fiscal year.

COMMENT I: There is a Health Insurance Reserve attributable to the City of San Rafael. This Reserve is excluded in determining the computed rate for pension benefits. If such amount were transferred into "countable" pension assets and roughly \$9 million at time of transfer, this would have had the impact of reducing the City's rate by 2.70% — down to 33.82%. Such transfer could only occur with MCERA's approval.

COMMENT J: All parties should understand that the 8.25% assumed investment return is a rate <u>net</u> of administrative expenses, investment expenses and payments made directly to retirants for retiree medical premium reimbursement (other than from the City's current Health Insurance Reserve).

COMMENT K: We have assumed no benefit formula changes since the 2004 valuation.



FINANCIAL PRINCIPLES AND OPERATIONAL TECHNIQUES

City of San Rafael

Financial Principles and Operational Techniques

Promises Made, and To Be Paid For. As each year is completed, the Retirement System in effect

hands an "IOU" to each member then acquiring a year of service credit – the "IOU" says: "The City

of San Rafael owes you one year's worth of retirement benefits, payments in cash commencing when

you qualify for retirement."

The related key financial questions are:

Which generation of taxpayers contributes the money to cover the IOU?

The present taxpayers, who receive the benefit of the member's present year of service?

Or the future taxpayers, who happen to be in San Rafael at the time the IOU becomes a cash demand,

years and decades later?

The principle of level percent of payroll financing intends that this year's taxpayers contribute the

money to cover the IOUs being handed out this year. By following this principle, the employer

contribution rate will remain approximately level from generation to generation (after funding of the

System's initial unfunded liability is addressed) – our children and our grandchildren will contribute

the same percents of active payroll we contribute now.

(There are systems which have a design for deferring contributions to future taxpayers, lured by a

lower contribution rate now and putting aside the consequence that the contribution rate must then

relentlessly grow much greater over decades of time.)

An inevitable by-product of the level-cost design is the accumulation of reserve assets, for decades,

and income produced when the assets are invested. <u>Invested assets are a by-product and not the</u>

objective. Investment income becomes, in effect, the 3rd contributor for benefits to employees, and is

interlocked with the contribution amounts required from employees and employer.

(Concluded on next page)

3

City of San Rafael

Financial Principles and Operational Techniques

(Concluded)

Translated to actuarial terminology, this level-cost objective means that the contribution rates must total at least the following:

Current Cost (the cost of members' service being rendered this year) . . .

plus. . .

Interest on Unfunded Accrued Liabilities (unfunded accrued liabilities are the difference between

(i) liabilities for service already rendered and (ii) the accrued assets of the plan).

<u>Computing Contributions To Support System Benefits</u>. From a given schedule of benefits and from the employee data and asset data furnished, the actuary determines the contribution rates to support the benefits, by means of <u>an actuarial valuation and a funding method</u>.

An actuarial valuation has a number of ingredients such as: the rate of investment return which plan assets will earn; rates of withdrawal of active members who leave covered employment; rates of mortality; rates of disability; rates of pay increases; and the assumed age or ages at actual retirement. In an actuarial valuation assumptions must be made as to what the above rates will be, for the next year and for decades in the future. Only the subsequent actual experience of the plan can indicate the degree of accuracy of the assumptions.

Reconciling Differences Between Assumed Experience and Actual Experience. Once actual experience has occurred and been observed, it will not coincide exactly with assumed experience, regardless of the wisdom behind the various financial assumptions or the skill of the actuary and the millions of calculations made. The future can be predicted with considerable but not complete precision, except for <u>inflation which defies reliable prediction</u>.

The System copes with these continually changing differences by having annual actuarial valuations. Each actuarial valuation is a complete recalculation of assumed future experience, taking into account all past differences between assumed and actual experience. The result is continual adjustments in the computed employer contribution rates.

THE ACTUARIAL VALUATION PROCESS

The financing diagram on the following page shows the relationship between the two fundamentally different philosophies of paying for retirement benefits: the method where contributions match cash benefit payments (or barely exceed cash benefit payments, as in the Federal Social Security program) which is an <u>increasing contribution method</u>; and the <u>level contribution method</u> which equalizes contributions between the generations.

The <u>actuarial valuation</u> is the mathematical process by which the level contribution rate is determined. The flow of activity constituting the valuation may be summarized as follows:

A. Covered people data, furnished by the System including:

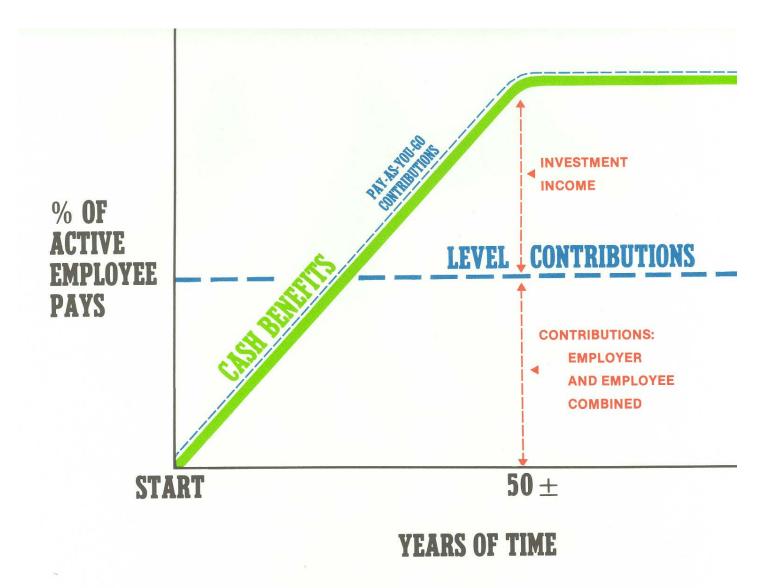
Retired lives now receiving benefits

Former employees with vested benefits not yet payable

Active employees

- B. + Asset data (cash & investments), furnished by the System
- C. + <u>Assumptions concerning future experience in various risk areas</u>, which are established by the Board after consulting with the actuary
- D. + <u>The funding method</u> for employer contributions (the long-term, planned pattern for employer contributions)
- E. + Mathematically combining the assumptions, the funding method, and the data
- F. = Determination of:

Plan Financial Position and/or Employer's New Contribution Rate



CASH BENEFITS LINE. This relentlessly increasing line is the fundamental reality of retirement plan financing. It happens each time a new benefit is added for future retirements (and happens regardless of the design for contributing for benefits).

LEVEL CONTRIBUTION LINE. Determining the level contribution line requires detailed assumptions concerning a variety of experiences in future decades, including:

Economic Risk Areas

Rates of investment return

Rates of pay increase

Changes in active member group size

Non-Economic Risk Areas

Ages at actual retirement

Rates of mortality

Rates of withdrawal of active members (turnover)

Rates of disability

VALUATION RESULTS

City of San Rafael

June 30, 2005

FUNDING OBJECTIVE

The funding objective of the Retirement System is to establish and receive contributions, expressed as percents of active member payroll, which will remain approximately level from year to year and will not have to be increased for future generations of citizens.

CONTRIBUTION RATES

The System is supported by member contributions, employer contributions, and investment income from Fund assets.

Contributions which satisfy the funding objective are determined by the annual actuarial valuation and are intended to:

- 1. cover the actuarial present value of benefits allocated to the current year by the actuarial cost method (the normal cost); and
- finance over a period of future years the actuarial present value of benefits not covered by valuation assets and anticipated future normal costs (unfunded actuarial accrued liability).

Computed contributions for the fiscal year beginning July 1, 2006 are shown on the following pages.

City of San Rafael

Computed Contribution Rates

(Expressed as Percents of Active Payroll)

Total Employer Contribution

Valuation Date	<u>2004</u>	<u>2005</u>
Fiscal Year	2005-2006	2006-2007
Miscellaneous	25.38%	28.20%
Police	42.90%	47.23%
Fire	35.18%	43.64%
Overall	32.41%	36.52%

Ongoing unfunded actuarial accrued liabilities (UAAL) are a byproduct of actuarial gains and losses, as well as benefit, assumption and methodology changes. Each valuation generates an actuarial gain (loss) for each group valued. This year's gain (loss) is amortized over 16 years.

Amortization is expressed as a percent-of-payroll and added to (or subtracted from) computed normal costs.

City of San Rafael

Computed Contribution Rates

June 30, 2005

(Expressed as Percents of Active Payroll)

Elements of County Normal Cost

	Safe	<u>ety</u>	Miscellaneou	<u>Overall</u>
			<u>s</u>	
	<u>Police</u>	<u>Fire</u>		
Normal Retirement	16.26	13.03	17.23	16.04
Vested Deferred Retirement	2.68	2.24	2.81	2.65
Death-In-Service ¹	0.79	0.86	0.44	0.62
Disability	8.34	9.18	2.51	5.47
Contribution Refunds	0.84	0.83	1.14	0.99
Total Normal Cost	28.91%	26.14%	24.13%	25.77%
Less				
Employee Contributions	10.56	<u>10.11</u>	<u>9.84</u>	10.07
Equals				
Employer Normal Cost	18.35%	16.03%	14.29%	15.70%

¹ These figures could be viewed as overstated, and Normal Retirement figures understated, since, in many cases, an active member, who dies or becomes disabled will have significant service credit accrued and may be eligible for service retirement at time of disability or death benefit grant.

Marin County Employees' Retirement Association City of San Rafael

Member Contributions as of June 30, 2005

Please refer to Appendix A for a detailed list of these rates.

(Percents of Pay)

Weighted Employee Contribution

<u>2004</u> <u>2005</u> 10.02% 10.07%

Weighted employee contribution rate

valuation.

The rates used in this valuation for each participant were those supplied by the Retirement Office in the individual data. We have assumed the elimination of subventions (pick ups) in this

City of San Rafael

Unfunded Actuarial Accrued Liability

June 30, 2005

Derivation of Experience Gain (Loss)

The actuarial gains or losses realized in the operation of the System provide an experience test. Gains and losses are expected to cancel each other over a period of years and sizable year-to-year fluctuations are common.

(1)	UAAL* at beginning of year	\$59,709,387
(2)	Expected UAAL payment	3,052,917
(3)	Interest accrual	4,802,687
(4)	Change due to elimination of subventions	(493,799)
(5)	Expected UAAL at end of year: $(1) - (2) + (3) + (4)$	60,965,358
(6)	Actual UAAL at end of year	69,507,032
(7)	Gain (loss) from actuarial experience: (5) – (6)	(8,541,674)
(8)	Gain (loss) as percentage of actuarial accrued	
	liabilities at beginning of year	(3.4)%

City of San Rafael

Gain/Loss on Unfunded Accrued Liability

June 30, 2005

Components of Actuarial Gain/(Loss) for the Year Ending June 30, 2005

Estimated Gain/(Loss) attributed to pay increases	\$1,164,760
Estimated Gain/(Loss) attributed to employee turnover, mortality, retirement incidence, and miscellaneous factors	(1,922,657)
Estimated Gain/(Loss) attributed to retirant mortality and retirant data refinements	(754,607)
Estimated Gain/(Loss) attributed to COLA increase	662,756
Estimated Gain/(Loss) attributed to investment experience	(7,691,926)
Total Estimated Experience Gain/(Loss)	\$(8,541,674)

Unfunded Actuarial Accrued Liability

Total actuarial accrued liabilities	\$265,204,894
Assets allocated to funding	195,697,862
Unfunded Actuarial Accrued Liability	\$69,507,032



City of San Rafael

Funding Progress Indicators

June 30, 2005

There is no single all-encompassing indicator which measures a retirement system's funding progress and current funded status. A traditional measure has been the relationship of valuation assets to unfunded actuarial accrued liability – a measure that is influenced by the choice of actuarial cost method.

We believe a better understanding of funding progress and status can be achieved using the following indicators which are independent of the actuarial cost method.

- 1. The ratio of valuation assets to the actuarial present value of credited projected benefits allocated in the proportion accrued service is to projected total service a plan continuation indicator.
- 2. The ratio of the unfunded actuarial present value of credited projected benefits to member payroll a plan continuation indicator. In a soundly financed retirement system, the amount of the unfunded actuarial present value of credited projected benefits will be controlled and prevented from increasing in the absence of benefit improvements or strengthening of actuarial assumptions. However, in an inflationary environment it is seldom practical to impose this control on dollar amounts which are depreciating in value. The ratio is a relative index of condition where inflation is present in both items. The ratio is expected to decrease in the absence of benefit improvements or strengthening of actuarial assumptions.

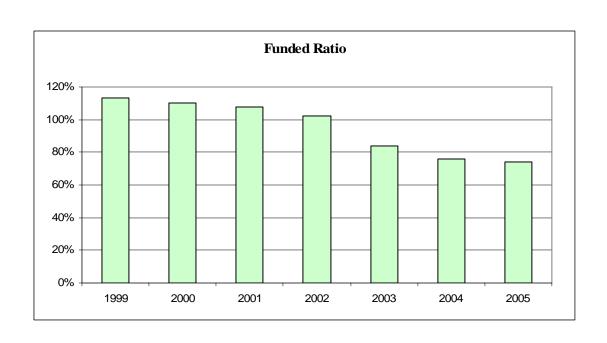
City of San Rafael

Funding Progress Indicators – Historic Comparison

(\$ in Thousands)

	Actuarial				UAAL
Valuation	Accrued	Unfunded	Funded	Member	Ratio to
<u>Assets</u>	<u>Liability</u>	\underline{AAL}	<u>Ratio</u>	<u>Payroll</u>	<u>Payroll</u>
\$114,506	\$110,198	\$ (4,307)	104%	16,298	(25.3)%
131,142	124,239	(6,903)	106%	20,361	(33.9)%
151,466	134,247	(17,219)	113%	23,293	(73.9)%
171,663	156,806	(14,857)	110%	23,372	(63.6)%
186,085	172,939	(13,146)	108%	25,650	(51.3)%
190,563	187,118	(3,445)	102%	27,223	(12.7)%
185,632	201,294	15,662	92%	27,453	57.1%
185,632	219,845	34,213	84%	27,453	124.6%
188,956	241,901	52,945	78%	29,299	180.7%
188,956	248,665	59,709	76%	29,299	203.8%
195,698	265,205	69,507	74%	28,357	245.1%
	Assets \$114,506 131,142 151,466 171,663 186,085 190,563 185,632 185,632 188,956 188,956	Valuation Accrued Assets Liability \$114,506 \$110,198 131,142 124,239 151,466 134,247 171,663 156,806 186,085 172,939 190,563 187,118 185,632 201,294 185,632 219,845 188,956 241,901 188,956 248,665	Valuation Accrued Unfunded Assets Liability AAL \$114,506 \$110,198 \$ (4,307) 131,142 124,239 (6,903) 151,466 134,247 (17,219) 171,663 156,806 (14,857) 186,085 172,939 (13,146) 190,563 187,118 (3,445) 185,632 201,294 15,662 185,632 219,845 34,213 188,956 241,901 52,945 188,956 248,665 59,709	Valuation Assets Accrued Liability Unfunded AAL AAL (Ratio) Funded Ratio \$114,506 \$110,198 \$ (4,307) 104% 131,142 124,239 (6,903) 106% 151,466 134,247 (17,219) 113% 171,663 156,806 (14,857) 110% 186,085 172,939 (13,146) 108% 190,563 187,118 (3,445) 102% 185,632 201,294 15,662 92% 185,632 219,845 34,213 84% 188,956 241,901 52,945 78% 188,956 248,665 59,709 76%	Valuation Accrued Unfunded Funded Member Assets Liability AAL Ratio Payroll \$114,506 \$110,198 \$ (4,307) 104% 16,298 131,142 124,239 (6,903) 106% 20,361 151,466 134,247 (17,219) 113% 23,293 171,663 156,806 (14,857) 110% 23,372 186,085 172,939 (13,146) 108% 25,650 190,563 187,118 (3,445) 102% 27,223 185,632 201,294 15,662 92% 27,453 185,632 219,845 34,213 84% 27,453 188,956 241,901 52,945 78% 29,299 188,956 248,665 59,709 76% 29,299

¹ Includes Miscellaneous and Police 2004 benefit enhancements ² Prior to 2004 assumption changes ³ After the 2004 assumption changes



City of San Rafael

Actuarial Balance Sheet – June 30, 2005

Present Resources and Expected Future Resources

			<u>Total</u>
A. A	ctuarial value of system assets		\$195,697,862
1. 2.	For normal costs for present actives ¹ For unfunded actuarial accrued liability Totals	36,301,619 69,507,032	105,808,651
	resent value of expected future member ontributions ¹		23,286,735
D. To	otal Present and Expected Future Resources		\$324,793,248
	Present Value of Expected Future Benefit Pay	ments and Re	<u>eserve</u>
A. To	o retirants and beneficiaries		\$133,207,723
В. То	o vested terminated members		17,157,368
1.	Allocated to service rendered prior to valuation date Allocated to service likely to be rendered	114,839,803	
3.	after valuation date Totals	59,588,354	174,428,157

SUMMARY OF BENEFIT PROVISIONS

&

VALUATION DATA SUBMITTED BY RETIREMENT SYSTEM

Marin County Employees' Retirement Association City of San Rafael

Brief Summary of Benefit Provisions Evaluated

Effective June 30, 2005

1. <u>Membership Requirements</u> – First day of employment.

2. Final Compensation for Benefit Determination

Highest consecutive twelve months of compensation earnable.

3. <u>Service Requirement</u>

A. <u>Eligibility</u>: Age 50 with 10 years of service, Safety members after 20 years of service, regardless of age, or Miscellaneous members after 30 years of service, regardless of age.

B. Benefit Formula Per Year of Service

Miscellaneous – Section 31676.11 (One-sixtieth times years of service times retirement age factor) or 31676.19 (2.7% at 55) will apply to Miscellaneous employees depending upon bargaining group.

Safety – 3% at 55 (Section 31664.2) for Police and 31664 for Fire (2% at 50).

Above formulas will generally vary by attained age. See Appendix B for Retirement Age Factors.

C. Maximum Benefit - 100% of Final Average Compensation

(Continued on Next Page)

City of San Rafael

Brief Summary of Benefit Provisions Evaluated

Effective June 30, 2005

(Continued)

4. Ordinary Disability

- A. <u>Eligibility</u> Five years of continuous service.
- B. Benefit Formula 1.5% (1.8% for Safety members) of Final Compensation for each year of service (including projected years to age 65 for Miscellaneous members (age 55 for Safety members), subject to a maximum of 1/3 of Final Compensation. Notwithstanding, the benefit shall not be less than any service retirement benefit eligible to be received at time of disability.

5. Duty Disability

- A. Eligibility Immediate
- B. <u>Benefit Formula</u> The greater of 50% of Final Compensation or service retirement benefit eligible to be received at time of disability.

6. Pre-retirement Death Benefit

- A. <u>Eligibility</u> None.
- B. <u>Benefit</u> Refund of employee contributions with interest plus one month of final compensation for each year of service to a maximum of six years

or

- A1. <u>Eligibility</u> Duty-related death
- B1. Benefit 50% of Final Compensation to a spouse

or

- A2. <u>Eligibility</u> Qualified for Service Retirement or Ordinary Disability.
- B2. Benefit 60% survivor benefit based on benefit due on member's date of death.

City of San Rafael

Brief Summary of Benefit Provisions Evaluated

Effective June 30, 2005

(Continued)

7. Death After Retirement

A. Service or Disability Retirement

- 60% of member's unmodified allowance (100% if Duty Disability) continued to eligible spouse or modified optional continuance selected by the member at the time of retirement.
- \$5,000 lump sum benefit payable to member's beneficiary
- If applicable, return of any unused employee contributions and interest

8. Withdrawal Benefits

A. Less than Five Years of Service

Refund of accumulated employee contributions with interest.

B. Five or More Years of Service

If contributions left on deposit, entitled to earned benefits commencing at any time after eligible to retire.

9. Post-retirement Cost-of-Living Benefits

Each April 1, benefits are increased based on increases in the local CPI, subject to a 3% maximum increase.

10. Employer Contributions

Determined by Entry Age Normal cost method with funding of the Unfunded Actuarial Accrued Liability spread as a level percent of payroll over 16 years.

City of San Rafael

Brief Summary of Benefit Provisions Evaluated

Effective June 30, 2005

(Concluded)

11. Member Contributions

Please refer to Appendix A for entry-age based rates. Member contributions cease upon attainment of 30 years of service.

NOTE: The summary of major plan provisions is designed to outline principal plan benefits. If retirement staff or any Employer should find the plan summary not in accordance with the actual provisions, the actuary should be IMMEDIATELY alerted so they can both be sure the proper provisions are valued.

Summary of Reported Asset Information

Submitted for the June 30, 2005 Valuation

Reported Market Value of Assets

Cash/Short-term	\$25,748,719
Receivables	20,350,652
Stocks	841,357,695
Bonds	235,750,906
Real Estate	98,000,000
Miscellaneous	<u>1,148,530</u>
Total Market Value	<u>\$1,222,356,502</u>
Liabilities	60,360,398

Revenues and Disbursements Among Applicable Reserves

Balance - Beginning of year	\$1,082,852,758
Revenues	
Employees' contributions	11,619,180
Employer contributions	30,877,430
Distributed & undistributed investment	
income (net of expenses)	103,507,009
Total Revenues	146,003,619
Disbursements	
Benefit payments	65,269,313
Refunds	276,913
Administrative Expense	<u>1,314,047</u>
Total Disbursements	66,860,273
Balance - End of year	\$1,161,996,104

Actuarial Value of Assets As of June 30, 2005

(1)

(2)

(1-2)

1,150,084,029 \$1,163,203,290

Fiscal							Total	Expected			
										Deferre	
Year	County	Member	Total	Total	Market	Average	Market	Market	Investment	d	Deferred
Ending	Contributions	Contributions	<u>Contributions</u>	<u>Benefits</u>	<u>Value</u>	<u>Value</u>	Return	<u>Return</u>	<u>Gain</u>	<u>Factor</u>	Return
2001.02	21 005 550	0.217.700	20 202 240	45 245 004	022 021 520	000 100 (00	(60.167.207)	77.002.600	(107, 170, 000)	0.0	(27, 424, 001)
2001-02	21,985,559	8,316,789	30,302,348	45,347,094	833,821,520	909,123,622	(62,167,307)	75,002,699	(137,170,006)	0.2	(27,434,001)
$2002-03^{1}$	134,960,478	10,348,913	145,309,391	51,211,890	935,491,460	852,252,760	7,572,439	70,310,853	(62,738,414)	0.4	(25,095,366)
2003-04	26,890,964	10,247,043	37,138,007	57,897,146	1,082,852,758	938,557,373	168,120,437	77,430,983	90,689,454	0.6	54,413,672
2004-05	30,877,430	11,619,180	42,496,610	65,546,226	1,161,996,104	1,086,766,665	102,192,962	89,658,250	12,534,712	0.8	10,027,770
1 Total det	erred return										11,912,075
2. Market V											1,161,996,104
		0 T 1									, , ,
3. Smoothed Market Value (Item 2 - Item 1) 1,150,084,029											
4. Corridor Limit											
a. 80% of Net Market Value								929,596,883			
b. 120% of Net Market Value								1,394,395,325			

	Reserve	Actuarial	Actuarial
	<u>Value</u>	Value Ratio	<u>Value</u>
Marin County and Special Districts	\$867,972,374	0.9887	\$858,182,894
City of San Rafael	\$197,930,231	0.9887	\$195,697,862
Novato Fire Protection District	\$87,829,608	0.9887	\$86,839,016
Health Insurance Reserve	\$9,471,077	0.9887	\$9,364,257
Total	\$1,163,203,290		\$1,150,084,029

5. Actuarial Value (Item 3 after corridor applied) Inclusive of Health Insurance Reserve

Recognition of							
Deferred Return							
Valuation	Amount to be						
<u>Date</u>	Recognized						
6/30/2006	(\$19,336,851)						
6/30/2007	8,097,150						
6/30/2008	20,644,833						
6/30/2009	<u>2,506,942</u>						
Total	\$11.912.075						

6. Reserves at Market Value

¹ Includes \$109,826,000 Pension Obligation Bond

Summary of Reserves and Other Liabilities

June 30, 2005

Reserves and Liabilities

Employer Reserves	\$3,776,616
Employee Reserves	103,710,549
Death Benefit Reserves	674,401
Article 15.5 Reserves	1,693,674
Reserve for Pre 7/1/77 San Rafael Retirees	10,952,178
Retired Employees Reserve	318,771,774
Cost of Living Adjustment Reserves	244,703,809
Health Insurance Reserves	9,471,077
Contingency and other Reserves	58,160,164
Unrestricted Reserves	411,289,047
Security Deposits Payable	728,807
County Contribution Payable	673,630
Investments Payable	163,165,617
Other Payables	6,913,812
Total Liabilities	\$1,334,685,155

City of San Rafael

Summary of Reserves and Other Liabilities

June 30, 2005

Total	\$265,204,894	\$195,697,862
Fire (Actives & Deferreds)	\$35,511,535	\$14,712,396
Police (Actives & Deferreds)	\$40,041,051	\$15,455,133
Safety Retirees	\$91,948,170	\$91,948,170
Miscellaneous	\$97,704,138	\$73,582,163
	Accrued Liability	<u>Assets</u>

Marin County Employees' Retirement Association City of San Rafael

Annual Benefit and Membership Distribution

Miscellaneous Retirees and Beneficiaries

Age			Years	of Retiremen	nt			
<u>Group</u>	<u>0-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30-34</u>	<u>Total</u>
35-39 No.	1							1
AVG AMT	26,122							26,122
40-44 No.								
AVG AMT								
45-49 No.		2	2					4
AVG AMT		8,884	11,194					10,039
50-54 No.	6	1		3				10
AVG AMT	26,865	14,757		20,191				23,652
55-59 No.	19	11	1			1		32
AVG AMT	38,840	12,379	7,836			14,634		28,019
60-64 No.	10	7	3	2	2	1		25
AVG AMT	26,842	27,536	16,989	21,980	22,846	14,862		24,666
65-69 No.	6	10	5	2		2		25
AVG AMT	30,565	18,875	10,241	14,214		17,489		19,470
70-74 No.	2		6	4	3			15
AVG AMT	32,014		26,420	12,295	15,037			21,123
75-79 No.	2	3	6	4	6	6	1	28
AVG AMT	29,910	12,456	12,145	15,237	6,802	10,406	1,777	12,001
80-84 No.	1		3	1	9	3		17
AVG AMT	4,049		17,207	17,917	7,933	11,046		10,478
85-89 No.					4	4	2	10
AVG AMT					10,658	18,650	3,151	12,353
90-94 No.					1	4	1	6
AVG AMT					17,376	9,007	1,018	9,070
95-99 No.						1		1
AVG AMT						1,593		1,593
Total No.	47	34	26	16	25	22	4	174
AVG AMT	32,021	17,282	15,977	16,313	10,521	12,376	2,274	19,042

Marin County Employees' Retirement Association City of San Rafael

Annual Benefit and Membership Distribution

Safety Retirees and Beneficiaries

Age				Years	of Retireme	nt				
<u>Group</u>	<u>0-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30-34</u>	<u>35-39</u>	<u>40-44</u>	<u>Total</u>
30-34 No.	1									1
AVG AMT	40,929									40,929
35-39 No.	2	1		1						4
AVG AMT	40,304	25,005		15,660						30,318
40-44 No.			1							1
AVG AMT			29,632							29,632
45-49 No.	3	2	1		1					7
AVG AMT	32,753	30,165	2,290		18,891					25,681
50-54 No.	3	5	1	2						11
AVG AMT	32,145	29,814	34,348	28,916						30,699
55-59 No.	30	8	6	2	2					48
AVG AMT	69,190	42,604	22,558	27,853	25,213					55,375
60-64 No.	8	14	1	2	3	2				30
AVG AMT	60,521	45,848	7,608	31,834	29,223	16,047				43,903
65-69 No.	2	4	8	8	5	1				28
AVG AMT	79,319	50,878	67,145	18,340	26,067	18,344				42,668
70-74 No.		1	2	4	6	4				17
AVG AMT		3,539	24,556	55,335	25,407	16,733				29,022
75-79 No.					4	5				9
AVG AMT					36,866	21,255				28,193
80-84 No.						1				1
AVG AMT						39,123				39,123
85-89 No.						2	2			4
AVG AMT						19,566	11,575			15,571
90-94 No.						2			1	3
AVG AMT						7,921			5,680	7,174
Total No.	49	35	20	19	21	17	2	0	1	164
AVG AMT	61,933	40,690	39,775	29,522	27,963	18,691	11,575	0	5,680	41,153

City of San Rafael

Summary of Monthly Allowances Being Paid

Submitted for the June 30, 2005 Valuation

Miscellaneous

	Annual Allowance				
Service Retirement	Number	<u>Total</u>	Average		
Unmodified	112	2,463,052	21,992		
Option 1	5	50,023	10,005		
Option 2	9	128,946	14,327		
Option 3	0	0	0		
Total	126	2,642,020	20,968		
Ordinary Disability					
Unmodified	3	35,735	11,912		
Option 1	0	0	0		
Option 2	0	0	0		
Option 3	0	0	0_		
Total	3	35,735	11,912		
Duty Disability					
Unmodified	18	361,513	20,084		
Option 1	1	21,891	21,891		
Option 2	0	0	0		
Option 3	0	0	0		
Total	19	383,404	20,179		
Beneficiary					
Unmodified	25	242,158	9,686		
Option 1	0	0	0		
Option 2	1	10,027	10,027		
Option 3	0	0	0		
Total	26	252,186	9,699		
TOTAL	174	3,313,345	19,042		

City of San Rafael

Summary of Monthly Allowances Being Paid

Submitted for the June 30, 2005 Valuation

Safety

_	A	nnual Allowance	
Service Retirement	<u>Number</u>	<u>Total</u>	Average
Unmodified	89	4,421,034	49,675
Option 1	2	30,695	15,347
Option 2	4	141,089	35,272
Option 3	0	0	0
Total	95	4,592,817	48,345
Ordinary Disability			
Unmodified	0	0	0
Option 1	0	0	0
Option 2	0	0	0
Option 3	0	0	0
Total	0	0	0
Duty Disability			
Unmodified	43	1,602,567	37,269
Option 1	1	30,691	30,691
Option 2	1	29,632	29,632
Option 3	0	0	0
Total	45	1,662,890	36,953
Beneficiary			
Unmodified	22	389,046	17,684
Option 1	0	0	0
Option 2	2	104,355	52,178
Option 3	0	0	0
Total	24	493,401	20,558
TOTAL	164	6,749,109	41,153

City of San Rafael

Summary of Retired Members and Beneficiaries Included

In the June 30, 2005 Actuarial Valuation

Miscellaneous Members	S			Averages	<u> </u>]	New Retirees	Only
				Attaine				
		Annual	Annual	d	Age at		Average	Average
Retirees	<u>No.</u>	<u>Allowance</u>	<u>Allowance</u>	<u>Age</u>	Retirement	<u>No.</u>	Allowance	<u>Age</u>
6/30/2004	129	\$2,276,121	\$17,644	68.7	56.2	3	\$24,501	58.4
6/30/2005	148	\$3,061,159	\$20,684	66.9	56.6	21	\$35,561	59.6
Increase	14.7%	34.5%	17.2%					
Beneficiaries								
6/30/2004	27	\$217,899	\$8,070	75.1	N/A	N/A	N/A	N/A
6/30/2005	26	\$252,186	\$9,699	74.4	N/A	N/A	N/A	N/A
	(3.7)							
Increase	%	15.7%	20.2%					
Total								
6/30/2004	156	\$2,494,020	\$15,987	69.8	56.2	3	\$24,501	58.4
6/30/2005	174	\$3,313,345	\$19,042	68.0	56.6	21	\$35,561	59.6
Increase	11.5%	32.9%	19.1%					
Safety Members				Averages]	New Retirees	Only
		A 1	A 1	Attaine	A 4		A	A
D. C.	NT	Annual	Annual	d	Age at	NT	Average	Average
Retirees	<u>No.</u>	Allowance	Allowance	Age	Retirement	<u>No.</u>	Allowance	Age
6/30/2004	130	\$5,101,527	\$39,243	61.8	50.8	5	\$54,223	50.8
6/30/2005	140	\$6,255,708	\$44,684	62.6	50.8	15	\$76,315	55.1
Increase	7.7%	22.6%	13.9%					
Beneficiaries								
6/30/2004	23	\$456,364	\$19,842	71.5	N/A	N/A	N/A	N/A
6/30/2005	24	\$493,401	\$20,558	72.7	N/A	N/A	N/A	N/A
Increase	4.3%	8.1%	3.6%					
Total								
6/30/2004	153	\$5,557,891	\$36,326	63.2	50.8	5	\$54,223	50.8
6/30/2005	164	\$6,749,109	\$41,153	64.1	50.8	15	\$76,315	55.1
Increase	7.2%	21.4%	13.3%				•	
G 15 / 1 / 10 / 10 / 10 / 10 / 10 / 10 /	200	Φ0.071.011	Φ0 < 0.70		50.5	0	ф.42. OZZ	52.5
Grand Total 6/30/2004	309	\$8,051,911	\$26,058	66.6	53.5	8	\$43,077	53.7
Grand Total 6/30/2005	338	\$10,062,454	\$29,771	65.9	53.8	36	\$52,542	57.7
Increase	9.4%	25.0%	14.2%					

City of San Rafael

Active Membership Summary

In the June 30, 2005 Actuarial Valuation

Active Miscellaneous

	=	Teave Minee	tre o tre		
City (31676.19)			Ave	rages	
		Annual	Annual		
					Servic
	No.	Compensation	Compensation	<u>Age</u>	<u>e</u>
6/30/2004	210	\$13,636,787	\$64,937	47.0	11.1
6/30/2005	195	\$12,608,766	\$64,660	47.5	10.8
	(7.1)	, ,	ŕ		
Percent Change	%	(7.5)%	(0.4)%	1.1%	(2.7)%
City (31676.11)			Ave	rages	
		Annual	Annual		
					<u>Servic</u>
	<u>No.</u>	Compensation	Compensation	<u>Age</u>	<u>e</u>
6/30/2004	42	\$1,455,364	\$34,652	41.3	5.8
6/30/2005	48	\$1,685,392	\$35,112	40.3	6.1
				(2.4)	
Percent Change 14.3%		15.8%	1.3%	%	5.2%
i creem emange					
Redevelopment				rages	
		Annual	Ave	rages	
		Annual	Annual		<u>Servic</u>
Redevelopment	<u>No.</u>	Annual Compensation	Annual Compensation	<u>Age</u>	<u>e</u>
Redevelopment 6/30/2004	<u>No.</u> 5	Annual Compensation \$430,675	Annual Compensation \$86,135	<u>Age</u> 48.0	<u>e</u> 6.7
Redevelopment 6/30/2004 6/30/2005	<u>No.</u> 5 5	Annual <u>Compensation</u> \$430,675 \$433,634	Annual Compensation \$86,135 \$86,727	Age 48.0 49.0	<u>e</u> 6.7 7.7
Redevelopment 6/30/2004	<u>No.</u> 5	Annual Compensation \$430,675	Annual Compensation \$86,135	<u>Age</u> 48.0	<u>e</u> 6.7
Redevelopment 6/30/2004 6/30/2005 Percent Change	No. 5 5 0.0%	Annual <u>Compensation</u> \$430,675 \$433,634	Annual Compensation \$86,135 \$86,727	Age 48.0 49.0	<u>e</u> 6.7 7.7
Redevelopment 6/30/2004 6/30/2005	No. 5 5 0.0%	Annual <u>Compensation</u> \$430,675 \$433,634	Annual <u>Compensation</u> \$86,135 \$86,727 0.7%	Age 48.0 49.0	<u>e</u> 6.7 7.7
Redevelopment 6/30/2004 6/30/2005 Percent Change	No. 5 5 0.0%	Annual <u>Compensation</u> \$430,675 \$433,634	Annual <u>Compensation</u> \$86,135 \$86,727 0.7%	Age 48.0 49.0 2.1%	<u>e</u> 6.7 7.7
Redevelopment 6/30/2004 6/30/2005 Percent Change	No. 5 5 0.0%	Annual <u>Compensation</u> \$430,675 \$433,634 0.7% Annual	Annual Compensation \$86,135 \$86,727 0.7% Ave	Age 48.0 49.0 2.1%	<u>e</u> 6.7 7.7
Redevelopment 6/30/2004 6/30/2005 Percent Change Total Miscellaneo	No. 5 5 0.0% Dus	Annual Compensation \$430,675 \$433,634 0.7% Annual Compensation	Annual Compensation \$86,135 \$86,727 0.7% Ave Annual Compensation	Age 48.0 49.0 2.1% rages	<u>e</u> 6.7 7.7 14.9% <u>Servic</u> <u>e</u>
Redevelopment 6/30/2004 6/30/2005 Percent Change Total Miscellaneo 6/30/2004	No. 5 5 0.0% Dus No. 257	Annual Compensation \$430,675 \$433,634 0.7% Annual Compensation \$15,522,826	Annual Compensation \$86,135 \$86,727 0.7% Ave	Age 48.0 49.0 2.1% rages Age 46.1	<u>e</u> 6.7 7.7 14.9% <u>Servic</u>
Redevelopment 6/30/2004 6/30/2005 Percent Change Total Miscellaneo	No. 5 5 0.0% No. 257 248	Annual Compensation \$430,675 \$433,634 0.7% Annual Compensation	Annual Compensation \$86,135 \$86,727 0.7% Ave Annual Compensation	Age 48.0 49.0 2.1% rages	<u>e</u> 6.7 7.7 14.9% <u>Servic</u> <u>e</u>
Redevelopment 6/30/2004 6/30/2005 Percent Change Total Miscellaneo 6/30/2004	No. 5 5 0.0% Dus No. 257	Annual Compensation \$430,675 \$433,634 0.7% Annual Compensation \$15,522,826	Annual Compensation \$86,135 \$86,727 0.7% Ave Annual Compensation \$60,400	Age 48.0 49.0 2.1% rages Age 46.1	<u>e</u> 6.7 7.7 14.9% <u>Servic</u> <u>e</u> 10.1

City of San Rafael

Active Membership Summary

In the June 30, 2005 Actuarial Valuation

Active Safety

Police		1101110	Aver	ages	
		Annual	Annual		
	<u>No.</u>	Compensation	Compensation	<u>Age</u>	<u>Service</u>
6/30/2004	76	\$6,954,267	\$91,504	40.4	13.4
6/30/2005	78	\$7,229,972	\$92,692	39.5	11.9
					(11.2)
Percent Change	2.6%	4.0%	1.3%	(2.2)%	%
Fire			Aver	ages	
		Annual	Annual		
	No.	Compensation	Compensation	<u>Age</u>	<u>Service</u>
6/30/2004	74	\$6,822,197	\$92,192	44.7	16.8
6/30/2005	67	\$6,399,552	\$95,516	44.6	16.5
.	(9.5)	(5.2) 0(2 504	(0.0)	(1.0).0(
Percent Change	%	(6.2)%	3.6%	(0.2)%	(1.8)%
Total Safety			Aver	rages	
		Annual	Annual		
	<u>No.</u>	Compensation	Compensation	Age	<u>Service</u>
6/30/2004 Total	150	\$13,776,464	\$91,843	42.5	15.0
6/30/2005 Total	145	\$13,629,524	\$93,997	41.9	14.0
5 6	(3.3)	(4.4)			- \
Percent Change	%	(1.1)%	2.3%	(1.4)%	(6.7)%
		Total Act	tive		
			Aver	rages	
		Annual	Annual		
	<u>No.</u>	Compensation	Compensation	<u>Age</u>	<u>Service</u>
6/30/2004 Total	407	\$29,299,290	\$71,988	44.8	11.9
6/30/2005 Total	393	\$28,357,316	\$72,156	44.5	11.4
Domaint Change	(3.4)	(2.2)0/	0.20/	(0.7)0/	(4.2)%
Percent Change	%	(3.2)%	0.2%	(0.7)%	(4.2)%
	Vo	sted Deferred an	d Recinrocals		
	7.0		-		
	NI.	Reported	Average Reported	۸	Commiss
6/30/2004 Total	<u>No.</u> 133	Compensation	Compensation \$53,064	Age 45.0	<u>Service</u> 5.2
6/30/2005 Total	153 153	\$7,057,578 \$8,229,589	\$53,064 \$53,788	43.7	5.2 4.8
0/30/2003 10tal	133	φ0,447,307	φ33,100	43.7	4.0

City of Rafael

Active Members June 30, 2005 By Attained Ages and Years of Service

Safety

Age						Years of Ac	crued Servi	ce					
<u>Group</u>	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30-34</u>	35 & Up	<u>Total</u>
20-24 NO.	1	0	0	0	0	0	0	0	0	0	0	0	1
TOT PAY	70,889	0	0	0	0	0	0	0	0	0	0	0	70,889
AVG PAY	70,889	0	0	0	0	0	0	0	0	0	0	0	70,889
25-29 NO.	0	1	4	5	2	2	0	0	0	0	0	0	14
TOT PAY	0	71,941	338,003	405,743	175,871	183,717	0	0	0	0	0	0	1,175,274
AVG PAY	0	71,941	84,501	81,149	87,936	91,859	0	0	0	0	0	0	83,948
30-34 NO.	0	4	4	3	3	10	0	0	0	0	0	0	24
TOT PAY	0	315,970	314,466	236,775	265,515	860,435	0	0	0	0	0	0	1,993,162
AVG PAY	0	78,993	78,617	78,925	88,505	86,044	0	0	0	0	0	0	83,048
35-39 NO.	1	0	2	4	3	10	4	1	0	0	0	0	25
TOT PAY	72,975	0	160,781	295,819	265,563	868,923	406,940	112,949	0	0	0	0	2,183,950
AVG PAY	72,975	0	80,391	73,955	88,521	86,892	101,735	112,949	0	0	0	0	87,358
40-44 NO.	0	1	1	0	0	3	0	8	2	0	0	0	15
TOT PAY	0	142,896	90,473	0	0	273,489	0	778,636	203,650	0	0	0	1,489,143
AVG PAY	0	142,896	90,473	0	0	91,163	0	97,330	101,825	0	0	0	99,276
45-49 NO.	1	0	1	1	1	2	0	9	7	6	0	0	28
TOT PAY	111,895	0	84,333	84,603	115,930	191,336	0	869,087	715,149	625,118	0	0	2,797,450
AVG PAY	111,895	0	84,333	84,603	115,930	95,668	0	96,565	102,164	104,186	0	0	99,909
50-54 NO.	0	0	0	0	0	1	1	0	8	13	3	0	26
TOT PAY	0	0	0	0	0	100,856	103,506	0	785,271	1,351,930	316,255	0	2,657,817
AVG PAY	0	0	0	0	0	100,856	103,506	0	98,159	103,995	105,418	0	102,224
55-59 NO.	0	0	0	0	0	0	0	1	0	4	6	0	11
TOT PAY	0	0	0	0	0	0	0	86,695	0	395,767	697,323	0	1,179,785
AVG PAY	0	0	0	0	0	0	0	86,695	0	98,942	116,221	0	107,253
60-99 NO.	0	0	0	0	0	0	1	0	0	0	0	0	1
TOT PAY	0	0	0	0	0	0	82,054	0	0	0	0	0	82,054
AVG PAY	0	0	0	0	0	0	82,054	0	0	0	0	0	82,054
65-99 NO.	0	0	0	0	0	0	0	0	0	0	0	0	0
TOT PAY	0	0	0	0	0	0	0	0	0	0	0	0	0
AVG PAY	0	0	0	0	0	0	0	0	0	0	0	0	0
TOT NO.	3	6	12	13	9	28	6	19	17	23	9	0	145
TOT AMT	255,759	530,807	988,056	1,022,940	822,879	2,478,756	592,500	1,847,367	1,704,070	2,372,815	1,013,578	0	13,629,524
AVG AMT	85,253	88,468	82,338	78,688	91,431	88,527	98,750	97,230	100,239	103,166	112,620	0	93,997

City of Rafael

Active Members June 30, 2005 By Attained Ages and Years of Service

Miscellaneous

Age						Years of Acc	rued Service						
<u>Group</u>	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30-34</u>	35 & Up	<u>Total</u>
20-24 NO.	6	0	0	0	0	0	0	0	0	0	0	0	6
TOT PAY	227,217	0	0	0	0	0	0	0	0	0	0	0	227,217
AVG PAY	37,870	0	0	0	0	0	0	0	0	0	0	0	37,870
25-29 NO.	2	1	2	1	2	4	0	0	0	0	0	0	12
TOT PAY	75,033	27,760	79,254	37,345	104,327	187,795	0	0	0	0	0	0	511,513
AVG PAY	37,517	27,760	39,627	37,345	52,164	46,949	0	0	0	0	0	0	42,626
30-34 NO.	3	0	3	2	6	5	0	0	0	0	0	0	19
TOT PAY	97,220	0	152,160	141,473	325,447	266,819	0	0	0	0	0	0	983,120
AVG PAY	32,407	0	50,720	70,737	54,241	53,364	0	0	0	0	0	0	51,743
35-39 NO.	2	1	3	2	1	13	5	0	0	0	0	0	27
TOT PAY	92,473	28,171	150,797	83,997	105,219	674,651	337,555	0	0	0	0	0	1,472,861
AVG PAY	46,237	28,171	50,266	41,999	105,219	51,896	67,511	0	0	0	0	0	54,550
40-44 NO.	1	0	3	4	4	8	5	7	5	0	0	0	37
TOT PAY	94,296	0	153,886	212,060	246,029	486,469	332,338	421,774	294,800	0	0	0	2,241,652
AVG PAY	94,296	0	51,295	53,015	61,507	60,809	66,468	60,253	58,960	0	0	0	60,585
45-49 NO.	4	2	5	0	1	22	8	5	3	0	0	0	50
TOT PAY	235,744	84,905	229,899	0	33,992	1,381,906	503,837	326,484	199,929	0	0	0	2,996,697
AVG PAY	58,936	42,453	45,980	0	33,992	62,814	62,980	65,297	66,643	0	0	0	59,934
50-54 NO.	3	2	0	1	2	12	7	8	4	6	2	0	47
TOT PAY	180,783	99,034	0	56,965	123,524	841,075	436,926	582,255	268,163	426,552	115,540	0	3,130,816
AVG PAY	60,261	49,517	0	56,965	61,762	70,090	62,418	72,782	67,041	71,092	57,770	0	66,613
55-59 NO.	1	1	2	0	3	6	3	7	4	2	0	0	29
TOT PAY	90,678	53,067	80,311	0	152,809	430,733	220,319	466,239	401,302	131,227	0	0	2,026,686
AVG PAY	90,678	53,067	40,156	0	50,936	71,789	73,440	66,606	100,326	65,614	0	0	69,886
60-64 NO.	0	0	1	0	1	4	2	2	4	1	0	0	15
TOT PAY	0	0	41,900	0	80,744	225,193	140,969	120,636	258,507	56,052	0	0	923,999
AVG PAY	0	0	41,900	0	80,744	56,298	70,485	60,318	64,627	56,052	0	0	61,600
65-99 NO.	0	0	0	0	0	3	1	1	0	0	1	0	6
TOT PAY	0	0	0	0	0	104,168	5,738	8,277	0	0	95,048	0	213,231
AVG PAY	0	0	0	0	0	34,723	5,738	8,277	0	0	95,048	0	35,539
TOT NO.	22	7	19	10	20	77	31	30	20	9	3	0	248
TOT AMT	1,093,444	292,937	888,207	531,840	1,172,091	4,598,809	1,977,682	1,925,665	1,422,701	613,831	210,588	0	14,727,792
AVG AMT	49,702	41,848	46,748	53,184	58,605	59,725	63,796	64,189	71,135	68,203	70,196	0	59,386

ACTUARIAL COST METHODS, ACTUARIAL ASSUMPTIONS

AND

DEFINITIONS OF TECHNICAL TERMS

City of San Rafael

Actuarial Cost Methods - June 30, 2005

Normal cost and the allocation of benefit values between service rendered before and after the valuation date were determined using an individual entry age actuarial cost method having the following characteristics:

- (i) the annual normal costs for each active member, payable from the date of entry into the system to the date of retirement, are sufficient to accumulate the value of the member's benefit at the time of retirement;
- (ii) each annual normal cost is a constant percentage of the member's year-by-year projected covered pay.

<u>Financing of Unfunded Actuarial Accrued Liability</u>. The Unfunded Actuarial Accrued Liability is funded (or credited, if negative) in 16 remaining installments.

Active member payroll in aggregate is assumed to increase 4.25% a year for the purpose of determining the level percent contributions, although individual annual pay increase rates will increase by greater percentages per year for the purpose of projecting individual pays.

<u>Deferred Member Actuarial Accrued Liability</u>. Data provided includes date of hire, date of birth, date of termination, last pay and an indicator if the deferred member is known to work with a reciprocal employer. Service credit, highest average salary, and deferred retirement age were estimated, based on the data provided. The estimates were used to compute the retirement benefit, upon which the liabilities are based.

City of San Rafael

Actuarial Assumptions Used for the June 30, 2005 Valuation

The contribution requirements and benefit values of the Fund are calculated by applying actuarial assumptions to the benefit provisions and member information furnished, using the actuarial cost methods described on the previous page.

The principal areas of financial risk which require assumptions about future experiences are:

- (i) long-term rates of investment return to be generated by the assets of the Fund.
- (ii) patterns of pay increases to members.
- (iii) rates of mortality among members, retirants, and beneficiaries.
- (iv) rates of withdrawal of active members (without entitlement to a retirement benefit).
- (v) rates of disability among members.
- (vi) the age patterns of actual retirements.

In making a valuation, the monetary effect of each assumption is calculated for as long as a present covered person survives -- a period of time which can be as long as a century.

Actual experience of the System will not coincide exactly with assumed experience, regardless of the choice of the assumptions, the skill of the actuary and the precision of the many calculations made. Each valuation provides a complete recalculation of assumed future experience and takes into account all past differences between assumed and actual experience. The result is a continual series of adjustments (usually small) to the computed contribution rate. From time to time it becomes appropriate to modify one or more of the assumptions, to reflect experience trends (but not random year-to-year fluctuations).

(Continued on Next Page)

City of San Rafael

Actuarial Assumptions Used for the June 30, 2005 Valuation

(Continued)

<u>The Entry Age Normal Actuarial Cost Method</u> was used in conjunction with the following actuarial assumptions.

<u>The investment return rate</u> used for the actuarial valuation calculations was 8.25% a year, net of administrative expenses, compounded annually. This assumption, used to equate the value of payments due at different points in time, is adopted by the Retirement Board. The rate is comprised of two elements:

Inflation	4.25%
Real Rate of Return	4.00%
Total	8.25%

<u>The general inflation rate</u> used for the actuarial valuation calculations was 4.25% per year, compounded annually. It represents the difference between the investment return rate and the assumed real rate of return.

Inflation actually experienced, as measured by the Consumer Price Index for urban wage earners, has been as follows:

Consumer Price Index
Urban Wage Earners and Clerical Workers Before 1978
All Urban Consumers After 1977
10 Year Moving Averages

June 30, 1965	1.7%
June 30, 1975	5.4
June 30, 1985	7.2
June 30, 1995	3.5
June 30, 2005	2.5

50-Year Average 4.1%

City of San Rafael

Actuarial Assumptions Used for the June 30, 2005 Valuation

(Continued)

<u>Compensation increase rates</u> used to project current pays to those, upon which a benefit will be based, are represented by the following table.

Annual Rate of Compensation Increase

Inflation 4.25%

plus

Merit & Longevity See Table Below for Sample Ages

<u>Age</u>	Miscellaneous	Safety
20	6.62%	5.13%
25	4.08%	3.34
30	3.37%	2.48
35	2.46%	1.40
40	2.09%	0.89
45	1.89%	0.97
50	1.46%	0.78
55	0.95%	0.70
60	0.90%	N/A
65	0.54%	N/A

City of San Rafael

Actuarial Assumptions Used for the June 30, 2005 Valuation

(Continued)

Rates of separation from active membership are shown below (rates do not include separation on account of retirement). This assumption measures the probabilities of members remaining in employment.

% of Active Members Separating Within Next Year (less than 5 years)

Years of Completed Service	Miscellaneous	<u>Safety</u>
0	15%	10%
1	9	5
2	7	4
3	6	4
4	6	4

Actuarial Assumptions Used for the June 30, 2005 Valuation

(Continued)

% of Active Members Separating with Next Year

		Pre-Retir	ement			
Retirement	Withdraw	<u>al</u>	Vested Defe	<u>Death</u>		
<u>Ages</u>	Miscellaneous	<u>Safety</u>	Miscellaneous	<u>Safety</u>	<u>Male</u>	<u>Female</u>
20	2.30%	1.13%	3.00%	2.06%	.05%	.03%
25	2.30%	1.13%	3.00%	2.24%	.06%	.03%
30	2.30%	0.75%	3.00%	3.53%	.08%	.03%
35	2.00%	0.56%	2.50%	3.41%	.09%	.04%
40	1.20%	0.56%	2.00%	1.14%	.10%	.06%
45	0.80%	0.56%	1.70%	1.70%	.13%	.09%
50	0.00%	0.00%	1.40%	0.27%	.20%	.12%
55	0.00%	0.00%	0.80%	0.00%	.35%	.19%
60	0.00%	0.00%	0.80%	0.00%	.60%	.31%
65	0.00%	0.00%	0.00%	0.00%	1.09%	.63%

	Ordinary Disability		Duty Disa	ability
	<u>Miscellaneous</u>	<u>Safety</u>	<u>Miscellaneous</u>	<u>Safety</u>
20	.000%	.020%	.050%	.110%
25	.005%	.030%	.080%	.150%
30	.010%	.050%	.130%	.360%
35	.015%	.070%	.160%	.550%
40	.025%	.160%	.210%	1.180%
45	.045%	.260%	.260%	1.140%
50	.090%	.360%	.310%	1.280%
55	.155%	.460%	.330%	3.900%
60	.255%	.000%	.370%	.000%
65	.395%	.000%	.390%	.000%

Actuarial Assumptions Used for the June 30, 2005 Valuation

(Continued)

The post-retirement mortality table used were the 1994 Group Annuity Mortality Basic Tables, with one-year setback for Males. This assumption is used to measure the probabilities of members dying after retirement and the probabilities of each benefit payment being made after retirement. The 1981 Disabled Life Mortality Tables are used for disabilitants, with a one-year setback for Safety and two-year setback for Miscellaneous. Related values are shown below.

Non-Disabled Retirees

	Future Lif	e Expectancy		
	(Y	rears)	% Dying Within Next Yea	
Sample Ages	Men	Women	<u>Men</u>	Women
45	35.6	39.0	.16%	.10%
50	30.9	34.2	.25	.15
55	26.4	29.5	.43	.25
60	22.0	25.0	.76	.48
65	18.0	20.7	1.39	.93
70	14.4	16.8	2.34	1.48
75	11.3	13.1	3.66	2.44

Disabled Retirees

Sample Ages	Future Life Expectancy (Years)	% Dying Within Next Year
45	31.9	0.23%
50	27.3	0.39
55	22.9	0.68
60	18.8	1.23
65	15.1	2.14
70	11.9	3.35
75	9.0	5.40

Actuarial Assumptions Used for the June 30, 2005 Valuation

(Continued)

<u>The rates of retirement</u> used to measure the probability of eligible members retiring during the next year.

Retirement Ages	Miscellaneous	Retirement		
50	6%	<u>Ages</u>	Saf	
			3% at 55	2% at 50
51	2	42	0%	0.64%
52	2	43	0	0.64
53	2	44	0	0.64
54	3	45	0	3.77
55	4	46	0	3.77
56	6	47	0	5.65
57	8	48	0	5.45
58	9	49	0	5.24
59	12	50	7	2.62
60	19	51	6	2.51
61	16	52	12	7.21
62	24	53	25	6.23
63	20	54	25	5.25
64	23	55	50	20.95
65	44	56	50	13.05
66	30	57	50	40.00
67	31	58	50	45.00
68	29	59	50	50.00
69	34	60	100	100.00
70	100			

Those members, whose accrued benefit is 100% of their final compensation, are assumed to retire immediately.

City of San Rafael

Actuarial Assumptions Used for the June 30, 2005 Valuation

(Continued)

<u>Survivor Benefits.</u> Marital status and spouses' census data were imputed with respect to active and deferred members.

 $\underline{\text{Marital Status}} - 80\%$ of male and 60% of female members are assumed to be married at retirement.

<u>Spouse Census</u> – Female spouses are assumed to be 3 years younger than their husbands.

For current deferred vested members, we assume that benefits will commence at the later of age 55 (50 for Safety) or current attained age. We assume that 50% of the deferred vested members are reciprocal.

Post-Retirement COLA increases are assumed to be 3% per year.

<u>Subventions.</u> A 3% nonrefundable employer pickup of employee contributions is assumed.

<u>Accumulation of Employee Contribution Balances.</u> Interest crediting is assumed to be based on the investment return rate.

City of San Rafael

Comparison of Selected Actuarial Assumptions To Actual Experience

(Continued)

The salary increase assumptions project annual increases in total member payroll of 4.25%, the inflation portion of the individual pay increase assumptions. In effect, this assumes no change in the number of active members. Changes actually experienced in areas related to these assumptions have been as follows:

		Year Ended			3-year	4-year
	6/30/05	6/30/04	6/30/03	6/30/02	Average	<u>Average</u>
Inflation ¹	1.1%	1.4%	1.6%	1.2%	1.4%	1.3%
Assumed					4.25	4.25
Average Pay Increase	0.2	8.8	(0.9)	7.2	2.6	3.8
Assumed					4.25	4.25
Merit & Longevity Increase	(0.9)	7.4	(2.5)	6.0	1.2	2.5
Assumed					0.5	0.5
Total Payroll	(3.2)	6.7	0.8	6.1	1.4	2.5
Assumed					4.25	4.25
Investment Return Rate ²	4.3	3.5	1.6	4.7	3.1	3.5
Assumed					8.25	8.25
Real Rate of Investment Return ²	3.2	2.1	0.0	3.5	1.8	2.2
Assumed					4.0	4.0

Based on Consumer Price Index for San Francisco-Oakland-San Jose Area (1982-1984 base period).

Based on actuarial value of assets, <u>NOT</u> market value or book value.

Definitions of Technical Terms

<u>Actuarial Accrued Liability</u>. The difference between the actuarial present value of system benefits and the actuarial value of future normal costs. Also referred to as "accrued liability" or "actuarial liability".

<u>Actuarial Assumptions</u>. Estimates of future experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment income and salary increases. Actuarial assumptions (rates of mortality, disability, turnover and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (salary increases and investment income) consist of an underlying rate in an inflation-free environment plus a provision for a long-term average rate of inflation.

<u>Accrued Service</u>. Service credited under the System which was rendered before the date of the actuarial valuation.

<u>Actuarial Equivalent</u>. A single amount or series of amounts of equal actuarial value to another single amount or series of amounts, computed on the basis of appropriate actuarial assumptions.

<u>Actuarial Cost Method</u>. A mathematical budgeting procedure for allocating the dollar amount of the actuarial present value of retirement system benefits between future normal cost and actuarial accrued liability. Sometimes referred to as the "actuarial funding method".

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

<u>Actuarial Present Value</u>. The amount of funds currently required to provide a payment or series of payments in the future. It is determined by discounting future payments at predetermined rates of interest, and by probabilities of payment.

<u>Amortization</u>. Paying off an interest-discounted amount with periodic payments of interest and principal -- as opposed to paying off with lump sum payment.

<u>Normal Cost</u>. The actuarial present value of retirement system benefits allocated to the current year by the actuarial cost method.

(Concluded on Next Page)

City of San Rafael

Definitions of Technical Terms

(Concluded)

<u>Unfunded Actuarial Accrued Liability</u>. The difference between actuarial accrued liability and valuation assets. Sometimes referred to as "unfunded actuarial liability" or "unfunded accrued liability".

Most retirement systems have unfunded actuarial accrued liability. They arise each time new benefits are added and each time an actuarial loss is realized.

The existence of unfunded actuarial accrued liability is not in itself bad, any more than a mortgage on a house is bad. Unfunded actuarial accrued liability does not represent a debt that is payable today. What is important is the ability to amortize the unfunded actuarial accrued liability and the trend in its amount (after due allowance for devaluation of the dollar). Unfunded actuarial accrued liability should be controlled.

DISCLOSURES REQUIRED BY STATEMENTS NO. 25 AND 27 OF THE GOVERNMENTAL ACCOUNTING STANDARDS BOARD

GASB No. 25 Disclosure Schedule of Funding Progress Retirement Benefits

(\$ in Thousands)

Valuation <u>Date</u>	Valuation <u>Assets</u>	Actuarial Accrued <u>Liability</u>	Unfunded <u>AAL</u>	Funded <u>Ratio</u>	Member <u>Payroll</u>	UAAL Ratio to <u>Payroll</u>
6/30/98	\$131,142	\$124,239	\$ (6,903)	106%	20,361	(33.9)%
6/30/99	151,466	134,247	(17,219)	113%	23,293	(73.9)%
6/30/00	171,663	156,806	(14,857)	110%	23,372	(63.6)%
6/30/01	186,085	172,939	(13,146	108%	25,650	(51.3)%
6/30/02	190,563	187,118	(3,445)	102%	27,223	(12.7)%
6/30/031	185,632	219,845	34,213	84%	27,453	124.6%
6/30/04 ²	188,956	241,901	52,945	78%	29,299	180.7%
6/30/04 ³	188,956	248,665	59,709	76%	29,299	203.8%
6/30/05	195,698	265,205	69,507	74%	28,357	245.1%

¹ Reflects 2004 benefit enhancement for Miscellaneous and Police employees

² Prior to 2004 assumption changes

³ After the 2004 assumption changes

GASB No. 25 Disclosure Schedule of Employer Contributions Retirement Benefits

Year Ended June 30	Actuarially Required Contributions (ARC)
2000	2,358,000
2001	2,187,000
2002	2,880,000
2003	$2,056,000^1$
2004	$3,220,701^2$
2005	7,143,653 ³

¹ Estimate based on interpolated valuation payroll and 7.52% overall rate.

² Estimate based on interpolated valuation payroll and 11.35% overall rate.

³ Estimate based on interpolated valuation payroll and 24.78% overall rate.

APPENDIX A: MEMBER CONTRIBUTION RATES

Contribution Rates Assumed for Members

Safety

Age	Basic	COL	<u>Total</u>
16	7.36%	2.82%	10.18%
17	7.39%	2.83%	10.22%
18	7.42%	2.84%	10.26%
19	7.45%	2.85%	10.30%
20	7.48%	2.86%	10.34%
21	7.51%	2.88%	10.39%
22	7.56%	2.89%	10.45%
23	7.61%	2.91%	10.52%
24	7.66%	2.93%	10.59%
25	7.72%	2.96%	10.68%
26	7.78%	2.98%	10.76%
27	7.86%	3.01%	10.87%
28	7.93%	3.04%	10.97%
29	8.01%	3.07%	11.08%
30	8.10%	3.10%	11.20%
31	8.20%	3.14%	11.34%
32	8.30%	3.18%	11.48%
33	8.41%	3.22%	11.63%
34	8.52%	3.26%	11.78%
35	8.64%	3.31%	11.95%
36	8.76%	3.35%	12.11%
37	8.89%	3.40%	12.29%
38	9.02%	3.45%	12.47%
39	9.15%	3.50%	12.65%
40	9.28%	3.55%	12.83%
41	9.41%	3.60%	13.01%
42	9.55%	3.66%	13.21%
43	9.69%	3.71%	13.40%
44	9.83%	3.76%	13.59%
45	9.98%	3.82%	13.80%
46	10.12%	3.87%	13.99%
47	10.27%	3.93%	14.20%
48	10.43%	3.99%	14.42%
49	10.58%	4.05%	14.63%
50 +	10.58%	4.05%	14.63%

Contribution Rates Assumed for Members

Miscellaneous (31676.11)

Age	Basic	<u>COL</u>	<u>Total</u>
16	6.16%	1.75%	7.91%
17	6.18%	1.76%	7.94%
18	6.20%	1.77%	7.97%
19	6.22%	1.77%	7.99%
20	6.24%	1.78%	8.02%
21	6.26%	1.78%	8.04%
22	6.28%	1.79%	8.07%
23	6.30%	1.79%	8.09%
24	6.33%	1.80%	8.13%
25	6.36%	1.81%	8.17%
26	6.40%	1.82%	8.22%
27	6.44%	1.83%	8.27%
28	6.48%	1.85%	8.33%
29	6.53%	1.86%	8.39%
30	6.57%	1.87%	8.44%
31	6.63%	1.89%	8.52%
32	6.68%	1.90%	8.58%
33	6.74%	1.92%	8.66%
34	6.80%	1.94%	8.74%
35	6.86%	1.95%	8.81%
36	6.93%	1.97%	8.90%
37	7.00%	1.99%	8.99%
38	7.07%	2.01%	9.08%
39	7.14%	2.03%	9.17%
40	7.22%	2.06%	9.28%
41	7.30%	2.08%	9.38%
42	7.38%	2.10%	9.48%
43	7.46%	2.12%	9.58%
44	7.54%	2.15%	9.69%
45	7.63%	2.17%	9.80%
46	7.72%	2.20%	9.92%
47	7.82%	2.23%	10.05%
48	7.91%	2.25%	10.16%
49	8.01%	2.28%	10.29%
50	8.12%	2.31%	10.43%
51	8.22%	2.34%	10.56%
52	8.33%	2.37%	10.70%
53	8.44%	2.40%	10.84%
54 +	8.55%	2.44%	10.99%

Contribution Rates Assumed for Members

Miscellaneous (31676.19)

		`	,
<u>Age</u>	Basic	<u>COL</u>	<u>Total</u>
16	7.39%	2.10%	9.49%
17	7.42%	2.11%	9.53%
18	7.44%	2.12%	9.56%
19	7.46%	2.12%	9.59%
20	7.49%	2.14%	9.62%
21	7.51%	2.14%	9.65%
22	7.54%	2.15%	9.68%
23	7.56%	2.15%	9.71%
24	7.60%	2.16%	9.76%
25	7.63%	2.17%	9.80%
26	7.68%	2.18%	9.86%
27	7.73%	2.20%	9.92%
28	7.78%	2.22%	10.00%
29	7.84%	2.23%	10.07%
30	7.88%	2.24%	10.13%
31	7.96%	2.27%	10.22%
32	8.02%	2.28%	10.30%
33	8.09%	2.30%	10.39%
34	8.16%	2.33%	10.49%
35	8.23%	2.34%	10.57%
36	8.32%	2.36%	10.68%
37	8.40%	2.39%	10.79%
38	8.48%	2.41%	10.90%
39	8.57%	2.44%	11.00%
40	8.66%	2.47%	11.14%
41	8.76%	2.50%	11.26%
42	8.86%	2.52%	11.38%
43	8.95%	2.54%	11.50%
44	9.05%	2.58%	11.63%
45	9.16%	2.60%	11.76%
46	9.26%	2.64%	11.90%
47	9.38%	2.68%	12.06%
48	9.49%	2.70%	12.19%
49	9.61%	2.74%	12.35%
50	9.74%	2.77%	12.52%
51	9.86%	2.81%	12.67%
52	10.00%	2.84%	12.84%
53	10.13%	2.88%	13.01%
54	10.26%	2.93%	13.19%
55+	10.26%	2.93%	13.19%

APPENDIX B: RETIREMENT AGE FACTORS

Retirement Age Factors

Miscellaneous

31676.11 1.667% at 55		31676 2% at	
	<u>Fractio</u>		<u>Fractio</u>
<u>Age</u>	<u>n</u>	<u>Age</u>	<u>n</u>
50	0.7454	50	1.00
51	0.7882	51	1.07
52	0.8346	52	1.14
53	0.8850	53	1.21
54	0.9399	54	1.28
55	1.0000	55+	1.35
56	1.0447		
57	1.1048		
58	1.1686		
59	1.2365		
60	1.3093		
61	1.3608		
62	1.4123		
63	1.4638		
64	1.5153		
65	1.5668		

Fire		Safety			
31664 2% at 50		31664.2 3% at 55			
	<u>Fractio</u>		<u>Fractio</u>		
<u>Age</u>	<u>n</u>	<u>Age</u>	<u>n</u>		
41	0.6258	41	0.4777		
42	0.6625	42	0.5058		
43	0.7004	43	0.5347		
44	0.7397	44	0.5647		
45	0.7805	45	0.5958		
46	0.8226	46	0.6280		
47	0.8678	47	0.6625		
48	0.9085	48	0.6936		
49	0.9522	49	0.7269		
50	1.0000	50	0.7634		
51	1.0516	51	0.8028		
52	1.1078	52	0.8457		
53	1.1692	53	0.8926		
54	1.2368	54	0.9418		
55+	1.3099	55+	1.0000		

NOTE: Staff has indicated that all factors are non-integrated.