MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

City of San Rafael

ANNUAL ACTUARIAL VALUATION

June 30, 2004

REVISED



City of San Rafael

June 30, 2004 Actuarial Valuation

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GABRIEL, ROEDER, SMITH & COMPANY CONSULTANTS & ACTUARIES

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April 1, 2005 **REVISED**

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, 2004</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, 2005.

	Police	Fire	Miscellaneous	Overall
Normal Costs	17.76%	15.70%	13.67%	15.10%
Unfunded Amortization	25.14%	19.48%	11.71%	17.31%
TOTAL	42.90%	35.18%	25.38%	32.41%

Before Assumption				
Changes	39.82%	31.91%	22.36%	28.68%

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 \$15.6 million, which reflects 7.1% of related actuarial accrued liabilities as of June 30, 2003.

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

Respectfully submitted,

Rick Roeder

GABRIEL, ROEDER, SMITH & COMPANY

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

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Rebekah Bayram

Marin County Employees' Retirement Association City of San Rafael

Summary of Significant Valuation Results

		June 30, 2003	June 30, 2004	Percent Change
I. Tota	l Membership			
A. A	ctive Members	415	407	(1.9)%
B. Pe	ensioners & Beneficiaries	308	309	0.3%
C. V	ested Deferreds	<u>119</u>	<u>133</u>	11.8%
D. Te	otal	842	849	0.8%
II. Sala	ries at June 30			
A. To	otal Annual Payroll	\$27,453,142	\$29,299,290	6.7%
B. A	verage Annual Compensation	\$66,152	\$71,988	8.8%
III. Bene	efits to Current Pensioners and			
Bene	eficiaries			
A. To	otal Annual Benefits	\$7,446,267	\$8,051,911	8.1%
B. A	verage Monthly Benefit Amount	\$2,015	\$2,171	7.8%
IV. Tota	al Assets			
A. A	Actuarial Value	\$185,632,244	\$188,955,939	1.8%
B. 1	Market Value	\$156,833,124	\$181,901,594	16.0%
V. Unft	unded Actuarial Accrued	\$34,212,721	\$59,709,387	74.5%
Lial	bility/(Surplus)			
VI. Bud	lget Items	FY 2004-2005	FY 2005-2006	
A. 1	Normal Cost as a Percent of Pay	14.19%	15.10%	6.4%
B. A	Amortization of UAAL	10.59%	17.31%	63.5%
С. Т	Total Contribution	24.78%	32.41%	30.8%
VII. Fun	ded Ratio (Based on Actuarial			
Va	lue of Assets)	84%	76%	(9.5)%
VIII. Fun	ded Ratio (Based on Market			
Va	lue of Assets)	71%	73%	2.8%

Marin County Employees' Retirement Association Contribution Reconciliation for June 30, 2004 Valuation

City of San Rafael

June 30, 2004 Valuation Payroll	\$29,299,290
Projected Payroll for 2005-2006	\$31,186,827

Contribution Reconciliation Based on Rate from 2003 Valuation	Expected Unfunded \$37,345,258				<u>Contribution</u> \$7,728,096	Rate 24.78%
	Change in Unfunded	Change in	Change in	2005-2006		
	Accrued Liability	Normal Cost	<u>Rate</u>	Contribution		
Gains and Losses						
Investment losses	\$8,998,681	\$0	2.61%	\$813,976		
COLA losses/(gains)	\$238,485	\$0	0.07%	\$21,831		
Pay increase losses/(gains)	\$3,367,974	\$0	0.97%	\$302,512		
Retirant mortality and data	***	4.0	4.04	***		
refinement losses/(gains)	\$3,476,256	\$0	1.01%	\$314,987		
Other demographic losses/(gains)	(\$481,505)	<u>\$0</u>	<u>(0.14%)</u>	(\$43,662)	ФО 127 740	20.200/
Subtotal	\$15,599,891	\$0	4.52%	\$1,409,644	\$9,137,740	29.30%
Other Factors Miscellaneous ² Change in Normal Cost due to demographic factors Subtotal	* <u>\$0</u> *	\$0 (\$268,207) (\$268,207)	0.24% (0.86%) (0.62%)	\$75,784 (\$268,207) (\$192,423)	\$8,945,317	28.68%
Benefit Increase	\$0	\$0	0.00%	\$0	\$8,945,317	28.68%
Assumption Change						
COLA from 2.75% to 3.00%	\$6,357,572	\$202,714	2.49%	\$776,552		
Change in withdrawal assumption for Misc. with 5+ years	\$105,858	\$40,543	0.16%	\$49,899		
Change in methodology of Miscellaneous 1.667% at 55	(\$540,521)	(\$37,424)	(0.28%)	(\$87,323)		
Other ³	<u>\$841,329</u>	<u>\$137,222</u>	1.36%	<u>\$424,141</u>		
Subtotal	\$6,764,238	\$343,055	3.73%	\$1,163,269	\$10,108,586	32.41%
Total from 2004 Valuation	\$59,709,387				\$10,108,586	32.41%

¹ 6/30/2003 Unfunded Accrued Liability of \$34,212,721 adjusted for interest and contributions during the year

² Reflects impact of contribution rate lag and impact of unexpected changes in payroll on amortization contribution

³ Including other assumption changes from experience study and change to mid-year decrements

^{*} Included in Expected Unfunded

City of San Rafael

Comments & Recommendations

June 30, 2004

COMMENT A: The City requested that a revised 2004 valuation be issued to reflect that there were a small number of Miscellaneous employees who were not granted the benefit enhancement received by most Miscellaneous employees. The City contribution rate significantly increased from 24.78% last year to 32.41% of payroll this year. 32.69% was the composite rate in the original 2004 valuation. The incorporation of new actuarial assumptions produced an increase in rates of 3.73% of payroll.

COMMENT B: The good news in the valuation is that the System's deferred loss (the excess of actuarial value over market value) was reduced from \$172 million to \$42 million. The City's share of this is roughly \$7 million. This reflects the excellent market returns for FYE2003. However, the actuarial smoothing process also reflects the 2000-03 bear market.

COMMENT C: Even without assumption changes, the computed rate would have significantly increased to 28.68%. This was primarily due to investment losses, using the actuarial value of assets, of \$9 million. The portion of the rate increase, attributable to such investment losses, is 2.61%. The actuarial rate of return was 3.45%. For actuarial loss purposes, we compare to the System's 8.25% assumption, not zero. Valuation pay also increased by 8.8%. This created an added actuarial loss in excess of \$3 million.

COMMENT D: The overall funded ratio decreased from 84% to 76% using the actuarial value of assets. Using market value of assets, the funded ratio increased from 71% to 73%.

COMMENT E: The average age and service increased by 1.4 years for Miscellaneous actives. This unusual demographic resulted from low employee turnover that was largely limited to young employees with little past service.

COMMENT F: We have again used a 16-year amortization period for financing of unfunded liabilities. We are assuming this policy may be reviewed in light of the comment on page 50 of the 2002 Mercer valuation report: "The 16-year period will remain unchanged as long as the unfunded actuarial accrued liability remains negative." Those days are behind us -- at least in the near term.

City of San Rafael

Comments & Recommendations

June 30, 2004

COMMENT G: 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 H: This valuation reflects a 3% pick up (subvention) of employee contributions. Since employees will be contributing more out-of-pocket than previously, there is an increase of 0.21% in the refund component of normal cost. Our understanding is that picked up contributions are generally nonrefundable.

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)

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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 inflation which defies reliable prediction.

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

VALUATION RESULTS

City of San Rafael

June 30, 2004

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, 2005 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>2003</u>
Fiscal Year	2005-2006	2004-2005
Miscellaneous	25.38%	20.37%
Police	42.90%	35.16%
Fire	35.18%	24.95%
Overall	32.41%	24.78%

The above contributions are **exclusive** of applicable "picked up" employee contributions and assume contributions are made, on average, mid-year.

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, 2004

(Expressed as Percents of Active Payroll)

Elements of County Normal Cost

	Safe	<u>ety</u>	<u>Miscellaneous</u>	<u>Overall</u>
	<u>Police</u>	<u>Fire</u>		
Normal Retirement	15.91	12.99	17.09	15.87
Vested Deferred Retirement	2.76	2.25	2.86	2.70
Death-In-Service ¹	0.75	0.84	0.41	0.59
Disability	8.12	9.12	2.49	5.33
Contribution Refunds	0.48	0.51	0.75	0.63
Total Normal Cost	28.02%	25.71%	23.60%	25.12%
Less				
Employee Contributions ²	10.26	<u>10.01</u>	<u>9.93</u>	10.02
Equals				
Employer Normal Cost	17.76%	15.70%	13.67%	15.10%

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.

² Shown employee contributions will be reduced by applicable employee pick ups (subventions).

Marin County Employees' Retirement Association City of San Rafael

Member Contributions as of June 30, 2004

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

(Percents of Pay)

Weighted Employee Contribution

<u>2003</u> <u>2004</u>

Weighted employee contribution rate

9.78% 10.02%

The above averages are shown prior to any pick ups (subventions) of employee contributions. The rates used in this valuation for each participant were those supplied by the Retirement Office in the individual data. Currently, the City of San Rafael picks up 3% of employee pay. The increase is partially due to data corrections made in 2004.



City of San Rafael

Unfunded Actuarial Accrued Liability

June 30, 2004

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	\$34,212,721
(2)	Expected UAAL payment	(297,950)
(3)	Interest accrual	2,834,587
(4)	Increase due to assumption changes	6,764,238
(5)	Expected UAAL at end of year: $(1) - (2) + (3) + (4)$	44,109,496
(6)	Actual UAAL at end of year	59,709,387
(7)	Gain (loss) from actuarial experience: (5) - (6)	(15,599,891)
(8)	Gain (loss) as percentage of actuarial accrued	
	liabilities at beginning of year	(7.1)%
Inve	estment Loss	8,998,681
Los	s from non-investment areas	6,601,210

City of San Rafael

Gain/Loss on Unfunded Accrued Liability

June 30, 2004

Components of Actuarial (Gain)/Loss for the Year Ending June 30, 2004

Estimated (Gain)/Loss attributed to pay increases	\$3,367,974
Estimated (Gain)/Loss attributed to employee turnover, mortality, retirement incidence, and miscellaneous	
factors	(481,505)
Estimated (Gain)/Loss attributed to retirant mortality and retirant data refinements	3,476,256
and retirant data refinements	3,470,230
Estimated (Gain)/Loss attributed to COLA increase	238,485
Estimated (Gain)/Loss attributed to investment experience	8,998,681
Total Estimated Experience (Gain)/Loss	\$15,599,891

Unfunded Actuarial Accrued Liability

Total actuarial accrued liabilities	\$249,205,847
Assets allocated to funding	188,955,939
Unfunded Actuarial Accrued Liability	\$60,249,908



City of San Rafael

Funding Progress Indicators

June 30, 2004

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.

<u>We believe a better understanding</u> 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.

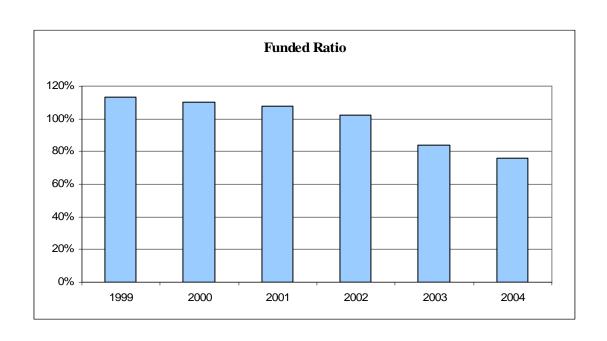
City of San Rafael

Funding Progress Indicators – Historic Comparison

(\$ in Thousands)

		Actuarial				UAAL
Valuation	Valuation	Accrued	Unfunded	Funded	Member	Ratio to
<u>Date</u>	<u>Assets</u>	<u>Liability</u>	\underline{AAL}	<u>Ratio</u>	<u>Payroll</u>	<u>Payroll</u>
6/30/97	\$114,506	\$110,198	\$ (4,307)	104%	16,298	(25.3)%
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)%
6/30/03	185,632	201,294	15,662	92%	27,453	57.1%
6/30/03 ¹	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%

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, 2004

Present Resources and Expected Future Resources

		<u>Total</u>
A.	Actuarial value of system assets	\$188,955,939
B.	Present value of expected future contributions	
	1. For normal costs for present actives ¹	35,368,937
	2. For unfunded actuarial accrued liability	59,709,387
	3. Totals	95,078,324
C.	Present value of expected future member	
	contributions ¹	23,469,096
D.	Total Present and Expected Future Resources	\$307,503,359
<u>P</u>	resent Value of Expected Future Benefit Paym	ents and Reserve
A.	To retirants and beneficiaries	\$104,517,856
B.	To vested terminated members	17,152,800
C.	To present active members	
	1. Allocated to service rendered prior to	
	valuation date	126,994,670
	2. Allocated to service likely to be rendered	
	after valuation date	58,838,033
	3. Totals	185,832,703
D.	Total Present Value of Expected Future	
	Benefit Payments	\$307,503,359

¹ Prior to any employer pick-up contributions (subventions)

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, 2004

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) will apply until July 1, 2004 when 32676.19 (2.7% at 55) will apply to most Miscellaneous employees.

Safety - 3% at 55 (Section 31664.2) for Police after July 1, 2004 and 31664 otherwise (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, 2004

(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

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, 2004

(Continued)

7. <u>Death After Retirement</u>

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, 2004

(Concluded)

11. Member Contributions

Please refer to Appendix A for entry-age based rates. Due to July 1, 2004 benefit increase for Miscellaneous members, it is assumed Miscellaneous rates will increase by 20%. 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, 2004 Valuation

Reported Market Value of Assets

Cash/Short-term	\$152,992,493
Receivables	6,283,532
Stocks	752,395,144
Bonds	258,298,417
Real Estate	92,720,000
Miscellaneous	1,207,053
Total Market Value	1,263,896,639
Liabilities	181,043,881
Net Market Value	\$1,082,852,758

Revenues and Disbursements Among Applicable Reserves

Balance – Beginning of year	\$935,491,460
Revenues	
Employees' contributions	10,247,043
Employer contributions	26,890,964
Distributed & undistributed investment	
income (net of expenses)	169,502,785
Total Revenues	206,640,792
Disbursements	
Benefit payments	57,304,486
Refunds	592,660
Administrative Expense	1,382,348
Total Disbursements	59,279,494
Balance – End of year	\$1,082,852,758

Actuarial Value of Assets As of June 30, 2004

Fisca							(1) Tota	(2) Expecte	(1-2)		
Yea	Count	Membe	Tota	Tota	Marke	Average	Marke	Marke	Investmen	Deferre	Deferre
Ending	Contributions	Contributions	Contributions	Benefit	<u>Value</u>	<u>Value</u>	Return	Return	<u>Gai</u>	Factor	Return
2000-01	18,064,245	7,324,467	25,388,712	38,936,735	911,123,573	954,447,152	(31,431,780)	78,741,920	(110,173,700)	0.2	(\$22,034,740)
		* *			, ,	, , , , , , , , , , , , , , , , , , ,			, , , ,		
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)	0.4	(54,868,002)
2002-03	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)	0.6	(37,643,048)
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	0.8	72,551,563
1. Total de	ferred										(41,994,228)
2. Market	Value										1,082,852,758
	ed Market Value (Item 2 - Item									1,124,846,986
4. Corrido	4. Corridor Limit										
a. 80% (of Net Market										866,282,206
b. 120%	of Net Market Va	alue				•					1,299,423,310
5. Actuaria	al Value (Item 3 af	ter corridor applie	d) Inclusive of Health	Insurance Reser	ve						1,124,846,986
6. Reserve	s at Market										\$1,082,852,758

	Reserv	Actuaria	Actuaria
	Value	Value Ratio	Value
Marin County and Special	\$811,690,803	1.0388	\$843,169,071
City of San Rafael	\$181,901,594	1.0388	\$188,955,939
Novato Fire Protection District	\$81,647,512	1.0388	\$84,813,892
Health Insurance	\$7,612,849	1.0388	\$7,908,084
Tota	\$1,082,852,758		\$1,124,846,986

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

D	·				
Recognition of					
Deferred					
Valuation	Amount to be				
<u>Dat</u>	Recognize				
6/30/2005	(\$43,878,533)				
6/30/2006	(21,843,793)				
6/30/2007	5,590,208				
6/30/2008	18,137,891				
Tota	(\$41,994,228)				

Summary of Reserves and Other Liabilities

June 30, 2004

Employer Reserves	\$32,778,787
Employee Reserves	97,557,420
Death Benefit Reserves	671,291
Article 15.5 Reserves	1,611,424
Reserve for Pre 7/1/77 San Rafael Retirees	9,676,412
Retired Employees Reserve	265,033,408
Cost of Living Adjustment Reserves	218,606,966
Health Insurance Reserves	7,612,849
Contingency and other Reserves	54,142,638
Unrestricted Reserves	395,161,564
Security Deposits Payable	745,487
County Contribution Payable	601,146
Investments Payable	50,245,403
Other Payables	1,593,977
Total Liabilities	\$1,136,038,771

City of San Rafael

Summary of Reserves and Other Liabilities

June 30, 2004

Total	\$249,205,847	\$188,955,939
Fire (Actives & Deferreds)	\$38,568,971	\$22,919,662
Police (Actives & Deferreds)	\$43,899,957	\$23,314,164
Safety Retirees	\$74,976,833	\$72,907,035
Miscellaneous	\$91,760,086	\$69,815,078
	Accrued Liability	<u>Assets</u>

City of San Rafael

Annual Benefit and Membership Distribution Miscellaneous Retirees and Beneficiaries

Age Years of Retirement 0-4 <u>5-9</u> <u>15-19</u> 20-24 <u>25-29</u> 30-34 Group <u>10-14</u> **Total** 30-34 NO. 25,864 25,864 AVG AMT 35-39 NO. AVG AMT 40-44 NO. AVG AMT 45-49 NO. AVG AMT 8,626 10,868 9,747 50-54 NO. AVG AMT 17,013 19,603 17,876 55-59 NO. 20,972 AVG AMT 23,930 13,785 11,152 20,265 60-64 NO. AVG AMT 27,350 27,108 1,566 24,126 14,429 25,067 65-69 NO. AVG AMT 19,599 18,007 13,619 16,007 25,094 16,979 16,803 70-74 NO. AVG AMT 11,403 16,024 24,130 10,146 8,806 1,726 14,641 75-79NO. 29,380 12,538 5,874 11,105 8,508 AVG AMT 11,612 80-84 NO. 8,486 20,815 12,464 15,196 12,090 AVG AMT 8,105 85-89 NO. AVG AMT 15,264 9,292 3,059 11,239 90+ NO. AVG AMT 7,305 6,252 Total NO.

23,507

17,750

15,038

13,682

12,096

10,510

AVG AMT

15,987

2,208

City of San Rafael

Annual Benefit and Membership Distribution

Safety Retirees and Beneficiaries

Age			\	Years of Re	tirement				
Group	<u>0-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	25-29	30-34	<u>35+</u>	<u>Total</u>
30-34 NO.	2	0	1	0	0	0	0	0	3
AVG AMT	39,756	0	15,204	0	0	0	0	0	31,572
35-39 NO.	2	0	0	0	0	0	0	0	2
AVG AMT	32,608	0	0	0	0	0	0	0	32,608
40-44 NO.	0	0	1	0	0	0	0	0	1
AVG AMT	0	0	28,769	0	0	0	0	0	28,769
45-49 NO.	2	3	1	0	1	0	0	0	7
AVG AMT	42,616	20,622	2,223	0	18,341	0	0	0	23,952
50-54 NO.	7	5	2	2	0	0	0	0	16
AVG AMT	38,023	34,675	32,379	27,211	0	0	0	0	34,920
55-59 NO.	21	5	4	2	2	0	0	0	34
AVG AMT	61,281	52,301	17,014	26,107	23,800	0	0	0	50,479
60-64 NO.	10	8	4	5	2	2	0	0	31
AVG AMT	39,246	46,873	39,696	23,763	25,680	15,012	0	0	36,336
65-69 NO.	2	2	10	7	3	2	0	0	26
AVG AMT	78,415	35,207	49,028	22,960	26,373	18,098	0	0	38,214
70-74 NO.	0	1	0	5	7	1	0	0	14
AVG AMT	0	3,435	0	47,332	18,874	8,319	0	0	27,181
75-79NO.	0	0	0	0	3	4	0	0	7
AVG AMT	0	0	0	0	44,011	20,704	0	0	30,693
80-84 NO.	0	0	0	0	0	2	0	0	2
AVG AMT	0	0	0	0	0	26,653	0	0	26,653
85-89 NO.	0	0	0	0	0	4	2	0	6
AVG AMT	0	0	0	0	0	25,099	11,443	0	20,547
90+ NO.	0	0	0	0	0	3	0	1	4
AVG AMT	0	0	0	0	0	9,690	0	5,514	8,646
Total NO.	46	24	23	21	18	18	2	1	153
AVG AMT	50,703	39,399	36,003	29,659	25,587	18,896	11,443	5,514	36,326

City of San Rafael

Summary of Monthly Allowances Being Paid

Submitted for the June 30, 2004 Valuation

Miscellaneous

	A	Annual Allowances	S
Service Retirement	Number	<u>Total</u>	Average
Unmodified	94	\$1,758,694	\$18,710
Option 1	5	48,606	9,721
Option 2	9	86,604	9,623
Option 3	0	0	0
Total	108	1,893,904	17,536
Ordinary Disability			
Unmodified	3	34,780	11,593
Option 1	0	0	0
Option 2	0	0	0
Option 3	0	0	0
Total	3	34,780	11,593
Duty Disability			
Unmodified	17	326,184	19,187
Option 1	1	21,253	21,253
Option 2	0	0	0
Option 3	0	0	0
Total	18	347,437	19,302
Beneficiary			
Unmodified	26	208,163	8,006
Option 1	0	0	0
Option 2	1	9,735	9,735
Option 3	0	0	0
Total	27	217,899	8,070
TOTAL	156	\$2,494,019	\$15,987

City of San Rafael

Summary of Monthly Allowances Being Paid

Submitted for the June 30, 2004 Valuation

Safety

	Annual Allowances					
Service Retirement	Number	<u>Total</u>	Average			
Unmodified	79	\$3,344,410	\$42,334			
Option 1	3	43,490	14,497			
Option 2	3	110,497	36,832			
Option 3	1	28,464	28,464			
Total	86	3,526,862	41,010			
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	42	1,517,824	36,139			
Option 1	1	28,073	28,073			
Option 2	1	28,769	28,769			
Option 3	0	0	0			
Total	44	1,574,665	35,788			
Beneficiary						
Unmodified	21	356,663	16,984			
Option 1	0	0	0			
Option 2	2	99,702	49,851			
Option 3	0	0	0			
Total	23	456,364	19,842			
TOTAL	153	\$5,557,891	\$36,326			

City of San Rafael

Summary of Retired Members and Beneficiaries Included

In the June 30, 2004 Actuarial Valuation

			Average		New Retirees Only			
		Annual	Annual	Attained	Age at		Average	Average
	<u>No.</u>	Allowance	Allowance	<u>Age</u>	Retirement	<u>No.</u>	Allowance	<u>Age</u>
Miscellaneous Member	rs							
Retirees								
6/30/2003	132	\$2,172,744	\$16,460	68.8	56.5	7	\$40,827	58.4
6/30/2004	129	\$2,276,121	\$17,644	68.7	56.2	3	\$24,501	58.4
Increase	(2.3)%	4.8%	7.2%					
Beneficiaries								
6/30/2003	26	\$199,065	\$7,656	74.5	NA	NA	NA	NA
6/30/2004	27	\$217,899	\$8,070	75.1	NA	NA	NA	NA
Increase	3.8%	9.5%	5.4%					
Total								
6/30/2003	158	\$2,371,809	\$15,011	69.7	56.5	7	\$40,827	58.4
6/30/2004	156	\$2,494,019	\$15,987	69.8	56.2	3	\$24,501	58.4
Increase	(1.3)%	5.2%	6.5%					
Safety Members								
Retirees								
6/30/2003	124	\$4,621,669	\$37,272	61.2	50.7	11	\$47,613	52.2
6/30/2004	130	\$5,101,527	\$39,243	61.8	50.8	5	\$54,223	50.8
Increase	4.8%	10.4%	5.3%					
Beneficiaries								
6/30/2003	26	\$452,789	\$17,415	70.8	NA	NA	NA	NA
6/30/2004	23	\$456,364	\$19,842	71.5	NA	NA	NA	NA
Increase	(11.5)%	0.8%	13.9%					
Total								
6/30/2003	150	\$5,074,458	\$33,830	62.9	50.7	11	\$47,613	52.2
6/30/2004	153	\$5,557,891	\$36,326	63.2	50.8	5	\$54,223	50.8
Increase	2.0%	9.5%	7.4%					
Grand Total 6/30/03	308	\$7,446,267	\$24,176	66.4	53.7	18	\$44,974	54.6
Grand Total 6/30/04	309	\$8,051,911	\$26,058	66.6	53.5	8	\$43,077	53.7
Increase	0.3%	8.1%	7.8%					

City of San Rafael

Active Membership Summary

In the June 30, 2004 Actuarial Valuation

Active Miscellaneous

			Averages		
		Annual	Annual		
	<u>No.</u>	Compensation	Compensation	<u>Age</u>	<u>Service</u>
6/30/2003	264	\$14,579,685	\$55,226	44.7	8.9
$6/30/2004^1$	257	\$15,522,826	\$60,400	46.1	10.1
Percent Change	(2.7)%	6.5%	9.4%	3.1%	13.5%

Active Safety

			Averages		
		Annual	Annual		
	No.	Compensation	Compensation	<u>Age</u>	<u>Service</u>
6/30/2003	151	\$12,873,457	\$85,255	42.0	14.4
6/30/2004	150	\$13,776,464	\$91,843	42.5	15.0
Percent Change	(0.7)%	7.0%	7.7%	1.3%	4.3%

Total Active

			Averages		
		Annual	Annual		
	<u>No.</u>	Compensation	Compensation	<u>Age</u>	<u>Service</u>
6/30/2003 Total	415	\$27,453,142	\$66,152	43.7	10.9
6/30/2004 Total	407	\$29,299,290	\$71,988	44.8	11.9
Percent Change	(1.9)%	6.7%	8.8%		

Vested Deferreds and Recipients

6/30/2003 Total	119	\$6,346,571	\$53,333	45.7	5.9
6/30/2004 Total	133	\$7,057,578	\$53,064	45.0	5.2

¹ 42 employees, with average compensation of \$34,652, still receive 1.6667% at 55 benefit.

Active Members June 30, 2004 By Attained Ages and Years of Service

Safety

Age	Years of Accrued 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.	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
25-29 NO.	2	1	7	3	1	1	0	0	0	0	0	0	15
TOT PAY	133,096	76,723	518,447	238,379	85,957	81,974	0	0	0	0	0	0	1,134,577
AVG PAY	66,548	76,723	74,064	79,460	85,957	81,974	0	0	0	0	0	0	75,638
30-34 NO.	3	5	1	3	4	8	0	0	0	0	0	0	24
TOT PAY	209,189	351,560	80,667	261,800	343,175	691,923	0	0	0	0	0	0	1,938,313
AVG PAY	69,730	70,312	80,667	87,267	85,794	86,490	0	0	0	0	0	0	80,763
35-39 NO.	0	2	2	2	2	7	5	0	0	0	0	0	20
TOT PAY	0	146,563	147,831	168,135	173,991	613,095	482,116	0	0	0	0	0	1,731,732
AVG PAY	0	73,281	73,916	84,068	86,996	87,585	96,423	0	0	0	0	0	86,587
40-44 NO.	1	1	1	1	0	2	0	11	4	0	0	0	21
TOT PAY	132,827	86,966	85,620	112,078	0	176,321	0	1,024,153	401,678	0	0	0	2,019,644
AVG PAY	132,827	86,966	85,620	112,078	0	88,161	0	93,105	100,420	0	0	0	96,174
45-49 NO.	0	1	1	0	0	1	0	9	10	3	0	0	25
TOT PAY	0	87,623	78,525	0	0	101,587	0	852,111	973,309	299,339	0	0	2,392,493
AVG PAY	0	87,623	78,525	0	0	101,587	0	94,679	97,331	99,780	0	0	95,700
50-54 NO.	0	0	0	0	0	1	1	1	11	10	5	0	29
TOT PAY	0	0	0	0	0	97,380	99,302	83,634	1,014,594	1,003,451	548,908	0	2,847,269
AVG PAY	0	0	0	0	0	97,380	99,302	83,634	92,236	100,345	109,782	0	98,182
55-59 NO.	0	0	0	0	0	0	0	0	1	5	8	0	14
TOT PAY	0	0	0	0	0	0	0	0	103,815	533,961	906,684	0	1,544,460
AVG PAY	0	0	0	0	0	0	0	0	103,815	106,792	113,335	0	110,319
60-64 NO.	0	0	0	0	0	0	1	0	0	0	0	1	2
TOT PAY	0	0	0	0	0	0	78,929	0	0	0	0	89,047	167,976
AVG PAY	0	0	0	0	0	0	78,929	0	0	0	0	89,047	83,988
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.	6	10	12	9	7	20	7	21	26	18	13	1	150
TOT AMT	475,112	749,434	911,089	780,393	603,124	1,762,281	660,347	1,959,898	2,493,397	1,836,751	1,455,592	89,047	13,776,464
AVG AMT	79,185	74,943	75,924	86,710	86,161	88,114	94,335	93,328	95,900	102,042	111,969	89,047	91,843

City of San Rafael

Active Members June 30, 2004 By Attained Ages and Years of Service

Miscellaneous

Age						Years of Acc	crued Service	;					
-												<u>35 & </u>	
<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>	<u>Up</u>	<u>Total</u>
20-24 NO.	1	0	1	1	0	0	0	0	0	0	0	0	3
TOT PAY	42,893	0	71,253	23,177	0	0	0	0	0	0	0	0	137,323
AVG PAY	42,893	0	71,253	23,177	0	0	0	0	0	0	0	0	45,774
25-29 NO.	2	4	4	2	6	0	0	0	0	0	0	0	18
TOT PAY	33,209	142,431	217,100	154,900	278,108	0	0	0	0	0	0	0	825,749
AVG PAY	16,605	35,608	54,275	77,450	46,351	0	0	0	0	0	0	0	45,875
30-34 NO.	0	4	2	6	1	7	0	0	0	0	0	0	20
TOT PAY	0	133,213	118,875	298,244	25,848	349,753	0	0	0	0	0	0	925,932
AVG PAY	0	33,303	59,437	49,707	25,848	49,965	0	0	0	0	0	0	46,297
35-39 NO.	0	3	5	2	1	10	5	1	0	0	0	0	27
TOT PAY	0	161,564	298,775	148,466	45,291	590,116	315,151	37,548	0	0	0	0	1,596,913
AVG PAY	0	53,855	59,755	74,233	45,291	59,012	63,030	37,548	0	0	0	0	59,145
40-44 NO.	0	3	2	4	1	15	8	8	2	0	0	0	43
TOT PAY	0	141,037	100,715	281,750	53,473	893,980	502,951	494,622	122,965	0	0	0	2,591,493
AVG PAY	0	47,012	50,357	70,438	53,473	59,599	62,869	61,828	61,483	0	0	0	60,267
45-49 NO.	2	4	1	1	6	12	10	6	2	2	0	0	46
TOT PAY	81,695	167,755	50,100	28,291	303,715	841,986	646,441	360,561	146,366	143,305	0	0	2,770,215
AVG PAY	40,848	41,939	50,100	28,291	50,619	70,166	64,644	60,094	73,183	71,652	0	0	60,222
50-54 NO.	2	0	0	3	3	10	5	10	4	5	0	0	42
TOT PAY	100,413	0	0	174,631	176,554	721,705	339,343	679,632	261,503	330,383	0	0	2,784,164
AVG PAY	50,207	0	0	58,210	58,851	72,171	67,869	67,963	65,376	66,077	0	0	66,290
55-59 NO.	0	3	0	3	0	10	5	5	5	3	2	1	37
TOT PAY	0	113,575	0	150,240	0	726,139	396,750	435,623	435,869	218,710	188,490	47,697	2,713,093
AVG PAY	0	37,858	0	50,080	0	72,614	79,350	87,125	87,174	72,903	94,245	47,697	73,327
60-64 NO.	0	0	0	1	1	4	0	4	1	1	1	0	13
TOT PAY	0	0	0	78,129	49,442	324,246	0	279,435	41,486	53,940	67,528	0	894,206
AVG PAY	0	0	0	78,129	49,442	81,062	0	69,859	41,486	53,940	67,528	0	68,785
65-99 NO.	0	0	0	0	1	3	1	1	0	0	2	0	8
TOT PAY	0	0	0	0	31,023	88,756	6,266	9,088	0	0	148,604	0	283,738
AVG PAY	0	0	0	0	31,023	29,585	6,266	9,088	0	0	74,302	0	35,467
TOT NO.	7	21	15	23	20	71	34	35	14	11	5	1	257
TOT AMT	258,210	859,575	856,819	1,337,829	963,454	4,536,682	2,206,903	2,296,508	1,008,189	746,338	404,622	47,697	15,522,826
AVG AMT	36,887	40,932	57,121	58,166	48,173	63,897	64,909	65,615	72,014	67,849	80,924	47,697	60,400

ACTUARIAL COST METHODS, ACTUARIAL ASSUMPTIONS

AND

DEFINITIONS OF TECHNICAL TERMS

City of San Rafael

Actuarial Cost Methods - June 30, 2004

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, 2004 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, 2004 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, 1964	1.4%
June 30, 1974	4.7
June 30, 1984	7.8
June 30, 1994	3.6
June 30, 2004	2.5

50-Year Average 4.0%

City of San Rafael

Actuarial Assumptions Used for the June 30, 2004 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>	<u>Miscellaneous</u>	<u>Safety</u>
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, 2004 Valuation

(Continued)

<u>Rates of separation from active membership</u> 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, 2004 Valuation

(Continued)

% of Active Members Separating with Next Year

		Pre-Retirement				
Retirement	tirement <u>Withdraw</u>		Vested Defe	erred <u>Death</u>		
<u>Ages</u>	Miscellaneous	<u>Safety</u>	Miscellaneous	<u>Safety</u>	Male	<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 Di	sability	Duty Disability			
	<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, 2004 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 Life	e Expectancy				
	(Y	ears)	% Dying Within Next Year			
Sample Ages	Men	Women	Men	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, 2004 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%	Ages	3% at 55	fety 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, 2004 Valuation

(Continued)

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

<u>Marital Status</u> - 80% of male and 60% of female members are assumed to be married at retirement.

Spouse Census – 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% (was 60%) of the deferred vested members are reciprocal.

Post-Retirement COLA increases are assumed to be 3% per year (was 2.75%).

Subventions. A 3% nonrefundable employer pickup of employee contributions is assumed.

<u>Accumulation of Employee Contribution Balances.</u> Interest crediting is assumed to be semiannual based on our assumed inflation rate.

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 must be controlled.

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

City of San Rafael

GASB No. 25 Disclosure Schedule of Funding Progress Retirement Benefits

(\$ in Thousands)

		Actuarial				UAAL
Valuation	Valuation	Accrued	Unfunded	Funded	Member	Ratio to
<u>Date</u>	<u>Assets</u>	<u>Liability</u>	<u>AAL</u>	<u>Ratio</u>	<u>Payroll</u>	<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%

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	Actuarially Required
Ended June 30	Contributions (ARC)
1999	2,480,000
2000	2,358,000
2001	2,187,000
2002	2,880,000
2003	$2,056,000^1$
2004	$3,220,701^2$

¹ Estimate based on interpolated valuation payroll and 7.52% overall rate. ² Estimate based on interpolated valuation payroll and 11.35% overall rate.

APPENDIX A: MEMBER CONTRIBUTION RATES

Contribution Rates Assumed for Members

Safety

<u>Age</u>	Basic	<u>COL</u>	<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 (Prior to July 1, 2004)¹

Age	Basic	COL	<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%

¹ A small group of Miscellaneous will continue to pay these contribution rates and receive the 1.667% at 55 benefits.

Contribution Rates Assumed for Members

Miscellaneous (July 1, 2004)

<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

_	1676.11 67% 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		

F	Fire	Safet	ty		
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.