CITY OF SAN JOSE
POLICE AND FIRE DEPARTMENT RETIREMENT PLAN

Actuarial Valuation
as of July 1, 1991

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Board of Administration
San Jose Police and Fire Department
Retirement Plan
801 North First Street
San Jose, California 95110

Board Members:

This report presents the results of our Actuarial Valuation of the San Jose Police and Fire Department Retirement Plan as of July 1, 1991. The report gives our determinations of: (a) contribution requirements for members and the City, and (b) the pension benefit obligation in accordance with Governmental Accounting Standards Board Statement No. 5.

The actuarial content of the report was prepared under the supervision of Brian O'Konski, A.S.A., Enrolled Actuary, in accordance with generally accepted actuarial principles and practices.

We thank the Secretary to the Board and his staff for provision of excellent data and their assistance with our questions.

Our report is presented in the following sections:

I. CONTRIBUTION REQUIREMENTS

II. FUNDING STATUS

III. ASSETS AND INVESTMENT RETURN

IV. PARTICIPANT DATA

V. ACTUARIAL METHODS AND ASSUMPTIONS

VI. SUMMARY OF PLAN PROVISIONS

We look forward to a discussion of our findings at your next meeting.

Sincerely,

Winston J. Hendzel

Winston J. Hendzel, A.S.A.
Assistant Actuary

Brian O'Konski

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I. CONTRIBUTION REQUIREMENTS

A. Retirement Income Benefits

Annual contributions to fund Retirement Income Benefits are determined according to the Entry Age Normal Cost Method. The normal cost under this method is calculated on an individual basis by spreading the cost of each participant's expected benefits as a level percentage of his/her own salary.

The second component of contributions required under the Entry Age Normal Cost Method is a payment in amortization of the Unfunded Supplemental Present Value (USPV). The unfunded supplemental present value is amortized over a 40 year period beginning in 1977. Accordingly, the USPV is amortized over the 26 years currently remaining on that schedule. The amortization payments are calculated to rise 5% per annum. This is equivalent to amortization in dollars of constant value assuming an annual inflation rate of 5%.

Funding is provided by a combination of City and employee contributions. The City pays eight-elevenths of the normal cost and the entire amount of the USPV amortization payment (or credit). The employees pay three-elevenths of the normal cost.

The resulting contribution requirements to fund retirement income benefits (with an allocation between Basic and Cost-Of-Living) are as follows:

	Percentage of Compensation		
	Basic Benefits	Cost-of-Living	Total
Employee contributions	5.54%	2.03%	7.57%
City contributions			
Normal Cost	14.77	5.41%	20.18%
Payment on USPV	(3.47)	2.12	(1.35)
Total City Contribution	11.30%	7.53%	18.83%
Total contributions	16.84%	9.56%	26.40%

A comparison of the July 1, 1991 costs for retirement income benefits only with those determined in the prior valuation follows.

	Valuation as of	
	July 1, 1991	July 1, 1989
Employees	7.57%	7.48%
City - Normal Cost	20.18%	19.94%
- Amortization of USPV	(1.35)	(0.14)
Total for City	18.83%	19.80%
Total	26.40%	27.28%

Derivations of the contribution rates as of July 1, 1991 are shown in Table 1. In addition to these rates, the City funds permanent cost-of-living benefits on a pay-as-you-go basis.

B. Retiree Medical Benefits

The Retirement Plan commenced payment of retiree health insurance premiums in September, 1984. The Plan pays the same amount toward premiums for pensioners and beneficiaries as is paid for active employees. Pensioners who retire directly from active service with 15 years of service or a 37.5% of salary benefit are eligible for this benefit. The estimated average annual premium paid by the Plan in 1991-92 is $3,309, including the effect of extending coverage to spouses acquired after retirement.

As of July 1, 1991, 3.38% of payroll is the level percentage of compensation over the next 10 years required to fund the benefits over the same period. This cost has been divided equally between the City and employees, each paying 1.69% of payroll. The derivation of these results is shown in Table 2. These contribution rates are both 0.03% higher than the 1.66% of payroll (for both the City and employees) developed in the prior valuation.

The contribution of 3.38% of payroll is greater than the projected cost of benefits payable over the next 4 years. So if this contribution rate was continued, assets would be expected to increase during the first 4 years. In the fifth year (1995-96) assets would be expected to start to decline, and be exhausted at the end of the tenth year. However, it has been the practice to extend the funding period with each successive actuarial valuation. Under this approach, if experience exactly matches assumptions, the contribution rate calculated in the next actuarial valuation would be higher.

C. <u>Retiree Dental Benefits</u>

Retiree dental benefits have been paid from the Plan since 1986. The Plan pays the full premium for these benefits. Currently, the premium is $47 per month. These benefits are funded using the ten year level percent of payroll method that is also used for the retiree medical insurance.

As of July 1, 1991, the contribution rate is determined to be 0.52%. The derivation of these results is in Table 3. The contribution rate is split in a 3 to 1 ratio between the City and the employees. Hence, the City contribution rate is 0.39% of payroll and the employee contribution is 0.13% of payroll. These represent increases of .03% and .01%, respectively, since the prior valuation.

The comments in the Retiree Medical Benefits Subsection above regarding the build-up and decline of the asset balance and the effect of extending the funding period on the contribution rates also apply to the dental benefits, except that the decline starts in the sixth year.

D. <u>Change in Contribution Rates</u>

An explanation of the change in the total contribution rate from the prior valuation is as follows:

July 1, 1989 Contribution Rates:			
Retirement income benefits	27.28%		
Retiree medical benefits	3.32%		
Retiree dental benefits	0.48%		
Total		31.08%	
Extension of retiree medical and and dental benefits to spouses acquired after retirement		+0.16%	,14
Two year "roll-forward" of funding period for retiree medical and dental benefits		+0.48%	
Investment gain		-0.82%	
Other factors including lower than expected increases in health insurance premiums and fewer than expected service-connected disability retirements		-0.60%	
July 1, 1991 Contribution Rates:			
Retirement Income Benefits	26.40%		
Retirement Medical Benefits	3.38%		
Retiree Dental Benefits	0.52%		
Total		30.30%	

E. Summary of Contribution Rates

The components of the total recommended contribution rate are shown below.

	Contribution Rates as a Percentage of Payroll		
	City	Employee	Total
Retirement Income			
Basic Benefits	11.30%	5.54%	16.84%
Cost-of-Living	7.53	2.03	9.56
Retiree Medical	1.69	1.69	3.38
Retiree Dental	0.39	0.13	0.52
	20.91%	9.39%	30.30%

Table 1

Determination of Contribution Requirements as of July 1, 1991

Retirement Income Benefits
(Dollar Amounts in Thousands)

	Basic Benefits	Cost-of-Living Benefits	Total
1. Present Value of Future Benefits			
a. Active Members	$490,809	$176,751	$667,560
b. Terminated Vested Members	2,236	860	3,096
c. Pensioners	90,038	57,870	147,908
d. Beneficiaries	9,708	8,458	18,166
e. Total	$592,791	$243,939	$836,730
2. Present Value of Future Normal Cost	$209,403	$ 76,718	$286,121
3. Supplemental Present Value = (1) - (2)	383,388	167,221	550,609
4. Actuarial Value of Assets	441,844	131,514	573,358
5. Unfunded Supplemental Present Value = (3) - (4)	(58,456)	35,707	(22,749)
6. Amortization of (5)	(3,250)	1,985	(1,265)
7. Amortization as % of Payroll	(3.47%)	2.12%	(1.35%)
8. Total Normal Cost as Percentage of Payroll			
a. City	14.77%	5.41%	20.18%
b. Employees	5.54	2.03	7.57
c. Total	20.31%	7.44%	27.75%
9. Total City Contribution Rate (7) + (8a)	11.30%	7.53%	18.83%
10. Total Employee Contribution Rate = (8b)	5.54%	2.03%	7.57%
11. Total Contribution Rates	16.84%	9.56%	26.40%
12. Covered Payroll	$ 93,686	$ 93,686	$ 93,686

Note: Amortization payments based on 26-year funding from July 1, 1991 with payments increasing 5% per annum.

Table 2

Determination of Contribution Requirements as of July 1, 1991

Retiree Health Insurance Funding Calculations
Medical Benefits

Year	(1) Estimated Number of Insured Retirees	(2) Estimated Annual Cost	(3) Projected Covered Payroll (000 Omitted)	(4) Cost as Percentage of Payroll = (2) / (3)
1991-92	606	$2,006,000	$ 93,686	2.14%
1992-93	656	2,476,000	100,244	2.47
1993-94	710	3,025,000	107,261	2.82
1994-95	765	3,652,000	114,769	3.18
1995-96	823	4,360,000	122,803	3.55
1996-97	882	5,140,000	131,399	3.91
1997-98	944	5,999,000	140,597	4.27
1998-99	1,009	6,921,000	150,439	4.60
1999-2000	1,075	7,970,000	160,970	4.95
2000-01	1,142	9,137,000	172,238	5.30

Level Cost Calculation Over 10 Years

(a)	Present Value of Future Benefits =	$ 31,937,000
(b)	Actuarial Value of Assets =	2,733,000
(c)	Present Value of Payroll over Next 10 Years =	864,843,000
(d)	Level Contribution Rate as Percentage of Payroll = [(a) - (b)]-(c) (rounded to nearest multiple of 0.02%)	3.38%

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Table 3

Determination of Contribution Requirements as of July 1, 1991

Retiree Health Insurance Funding Calculations
Dental Benefits

Year	(1) Estimated Number of Insured Retirees	(2) Estimated Annual Cost	(3) Projected Covered Payroll (000 Omitted)	(4) Cost as Percentage of Payroll = (2) / (3)
1991-92	635	$ 358,000	$ 93,686	0.38%
1992-93	685	413,000	100,244	0.41
1993-94	737	476,000	107,261	0.44
1994-95	793	548,000	114,769	0.48
1995-96	850	629,000	122,803	0.51
1996-97	909	719,000	131,399	0.55
1997-98	971	822,000	140,597	0.58
1998-99	1,035	938,000	150,439	0.62
1999-2000	1,102	1,068,000	160,970	0.66
2000-01	1,168	1,211,000	172,238	0.70

Level Cost Calculation Over 10 Years

(a)	Present Value of Future Benefits =	$ 4,603,000
(b)	Actuarial Value of Assets =	165,000
(c)	Present Value of Payroll over Next 10 Years =	864,843,000
(d)	Level Contribution Rate as Percentage of Payroll = [(a) - (b)]/(c) (rounded to nearest multiple of 0.04%)	0.52%

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II. FUNDING STATUS

There are various ways to measure the progress of funding a retirement system. One measure is the present value of projected benefits. This value must be disclosed in accordance with Governmental Accounting Standards Board (GASB) Statement No. 5 effective with the fiscal year beginning July 1, 1987. Its requirements include computation of the pension benefit obligation, or PBO. This amount includes projection of salary increases, but prorates all potential future occurrences for service as of the valuation date. Retiree medical and dental benefits are excluded. The PBO differs from the supplemental present value because the latter incorporates a leveling of contributions under the entry age normal method. The assumptions used are the same as those used for funding the Plan. The PBO is shown below as of July 1, 1991:

Retirees, beneficiaries and deferred vested terminated members	$169,170,000
Current employees:	
Employee contributions with credited interest	73,692,000
Employer-financed vested	278,840,000
Employer-financed non-vested	29,048,000
Total all participants	$550,750,000

The ratio of assets to the PBO provides a measure of funding status. As of July 1, 1991, the actuarial value of assets allocated to pension benefits exceeded the PBO; the funding ratio was 104.10% compared to 100.97% as of July 1, 1989. The funding ratio as of July 1, 1990 is estimated to have been 103.4%. Assets also exceeded the present values of accrued and vested benefits as of both July 1, 1991 and July 1, 1989.

Another measure of the funding condition of a retirement system is the level of assets in relation to the supplemental present value computed in funding that system. A higher funding ratio indicates an improved funding status.

The funding ratios on this basis that have been determined in actuarial valuations of the San Jose Police and Fire Department Plan since 1983 are presented in Table 4. Note that the actuarial cost method was changed in 1989; for comparison purposes, the ratio under both methods is presented for that year. The steady increase in the funding ratio during the period illustrated is the result of various factors, including the fact that actual investment returns have exceeded expectations and that contributions have been made to amortize the unfunded supplemental present value that existed prior to 1989.

Table 4

Comparison of Assets and Supplemental Present Values for Retirement Income Benefits
(in thousands)

As of July 1	Actuarial Cost Method	Pensioners and Beneficiaries*	Terminated Vested Members*	Active Members*	Total Supple-mental Pre-sent Value*	Actuarial Value of Assets*	Funding Ratio
1983	Current Service	61,191	1,142	147,150	209,483	172,953	82.6%
1985	Current Service	75,284	1,939	209,928	287,151	245,837	85.6%
1987	Current Service	115,594	2,740	272,313	390,647	345,015	88.3%
1989	Current Service	140,594	3,535	284,594	428,723	455,247	106.2%
1989	Entry Age Normal	140,594	3,535	309,142	453,271	455,247	100.4%
1991	Entry Age Normal	166,074	3,096	381,439	550,609	573,358	104.1%

*Does not include assets or liabilities for retirees' medical and dental benefits.

<u>Note</u>: Actuarial assumptions were changed during the above period.

III. ASSETS AND INVESTMENT RETURN

The audit report as of June 30, 1991 shows net assets of $565,216,000 for the combined Retirement and Cost-of-Living Funds. That amount includes fixed income investments at amortized cost, equities at original cost, and adjustments for amounts payable and receivable. The market value for the combined Funds was $596,286,000.

A different basis has been adopted for actuarial valuations. A smoothing technique is applied to the value of the investment component of plan assets. Recognition of net realized and unrealized appreciation (depreciation) of investments is phased in over five years, beginning with the fiscal year in which it occurs. Since the market value of investments recognizes appreciation (depreciation) immediately, the actuarial value of investments is computed as market value less the portion of appreciation (depreciation) that has been deferred to later years by the smoothing technique.

Table 5 shows the determination of the actuarial value of investments. As of July 1, 1991, the actuarial value of plan investments was $568,078,000. The net appreciation remaining to be recognized in future years totalled $20,030,000. This reserve will help offset any market value decreases subsequent to the valuation date.

Table 6 presents the total assets on the actuarial basis. On this basis, the value of the combined Funds has increased by 26% from $456,507,000 as of July 1, 1989 to $576,256,000 as of July 1, 1991. Of the total actuarial value of assets, $2,733,000 is allocated to retiree medical benefits, $165,000 to retiree dental benefits, $131,514,000 to cost-of-living retirement benefits, and $441,844,000 to basic retirement benefits.

Table 7 presents a summary of income and disbursements on the actuarial basis over the past two years. Employee and City contributions totalled $27.0 million in the fiscal year 1990-91 and $28.6 million in the fiscal year 1989-90. Benefit payments in the year 1990-91 were almost $14.7 million, including $1,858,000 paid for retiree health and dental insurance premiums.

Investment income on the actuarial value basis consists of interest, dividends and rental income, plus 20% of the total appreciation (or depreciation) in investments over the past five years. Investment income net of all expenses was $44,728,000 for the year 1990-91, and $47,463,000 the prior year. These represent net returns of 8.51% and 10.23%, respectively.

Table 8 summarizes the investment return experience for the past years. The weighted average investment return over this period was 11.10%.

Table 5
Determination of Actuarial Value of Investments
As of June 30, 1991
(All Amounts in Thousands of Dollars)

Year Ending	Market Value	Book Value	Unrealized Appreciation to Date	Unrealized Appreciation in Year	Realized Appreciation in Year	Total Appreciation	Deferred Appreciation Percentage	Deferred Appreciation Amount
6/30/87	375,834	347,176	28,658	(5,690)	15,777	10,087	N/A	-0-
6/30/88	405,106	399,716	5,390	(23,268)	8,531	(14,737)	20	(2,947)
6/30/89	473,760	451,752	22,008	16,618	10,569	27,187	40	10,875
6/30/90	538,212	509,243	28,969	6,961	6,050	13,011	60	7,807
6/30/91	588,108	557,038	31,070	2,101	3,268	5,369	80	4,295
						$40,917		$20,030

Market Value of Investments	$588,108
Less: Deferred Appreciation	20,030
Actuarial Value of Investments	$568,078

Table 6

Assets of the Fund as of June 30, 1991 and 1990
on the Actuarial Value Basis
(All Amounts in Thousands of Dollars)

	6/30/91		6/30/90	
Investments		$568,078		$515,369
Net Amounts Due from City and Other Retirement Fund		(107)		(255)
Accounts Receivable:				
Employee Contributions	$ 191		$ 144	
City Contributions	443		338	
Accrued Interest	5,417		4,936	
Other	4,010		1,606	
Total Receivables		10,061		7,024
Total Assets		$578,032		$522,138
Accounts Payable		1,776		2,905
Net Assets Available for Plan Benefits		$576,256		$519,233

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Table 7

Summary Statement of Income and Disbursements for
Plan Years Ending June 30, 1991 and 1990 on the Actuarial Value Basis
(All Amounts in Thousands of Dollars)

	1991		1990	
Contribution Income:				
Employees	$ 8,054		$ 7,417	
City	18,914		21,159	
Total		$ 26,968		$ 28,576
Investment Income:				
Interest	$31,056		$29,619	
Dividends	5,951		5,179	
Net Rental Income	1,355		687	
Write-up(down)*	8,182		13,545	
Less: Professional Fees & Other Expenses	1,816		1,567	
Net Total		$ 44,728		$ 47,463
Benefit Payments				
Account Refunds	$ 133		$ 281	
Health Insurance Premiums	1,858		1,513	
Retirement Benefits	12,682		11,519	
Total		14,673		13,313
Net Increase in Assets		$ 57,023		$ 62,726
Assets, Beginning of Year		519,233		456,507
Assets, End of Year		$576,256		$519,233

* Represents that portion of realized and unrealized appreciation (depreciation) recognized for the year under the asset valuation method.

Table 8

Summary of Investment Results
on the Actuarial Value Basis
(Dollar Amounts in Thousands)

Plan Year	Average Amount of Assets in Fund	Assumed Investment Income Amount	Assumed Investment Income %	Net Dividends, Interest, and Rental Income	Other Income Recognized*	Total Investment Income Amount	Total Investment Income %	Investment Gain (Loss)
1981-82	$ 99,599	$ 7,221	7.25%	$12,463	$(4,491)	$ 7,972	8.00%	$ 751
1982-83	124,556	9,030	7.25	14,563	24,548	39,111	31.40	30,081
1983-84	182,793	14,623	8.00	17,786	(3,057)	14,729	8.06	106
1984-85	215,021	17,202	8.00	21,440	1,724	23,164	10.77	5,962
1985-86	253,903	20,312	8.00	23,779	8,159	31,938	12.58	11,626
1986-87	301,854	24,148	8.00	25,881	10,174	36,055	11.94	11,907
1987-88	353,553	28,284	8.00	26,434	7,228	33,662	9.52	5,378
1988-89	402,790	32,223	8.00	30,117	15,720	45,837	11.38	13,614
1989-90	464,138	37,131	8.00	33,918	13,545	47,463	10.23	10,332
1990-91	525,380	42,030	8.00	36,546	8,182	44,728	8.51	2,698
Total Amount		$232,204		$242,927	$81,732	$324,659		$92,455
Weighted Average Investment Return Over Period						11.10%		

* Includes write-up (down) amounts after June 30, 1983 and all realized and unrealized appreciation (depreciation) before that date.

IV. PARTICIPANT DATA

Detailed information on active, retired, survivor and vested terminated members was provided on computer tape by the Secretary to the Board.

A. Active Employees

The valuation as of July 1, 1989 included 1,660 active employees (996 police, 664 fire). During the 1989-91 period, 24 of those members terminated (3 retained vested rights), 31 retired on service-connected disability, one retired on non-service connected disability, and there were 18 service retirements. There were three active member deaths.

There were 211 new members (including transfers and re-hires), increasing the active membership to 1,794 (1,108 police, 686 fire) as of July 1, 1991. Average salary increased from $46,822 to $52,222, or at the rate of 5.6% per annum. For the continuing members, salaries increased at an annualized rate of 7.4%. Table 9 summarizes the changes in basic data for active employees since 1983. Note that the size of the group and the average age have both increased throughout this period.

Distributions of the July 1, 1991 active participants by age, service and average salary are shown in Tables 10-A, 10-B and 10-C. Table 11 gives a distribution by salary and department. Of the 1,794 active participants, 1,145 (64%) had met the ten-year service requirement for a vested benefit.

B. Vested Terminated Employees

There were 25 former employees retaining vested rights to deferred pensions as of July 1, 1989. During the 1989-91 period, two of these members received lump sum distributions and five retired. Three active members terminated with vested rights. Hence, 21 vested terminated participants remained as of July 1, 1991. The average monthly benefit for the vested terminated employees was $1,261.

C. Retired Participants

There were 440 retired members as of July 1, 1989. During the succeeding two years, 17 retirees died, and 2 spouses of former employees ceased to receive QDRO benefits. There were 58 new pensions awarded (including 3 QDRO's). Hence there were 479 retired members as of July 1, 1991.

A distribution of these awards by type and benefit amount is shown in Table 12. The same awards are distributed by type and age in Table 13. The average benefit was $2,060 monthly, including $1,600 in Basic benefits. The average pensioner age was 60.

D. Survivors

One hundred one beneficiaries of deceased retirees and actives were included in the July 1, 1989 census. Eight of those members died, 4 child beneficiaries attained age 22, and there were 21 new beneficiaries. Hence there were 110 survivors in pay status as of July 1, 1991. These members are distributed by department and monthly pension in Table 14, and by age and department in Table 15. The average survivor benefit was $1,159 per month.

The following summarizes membership data as of July 1, 1991 and 1989.

	7/1/91	7/1/89
Actives		
Number	1,794	1,660
Average Age	39.9	39.7
Average Service	13.3	13.3
Total Annual Salaries*	$93,686,000	$77,724,000
Average Annual Salary*	$ 52,222	$ 46,822
Retirees		
Number	479	440
Average Age	60.3	59.8
Average Monthly Pension**	$2,060	$1,836
Survivors		
Number	110	101
Average Monthly Pension**	$1,159	$995
Vested Terminated		
Number	21	25
Average Monthly pension Payable at Age 55	$1,261	$1,194

* The annualized effects of anticipated salary increases in the coming year are included. For 1991, the increases included 4.9% for police and 5.3% for firefighters. In 1989, police salaries were increased by 5.0% while firefighters' salaries were increased by 4.2%. These adjustments were applied to the reported wages of each member.

** Including permanent cost-of-living benefits paid outside the Plan.

Table 9

Summary of Changes in Basic Data
for Active Employees

As of July 1	Active Employees: Number	Active Employees: % Change (Annualized)	Average on Anniversary Date: Age	Average on Anniversary Date: Service	Average on Anniversary Date: Compensation
1981	1,515	-	35.5*	10.0*	26,444
1983	1,582	+2.2%	37.0	10.5	33,945
1985	1,615	+1.0%	38.0	11.7	38,398
1987	1,652	+1.1%	38.6	12.3	42,440
1989	1,660	+0.2%	39.7	13.3	46,822
1991	1,794	+4.0%	39.9	13.3	52,222

*Estimate

Table 10-A

Census of Active Police Participants as of July 1, 1991
(figures in parentheses are average compensation)

Age	Total	Years of Service: Under 5	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 & Over
Total	1,108 ($52,074)	214 ($40,459)	262 ($51,558)	214 ($53,314)	168 ($56,138)	148 ($57,061)	89 ($60,577)	13 ($65,731)
Under 25 . . .	30 ($36,267)	30 ($36,267)						
25 - 29 . . .	148 ($42,083)	111 ($39,265)	37 ($50,536)					
30 - 34 . . .	201 ($49,749)	50 ($43,542)	117 ($51,642)	34 ($52,364)				
35 - 39 . . .	240 ($52,745)	15 ($44,728)	74 ($51,805)	118 ($53,493)	33 ($55,820)			
40 - 44 . . .	229 ($55,551)	5 ($48,189)	30 ($51,870)	53 ($53,449)	89 ($57,426)	52 ($57,314)		
45 - 49 . . .	167 ($56,718)	2 ($37,837)	4 ($51,633)	9 ($53,752)	40 ($53,583)	74 ($57,341)	38 ($61,036)	
50 - 54 . . .	69 ($59,451)				6 ($55,824)	15 ($55,467)	42 ($60,846)	6 ($63,280)
55 - 59 . . .	23 ($59,821)	1 ($47,111)				7 ($55,627)	9 ($57,388)	6 ($70,481)
60 - 64 . . .								1 ($51,933)

Note: Average compensation amounts include adjustments for increases scheduled during the fiscal year 1991-92 but after the valuation date.

Table 10-B

Census of Active Fire Participants as of July 1, 1991
(figures in parentheses are average compensation)

Age	Total	Years of Service: Under 5	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 & Over
Total	686 ($52,474)	88 ($37,935)	85 ($49,767)	146 ($52,621)	154 ($54,643)	110 ($54,967)	79 ($59,904)	24 ($64,679)
Under 25 . . .	7 ($36,646)	7 ($36,646)						
25 - 29 . . .	50 ($39,706)	40 ($37,670)	9 ($47,909)	1 ($47,305)				
30 - 34 . . .	80 ($46,306)	28 ($38,021)	32 ($49,369)	20 ($53,004)				
35 - 39 . . .	96 ($49,911)	11 ($39,272)	36 ($48,968)	38 ($52,713)	11 ($53,954)			
40 - 44 . . .	136 ($53,191)	2 ($39,180)	7 ($48,932)	36 ($51,307)	85 ($54,703)	6 ($52,715)		
45 - 49 . . .	171 ($54,904)			28 ($52,627)	52 ($55,175)	71 ($54,990)	20 ($57,080)	
50 - 54 . . .	116 ($58,273)		1 ($113,822)	19 ($54,559)	6 ($50,463)	32 ($55,154)	51 ($61,349)	7 ($58,960)
55 - 59 . . .	23 ($61,241)			3 ($51,351)		1 ($56,451)	8 ($57,750)	11 ($66,515)
60 - 64 . . .	5 ($67,720)			1 ($60,819)				4 ($69,445)
65 & Over . .	2 ($65,069)							2 ($65,069)

Note: Average compensation amounts include adjustments for increases scheduled during the fiscal year 1991-92 but after the valuation date.

Table 10-C

Census of Active Participants as of July 1, 1991
(figures in parentheses are average compensation)

Age	Total	Years of Service: Under 5	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 & Over
Total	1,794 ($52,222)	302 ($39,723)	347 ($51,119)	360 ($53,033)	322 ($55,423)	258 ($56,168)	168 ($60,260)	37 ($65,049)
Under 25 . . .	37 ($36,339)	37 ($36,339)						
25 - 29 . . .	198 ($41,483)	151 ($38,843)	46 ($50,022)	1 ($47,305)				
30 - 34 . . .	281 ($48,769)	78 ($41,560)	149 ($51,153)	54 ($52,601)				
35 - 39 . . .	336 ($51,935)	26 ($42,419)	110 ($50,877)	156 ($53,303)	44 ($55,353)			
40 - 44 . . .	365 ($54,671)	7 ($45,615)	37 ($51,314)	89 ($52,583)	174 ($56,095)	58 ($56,839)		
45 - 49 . . .	338 ($55,800)	2 ($37,837)	4 ($51,633)	37 ($52,901)	92 ($54,483)	145 ($56,190)	58 ($59,672)	
50 - 54 . . .	185 ($58,712)		1 ($113,822)	19 ($54,559)	12 ($53,144)	47 ($55,254)	93 ($61,121)	13 ($60,954)
55 - 59 . . .	46 ($60,531)	1 ($47,111)		3 ($51,351)		8 ($56,276)	17 ($57,558)	17 ($67,915)
60 - 64 . . .	6 ($65,089)			1 ($60,819)				5 ($65,943)
65 & Over . .	2 ($65,069)							2 ($65,069)

Note: Average compensation amounts include adjustments for increases scheduled during the fiscal year 1991-92 but after the valuation date.

Table 11

Distribution of Active Participants on July 1, 1991
by Annual Compensation

Annual Compensation	Number of Employees Police	Fire	Total
Under $35,000	-	-	-
$35,000 - $36,999	63	28	91
37,000 - 38,999	64	19	83
39,000 - 40,999	16	35	51
41,000 - 42,999	14	4	18
43,000 - 44,999	10	-	10
45,000 - 49,999	37	164	201
50,000 - 54,999	655	239	894
55,000 - 59,999	14	25	39
60,000 - 64,999	186	145	331
65,000 - 69,999	33	1	34
70,000 - 74,999	2	4	6
75,000 & Over	14	22	36
Total	1,108	686	1,794

Note: "Compensation" is July 1, 1991 rate including adjustments for increases scheduled during the fiscal year 1991-92.

Table 12

Distribution of Pensioners as of July 1, 1991
By Type and Total Monthly Pension

Monthly Benefit Amount	Police			Fire			Total		
	Service	Service Connected Disability	Non-Service Disability	Service	Service Connected Disability	Non-Service Disability	Service	Service Connected Disability	Non-Service Disability
Total	37	184	8	25	215	10	62	399	18
Under $ 600	-	-	-	1	2	-	1	2	-
$ 600 - 799	-	4	-	1	2	1	1	6	1
800 - 999	3	6	2	1	7	3	4	13	5
1,000 - 1,199	1	12	-	1	15	-	2	27	-
1,200 - 1,399	2	21	-	4	14	-	6	35	-
1,400 - 1,599	4	11	-	3	22	3	7	33	3
1,600 - 1,799	-	21	3	2	28	1	2	49	4
1,800 - 1,999	3	21	2	2	24	1	5	45	3
2,000 - 2,199	1	19	-	-	21	-	1	40	-
2,200 - 2,399	2	13	1	-	7	1	2	20	2
2,400 - 2,799	4	19	-	5	40	-	9	59	-
2,800 - 3,199	6	20	-	4	16	-	10	36	-
3,200 - 3,599	8	10	-	-	13	-	8	23	-
3,600 - 3,999	-	2	-	-	3	-	-	5	-
4,000 & Over	3	5	-	1	1	-	4	6	-

Table 13

Distribution of Pensioners as of July 1, 1991
By Type and Age

Monthly Benefit Amount	Police			Fire			Total		
	Service	Service Connected Disability	Non-Service Disability	Service	Service Connected Disability	Non-Service Disability	Service	Service Connected Disability	Non-Service Disability
Total	37	184	8	25	215	10	62	399	18
Under 40	-	7	-	-	1	-	-	8	-
40 - 44	-	10	-	-	-	-	-	10	-
45 - 49	-	22	-	-	14	2	-	36	2
50 - 54	6	31	1	2	25	1	8	56	2
55 - 59	9	36	-	9	53	4	18	89	4
60 - 64	7	33	2	4	52	-	11	85	2
65 - 69	3	27	2	1	37	1	4	64	3
70 - 74	7	12	1	2	15	2	9	27	3
75 - 79	3	5	2	3	14	-	6	19	2
80 - 84	1	1	-	2	4	-	3	5	-
85 & Over	1	-	-	2	-	-	3	-	-

V. ACTUARIAL METHODS AND ASSUMPTIONS

A different actuarial cost method has been utilized for funding the retirement income benefits from the method used for funding the retiree medical and dental benefits.

For retirement income benefits, the entry age normal actuarial cost method was used. Under this method, the total contribution requirement has two components: an annual normal cost and a payment with respect to the unfunded supplemental present value (USPV).

On the entry age normal method, the annual normal cost for each employee is calculated as the level percentage of pay required to fund total expected benefits over that employee's period of covered employment. The total normal cost is the sum of the normal costs for all employees. The supplemental present value is the accumulation of entry age normal costs allocated to past years, with adjustments for changes in plan provisions, differences between actual experience and assumptions, and benefit payments made by the plan. It is also called the actuarial accrued liability. The unfunded supplemental present value is difference between the supplemental present value and the actuarial value of assets. The unfunded supplemental present value is amortized over the 40-year period beginning July 1, 1977 (26 years remaining as of July 1, 1991) in amounts that are level in constant dollars assuming 5% inflation.

For the retiree medical and dental benefits, a ten year level percentage of payroll cost method was used. This method spreads the expected cost of the benefits payable for the ten years after the valuation as a level percentage of payroll over the same period. For this calculation, payroll was assumed to increase by 7% per year. The method does not reflect any medical or dental benefits payable after ten years from the valuation date in its calculation of costs.

The actuarial assumptions are generally classed as economic (e.g., investment return, salary scale, and post-retirement cost-of-living), and demographic (e.g., death, disability, termination, mortality and retirement). Each employee is projected from current status to latest possible retirement by application of these assumptions.

The assumptions used in the valuation as of July 1, 1991 are described below. The same assumptions were used in the prior valuation as of July 1, 1989.

Investment Return and Asset Valuation

The actuarial calculations are based on the assumption that the net effective return on the assets will be 8.00% per year. Assets are carried at adjusted market value; recognition of realized and unrealized appreciation (depreciation) occurring after June 30, 1983 is spread over five years. As of July 1, 1991, changes in market value through June 30, 1987 are fully recognized.

Salary Projection

A salary projection is used in any actuarial valuation to estimate the wage progression of employees in the future. The salary projection used in this valuation is graded, from 7% at age 25, to 6% at age 50, then to a 5.5% increase at ages 60 and over. Regardless of age, increases of 10.00% per year are assumed during the first five years after employment. The scale includes 5.00% for price inflation, .50% for real growth in wages, and 0% to 4.50% for promotion/longevity. The pay of each year is assumed to increase by 5.50% per annum. The weighted average salary increase assumption is 6.8%.

Post-Retirement Benefit Increases

Benefit increases to pensioners are triggered by increases in the Consumer Price Index. It is assumed that pensions will increase by 3% per year, the maximum allowed under the City Code.

Mortality Rates After Retirement

In estimating the amount of the reserve required to pay an employee's retirement benefits for the remainder of his and his spouse's lifetime, it is necessary to make an assumption with respect to expected mortality rates. For this purpose, the 1983 male Group Annuity Mortality Table has been used for service retirees. For beneficiaries, the 1983 female Group Annuity Mortality Table is used.

For disabled pensioners, the California P.E.R.S. 1982-86 experience study disability retirement mortality rates are used. The schedule below shows the annual mortality rates and life expectancies these tables provide.

	Deaths Per 1,000 Lives			Life Expectancy (Years)		
Age	Retiree	Beneficiary	Disabled Retiree	Retiree	Beneficiary	Disabled Retiree
45	N/A	1.12	6.0	N/A	38.7	30.0
50	4.34	1.83	7.7	28.2	34.0	25.9
55	6.81	2.82	11.4	23.9	29.3	22.1
60	10.18	4.71	15.9	19.8	24.8	18.4
65	17.32	7.85	26.5	15.9	20.5	15.0
70	30.59	13.76	41.4	12.4	16.3	12.2

VI. SUMMARY OF PLAN PROVISIONS

The principal features of the 1961 San Jose Police and Fire Department Retirement Plan are as follows:

1. **Normal Service Retirement**:

   Age requirement: 55
   Service requirement: 20 years (no requirement if age 65).

   Pension amount:

   2.50% of Final Compensation times years of service; maximum benefit is 75% of Final Compensation (for 30 years of service).

2. **Unreduced Early Retirement**:

   Age requirement: None
   Service requirement: 30 years

   Pension amount:

   Same as Normal Service Retirement without reduction, or 75% of Final Compensation.

3. **Reduced Early Retirement**:

   Age requirement: 50
   Service requirement: 20 years

   Pension amount:

   Accrued Service Retirement pension reduced for interest from age 55. Reduction factors are based on interest rates periodically adopted by the Board.

4. **Vested Benefits**:

   Age requirement: None
   Service requirement: 10 years

   Pension amount:

   2.50% of Final Compensation times years of service; maximum benefit is 75% of Final Compensation (for 30 years of service). Benefits commence at the later of age 55 and 20 years after employment date.

5. <u>Non-Service Disability Retirement</u>:

Age requirement:	None
Service requirement:	2 years

Pension amount:

32% of Final Compensation for the first 2 years of service, plus 1% for each year thereafter, up to 50% for 20 years of service. For retirement with more than 20 years of service, the pension is equal to 2.50% of Final Compensation times years of service (maximum 30 years).

6. <u>Service-Connected Disability Retirement</u>:

Age requirement:	None
Service requirement:	None

Pension amount:

50% of Final Compensation or 2.50% of Final Compensation times years of service (maximum of 30 years), if greater.

7. <u>Non-Service-Connected Death Benefit</u>:

Age requirement:	None
Service requirement:	2 years

Pension amount:

24% of Final Compensation for the first 2 years of service, plus .75% for each year thereafter, to a maximum of 37.5% of Final Compensation. This amount is payable to the surviving spouse. Benefits for eligible dependent children are as follows:

1 child: 25% of Final Compensation
2 children: 37.5% of Final Compensation
3 or more children: 50% of Final Compensation

Maximum family benefit is 75% of Final Compensation.

If no spouse or children survive the employee, a lump sum equal to the greater of the employee's accumulated contributions or $1,000 is paid.

Non-service connected death benefits are paid for active employee death or death after non-service disability.

EXHIBIT VI (continued)

8. <u>Service-Connected Death Benefit</u>:

Age requirement: None
Service requirement: None

Pension amount:

Annuity of 37.5% of member's Final Compensation payable to surviving spouse. The benefit amount for eligible dependent children is 25% of Final Compensation per child. The maximum family benefit is 75% of Final Compensation.

Service-connected death benefits are paid upon death as an active employee, and upon death after service or service-connected disability retirement.

9. <u>Post-Retirement Death Benefits, Vested Termination</u>:

An annuity of 1.875% of Final Compensation times years of service is payable to the surviving spouse. For surviving children, 1.25% (1.875% for two, or 2.50% for three children) times Final Compensation times years of service is payable. Service is limited to 20 years (37.5% spousal benefit); the family maximum benefit is 75% of Final Compensation.

10. <u>Termination Benefit</u>:

In lieu of any other pension benefit, an employee may elect to receive, upon termination of employment, an amount equal to his employee contributions accumulated with 2% interest per annum

11. <u>Final Compensation</u>:

Average monthly compensation during the highest 12 consecutive months, but not more than 108% of compensation paid in the 12 months preceding the last 12 months of service. Compensation excludes overtime and expense allowances.

12. <u>Service</u>:

Members shall receive credit for each year of full-time employment from date of hire until date of termination, including proportional credit for days.

13. Employee Contribution:

Employees contribute three-elevenths of the Plan's entry age normal cost for retirement income benefits. The City pays the full cost of (or takes the credit for) the unfunded supplemental present value. Employees pay one half of the cost of retiree medical benefits funded by the Plan, and employees pay one-fourth of the cost of retiree dental benefits. Current employee contributions are made on a pre-tax basis.

14. Eligible Beneficiaries:

The spouse to whom member was married at both retirement date and death for post-retirement annuities; spouse at time of active employee death; children under age 18 (age 22 for full-time students).

15. Cost-of-Living Adjustment:

Retiree and survivor benefits are increased or decreased annually by the annual increase or decrease in the Consumer Price Index (maximum adjustment applied: 3%). The excess over 3% is accumulated and applied to future years when CPI change is less than 3%. Such adjustments are included in beneficiary annuities. This increase is paid on the total benefit including the permanent cost-of-living benefits that are paid outside the Plan.

16. Retiree/Survivor Medical and Dental Insurance Benefits:

Eligibility requirement:

Either 15 years of service, or receiving a pension of 37.5% of Final Compensation. The member must be enrolled in a City sponsored health plan at the time of retirement, and must retire directly from active service.

Benefit amount:

The Plan pays same amount for medical coverage that the City pays for the corresponding active member. The premium is determined as a common rate applying to both active employees and retired members. The retiree pays the balance (if any). The cost of dental benefits is paid by the Plan. Benefits for spouses are payable only to a spouse as of retirement or a spouse a participant marries after retirement who has applied for coverage under the medical plan.