

**MARIN COUNTY EMPLOYEES'  
RETIREMENT ASSOCIATION  
City of San Rafael  
ANNUAL ACTUARIAL VALUATION  
June 30, 2003**



Marin County Employees' Retirement Association

**City of San Rafael**

June 30, 2003 Actuarial Valuation

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December 19, 2003

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 Actuarial Valuation as of June 30, 2003 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, 2004.

	Police	Fire	Miscellaneous	Overall
Normal Costs	16.84%	14.13%	13.06%	14.19%
Unfunded Amortization	18.32%	10.82%	7.31%	10.59%
TOTAL	35.16%	24.95%	20.37%	24.78%

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.

These benefits reflect a benefit increase for Police and Miscellaneous members. The resulting increase in the accrued benefit was \$18.5 million; \$6.1 million for Police and \$12.4 million for Miscellaneous. There was an overall actuarial loss of \$18.2 million, which reflects 9.7% of related actuarial accrued liabilities as of June 30, 2002.

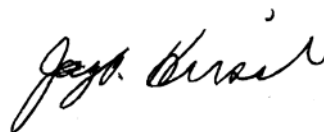
The cooperation of staff in furnishing materials requested for this valuation is deeply acknowledged with appreciation.

Respectfully submitted,

GABRIEL, ROEDER, SMITH & COMPANY



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



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

**City of San Rafael**

**Summary of Significant Valuation Results**

	<u>June 30, 2002</u>	<u>June 30, 2003</u>	<u>Percent Change</u>
I. Total Membership			
A. Active Members	408	415	1.7%
B. Pensioners & Beneficiaries	290	308	6.2%
C. Vested Deferreds	<u>116</u>	<u>122</u>	5.2%
D. Total	814	845	3.8%
II. Salaries at June 30			
A. Total Annual Payroll	\$27,223,000	\$27,453,142	0.8%
B. Average Annual Compensation	\$66,723	\$66,152	(0.9)%
III. Benefits to Current Pensioners and Beneficiaries			
A. Total Annual Benefits	\$6,416,000	\$7,446,267	16.1%
B. Average Monthly Benefit Amount	\$1,844	\$2,015	9.3%
IV. Total Assets			
A. Actuarial Value	\$190,562,674	\$185,632,244	(2.6)%
B. Market Value	\$165,569,000	\$156,833,124	(5.3)%
V. Unfunded Actuarial Accrued Liability/(Surplus)	\$(3,445,000)	\$34,212,721	
VI. <b>Budget Items</b>	<b>FY 2003-2004</b>	<b>FY 2004-2005</b>	
A. Normal Cost as a Percent of Pay	12.40%	14.19%	14.4%
B. Amortization of UAAL	(1.05)%	10.59%	N/A
C. Total Contribution	<b>11.35%</b>	<b>24.78%</b>	<b>118.3%</b>
VII. Funded Ratio (Based on Actuarial Value of Assets)	102%	84%	(17.7)%
VIII. Funded Ratio (Based on Market Value of Assets)	87%	71%	(18.4)%

Marin County Employees' Retirement Association

**City of San Rafael**

**Comments & Recommendations**

June 30, 2003

**COMMENT A:** The City contribution rate significantly increased from 11.35% to 24.78% of payroll. There were two significant benefit enhancements that we were directed to include in the 2003 valuation – “2.7% at age 55” for Miscellaneous members and “3% at age 55” for Police members.

**COMMENT B:** Even without benefit enhancements, the computed rate would have significantly increased to 16.89%. This was primarily due to investment losses of \$13.1 million. The actuarial rate of return was 1.56%. For actuarial loss purposes, we compare to the System's 8.25% assumption not zero.

**COMMENT C:** The overall funded ratio decreased from 102% to 84% using the actuarial value of assets. Using market value of assets, the funded ratio decreased from 87% to 71%.

**COMMENT D:** Heads Up! Please apprise all interested parties that it is close to certain that rates will increase in next year's 2004 valuation. Since the actuarial value of assets is 19% higher than the market value of assets, there are significant deferred losses, not reflected in the 2003 valuation, due to actuarial smoothing of assets.

**COMMENT E:** In conjunction with 2004 benefit enhancements, we assumed an increase in employee contribution rates for Miscellaneous members (20%) but no increase for Safety members. Please advise IMMEDIATELY if this is incorrect. Currently, employee rates for Miscellaneous employees are determined on the basis of a “1/120<sup>th</sup>” accrual per year of service as of age 55. Our reading of the statute (Section 31676.19) is that the new formula is associated with a “1/100<sup>th</sup>” accrual factor.

**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.” As of this valuation, those days are behind us, at least in the near term.

**COMMENT G:** We are not provided a contribution breakout by plan sponsor. We have assumed 100% of the required contribution was made for fiscal year end 2003. Please advise if our GASB schedule appears materially incorrect.

**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. Invested assets are a by-product and not the objective. Investment income becomes, in effect, the 3<sup>rd</sup> contributor for benefits to employees, and is interlocked with the contribution amounts required from employees and employer.

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**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).

Computing Contributions To Support System Benefits. 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 an actuarial valuation and a funding method.

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 increasing contribution method; and the level contribution method which equalizes contributions between the generations.

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The actuarial valuation 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. + Assumptions concerning future experience in various risk areas, which are established by the Board after consulting with the actuary

D. + The funding method 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, 2003

**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
2. 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, 2004 are shown on the following pages.

Marin County Employees' Retirement Association

**City of San Rafael**

**Computed Contribution Rates**

(Expressed as Percents of Active Payroll)

**Total Employer Contribution**

Valuation Date	<u>2003</u>	<u>2002</u>
<b>Fiscal Year</b>	<b>2004-2005</b>	<b>2003-2004</b>
Miscellaneous	20.37%	9.77%
Police	35.16%	--
Fire	24.95%	--
Safety	--	13.16%
<b>Overall</b>	<b>24.78%</b>	<b>11.35%</b>

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.

Marin County Employees' Retirement Association

**City of San Rafael**

**Computed Contribution Rates**

June 30, 2003

(Expressed as Percents of Active Payroll)

**Elements of County Normal Cost**

	<u>Safety</u>		<u>Miscellaneous</u>	<u>Overall</u>
	<u>Police</u>	<u>Fire</u>	<u>s</u>	
Normal Retirement	15.31	12.89	15.36	14.78
Vested Deferred Retirement	2.83	2.30	3.63	3.14
Death-In-Service <sup>1</sup>	0.46	0.44	0.55	0.50
Disability	7.84	8.26	2.61	5.12
Contribution Refunds	<u>0.34</u>	<u>0.35</u>	<u>0.51</u>	<u>0.43</u>
<b>Total Normal Cost</b>	26.78	24.24	22.66	23.97
Less				
Employee Contributions <sup>2</sup>	<u>9.94</u>	<u>10.11</u>	<u>9.60</u>	<u>9.78</u>
Equals				
<b>Employer Normal Cost</b>	16.84	14.13	13.06	14.19

<sup>1</sup> 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.

<sup>2</sup> 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, 2003**

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

	(Percents of Pay)	
	<u>Weighted Employee Contribution</u>	
	<u>2002</u>	<u>2003</u>
Weighted employee contribution rate	9.14%	9.78 %

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 50% of employee contributions. The increase is due to higher employee contributions specified in the statute relating to "2.7% at age 55."



Marin County Employees' Retirement Association

**City of San Rafael**

**Unfunded Actuarial Accrued Liability**

June 30, 2003

**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. Numbers are in thousands.

(1) UAAL* at beginning of year	\$(3,444,749)
(2) Expected UAAL payment	(1,156,400)
(3) Interest accrual	(237,473)
(4) Increase due to Miscellaneous benefit enhancement	12,401,081
(5) Increase due to Police benefit enhancement	6,149,559
(6) Expected UAAL at end of year: (1) - (2) + (3) + (4) + (5)	16,024,818
(7) Actual UAAL at end of year	34,212,721
(8) Gain (loss) from actuarial experience: (6) - (7)	(18,187,903)
(9) Gain (loss) as percentage of actuarial accrued liabilities at beginning of year	(9.7)%
Investment Loss	13,080,071
Loss from non-investment areas	5,107,832



Marin County Employees' Retirement Association

**City of San Rafael**

**Gain/Loss on Unfunded Accrued Liability**

June 30, 2003

**Components of Actuarial (Gain)/Loss for the Year Ending June 30, 2003**

Estimated (Gain)/Loss attributed to pay increases	\$(2,721,000)
Estimated (Gain)/Loss attributed to employee turnover, mortality, retirement incidence, and miscellaneous factors	7,828,832
Estimated (Gain)/Loss attributed to investment experience	<u>13,080,071</u>
Total Estimated Experience (Gain)/Loss	\$18,187,903

**Unfunded Actuarial Accrued Liability**

Total actuarial accrued liabilities	\$219,844,965
Assets allocated to funding	<u>185,632,244</u>
Unfunded Actuarial Accrued Liability	\$34,212,721



**City of San Rafael**

**Funding Progress Indicators**

June 30, 2003

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.

Marin County Employees' Retirement Association

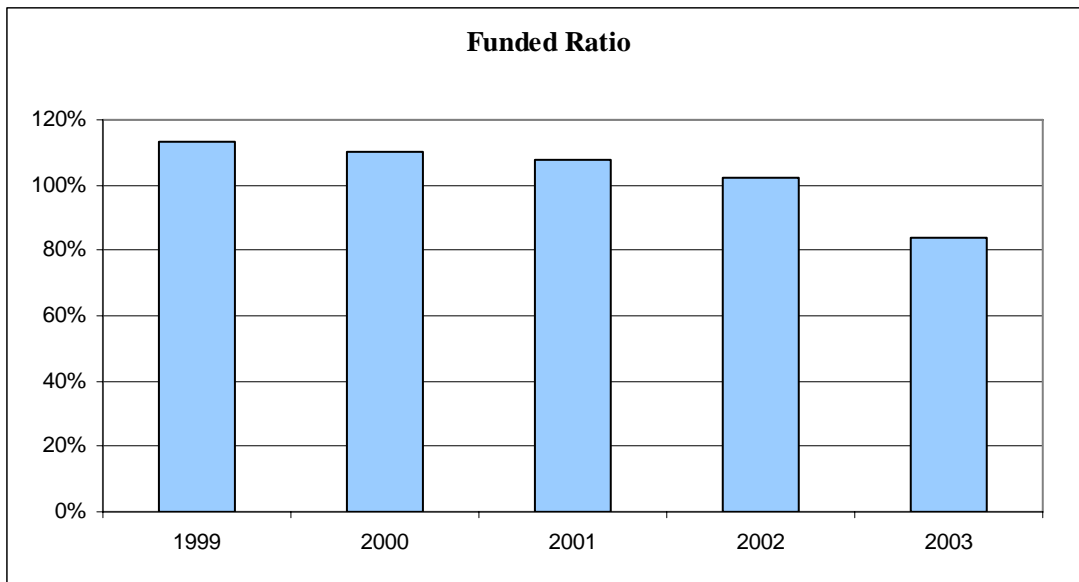
**City of San Rafael**

**Funding Progress Indicators – Historic Comparison**

(\$ in Thousands)

<u>Valuation Date</u>	<u>Valuation Assets</u>	<u>Actuarial Accrued Liability</u>	<u>Unfunded AAL</u>	<u>Funded Ratio</u>	<u>Member Payroll</u>	<u>UAAL Ratio to 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 <sup>1</sup>	185,632	219,845	34,213	84%	27,453	124.6%

<sup>1</sup>Includes Miscellaneous and Police 2004 benefit enhancements



Marin County Employees' Retirement Association

**City of San Rafael**

**Actuarial Balance Sheet – June 30, 2003**

**Present Resources and Expected Future Resources**

	<u>Total</u>
A. Actuarial value of system assets	\$185,632,244
B. Present value of expected future contributions	
1. For normal costs for present actives <sup>1</sup>	30,033,117
2. For unfunded actuarial accrued liability	<u>34,212,721</u>
3. Totals	64,245,838
C. Present value of expected future member contributions <sup>1</sup>	<u>20,699,357</u>
D. Total Present and Expected Future Resources	\$270,577,439

**Present Value of Expected Future Benefit Payments and Reserve**

A. To retirants and beneficiaries	\$95,736,691
B. To vested terminated members	16,250,774
C. To present active members	
1. Allocated to service rendered prior to valuation date	107,857,500
2. Allocated to service likely to be rendered after valuation date	<u>50,732,474</u>
3. Totals	158,589,974
D. Total Present Value of Expected Future Benefit Payments	\$270,577,439

<sup>1</sup> 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, 2003

1. Membership Requirements – First day of employment.
  
2. Final Compensation for Benefit Determination  
Highest consecutive twelve months of compensation earnable.
  
3. Service Requirement
  - A. Eligibility: 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.

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

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**City of San Rafael**

**Brief Summary of Benefit Provisions Evaluated**

Effective June 30, 2003

(Continued)

4. Ordinary Disability

A. Eligibility – 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. Benefit Formula – Minimum of 50% of Final Compensation or service retirement benefit, eligible to be received at time of disability.

6. Pre-retirement Death Benefit

A. Eligibility – None.

B. Benefit – 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. Eligibility – Duty-related death

Benefit – 50% of Final Compensation to a spouse

or

A2. Eligibility – Qualified for Service Retirement or Ordinary Disability.

B2. Benefit – 60% survivor benefit based on benefit due on member's date of death.

(Continued on Next Page)

**Brief Summary of Benefit Provisions Evaluated**

Effective June 30, 2003

(Continued)

7. Death After Retirement

A. Service or Disability Retirement

- 60% of member's unmodified allowance 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.

(Concluded on Next Page)



**City of San Rafael**

**Brief Summary of Benefit Provisions Evaluated**

Effective June 30, 2003

(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%.

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.

Marin County Employees' Retirement Association

**Summary of Reported Asset Information**

Submitted for the June 30, 2003 Valuation

(in thousands)

Reported Market Value of Assets

(System-wide)

Cash/Short-term	\$136,614,869
Receivables	11,339,913
Stocks	624,103,902
Bonds	227,641,887
Real Estate	92,300,000
Miscellaneous	<u>1,153,415</u>
<b>Total Market Value</b>	<b>1,093,153,986</b>
<b>Liabilities</b>	<b>157,662,526</b>
<b>Net Market Value</b>	<b>\$935,491,460</b>

Revenues and Disbursements Among Applicable Reserves

<b>Balance – Beginning of year</b>	<b>\$833,821,520</b>
Revenues	
Employees' contributions	10,348,913
Employer contributions	134,960,478
Distributed & undistributed investment income (net of expenses)	<u>8,589,782</u>
<b>Total Revenues</b>	<b>153,899,173</b>
Disbursements	
Benefit payments	50,719,302
Refunds	492,588
Administrative Expense	<u>1,017,343</u>
<b>Total Disbursements</b>	<b>52,229,233</b>
<b>Balance – End of year</b>	<b>\$935,491,460</b>

## Marin County Employees' Retirement Association

### Actuarial Value of Assets As of June 30, 2003

Fiscal Year Ending	County Contributions	Member Contributions	Total Contributions	Total Benefits	Market Value	Average Value	(1) Total Market Return (Net)	(2) Expected Market Return (Net)	(1-2) Investment Gain (Loss)	Deferred Factor	Deferred Return
1999-00	18,399,413	7,102,424	25,501,837	36,071,898	956,103,376	871,000,728	95,751,495	71,857,560	23,893,935	0.2	4,778,787
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)	0.4	(44,069,480)
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)	0.6	(82,302,004)
2002-03	134,960,478 <sup>1</sup>	10,348,913	145,309,392 <sup>1</sup>	51,211,890	935,491,460	852,252,760	7,572,439	70,310,853	(62,738,414)	0.8	(50,190,731)

1. Total deferred return	(\$171,783,428)
2. Market Value	935,491,460
3. Smoothed Market Value (Item 2 - Item 1)	1,107,274,888
4. Corridor Limit	
a. 80% of Net Market Value	748,393,168
b. 120% of Net Market Value	1,122,589,752
5. Actuarial Value (Item 3 after corridor applied) Inclusive of Health Insurance Reserve	1,107,274,888
6. Reserves at Market Value	935,491,460

	Reserve Value	Actuarial Value Ratio	Actuarial Value
Marin County and Special Districts	\$699,280,311	1.1847	\$828,438,395
City of San Rafael	\$156,691,161	1.1847	\$185,632,244
Novato Fire Protection District	\$71,634,753	1.1847	\$84,865,795
Health Insurance Reserve	<u>\$7,038,443</u>	1.1847	<u>\$8,338,454</u>
<b>Total</b>	<b>\$934,644,668</b>		<b>\$1,107,274,888</b>

Recognition of Deferred Return	
Valuation Date	Amount to be Recognized
6/30/2004	(57,237,637)
6/30/2005	(62,016,424)
6/30/2006	(39,981,684)
6/30/2007	<u>(12,547,683)</u>
Total	(171,783,428)

<sup>1</sup> Includes \$109,826,000 Pension Obligation Bond

Marin County Employees' Retirement Association

**Summary of Reserves and Other Liabilities**

June 30, 2003

Employer Reserves	\$45,163,072
Employee Reserves	92,934,684
Death Benefit Reserves	648,721
Article 15.5 Reserves	1,589,184
Reserve for Pre 7/1/77 San Rafael Retirees	9,416,084
Retired Employees Reserve	256,060,027
Cost of Living Adjustment Reserves	207,966,042
Health Insurance Reserves	7,038,443
Contingency and other Reserves	46,732,233
Unrestricted Reserves	267,096,177
Security Deposits Payable	702,276
County Contribution Payable	479,643
Investments Payable	48,223,265
Other Payables	<u>6,278,845</u>
Total Liabilities	<u>\$990,328,698</u>

Marin County Employees' Retirement Association

**City of San Rafael**

**Summary of Reserves and Other Liabilities**

June 30, 2003

	<u>Accrued Liability</u>	<u>Assets</u>
Miscellaneous	\$80,637,434	\$68,650,696
Safety Retirees	\$67,964,975	\$67,964,975
Police	\$38,882,258	\$24,648,500
Fire	<u>\$32,360,298</u>	<u>\$24,368,073</u>
<b>Total</b>	<b>\$219,844,965</b>	<b>\$185,632,244</b>

Marin County Employees' Retirement Association  
**City of San Rafael**  
Annual Benefit and Membership Distribution  
**Miscellaneous Retirees and Beneficiaries**

Age Group	Years of Retirement								Total
	<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+</u>	
30-34	1 25,110								1 25,110
35-39									
40-44	1 7,141								1 7,141
45-49		1 9,262	2 9,880						3 9,674
50-54	8 13,913		2 18,166	1 18,456					11 15,099
55-59	13 22,110	5 15,187	2 10,573	3 20,361					23 19,374
60-64	12 33,867	3 7,130	2 6,307		1 23,423	2 14,261			20 24,617
65-69	3 8,237	6 19,840	7 14,352	3 15,041	1 16,441	1 18,456			21 15,440
70-74	1 11,180	4 15,165	7 20,148	5 7,846	3 15,135		1 1,675		21 14,247
75-79	2 28,524	1 8,373	4 12,407	7 7,158	6 6,830	5 8,733			25 9,992
80-84		2 5,646	1 36,674	3 12,294	3 6,401	6 9,834			15 10,870
85-89				1 16,378	7 13,626	2 4,135	1 2,391		11 11,129
90+					1 1,502	5 9,262			6 7,969
<b>Total</b>	<b>41 22,691</b>	<b>22 13,907</b>	<b>27 15,469</b>	<b>23 11,620</b>	<b>22 11,015</b>	<b>21 9,725</b>	<b>2 2,033</b>	<b>0 0</b>	<b>158 15,011</b>

Marin County Employees' Retirement Association  
**City of San Rafael**  
 Annual Benefit and Membership Distribution  
**Safety Retirees and Beneficiaries**

Age Group	Years of Retirement								Total
	<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+</u>	
30-34	3 25,557								3 25,557
35-39	1 40,020		1 26,391						2 33,206
40-44	2 30,438								2 30,438
45-49	1 2,158	2 17,861			1 17,519				4 13,850
50-54	8 38,001	4 35,324	2 26,692	1 27,255					15 35,063
55-59	25 62,227	5 19,376	2 19,417	3 27,399	3 21,935	1 6,840			39 47,339
60-64	10 33,975	7 42,329	6 31,643	6 18,664	2 24,411				31 31,829
65-69		3 15,435	7 55,359	6 25,319	5 18,737	1 17,022			22 31,656
70-74				8 37,154	5 22,782	2 15,600			15 29,489
75-79					4 25,108	1 14,316			5 22,949
80-84						2 25,345			2 25,345
85-89						6 17,902	1 15,275		7 17,527
90+					1 10,658	1 13,291		1 5,354	3 9,768
<b>Total</b>	<b>50 47,583</b>	<b>21 29,357</b>	<b>18 38,665</b>	<b>24 27,940</b>	<b>21 21,468</b>	<b>14 17,198</b>	<b>1 15,275</b>	<b>1 5,354</b>	<b>150 33,830</b>

Marin County Employees' Retirement Association

**City of San Rafael**

**Summary of Monthly Allowances Being Paid**

Submitted for the June 30, 2003 Valuation

**Miscellaneous**

<u>Service Retirement</u>	<u>Annual Allowances</u>		
	<u>Number</u>	<u>Total</u>	<u>Average</u>
Unmodified	95	1,685,458	17,742
Option 1	7	53,955	7,708
Option 2	10	90,692	9,069
Option 3	0	0	0
Total	112	1,830,105	16,340
<u>Ordinary Disability</u>			
Unmodified	3	33,449	11,150
Option 1	0	0	0
Option 2	0	0	0
Option 3	0	0	0
Total	3	33,449	11,150
<u>Duty Disability</u>			
Unmodified	16	288,556	18,035
Option 1	1	20,634	20,634
Option 2	0	0	0
Option 3	0	0	0
Total	17	309,190	18,188
<u>Beneficiary</u>			
Unmodified	26	199,065	7,656
Option 1	0	0	0
Option 2	0	0	0
Option 3	0	0	0
Total	26	199,065	7,656
<b>TOTAL</b>	<b>158</b>	<b>2,371,809</b>	<b>15,011</b>



Marin County Employees' Retirement Association

**City of San Rafael**

**Summary of Monthly Allowances Being Paid**

Submitted for the June 30, 2003 Valuation

**Safety**

<u>Service Retirement</u>	<u>Annual Allowances</u>		
	<u>Number</u>	<u>Total</u>	<u>Average</u>
Unmodified	76	3,016,496	39,691
Option 1	3	41,933	13,978
Option 2	3	107,948	35,983
Option 3	1	27,305	27,305
<b>Total</b>	<b>83</b>	<b>3,193,682</b>	<b>38,478</b>
<u>Ordinary Disability</u>			
Unmodified	0	0	0
Option 1	0	0	0
Option 2	0	0	0
Option 3	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>
<u>Duty Disability</u>			
Unmodified	39	1,374,341	35,240
Option 1	1	27,255	27,255
Option 2	1	26,391	26,391
Option 3	0	0	0
<b>Total</b>	<b>41</b>	<b>1,427,987</b>	<b>34,829</b>
<u>Beneficiary</u>			
Unmodified	25	383,114	15,325
Option 1	0	0	0
Option 2	1	69,675	69,675
Option 3	0	0	0
<b>Total</b>	<b>26</b>	<b>452,789</b>	<b>17,415</b>
 <b>TOTAL</b>	 <b>150</b>	 <b>5,074,458</b>	 <b>33,830</b>

Marin County Employees' Retirement Association

**City of San Rafael**

**Active Membership Summary**

In the June 30, 2003 Actuarial Valuation

**Active Safety**

	<u>No.</u>	<u>Compensation</u>	<u>Averages</u>		
			<u>Annual</u>	<u>Annual</u>	<u>Service</u>
			<u>Compensation</u>	<u>Age</u>	<u>e</u>
6/30/2002	151	\$12,684,992	\$84,007	41.4	13.8
6/30/2003	151	\$12,873,457	\$85,255	42.0	14.4
<b>Percent Change</b>	<b>0.0%</b>	<b>1.5%</b>	<b>1.5%</b>		

**Active Miscellaneous**

	<u>No.</u>	<u>Compensation</u>	<u>Averages</u>		
			<u>Annual</u>	<u>Annual</u>	<u>Service</u>
			<u>Compensation</u>	<u>Age</u>	<u>e</u>
6/30/2002	257	\$14,538,095	\$56,568	44.3	8.6
6/30/2003 <sup>1</sup>	264	\$14,579,685	\$55,226	44.7	8.9
<b>Percent Change</b>	<b>2.7%</b>	<b>2.9%</b>	<b>-2.4%</b>		

<sup>1</sup>Includes 5 Redevelopment employees with average compensation of \$80,189.

**Total Active**

	<u>No.</u>	<u>Compensation</u>	<u>Averages</u>		
			<u>Annual</u>	<u>Annual</u>	<u>Service</u>
			<u>Compensation</u>	<u>Age</u>	<u>e</u>
6/30/2002 Total	408	\$27,223,087	\$66,725	43.2	10.5
6/30/2003 Total	415	\$27,453,142	\$66,152	43.7	10.9
<b>Percent Change</b>	<b>1.7%</b>	<b>0.8%</b>	<b>(0.9)%</b>		

**Total Inactive**

	<u>No.</u>	<u>Compensation</u>	<u>Averages</u>		
			<u>Annual</u>	<u>Annual</u>	<u>Service</u>
			<u>Compensation</u>	<u>Age</u>	<u>e</u>
6/30/2002 Total	116	N/A	N/A	N/A	N/A
6/30/2003 Total	119	\$27,453,142	N/A	45.7	5.9



Marin County Employees' Retirement Association

**City of San Rafael**

Active Members June 30, 2003

By Attained Ages and Years of Service

**Safety**

Age Group	Years of Accrued Service												Total
	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25-29	30-34	35 & Up	
25-29 NO.	1	7	3	2	1	1	0	0	0	0	0	0	15
TOT PAY	65,170	470,032	215,535	157,606	78,202	85,141	0	0	0	0	0	0	1,071,686
AVG PAY	65,170	67,147	71,845	78,803	78,202	85,141	0	0	0	0	0	0	71,446
30-34 NO.	6	2	4	4	2	7	2	0	0	0	0	0	27
TOT PAY	368,858	139,900	316,540	310,931	155,319	559,482	165,096	0	0	0	0	0	2,016,126
AVG PAY	61,476	69,950	79,135	77,733	77,660	79,926	82,548	0	0	0	0	0	74,671
35-39 NO.	2	1	2	2	1	5	5	3	0	0	0	0	21
TOT PAY	135,167	70,016	138,704	163,065	81,471	413,320	440,643	263,071	0	0	0	0	1,705,458
AVG PAY	67,583	70,016	69,352	81,533	81,471	82,664	88,129	87,690	0	0	0	0	81,212
40-44 NO.	1	2	1	0	2	1	2	7	3	0	0	0	19
TOT PAY	76,674	145,461	106,000	0	128,507	84,245	179,359	621,158	275,182	0	0	0	1,616,585
AVG PAY	76,674	72,731	106,000	0	64,254	84,245	89,679	88,737	91,727	0	0	0	85,083
45-49 NO.	0	0	0	0	1	0	0	11	14	3	0	0	29
TOT PAY	0	0	0	0	93,434	0	0	985,934	1,291,491	296,923	0	0	2,667,782
AVG PAY	0	0	0	0	93,434	0	0	89,630	92,249	98,974	0	0	91,992
50-54 NO.	0	0	0	1	0	1	1	1	11	8	7	0	30
TOT PAY	0	0	0	93,798	0	91,747	95,512	79,088	970,706	760,821	674,879	0	2,766,550
AVG PAY	0	0	0	93,798	0	91,747	95,512	79,088	88,246	95,103	96,411	0	92,218
55-59 NO.	0	0	0	0	0	0	0	0	1	4	2	1	8
TOT PAY	0	0	0	0	0	0	0	0	78,485	450,494	205,357	85,081	819,416
AVG PAY	0	0	0	0	0	0	0	0	78,485	112,623	102,678	85,081	102,427
60-64 NO.	0	0	0	0	0	1	0	0	0	0	0	0	1
TOT PAY	0	0	0	0	0	74,392	0	0	0	0	0	0	74,392
AVG PAY	0	0	0	0	0	74,392	0	0	0	0	0	0	74,392
65-99 NO.	0	0	0	0	0	0	0	0	0	0	0	1	1
TOT PAY	0	0	0	0	0	0	0	0	0	0	0	135,463	135,463
AVG PAY	0	0	0	0	0	0	0	0	0	0	0	135,463	135,463
TOT NO.	10	12	10	9	7	16	10	22	29	15	9	2	151
TOT AMT	645,868	825,410	776,779	725,399	536,934	1,308,327	880,610	1,949,250	2,615,864	1,508,237	880,235	220,544	12,873,457
AVG AMT	64,587	68,784	77,678	80,600	76,705	81,770	88,061	88,602	90,202	100,549	97,804	110,272	85,255

Marin County Employees' Retirement Association

**City of San Rafael**

Active Members June 30, 2003

By Attained Ages and Years of Service

**Miscellaneous**

Age Group	Years of Accrued Service												Total
	<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>35 &amp; Up</u>	
20-24 NO.	2	1	1	0	0	0	0	0	0	0	0	0	4
TOT PAY	45,349	61,028	21,013	0	0	0	0	0	0	0	0	0	127,390
AVG PAY	22,674	61,028	21,013	0	0	0	0	0	0	0	0	0	31,847
25-29 NO.	8	6	4	7	0	0	0	0	0	0	0	0	25
TOT PAY	275,996	302,256	220,753	278,029	0	0	0	0	0	0	0	0	1,077,035
AVG PAY	34,500	50,376	55,188	39,718	0	0	0	0	0	0	0	0	43,081
30-34 NO.	5	3	4	0	7	1	1	0	0	0	0	0	21
TOT PAY	169,188	158,031	179,957	0	323,569	67,311	61,410	0	0	0	0	0	959,467
AVG PAY	33,838	52,677	44,989	0	46,224	67,311	61,410	0	0	0	0	0	45,689
35-39 NO.	2	6	4	2	6	7	3	3	0	0	0	0	33
TOT PAY	77,991	299,180	198,716	90,486	345,317	379,720	184,808	167,549	0	0	0	0	1,743,767
AVG PAY	38,996	49,863	49,679	45,243	57,553	54,246	61,603	55,850	0	0	0	0	52,841
40-44 NO.	6	0	5	3	4	11	6	7	2	0	0	0	44
TOT PAY	214,116	0	267,459	189,526	176,672	665,066	355,149	379,165	117,961	0	0	0	2,365,113
AVG PAY	35,686	0	53,492	63,175	44,168	60,461	59,192	54,166	58,981	0	0	0	53,753
45-49 NO.	2	2	1	5	6	10	9	6	2	2	0	0	45
TOT PAY	80,664	91,062	26,687	203,145	230,014	816,629	546,275	332,138	140,593	135,970	0	0	2,603,178
AVG PAY	40,332	45,531	26,687	40,629	38,336	81,663	60,697	55,356	70,297	67,985	0	0	57,848
50-54 NO.	2	0	3	3	4	4	7	8	3	5	0	0	39
TOT PAY	56,231	0	162,318	161,939	300,876	269,934	480,669	472,931	197,595	309,207	0	0	2,411,699
AVG PAY	28,115	0	54,106	53,980	75,219	67,484	68,667	59,116	65,865	61,841	0	0	61,838
55-59 NO.	2	0	3	0	1	12	0	4	7	2	2	1	34
TOT PAY	80,288	0	141,974	0	59,099	826,614	0	363,345	495,628	142,950	169,736	46,408	2,326,042
AVG PAY	40,144	0	47,325	0	59,099	68,885	0	90,836	70,804	71,475	84,868	46,408	68,413
60-64 NO.	0	0	1	1	0	4	1	2	1	1	1	0	12
TOT PAY	0	0	70,776	47,847	0	288,324	58,641	122,306	39,716	50,694	64,324	0	742,628
AVG PAY	0	0	70,776	47,847	0	72,081	58,641	61,153	39,716	50,694	64,324	0	61,886
65-99 NO.	0	0	0	1	1	2	0	1	0	0	2	0	7
TOT PAY	0	0	0	28,085	29,748	12,560	0	9,110	0	0	143,863	0	223,367
AVG PAY	0	0	0	28,085	29,748	6,280	0	9,110	0	0	71,932	0	31,910
TOT NO.	29	18	26	22	29	51	27	31	15	10	5	1	264
TOT AMT	999,824	911,557	1,289,653	999,057	1,465,295	3,326,159	1,686,952	1,846,543	991,494	638,821	377,923	46,408	14,579,685

AVG AMT	34,477	50,642	49,602	45,412	50,527	65,219	62,480	59,566	66,100	63,882	75,585	46,408	55,226
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**ACTUARIAL COST METHODS, ACTUARIAL ASSUMPTIONS**

**AND**

**DEFINITIONS OF TECHNICAL TERMS**

Marin County Employees' Retirement Association

**City of San Rafael**

**Actuarial Cost Methods - June 30, 2003**

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.

Financing of Unfunded Actuarial Accrued Liability. 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.

Deferred Member Actuarial Accrued Liability. 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, 2003 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.

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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, 2003 Valuation**

(Continued)

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

The investment return rate 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	<u>4.00%</u>
Total	8.25%

The general inflation rate 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	
<u>10 Year Moving Averages</u>	
June 30, 1963	1.4%
June 30, 1973	3.7%
June 30, 1983	8.4%
June 30, 1993	3.8%
June 30, 2003	2.4%
<b>50-Year Average</b>	<b>3.9%</b>

Marin County Employees' Retirement Association

**City of San Rafael**

**Actuarial Assumptions Used for the June 30, 2003 Valuation**

(Continued)

Compensation increase rates 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

Marin County Employees' Retirement Association

**City of San Rafael**

**Actuarial Assumptions Used for the June 30, 2003 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	<b><u>Miscellaneous Men</u></b>		
	Attained Age		
	<u>Under 40</u>	<u>40-50</u>	<u>50-60</u>
0	12.0%	9.0%	7.0%
1	9.0	9.0	7.0
2	5.5	5.5	5.5
3	5.0	5.0	5.0
4	4.0	4.0	4.0

Years of Completed Service	<b><u>Miscellaneous Women</u></b>				
	Attained Age				
	<u>Under 35</u>	<u>35-40</u>	<u>40-45</u>	<u>45-50</u>	<u>50-60</u>
0	15.0%	15.0%	15.0%	10.0%	10.0%
1	13.5	11.0	9.0	6.0	6.0
2	6.0	6.0	6.0	6.0	6.0
3	6.0	6.0	6.0	6.0	5.0
4	5.0	5.0	5.0	5.0	5.0

Years of Completed Service	<b><u>Safety</u></b>					
	Attained Age					
	<u>Under 25</u>	<u>25-29</u>	<u>30-34</u>	<u>35-44</u>	<u>45-50</u>	<u>50-60</u>
0	10.0%	10.0%	8.0%	8.0%	6.0%	6.0%
1	5.0	4.5	4.5	6.0	6.0	6.0
2	5.0	4.0	4.0	5.0	5.0	5.0
3	5.0	4.0	4.0	4.0	4.0	4.0
4	4.0	4.0	4.0	4.0	4.0	2.5

Marin County Employees' Retirement Association

**City of San Rafael**

**Actuarial Assumptions Used for the June 30, 2003 Valuation**

(Continued)

% of Active Members  
Separating with Next Year

(at least 5 years)

Retirement Ages							Pre-Retirement		
	<u>Withdrawal</u>			<u>Vested Deferred</u>			<u>Death</u>		
	<u>Miscellaneous</u>		<u>Safety</u>	<u>Miscellaneous</u>		<u>Safety</u>	<u>Miscellaneous</u>		<u>Safety</u>
	<u>Male</u>	<u>Female</u>		<u>Male</u>	<u>Female</u>		<u>Male</u>	<u>Female</u>	<u>(Duty)</u>
20	3.00%	3.00%	1.13%	3.00%	4.75%	2.06%	0.05%	0.03%	0.04%
25	3.00%	3.00%	1.13%	3.00%	4.75%	2.24%	0.07%	0.03%	0.04%
30	3.00%	3.00%	0.75%	3.00%	4.65%	3.53%	0.09%	0.04%	0.04%
35	3.00%	2.50%	0.56%	2.70%	3.75%	3.41%	0.09%	0.05%	0.05%
40	1.50%	1.75%	0.56%	2.70%	2.75%	1.14%	0.12%	0.08%	0.06%
45	1.00%	1.00%	0.56%	1.70%	2.75%	1.70%	0.17%	0.10%	0.08%
50	0.00%	0.00%	0.00%	1.20%	2.25%	0.27%	0.28%	0.15%	0.10%
55	0.00%	0.00%	0.00%	1.10%	1.00%	0.00%	0.48%	0.25%	0.18%
60	0.00%	0.00%	0.00%	1.10%	1.00%	0.00%	0.86%	0.48%	0.00%
65	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.56%	0.93%	0.00%

:

	<u>Ordinary Disability</u>			<u>Duty Disability</u>		
	<u>Miscellaneous</u>		<u>Safety</u>	<u>Miscellaneous</u>		<u>Safety</u>
	<u>Male</u>	<u>Female</u>		<u>Male</u>	<u>Female</u>	
20	.00%	.00%	.02%	.04%	.05%	.11%
25	.01%	.01%	.03%	.05%	.10%	.15%
30	.02%	.02%	.05%	.10%	.15%	.36%
35	.03%	.03%	.07%	.11%	.20%	.55%
40	.05%	.05%	.16%	.16%	.25%	1.18%
45	.09%	.09%	.26%	.21%	.30%	1.14%
50	.18%	.18%	.36%	.26%	.35%	1.28%
55	.31%	.31%	.46%	.31%	.35%	3.90%
60	.51%	.51%	-0-	.41%	.35%	-0-
65	.79%	.79%	.00%	.46%	.35%	-0-

Marin County Employees' Retirement Association  
**City of San Rafael**

**Actuarial Assumptions Used for the June 30, 2003 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.

Sample	Future Life Expectancy (Years)		% Dying Within Next Year	
	Non-disabled Retirees		Non-disabled Retirees	
<u>Ages</u>	<u>Men</u>	<u>Women</u>	<u>Men</u>	<u>Women</u>
45	35.8	39.2	.15%	.10%
50	31.1	34.4	.23	.14
55	26.5	29.7	.40	.23
60	22.2	25.1	.71	.44
65	18.1	20.8	1.29	.86
70	14.5	16.8	2.17	1.37
75	11.2	13.1	3.41	2.27

Sample	Future Life Expectancy (Years)		% Dying Within Next Year	
	Disabled Retirees		Disabled Retirees	
<u>Ages</u>	<u>Misc.</u>	<u>Safety</u>	<u>Misc.</u>	<u>Safety</u>
45	24.1	27.9	1.94%	0.64 %
50	21.6	23.9	2.29	0.86
55	19.1	20.0	2.67	1.30
60	16.8	16.7	3.12	2.60
65	14.5	14.1	3.58	3.50
70	12.2	11.7	4.11	4.22
75	9.7	9.2	4.96	5.22

Marin County Employees' Retirement Association  
**City of San Rafael**

**Actuarial Assumptions Used for the June 30, 2003 Valuation**

(Continued)

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

Retirement Ages	<u>Miscellaneous</u>		Retirement Ages	<u>Safety</u>	
	<u>Male</u>	<u>Female</u>		<u>3% at 55</u>	<u>2% at 50</u>
50	4.48%	6.76%	42	0%	0.64%
51	2.21	2.40	43	0	0.64
52	1.86	2.10	44	0	0.64
53	1.92	2.50	45	0	3.77
54	2.00	2.91	46	0	3.77
55	3.40	3.87	47	0	5.65
56	4.90	6.94	48	0	5.45
57	8.65	7.50	49	0	5.24
58	11.21	8.00	50	7	2.62
59	16.50	8.50	51	6	2.51
60	30.00	12.19	52	12	7.21
61	1489	16.55	53	25	6.23
62	30.00	20.00	54	25	5.25
63	21.21	20.00	55	50	20.95
64	26.56	20.00	56	50	13.05
65	50.00	40.00	57	50	40.0
66	37.27	25.00	58	50	45.0
67	39.51	25.00	59	50	50.0
68	35.92	25.00	60	100	100
69	35.92	25.00			
70	100.00	100.00			

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

Marin County Employees' Retirement Association

**City of San Rafael**

**Actuarial Assumptions Used for the June 30, 2003 Valuation**

(Continued)

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

Marital Status - 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 60% of the deferred vested members are reciprocal.

Post-Retirement COLA Assumed: 2.75%



**Definitions of Technical Terms**

Actuarial Accrued Liability. 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".

Actuarial Assumptions. 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.

Accrued Service. Service credited under the System which was rendered before the date of the actuarial valuation.

Actuarial Equivalent. 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.

Actuarial Cost Method. 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".

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

Actuarial Present Value. The 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.

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

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

(Concluded on Next Page)

**Definitions of Technical Terms**

(Concluded)

Unfunded Actuarial Accrued Liability. 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**

Marin County Employees' Retirement Association

**City of San Rafael**

**GASB No. 25 Disclosure  
Schedule of Funding Progress  
Retirement Benefits**

(\$ in Thousands)

<u>Valuation Date</u>	<u>Valuation Assets</u>	<u>Actuarial Accrued Liability</u>	<u>Unfunded AAL</u>	<u>Funded Ratio</u>	<u>Member Payroll</u>	<u>UAAL Ratio to 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)%
6/30/03 <sup>1</sup>	185,632	219,845	34,213	84%	27,453	124.6%

<sup>1</sup>Reflects 2004 benefit enhancement for Miscellaneous and Police employees

Marin County Employees' Retirement Association

**City of San Rafael**

**GASB No. 25 Disclosure  
Schedule of Employer Contributions  
Retirement Benefits**

<u>Year Ended June 30</u>	<u>Actuarially Required Contributions (ARC)</u>	<u>Percentage Contributed</u>
1998	2,690,000	100%
1999	2,480,000	100%
2000	2,358,000	100%
2001	2,187,000	100%
2002	2,880,000	100%
2003	2,056,000 <sup>1</sup>	100%

<sup>1</sup> Estimate based on interpolated valuation payroll and 7.52% overall rate

**APPENDIX A:**  
**MEMBER CONTRIBUTION RATES**

Marin County Employees' Retirement Association  
**City of San Rafael**

Contribution Rates Assumed for Members

**Safety**

<u>Age</u>	<u>Basic</u>	<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%

Marin County Employees' Retirement Association  
**City of San Rafael**

Contribution Rates Assumed for Members

**Miscellaneous** (Prior to July 1, 2004)

<u>Age</u>	<u>Basic</u>	<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%



Marin County Employees' Retirement Association  
**City of San Rafael**

Contribution Rates Assumed for Members

**Miscellaneous (July 1, 2004)**

<u>Age</u>	<u>Basic</u>	<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**

Marin County Employees' Retirement Association  
**City of San Rafael**

**Retirement Age Factors**

**Miscellaneous**

<b><u>31676.11</u></b> 1.667% at 55		<b><u>31676.19</u></b> 2% at 50	
<u>Age</u>	<u>Fractio</u> <u>n</u>	<u>Age</u>	<u>Fractio</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		

**Safety**

<b><u>31664</u></b> 2% at 50		<b><u>31664.2</u></b> 3% at 55	
<u>Age</u>	<u>Fractio</u> <u>n</u>	<u>Age</u>	<u>Fractio</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.