REVISED



MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Novato Fire Protection District
ANNUAL ACTUARIAL VALUATION

June 30, 2006

Novato Fire Protection District

June 30, 2006 Actuarial Valuation

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February 6, 2007

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, 2006</u> of Marin County Employees' Retirement Association (Novato Fire Protection District) 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, 2007.

	Safety	Miscellaneous	Overall
Normal Costs	25.67%	11.60%	24.78%
Unfunded Amortization	18.66%	5.10%	17.79%
TOTAL	44.33%	16.70%	42.57%

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 gain of \$0.99 million, which reflects 1.0% of related actuarial accrued liabilities as of June 30, 2005.

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

Respectfully submitted,

Rich Roeder

GABRIEL, ROEDER, SMITH & COMPANY

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

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

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Marin County Employees' Retirement Association Novato Fire Protection District

Summary of Significant Valuation Results

		June 30, 2005	June 30, 2006	Percent Change
I.	Total Membership			
	A. Active Members	91	88	(3.3)%
	B. Pensioners & Beneficiaries	76	79	3.9%
	C. Vested Deferreds	<u>16</u>	<u>17</u>	6.3%
	D. Total	183	184	0.5%
II.	Salaries at June 30			
	A. Total Annual Payroll	\$7,889,395	\$7,990,210	1.3%
	B. Average Annual Compensation	\$86,697	\$90,798	4.7%
III.	Benefits to Current Pensioners & Beneficiaries			
	A. Total Annual Benefits	\$4,272,676	\$4,680,005	9.5%
	B. Average Monthly Benefit Amount	\$4,685	\$4,937	5.4%
IV.	Total Assets			
	A. Actuarial Value	\$86,839,016	\$92,390,127	6.4%
	B. Market Value	\$87,738,457	\$97,375,433	11.0%
V.	Unfunded Actuarial Accrued Liability	\$11,948,090	\$16,740,818	40.1%
VI.	Budget Items	FY 2006-2007	FY 2007-2008	
	1. Normal Cost as a Percent of Pay	25.16%	24.78%	(1.5)%
	2. Amortization of UAAL	12.86%	17.79%	38.3%
	3. Total Contribution	38.02%	42.57%	12.0%
VII.	Funded Ratio (Based on Actuarial Value of Assets)	88%	85%	(3.4)%
VIII.	Funded Ratio (Based on Market Value of Assets)	89%	89%	0.0%

Marin County Employees' Retirement Association Contribution Reconciliation for June 30, 2006 Valuation

Novato Fire Protection District

June 30, 2006 Valuation Payroll \$7,990,210 Projected Payroll for 2007-2008 \$8,474,385

Contribution Reconciliation Based on Rate from 2005 Valuation	Expected Unfunded \$12,377,045				<u>Contribution</u> \$3,221,961	Rate 38.02%
	Change in Unfunded Accrued Liability	Change in Normal Cost	Change in Rate	2006-2007 Contribution		
Reduction in inflation assumption	\$3,013,248	\$23,274	3.47%	\$294,061		
Other assumption changes	\$1,400,404	(\$86,281)	0.47%	\$39,830		
Valuation of accrued Sick Time	\$944,642	<u>\$0</u>	1.01%	\$85,591		
	\$5,358,294	(\$63,007)	4.95%	\$419,482	\$3,641,443	42.97%
Gains and Losses						
Investment losses	\$738,540	\$0	0.78	\$66,100		
COLA gains	(\$1,272,427)	\$0	-1.35	(\$114,404)		
Pay increase losses	\$146,981	\$0	0.16	\$13,559		
Retirant mortality and data						
refinement gains	(\$322,240)	\$0	-0.34	(\$28,813)		
Other demographic gains	<u>(\$285,375)</u>	<u>\$0</u>	<u>-0.30</u>	<u>(\$25,423)</u>		
Subtotal	(\$994,521)	\$0	-1.05	(\$88,981)	\$3,552,462	41.92%
Other Factors						
Miscellaneous ¹	*	\$0	0.29	\$24,576		
Change in Normal Cost due to demographic factors	<u>\$0</u>	<u>\$30,508</u>	<u>0.36</u>	\$30,508		
Subtotal	*	\$30,508	0.65	\$55,084	\$3,607,546	42.57%
Total from 2006 Valuation	\$16,740,818	(\$32,499)	4.55	\$385,584	\$3,607,546	42.57%

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

^{*} Included in Expected Unfunded

Novato Fire Protection District

Comments & Recommendations

June 30, 2006

<u>COMMENT A:</u> The Retirement Board has requested that our earlier valuation report be revised to reflect both updated employee contribution rates and conversion of accrued sick time. Employee rate changes reflect assumption changes adopted by the Board in September and our review of relevant Memorandums of Understanding ("MOUs"). Both staff and Daniel Hom have agreed that the changed employee rates should incorporate the full rate for the COLA since the MOUs are silent in this regard. This will mean a significant increase in employee rates.

When we reviewed the MOUs, it became apparent that 100% of unused sick leave can be converted to credited retirement service. We recently finished a study which indicates that increasing most active member accrued liabilities by 3% would be a reasonable estimate. Thus, accrued liabilities increased by about \$945,000 due to this estimate.

COMMENT B: The District's contribution rate again significantly increased from 38.02% to 42.57%. If not for assumption changes and sick time accruals, the rate actually would have remained stable at 37.62%. Among changes adopted, the inflation component of the assumed investment return assumption was lowered from 4.25% to 4%. Also, earlier retirements were assumed for Miscellaneous members and higher rates of duty disability were assumed for Safety members.

COMMENT C: There was a slight experience gain of \$995,000. The biggest loss area related included the actuarial value of assets, which incorporates 5-year smoothing and reflected the lingering effect of the 2000-02 bear market. There was a significant actuarial gain due to COLA adjustments being less than the 3.8% assumption.

COMMENT D: The good news in the valuation is that the System's deferred gains (the excess of actuarial value over market value) again increased. The District has a deferred gain of \$5 million. Deferred gains and losses are a byproduct of your asset smoothing policy. This will serve as a "buffer" against future contribution increases.

COMMENT E: The overall funded ratio decreased from 88% to 85% using the actuarial value of assets. Using market value of assets, the funded ratio was level at 89%.

COMMENT F: We have again used an open 16-year amortization period for financing of unfunded liabilities but you may wish to review this policy periodically.

COMMENT G: All parties should understand that the newly adopted 8% assumed investment return is a rate **net** of both administrative expenses and investment expenses.

COMMENT H: We have assumed no benefit changes from the 2005 valuation other than to incorporate an estimate for sick leave conversion.

FINANCIAL PRINCIPLES AND OPERATIONAL TECHNIQUES

Novato Fire Protection District

Financial Principles and Operational Techniques

<u>Promises Made, and To Be Paid For.</u> 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:

"Novato Fire Protection District 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 Novato 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 grand-

children 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</u>

and not the objective. <u>Investment income</u> becomes, in effect, the <u>3rd contributor</u> for benefits to

employees, and is interlocked with the contribution amounts required from employees and

employer.

(Concluded on next page)

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Novato Fire Protection District

Financial Principles and Operational Techniques

(Concluded)

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

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

plus...

Interest on Unfunded Accrued Liabilities (unfunded accrued liabilities are the difference between (i) liabilities for service already rendered and (ii) the accrued assets of the plan).

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

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

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

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

THE ACTUARIAL VALUATION PROCESS

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

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

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

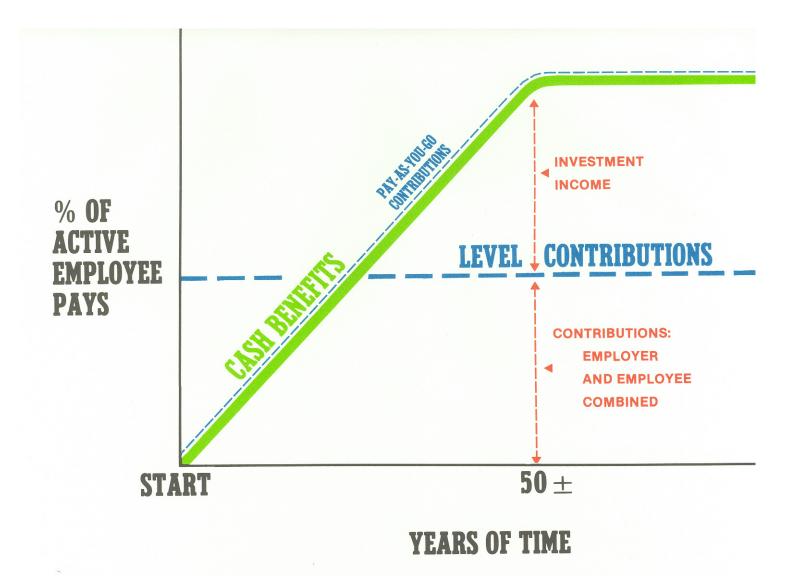
Retired lives now receiving benefits

Former employees with vested benefits not yet payable

Active employees

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

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



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

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

Economic Risk Areas

Rates of investment return

Rates of pay increase

Changes in active member group size

Non-Economic Risk Areas

Ages at actual retirement

Rates of mortality

Rates of withdrawal of active members (turnover)

Rates of disability

VALUATION RESULTS

Novato Fire Protection District

June 30, 2006

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, 2007 are shown on the following pages.

Novato Fire Protection District

Computed Contribution Rates

(Expressed as Percents of Active Payroll)

Total Employer Contribution

Valuation Date	<u>2006</u> *	<u>2005</u>
Fiscal Year	2007-2008	2006-2007
Miscellaneous	16.70% (17.20%)	16.79%
Safety	44.33% (39.20%)	39.48%
Overall	42.57% (37.62%)	38.02%

^{*} Amounts prior to assumption changes in parenthesis.

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.

Novato Fire Protection District

Computed Contribution Rates

June 30, 2006

(Expressed as Percents of Active Payroll)

Elements of County Normal Cost

	<u>Safety</u>	Miscellaneou	<u>Overall</u>
		<u>S</u>	
Normal Retirement	22.11%	16.72%	21.76%
Vested Deferred Retirement	3.54%	1.88%	3.44%
Death-In-Service ¹	0.72%	0.38%	0.70%
Disability	11.06%	2.96%	10.54%
Contribution Refunds	0.62%	0.62%	0.62%
Total Normal Cost	38.05%	22.56%	37.06%
Less Employee Contributions ²	12.38%	10.96%	<u>12.28%</u>
Equals Employer Normal Cost	25.67%	11.60%	24.78%

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 Novato Fire Protection District

Member Contributions as of June 30, 2006

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

(Percents of Pay)

Weighted Employee Contribution

<u>2006</u> <u>2005</u>

Weighted employee contribution rate 12.28% 11.17%

The above averages are shown prior to the 5% pick ups of employee contributions (subventions) that generally apply. We understand some management contributions are entirely picked up. For this purpose, we used employee rates supplied on the data tape given us by MCERA.

Novato Fire Protection District

Unfunded Actuarial Accrued Liability

June 30, 2006

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	\$11,948,090
(2)	Expected UAAL payment	535,143
(3)	Interest accrual [(1) * .0825 - (2) * .0404]	964,098
(4)	Increase due to change in inflation assumption	3,013,248
(5)	Increase due to change in other assumptions	1,400,404
(6)	Increase due to valuation of accrued sick time	944,642
(7)	Expected UAAL at end of year (1) - (2) + (3) + (4) + (5) + (6)	17,735,339
(8)	Actual UAAL at end of year	16,740,818
(9)	Gain (loss) from actuarial experience (7) - (8)	994,521
(10)	Gain (loss) as percentage of actuarial accrued liabilities at beginning of year	1.01%

Novato Fire Protection District

Gain/Loss on Unfunded Accrued Liability

June 30, 2006

Components of Actuarial Gain/(Loss) for the Year Ending June 30, 2006

Estimated Gain/(Loss) attributed to pay increases	(\$146,981)
Estimated Gain/(Loss) due to COLA increases	1,272,427
Estimated Gain/(Loss) attributed to employee turnover, mortality, retirement incidence, and miscellaneous factors	285,375
Estimated Gain/(Loss) due to retirant mortality and retirant data refinements	322,240
Estimated Gain/(Loss) attributed to investment experience	(738,540)
Total Estimated Experience Gain/(Loss)	\$994,521

Unfunded Actuarial Accrued Liability

Total Actuarial Accrued Liabilities	\$109,130,945
Asset allocated to funding	92,390,127
Unfunded Actuarial Accrued Liability	16,740,818



Novato Fire Protection District

Funding Progress Indicators

June 30, 2006

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.

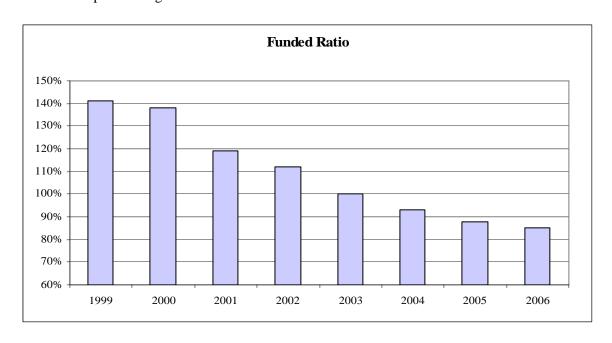
Novato Fire Protection District

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>	<u>AAL</u>	<u>Ratio</u>	<u>Payroll</u>	<u>Payroll</u>
6/30/97	\$51,687	\$45,163	\$(6,524)	114%	4,459	(146.3)%
6/30/98	59,276	45,171	(14,105)	131%	5,097	(276.7)%
6/30/99	68,394	48,570	(19,824)	141%	5,199	(381.3)%
6/30/00	77,643	56,197	(21,446)	138%	5,726	(374.5)%
6/30/01	84,806	71,471	(13,335)	119%	6,331	(210.6)%
6/30/02	87,497	78,164	(9,333)	112%	6,119	(152.5)%
6/30/03	84,866	84,842	(24)	100%	6,811	(0.4)%
6/30/04*	84,814	88,626	3,812	96%	7,616	50.1%
6/30/04	84,814	90,861	6,047	93%	7,616	79.4%
6/30/05	86,839	98,787	11,948	88%	7,889	151.5%
6/30/06*	92,390	103,772	11,382	89%	7,990	142.5%
6/30/06	92,390	109,131	16,741	85%	7,990	209.5%

^{*} Before assumption changes



Marin County Employees' Retirement Association Novato Fire Protection District

Actuarial Balance Sheet – June 30, 2006

Present Resources and Expected Future Resources				
			<u>Total</u>	
A.	Actuarial value of system assets		\$92,390,127	
В.	Present value of expected future contributions 1. For normal costs for present actives 2. For unfunded actuarial accrued liability 3. Totals	\$16,152,543 \$16,740,818	\$32,893,361	
C.	Present value of expected future member contributions		\$8,004,569	
D.	Total Present and Expected Future Resources		\$133,288,057	
<u>Pre</u>	sent Value of Expected Future Benefit Payme	nts and Reserv	<u>ve</u>	
A.	To retirants and beneficiaries		\$75,715,826	
B.	To vested terminated members		\$1,189,961	
C.	 To present active members Allocated to service rendered prior to valuation date Allocated to service likely to be rendered after valuation date Totals 	\$32,225,158 \$24,157,112	\$56,382,270	
D.	Total Present Value of Expected Future Benefit Payments		<u>\$133,288,057</u>	

SUMMARY OF BENEFIT PROVISIONS

&

VALUATION DATA SUBMITTED BY RETIREMENT SYSTEM

Marin County Employees' Retirement Association Novato Fire Protection District

Brief Summary of Benefit Provisions Evaluated

Effective June 30, 2006

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 31676.16 (One-fiftieth times years of service times retirement age factor) will apply.

Safety – 3% at 50 (Section 31664.1)

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

C. Maximum Benefit – 100% of Final Average Compensation

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.

(Continued on Next Page)

Novato Fire Protection District

Brief Summary of Benefit Provisions Evaluated

Effective June 30, 2006

(Continued)

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. Eligibility Duty-related death
- B1. Benefit 50% of Final Compensation to a spouse

or

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

(Continued on Next Page)

Novato Fire Protection District

Brief Summary of Benefit Provisions Evaluated

Effective June 30, 2006

(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 4% maximum increase.

10. Unused Sick Leave

100% of unused sick leave will be credited as additional retirement service.

(Concluded on Next Page)

Novato Fire Protection District

Brief Summary of Benefit Provisions Evaluated

Effective June 30, 2006

(Concluded)

11. 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.

12. Member Contributions

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

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

Summary of Reported Asset Information

Submitted for the June 30, 2006 Valuation

Reported Market Value of Assets

Cash/Short-term	\$39,001,160
Receivables	28,979,904
Stocks	907,722,543
Bonds	263,913,330
Real Estate	145,992,241
Miscellaneous	<u>757,651</u>
Total Market Value	\$1,386,366,829
Liabilities	98,283,704
Net Market Value	\$1,288,083,125

Revenues and Disbursements Among Applicable Reserves

Balance - Beginning of year	\$1,163,203,289		
Revenues			
Employees' contributions	13,042,829		
Employer contributions	43,626,549		
Distributed & undistributed investment			
income (net of expenses)	140,614,190		
Total Revenues	197,283,568		
Disbursements			
Benefit payments	70,203,441		
Refunds	821,943		
Administrative Expense	<u>1,378,348</u>		
Total Disbursements	72,403,732		
Balance - End of year	\$1,288,083,125		

Actuarial Value of Assets As of June 30, 2006

Fiscal							(1) Total	(2) Expected	(1-2)	Deferre	
Year	Employer	Member	Total	Total	Market	Average	Market	Market	Investment	d	Deferred
<u>Ending</u>	Contributions	Contributions	<u>Contributions</u>	<u>Benefits</u>	<u>Value</u>	<u>Value</u>	<u>Return</u>	Return	<u>Gain</u>	<u>Factor</u>	Return
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)	0.0	0
$2002-03^1$	134,960,478	10,348,913	145,309,391	51,211,890	935,491,460	852,252,760	7,572,439	70,310,853	(62,738,414)	0.2	(12,547,683)
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	0.4	36,275,782
2004-05	30,877,430	11,619,180	42,496,610	65,546,226	1,161,996,104	1,086,766,665	102,192,962	89,658,250	12,534,712	0.6	7,520,827
2005-06	43,626,549	13,042,829	56,669,378	71,025,384	1,288,083,125	1,176,631,376	140,443,027	97,072,088	43,370,939	0.8	34,696,751
1. Total defe	erred return										65,945,677
2. Market V	alue										1,288,083,125
3. Smoothed	Market Value (Iten	n 2 - Item 1)									1,222,137,448
4. Corridor Limit											
a. 80% of Net Market Value 1,030,466								1,030,466,500			
b. 120% of Net Market Value 1,545,699,								1,545,699,750			
5. Actuarial	Value (Item 3 after	corridor applied) Inclu	sive of Health Insur	rance Reserve							1,222,137,448
6. Reserves	at Market Value										\$1,288,083,054

	Reserve	Actuarial	Actuarial
	<u>Value</u>	Value Ratio	<u>Value</u>
Marin County and Special Districts	\$957,802,989	0.9488	\$908,766,634
City of San Rafael	\$221,105,017	0.9488	\$209,785,169
Novato Fire Protection District	\$97,375,428	0.9488	\$92,390,127
Health Insurance Reserve	\$11,799,620	0.9488	<u>\$11,195,518</u>
Total	\$1,288,083,054		\$1,222,137,448

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

Recog	Recognition of						
Deferre	ed Return						
Valuation	Amount to be						
<u>Date</u>	Recognized						
6/30/2006	\$16,771,338						
6/30/2007	29,319,021						
6/30/2008	11,181,130						
6/30/2009	8,674,188						
Total	\$65,945,677						

Summary of Reserves and Other Liabilities

June 30, 2006

Reserves and Liabilities

Employer Reserves	\$2,059,837
Employee Reserves	\$113,364,109
Death Benefit Reserves	\$668,657
Article 15.5 Reserves	\$1,780,735
Reserve for Pre 7/1/77 San Rafael Retirees	\$12,260,812
Retired Employees Reserve	\$361,455,221
Cost of Living Adjustment Reserves	\$278,301,792
Health Insurance Reserves	\$11,799,690
Contingency and other Reserves	\$64,404,156
Unrestricted Reserves	\$441,988,116
Security Deposits Payable	\$723,647
Health Insurance Payable	\$918,385
Prepaid Contribution	\$5,144,448
Investments Payable & Collateral	\$206,452,768
Other Payables	\$2,064,315
Total Reserves and Liabilities	\$1,503,386,688

Novato Fire Protection District

Summary of Reserves and Other Liabilities

June 30, 2006

Total	\$109,130,945	\$92,390,127
Safety	<u>\$107,118,155</u>	\$90,680,120
Miscellaneous	\$2,012,790	\$1,710,007
	Accrued Liability	<u>Assets</u>

Marin County Employees' Retirement Association Novato Fire Protection District

Annual Benefit and Membership Distribution

Miscellaneous and Safety Retirees and Beneficiaries

Age	Years of Retirement						
<u>Group</u>	<u>0-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>Total</u>
35-39 No.	1						1
AVG AMT	56,651						56,651
40-44 No.	1		1				2
AVG AMT	36,408		35,349				35,878
45-49 No.							
AVG AMT							
71 / 6 / 11/11							
50-54 No.	6	3	2		1	1	13
AVG AMT	87,311	26,888	32,519		30,475	29,951	56,154
55-59 No.	15	3	1	1			20
AVG AMT	76,263	40,075	36,135	37,105			66,870
60-64 No.	8	11	3	2	2	1	27
AVG AMT	84,609	68,870	58,552	34,645	28,438	32,256	65,501
AVGAWII	04,007	00,070	36,332	34,043	20,436	32,230	05,501
65-69 No.	2	2	4	2	1	1	12
AVG AMT	28,880	60,845	65,194	32,841	23,025	52,832	48,480
70-74 No.				1			1
AVG AMT				34,278			34,278
75-79 No.					1	1	2
AVG AMT					35,135	20,850	27,993
					35,135	20,020	21,555
80-84 No.					1		1
AVG AMT					43,645		43,645
							_
Total No.	33	19	11	6	6	4	79 50 241
AVG AMT	75,621	56,850	52,087	34,393	31,526	33,972	59,241

Novato Fire Protection District

Summary of Monthly Allowances Being Paid

Submitted for the June 30, 2006 Valuation

Miscellaneous and Safety

	Annual Allowances			
Service Retirement	Number	<u>Total</u>	<u>Average</u>	
Unmodified	46	\$3,347,160	\$72,764	
Option 1	0	0	0	
Option 2	1	7,113	7,113	
Option 3	0	0	0	
Total	47	3,354,273	71,368	
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	27	1,148,553	42,539	
Option 1	0	0	0	
Option 2	0	0	0	
Option 3	0	0	0	
Total	27	1,148,553	42,539	
Beneficiary				
Unmodified	5	177,179	35,436	
Option 1	0	0	0	
Option 2	0	0	0	
Option 3	0_	0_	0	
Total	5	177,179	35,436	
TOTAL	79	\$4,680,005	\$59,241	

Novato Fire Protection District

Summary of Retired Members and Beneficiaries Included

In the June 30, 2006 Actuarial Valuation

			Averages			N	lew Retirees	Only*
Miscellaneous								
Members		Annual	Annual	Attained	Age at		Average	Average
Retirees	<u>No.</u>	<u>Allowance</u>	<u>Allowance</u>	<u>Age</u>	<u>Retirement</u>	<u>No.</u>	<u>Allowance</u>	<u>Age</u>
6/30/2006	74	\$4,502,826	\$60,849	60.6	51.9	4	\$86,620	59.6
6/30/2005	71	\$4,099,365	\$57,738	59.7	51.3	1	\$57,738	50.4
Increase	4.2%	9.8%	5.4%					
Beneficiaries								
6/30/2006	5	\$177,179	\$35,436	61.3	N/A	N/A	N/A	N/A
6/30/2005	5	\$173,311	\$34,662	60.3	N/A	N/A	N/A	N/A
Increase	0.0%	2.2%	2.2%					
Total								
6/30/2006	79	4,680,005	\$59,241	60.6	51.9	4	\$86,620	59.6
6/30/2005	76	4,272,676	\$56,219	59.7	51.3	1	\$57,738	50.4
Increase	3.9%	9.5%	5.4%					

^{*} Reflects retirements from active service only

Novato Fire Protection District

Active Membership Summary

In the June 30, 2006 Actuarial Valuation

Active Miscellaneous

			Averages			
		Annual	Annual			
	No.	Compensation	Compensation	<u>Age</u>	<u>Service</u>	
6/30/2006	8	\$513,512	\$64,189	43.4	3.1	
6/30/2005	8	\$514,963	\$64,370	43.8	5.8	
Percent Change	0.0%	(0.3)%	(0.3)%	(0.9)%	(46.6)%	

Active Safety

			Averages			
		Annual	Annual			
	<u>No.</u>	Compensation	Compensation	<u>Age</u>	<u>Service</u>	
6/30/2006	80	\$7,476,698	\$93,459	38.1	8.9	
6/30/2005	83	\$7,374,432	\$88,849	37.2	8.6	
Percent Change	(3.6)%	1.4%	5.2%	2.4%	3.5%	

Total Active

			Averages			
		Annual	Annual			
	<u>No.</u>	Compensation	Compensation	<u>Age</u>	<u>Service</u>	
6/30/2006 Total	88	\$7,990,210	\$90,798	38.5	8.4	
6/30/2005 Total	91	\$7,889,395	\$86,697	37.8	8.3	
Percent Change	(3.3)%	1.3%	4.7%	1.9%	1.2%	

Vested Deferreds and Reciprocals

		Valuation	Valuation		
	<u>No.</u>	Compensation	Compensation	<u>Age</u>	<u>Service</u>
6/30/2006 Total	17	\$1,210,208	\$71,189	38.8	3.0
6/30/2005 Total	16	\$919,372	\$57,461	39.2	2.8

Novato Fire Protection District

Active Members June 30, 2006 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>
25-29 NO.	0	0	3	3	1	2	0	0	0	0	0	0	9
TOT PAY	0	0	252,722	261,209	85,320	174,139	0	0	0	0	0	0	773,390
AVG PAY	0	0	84,241	87,070	85,320	87,070	0	0	0	0	0	0	85,932
30-34 NO.	0	0	3	11	4	5	0	0	0	0	0	0	23
TOT PAY	0	0	250,389	970,582	347,410	430,495	0	0	0	0	0	0	1,998,876
AVG PAY	0	0	83,463	88,235	86,852	86,099	0	0	0	0	0	0	86,908
35-39 NO.	0	0	2	2	1	8	5	2	0	0	0	0	20
TOT PAY	0	0	164,444	174,139	86,852	722,326	481,666	197,923	0	0	0	0	1,827,350
AVG PAY	0	0	82,222	87,070	86,852	90,291	96,333	98,962	0	0	0	0	91,367
40-44 NO.	0	0	0	1	0	0	2	5	1	0	0	0	9
TOT PAY	0	0	0	118,657	0	0	217,371	482,152	118,657	0	0	0	936,838
AVG PAY	0	0	0	118,657	0	0	108,686	96,430	118,657	0	0	0	104,093
45-49 NO.	0	0	0	1	1	3	0	3	1	0	0	0	9
TOT PAY	0	0	0	80,327	91,470	275,653	0	323,545	87,927	0	0	0	858,922
AVG PAY	0	0	0	80,327	91,470	91,884	0	107,848	87,927	0	0	0	95,436
50-54 NO.	1	0	1	0	0	1	0	1	2	1	2	0	9
TOT PAY	84,000	0	98,504	0	0	129,913	0	159,216	199,530	93,296	213,614	0	978,073
AVG PAY	84,000	0	98,504	0	0	129,913	0	159,216	99,765	93,296	106,807	0	108,675
55-59 NO.	0	0	0	0	0	0	0	0	0	0	1	0	1
TOT PAY	0	0	0	0	0	0	0	0	0	0	103,249	0	103,249
AVG PAY	0	0	0	0	0	0	0	0	0	0	103,249	0	103,249
60-64 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
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.	1	0	9	18	7	19	7	11	4	1	3	0	80
TOT AMT	84,000	0	766,059	1,604,914	611,052	1,732,527	699,037	1,162,837	406,114	93,296	316,863	0	7,476,698
AVG AMT	84,000	0	85,118	89,162	87,293	91,186	99,862	105,712	101,529	93,296	105,621	0	93,459

Novato Fire Protection District

Active Members June 30, 2006 By Attained Ages and Years of Service

Miscellaneous

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>
25-29 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
30-34 NO.	0	1	1	0	0	0	0	0	0	0	0	0	2
TOT PAY	0	48,877	51,640	0	0	0	0	0	0	0	0	0	100,517
AVG PAY	0	48,877	51,640	0	0	0	0	0	0	0	0	0	50,259
35-39 NO.	0	0	1	1	0	0	0	0	0	0	0	0	2
TOT PAY	0	0	51,640	82,046	0	0	0	0	0	0	0	0	133,686
AVG PAY	0	0	51,640	82,046	0	0	0	0	0	0	0	0	66,843
40-44 NO.	0	0	0	0	0	1	0	0	0	0	0	0	1
TOT PAY	0	0	0	0	0	53,681	0	0	0	0	0	0	53,681
AVG PAY	0	0	0	0	0	53,681	0	0	0	0	0	0	53,681
45-49 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
50-54 NO.	1	0	0	0	0	0	0	0	0	0	0	0	1
TOT PAY	70,181	0	0	0	0	0	0	0	0	0	0	0	70,181
AVG PAY	70,181	0	0	0	0	0	0	0	0	0	0	0	70,181
55-59 NO.	0	0	1	0	0	1	0	0	0	0	0	0	2
TOT PAY	0	0	103,807	0	0	51,640	0	0	0	0	0	0	155,447
AVG PAY	0	0	103,807	0	0	51,640	0	0	0	0	0	0	77,723
60-64 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
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.	1	1	3	1	0	2	0	0	0	0	0	0	8
TOT AMT	70,181	48,877	207,087	82,046	0	105,321	0	0	0	0	0	0	513,512
AVG AMT	70,181	48,877	69,029	82,046	0	52,661	0	0	0	0	0	0	64,189

ACTUARIAL COST METHODS, ACTUARIAL ASSUMPTIONS

AND

DEFINITIONS OF TECHNICAL TERMS

Novato Fire Protection District

Actuarial Cost Methods - June 30, 2006

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% a year (4.25% in previous valuation) 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.

Novato Fire Protection District

Actuarial Assumptions Used for the June 30, 2006 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)

Novato Fire Protection District

Actuarial Assumptions Used for the June 30, 2006 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 8.00%* 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	4.00%*
Real Rate of Return	4.00%
Total	8.00%*

The general inflation rate used for the actuarial valuation calculations was 4.00%* 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 in the Bay area, 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, 1966	1.8%
June 30, 1976	5.8
June 30, 1986	6.8
June 30, 1996	3.6
June 30, 2006	2.6

50-Year Average 4.1%

^{*} Inflation component of investment return assumption was reduced to 4.00% from 4.25% in previous valuation.

Novato Fire Protection District

Actuarial Assumptions Used for the June 30, 2006 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

4.00%

PLUS

Years of Service at		
Valuation Date	<u>Miscellaneous</u>	Safety
0	3.00%	8.00%
1	2.25	3.00
2	1.50	1.50
3	0.75	1.00
4 or more	0.50	0.75

No merit increases are assumed upon attainment of age 60.

^{*} Assumption changed from last valuation

Actuarial Assumptions Used for the June 30, 2006 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	<u>Miscellaneous</u>	<u>Safety</u>
0	21%*	14%*
1	9	5
2	7	4
3	6	4
4	6	4

^{*} Assumption changed from last valuation

Novato Fire Protection District

Actuarial Assumptions Used for the June 30, 2006 Valuation

(Continued)

% of Active Members Separating with Next Year

(at least 5 years)					Pre-Retin	rement
	<u>Withdraw</u>	<u>al</u>	Vested Defe	rred	Death*	
<u>Ages</u>	Miscellaneous	<u>Safety</u>	Miscellaneous	<u>Safety</u>	Male	<u>Female</u>
20	2.30%	1.13%	3.00%	2.06%	.03%	.02%
25	2.30%	1.13%	3.00%	2.24%	.04%	.02%
30	2.30%	0.75%	3.00%	3.53%	.04%	.02%
35	2.00%	0.56%	2.50%	3.41%	.06%	.04%
40	1.20%	0.56%	2.00%	1.14%	.09%	.06%
45	0.80%	0.56%	1.70%	1.70%	.12%	.09%
50	0.00%	0.00%	1.40%	0.27%	.17%	.13%
55	0.00%	0.00%	0.80%	0.00%	.27%	.20%
60	0.00%	0.00%	0.80%	0.00%	.47%	.35%
65	0.00%	0.00%	0.00%	0.00%	.88%	.67%

	Ordinary Di	Ordinary Disability		ability
	<u>Miscellaneous</u>	<u>Safety</u>	<u>Miscellaneous</u>	Safety*
20	.000%	.020%	.050%	.121%
25	.005%	.030%	.080%	.165%
30	.010%	.050%	.130%	.396%
35	.015%	.070%	.160%	.605%
40	.025%	.160%	.210%	1.298%
45	.045%	.260%	.260%	1.254%
50	.090%	.360%	.310%	1.408%
55	.155%	.460%	.330%	4.290%
60	.255%	.000%	.370%	.000%
65	.395%	.000%	.390%	.000%

^{*} Assumption changed from last valuation

Actuarial Assumptions Used for the June 30, 2006 Valuation

(Continued)

The post-retirement mortality tables used were the RP-2000 Combined Healthy Mortality Basic Tables, with one-year setback for Males and a two-year setback for Females.* 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 Male RP-2000 Combined Healthy Mortality Table was set forward three years* for disabled retirees. Related values are shown below.

Non-Disabled Retirees

	Future Life	e Expectancy		
	(Ye	ears)*	% Dying Withi	n Next Year*
Sample Ages	Men	Women	Men	Women
45	36.7	40.3	.14%	.09%
50	31.7	35.6	.20	.14
55	27.1	30.8	.32	.22
60	22.6	26.2	.59	.39
65	18.4	21.8	1.13	.76
70	14.6	17.8	1.98	1.34
75	11.2	14.1	3.39	2.30

Disabled Retirees

Sample Ages	Future Life Expectancy (Years)*	% Dying Within Next Year*
45	32.7	0.19%
50	28.0	0.29
55	23.5	0.53
60	19.2	1.00
65	15.3	1.79
70	11.8	3.04
75	8.8	5.21

^{*} Assumption changed from last valuation

Actuarial Assumptions Used for the June 30, 2006 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 Ages	Safety
50	7.8%*		3% at 50
51	2.6%*	50	33%
52	2.6%*	51	25%
53	2.6%*	52	25%
54	3.9%*	53	33%
55	5.2%*	54	33%
56	7.8%*	55	50%
57	10.4%*	56	50%
58	11.7%*	57	50%
59	15.6%*	58	50%
60	19%	59	50%
61	16%	60	100%
62	24%		
63	20%		
64	23%		
65	44%		
66	30%		
67	31%		
68	29%		
69	34%		
70	100%		

^{*} Assumption changed from last valuation

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

Novato Fire Protection District

Actuarial Assumptions Used for the June 30, 2006 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 50%* (60% in previous valuation) of female members are assumed to be married at retirement.

<u>Spouse Census</u> – Spouses are assumed to be 3 years younger than members.

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 40%* (50% in previous valuation) of the deferred vested members are reciprocal.

Post-Retirement COLA – Assumed 3.8%.

<u>Accumulated Employee Contributions</u> – Credited semiannual interest at the assumed investment rate of return.

<u>Accumulated Sick Time</u>* - Most active member accrued liabilities loaded by 3% for conversion from sick leave to retirement service credit (This is a new assumption with the revised 2006 valuation).

* Assumption changed from last valuation

Comparison of Selected Actuarial Assumptions To Actual Experience

(Continued)

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

			Year End	ed		3-year	5-year
	6/30/06	6/30/05	6/30/04	6/30/03	6/30/02	Average	<u>Average</u>
Inflation ¹	3.9%	1.1%	1.4%	1.6%	1.2%	2.1%	1.8%
Assumed						4.25	4.25
Average Pay Increase	4.7	7.0	2.3	1.0	2.8	4.6	3.5
Assumed						4.25	4.25
Merit & Longevity Increase	0.8	5.9	0.9	(0.6)	1.6	2.5	1.7
Assumed						0.5	0.5
Total Payroll	1.3	3.6	11.8	11.3	(3.3)	5.5	4.8
Assumed						4.25	4.25
Investment Return Rate ²	7.4	4.3	3.5	1.6	4.7	5.1	4.3
Assumed						8.25	8.25
Real Rate of Investment Return ²	3.5	3.2	2.1	0.0	3.5	2.9	2.5
Assumed						4.0	4.0

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

² Based on actuarial value of assets <u>NOT</u> market value or book value.

Novato Fire Protection District

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.

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

(Concluded on Next Page)

Novato Fire Protection District

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

Novato Fire Protection District

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>
6/30/01	84,806	71,471	(13,335)	119%	6,331	(210.6)%
6/30/02	87,497	78,164	(9,333)	112%	6,119	(152.5)%
6/30/03	84,866	84,842	(24)	100%	6,811	(0.4)%
6/30/04*	84,814	88,626	3,812	96%	7,616	50.1%
6/30/04	84,814	90,861	6,047	93%	7,616	79.4%
6/30/05	86,839	98,787	11,948	88%	7,889	151.5%
6/30/06*	92,390	103,772	11,382	89%	7,990	142.5%
6/30/06	92,390	109,131	16,741	85%	7,990	209.5%

^{*} Before assumption changes

Novato Fire Protection District

GASB No. 25 Disclosure Schedule of Employer Contributions Retirement Benefits

	Actuarially
Year	Required
Ended	Contributions
<u>June 30</u>	(ARC)
	(000's)
1999	252
2000	273
2001	301
2002	383
2003^{1}	301
2004^{2}	762
2005^{3}	1,819
2006^{4}	2,526

¹ Estimate of ARC for 2003 is based on interpolated payroll and overall rate of 4.66%

² Estimate of ARC for 2004 is based on interpolated payroll and overall rate of 10.56%

³ Estimate of ARC for 2005 is based on interpolated payroll and overall rate of 23.46%

⁴ Estimate of ARC for 2006 is based on interpolated payroll and overall rate of 31.82%

APPENDIX A: MEMBER CONTRIBUTION RATES

Contribution Rates Assumed for Members

(Prior to July 1, 2007)

Safety

		Implicit	Limited To	
Basic	COL	COL	Implicit COL	<u>Total</u>
7.36%	5.42%	3.45%	3.45%	10.81%
7.39%	5.44%	3.40%	3.40%	10.79%
7.42%	5.46%	3.34%	3.34%	10.76%
7.45%	5.49%	3.28%	3.28%	10.73%
7.48%	5.51%	3.22%	3.22%	10.70%
7.51%	5.53%	3.15%	3.15%	10.66%
7.56%	5.57%	3.22%	3.22%	10.78%
7.61%	5.60%	3.28%	3.28%	10.89%
7.66%	5.64%	3.35%	3.35%	11.01%
7.72%	5.68%	3.41%	3.41%	11.13%
7.78%	5.73%	3.47%	3.47%	11.25%
7.86%	5.79%	3.52%	3.52%	11.38%
7.93%	5.84%	3.56%	3.56%	11.49%
8.01%	5.90%	3.61%	3.61%	11.62%
8.10%	5.96%	3.65%	3.65%	11.75%
8.20%	6.04%	3.69%	3.69%	11.89%
8.30%	6.11%	3.72%	3.72%	12.02%
8.41%	6.19%	3.76%	3.76%	12.17%
8.52%	6.27%	3.79%	3.79%	12.31%
8.64%	6.36%	3.82%	3.82%	12.46%
8.76%	6.45%	3.86%	3.86%	12.62%
8.89%	6.55%	3.91%	3.91%	12.80%
9.02%	6.64%	3.95%	3.95%	12.97%
9.15%	6.74%	3.99%	3.99%	13.14%
9.28%	6.83%	4.04%	4.04%	13.32%
9.41%	6.93%	4.08%	4.08%	13.49%
9.55%	7.03%	4.13%	4.13%	13.68%
9.69%	7.13%	4.18%	4.18%	13.87%
9.83%	7.24%	4.24%	4.24%	14.07%
9.98%	7.35%	5.42%	5.42%	15.40%
10.12%	7.45%	5.21%	5.21%	15.33%
10.27%	7.56%	5.02%	5.02%	15.29%
10.43%	7.68%	4.82%	4.82%	15.25%
10.58%	7.79%	4.64%	4.64%	15.22%
10.58%	7.79%	4.64%	4.64%	15.22%
	7.36% 7.39% 7.42% 7.45% 7.48% 7.51% 7.56% 7.66% 7.72% 7.78% 7.86% 7.93% 8.01% 8.10% 8.20% 8.30% 8.41% 8.52% 8.64% 8.76% 8.89% 9.02% 9.15% 9.28% 9.41% 9.55% 9.41% 9.55% 9.69% 9.83% 9.98% 10.12% 10.27% 10.43% 10.58%	7.36% 5.42% 7.39% 5.44% 7.42% 5.46% 7.45% 5.49% 7.48% 5.51% 7.51% 5.53% 7.56% 5.57% 7.61% 5.60% 7.66% 5.64% 7.72% 5.68% 7.78% 5.73% 7.86% 5.79% 7.93% 5.84% 8.01% 5.90% 8.10% 5.96% 8.20% 6.04% 8.30% 6.11% 8.41% 6.19% 8.52% 6.27% 8.64% 6.36% 8.76% 6.45% 8.89% 6.55% 9.02% 6.64% 9.15% 6.74% 9.28% 6.83% 9.41% 6.93% 9.55% 7.03% 9.69% 7.13% 9.83% 7.24% 9.98% 7.35% 10.12% 7.45% 10.27%<	7.36% 5.42% 3.45% 7.39% 5.44% 3.40% 7.42% 5.46% 3.34% 7.45% 5.49% 3.28% 7.48% 5.51% 3.22% 7.51% 5.53% 3.15% 7.56% 5.57% 3.22% 7.61% 5.60% 3.28% 7.66% 5.64% 3.35% 7.72% 5.68% 3.41% 7.78% 5.73% 3.47% 7.86% 5.79% 3.52% 7.93% 5.84% 3.56% 8.01% 5.90% 3.61% 8.10% 5.96% 3.65% 8.20% 6.04% 3.69% 8.30% 6.11% 3.72% 8.41% 6.19% 3.76% 8.52% 6.27% 3.79% 8.64% 6.36% 3.82% 8.76% 6.45% 3.86% 8.89% 6.55% 3.91% 9.02% 6.64% 3.95% <td< td=""><td>Basic COL COL Implicit COL 7.36% 5.42% 3.45% 3.45% 7.39% 5.44% 3.40% 3.40% 7.42% 5.46% 3.34% 3.34% 7.45% 5.49% 3.28% 3.28% 7.48% 5.51% 3.22% 3.22% 7.51% 5.53% 3.15% 3.15% 7.56% 5.57% 3.22% 3.22% 7.61% 5.60% 3.28% 3.28% 7.66% 5.64% 3.35% 3.35% 7.72% 5.68% 3.41% 3.41% 7.78% 5.73% 3.47% 3.47% 7.86% 5.79% 3.52% 3.52% 7.93% 5.84% 3.56% 3.56% 8.01% 5.90% 3.61% 3.61% 8.10% 5.96% 3.65% 3.65% 8.20% 6.04% 3.69% 3.72% 8.41% 6.19% 3.76% 3.76% 8.52% <td< td=""></td<></td></td<>	Basic COL COL Implicit COL 7.36% 5.42% 3.45% 3.45% 7.39% 5.44% 3.40% 3.40% 7.42% 5.46% 3.34% 3.34% 7.45% 5.49% 3.28% 3.28% 7.48% 5.51% 3.22% 3.22% 7.51% 5.53% 3.15% 3.15% 7.56% 5.57% 3.22% 3.22% 7.61% 5.60% 3.28% 3.28% 7.66% 5.64% 3.35% 3.35% 7.72% 5.68% 3.41% 3.41% 7.78% 5.73% 3.47% 3.47% 7.86% 5.79% 3.52% 3.52% 7.93% 5.84% 3.56% 3.56% 8.01% 5.90% 3.61% 3.61% 8.10% 5.96% 3.65% 3.65% 8.20% 6.04% 3.69% 3.72% 8.41% 6.19% 3.76% 3.76% 8.52% <td< td=""></td<>

Contribution Rates Assumed for Members

(After July 1, 2007)

Safety

Entry				Entry			
<u>Age</u>	Basic	<u>COL</u>	Total	Age	Basic	<u>COL</u>	Total
16	7.20%	3.80%	11.00%	33	8.99%	4.74%	13.73%
17	7.20%	3.80%	11.00%	34	9.15%	4.82%	13.97%
18	7.20%	3.80%	11.00%	35	9.30%	4.91%	14.21%
19	7.19%	3.79%	10.98%	36	9.46%	4.99%	14.45%
20	7.18%	3.78%	10.96%	37	9.63%	5.08%	14.71%
21	7.30%	3.85%	11.15%	38	9.79%	5.16%	14.95%
22	7.43%	3.92%	11.35%	39	9.96%	5.25%	15.21%
23	7.57%	3.99%	11.56%	40	10.13%	5.34%	15.47%
24	7.70%	4.06%	11.76%	41	10.31%	5.44%	15.75%
25	7.84%	4.13%	11.97%	42	10.50%	5.54%	16.04%
26	7.97%	4.20%	12.17%	43	10.69%	5.64%	16.33%
27	8.11%	4.28%	12.39%	44	10.90%	5.75%	16.65%
28	8.25%	4.35%	12.60%	45	11.12%	5.86%	16.98%
29	8.40%	4.43%	12.83%	46	11.37%	6.00%	17.37%
30	8.54%	4.50%	13.04%	47	11.64%	6.14%	17.78%
31	8.69%	4.58%	13.27%	48	11.96%	6.31%	18.27%
32	8.84%	4.66%	13.50%	49	12.29%	6.48%	18.77%

Contribution Rates Assumed for Members (Prior to July 1, 2007)

Miscellaneous

			Implicit	Limited To	
<u>Age</u>	Basic	<u>COL</u>	<u>COL</u>	Implicit COL	<u>Total</u>
16	6.16%	2.66%	0.14%	0.14%	6.30%
17	6.18%	2.67%	0.21%	0.21%	6.39%
18	6.20%	2.67%	0.28%	0.28%	6.48%
19	6.22%	2.68%	0.34%	3.40%	6.56%
20	6.24%	2.69%	0.39%	0.39%	6.63%
21	6.26%	2.70%	0.45%	0.45%	6.71%
22	6.28%	2.71%	0.52%	0.52%	6.80%
23	6.30%	2.72%	0.59%	0.59%	6.89%
24	6.33%	2.73%	0.65%	0.65%	6.98%
25	6.36%	2.74%	0.72%	0.72%	7.08%
26	6.40%	2.76%	0.79%	0.79%	7.19%
27	6.44%	2.78%	0.88%	0.88%	7.32%
28	6.48%	2.80%	0.95%	0.95%	7.43%
29	6.53%	2.82%	1.04%	1.04%	7.57%
30	6.57%	2.83%	1.12%	1.12%	7.69%
31	6.63%	2.86%	1.20%	1.20%	7.83%
32	6.68%	2.88%	1.29%	1.29%	7.97%
33	6.74%	2.91%	1.38%	1.38%	8.12%
34	6.80%	2.93%	1.48%	1.48%	8.28%
35	6.86%	2.96%	1.57%	1.57%	8.43%
36	6.93%	2.99%	1.66%	1.66%	8.59%
37	7.00%	3.02%	1.76%	1.76%	8.76%
38	7.07%	3.05%	1.86%	1.86%	8.93%
39	7.14%	3.08%	1.95%	1.95%	9.09%
40	7.22%	3.11%	2.05%	2.05%	9.27%
41	7.30%	3.15%	2.15%	2.15%	9.45%
42	7.38%	3.18%	2.25%	2.25%	9.63%
43	7.46%	3.22%	2.37%	2.37%	9.83%
44	7.54%	3.25%	2.48%	2.48%	10.02%
45	7.63%	3.29%	2.58%	2.58%	10.21%
46	7.72%	3.33%	2.70%	2.70%	10.42%
47	7.82%	3.37%	2.80%	2.80%	10.62%
48	7.91%	3.41%	2.92%	2.92%	10.83%
49	8.01%	3.46%	3.01%	3.01%	11.02%
50	8.12%	3.50%	4.00%	3.50%	11.62%
51	8.22%	3.55%	3.88%	3.55%	11.77%
52	8.33%	3.59%	3.76%	3.59%	11.92%
53	8.44%	3.64%	3.62%	3.62%	12.06%
54	8.55%	3.69%	3.47%	3.47%	12.02%
55+	8.55%	3.69%	3.47%	3.47%	12.02%

Contribution Rates Assumed for Members (After July 1, 2007)

Miscellaneous

Entry				Entry			
<u>Age</u>	Basic	COL	Total	<u>Age</u>	Basic	COL	Total
16	5.35%	2.63%	7.98%	38	7.06%	3.47%	10.53%
17	5.38%	2.65%	8.03%	39	7.19%	3.54%	10.73%
18	5.42%	2.67%	8.09%	40	7.32%	3.60%	10.92%
19	5.45%	2.68%	8.13%	41	7.45%	3.67%	11.12%
20	5.47%	2.69%	8.16%	42	7.59%	3.74%	11.33%
21	5.49%	2.70%	8.19%	43	7.73%	3.80%	11.53%
22	5.51%	2.71%	8.22%	44	7.87%	3.87%	11.74%
23	5.52%	2.72%	8.24%	45	8.02%	3.95%	11.97%
24	5.53%	2.72%	8.25%	46	8.17%	4.02%	12.19%
25	5.53%	2.72%	8.25%	47	8.32%	4.09%	12.41%
26	5.64%	2.77%	8.41%	48	8.48%	4.17%	12.65%
27	5.75%	2.83%	8.58%	49	8.64%	4.25%	12.89%
28	5.86%	2.88%	8.74%	50	8.81%	4.34%	13.15%
29	5.97%	2.94%	8.91%	51	9.01%	4.43%	13.44%
30	6.08%	2.99%	9.07%	52	9.20%	4.53%	13.73%
31	6.20%	3.05%	9.25%	53	9.35%	4.60%	13.95%
32	6.32%	3.11%	9.43%	54+	9.46%	4.66%	14.12%
33	6.44%	3.17%	9.61%				
34	6.56%	3.23%	9.79%				
35	6.68%	3.29%	9.97%				
36	6.80%	3.35%	10.15%				
37	6.93%	3.41%	10.34%				

APPENDIX B: RETIREMENT AGE FACTORS

Retirement Age Factors

Miscellaneous

<u>316</u>	<u>76</u>	<u>.16</u>
2%	at	55
<u>Age</u>		Fra
50		

<u>Age</u>	Fraction
50	0.713
51	0.761
52	0.814
53	0.871
54	0.933
55	1.000
56	1.026
57	1.052
58	1.078
59	1.105
60	1.131
61	1.157
62	1.183
63+	1.209

Safety

31664.1 3% at 50

<u>Age</u>	Fraction
41	0.6258
42	0.6625
43	0.7004
44	0.7397
45	0.7805
46	0.8226
47	0.8678
48	0.9085
49	0.9522
50+	1.0000

NOTE: All rates are assumed to be non-integrated