

14

**GRS** Gabriel Roeder Smith & Company  
Consultants & Actuaries

**FEDERATED CITY EMPLOYEES' RETIREMENT SYSTEM  
ACTUARIAL VALUATION REPORT  
AS OF JUNE 30, 2009**

March 1, 2010

Board of Administration  
Federated City Employees' Retirement System  
1737 N First Street  
Suite 580  
San Jose, CA 95112-4505

**Re: Federated City Employees' Retirement System Actuarial Valuation as of June 30, 2009**

Dear Members of the Board:

We are pleased to present the report of the actuarial valuation of the Federated City Employees' Retirement System of the City of San Jose ("System") as of June 30, 2009.

This valuation provides information on the funding status of the System. In addition, it includes a determination of the actuarially calculated contribution levels for the fiscal years ending June 30, 2011 and June 30, 2012.

This valuation is based on the provisions of the System in effect as of the valuation date, data on the System membership and information on the asset value of the trust fund as of that date. All member data and asset information were provided by System staff. While certain checks for reasonableness were performed, the data used was unaudited.

The actuarial assumptions and cost method are identical to those used in the prior actuarial valuation of the System.

To the best of our knowledge, this actuarial statement is complete and accurate, and has been prepared in accordance with generally accepted actuarial principles and practice.

Respectfully submitted,

Gabriel, Roeder, Smith & Co.



Leslie Thompson, EA, FSA, FCA, MAAA  
Senior Consultant



Diane L. Hunt, EA, FSA MAAA  
Consultant

## Table of Contents

		<u>Page</u>
<b>Section A</b>	Report Highlights.....	2
<b>Section B</b>	Comments & Recommendations.....	4
<b>Section C</b>	Valuation Results.....	7
<b>Section D</b>	Asset Information.....	15
	Table 1 – Statement of Plan Assets	
	Table 2 – Statement of Changes in Plan Assets	
	Table 3 - Development of Actuarial Value of Assets	
<b>Section E</b>	Funding Progress – Information for GASB No. 25 to 27.....	19
<b>Section F</b>	Summary of Benefit Provisions.....	23
<b>Section G</b>	Membership Data.....	27
	Table 4 – Summary of Data Characteristics	
	Table 5 – Active Members Age and Distribution	
<b>Section H</b>	Actuarial Method and Assumptions.....	30
<b>Section I</b>	Financial Principles and Operational Techniques.....	40
<b>Section J</b>	Definitions of Technical Terms.....	45

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**SECTION A**  
**REPORT HIGHLIGHTS**

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## Report Highlights

The following is a set of key results for the prior valuation and for the current year:

Effective with the June 30, 2009 valuation, assumption changes as a result of the June 30, 2009 Experience Study have been incorporated in the results. The impact of these changes will be discussed in the following Section B, Comments and Recommendations.

In addition, the Retiree Healthcare valuation results are developed separately, as of June 30, 2009, in a report for the City of San Jose Federated Retiree Healthcare Plan.

	June 30, 2007	June 30, 2009	Percent Change
I. Total Membership			
A. Active Members	3,942	4,079	3.48%
B. Pensioners	2,691	2,930	8.88%
C. Inactive	673	719	6.84%
II. Valuation Compensation as of June 30			
A. Total Annual Payroll	\$291,404,606	\$323,020,387	10.85%
B. Average Annual Compensation	\$73,923	\$79,191	7.13%
III. Benefits to Current Pensioners and Beneficiaries			
A. Total Annual Benefits	\$84,723,411	\$101,193,707	19.44%
B. Average Annual Benefit	\$31,484	\$34,537	9.70%
IV. Total System Assets			
A. Actuarial Value (net of excludables)	\$1,711,602,000	\$1,867,377,164	9.10%
1. Retirement Assets	1,622,851,000	1,756,588,065	8.24%
2. Health Assets	88,751,000	110,789,099	24.83%
B. Market Value	\$1,862,998,000	\$1,442,202,000	-22.59%
1. Retirement Assets	\$1,766,397,000	\$1,356,638,000	-23.20%
2. Health Assets	\$96,601,000	\$85,564,000	-11.43%
V. Actuarial Information - Retirement Benefits			
A. Actuarial Accrued Liability	\$1,960,943,000	\$2,486,155,000	26.78%
B. Unfunded Actuarial Accrued Liability	\$338,091,729	\$729,567,166	115.79%
VI. Budget Items - Retirement Benefits			
A. Employer Cost (% of Pay)	18.31%	25.75%	7.44%
B. Employee Cost (% of pay)	4.28%	4.88%	0.60%
C. Total Contribution Rate (% of pay)	<b>22.59%</b>	<b>30.63%</b>	8.04%
VII. Funded Ratio - Retirement Benefits			
A. Based on Actuarial Value of Assets	82.8%	70.7%	-12.10%
B. Based on Market Value of Assets	90.0%	54.6%	-35.40%

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**SECTION B**

**COMMENTS AND RECOMMENDATIONS**

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## Comments & Recommendations

**COMMENT A:** Effective with this valuation, the retiree health care benefits are being valued in a separate report for the San Jose Federated Retiree Health Care Plan. The results in this report do not include any liabilities or contribution calculations for retiree health care benefits.

**COMMENT B:** An experience study was performed for the six-year period ending June 30, 2009 for the San Jose Federated Employees' Retirement Plan. The Board adopted actuarial assumption changes and actuarial methodology changes that are incorporated in these results.

1. **Economic assumption changes:** The investment return assumption was reduced from 8.25%, net of expenses, to 7.75%, net of expenses. The underlying inflation assumption was reduced from 4.0% to 3.67%. The payroll growth assumption was reduced from 4.0% to 3.83% and the ultimate salary increase assumption was reduced from 4.25% to 4.08%.

The impact of these changes was to increase actuarial accrued liability by \$141.5 M and the total contribution requirement by 3.64%.

2. **Demographic assumptions:** A setback of three years for males and one year for females was added to the 94 Group Annuity Mortality Tables for post-retirement mortality. Pre-retirement mortality tables were changed to be the same as the post-retirement mortality tables.

The impact of these changes was to increase actuarial accrued liability by \$87.3 M and the total contribution requirement 1.58%.

3. **Amortization methodology:** The current amortization methodology amortizes the unfunded actuarial accrued liability over 30 years from the valuation date on an open basis. The Board adopted a 30/20 layered amortization methodology effective with this valuation. The initial unfunded actuarial accrued liability as of June 30, 2009 will be amortized over a closed amortization period of 30 years. Each year subsequent to this valuation, any gains/(losses) will be amortized over a closed 20-year period in a separate amortization schedule. The result is that each year another layer of amortization components is calculated. These layers are summed to obtain the total amortization component. The total amortization component is then added to the Normal Cost to get the total contribution requirement.

There is no impact of this change on this year's contribution requirement because the amortization time frame of 30 years is the same for this year's unfunded actuarial accrued liability of \$729.6 M under the prior and current method for June 30, 2009.

**COMMENT C:** The contribution rate for the Retirement Benefits increased from 22.59% to 30.63%. Based on the provisions of the Ordinance this total rate is allocated as follows:

- 1) 25.75% to the City
- 2) 4.88% to the employees

**COMMENT D:** The Retirement Plan funded ratio decreased from 82.80% to 70.70% on an actuarial value of assets basis. The retirement benefit funded ratio decreased from 90.0% to 54.60% on market value of assets basis.

**COMMENT E:** The principal reasons for the changes in contribution rates are as follows. Please refer to page 8 for additional details.

- 1) There was a \$ 86.5 M loss on the actuarial value of assets. For this purpose, gains and losses are calculated relative to the 8.25% investment assumption that was in effect until June 30, 2009. The loss on assets increased the contribution requirement by 1.63%.
- 2) The change in economic assumptions, including investment return assumption, increased the contribution requirement by 3.64%. The change in the mortality assumption increased the contribution requirement by 1.58%.
- 3) There was a slight loss from retirements, terminations and withdrawals. The plan experienced a slight gain on salary increases.

**COMMENT F:** Due to actuarial smoothing, the market value of assets is not directly used in calculating computed rates. Deferred losses total \$445.0 M and will enter the actuarial value of assets according to the 5 year smoothing schedule. As shown on Table 3 in Section D, each year has a gain/(loss) that is being smoothed into the actuarial value of assets. Unexpected market fluctuations are spread over a 5-year time frame.

**COMMENT G:** The UAL increased from \$338.1 M to \$729.6 M , or by 115.79%, for the retirement benefits over the prior year. If the UAL continues to have large increases that are not offset by assets in trust, and if the actuarially required contributions are not made, then the plan will require either an increase in assets or a reduction in liabilities to bring it back into actuarial balance (and to maintain long term solvency).

**COMMENT H:** The SRBR reserve balance as of June 30, 2009 was \$19,786,000. This is excluded from valuation assets.

**COMMENT I:** The total number of plan participants, active and inactive, has increased from 7,306 total in 2007 to 7,728 in 2009, an increase of 5.8%. Total annual payroll increased from \$291.4 M in 2007 to \$323.0 M in 2009, an increase of 10.9%. Average pay increased 7.13% for the two year period.

**COMMENT J:** The Board has adopted a funding policy to phase-in the contribution rate increase of the 7.75% economic assumption changes over 5 years. The phase-in contribution percentages will be shown in a separate document. The results shown here are prior to phase-in adjustments.



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**SECTION C**  
**VALUATION RESULTS**

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## Valuation Results Total Actuarial Contribution

Note: Effective this year, the Health Insurance Rate and Dental Insurance Rate are developed separately in a report for the City of San Jose Federated Retiree Health Care Plan.

The San Jose Municipal Code provides that the required annual contribution is allocated between the City and the members as follows:

- The **Current Service Rate (Normal Rate)** is the cost for funding liabilities for service after July 1, 1975. This cost is shared 8/3 between the City and the Members.
- The **Current Service Deficiency Rate** is the amortization of the funding deficiency for service after July 1, 1975 which is not covered by the Current Service Rate. The City bears this entire cost.
- The **Prior Service Rate** is the difference in costs between the current plan and the predecessor plan (the "1964 Plan") for service before July 1, 1975. The cost is shared 58/42 between the City and the Members. Additionally, the City's Prior Service Rate reflects the entire cost for any gains or losses associated with liabilities for service prior to July 1, 1975 (**Prior Service Deficiency Rate**).
- The **Golden Handshake Rate** is the cost for funding the additional benefits granted to certain retiring employees. The City bears this entire cost.
- The **Reciprocity Rate** represents prefunding of the liability associated with the adoption of reciprocal benefits with other public pension plans. The City bears this entire cost.

The contribution rates developed in this valuation are summarized as follows:

<b>Recommended Contributions for Fiscal Years 2011 and 2012</b>			
	Percentage of Salary		
	City	Member	Total
Contribution for Retirement, Disability, and Death Benefits	25.75%	4.88%	30.63%

## Valuation Results

### Explanation of Contribution Change Since the Last Valuation

The effect of experience on the System's total contribution rate is as follows:

**Note that these results do not include the phase-in.**

June 30, 2007 Pension Contribution Rate	<b>22.59%</b>
<i>Experience:</i>	
Increase due to Investment Loss	1.63 %
Increase due to More Retirements than Anticipated	0.06 %
Increase due to More Terminations than Anticipated	0.10 %
Decrease due to Salary Gain	(0.03)%
Increase due to Post-Retirement Mortality Loss	0.19 %
<i>Methods:</i>	
Decrease due to Open Amortization Period	(0.48)%
Increase due to Contribution Timing Lag	0.41 %
<i>Assumption Changes:</i>	
Increase due to Demographic Assumption Change	1.58 %
Increase due to Economic Assumption Change	3.64 %
Other Miscellaneous Factors	<u>0.94 %</u>
<b>Total Change in Contribution Rate</b>	<b>8.04 %</b>
 <b>June 30, 2009 Pension Contribution Rate</b>	 <b>30.63 %</b>

Computed Contribution Rates - Historic Comparison

Valuation Date	CITY			MEMBER <sup>(2)</sup>	TOTAL	Valuation Payroll (thousands)
	Retirement	Health <sup>(1)</sup>	Total			
6/30/1991	n/a	n/a	n/a	n/a	22.47%	n/a
6/30/1993	n/a	n/a	n/a	n/a	26.13%	\$145,781
6/30/1995	n/a	n/a	n/a	n/a	26.65%	153,918
6/30/1997	n/a	n/a	n/a	n/a	21.83%	176,284
6/30/1999	15.33%	0.76%	16.09%	4.76%	20.85%	193,650
6/30/2001	13.82%	1.38%	15.20%	5.08%	20.28%	252,696
6/30/2003	14.96%	2.16%	17.12%	6.06%	23.18%	292,961
6/30/2005	18.16%	3.82%	21.98%	7.58%	29.56%	286,446
6/30/2007	18.31%	5.25%	23.56%	8.93%	32.49%	291,405
6/30/2009	25.75%	-	25.75%	4.88%	30.63%	323,020

<sup>(1)</sup>Effective 6/30/2009, health contribution rates will be calculated in a separate Retiree Health report.

<sup>(2)</sup>Effective 6/30/2009, member contributions shown on this chart are for retirement benefits only. Member health contribution rates will be calculated in a separate Retiree Health report.



**Valuation Results**

**Recommended Contributions for Retirement Benefits  
Fiscal Years 2011 and 2012**

	City	Members	Total
<b>For Basic Retirement Benefits</b>			
Current Service Normal Rate	9.82%	3.68%	13.50%
Current Service Deficiency Rate	8.00%	N/A	8.00%
Prior Service Normal Rate	0.01%	0.01%	0.02%
Prior Service Deficiency Rate	0.90%	N/A	0.90%
Retirement Golden Handshake Rate	0.26%	N/A	0.26%
Reciprocity	0.50%	N/A	0.50%
<b>Total Contributions for Basic Retirement Benefits</b>	<b>19.49%</b>	<b>3.69%</b>	<b>23.18%</b>
<b>For Cost-of-Living (COL) Retirement Benefits</b>			
Current Service Normal Rate	3.15%	1.19%	4.34%
Current Service Deficiency Rate	2.85%	N/A	2.85%
Prior Service Normal Rate	0.01%	0.00%	0.01%
Prior Service Deficiency Rate	0.00%	N/A	0.00%
Retirement Golden Handshake Rate	0.08%	N/A	0.08%
Reciprocity	0.16%	N/A	0.16%
<b>Total Contributions for COL Retirement Benefits</b>	<b>6.25%</b>	<b>1.19%</b>	<b>7.44%</b>
<b>Total Contributions for Retirement Benefits</b>	<b>25.75%</b>	<b>4.88%</b>	<b>30.63%</b>

\*Numbers may not add due to rounding.

Valuation Results

Summary of Actuarial Values

(\$ in 000's)

	Present Value of Projected Benefits	Entry Age Actuarial Values	
		Actuarial Accrued Liability (AAL)	Normal Cost % of Pay
<b>(1) Active Members</b>			
a. Retirement	\$ 1,308,642	\$ 986,710	13.63%
b. Termination	82,994	35,495	1.82%
b. Death	37,193	21,590	0.67%
c. Disability	71,629	37,838	1.44%
d. Refunds	26,646	11,408	0.60%
<b>Total</b>	<b>\$ 1,527,104</b>	<b>\$ 1,093,041</b>	<b>18.16%</b>
<b>(2) Benefit Recipients</b>	\$ 1,300,766	\$ 1,300,766	0.00%
<b>(3) Other Inactives</b>	92,348	92,348	0.00%
<b>(4) Total Actuarial Values of Benefits</b>	\$ 2,920,218	\$ 2,486,155	18.16%
<b>(5) Actuarial Value of Assets</b>		\$ 1,756,588	
<b>(6) Unfunded Actuarial Accrued Liability: (4 - 5)</b>		\$ 729,567	
<b>(7) Funding Ratio</b>		70.65%	

Valuation Results

**Actuarial Balance Sheet - Retirement Benefits**  
**As of June 30, 2009**  
 (\$ in 000's)

**ASSETS AND PRESENT VALUE OF EXPECTED FUTURE RESOURCES**

	<u>Total</u>
(1) Actuarial Value of Assets	\$ 1,756,588
(2) Present Value of Future Expected City Contributions	
a. Normal Rate	335,478
b. Deficiency Rate	709,785
c. Golden Handshake	<u>19,782</u>
d. Unfunded Accrued Liability: (b) + (c)	<u>729,567</u>
e. Total	1,065,045
(3) Present Value of Future Expected Member Contributions	98,585
(4) <b>Total Present and Expected Future Resources</b>	<b>\$ 2,920,218</b>

**PRESENT VALUE OF EXPECTED FUTURE BENEFIT PAYMENTS AND RESERVE**

	<u>Total</u>
(1) To Retirees and Beneficiaries	\$ 1,300,766
(2) To Vested Terminated and Inactive Members	92,348
(3) To Active Members	
a. Allocated to service rendered prior to valuation date	1,093,041
b. Allocated to service expected to be rendered in the future	434,063
c. Total	<u>1,527,104</u>
(4) <b>Total Present Value of Expected Future Benefit Payments</b>	<b>\$ 2,920,218</b>

**Unfunded Actuarial Accrued Liability for Retirement Benefits Only  
June 30, 2009**

**Derivation of Experience Gain (Loss)**

Analysis of actuarial gains and losses in a pension benefit program is a review of the effects on actuarial results of actual experience that differs from assumed experience. If such a difference increases assets or reduces liabilities, there is an actuarial gain. The reverse is an actuarial loss.

(1) Unfunded Actuarial Accrued Liability (UAAL) as of June 30, 2007		\$338,091,729
(2) Expected Change in UAAL during 2008 - 2009		
a. Normal Cost for 2008 - 2009	\$97,939,344	
b. Contributions during 2008 - 2009	(139,192,000)	
c. Interest adjustments on 1, 2a, & 2b @ 8.25%	54,682,928	
d. Adjustment for timing lag of contributions	588,206	
e. Expected change in UAAL		14,018,478
(3) Increase in UAAL due to Assumption Changes		228,787,364
a. Due to Demographic Assumption change		87,268,935
b. Due to Economic Assumption change		141,518,429
(4) Expected UAAL as of June 30, 2009		580,897,571
[(1) + (2) + (3)]		
(5) Actual UAAL as of June 30, 2009		729,567,166
(6) Total Gain / (Loss) - based on deviating experience from prior assumptions		(148,669,595)
a. Approximate portion of gain/(loss) due to investments		(86,478,000)
b. Approximate portion of gain/(loss) due to liabilities		(62,191,595)
(7) Total Gain/ (Loss) as % of 6/30/07 liabilities		(7.6)%
a. Gain/(loss) due to investments as % of 6/30/07 liabilities		(4.4)%
b. Gain/(loss) due to liabilities as % of 6/30/07 liabilities		(3.2)%



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**SECTION D**  
**ASSET INFORMATION**

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## Asset Information

Statement of Plan Assets  
June 30, 2009  
(\$ in 000's)

	<u>Pension Benefits</u>	<u>Post-Employment Healthcare</u>	<u>Total</u>
<b>ASSETS</b>			
<b>Receivables</b>			
Employee Contribution	634	691	1,325
Employer Contribution	5,760	1,652	7,412
Brokers and Others	27,498	1,736	29,234
Accrued Investment Income	6,919	436	7,355
	<u>40,811</u>	<u>4,515</u>	<u>45,326</u>
<b>Investments</b>			
Short Term Funds	41,642	2,562	44,204
Short Term Currency Investments	(108)	(6)	(114)
Government Debt Securities	205,401	12,639	218,040
Corporate Debt Securities	302,594	18,619	321,213
Equities	725,720	44,656	770,376
Real Estate	82,985	5,249	88,234
Securities Lending Pool	19,909	1,255	21,164
	<u>1,378,143</u>	<u>84,974</u>	<u>1,463,117</u>
<b>Total Assets</b>	<b>\$1,418,954</b>	<b>\$89,489</b>	<b>\$1,508,443</b>
<b>Liabilities</b>			
Payable to Brokers	39,192	2,471	41,663
Securities Lending Collateral Due	21,770	1,373	23,143
Other Liabilities	1,354	81	1,435
<b>Total Liabilities</b>	<b>\$62,316</b>	<b>\$3,925</b>	<b>\$66,241</b>
<b>Net Assets Available For Benefits</b>	<b><u>\$1,356,638</u></b>	<b><u>\$85,564</u></b>	<b><u>\$1,442,202</u></b>

## Asset Information

**Statement of Changes in Plan Assets  
For the Fiscal Year Ended June 30, 2009**

(\$ in 000's)

	<u>Pension Benefits</u>	<u>Post-Employment Healthcare</u>	<u>Total</u>
<b>ADDITIONS</b>			
<b>Contributions</b>			
Employee Contribution	13,848	15,076	28,924
Employer Contribution	57,020	16,368	73,388
	<u>70,868</u>	<u>31,444</u>	<u>102,312</u>
<b>Investment Income</b>			
Net Appreciation	(330,179)	(20,705)	(350,884)
Dividends and Interest	38,011	2,386	40,397
Net Rental Income	4,128	259	4,387
Investment Expense	(6,803)	(425)	(7,228)
Net Securities Lending Income	(930)	(58)	(988)
	<u>(295,773)</u>	<u>(18,543)</u>	<u>(314,316)</u>
<b>Total Additions</b>	<b>(224,905)</b>	<b>12,901</b>	<b>(212,004)</b>
<b>DEDUCTIONS</b>			
Retirement Benefits	89,767	-	89,767
Health Insurance Premiums	-	21,725	21,725
Death Benefits	6,923	-	6,923
Refunds	1,395	-	1,395
Administrative Expenses	2,108	132	2,240
	<u>100,193</u>	<u>21,857</u>	<u>122,050</u>
<b>Total Deductions</b>	<b>100,193</b>	<b>21,857</b>	<b>122,050</b>
<b>NET ASSETS AVAILABLE FOR BENEFITS</b>			
Beginning of Year	1,681,736	94,520	1,776,256
End of Year	<u>1,356,638</u>	<u>85,564</u>	<u>1,442,202</u>

Asset Information

Development of Actuarial Value of Assets  
As of June 30, 2009  
(\$ in 000's)

<b>(1) Market Value of Assets</b>		<b>1,442,202</b>
<b>(2) Deferred Gains / (Losses)</b>	<u>Total</u>	<u>Deferred</u>
June 30, 2009 Loss (80% deferred)	(460,059)	(368,047)
June 30, 2008 Loss (60% deferred)	(216,586)	(129,952)
June 30, 2007 Gain (40% deferred)	124,325	49,730
June 30, 2006 Gain (20% deferred)	<u>16,539</u>	<u>3,308</u>
Total		(444,961)
<b>(3) Actuarial Value of Assets (AVA) @ 6-30-2009 (1) - (2)</b> (including excludable assets)		<u>1,887,163</u>
a. SRBR Reserve		19,786
b. Contingency Reserve		-
c. AVA @ 6-30-2009 (net of excludable assets)		<u>1,867,377</u>
<b>(4) Allocation of Actuarial Value of Assets ("AVA")</b>		
<b>a. Post-employment Health Care Fund</b>		
1. Post-Employment Health Care Fund Market Value of Assets		85,564
2. Total Market Value of Assets		1,442,202
3. AVA Allocated to Post-Employment Health Care Fund [4(a)(1)/4(a)(2)] x 3(c)		110,789
<b>b. Retirement Benefits</b>		
1. Pension Benefits Market Value of Assets		1,356,638
2. Total Market Value of Assets		1,442,202
3. AVA Allocated to Pension Benefits [4(b)(1)/4(b)(2)] x 3(c)		1,756,588



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**SECTION E**

**FUNDING PROGRESS-INFORMATION FOR  
GASB NO. 25 & 27**

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## Funding Progress Indicators

### June 30, 2009

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

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

(1) The ratio of 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. The ratio is expected to increase in the absence of benefit improvements or strengthening of actuarial assumptions.

(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.

## Funding Progress

### Schedule of Funding Status for Retirement Benefits (\$ in 000's)

End of Year	Actuarial Value of Assets (a)	AAL (b)	UAAL (b-a)	Funding Ratio (a/b)	Payroll (c)	UAAL as % of Payroll ((b-a)/c)
1993	\$ 489,865	\$ 583,119	\$ 93,254	84.0%	\$ 145,781	64.0%
1995	566,102	658,175	92,073	86.0%	153,918	59.8%
1997	678,954	735,772	56,818	92.3%	176,284	32.2%
1999	804,860	862,226	57,366	93.4%	193,650	29.6%
2001	1,060,144	1,072,333	12,189	98.9%	252,696	4.8%
2003	1,280,719	1,311,691	30,972	97.6%	292,961	10.6%
2005	1,384,454	1,711,370	326,916	80.9%	286,446	114.1%
2007	1,622,851	1,960,943	338,092	82.8%	291,405	116.0%
2009	1,756,588	2,486,155	729,567	70.7%	323,020	225.9%

## Funding Progress

### Schedule of Employer Contributions Retirement Benefits Only

<b>Fiscal Year</b>	<b>Annual Required Contribution</b>	<b>Percentage Contributed</b>
1999/2000	15.37%	100.00%
2000/2001	15.33%	100.00%
2001/2002	15.33%	100.00%
2002/2003	13.82%	100.00%
2003/2004	13.82%	100.00%
2004/2005	14.96%	100.00%
2005/2006	14.96%	100.00%
2006/2007	18.16%	100.00%
2007/2008	18.16%	100.00%
2008/2009	18.31%	100.00%
2009/2010	18.31%	N/A



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**SECTION F**  
**SUMMARY OF BENEFIT PROVISIONS**

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## Summary of Retirement Benefit Provisions

This section summarizes the major benefit provisions as included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of benefit provisions.

1. **Eligibility:** Full-time employees are eligible on their first day of City employment.
  
2. **Final Compensation:** Highest 12-month average salary, if separation takes place on or after July 1, 2001.  
Highest consecutive 36-month average salary, if separation takes place before July 1, 2001.
  
3. **Service Retirement:**
  - A) **Eligibility:** Age 55 with 5 years of service, or any age with 30 years of service.
  - B) **Benefit:** 2.5% of Final Compensation for each year of service. Maximum benefit is 75% of Final Compensation.
  - C) **Form of Payment:** Monthly benefit payable for life.
  
4. **Disability Retirement:**
  - A) **Eligibility:** Physically or mentally incapacitated so unable to perform duties of position. If disability is not service connected, then the member must have at least five years of City service.
  - B) **Benefit:** *Service-connected benefit:* 2.5% of Final Compensation per year of service. The maximum benefit is 75% and the minimum benefit is 40% of Final Compensation. Workers' Compensation benefits are generally offset from the service-connected benefits under this system.  
  
*For those members who were hired prior to September 1, 1998, the non-service connected benefit is the amount of the service-connected benefit reduced by .5% for every year under age 55.*  
  
*For those members who are hired on or after September 1, 1998, the non-service connected benefit is as follows:*  
  
20% of Final Compensation for 6 years of service;  
Plus 2% for each years of service in excess of 6, but less than 16;  
Plus 2.5% for each year of service in excess of 16.
  - C) **Form of Payment:** Monthly benefit payable, while incapacitated or if over age 55, for life.

**5. Deferred Service Retirement:**

- A) **Eligibility:** Five years of membership prior to termination of City service. Member must leave contributions on deposit until retirement.
- B) **Benefit:** Same as Service Retirement, payable anytime after age 55.
- C) **Form of Payment:** Same as Service Retirement.

**6. Pre-Retirement Death Benefits:**

- A) **Non-Service Connected with less than five years of service, or No Family Members Eligible for Allowance:**

Member's beneficiary or estate receives (i), and (ii) where:

(i) = Accumulated contributions with interest.

(ii) = Lump sum benefit of one month's salary for each year of service, up to six years.

- B) **Service-Connected, or Non-Service Connected with five years of service:**

Member's eligible survivor receives 2.5% of Final Compensation per years of service. The maximum benefit is 75% and the minimum benefit, if still an active employee at time of death is 40% of Final Compensation, payable until the spouse or registered domestic partner marries or establishes a domestic partnership. If the Member was age 55 with 20 years of service at death, the benefit is payable for the lifetime of the Member's spouse or registered domestic partner.

**7. Post-Retirement Death Benefits:**

Member's eligible survivor or domestic partner receives (i) and (ii),

(i) = 50% continuance to surviving eligible spouse or domestic partner; if there is no surviving spouse or domestic partner, certain benefits are paid to the children.

(ii) = \$500 death benefit allowance at death of retiree.

**8. Post-retirement Cost-of-Living Benefits:**

A) Prior to April 1, 2006: Each April 1, the benefits are increased by the percentage increase in CPI (to a maximum of 3%). Increases in CPI above 3% are "banked" to apply in years when CPI increase is less than 3%.

B) April 1, 2006 and after: Each April 1 beginning with April 1, 2006, the benefits are increased by a flat 3% per annum, without banking.

The first cost-of-living adjustment is on the first day of the month following the one-year anniversary of retirement. The next adjustment will be prorated for the number of months remaining until the following April.

**9. Employee Contributions:**

The Members' contribution rates are recalculated on an actuarial basis at each actuarial study to fund 3/11 of benefits. Contributions are credited with 3% interest annually (the interest crediting provision was changed from 7.25% to 3% effective July 1, 2001).

**Note: If any of these provisions are incorrect, please inform the actuary.**

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**SECTION G**  
**MEMBERSHIP DATA**

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## Membership Data

### Summary of Data Characteristics

	June 30, 2007	June 30, 2009	Percentage Change
<b>Active Members *</b>			
Number	3,942	4,079	3.5%
Average Age	45.5	45.5	0.0%
Average Years of Service	11.6	11.6	0.0%
Total Annual Compensation	291,404,606	323,020,387	10.8%
Average Annual Compensation	73,923	79,191	7.1%
<b>Retirees &amp; Disabled Members</b>			
Number	2,313	2,518	8.9%
Average Age	68.1	68.3	0.3%
Total Annual Allowance	78,613,023	93,987,905	19.6%
Average Annual Benefit	33,987	37,326	9.8%
<b>Beneficiaries</b>			
Number	378	412	9.0%
Average Age	72.2	72.6	0.6%
Total Annual Allowance	6,110,388	7,205,802	17.9%
Average Annual Benefit	16,165	17,490	8.2%
<b>Benefit Recipients - Total</b>			
Number	2,691	2,930	8.9%
Average Age	68.7	68.9	0.3%
Total Annual Allowance	84,723,411	101,193,707	19.4%
Average Annual Benefit	31,484	34,537	9.7%
<b>Inactive Members *</b>			
Number	673	719	6.8%
Average Age	44.3	45.3	2.3%
Total Annual Allowance	8,427,812	9,498,067	12.7%
Average Annual Benefit	12,523	13,210	5.5%

\* Leave of Absence included as included as Inactive in 2007 and 2009

Membership Data

Active Members Age and Service Distribution  
as of June 30, 2009

Age	Years of Service								Totals	
	Under 1	1-4	5-9	10-14	15-19	20-24	25-29	30 & Over		
Under 20	-	-	-	-	-	-	-	-	-	\$0
20-24	23 \$51,134	31 \$47,846	-	-	-	-	-	-	-	54 \$49,246
25-29	39 \$62,715	191 \$60,329	36 \$63,009	-	-	-	-	-	-	266 61,042
30-34	27 \$60,068	191 \$66,039	149 \$74,156	28 \$77,520	1 70,200	-	-	-	-	396 69,508
35-39	9 \$63,621	135 \$72,310	197 \$76,632	139 \$84,103	22 \$78,621	3 \$73,490	-	-	-	505 77,369
40-44	13 \$76,209	108 \$70,000	162 \$78,800	159 \$79,530	91 \$86,610	45 \$78,715	2 \$74,641	-	-	580 78,508
45-49	14 \$73,549	102 \$77,350	130 \$82,388	139 \$85,263	152 \$91,269	151 \$85,110	37 \$81,718	-	-	725 84,454
50-54	11 \$70,774	87 \$78,774	103 \$78,524	109 \$82,334	134 \$88,747	137 \$89,466	104 \$89,070	6 \$85,686	-	691 84,834
55-59	4 \$117,126	53 \$83,423	100 \$84,446	94 \$83,791	93 \$81,079	97 \$93,987	42 \$90,384	13 \$83,442	-	496 86,187
60-64	2 \$44,970	28 \$72,042	53 \$75,022	67 \$78,553	58 \$87,935	41 \$86,734	20 \$77,888	6 \$87,691	-	275 80,315
65&Over	1 \$105,830	5 \$71,103	20 \$99,402	31 \$75,601	14 \$72,335	17 \$78,445	3 \$56,042	-	-	91 80,301
<b>Totals</b>	143 \$64,892	931 \$69,257	950 \$78,302	766 \$82,004	565 \$86,902	491 \$87,327	208 \$86,337	25 \$85,000	-	4,079 \$79,191

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SECTION H  
ACTUARIAL METHODS AND ASSUMPTIONS

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## Actuarial Methods

**Actuarial Cost Method** – 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 cost for each individual active member, payable from the date of employment to the date of retirement, is 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.

Actuarial gain/(losses), as they occur, reduce (increase) the Unfunded Actuarial Accrued Liability.

The Actuarial Accrued Liability (AAL) under this method is the theoretical asset balance such normal costs would have accumulated to date based on current assumptions. To the extent that the assets of the fund are insufficient to cover the AAL, an Unfunded Actuarial Accrued Liability (UAAL) develops.

The actuarially calculated contribution for a year is the NC for that year plus an amount to amortize the UAAL as a level percentage of pay over the period adopted by the Board as described below.

**Financing of Unfunded Actuarial Accrued Liability.** Prior to June 30, 2009, the Unfunded Actuarial Accrued Liability was amortized by level (principal and interest combined) percent of payroll contributions over a 30 year open period.

Subsequent to June 30, 2009, the Unfunded Actuarial Accrued Liability as of June 30, 2009 is amortized over a 30 year closed period. Gains/(losses) in future years will be amortized over a 20 year closed period, with an amortization schedule set up for each gain or loss in each year separately.

**Payroll Increase Assumption.** Prior to June 30, 2009, active member payroll in aggregate was assumed to increase 4.0% a year for the purpose of determining the level percent contributions. Subsequent to June 30, 2009, the payroll assumption was changed to a yearly increase of 3.83%.

**Asset Valuation Method.** The Actuarial Value of Assets recognizes 20% of total return in excess of (or less than) the investment return assumption for each of the last five years. This method has the effect of smoothing volatility in investment returns.

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## Actuarial Assumptions Used for the June 30, 2009 Valuation

Note that the actuarial assumptions in this report reflect assumption changes adopted as a result of the June 30, 2009 Experience Analysis. 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, retirees, 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.

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 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).

## Actuarial Assumptions Used for the June 30, 2009 Valuation

The Investment Return Rate assumed in the actuarial valuation calculations was changed effective July 1, 2009 from 8.25% a year, net of investment and administrative expenses, compounded annually to 7.75% a year, net of investment and administrative expenses, compounded annually. This assumption is used to equate the value of payments due at different points in time. The rate is comprised of two elements:

	<u>Current</u>	<u>Prior</u>
Inflation	3.67%	4.00%
Real Rate of Return	<u>4.08%</u>	<u>4.25%</u>
Total	7.75%	8.25%

The Inflation Rate assumed in the actuarial valuation was changed effective July 1, 2009 from 4.00% per year compounded annually to 3.67% per year compounded annually. It represents the difference between the investment return rate and the assumed real rate of return. Inflation actually experienced, as measured by the Consumer Price Index for urban wage earners, has been as follows:

Consumer Price Index  
Urban Wage Earner and Clerical Workers Before 1978  
All Urban Consumers After 1977

10 Year Moving Averages

June 30, 1969	0.0%
June 30, 1979	7.1%
June 30, 1989	5.6%
June 30, 1999	3.0%
June 30, 2009	2.7%
<b>50-Year Average</b>	<b>4.1%</b>

Interest credited to member contributions is 3.00%, compounded annually.

Salary Increase Rates for individual active members are used in projecting future benefits payable from the system. Rates do not vary by age, but do reflect an added merit component, for those with 0-4 years of service at the valuation date. Part of the assumption for each age is for merit and/or seniority increase and part recognizes wage inflation.



The salary increase assumption was changed effective July 1, 2009 for the base annual rate of salary increase while the merit/longevity component remained the same. The current and prior rates are shown on the following table.

	<i>Base Annual Rate of Salary Increase</i>		<i>Additional merit component</i>	
	<u>Current</u>	<u>Prior</u>	<u>Years of Service at Valuation Date</u>	<u>Merit/ Longevity</u>
Inflation	3.67%	4.00%	0	5.50%
Merit and Longevity	<u>0.33%</u>	<u>0.25%</u>	1	3.50%
Total	4.08%	4.25%	2	2.00%
			3	1.50%
			4	0.75%

## Actuarial Assumptions Used for the June 30, 2009 Valuation

Rates of separation from active membership are shown below (rates do not apply to members eligible to retire and do not include separation on account of death). This assumption measures the probabilities of members remaining in employment.

### % of Active Members Separating Within Next Year

Sample Ages	<u>Disability</u> <sup>(1)</sup>	<u>Withdrawal</u>	<u>Vested</u> <sup>(2)</sup> <u>Termination</u>
20	.04%	11.00%	---%
25	.06	7.00	3.00
30	.07	5.00	3.00
35	.09	2.50	2.75
40	.15	1.50	2.00
45	.25	1.25	2.00
50	.40	1.25	1.50
55	.50	1.00	0.00
60	1.00	1.00	0.00
65	2.00	0.00	0.00
70	0.00	0.00	0.00

<sup>(1)</sup> 50% of the disabilities are assumed to be duty-related and 50% are assumed to be non-duty related.

<sup>(2)</sup> 30% of terminating employees who leave their contributions in the Plan, with 5+ years of service, are assumed to subsequently work for a reciprocal employer and receive 4.0% pay increases per year.

For inactive members, the assumed age at retirement is age 58.

If an inactive member is not vested, the liability valued is their employee contributions with interest.

### Actuarial Assumptions Used for the June 30, 2009 Valuation

The post-retirement mortality table used for healthy retirees and beneficiaries was the 1994 Group Annuity Mortality Table (sex distinct) for valuations prior to June 30, 2009. Effective July 1, 2009, the mortality table is the 1994 Group Annuity Mortality Table setback three years for males and one year 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. Values are shown below.

#### Future Life Expectancy (Years) (Retired)

<u>Sample Ages</u>	Current		Prior	
	<u>Men</u>	<u>Women</u>	<u>Men</u>	<u>Women</u>
45	38.2	40.6	35.4	39.7
50	33.5	35.8	30.7	34.9
55	28.9	31.1	26.2	30.2
60	24.4	26.5	21.8	25.6
65	20.2	22.1	17.8	21.3
70	16.4	18.1	14.3	17.3
75	13.0	14.3	11.1	13.6
80	10.0	10.9	8.4	10.3

#### % of Benefit Recipients Dying Each Year (Retired)

<u>Sample Ages</u>	Current		Prior	
	<u>Men</u>	<u>Women</u>	<u>Men</u>	<u>Women</u>
45	0.13%	0.09%	0.16%	0.10%
50	0.19	0.13	0.26	0.14
55	0.32	0.21	0.44	0.23
60	0.56	0.39	0.80	0.44
65	1.01	0.76	1.45	0.86
70	1.80	1.27	2.37	1.37
75	2.85	2.04	3.72	2.27
80	4.52	3.54	6.20	3.94

The post-retirement mortality table used for disabled retirees was the 1981 Disability Mortality Table. Values are shown below.

<u>Sample Ages</u>	<b>Future Life Expectancy (Years)</b>		<b>% of Benefit Recipients</b>
	Retired		<b>Dying Each Year</b>
	<u>Disabled</u>		<u>Disabled</u>
45	23.6		2.08%
50	21.1		2.44
55	18.7		2.84
60	16.4		3.30
65	14.1		3.79
70	11.7		4.37
75	9.2		5.53
80	7.0		8.74

The active member mortality assumption measures the probability of mortality before retirement. The rates include probability of ordinary death, service death, and death while eligible for retirement or disability. The mortality rates used for active mortality were revised effective July 1, 2009 to use the 1994 Group Annuity Mortality table setback three years for males and one year for females.

<u>Sample Ages</u>	<b>% of Active Members Dying Each Year</b>			
	<b>(Active)</b>		Prior	
	Current			
	<u>Men</u>	<u>Women</u>	<u>Men</u>	<u>Women</u>
45	0.13%	0.09%	0.09%	0.08%
50	0.19	0.13	0.16	0.13
55	0.32	0.21	0.26	0.20
60	0.56	0.39	0.38	0.30
65	1.01	0.76	0.53	0.44
70	1.80	1.27	2.37	1.37
75	2.85	2.04	3.72	2.27
80	4.52	3.54	6.20	3.94

## Actuarial Assumptions Used for the June 30, 2009 Valuation

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

### % of Active Members Separating Within Next Year<sup>1</sup>

#### Retirement Ages

50	---%
51	---%
52	---%
53	---%
54	---%
55	15.0%
56	7.5
57	7.5
58	7.5
59	7.5
60	7.5%
61	7.5
62	20.0
63	10.0
64	10.0
65	25.0%
66	25.0
67	25.0
68	25.0
69	25.0
70	100.0

<sup>1</sup>Superseded by 50% retirement probability each year after completion of 30 years of service and attainment of age 50.

## Actuarial Assumptions Used for the June 30, 2009 Valuation

Disability Benefit Offset. Workers' Compensation Benefits are not assumed to be an offset.

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

Marital Status: 75% of men and 55% of women were assumed married at retirement.

Spouse Census: Women were assumed to be 3 years younger than men.

"Spouse" is assumed to encompass a registered domestic partner.



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**SECTION I**  
**FINANCIAL PRINCIPLES AND OPERATIONAL**  
**TECHNIQUES**

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## Financial Principles and Operational Techniques

Promises Made, and To Be Paid For. As each year is completed, the Retirement System in effect hands an "IOU" to each member then acquiring a year of service credit – the "IOU" says: "The San Jose Federated City Employees' Retirement System owes you one year's worth of retirement benefits, payments in cash commencing when you qualify for retirement."

The related key financial questions are:

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

**The present taxpayers**, who receive the benefit of the member's present year of service; or

**The future taxpayers**, who happen to be in San Jose at the time the IOU becomes a cash demand, years and decades later?

The principle of level percent of payroll financing intends that this year's taxpayers contribute the money to cover the IOUs being handed out this year. By following this principle, the employer contribution rate will remain approximately level from generation to generation (after funding of the system's initial unfunded liability is addressed) – our children and our grandchildren will contribute the same percents of active payroll we contribute now.

(There are systems which have a design for deferring contributions to future taxpayers, lured by a lower contribution rate now and putting aside the consequence that the contribution rate must then grow much greater over decades of time.)

An inevitable by-product of the level-cost design is the accumulation of reserve assets, for decades, and income produced when the assets are invested. Invested assets are a by-product and not the objective. Investment income becomes, in effect, the 3<sup>rd</sup> contributor for benefits to employees, and is interlocked with the contribution amounts required from employees and employer.

## Financial Principles and Operational Techniques

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 Liability (UAL is the difference between (i) liabilities for service already rendered and (ii) the assets of the plan).

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

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

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

The System copes with these continually changing differences by having 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 contribution rates.

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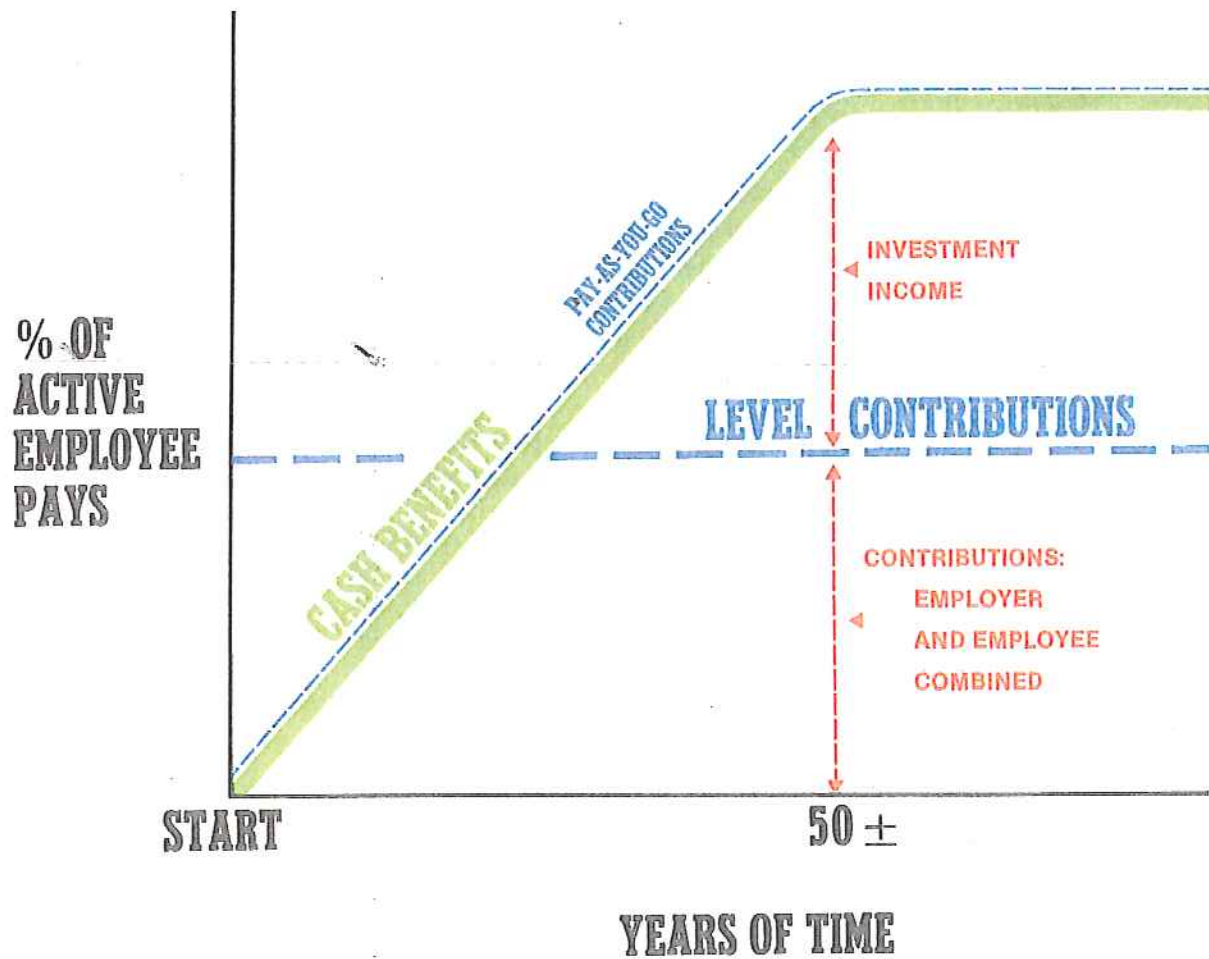
## Financial Principles and Operational Techniques

### THE ACTUARIAL VALUATION PROCESS

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

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

- A. Covered people data, furnished by staff, including:
  - Retired members now receiving benefits
  - Former employees with vested benefits not yet payable
  - Active employees
- B. + Asset data (cash & investments), furnished by staff
- C. + Assumptions concerning future experience in various risk areas, which are established by the Board after consulting with the actuary
- D. + The funding method for employer contributions (the long-term, planned pattern for employer contributions)
- E. + Mathematically combining the assumptions, the funding method, and the data
- F. = Determination of:
  - Plan Financial Position and/or
  - Employer's New Contribution Rate



**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



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**SECTION J**

**DEFINITIONS OF TECHNICAL TERMS**

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## DEFINITIONS OF TECHNICAL TERMS

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

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

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

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

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

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

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

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

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

## DEFINITIONS OF TECHNICAL TERMS

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