

**City and County of San Francisco
Employees' Retirement System**

**July 1, 2008
Actuarial Valuation**

Produced by [Cheiron](#)

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LETTER OF TRANSMITTAL

January 6, 2009

Retirement Board of the City and County of
 San Francisco Employees' Retirement System
 c/o Ms. Clare M. Murphy, Executive Director
 30 Van Ness Avenue, Suite 3000
 San Francisco, CA 94102

Dear Members of the Board:

At your request, we performed the July 1, 2008 actuarial valuation of the City and County of San Francisco Employees' Retirement System (SFERS). The valuation results with respect to SFERS are contained in this report. Please note that as this represents Cheiron's first valuation of the SFERS. All results in this valuation pertaining to July 1, 2007 were produced by the former actuary Towers and presented in their July 1, 2007 valuation report. However, in the transition process Cheiron did replicate and reconcile the prior valuation results within industry specific tolerances.

The table below presents the key results of the 2008 valuation for the SFERS.

Table I-1			
City and County of San Francisco Employees' Retirement System			
	Valuation Date	July 1, 2008	July 1, 2007*
Unfunded Actuarial Liability/(Surplus)		\$(582.6) mil.	\$(1,387.9) mil.
Funding Ratio		103.8%	110.2%
Net Employer Contribution Rate		9.49%	4.99%

*July 1, 2007 numbers completed by prior actuary

- Unfunded Actuarial Liability (UAL)/Surplus:* SFERS' surplus has decreased by \$805.3 million. The primary cause of this increase is the inclusion of the following benefit changes under Proposition B; (i) increased retirement accrual factors for miscellaneous plan members (resulting in an additional change in retirement rates to recognize the increased benefit), and (ii) COLA for all new plan members (police, fire, and miscellaneous) changed from a 2.0% simple COLA to a 2.0% compound COLA. The results also reflect the change in investment assumption from 8.00% to 7.75%.
- Funding Ratio:* This is the ratio of system assets to actuarial liabilities which for SFERS declined since the last valuation by 6.4%.
- Net Employer Contribution Rate:* Represents the recommended contribution rate to be made by the Employer as a percent of covered payroll. The increase of 4.5% primarily reflects the increased cost of benefits under Proposition B. The rate is also impacted by the decrease in the investment assumption from 8.00% to 7.75%

More details on the plan experience for the past year, including the changes listed above and their impact on these July 1, 2008 valuation results can be found in our report which follows.



In conclusion, we certify that, to the best of our knowledge, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board. As such, it reflects the actuary's responsibility under Section 5.8 of ASOP No. 4 "for assessing the implications of the overall results, in terms of short- and long-range benefit security and expected cost progression." In preparing our report, we relied without audit, on information supplied by SFERS' staff. This information includes, but is not limited to, plan provisions, employee data, and financial information.

Finally, it's important to note that this valuation, which was prepared using census data and financial information as of July 1, 2008, does not reflect any subsequent changes in the membership profile and decline in the investment markets. The next valuation will reflect those changes including the still to be determined membership and investment experience through July 1, 2009.

Sincerely,
Cheiron



Gene Kalwarski, FSA, FCA, EA, MAAA
Consulting Actuary



Ken Kent, FSA, FCA, EA, MAAA
Consulting Actuary

SECTION I
BOARD SUMMARY

The primary purpose of the actuarial valuation and this report is to report, as of the valuation date, on the following:

- The financial condition of the City and County of San Francisco Employees' Retirement System (SFERS),
- Past and expected trends in the financial condition of SFERS,
- The Employer's contribution rate for Fiscal Year 2010, and
- Information required by the Governmental Accounting Standards Board (GASB).

In this Section, we present a summary of the principal valuation results. This includes the basis upon which the July 1, 2008 valuation was completed and an examination of the current financial condition of SFERS. In addition, we present a review of the key historical trends followed by the projected financial outlook for SFERS.

A. Valuation Basis

SFERS funding policy is comprised of contributions equal to the sum of normal cost under the Entry Age Normal Cost Method, plus amortization of changes in the unfunded actuarial liabilities over various periods not to exceed 20 years.

Changes since the last actuarial valuation that are included in this years results are as follows:

- Benefits changes passed in June of 2008 under Proposition B which include:
 - Increased retirement accrual factors for miscellaneous plan members (resulting in an additional change in retirement rates to recognize the increased benefit).
 - Basic COLA for all new plan members (police, fire, and miscellaneous) changed from a 2.0% simple COLA to a 2.0% compound COLA.
 - The changes to the Supplemental COLA which take effect July 1, 2009 and therefore will not impact valuation results until the next valuation.
- The change in plan actuary resulted in minor differences in the interpretations of plan provisions and in the valuation of liabilities. These differences are disclosed in Section III - *Liabilities* and in Appendix B – *Actuarial Assumptions and Methods*.
- A decrease in the long term investment/discount rate from 8.00% to 7.75%, which was approved by the Board in November 2008.
- Reflection of the new Deferred Retirement Option Program (DROP) which for this valuation has no impact on the liabilities or costs since there is insufficient experience to evaluate its impact.

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**SECTION I
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B. Current Financial Condition of SFERS

On the following pages, we summarize the key results of the July 1, 2008 valuation and how they compare to the results from the July 1, 2007 valuation.

1. SFERS Membership:

As shown in Table I-2 below, total membership in SFERS increased from 2007 to 2008 by 3.1%. Active membership increased 1.5% and total payroll increased by 3.4%. Finally, the average pay per active member increased by 1.9%. This increase is less than the assumed payroll inflation of 4.5%.

Table I-2 City and County of San Francisco Employees' Retirement System Membership Total			
Item	July 1, 2008	July 1, 2007*	% Change
Active Counts	30,650	30,190	1.5%
Terminated Vested	4,746	3,870	22.6%
Disabled	2,630	2,615	0.6%
Retirees	15,147	14,766	2.6%
Beneficiaries	3,737	3,735	0.1%
Total SFERS Members	56,910	55,176	3.1%
Active Member Payroll	\$ 2,457,196,188	\$ 2,376,221,000	3.4%
Average Pay per Active Member	80,170	78,709	1.9%

*July 1, 2007 numbers completed by prior actuary

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**SECTION I
BOARD SUMMARY**

2. SFERS Assets and Liabilities

Table I-3 presents a comparison between the July 1, 2008 and July 1, 2007 SFERS assets, liabilities, UAL, and funding ratios.

The key results shown in Table I-3 indicate that the total actuarial liability increased 13.4% (reflecting the increase due to Proposition B and the change in the investment assumption) and the market value of assets decreased by 6.6%. SFERS employs an asset smoothing method which dampens market volatility. For this year the smoothed value of assets (called the actuarial value of assets) increased by 6.8%. Finally, SFERS' surplus (actuarial value of assets less actuarial liabilities) decreased from \$1.39 billion to \$0.58 billion, resulting in a decreased in the funding ratio from 110.2% to 103.8%.

Table I-3			
City and County of San Francisco Employees' Retirement System			
Assets & Liabilities			
(in millions)			
Item	July 1, 2008	July 1, 2007*	% Change
Actives	\$ 7,055.2	\$ 5,900.3	19.6%
Terminated Vested	290.1	217.5	33.4%
Disabled	1,493.6	1,381.1	8.1%
Retirees	5,740.1	5,295.4	8.4%
Beneficiaries	779.8	747.1	4.4%
Total Actuarial Liability	\$ 15,358.8	\$ 13,541.4	13.4%
Market Value Assets	\$ 15,833.3	\$ 16,952.0	-6.6%
Actuarial Value Assets	15,941.4	14,929.3	6.8%
Unfunded Actuarial Liability	\$ (582.6)	\$ (1,387.9)	-58.0%
Funding Ratio - Actuarial Value	103.8%	110.2%	-6.4%

*July 1, 2007 numbers completed by prior actuary

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3. Components of Surplus decrease between July 1, 2007 and July 1, 2008:

As mentioned earlier the surplus declined this year by \$805.3 million; from a surplus of \$1,387.9 million to \$582.6 million. Table I-4 below presents the specific components of this change in the Surplus.

The key findings in Table I-4 are that the economic assumption change reduced the Surplus by \$433.3 million, Proposition B decreased the Surplus an additional \$750.2 million. Partially offsetting those decreases was an investment gain of \$216.7 million, a liability experience gain of \$122.6 million, and additional member contributions more than expected by \$15.4 million. The change in actuary to Cheiron resulted in an increase in the Surplus by \$12.2 million due to differences in measurement of liabilities.

Table I-4			
City and County of San Francisco Employees' Retirement System - Decrease in Surplus			
Experience		in millions	% of Liabilities
1.	Surplus increase due to investment gain	\$ 216.7	1.41%
2.	Surplus increase due to overall liability gain	122.6	0.80%
Benefits			
4.	Surplus decrease due to Proposition B	(750.2)	-4.88%
Contributions			
5.	Surplus increase due to contributions in excess of expected	15.4	0.10%
Actuarial			
6.	Surplus decrease due to change in economic assumption changes	(433.3)	-2.82%
7.	Surplus increase due to change in valuation of the liabilities	12.2	0.08%
Total			
7.	Total net overall change: sum 1 through 6	\$ (816.6)	-5.32%
8.	Expected change in Surplus	<u>11.3</u>	<u>0.07%</u>
9.	Total actual change in Surplus: 7 + 8	\$ (805.3)	-5.24%

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4. SFERS Contributions:

Table I-5 shows SFERS contribution for FY 2010 measured as a percent of membership payroll increased from 4.99% to 9.49%.

Table I-5				
City and County of San Francisco Employees' Retirement System – Contributions				
Item	July 1, 2008	July 1, 2007*	%Change	
1. Gross Normal Cost %	18.16%	16.19%	1.97%	
2. Member Cost %	<u>7.50%</u>	<u>7.52%</u>	<u>-0.02%</u>	
3. Employer Normal Cost %	10.66%	8.67%	1.99%	
4. Amortization of Proposition UAL%	-7.03%	-7.55%	0.52%	
5. Amortization of Remaining UAL%	<u>5.41%</u>	<u>3.42%</u>	<u>1.99%</u>	
6. Total Employer Unfunded Liability Cost %	-1.62%	-4.13%	2.51%	
7. Expenses %	<u>0.45%</u>	<u>0.45%</u>	<u>0.00%</u>	
8. Net Employer Contribution Rate: (3 + 6 + 7)	9.49%	4.99%	4.50%	

*July 1, 2007 numbers completed by prior actuary

Table I-6 shows sources for the change in the net employer contribution rate. The contribution rate increase is primarily attributable to the changes under Proposition B and the investment assumption change. Plan experience as well as the change in actuary offset the increase in the contribution rate by 1.30%.

Table I-6			
City and County of San Francisco Employees' Retirement System			
Contribution Reconciliation			
Item	Total	Normal Cost	Amortization
2007 Net Employer Contribution Rate*	4.99%	9.12%	-4.13%
Change due to experience and transition	-1.30%	-0.13%	-1.18%
Change due to benefit changes	3.26%	1.17%	2.08%
Change due to assumption changes	<u>2.55%</u>	<u>0.95%</u>	<u>1.60%</u>
2008 Net Employer Contribution Rate*	9.49%	11.11%	-1.62%

*includes expenses

In Section IV of this report, we provide more detail on the development of this contribution rate.

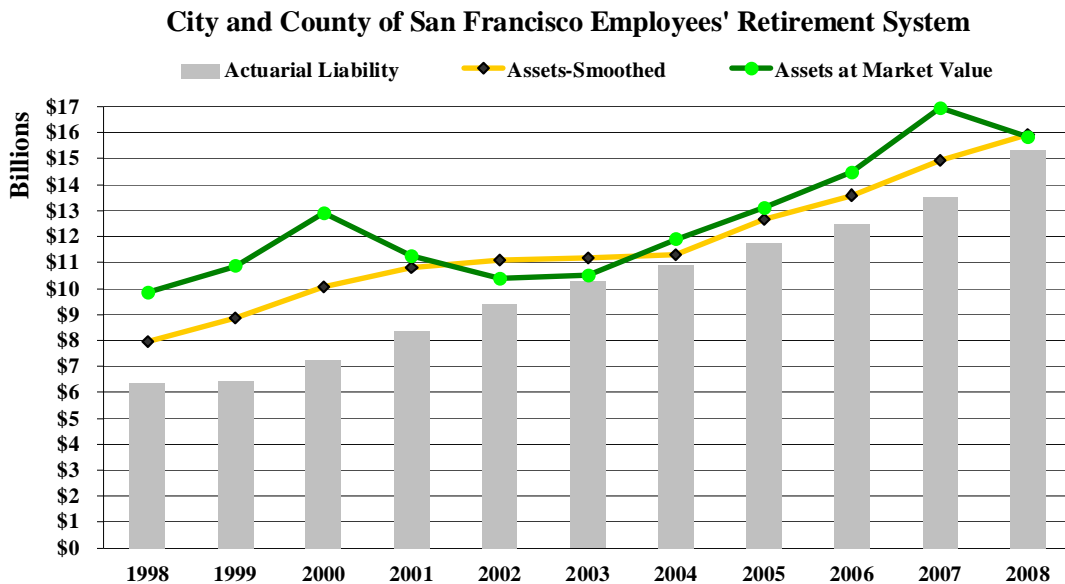
**SECTION I
 BOARD SUMMARY**

C. Historical Trends

Despite the fact that most of the attention given to the valuation is with respect to the most recently computed unfunded actuarial liability, funding ratio, and SFERS contribution rate, it is important to remember that each valuation is merely a snapshot of the long-term progress of a pension fund. It is more important to judge a current year's valuation result relative to historical trends, as well as trends expected into the future trends.

In the chart below, we present the historical trends for assets (both market and smoothed) versus actuarial liabilities, and also show the progress of SFERS' funding ratios since 1998.

SFERS- Assets and Liabilities 1998-2008



Funded Ratio	125.1%	137.8%	138.8%	129.0%	117.9%	109.0%	103.8%	107.6%	108.6%	110.2%	103.8%
UAL/(Surplus)	\$ (1.59)	\$ (2.43)	\$ (2.82)	\$ (2.43)	\$ (1.69)	\$ (0.92)	\$ (0.41)	\$ (0.89)	\$ (1.08)	\$ (1.39)	\$ (0.58)

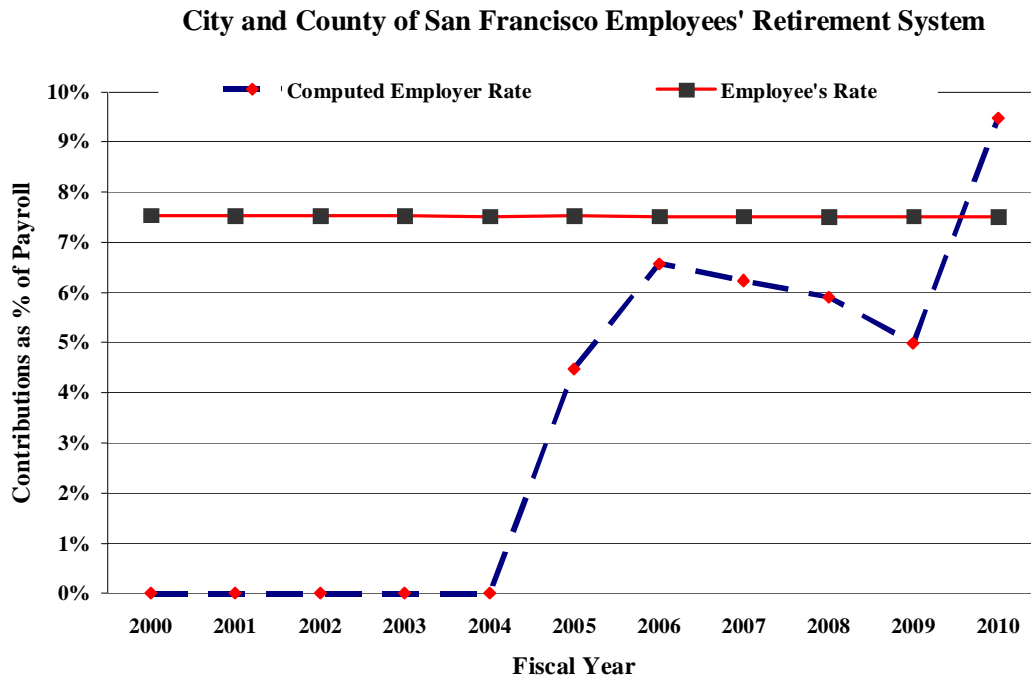
The chart above indicates that from 1998 to 2000, SFERS maintained a strong and improving funding ratio. Then from 2000 to 2004, the funding ratio declined but remained in a surplus status with the low point being in 2004 at 103.8%. From 2004 to 2007, the ratio improved, primarily due to strong asset performance. In 2008, the ratio declined slightly primarily due to Proposition B and assumption changes.

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In the chart below, we present the historical trends for SFERS' contribution rates since fiscal year 2000. All information shown prior to FY2010 was calculated by the prior actuary.

Employer and Member Contribution Rates 1998-2008



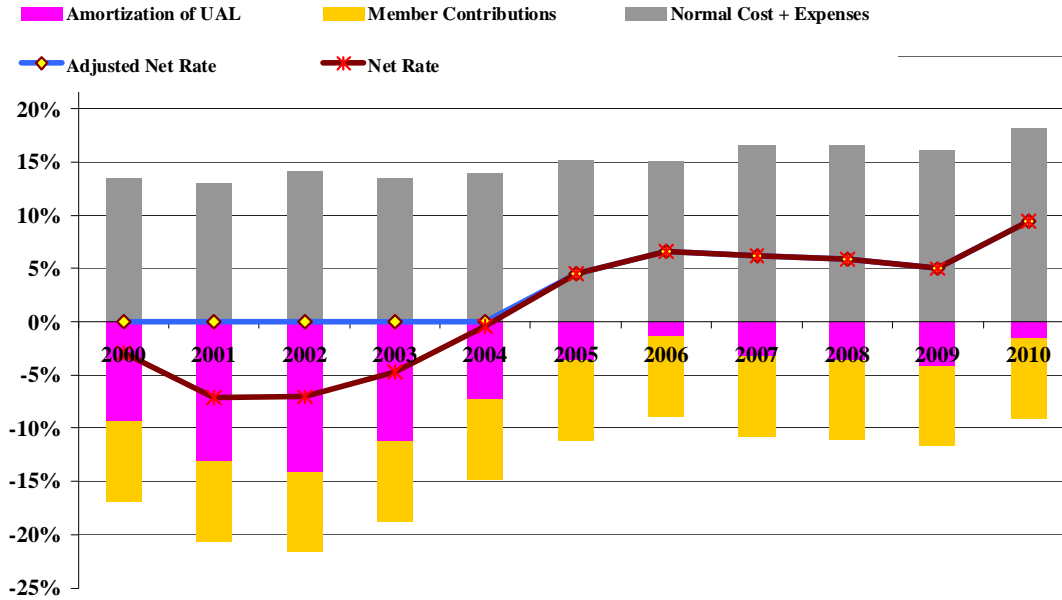
The key information in this chart is the increase in the Employer contribution rate since 2004. The dramatic increase scheduled fiscal year 2010 is primarily due to benefit changes under Proposition B

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In the chart below, we show historical trends of SFERS' contribution rate components since fiscal year 2000, with a table below it showing the detail of the components of the contribution rates. All information shown prior to FY2010 was calculated by the prior actuary.

City and County of San Francisco Employees' Retirement System



Historic Cost as a Percentage of Pay

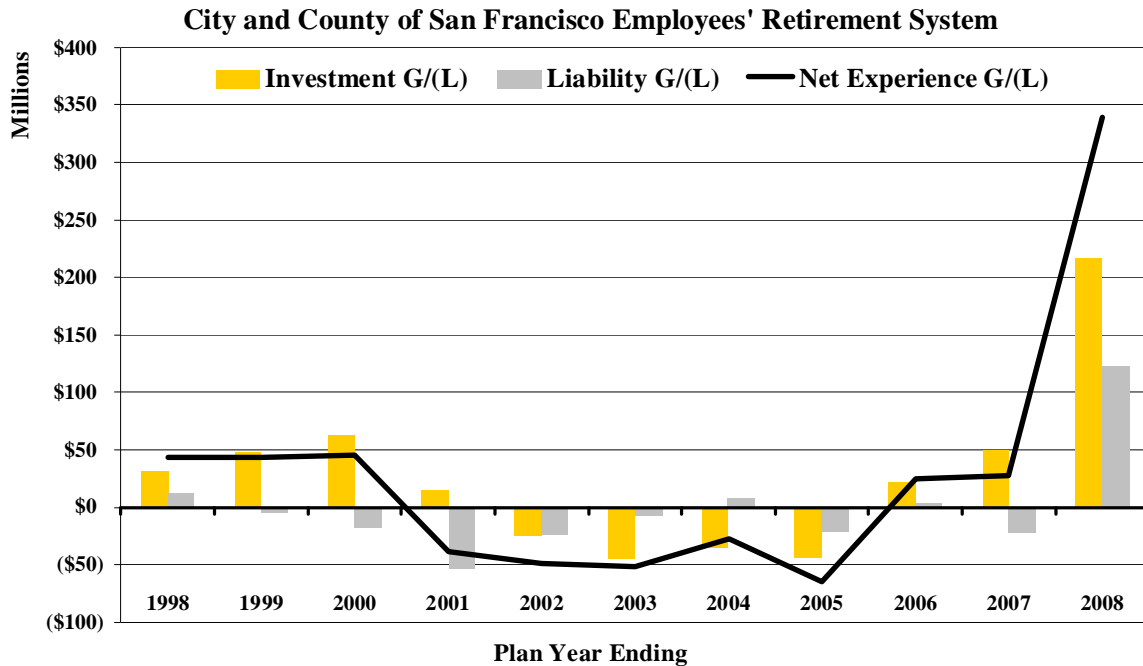
Fiscal Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Normal Cost + Expenses	13.94%	13.45%	14.57%	14.01%	14.42%	15.64%	15.51%	17.01%	17.05%	16.64%	18.61%
Amortization of UAL	-9.30%	-13.07%	-14.10%	-11.21%	-7.32%	-3.63%	-1.41%	-3.25%	-3.63%	-4.13%	-1.62%
Member Contributions	-7.54%	-7.53%	-7.53%	-7.53%	-7.52%	-7.53%	-7.52%	-7.52%	-7.51%	-7.52%	-7.50%
Net Rate	-2.90%	-7.15%	-7.06%	-4.73%	-0.42%	4.48%	6.58%	6.24%	5.91%	4.99%	9.49%
Adjusted Net Rate	0.00%	0.00%	0.00%	0.00%	0.00%	4.48%	6.58%	6.24%	5.91%	4.99%	9.49%

The key information above is that the normal cost as a percent of payroll has been increasing gradually from fiscal year 2000 to fiscal year 2010. The amortization of the UAL as a percent of pay decreased for the periods of fiscal year 2000 to fiscal year 2002 and fiscal year 2006 to fiscal year 2009. The chart demonstrates how the total annual cost is offset by member contribution and amortization of surplus assets over actuarial liabilities causing the net cost to be negative and the adjusted rate to be zero, as the surplus declines as in 2005 and 2006 the Employer contribution rates have increased. This contribution rate volatility can be expected for a system that is near or more than fully funded.

**SECTION I
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The next chart below presents the pattern of SFERS' annual gains and losses, broken into the investment and liability components. The chart does not include any changes in the system's assets and liabilities attributable to changes to methods, procedures or assumptions.

SFERS Historical Gain/(Loss) 1998-2008



The key insights from this chart are:

- Investment gains (gold bars) from 1998 through 2000 were offset by investment losses from 2001 through 2005. From 2006 to 2008, there were positive investment trends, with a significant investment gain in 2008.
- On the liability side, from 1999 to 2007 there was a pattern of liability losses, with the exception small gains in 2004 and 2006. In 2008 the system experienced a relatively large liability gain.

**SECTION I
 BOARD SUMMARY**

D. Projected Financial Trends

Our analysis of SFERS projected financial trends is an important part of this valuation. In this Section, we present our assessment of the implications of the July 1, 2008 valuation results on the future outlook for SFERS in terms of benefit security (assets over liabilities) and the SFERS expected cost progression.

In the charts that follow, we project SFERS' assets and liabilities, the pay down of UAL, and the Employer contributions as a percent of payroll on two different bases:

- 1) Assuming 7.75% returns each and every year, and
- 2) Assuming returns shown in the table below. These are rates of return that vary each year but over the projection period equals on average the assumed 7.75% return. We do this because SFERS' returns will never be level each and every year.

July 1,	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>
Return	-14.00%	8.00%	6.00%	9.00%	13.00%	15.00%	9.00%	7.00%	10.00%	6.00%

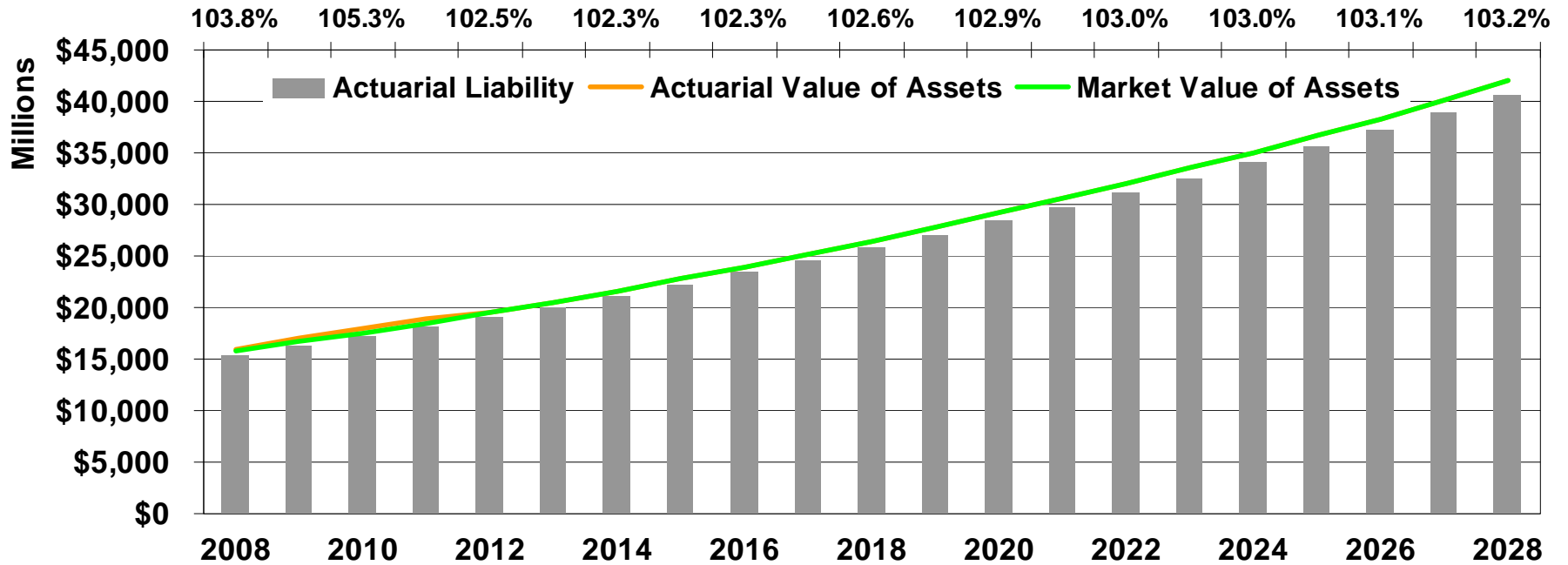
July 1,	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>
Return	8.00%	12.00%	16.00%	7.00%	4.00%	-3.00%	10.00%	18.00%	4.00%	10.00%

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Projection Set 1: Assets and Liabilities - SFERS

The two charts below show asset measures (green and gold lines) compared to liabilities (grey bars). At the top of each chart is the progression of SFERS funding ratios. The most revealing insight from these two charts is how varying investment returns impact SFERS' funding ratios.

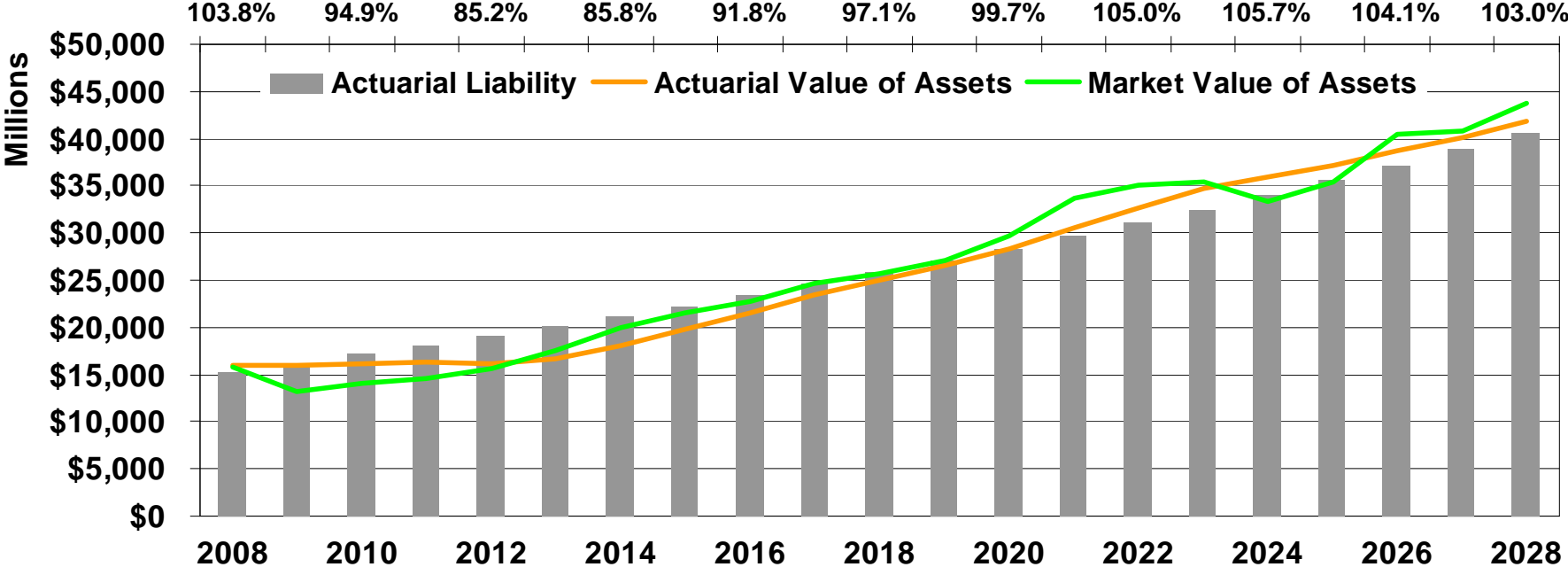
Chart 1: Projection of Assets and Liabilities, 7.75% return each year



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Chart 2: Projection of Assets and Liabilities, varying returns averaging 7.75%

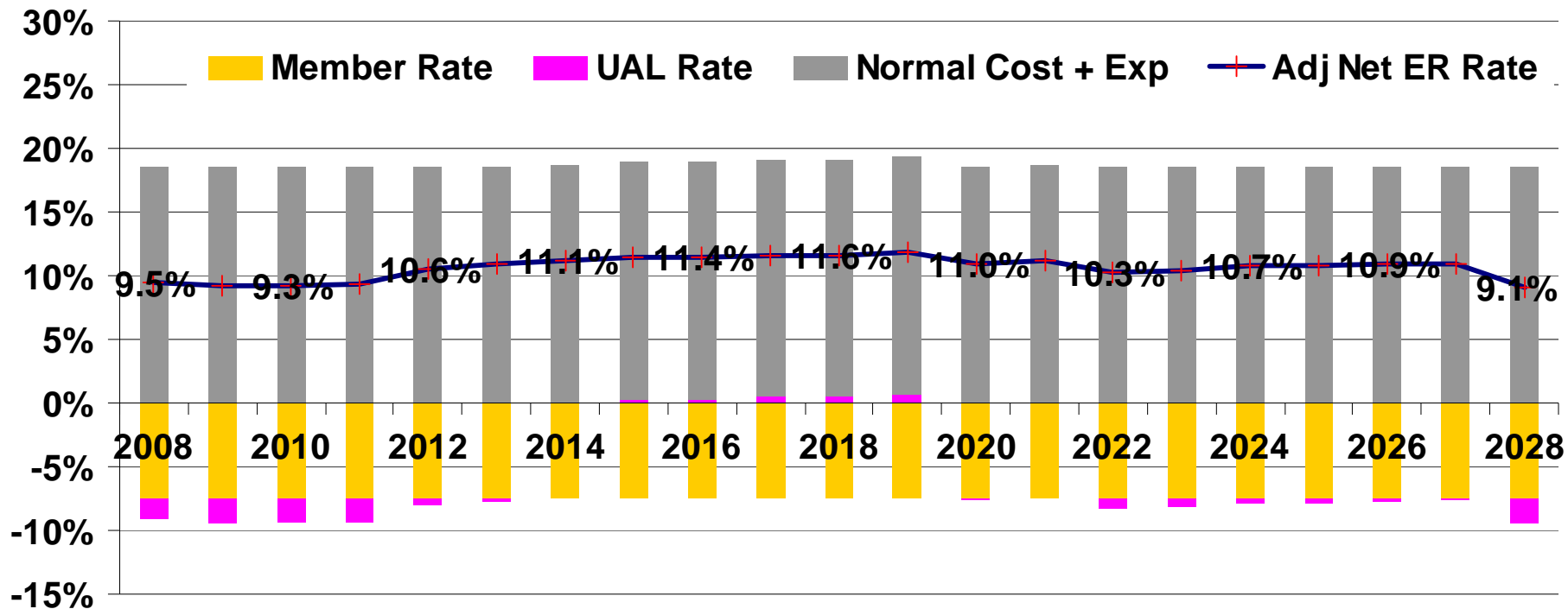


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Projection Set 3: Projected Employer Contribution Rate

As seen on the charts to the below, varying returns will also have a significant impact on the actuarially computed Employer contribution rate.

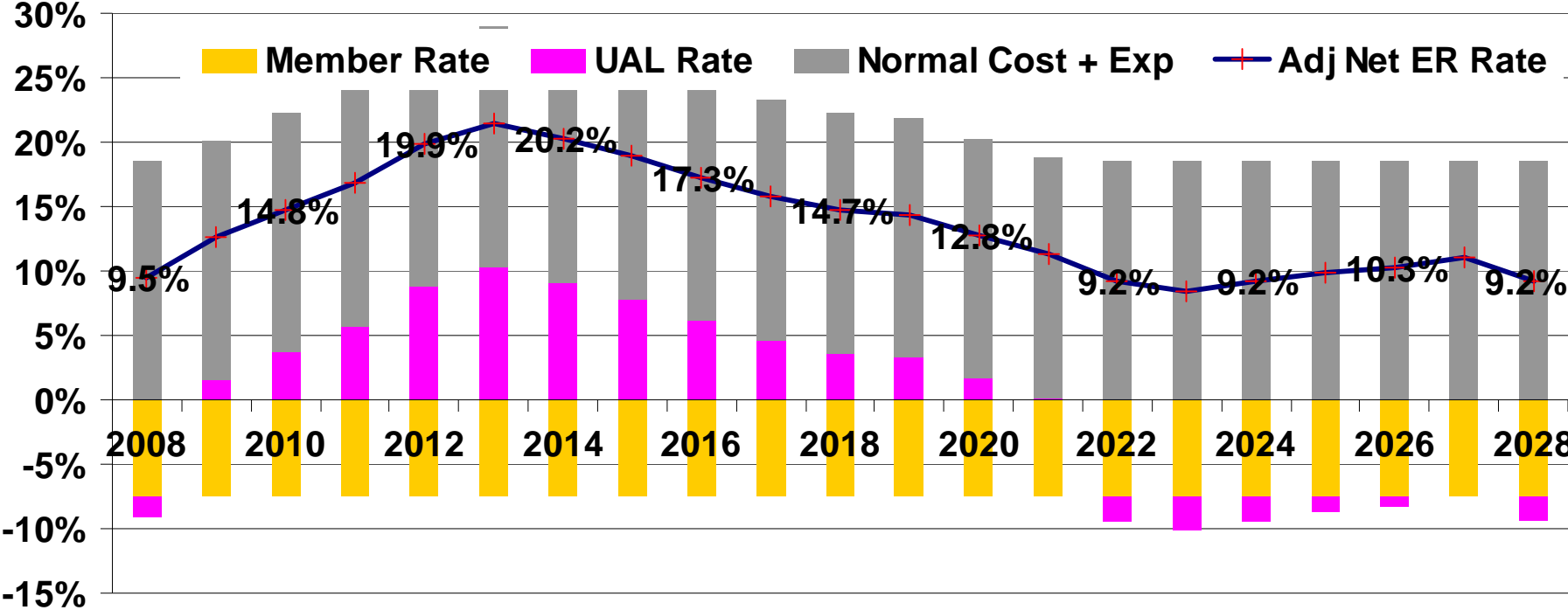
Chart 1: 7.75% return each year



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Chart 2: varying returns averaging 7.75%



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**SECTION II
ASSETS**

SFERS uses and discloses two different asset measurements which are presented in this Section of the report: market value and actuarial value of assets. The market value represents, as of the valuation date, the value of the assets if they were liquidated on that date. The actuarial value of assets is a value that attempts to smooth annual investment return performance over multiple years to reduce investment volatility, and is used in determining SFERS' contribution rates.

On the following pages we present detailed information on SFERS' assets:

- Statement of cash flows during the year by membership group,
- Development of the actuarial value of assets,
- Discussion of investment performance for the year.

Table II-1				
SFERS – Change in Market Value of Assets from 2007-2008				
(in thousands)				
Item	Police	Fire	Miscellaneous	Total
1. Market Value as of 7/1/2007	\$3,492,056	\$2,811,696	\$10,648,292	\$16,952,044
2. Additions				
a. Employers' contributions for 2007-2008	13,114	9,398	111,535	134,046
b. Members' contributions for 2007-2008	<u>16,836</u>	<u>12,097</u>	<u>156,203</u>	<u>185,136</u>
c. Total Additions: (2a + 2b)	\$29,950	\$21,495	\$267,738	\$319,183
3. Net Investment Income for 2007-2008	(152,421)	(122,067)	(460,944)	(735,432)
4. Benefits and Administrative Expenses	(124,505)	(132,201)	(445,785)	(702,492)
5. Net Increase/(Decrease): (2c + 3 + 4)	<u>\$(246,976)</u>	<u>\$(232,774)</u>	<u>\$(638,991)</u>	<u>\$(1,118,741)</u>
6. Market Value as of 7/1/2008: (1 + 5)	\$3,245,080	\$2,578,922	\$10,009,301	\$15,833,303

**SECTION II
ASSETS**

A. Actuarial Value of Assets

To determine on-going funding requirements, most pension funds utilize an actuarial value of assets that differs from the market value of assets. The actuarial value of assets represents an asset value based on averaging or smoothing year-to-year market value returns for purposes of reducing the resulting volatility on contributions.

The actuarial value is calculated by recognizing 20% of each of the prior four years of actual investment experience relative the expected return (8.0%) on the actuarial asset value. The expected return on market assets is determined using the Fund's actual cash flows and the actuarial rate of interest. The balance of the actual investment experience is recognized in a similar fashion in future years. (See Appendix B.2 for further explanation of the asset valuation method).

Table II-2				
SFERS – Development of Actuarial Value of Assets for 7/1/2008				
(in thousands)				
Item	Police	Fire	Miscellaneous	Total
1. Actuarial Value as of 7/1/2007	\$3,129,469	\$2,501,834	\$9,297,984	\$14,929,287
2. Non-Investment Cash Flow for 2007-2008	(94,555)	(110,707)	(178,047)	(383,309)
3. Expected Return in 2007-2008	246,648	195,804	736,854	1,179,306
Expected Actuarial Value as of 7/1/2008:				
4. (1 + 2 + 3)	\$3,281,562	\$2,586,931	\$9,856,791	\$15,725,283
5. Actual Return in 2007-2008	(152,421)	(122,067)	(460,944)	(735,432)
6. Actual Return Above Expected in 2007-2008	(399,069)	(317,871)	(1,197,798)	(1,914,737)
7. Recognition of Returns Above Expected				
a. 2007-2008	(79,814)	(63,574)	(239,560)	(382,947)
b. 2006-2007	72,455	58,212	213,821	344,487
c. 2005-2006	28,694	23,339	83,642	135,676
d. 2004-2005	25,243	20,874	72,774	118,891
e. 2003-2004	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
f. Total: (7a + 7b + 7c + 7d + 7e)	<u>\$46,577</u>	<u>\$38,852</u>	<u>\$130,677</u>	<u>\$216,107</u>
8. Actuarial Value as of 7/1/2008: (4 + 7f)	\$3,328,139	\$2,625,783	\$9,987,468	\$15,941,390

SECTION II
ASSETS

B. Investment Performance

The market value of assets internal rate of return, net of expenses, was -4.44% for the year ending July 1, 2008 based on SFERS return determination. This is compared to an assumed return of 8.00%.

On an actuarial value of assets basis, the return for the year ending July 1, 2008 was 9.47%. This return produced an overall SFERS investment gain of \$216.7 million for the year ending July 1, 2008.

SECTION III LIABILITIES

In this section, we present detailed information on liabilities for SFERS, including:

- Disclosure of liabilities at July 1, 2007 and July 1, 2008, and
- Statement of changes in the unfunded actuarial liabilities during the year.
- Schedule of amortization amounts of the unfunded actuarial liability portion of the annual cost

A. Disclosure

Several types of liabilities are calculated and presented in this report. Each type is distinguished by the purpose for which the figures are ultimately used.

- **Present Value of all Future Benefits:** Used for measuring all future SFERS obligations, represents the amount of money needed today to fully pay off all benefits of SFERS both earned as of the valuation date and those to be earned in the future by current plan participants, under the current Plan provisions.
- **Actuarial Liability-Entry Age Normal (EAN):** Used for determining employer contributions and GASB accounting disclosures. This liability is calculated taking the present value of all future benefits and subtracting the present value of future member contributions and future employer normal costs as determined under the EAN actuarial funding method.
- **Present Value of Accrued Benefits:** Disclosed in Section V of this report for accounting statement purposes (FASB 35). This liability represents the present value of future benefits payable to all plan participants if the plan were terminated as of the valuation date, and future accruals and contributions stopped.

Table III-1 on the following page discloses the first two of these liabilities for the current and prior year valuations. By subtracting the actuarial value of assets from the actuarial liability the net surplus or an unfunded actuarial liability (UAL) is determined.

CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM
JULY 1, 2008 ACTUARIAL VALUATION

**SECTION III
LIABILITIES**

Table III-1		
City and County of San Francisco Employees' Retirement System – Total		
(in thousands)		
Item	July 1, 2008	July 1, 2007*
Present Value of Future Benefits		
Actives	\$ 11,621,278	\$ 9,735,105
Terminated Vested	290,154	217,550
Disabled	1,493,591	1,381,123
Retirees	5,740,108	5,295,384
Beneficiaries	<u>779,757</u>	<u>747,074</u>
Total SFERS	\$ 19,924,888	\$ 17,376,237
Actuarial Liability		
Total Present Value of Benefits	\$ 19,924,888	\$ 17,376,237
Present Value of Future Normal Costs		
Employer Portion	2,682,394	1,952,165
Employee Portion	<u>1,883,670</u>	<u>1,882,683</u>
Actuarial Liability	\$ 15,358,824	\$ 13,541,388
Actuarial Value of Assets	\$ 15,941,390	\$ 14,929,287
Unfunded Actuarial Liability/(Surplus)	\$ (582,566)	\$ (1,387,899)

*July 1, 2007 numbers completed by prior actuary

Table III-2 shows actuarial liability as of July 1, 2008 for each of the Miscellaneous, Police, and Fire members of SFERS.

Table III-2			
City and County of San Francisco Employees' Retirement System – Split by Group			
(in thousands)			
Item	July 1, 2008	July 1, 2008	July 1, 2008
Present Value of Future Benefits	Police	Fire	Miscellaneous
Actives	\$ 1,797,129	\$ 1,289,790	\$ 8,534,359
Terminated Vested	14,006	8,394	267,754
Disabled	430,546	745,923	317,122
Retirees	998,391	837,478	3,904,240
Beneficiaries	<u>262,628</u>	<u>209,703</u>	<u>307,425</u>
Total SFERS	\$ 3,502,700	\$ 3,091,288	\$ 13,330,900
Actuarial Liability			
Actives	\$ 1,137,955	\$ 771,249	\$ 5,146,011
Terminated Vested	14,006	8,394	267,754
Disabled	430,546	745,923	317,122
Retirees	998,391	837,478	3,904,240
Beneficiaries	<u>262,628</u>	<u>209,703</u>	<u>307,425</u>
Total SFERS	\$ 2,843,525	\$ 2,572,746	\$ 9,942,552

**SECTION III
LIABILITIES**

B. Changes in Unfunded Actuarial Liabilities

The UAL of any retirement plan is expected to change at each subsequent valuation for a variety of reasons. In each valuation, we will report on those elements of change in the UAL that have particular significance or could potentially affect the long-term financial outlook of a retirement plan. Below we present key changes in liabilities since the last valuation.

Table III-3	
SFERS – Development of 2008 Experience Gain/(Loss)	
(in millions)	
Item	Cost
1. Unfunded Actuarial Liability/(Surplus) at July 1, 2007	\$(1,387.9)
2. Middle of year actuarial liability payment	95.9
3. Interest to end of year on 1 and 2	<u>(107.3)</u>
4. Expected Unfunded Actuarial Liability at July 1, 2008 (1+2+3)	\$(1,399.3)
5. Actual Unfunded Liability at July 1, 2008	\$(582.6)
6. Difference: (4 - 5)	\$(816.7)
7. Portion of difference (6) due to actuarial assumption changes	\$ (433.3)
8. Portion of difference (6) due to benefit changes from Prop B	\$ (750.2)
9. Portion of difference (6) due to change in actuarial measurement of the liabilities	12.2
10. Portion of difference (6) due to contributions more than expected	15.4
11. Portion of difference (6) due to experience Gain/(Loss)	339.2
a) portion of (11) due to investment experience	216.7
b) portion of (11) due to liability experience	122.6

SECTION IV CONTRIBUTIONS

In the process of evaluating the financial condition of any pension plan, the actuary analyzes the assets and liabilities to determine what level (if any) of contributions needed to achieve and maintain an appropriate funded status of a plan. Typically, the actuarial process will use an actuarial funding method that will result in a pattern of contributions that are both stable and predictable.

The actuarial funding methodology employed is the Entry Age Normal actuarial funding method. Under this method, there are two components to the total contribution: the normal cost, and the unfunded actuarial liability contribution. The normal cost rate is determined by taking the value, as of entry age into the plan, of each member's projected future benefits. This value is then divided by the value, also at entry age, of the each member's expected future salary. The normal cost rate is multiplied by current salary to determine each member's normal cost. Finally, the normal cost is reduced by the member contribution to produce the employer normal cost. The difference between the EAN actuarial liability and the actuarial value of assets is the unfunded actuarial liability. The UAL is made up of unamortized prior Charter amendments, plus the impact of accumulated experience, assumption and method changes and Supplemental COLA costs.

Table IV-1 on the following page shows how the Employer's contribution rate for FY 2010 is developed. The methodology and assumptions used are in full compliance with the parameters set in GASB Statement No. 25 for purposes of determining the annual required contribution (ARC).

Table IV-2 provides the payment schedules to amortize the changes to the actuarial liability as a result of changes to the Charter over 20 years with the net unfunded liability representing the accumulated experience gains/losses, cost of Supplemental COLA or changes in the assumptions or methods over 15 years. All amortizations are determined on a level percent of pay basis which means that for the duration of the amortization schedule the payment amount increases each year at the assumed wage inflation rate of 4.5%. The balance of the unfunded liability this year reflects the increase in actuarial liabilities due to the interest assumption change from 8.0% to 7.75%. As partial offset the finance charge portion of the amortization payments has been reduced as a function of the interest assumption change

CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM
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**SECTION IV
CONTRIBUTIONS**

Table IV-1
City and County of San Francisco Employees' Retirement System
Development of the Net Employer Contribution Rate as of July 1, 2008 (FY 2010)
(dollars in millions)

		July 1, 2008				July 1, 2007*
		Police	Fire	Miscellaneous	COMPOSITE	COMPOSITE
1.	Total Normal Cost Rate	24.77%	30.50%	16.43%	18.16%	16.19%
2.	Member Contribution Rate	<u>7.50%</u>	<u>7.50%</u>	<u>7.50%</u>	<u>7.50%</u>	<u>7.52%</u>
3.	Employer Normal Cost Rate (1-2)	17.27%	23.00%	8.93%	10.66%	8.67%
4.	a. UAL - Proposition balance as of 7/1/2008	\$ 215.9	\$ 209.1	\$ 1,024.7	\$ 1,449.6	\$ 728.1
	b. Remaining balance of 7/1/2008 UAL	<u>(700.5)</u>	<u>(262.2)</u>	<u>(1,069.6)</u>	<u>(2,032.2)</u>	<u>(2,116.0)</u>
	c. Net UAL - as of 7/1/2008	\$ (484.6)	\$ (53.1)	\$ (44.9)	\$ (582.6)	\$ (1,387.9)
5.	a. Amortization of 4.a., Proposition UAL	8.38%	11.74%	4.57%	5.41%	3.42%
	b. Amortization of 4.b., Remaining UAL	<u>-25.38%</u>	<u>-13.67%</u>	<u>-4.41%</u>	<u>-7.03%</u>	<u>-7.55%</u>
	c. Amortization of Net UAL (5a + 5b)	-17.00%	-1.93%	0.15%	-1.62%	-4.13%
6.	Expense Load	0.45%	0.45%	0.45%	0.45%	0.45%
7.	Net Employer Contribution Rate (3 + 5c + 6)	0.73%	21.52%	9.53%	9.49%	4.99%

*July 1, 2007 numbers completed by prior actuary

CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM
JULY 1, 2008 ACTUARIAL VALUATION

**SECTION IV
CONTRIBUTIONS**

Table IV-2

**City and County of San Francisco Employees' Retirement System
Development of the Total Propositions Rate as of July 1, 2008 (FY 2010)**

Item	Remaining Period	Police			Fire			Miscellaneous			Total	
		Outstanding Balance	Total Amortization	Total As a % of Pay	Outstanding Balance	Total Amortization	Total As a % of Pay	Outstanding Balance	Total Amortization	Total As a % of Pay	Outstanding Balance	Total Amortization
1991 Prop A - Misc ERP Window	3	\$0	\$0	0.00%	\$0	\$0	0.00%	\$37,950	\$13,240	0.64%	\$37,950	\$13,240
1992 Prop F - Retiree Bft Increase	4	106	29	0.01%	61	16	0.01%	17,819	4,733	0.23%	17,986	4,778
1994 Prop H - Domestic Partners	6	3,352	622	0.27%	3,735	690	0.42%	5,646	1,030	0.05%	12,732	2,342
1996 Prop C - Retiree Benefits	8	179	26	0.01%	71	10	0.01%	32,528	4,584	0.22%	32,778	4,620
1996 Prop D - New Fire Ret Bfts	8	0	0	0.00%	13,680	1,954	1.20%	0	0	0.00%	13,680	1,954
1998 Prop A - New Police Ret Bfts	10	31,019	3,668	1.56%	0	0	0.00%	0	0	0.00%	31,019	3,668
1998 Prop C - Paramedics Bfts	10	0	0	0.00%	6,425	756	0.46%	0	0	0.00%	6,425	756
2000 Prop C - New Misc Ret Bfts	12	0	0	0.00%	0	0	0.00%	254,923	25,386	1.23%	254,923	25,386
6.25% Credited Interest on EE ctrbs	14	77	7	0.00%	19	2	0.00%	10,698	940	0.05%	10,794	948
2002 Prop H - Safety Ret Bfts	14	136,315	12,204	5.20%	144,847	12,905	7.92%	0	0	0.00%	281,162	25,109
5.0% Credited Interest on EE ctrbs	16	(513)	(41)	-0.02%	(244)	(20)	-0.01%	(46,982)	(3,714)	-0.18%	(47,739)	(3,775)
2004 Prop E - New Safety LOD Bfts	17	5,996	461	0.20%	8,417	644	0.40%	0	0	0.00%	14,413	1,106
2003 Prop F - Misc 3+3 Early Ret Bfts	17	0	0	0.00%	0	0	0.00%	18,108	1,366	0.07%	18,108	1,366
Liability of 2003 Prop F (extended) - Misc 3+3 Early Ret Bfts	18	0	0	0.00%	0	0	0.00%	10,481	757	0.04%	10,481	757
Liability of 2003 Prop F (extended) - Misc 3+3 Early Ret Bfts	19	0	0	0.00%	0	0	0.00%	4,703	327	0.02%	4,703	327
2008 Prop B - New Misc Ret Bfts and Compound COLA	20	<u>39,338</u>	<u>2,682</u>	<u>1.14%</u>	<u>32,090</u>	<u>2,177</u>	<u>1.34%</u>	<u>678,794</u>	<u>45,389</u>	<u>2.20%</u>	<u>750,222</u>	<u>50,248</u>
Total of Propositions		\$215,868	\$19,658	8.38%	\$209,101	\$19,136	11.74%	\$1,024,669	\$94,038	4.57%	\$1,449,638	\$132,832

SECTION V
ACCOUNTING STATEMENT INFORMATION

Statement No. 35 of the Financial Accounting Standards Board (FASB) requires the disclosure of certain information regarding funding status. Statement No. 25 of the Governmental Accounting Standards Board (GASB) establishes standards for disclosure of pension information by public employee retirement systems and governmental employers in notes to financial statements and supplementary information.

The FASB No. 35 Basis disclosure provides a “snap shot” view of how system assets at market value compare to liabilities if contributions stopped and accrued benefit claims had to be satisfied.

The GASB No. 25 Basis disclosure presents the actuarial liability computed for funding purposes to the actuarial value of assets to determine a funded ratio (i.e. the EAN liability).

Both the present value of accrued benefits (FASB No. 35 Basis) and the actuarial liability (GASB No. 25 Basis) are determined assuming that participants continue to terminate employment, retire, etc., in accordance with the actuarial assumptions. Liabilities are discounted at the assumed valuation interest rate of 7.75% per annum.

FASB Statement No. 35 specifies that a comparison of the present value of accrued (accumulated) benefits to the market value of the assets as of the valuation date must be provided. GASB Statement No. 25 requires the actuarial liability be compared with the actuarial value of assets for funding purposes. The relevant amounts as of July 1, 2007 and July 1, 2008 are presented in Table V-1.

CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM
JULY 1, 2008 ACTUARIAL VALUATION

SECTION V
ACCOUNTING STATEMENT INFORMATION

Table V-1			
San Francisco Employees' Retirement System			
(in thousands)			
Item	July 1, 2008	July 1, 2007*	% Change
GASB No. 25 Basis			
1. Actuarial Liabilities			
a. Members Currently Receiving Payments	\$ 8,013,456	\$ 7,423,580	7.9%
b. Vested Terminated and Inactive Members	290,154	217,550	33.4%
c. Active Members	<u>7,055,214</u>	<u>5,900,257</u>	<u>19.6%</u>
d. Total Actuarial Liability	\$ 15,358,824	\$ 13,541,388	13.4%
2. Actuarial Value of Assets	\$ 15,941,390	\$ 14,929,287	6.8%
3. Unfunded Actuarial Liability	\$ (582,566)	\$ (1,387,899)	-58.0%
4. Ratio of Actuarial Value of Assets to Actuarial Liability (2)/(1)(d)	103.79%	110.25%	-6.4%
FASB No. 35 Basis			
1. Present Value of Benefits Accrued and Vested to Date			
a. Members Currently Receiving Payments	\$ 8,013,456	N/A	N/A
b. Vested Terminated and Inactive Members	290,154	N/A	N/A
c. Active Members	<u>5,479,729</u>	<u>N/A</u>	<u>N/A</u>
d. Total PVAB	\$ 13,783,339	N/A	N/A
2. Assets at Market Value	\$ 15,833,303	\$ 16,952,044	-6.6%
3. Unfunded Present Value of Accrued Benefits, But Not Less Than Zero	\$ -	N/A	N/A
4. Ratio of Assets to Value of Benefits (2)/(1)(d)	114.87%	N/A	N/A

*July 1, 2007 numbers completed by prior actuary

SECTION V
ACCOUNTING STATEMENT INFORMATION

Tables V-2 through V-4 are exhibits for use in SFERS' Comprehensive Annual Financial Report (CAFR). The Government Finance Officers Association (GFOA) recommends showing at least 6 years of experience in each of these exhibits. Table V-2 shows the Notes to Required Supplementary Information. Table V-3 presents an analysis of financial experience for the valuation year, and Table V-4 presents the Solvency Test which shows the portion of actuarial liability covered by assets.

Table V-2
San Francisco Employees' Retirement System
NOTES TO REQUIRED SUPPLEMENTARY INFORMATION

The information presented in the required supplementary schedules to the Financial Section of the CAFR was determined as part of the actuarial valuation at the date indicated. Additional information as of the latest actuarial valuation follows.

Valuation date		July 1, 2008
Actuarial funding method		Entry Age Normal
Amortization method		Rolling
Remaining amortization period		15 or 20 years depending upon the source
Asset valuation method		5 year smoothing of return over or under expected returns
Actuarial assumptions:		
Investment rate of return		7.75%
Projected salary increases due to inflation ¹		4.50%
Cost-of-living adjustments	Old Plans – Police and Fire, post 7/1/75 DOR	4.5% per year
	Old Plans – Police and Fire, pre 7/1/75 DOR	3.0% per year
	Old Plans – Miscellaneous	2.0% per year
	New Plans – Police, Fire, and Miscellaneous	2.0% per year

The actuarial assumptions used have been recommended by the actuary and adopted by SFERS Board based on the most recent review of SFERS' experience, completed in 2008.

The rate of employer contributions to SFERS is composed of the normal cost and amortization of the unfunded actuarial liability. The normal cost is a level percent of payroll cost which, along with the member contributions, will pay for projected benefits at retirement for the average plan participant. The actuarial liability is that portion of the present value of projected benefits that will not be paid by future employer normal costs or member contributions. The difference between this liability and the funds accumulated as of the same date is the unfunded actuarial liability.

¹ Additional merit salary increases of 0.70% to 21.00% based on a participant's years of service, and membership group are also assumed. These increases are not used in the amortization of SFERS' UAL.

CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM
 JULY 1, 2008 ACTUARIAL VALUATION

SECTION V
 ACCOUNTING STATEMENT INFORMATION

Table V-3
San Francisco Employees' Retirement System
ANALYSIS OF FINANCIAL EXPERIENCE
Gain (or Loss) in Actuarial Liability During Years Ended July 1
Resulting from Differences Between Assumed Experience
and Actual Experience
 (\$ in thousands)

*Gain (or Loss) for
 Year ending
 July 1, 2008*

Type of Activity

Investment Income	\$ 216,709
Combined Liability Experience	<u>122,569</u>
Gain (or Loss) During Year from Financial Experience	\$ 339,278
Non-Recurring Gain (or Loss) Items	<u>(1,155,958)</u>
Composite Gain (or Loss) During Year	\$ (816,680)

**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM
JULY 1, 2008 ACTUARIAL VALUATION**

**SECTION V
ACCOUNTING STATEMENT INFORMATION**

**Table V-4
San Francisco Employees' Retirement System
GASB SOLVENCY TEST
Actuarial Liabilities For
(\$ in thousands)**

Valuation Date July 1, ³	(A)	(B)	(C)	Reported Assets ¹	Portion of Actuarial Liabilities Covered by Reported Assets		
	Active Member Contributions	Retirees And Beneficiaries	Remaining Active Members' Liabilities		(A)	(B)	(C)
2008 ²	\$ 2,411,027	\$ 8,013,456	\$ 4,934,341	\$ 15,941,390	100%	100%	100%
2007	\$ 2,251,564	\$ 7,423,580	\$ 3,866,243	\$ 14,929,287	100%	100%	100%

1 Actuarial Value of Assets

2 Reflects revised economic assumptions and Prop B changes

3 July 1, 2007 and prior year numbers calculated by prior actuary

**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM
JULY 1, 2008 ACTUARIAL VALUATION**

**APPENDIX A
MEMBERSHIP INFORMATION**

Table A-1			
City and County of San Francisco Employees' Retirement System			
Active Member Data - Total System			
	July 1, 2008	July 1, 2007*	% Change
<u>Total</u>			
Count	30,650	30,190	1.5%
Average Current Age	47.4	47.5	-0.2%
Average Service	11.9	12.2	-2.1%
Annual Pensionable Earnings	\$ 2,457,196,188	\$ 2,376,221,000	3.4%
Average Pensionable Earnings	\$ 80,170	\$ 78,709	1.9%

Table A-2			
City and County of San Francisco Employees' Retirement System			
Active Member Data - Police Only			
	July 1, 2008	July 1, 2007*	% Change
<u>Total</u>			
Count	2,243	2,091	7.3%
Average Current Age	43.1	43.9	-1.9%
Average Service	15.1	16.1	-6.4%
Annual Pensionable Earnings	\$ 234,633,311	\$ 212,561,000	10.4%
Average Pensionable Earnings	\$ 104,607	\$ 101,655	2.9%
<u>Old</u>			
Count	37	51	-27.5%
Average Current Age	60.3	59.2	2.0%
Average Service	37.2	36.1	2.9%
Annual Pensionable Earnings	\$ 4,870,374	\$ 6,183,000	-21.2%
Average Pensionable Earnings	\$ 131,632	\$ 121,235	8.6%
<u>New</u>			
Count	2,206	2,040	8.1%
Average Current Age	42.8	43.6	-1.7%
Average Service	14.7	15.6	-5.7%
Annual Pensionable Earnings	\$ 229,762,937	206,378,000	11.3%
Average Pensionable Earnings	\$ 104,154	101,166	3.0%

**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM
JULY 1, 2008 ACTUARIAL VALUATION**

**APPENDIX A
MEMBERSHIP INFORMATION**

Table A-3			
City and County of San Francisco Employees' Retirement System			
Active Member Data - Fire Only			
	July 1, 2008	July 1, 2007*	% Change
<u>Total</u>			
Count	1,529	1,491	2.5%
Average Current Age	43.6	43.7	-0.3%
Average Service	13.7	14.1	-2.9%
Annual Pensionable Earnings	\$ 162,975,058	\$ 155,468,000	4.8%
Average Pensionable Earnings	\$ 106,589	\$ 104,271	2.2%
<u>Old</u>			
Count	17	28	-39.3%
Average Current Age	60.9	59.3	2.9%
Average Service	36.3	31.9	13.9%
Annual Pensionable Earnings	\$ 2,532,164	\$ 4,010,000	-36.9%
Average Pensionable Earnings	\$ 148,951	\$ 143,214	4.0%
<u>New</u>			
Count	1,512	1,463	3.3%
Average Current Age	43.4	43.5	0.0%
Average Service	13.4	13.7	-2.4%
Annual Pensionable Earnings	\$ 160,442,894	\$ 151,458,000	5.9%
Average Pensionable Earnings	\$ 106,113	\$ 103,526	2.5%

Table A-4			
City and County of San Francisco Employees' Retirement System			
Active Member Data - Miscellaneous Only			
	July 1, 2008	July 1, 2007*	% Change
<u>Total</u>			
Count	26,878	26,608	1.0%
Average Current Age	47.9	47.8	0.2%
Average Service	11.6	11.6	-0.7%
Annual Pensionable Earnings	\$ 2,059,587,819	\$ 2,008,192,000	2.6%
Average Pensionable Earnings	\$ 76,627	\$ 75,473	1.5%
<u>Old</u>			
Count	598	690	-13.3%
Average Current Age	61.0	61.6	-1.0%
Average Service	34.9	27.0	29.0%
Annual Pensionable Earnings	\$ 55,268,515	\$ 62,249,000	-11.2%
Average Pensionable Earnings	\$ 92,422	\$ 90,216	2.4%
<u>New</u>			
Count	26,280	25,918	1.4%
Average Current Age	47.6	47.5	0.4%
Average Service	11.0	11.2	-1.8%
Annual Pensionable Earnings	\$ 2,004,319,304	\$ 1,945,943,000	3.0%
Average Pensionable Earnings	\$ 76,268	\$ 75,081	1.6%

CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM
JULY 1, 2008 ACTUARIAL VALUATION

**APPENDIX A
MEMBERSHIP INFORMATION**

Table A-5						
City and County of San Francisco Employees' Retirement System						
Non-Active Member Data - Total System						
	Count			Average Age		
	July 1, 2008	July 1, 2007*	% Change	July 1, 2008	July 1, 2007*	% Change
Total						
Retired	15,147	14,822	2.2%	70.0	70.0	0.1%
Disabled	2,630	2,559	2.8%	66.2	66.1	0.2%
Beneficiaries	3,737	3,735	0.1%	76.9	76.8	0.2%
Payee Total	21,514	21,116	1.9%	70.8	70.7	0.1%
Inactives	4,748	3,870	22.7%	47.9	47.8	0.3%

Table A-6						
City and County of San Francisco Employees' Retirement System						
Non-Active Member Data - Total System						
	Total Annual Benefit**			Average Annual Benefit**		
	July 1, 2008	July 1, 2007*	% Change	July 1, 2008	July 1, 2007*	% Change
Total						
Retired	\$ 498,014,844	\$ 495,584,259	0.5%	\$ 32,879	\$ 33,436	-1.7%
Disabled	108,615,485	104,720,894	3.7%	41,299	40,923	0.9%
Beneficiaries	85,211,726	83,604,455	1.9%	22,802	22,384	1.9%
Payee Total	\$ 691,842,055	\$ 683,909,608	1.2%	\$ 32,158	\$ 32,388	-0.7%
Inactives	\$ 122,649,248	n/a	n/a	\$ 25,832	n/a	n/a

* For Deferred Vested employees, total contribution balance with interest is displayed

**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM
JULY 1, 2008 ACTUARIAL VALUATION**

**APPENDIX A
MEMBERSHIP INFORMATION**

	Count			Average Age		
	July 1, 2008	July 1, 2007*	%Change	July 1, 2008	July 1, 2007*	%Change
Total						
Retired	1,046	1,044	0.2%	67.4	67.3	0.1%
Disabled	517	489	5.7%	67.2	67.2	0.1%
Beneficiaries	<u>578</u>	<u>581</u>	-0.5%	<u>75.8</u>	<u>75.5</u>	0.3%
Payee Total	2,141	2,114	1.3%	69.6	69.5	0.1%
Inactives	122	93	31.2%	44.4	44.2	0.4%
Old						
Retired	768	806	-4.7%	70.1	69.5	0.8%
Disabled	396	387	2.3%	70.9	70.4	0.6%
Beneficiaries	<u>543</u>	<u>549</u>	-1.1%	<u>77.0</u>	<u>76.7</u>	0.4%
Payee Total	1,707	1,742	-2.0%	72.5	72.0	0.7%
Inactives	-	-	0.0%	-	-	0.0%
New						
Retired	278	238	16.8%	60.0	59.9	0.2%
Disabled	121	102	18.6%	55.4	55.0	0.7%
Beneficiaries	<u>35</u>	<u>32</u>	9.4%	<u>55.8</u>	<u>54.8</u>	1.8%
Payee Total	434	372	16.7%	58.4	58.1	0.4%
Inactives	122	93	31.2%	44.4	44.2	0.4%

	Total Annual Benefit**			Average Annual Benefit**		
	July 1, 2008	July 1, 2007*	%Change	July 1, 2008	July 1, 2007*	%Change
Total						
Retired	\$ 70,781,854	\$ 68,370,361	3.5%	\$ 67,669	\$ 65,489	3.3%
Disabled	28,917,673	26,808,606	7.9%	55,934	54,823	2.0%
Beneficiaries	<u>25,878,272</u>	<u>25,171,369</u>	2.8%	<u>44,772</u>	<u>43,324</u>	3.3%
Payee Total	\$ 125,577,799	\$ 120,350,336	4.3%	\$ 58,654	\$ 56,930	3.0%
Inactives	\$ 4,962,319	\$ -	n/a	\$ 40,675	n/a	n/a
Old						
Retired	\$ 56,540,773	\$ 56,798,663	-0.5%	\$ 73,621	\$ 70,470	4.5%
Disabled	22,103,794	21,257,039	4.0%	55,818	54,928	1.6%
Beneficiaries	<u>24,430,797</u>	<u>23,809,164</u>	2.6%	<u>44,992</u>	<u>43,368</u>	3.7%
Payee Total	\$ 103,075,363	\$ 101,864,866	1.2%	\$ 60,384	\$ 58,476	3.3%
Inactives	\$ -	\$ -	0.0%	\$ -	\$ -	0.0%
New						
Retired	\$ 14,241,081	\$ 11,571,698	23.1%	\$ 51,227	\$ 48,621	5.4%
Disabled	6,813,880	5,551,567	22.7%	56,313	54,427	3.5%
Beneficiaries	<u>1,447,475</u>	<u>1,362,205</u>	6.3%	<u>41,356</u>	<u>42,569</u>	-2.8%
Payee Total	\$ 22,502,436	\$ 18,485,470	21.7%	\$ 51,849	\$ 49,692	4.3%
Inactives	\$ 4,962,319	n/a	n/a	\$ 40,675	n/a	n/a

* For Deferred Vested employees, total contribution balance with interest is displayed

**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM
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**APPENDIX A
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Table A-9						
City and County of San Francisco Employees' Retirement System						
Non-Active Member Data - Fire						
	Count			Average Age		
	July 1, 2008	July 1, 2007*	% Change	July 1, 2008	July 1, 2007*	% Change
Total						
Retired	789	802	-1.6%	67.3	67.1	0.3%
Disabled	722	693	4.2%	68.3	68.3	-0.1%
Beneficiaries	<u>466</u>	<u>467</u>	-0.2%	<u>78.5</u>	<u>77.9</u>	0.7%
Payee Total	1,977	1,962	0.8%	70.3	70.1	0.2%
Inactives	63	45	40.0%	43.4	42.4	2.4%
Old						
Retired	590	627	-5.9%	70.0	69.4	0.9%
Disabled	584	577	1.2%	70.9	70.8	0.2%
Beneficiaries	<u>444</u>	<u>447</u>	-0.7%	<u>79.6</u>	<u>79.1</u>	0.6%
Payee Total	1,618	1,651	-2.0%	73.0	72.5	0.6%
Inactives	3	2	50.0%	68.7	61.5	11.7%
New						
Retired	199	175	13.7%	59.4	59.0	0.7%
Disabled	138	116	19.0%	57.1	56.1	1.7%
Beneficiaries	<u>22</u>	<u>20</u>	10.0%	<u>55.9</u>	<u>51.4</u>	8.8%
Payee Total	359	311	15.4%	58.3	57.4	1.5%
Inactives	60	43	39.5%	42.2	41.5	1.5%

Table A-10						
City and County of San Francisco Employees' Retirement System						
Non-Active Member Data - Fire						
	Total Annual Benefit**			Average Annual Benefit**		
	July 1, 2008	July 1, 2007*	% Change	July 1, 2008	July 1, 2007*	% Change
Total						
Retired	\$ 59,595,538	\$ 59,403,674	0.3%	\$ 75,533	\$ 74,069	2.0%
Disabled	50,164,872	48,264,320	3.9%	69,480	69,645	-0.2%
Beneficiaries	<u>22,985,499</u>	<u>22,722,083</u>	1.2%	<u>49,325</u>	<u>48,655</u>	1.4%
Payee Total	\$ 132,745,909	\$ 130,390,077	1.8%	\$ 67,145	\$ 66,458	1.0%
Inactives	\$ 3,385,072	n/a	n/a	\$ 53,731	n/a	n/a
Old						
Retired	\$ 44,740,957	\$ 46,666,377	-4.1%	\$ 75,832	\$ 74,428	1.9%
Disabled	41,994,416	41,443,138	1.3%	71,908	71,825	0.1%
Beneficiaries	<u>22,110,217</u>	<u>21,932,591</u>	0.8%	<u>49,798</u>	<u>49,066</u>	1.5%
Payee Total	\$ 108,845,590	\$ 110,042,106	-1.1%	\$ 67,272	\$ 66,652	0.9%
Inactives	\$ 56,964	n/a	n/a	\$ 18,988	n/a	n/a
New						
Retired	\$ 14,854,581	\$ 12,737,297	16.6%	\$ 74,646	\$ 72,785	2.6%
Disabled	8,170,456	6,821,182	19.8%	59,206	58,803	0.7%
Beneficiaries	<u>875,283</u>	<u>789,492</u>	10.9%	<u>39,786</u>	<u>39,475</u>	0.8%
Payee Total	\$ 23,900,319	\$ 20,347,971	17.5%	\$ 66,575	\$ 65,428	1.8%
Inactives	\$ 3,328,108	n/a	n/a	\$ 55,468	n/a	n/a

* For Deferred Vested employees, total contribution balance with interest is displayed

**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM
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	Count			Average Age		
	July 1, 2008	July 1, 2007*	% Change	July 1, 2008	July 1, 2007*	% Change
<u>Total</u>						
Retired	13,312	12,976	2.6%	70.4	70.4	0.0%
Disabled	1,391	1,377	1.0%	64.8	64.6	0.3%
Beneficiaries	<u>2,693</u>	<u>2,687</u>	0.2%	<u>76.9</u>	<u>76.9</u>	0.0%
Payee Total	17,396	17,040	2.1%	70.9	70.9	0.0%
Inactives	4,563	2,985	52.9%	48.1	49.3	-2.5%
<u>Old</u>						
Retired	6,481	6,687	-3.1%	74.7	74.3	0.5%
Disabled	660	692	-4.6%	72.2	71.7	0.7%
Beneficiaries	<u>2,198</u>	<u>2,242</u>	-2.0%	<u>79.0</u>	<u>78.8</u>	0.2%
Payee Total	9,339	9,621	-2.9%	75.5	75.2	0.4%
Inactives	296	262	13.0%	68.9	69.7	-1.2%
<u>New</u>						
Retired	6,831	6,289	8.6%	66.3	66.2	0.2%
Disabled	731	685	6.7%	58.1	57.4	1.2%
Beneficiaries	<u>495</u>	<u>445</u>	11.2%	<u>67.7</u>	<u>67.1</u>	0.8%
Payee Total	8,057	7,419	8.6%	65.7	65.4	0.4%
Inactives	4,267	2,723	56.7%	46.7	47.4	-1.5%

	Total Annual Benefit**			Average Annual Benefit**		
	July 1, 2008	July 1, 2007*	% Change	July 1, 2008	July 1, 2007*	% Change
<u>Total</u>						
Retired	\$ 367,637,453	\$ 367,810,224	0.0%	\$ 27,617	\$ 28,345	-2.6%
Disabled	29,532,939	29,647,968	-0.4%	21,231	21,531	-1.4%
Beneficiaries	<u>36,347,954</u>	<u>35,711,003</u>	1.8%	<u>13,497</u>	<u>13,290</u>	1.6%
Payee Total	\$ 433,518,346	\$ 433,169,195	0.1%	\$ 24,921	\$ 25,421	-2.0%
Inactives	\$ 114,301,858	n/a	n/a	\$ 25,050	n/a	n/a
<u>Old</u>						
Retired	\$ 229,925,982	\$ 236,636,988	-2.8%	\$ 35,477	\$ 35,388	0.3%
Disabled	14,180,139	14,914,464	-4.9%	21,485	21,553	-0.3%
Beneficiaries	<u>31,368,843</u>	<u>31,341,815</u>	0.1%	<u>14,272</u>	<u>13,979</u>	2.1%
Payee Total	\$ 275,474,964	\$ 282,893,267	-2.6%	\$ 29,497	\$ 29,404	0.3%
Inactives	\$ 3,830,615	n/a	n/a	\$ 12,941	n/a	n/a
<u>New</u>						
Retired	\$ 137,711,471	\$ 131,173,236	5.0%	\$ 20,160	\$ 20,858	-3.3%
Disabled	15,352,800	14,733,504	4.2%	21,002	21,509	-2.4%
Beneficiaries	<u>4,979,112</u>	<u>4,369,188</u>	14.0%	<u>10,059</u>	<u>9,818</u>	2.4%
Payee Total	\$ 158,043,382	\$ 150,275,928	5.2%	\$ 19,616	\$ 20,256	-3.2%
Inactives	\$ 110,471,243	n/a	n/a	\$ 25,890	n/a	n/a

* For Deferred Vested employees, total contribution balance with interest is displayed

**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM
JULY 1, 2008 ACTUARIAL VALUATION**

**APPENDIX A
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**Table A-13
City and County of San Francisco Employees' Retirement System
Distribution of Active Members as of July 1, 2008
Total System**

Age	Years of Service ¹											Total
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 and up		
Under 25	201	130	-	-	-	-	-	-	-	-	-	331
25 to 29	491	812	127	1	-	-	-	-	-	-	-	1,431
30 to 34	425	1,028	683	101	-	-	-	-	-	-	-	2,237
35 to 39	395	1,053	1,253	655	87	1	-	-	-	-	-	3,444
40 to 44	301	816	1,418	973	574	90	1	-	-	-	-	4,173
45 to 49	251	754	1,291	1,019	892	660	205	1	-	-	-	5,073
50 to 54	187	592	1,166	847	870	1,053	630	147	3	-	-	5,495
55 to 59	127	413	816	689	708	894	653	418	102	1	1	4,821
60 to 64	54	183	436	368	383	476	323	274	133	11	11	2,641
65 to 69	11	36	126	112	131	117	62	57	39	25	25	716
70 and up	6	16	29	37	57	63	39	18	14	9	9	288
Total Count	2,449	5,833	7,345	4,802	3,702	3,354	1,913	915	291	46	46	30,650

**Table A-14
City and County of San Francisco Employees' Retirement System
Distribution of Active Members as of July 1, 2008
Total System**

Age	Average Salary Years of Service ¹											Total
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 and up		
Under 25	\$ 58,262	\$ 57,414	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 57,929
25 to 29	63,945	66,337	79,604	53,368	-	-	-	-	-	-	-	66,685
30 to 34	68,032	72,718	79,005	78,770	-	-	-	-	-	-	-	74,021
35 to 39	68,495	75,500	80,916	89,172	96,303	101,104	-	-	-	-	-	79,800
40 to 44	68,863	73,272	78,243	88,511	93,094	88,907	105,212	-	-	-	-	81,268
45 to 49	66,343	74,680	75,724	83,449	89,291	88,695	96,252	72,645	-	-	-	81,558
50 to 54	65,689	72,400	73,478	79,283	84,553	89,776	104,595	101,604	75,010	-	-	83,189
55 to 59	70,849	70,445	74,873	78,751	82,118	84,596	96,296	99,371	105,499	118,961	-	83,492
60 to 64	65,931	74,326	73,835	77,888	77,102	81,553	82,725	93,909	97,873	104,877	-	80,647
65 to 69	69,028	81,484	71,687	72,827	74,937	73,530	80,636	82,230	99,449	91,907	-	77,045
70 and up	50,765	78,468	61,270	72,744	77,361	71,479	70,976	88,265	98,475	93,104	-	74,704
Avg. Salary	\$ 66,297	\$ 72,249	\$ 76,779	\$ 82,985	\$ 85,607	\$ 86,085	\$ 95,714	\$ 96,779	\$ 100,551	\$ 95,831	\$ 95,831	\$ 80,170

**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM
JULY 1, 2008 ACTUARIAL VALUATION**

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**Table A-15
City and County of San Francisco Employees' Retirement System
Distribution of Active Members as of July 1, 2008
Total Police**

Age	Years of Service ¹											Total
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 and up		
Under 25	5	28	-	-	-	-	-	-	-	-	-	33
25 to 29	19	129	33	-	-	-	-	-	-	-	-	181
30 to 34	10	93	113	19	-	-	-	-	-	-	-	235
35 to 39	9	58	127	155	16	-	-	-	-	-	-	365
40 to 44	3	23	89	165	109	10	-	-	-	-	-	399
45 to 49	1	6	27	92	66	98	85	-	-	-	-	375
50 to 54	-	2	8	36	37	67	190	57	-	-	-	397
55 to 59	2	1	1	24	10	21	76	54	23	-	-	212
60 to 64	-	-	1	5	4	3	7	4	10	2	-	36
65 to 69	-	-	-	1	-	-	-	2	-	4	-	7
70 and up	-	-	-	-	1	-	-	1	-	1	-	3
Total Count	49	340	399	497	243	199	358	118	33	199	7	2,243

**Table A-16
City and County of San Francisco Employees' Retirement System
Distribution of Active Members as of July 1, 2008
Total Police**

Age	Average Salary Years of Service ¹											Total
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 and up		
Under 25	\$ 76,532	\$ 76,845	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 76,797
25 to 29	76,532	78,822	95,977	-	-	-	-	-	-	-	-	81,709
30 to 34	78,540	80,479	99,125	99,711	-	-	-	-	-	-	-	90,917
35 to 39	78,966	82,574	97,336	104,865	115,025	-	-	-	-	-	-	98,510
40 to 44	78,841	82,198	97,999	104,745	110,834	110,708	-	-	-	-	-	103,559
45 to 49	76,532	80,933	100,082	102,604	111,065	112,179	121,770	-	-	-	-	110,342
50 to 54	-	82,069	103,492	108,035	109,354	113,211	120,134	127,874	-	-	-	117,448
55 to 59	102,443	76,356	109,841	116,446	106,479	113,807	117,539	120,228	127,835	-	-	117,953
60 to 64	-	-	104,124	113,335	114,078	121,729	112,916	113,084	141,704	137,349	-	122,966
65 to 69	-	-	-	103,386	-	-	-	121,401	-	128,239	-	122,735
70 and up	-	-	-	-	114,421	-	-	126,909	-	129,726	-	123,685
Avg. Salary	\$ 78,588	\$ 80,030	\$ 98,236	\$ 105,081	\$ 110,836	\$ 112,768	\$ 119,830	\$ 123,756	\$ 132,037	\$ 131,054	\$ 131,054	\$ 104,607

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**Table A-17
City and County of San Francisco Employees' Retirement System
Distribution of Active Members as of July 1, 2008
Old Police**

Age	Years of Service ¹										Total	
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 and up		
Under 25	-	-	-	-	-	-	-	-	-	-	-	-
25 to 29	-	-	-	-	-	-	-	-	-	-	-	-
30 to 34	-	-	-	-	-	-	-	-	-	-	-	-
35 to 39	-	-	-	-	-	-	-	-	-	-	-	-
40 to 44	-	-	-	-	-	-	-	-	-	-	-	-
45 to 49	-	-	-	-	-	-	-	-	-	-	-	-
50 to 54	-	-	-	-	-	-	-	-	-	-	-	-
55 to 59	-	-	-	-	-	-	-	-	4	16	-	20
60 to 64	-	-	-	-	-	-	-	-	1	8	2	11
65 to 69	-	-	-	-	-	-	-	-	1	-	3	4
70 and up	-	-	-	-	-	-	-	-	1	-	1	2
Total Count	-	-	-	-	-	-	-	-	7	24	6	37

**Table A-18
City and County of San Francisco Employees' Retirement System
Distribution of Active Members as of July 1, 2008
Old Police**

Age	Average Salary Years of Service ¹										Total	
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 and up		
Under 25	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
25 to 29	-	-	-	-	-	-	-	-	-	-	-	-
30 to 34	-	-	-	-	-	-	-	-	-	-	-	-
35 to 39	-	-	-	-	-	-	-	-	-	-	-	-
40 to 44	-	-	-	-	-	-	-	-	-	-	-	-
45 to 49	-	-	-	-	-	-	-	-	-	-	-	-
50 to 54	-	-	-	-	-	-	-	-	-	-	-	-
55 to 59	-	-	-	-	-	-	-	118,571	130,827	-	-	128,375
60 to 64	-	-	-	-	-	-	-	116,677	138,993	137,349	-	136,665
65 to 69	-	-	-	-	-	-	-	127,051	-	138,622	-	135,729
70 and up	-	-	-	-	-	-	-	126,909	-	129,726	-	128,318
Avg. Salary	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 120,703	\$ 133,549	\$ 136,715	\$ -	\$ 131,632

**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM
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**APPENDIX A
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**Table A-19
City and County of San Francisco Employees' Retirement System
Distribution of Active Members as of July 1, 2008
New Police**

Age	Years of Service ¹										Total	
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 and up		
Under 25	5	28	-	-	-	-	-	-	-	-	-	33
25 to 29	19	129	33	-	-	-	-	-	-	-	-	181
30 to 34	10	93	113	19	-	-	-	-	-	-	-	235
35 to 39	9	58	127	155	16	-	-	-	-	-	-	365
40 to 44	3	23	89	165	109	10	-	-	-	-	-	399
45 to 49	1	6	27	92	66	98	85	-	-	-	-	375
50 to 54	-	2	8	36	37	67	190	57	-	-	-	397
55 to 59	2	1	1	24	10	21	76	50	7	-	-	192
60 to 64	-	-	1	5	4	3	7	3	2	-	-	25
65 to 69	-	-	-	1	-	-	-	1	-	1	-	3
70 and up	-	-	-	-	1	-	-	-	-	-	1	1
Total Count	49	340	399	497	243	199	358	111	9	1		2,206

**Table A-20
City and County of San Francisco Employees' Retirement System
Distribution of Active Members as of July 1, 2008
New Police**

Age	Average Salary										Total	
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 and up		
Under 25	\$ 76,532	\$ 76,845	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 76,797
25 to 29	76,532	78,822	95,977	-	-	-	-	-	-	-	-	81,709
30 to 34	78,540	80,479	99,125	99,711	-	-	-	-	-	-	-	90,917
35 to 39	78,966	82,574	97,336	104,865	115,025	-	-	-	-	-	-	98,510
40 to 44	78,841	82,198	97,999	104,745	110,834	110,708	-	-	-	-	-	103,559
45 to 49	76,532	80,933	100,082	102,604	111,065	112,179	121,770	-	-	-	-	110,342
50 to 54	-	82,069	103,492	108,035	109,354	113,211	120,134	127,874	-	-	-	117,448
55 to 59	102,443	76,356	109,841	116,446	106,479	113,807	117,539	120,361	120,996	-	-	116,867
60 to 64	-	-	104,124	113,335	114,078	121,729	112,916	111,886	152,549	-	-	116,939
65 to 69	-	-	-	103,386	-	-	-	115,752	-	-	97,089	105,409
70 and up	-	-	-	-	114,421	-	-	-	-	-	-	114,421
Avg. Salary	\$ 78,588	\$ 80,030	\$ 98,236	\$ 105,081	\$ 110,836	\$ 112,768	\$ 119,830	\$ 123,949	\$ 128,008	\$ 97,089		\$ 104,154

**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM
JULY 1, 2008 ACTUARIAL VALUATION**

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**Table A-21
City and County of San Francisco Employees' Retirement System
Distribution of Active Members as of July 1, 2008
Total Fire**

Age	Years of Service ¹										Total	
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 and up		
Under 25	4	3	-	-	-	-	-	-	-	-	-	7
25 to 29	11	47	15	-	-	-	-	-	-	-	-	73
30 to 34	9	45	65	9	-	-	-	-	-	-	-	128
35 to 39	4	47	126	89	17	1	-	-	-	-	-	284
40 to 44	1	28	114	110	105	5	-	-	-	-	-	363
45 to 49	1	9	65	58	125	26	3	-	-	-	-	287
50 to 54	1	3	21	17	57	31	81	11	-	-	-	222
55 to 59	-	1	-	8	21	15	67	24	4	-	-	140
60 to 64	-	-	1	1	1	1	5	7	3	-	-	19
65 to 69	-	-	-	-	1	-	-	-	1	1	-	3
70 and up	-	-	1	-	-	-	-	-	1	1	-	3
Total Count	31	183	408	292	327	79	156	42	9	2	-	1,529

**Table A-22
City and County of San Francisco Employees' Retirement System
Distribution of Active Members as of July 1, 2008
Total Fire**

Age	Average Salary Years of Service ¹										Total	
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 and up		
Under 25	\$ 60,249	\$ 60,249	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 60,249
25 to 29	62,682	81,552	95,526	-	-	-	-	-	-	-	-	81,580
30 to 34	78,580	82,674	100,219	100,280	-	-	-	-	-	-	-	92,533
35 to 39	80,242	86,810	100,630	103,525	114,004	101,104	-	-	-	-	-	99,766
40 to 44	80,242	85,524	100,162	107,145	114,463	116,350	-	-	-	-	-	105,454
45 to 49	60,249	89,293	101,560	107,444	112,097	120,896	100,764	-	-	-	-	108,553
50 to 54	80,242	101,142	104,209	106,192	114,417	119,783	126,316	127,095	-	-	-	118,207
55 to 59	-	47,025	-	106,351	110,201	125,050	125,108	139,040	141,265	-	-	124,086
60 to 64	-	-	101,092	108,557	116,084	134,115	119,221	140,447	141,998	-	-	129,741
65 to 69	-	-	-	-	106,238	-	-	-	133,160	167,066	-	135,488
70 and up	-	-	120,981	-	-	-	-	-	189,627	189,657	-	166,755
Avg. Salary	\$ 70,304	\$ 83,950	\$ 100,630	\$ 105,817	\$ 113,233	\$ 120,877	\$ 125,078	\$ 136,146	\$ 145,982	\$ 178,361	\$ -	\$ 106,589

**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM
JULY 1, 2008 ACTUARIAL VALUATION**

**APPENDIX A
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**Table A-23
City and County of San Francisco Employees' Retirement System
Distribution of Active Members as of July 1, 2008
Old Fire**

Age	Years of Service ¹										Total	
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 and up		
Under 25	-	-	-	-	-	-	-	-	-	-	-	-
25 to 29	-	-	-	-	-	-	-	-	-	-	-	-
30 to 34	-	-	-	-	-	-	-	-	-	-	-	-
35 to 39	-	-	-	-	-	-	-	-	-	-	-	-
40 to 44	-	-	-	-	-	-	-	-	-	-	-	-
45 to 49	-	-	-	-	-	-	-	-	-	-	-	-
50 to 54	-	-	-	-	-	-	-	-	-	-	-	-
55 to 59	-	-	-	-	-	-	-	6	1	-	-	7
60 to 64	-	-	-	-	-	-	-	4	3	-	-	7
65 to 69	-	-	-	-	-	-	-	-	-	1	-	1
70 and up	-	-	-	-	-	-	-	-	1	1	-	2
Total Count	-	-	-	-	-	-	-	10	5	2	-	17

**Table A-24
City and County of San Francisco Employees' Retirement System
Distribution of Active Members as of July 1, 2008
Old Fire**

Age	Average Salary Years of Service ¹										Total	
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 and up		
Under 25	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
25 to 29	-	-	-	-	-	-	-	-	-	-	-	-
30 to 34	-	-	-	-	-	-	-	-	-	-	-	-
35 to 39	-	-	-	-	-	-	-	-	-	-	-	-
40 to 44	-	-	-	-	-	-	-	-	-	-	-	-
45 to 49	-	-	-	-	-	-	-	-	-	-	-	-
50 to 54	-	-	-	-	-	-	-	-	-	-	-	-
55 to 59	-	-	-	-	-	-	-	141,352	165,201	-	-	144,759
60 to 64	-	-	-	-	-	-	-	136,627	141,998	-	-	138,929
65 to 69	-	-	-	-	-	-	-	-	-	167,066	-	167,066
70 and up	-	-	-	-	-	-	-	-	189,627	189,657	-	189,642
Avg. Salary	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 139,462	\$ 156,164	\$ 178,361	\$ -	\$ 148,951

**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM
JULY 1, 2008 ACTUARIAL VALUATION**

**APPENDIX A
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**Table A-25
City and County of San Francisco Employees' Retirement System
Distribution of Active Members as of July 1, 2008
New Fire**

Age	Years of Service ¹										Total
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 and up	
Under 25	4	3	-	-	-	-	-	-	-	-	7
25 to 29	11	47	15	-	-	-	-	-	-	-	73
30 to 34	9	45	65	9	-	-	-	-	-	-	128
35 to 39	4	47	126	89	17	1	-	-	-	-	284
40 to 44	1	28	114	110	105	5	-	-	-	-	363
45 to 49	1	9	65	58	125	26	3	-	-	-	287
50 to 54	1	3	21	17	57	31	81	11	-	-	222
55 to 59	-	1	-	8	21	15	67	18	3	-	133
60 to 64	-	-	1	1	1	1	5	3	-	-	12
65 to 69	-	-	-	-	1	-	-	-	1	-	2
70 and up	-	-	1	-	-	-	-	-	-	-	1
Total Count	31	183	408	292	327	79	156	32	4	-	1,512

**Table A-26
City and County of San Francisco Employees' Retirement System
Distribution of Active Members as of July 1, 2008
New Fire**

Age	Average Salary										Total
	Years of Service ¹										
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 and up	
Under 25	\$ 60,249	\$ 60,249	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 60,249
25 to 29	62,682	81,552	95,526	-	-	-	-	-	-	-	81,580
30 to 34	78,580	82,674	100,219	100,280	-	-	-	-	-	-	92,533
35 to 39	80,242	86,810	100,630	103,525	114,004	101,104	-	-	-	-	99,766
40 to 44	80,242	85,524	100,162	107,145	114,463	116,350	-	-	-	-	105,454
45 to 49	60,249	89,293	101,560	107,444	112,097	120,896	100,764	-	-	-	108,553
50 to 54	80,242	101,142	104,209	106,192	114,417	119,783	126,316	127,095	-	-	118,207
55 to 59	-	47,025	-	106,351	110,201	125,050	125,108	138,270	133,287	-	122,998
60 to 64	-	-	101,092	108,557	116,084	134,115	119,221	145,540	-	-	124,381
65 to 69	-	-	-	-	106,238	-	-	-	133,160	-	119,699
70 and up	-	-	120,981	-	-	-	-	-	-	-	120,981
Avg. Salary	\$ 70,304	\$ 83,950	\$ 100,630	\$ 105,817	\$ 113,233	\$ 120,877	\$ 125,078	\$ 135,110	\$ 133,255	\$ -	\$ 106,113

**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM
JULY 1, 2008 ACTUARIAL VALUATION**

**APPENDIX A
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**Table A-27
City and County of San Francisco Employees' Retirement System
Distribution of Active Members as of July 1, 2008
Total Miscellaneous**

Age	Years of Service ¹										Total	
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 and up		
Under 25	192	99	-	-	-	-	-	-	-	-	-	291
25 to 29	461	636	79	1	-	-	-	-	-	-	-	1,177
30 to 34	406	890	505	73	-	-	-	-	-	-	-	1,874
35 to 39	382	948	1,000	411	54	-	-	-	-	-	-	2,795
40 to 44	297	765	1,215	698	360	75	1	-	-	-	-	3,411
45 to 49	249	739	1,199	869	701	536	117	1	-	-	-	4,411
50 to 54	186	587	1,137	794	776	955	359	79	3	-	-	4,876
55 to 59	125	411	815	657	677	858	510	340	75	1	-	4,469
60 to 64	54	183	434	362	378	472	311	263	120	9	-	2,586
65 to 69	11	36	126	111	130	117	62	55	38	20	-	706
70 and up	6	16	28	37	56	63	39	17	13	7	-	282
Total Count	2,369	5,310	6,538	4,013	3,132	3,076	1,399	755	249	37	-	26,878

**Table A-28
City and County of San Francisco Employees' Retirement System
Distribution of Active Members as of July 1, 2008
Total Miscellaneous**

Age	Average Salary Years of Service ¹										Total	
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 and up		
Under 25	\$ 57,744	\$ 51,833	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 55,733
25 to 29	63,456	62,681	69,741	53,368	-	-	-	-	-	-	-	63,450
30 to 34	67,540	71,403	71,773	70,668	-	-	-	-	-	-	-	70,637
35 to 39	68,125	74,506	76,347	80,145	85,183	-	-	-	-	-	-	75,328
40 to 44	68,724	72,555	74,739	81,736	81,490	84,171	105,212	-	-	-	-	76,086
45 to 49	66,327	74,452	73,774	79,820	83,174	82,840	77,598	72,645	-	-	-	77,355
50 to 54	65,610	72,220	72,699	77,403	81,177	87,158	91,471	79,100	75,010	-	-	78,805
55 to 59	70,344	70,487	74,830	77,038	80,887	83,174	89,346	93,259	96,742	118,961	-	80,585
60 to 64	65,931	74,326	73,703	77,314	76,608	81,187	81,459	92,378	93,117	97,661	-	79,697
65 to 69	69,028	81,484	71,687	72,552	74,696	73,530	80,636	80,805	98,562	80,882	-	76,344
70 and up	50,765	78,468	59,138	72,744	76,700	71,479	70,976	85,991	91,463	74,079	-	73,203
Avg. Salary	\$ 65,991	\$ 71,348	\$ 73,981	\$ 78,587	\$ 80,766	\$ 83,466	\$ 86,269	\$ 90,372	\$ 94,735	\$ 84,706	-	\$ 76,627

**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM
JULY 1, 2008 ACTUARIAL VALUATION**

**APPENDIX A
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**Table A-29
City and County of San Francisco Employees' Retirement System
Distribution of Active Members as of July 1, 2008
Old Miscellaneous**

Age	Years of Service ¹										Total	
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 and up		
Under 25	-	-	-	-	-	-	-	-	-	-	-	-
25 to 29	-	-	-	-	-	-	-	-	-	-	-	-
30 to 34	-	-	-	-	-	-	-	-	-	-	-	-
35 to 39	-	-	-	-	-	-	-	-	-	-	-	-
40 to 44	-	-	-	-	-	-	-	-	-	-	-	-
45 to 49	-	-	-	-	-	-	-	-	-	-	-	-
50 to 54	-	-	-	-	-	-	-	17	2	-	-	19
55 to 59	-	-	-	-	-	1	8	142	71	1	-	223
60 to 64	-	-	-	-	-	6	5	117	113	9	-	250
65 to 69	-	-	-	-	-	-	1	21	35	20	-	77
70 and up	-	-	-	-	-	1	-	8	13	7	-	29
Total Count	-	-	-	-	-	8	14	305	234	37	-	598

**Table A-30
City and County of San Francisco Employees' Retirement System
Distribution of Active Members as of July 1, 2008
Old Miscellaneous**

Age	Average Salary Years of Service ¹										Total	
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 and up		
Under 25	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
25 to 29	-	-	-	-	-	-	-	-	-	-	-	-
30 to 34	-	-	-	-	-	-	-	-	-	-	-	-
35 to 39	-	-	-	-	-	-	-	-	-	-	-	-
40 to 44	-	-	-	-	-	-	-	-	-	-	-	-
45 to 49	-	-	-	-	-	-	-	-	-	-	-	-
50 to 54	-	-	-	-	-	-	-	75,977	56,709	-	-	73,949
55 to 59	-	-	-	-	-	68,929	63,345	94,397	97,903	118,961	-	94,395
60 to 64	-	-	-	-	-	72,868	80,571	97,353	93,607	97,661	-	94,748
65 to 69	-	-	-	-	-	-	58,853	80,747	98,101	80,882	-	88,386
70 and up	-	-	-	-	-	-	47,025	70,756	91,463	74,079	-	80,022
Avg. Salary	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 69,145	\$ 69,176	\$ 92,945	\$ 95,148	\$ 84,706	\$ -	\$ 92,422

**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM
JULY 1, 2008 ACTUARIAL VALUATION**

**APPENDIX A
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**Table A-31
City and County of San Francisco Employees' Retirement System
Distribution of Active Members as of July 1, 2008
New Miscellaneous**

Age	Years of Service ¹										Total
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 and up	
Under 25	192	99	-	-	-	-	-	-	-	-	291
25 to 29	461	636	79	1	-	-	-	-	-	-	1,177
30 to 34	406	890	505	73	-	-	-	-	-	-	1,874
35 to 39	382	948	1,000	411	54	-	-	-	-	-	2,795
40 to 44	297	765	1,215	698	360	75	1	-	-	-	3,411
45 to 49	249	739	1,199	869	701	536	117	1	-	-	4,411
50 to 54	186	587	1,137	794	776	955	359	62	1	-	4,857
55 to 59	125	411	815	657	677	857	502	198	4	-	4,246
60 to 64	54	183	434	362	378	466	306	146	7	-	2,336
65 to 69	11	36	126	111	130	117	61	34	3	-	629
70 and up	6	16	28	37	56	62	39	9	-	-	253
Total Count	2,369	5,310	6,538	4,013	3,132	3,068	1,385	450	15	-	26,280

**Table A-32
City and County of San Francisco Employees' Retirement System
Distribution of Active Members as of July 1, 2008
New Miscellaneous**

Age	Average Salary										Total
	Years of Service ¹										
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 and up	
Under 25	\$ 57,744	\$ 51,833	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 55,733
25 to 29	63,456	62,681	69,741	53,368	-	-	-	-	-	-	63,450
30 to 34	67,540	71,403	71,773	70,668	-	-	-	-	-	-	70,637
35 to 39	68,125	74,506	76,347	80,145	85,183	-	-	-	-	-	75,328
40 to 44	68,724	72,555	74,739	81,736	81,490	84,171	105,212	-	-	-	76,086
45 to 49	66,327	74,452	73,774	79,820	83,174	82,840	77,598	72,645	-	-	77,355
50 to 54	65,610	72,220	72,699	77,403	81,177	87,158	91,471	79,956	111,610	-	78,824
55 to 59	70,344	70,487	74,830	77,038	80,887	83,191	89,760	92,442	76,135	-	79,860
60 to 64	65,931	74,326	73,703	77,314	76,608	81,294	81,474	88,391	85,213	-	78,086
65 to 69	69,028	81,484	71,687	72,552	74,696	73,530	80,993	80,841	103,942	-	74,870
70 and up	50,765	78,468	59,138	72,744	76,700	71,873	70,976	99,534	-	-	72,422
Avg. Salary	\$ 65,991	\$ 71,348	\$ 73,981	\$ 78,587	\$ 80,766	\$ 83,503	\$ 86,441	\$ 88,629	\$ 88,298	\$ -	\$ 76,268

**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM
JULY 1, 2008 ACTUARIAL VALUATION**

**APPENDIX A
MEMBERSHIP INFORMATION**

**Table A-33
City and County of San Francisco Employees' Retirement System
Retirees, Disabled, and Beneficiaries by Attained Age and Benefit Effective Date
Total System**

Benefit Effective	Age										Total
	Under 50	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 and up	
pre-1989	3	3	27	63	152	238	507	944	973	658	3,568
1989	-	2	10	11	17	61	84	170	65	13	433
1990	2	2	6	17	32	85	119	157	47	14	481
1991	2	1	6	9	44	75	125	140	45	17	464
1992	1	2	7	26	188	425	550	275	72	19	1,565
1993	-	3	5	16	72	49	48	39	35	17	284
1994	1	9	9	30	90	67	86	58	29	16	395
1995	1	6	13	43	121	101	120	51	33	20	509
1996	5	5	25	82	106	141	126	67	30	14	601
1997	7	7	20	92	151	165	108	49	31	13	643
1998	8	20	27	153	173	223	134	45	42	17	842
1999	3	10	40	129	172	195	119	52	33	18	771
2000	6	18	90	176	187	211	96	47	20	17	868
2001	15	25	110	245	301	254	106	49	27	11	1,143
2002	15	20	131	210	311	196	61	45	38	14	1,041
2003	22	34	205	312	299	176	73	34	27	12	1,194
2004	27	44	238	307	315	163	54	57	38	8	1,251
2005	21	146	324	396	385	148	76	37	30	14	1,577
2006	24	186	307	370	253	95	41	49	26	11	1,362
2007	28	184	318	450	229	95	54	55	23	6	1,442
2008	15	200	264	288	133	59	42	38	33	8	1,080
Total	206	927	2,182	3,425	3,731	3,222	2,729	2,458	1,697	937	21,514

Average Age at Retirement/Disability 57.7
Average Current Age 70.7
Average Annual Pension \$ 32,158

CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM
 JULY 1, 2008 ACTUARIAL VALUATION

**APPENDIX A
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**Table A-34
 City and County of San Francisco Employees' Retirement System
 Retirees, Disabled, and Beneficiaries by Attained Age and Benefit Effective Date
 Total Police**

Benefit Effective	Age										Total
	Under 50	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 and up	
pre-1989	2	2	16	33	51	72	149	182	80	56	643
1989	-	2	6	1	5	18	9	4	4	1	50
1990	1	2	2	3	4	17	9	3	4	-	45
1991	-	1	2	3	8	20	6	4	2	1	47
1992	1	1	1	2	14	12	7	2	-	1	41
1993	-	1	1	3	20	7	1	3	4	3	43
1994	-	2	1	3	20	10	9	2	4	-	51
1995	-	-	1	7	34	13	4	1	5	2	67
1996	-	1	4	16	16	4	3	8	5	2	59
1997	-	2	2	20	22	10	2	5	3	-	66
1998	1	3	6	16	12	11	8	3	1	2	63
1999	1	1	3	18	11	7	3	5	3	-	52
2000	1	6	12	41	13	8	6	7	4	1	99
2001	3	4	16	35	21	7	10	6	1	-	103
2002	3	3	15	32	9	6	3	5	4	2	82
2003	-	5	26	44	16	11	3	7	2	1	115
2004	5	2	37	32	10	6	4	7	5	1	109
2005	2	13	26	27	16	5	7	2	3	1	102
2006	6	16	34	14	6	5	6	5	5	1	98
2007	5	16	39	16	5	6	8	8	3	1	107
2008	5	25	36	13	5	5	5	3	2	-	99
Total	36	108	286	379	318	260	262	272	144	76	2,141

Average Age at Retirement/Disability 51.5
 Average Current Age 69.6
 Average Annual Pension \$ 58,654

**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM
JULY 1, 2008 ACTUARIAL VALUATION**

**APPENDIX A
MEMBERSHIP INFORMATION**

**Table A-35
City and County of San Francisco Employees' Retirement System
Retirees, Disabled, and Beneficiaries by Attained Age and Benefit Effective Date
Old Police**

Benefit Effective	Age										Total
	Under 50	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 and up	
pre-1989	2	1	13	29	50	66	146	182	80	56	625
1989	-	-	4	1	4	17	8	4	4	1	43
1990	-	-	1	1	4	16	9	3	4	-	38
1991	-	1	1	3	7	20	6	4	2	1	45
1992	-	-	1	2	13	12	7	2	-	1	38
1993	-	-	-	1	17	7	1	3	4	3	36
1994	-	-	-	1	18	10	8	2	4	-	43
1995	-	-	1	5	29	12	4	1	5	2	59
1996	-	-	3	9	12	4	3	7	5	1	44
1997	-	1	1	15	21	9	2	5	3	-	57
1998	-	1	3	14	10	10	8	3	1	2	52
1999	-	-	3	17	8	6	3	5	3	-	45
2000	-	3	5	27	11	5	6	7	4	1	69
2001	1	1	13	28	17	5	10	6	1	-	82
2002	1	-	8	26	7	6	3	5	4	2	62
2003	-	3	15	35	14	10	3	7	2	1	90
2004	1	-	22	22	7	6	4	7	5	1	75
2005	-	2	12	13	13	5	7	2	3	1	58
2006	-	1	17	9	3	4	5	5	5	1	50
2007	1	3	17	8	3	6	8	8	3	1	58
2008	1	5	9	4	4	5	5	3	2	-	38
Total	7	22	149	270	272	241	256	271	144	75	1,707

Average Age at Retirement/Disability 51.6
Average Current Age 72.5
Average Annual Pension \$ 60,384

CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM
JULY 1, 2008 ACTUARIAL VALUATION

**APPENDIX A
MEMBERSHIP INFORMATION**

**Table A-36
City and County of San Francisco Employees' Retirement System
Retirees, Disabled, and Beneficiaries by Attained Age and Benefit Effective Date
New Police**

Benefit Effective	Age										Total
	Under 50	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 and up	
pre-1989	-	1	3	4	1	6	3	-	-	-	18
1989	-	2	2	-	1	1	1	-	-	-	7
1990	1	2	1	2	-	1	-	-	-	-	7
1991	-	-	1	-	1	-	-	-	-	-	2
1992	1	1	-	-	1	-	-	-	-	-	3
1993	-	1	1	2	3	-	-	-	-	-	7
1994	-	2	1	2	2	-	1	-	-	-	8
1995	-	-	-	2	5	1	-	-	-	-	8
1996	-	1	1	7	4	-	-	1	-	1	15
1997	-	1	1	5	1	1	-	-	-	-	9
1998	1	2	3	2	2	1	-	-	-	-	11
1999	1	1	-	1	3	1	-	-	-	-	7
2000	1	3	7	14	2	3	-	-	-	-	30
2001	2	3	3	7	4	2	-	-	-	-	21
2002	2	3	7	6	2	-	-	-	-	-	20
2003	-	2	11	9	2	1	-	-	-	-	25
2004	4	2	15	10	3	-	-	-	-	-	34
2005	2	11	14	14	3	-	-	-	-	-	44
2006	6	15	17	5	3	1	1	-	-	-	48
2007	4	13	22	8	2	-	-	-	-	-	49
2008	4	20	27	9	1	-	-	-	-	-	61
Total	29	86	137	109	46	19	6	1	-	1	434

Average Age at Retirement/Disability 51.5
Average Current Age 58.3
Average Annual Pension \$ 51,849

CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM
JULY 1, 2008 ACTUARIAL VALUATION

**APPENDIX A
MEMBERSHIP INFORMATION**

**Table A-37
City and County of San Francisco Employees' Retirement System
Retirees, Disabled, and Beneficiaries by Attained Age and Benefit Effective Date
Total Fire**

Benefit Effective	Age										Total
	Under 50	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 and up	
pre-1989	-	-	2	7	19	29	92	141	119	71	480
1989	-	-	2	3	3	4	5	4	3	-	24
1990	-	-	-	4	7	16	14	4	3	4	52
1991	-	-	2	2	10	10	6	7	4	4	45
1992	-	-	1	2	16	10	9	5	1	4	48
1993	-	-	2	2	16	9	9	7	3	4	52
1994	-	2	2	4	12	12	4	2	3	3	44
1995	-	-	2	4	25	14	3	3	4	1	56
1996	-	1	4	8	14	12	3	7	1	2	52
1997	2	1	1	6	24	5	4	5	1	2	51
1998	2	1	3	24	23	13	6	2	7	2	83
1999	-	-	4	18	21	11	1	2	5	1	63
2000	-	3	7	24	20	6	4	2	1	2	69
2001	4	4	5	42	32	10	3	3	3	2	108
2002	3	2	9	23	20	2	2	5	4	1	71
2003	10	3	20	79	27	4	3	3	3	2	154
2004	5	3	24	55	13	1	-	6	1	2	110
2005	4	4	36	27	8	3	4	6	4	1	97
2006	3	11	53	21	7	4	3	6	4	2	114
2007	3	16	61	26	1	-	2	11	3	-	123
2008	1	6	32	13	2	5	3	10	6	3	81
Total	37	57	272	394	320	180	180	241	183	113	1,977

Average Age at Retirement/Disability 54.1
Average Current Age 70.3
Average Annual Pension \$ 67,145

CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM
JULY 1, 2008 ACTUARIAL VALUATION

**APPENDIX A
MEMBERSHIP INFORMATION**

**Table A-38
City and County of San Francisco Employees' Retirement System
Retirees, Disabled, and Beneficiaries by Attained Age and Benefit Effective Date
Old Fire**

Benefit Effective	Age										Total
	Under 50	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 and up	
pre-1989	-	-	1	7	17	26	92	141	119	71	474
1989	-	-	-	3	3	4	5	4	3	-	22
1990	-	-	-	3	6	16	14	4	3	4	50
1991	-	-	2	1	8	10	6	6	4	3	40
1992	-	-	-	2	15	10	9	4	1	4	45
1993	-	-	1	2	16	9	9	7	3	4	51
1994	-	-	1	4	11	12	4	2	3	3	40
1995	-	-	2	3	24	14	3	3	4	1	54
1996	-	1	4	7	12	12	3	7	1	2	49
1997	1	-	1	5	22	5	4	5	1	2	46
1998	1	1	1	22	19	13	6	2	7	2	74
1999	-	-	4	17	21	10	1	2	5	1	61
2000	-	2	4	21	14	5	4	2	1	2	55
2001	1	1	4	35	26	9	3	3	3	2	87
2002	1	1	7	15	19	2	2	5	4	1	57
2003	2	1	14	62	22	3	3	3	3	2	115
2004	-	-	14	46	12	1	-	6	1	2	82
2005	-	1	21	19	6	3	4	6	4	1	65
2006	1	-	33	13	4	4	3	6	4	2	70
2007	-	2	12	10	1	-	2	11	3	-	41
2008	-	-	7	5	1	5	3	10	6	3	40
Total	7	10	133	302	279	173	180	239	183	112	1,618

Average Age at Retirement/Disability 54.5
Average Current Age 73.0
Average Annual Pension \$ 67,272

CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM
JULY 1, 2008 ACTUARIAL VALUATION

**APPENDIX A
MEMBERSHIP INFORMATION**

**Table A-39
City and County of San Francisco Employees' Retirement System
Retirees, Disabled, and Beneficiaries by Attained Age and Benefit Effective Date
New Fire**

Benefit Effective	Age										Total
	Under 50	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 and up	
pre-1989	-	-	1	-	2	3	-	-	-	-	6
1989	-	-	2	-	-	-	-	-	-	-	2
1990	-	-	-	1	1	-	-	-	-	-	2
1991	-	-	-	1	2	-	-	1	-	1	5
1992	-	-	1	-	1	-	-	1	-	-	3
1993	-	-	1	-	-	-	-	-	-	-	1
1994	-	2	1	-	1	-	-	-	-	-	4
1995	-	-	-	1	1	-	-	-	-	-	2
1996	-	-	-	1	2	-	-	-	-	-	3
1997	1	1	-	1	2	-	-	-	-	-	5
1998	1	-	2	2	4	-	-	-	-	-	9
1999	-	-	-	1	-	1	-	-	-	-	2
2000	-	1	3	3	6	1	-	-	-	-	14
2001	3	3	1	7	6	1	-	-	-	-	21
2002	2	1	2	8	1	-	-	-	-	-	14
2003	8	2	6	17	5	1	-	-	-	-	39
2004	5	3	10	9	1	-	-	-	-	-	28
2005	4	3	15	8	2	-	-	-	-	-	32
2006	2	11	20	8	3	-	-	-	-	-	44
2007	3	14	49	16	-	-	-	-	-	-	82
2008	1	6	25	8	1	-	-	-	-	-	41
Total	30	47	139	92	41	7	-	2	-	1	359

Average Age at Retirement/Disability 52.6
Average Current Age 58.3
Average Annual Pension \$ 66,575

**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM
JULY 1, 2008 ACTUARIAL VALUATION**

**APPENDIX A
MEMBERSHIP INFORMATION**

**Table A-40
City and County of San Francisco Employees' Retirement System
Retirees, Disabled, and Beneficiaries by Attained Age and Benefit Effective Date
Total Miscellaneous**

Benefit Effective	Age										Total
	Under 50	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 and up	
pre-1989	1	1	9	23	82	137	266	621	774	531	2,445
1989	-	-	2	7	9	39	70	162	58	12	359
1990	1	-	4	10	21	52	96	150	40	10	384
1991	2	-	2	4	26	45	113	129	39	12	372
1992	-	1	5	22	158	403	534	268	71	14	1,476
1993	-	2	2	11	36	33	38	29	28	10	189
1994	1	5	6	23	58	45	73	54	22	13	300
1995	1	6	10	32	62	74	113	47	24	17	386
1996	5	3	17	58	76	125	120	52	24	10	490
1997	5	4	17	66	105	150	102	39	27	11	526
1998	5	16	18	113	138	199	120	40	34	13	696
1999	2	9	33	93	140	177	115	45	25	17	656
2000	5	9	71	111	154	197	86	38	15	14	700
2001	8	17	89	168	248	237	93	40	23	9	932
2002	9	15	107	155	282	188	56	35	30	11	888
2003	12	26	159	189	256	161	67	24	22	9	925
2004	17	39	177	220	292	156	50	44	32	5	1,032
2005	15	129	262	342	361	140	65	29	23	12	1,378
2006	15	159	220	335	240	86	32	38	17	8	1,150
2007	20	152	218	408	223	89	44	36	17	5	1,212
2008	9	169	196	262	126	49	34	25	25	5	900
Total	133	762	1,624	2,652	3,093	2,782	2,287	1,945	1,370	748	17,396

Average Age at Retirement/Disability 58.9
Average Current Age 70.9
Average Annual Pension \$ 24,921

CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM
JULY 1, 2008 ACTUARIAL VALUATION

APPENDIX A
MEMBERSHIP INFORMATION

Table A-41
City and County of San Francisco Employees' Retirement System
Retirees, Disabled, and Beneficiaries by Attained Age and Benefit Effective Date
Old Miscellaneous

Benefit Effective	Age										Total
	Under 50	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 and up	
pre-1989	1	1	7	22	81	126	259	603	744	526	2,370
1989	-	-	1	4	8	34	66	134	41	11	299
1990	1	-	3	7	18	42	82	123	29	9	314
1991	2	-	2	3	17	31	97	98	30	10	290
1992	-	1	2	20	142	372	419	162	49	11	1,178
1993	-	-	1	5	23	20	26	20	24	10	129
1994	1	1	4	13	34	35	48	35	21	13	205
1995	-	1	2	16	40	54	67	18	22	16	236
1996	2	-	5	23	49	77	58	31	19	10	274
1997	-	-	3	23	65	85	38	25	20	11	270
1998	1	3	8	41	93	133	39	19	30	12	379
1999	1	3	11	33	78	91	43	30	21	14	325
2000	2	2	15	40	92	86	41	26	13	13	330
2001	2	4	17	62	137	92	27	25	19	9	394
2002	2	3	15	62	146	62	23	20	25	11	369
2003	4	4	33	77	116	40	35	15	19	9	352
2004	-	2	34	85	100	44	18	31	26	5	345
2005	1	6	46	116	127	34	24	20	20	12	406
2006	2	5	38	129	62	33	18	29	16	8	340
2007	2	5	39	125	50	29	36	25	15	5	331
2008	1	3	33	60	28	14	20	20	20	4	203
Total	25	44	319	966	1,506	1,534	1,484	1,509	1,223	729	9,339

Average Age at Retirement/Disability 58.9
Average Current Age 75.5
Average Annual Pension \$ 29,497

**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM
JULY 1, 2008 ACTUARIAL VALUATION**

**APPENDIX A
MEMBERSHIP INFORMATION**

**Table A-42
City and County of San Francisco Employees' Retirement System
Retirees, Disabled, and Beneficiaries by Attained Age and Benefit Effective Date
New Miscellaneous**

Benefit Effective	Age										Total
	Under 50	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 and up	
pre-1989	-	-	2	1	1	11	7	18	30	5	75
1989	-	-	1	3	1	5	4	28	17	1	60
1990	-	-	1	3	3	10	14	27	11	1	70
1991	-	-	-	1	9	14	16	31	9	2	82
1992	-	-	3	2	16	31	115	106	22	3	298
1993	-	2	1	6	13	13	12	9	4	-	60
1994	-	4	2	10	24	10	25	19	1	-	95
1995	1	5	8	16	22	20	46	29	2	1	150
1996	3	3	12	35	27	48	62	21	5	-	216
1997	5	4	14	43	40	65	64	14	7	-	256
1998	4	13	10	72	45	66	81	21	4	1	317
1999	1	6	22	60	62	86	72	15	4	3	331
2000	3	7	56	71	62	111	45	12	2	1	370
2001	6	13	72	106	111	145	66	15	4	-	538
2002	7	12	92	93	136	126	33	15	5	-	519
2003	8	22	126	112	140	121	32	9	3	-	573
2004	17	37	143	135	192	112	32	13	6	-	687
2005	14	123	216	226	234	106	41	9	3	-	972
2006	13	154	182	206	178	53	14	9	1	-	810
2007	18	147	179	283	173	60	8	11	2	-	881
2008	8	166	163	202	98	35	14	5	5	1	697
Total	108	718	1,305	1,686	1,587	1,248	803	436	147	19	8,057

Average Age at Retirement/Disability 58.9
 Average Current Age 65.7
 Average Annual Pension \$ 19,616

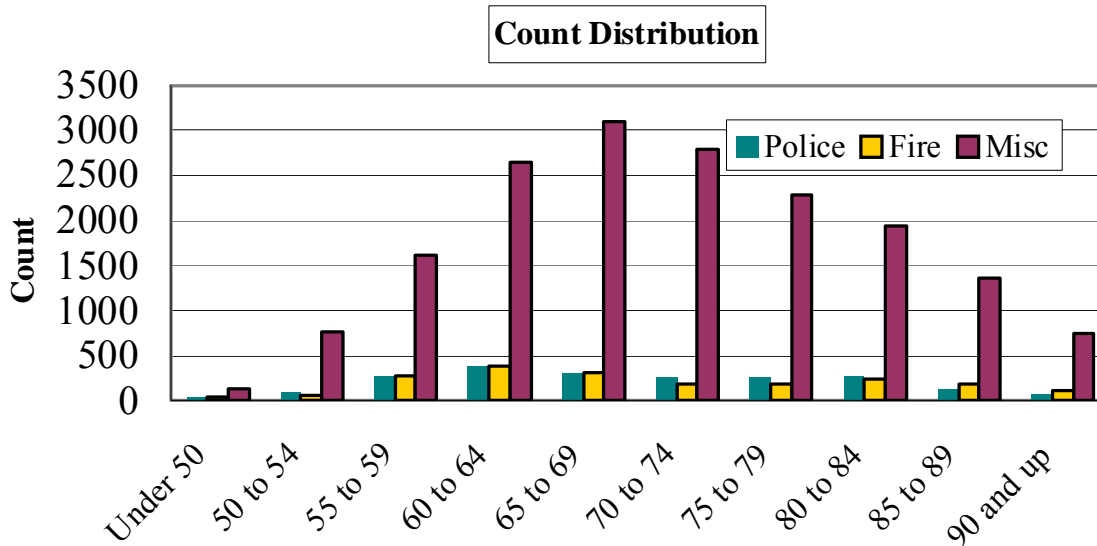
CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM
 JULY 1, 2008 ACTUARIAL VALUATION

**APPENDIX A
 MEMBERSHIP INFORMATION**

**Table A-43
 City and County of SFERS
 Distribution of Retirees, Disabled Members,
 and Beneficiaries as of July 1, 2008**

Age	Count			Total
	Police	Fire	Misc	
Under 50	36	37	133	206
50 to 54	108	57	762	927
55 to 59	286	272	1,624	2,182
60 to 64	379	394	2,652	3,425
65 to 69	318	320	3,093	3,731
70 to 74	260	180	2,782	3,222
75 to 79	262	180	2,287	2,729
80 to 84	272	241	1,945	2,458
85 to 89	144	183	1,370	1,697
90 and up	76	113	748	937
Total	2,141	1,977	17,396	21,514

Chart A-1



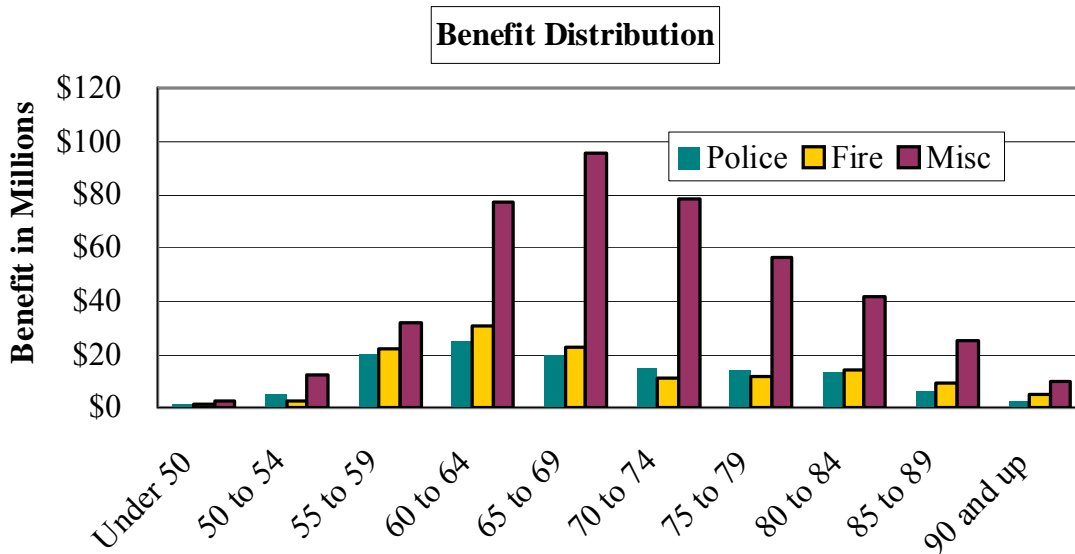
CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM
JULY 1, 2008 ACTUARIAL VALUATION

**APPENDIX A
MEMBERSHIP INFORMATION**

**Table A-44
City and County of SFERS
Distribution of Retirees, Disabled Members,
and Beneficiaries as of July 1, 2008**

Age	Annual Benefit			Total
	Police	Fire	Misc	
Under 50	\$ 1,598,066	\$ 1,529,190	\$ 2,601,566	\$ 5,728,821
50 to 54	5,373,360	2,865,343	12,591,411	20,830,114
55 to 59	20,595,817	22,051,851	32,126,003	74,773,671
60 to 64	25,447,647	30,994,973	77,543,851	133,986,471
65 to 69	19,667,029	22,887,529	95,883,584	138,438,141
70 to 74	14,957,472	11,611,327	78,388,169	104,956,967
75 to 79	14,446,142	12,065,929	56,605,656	83,117,727
80 to 84	13,967,316	14,490,223	42,173,252	70,630,791
85 to 89	6,663,613	9,323,950	25,443,547	41,431,110
90 and up	2,861,340	4,925,594	10,161,307	17,948,241
Total	\$ 125,577,799	\$ 132,745,909	\$433,518,346	691,842,055

Chart A-2



APPENDIX A
MEMBERSHIP INFORMATION

Data Assumptions and Methods

In preparing our data, we relied without audit on information supplied by the SFERS staff. This information includes, but is not limited to, plan provisions, employee data, and financial information. Our methodology for obtaining the data used for the valuation is based upon the following assumptions and practices:

- Service for members on the “Active” data file was calculated using the field “Yrs Svc”. Service buyback that has been paid for is included in the “Yrs Svc” field. Service buyback that is under contract, but not paid in full, as of the valuation date will be assumed to be paid in full and this service will be reflected in the projected benefit. An adjusted date of hire is retroactively calculated from the valuation date.
- Valuation Salary will be “Covered Pay” for members hired before the beginning of the previous plan year and “Calculated Pay”, which is an annualized pay rate, for new hires. A minimum of \$45,000 is used for all active members. Then an increase of 4.5% based on the wage increase assumption is applied.
- For accounts having duplicate records based on Social Security Number in the “Active” data file, the records are added together for fields “Cvd Pay”, “Contribs”, “Interest”, “Shortage”, “Short Int” and “Yrs Svc”. The other data in the record is determined by the record which is considered open (“Plan Stat” = “O”) with the most recent “Membership Date”.
- Records on the “Active” data file are considered to be Active if they have a status of “AM” which means active, no “Job End Date” or the “Job End Date” is after 6/30/2008, and do not have a retiree record and their “Cvd Pay” is greater than \$0.
- Records on the “Active” data file are considered to be Inactive if they have a status of “VM”, which means vested or they have a status of “AM” but their “Job End Date” is prior to 6/30/2008, or their “Cvd Pay” is \$0.
- Records on the “Retiree” file are considered in pay status if their benefit is not suspended or terminated.
- Members may retire and receive benefits from multiple Plans (e.g. - a police officer can have two benefits, one for the service during the academy training which is considered the Miscellaneous group and a second benefit for all other service as a police officer). We will value each member’s blended benefit individually. This will result in the counts being slightly higher than actual counts due to people having more than one benefit payable from multiple plans.
- We assume any member found in last year’s “Retiree” file and not in this year’s file has deceased without a beneficiary and should be removed from the valuation data.
- We assume all deceased members with payments continuing to a beneficiary have already been accounted for in the “Retiree” file.

APPENDIX B
ACTUARIAL ASSUMPTIONS AND METHODS

A. Actuarial Assumptions

1. Investment Return Assumption

SFERS' assets are assumed to earn 7.75% net of expenses.

2. Inflation Rate

An inflation assumption for wage increase rate of 4.50% compounded annually is used for projecting the total annual payroll growth for amortization of the UAL. The Consumer Price Index assumption of 3.5% was used and represents the difference between the investment return rate and the assumed real rate of return.

3. Interest Credited to Member Contributions

5.00%, compounded annually.

4. Salary Increase Rate

Inflation component 4.50%

The additional merit component:

Table B-1						
Salary Merit Increases						
Year of Service	Police	Fire	Muni	Craft Workers	Misc. Females	Misc. Males
1	13.5%	21.0%	13.0%	5.0%	5.00%	5.25%
2	5.0	5.0	8.0	2.0	4.00	4.25
3	5.0	5.0	1.0	2.0	4.00	3.50
4	1.0	1.0	0.0	2.0	3.50	3.50
5	1.0	1.0	0.0	1.5	2.50	3.25
6	1.0	1.0	0.0	1.0	2.25	2.75
7	1.0	1.0	0.0	1.0	2.25	2.50
8	1.0	1.0	0.0	0.8	2.00	2.25
9	1.0	1.0	0.0	0.7	1.75	2.25
10	1.0	1.0	0.0	0.7	1.50	2.25
11	1.0	1.0	0.0	0.7	1.00	2.25
12	1.0	1.0	0.0	0.7	1.00	1.75
13	1.0	1.0	0.0	0.7	1.00	1.75
14	1.0	1.0	0.0	0.7	1.00	1.75
15 & over	1.0	1.0	0.0	0.7	0.90	1.00

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For those expected as service retirement, extra covered wages in the last year before retirement are assumed to be as follows:

	Old Plan	New Plan
Craft Workers	8.0%	5.0%
Male Miscellaneous	3.0%	2.0%

5. Administration Expense Assumption

There is a 0.45% of Payroll assumption included in the normal costs rates for administrative expenses.

6. Cost-of-Living Increase in Benefits*

Old Plans - Police and Fire, post-7/1/75 DOR 4.50% per year
 Old Plans - Police and Fire, pre-7/1/75 DOR 3.00% per year
 Old Plans - Miscellaneous 2.00% per year
 New Plans - Police, Fire and Miscellaneous 2.00% per year

* No supplemental COLA was adopted by the Board as of July 1, 2008.

7. Member Refunds

The rates of refund of contribution for terminated vested members are presented in Table B-2 below.

Table B-2 Rates of Refund of Contributions after Withdrawal			
Age	Old Plans Police & Fire	New Plans Police & Fire	Miscellaneous
Under 25	100%	100%	100%
25	100	80	95
30	90	80	65
35	80	65	60
40	60	50	50
45	40	40	40
50 and above	0	0	0

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8. Family Composition

Family Composition (including assumption for Domestic Partners, 1994 Proposition H).

(i) Percentage Married	<u>Old Plan</u>	<u>New Plan</u>
Police and Fire Males	90%	85%
Police and Fire Females	48	42
Miscellaneous Males	80	80
Miscellaneous Females	48	48
 (ii) Age Difference		
Wives assumed to be three years younger than husbands (and then spouse assumed to be an additional year younger in order to value continuance to children and dependent parents).		

9. Rates of Withdrawal/Termination

Sample rates of withdrawal/termination are show in the following Table B-3.

Table B-3 Rates of Withdrawal/Termination				
Years of Service	Police	Fire	Muni	Craft Workers
0	0.1000	0.0400	0.1000	0.0700
1	0.0400	0.0150	0.0250	0.0300
2	0.0200	0.0100	0.0250	0.0300
3	0.0200	0.0100	0.0250	0.0300
4	0.0200	0.0100	0.0250	0.0300
5	0.0100	0.0100	0.0400	0.0300
6	0.0100	0.0300	0.0250	0.0300
7	0.0100	0.0250	0.0250	0.0250
8	0.0100	0.0100	0.0250	0.0250
9	0.0100	0.0100	0.0250	0.0200
10	0.0100	0.0100	0.0250	0.0200
11	0.0100	0.0050	0.0250	0.0150
12	0.0100	0.0050	0.0250	0.0150
13	0.0100	0.0050	0.0250	0.0100
14	0.0100	0.0050	0.0250	0.0100
15	0.0100	0.0050	0.0250	0.0100
16	0.0050	0.0050	0.0250	0.0100
17	0.0050	0.0050	0.0250	0.0100
18	0.0050	0.0020	0.0250	0.0100
19	0.0050	0.0010	0.0250	0.0100
20	0.0050	0.0005	0.0250	0.0100
21	0.0000	0.0000	0.0250	0.0100
22	0.0000	0.0000	0.0000	0.0100
23	0.0000	0.0000	0.0000	0.0000

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Table B-3 (continued)						
Rate of Withdrawal						
Years of Service						
Age	<u>0</u>		<u>3</u>		<u>5+</u>	
	Misc. Females	Misc. Males	Misc. Females	Misc. Males	Misc. Females	Misc. Males
20	0.1500	0.1500	0.1500	0.1000	0.1000	0.1000
25	0.1500	0.1500	0.0750	0.1000	0.0500	0.0650
30	0.1250	0.1500	0.0750	0.0700	0.0500	0.0650
35	0.1250	0.1000	0.0750	0.0700	0.0300	0.0250
40	0.1000	0.1000	0.0500	0.0500	0.0300	0.0250
45	0.1000	0.1000	0.0250	0.0500	0.0250	0.0250
50	0.1500	0.1000	0.0250	0.0500	0.0250	0.0250
55	0.1500	0.1000	0.0250	0.0250	0.0250	0.0250
60	0.0750	0.2000	0.0250	0.0250	0.0250	0.0250
65	0.0750	0.2000	0.0250	0.0250	0.0250	0.0250
69	0.0750	0.2000	0.0250	0.0250	0.0000	0.0000

30% of terminating employees are assumed to subsequently work for a reciprocal employer and receive 4.50% pay increases per year.

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10. Rates of Disability

Disability rates of active participants are provided in Table B-4

Table B-4						
Active Disability Rates						
<u>Age</u>	<u>Police*</u>	<u>Fire*</u>	<u>Muni</u>	<u>Craft Workers</u>	<u>Misc Females</u>	<u>Misc Males</u>
20	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000
21	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000
22	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000
23	0.0001	0.0002	0.0000	0.0000	0.0000	0.0000
24	0.0002	0.0002	0.0000	0.0000	0.0000	0.0000
25	0.0002	0.0003	0.0000	0.0000	0.0000	0.0000
26	0.0003	0.0003	0.0000	0.0000	0.0000	0.0000
27	0.0003	0.0004	0.0000	0.0000	0.0000	0.0000
28	0.0004	0.0004	0.0000	0.0000	0.0000	0.0000
29	0.0004	0.0005	0.0000	0.0000	0.0000	0.0000
30	0.0005	0.0006	0.0001	0.0001	0.0002	0.0001
31	0.0006	0.0007	0.0002	0.0002	0.0004	0.0003
32	0.0007	0.0008	0.0003	0.0003	0.0006	0.0005
33	0.0008	0.0009	0.0004	0.0004	0.0008	0.0007
34	0.0009	0.0010	0.0005	0.0005	0.0010	0.0009
35	0.0009	0.0015	0.0006	0.0006	0.0015	0.0012
36	0.0010	0.0020	0.0007	0.0007	0.0017	0.0014
37	0.0010	0.0030	0.0008	0.0008	0.0019	0.0016
38	0.0011	0.0045	0.0009	0.0009	0.0021	0.0018
39	0.0011	0.0060	0.0010	0.0010	0.0023	0.0020
40	0.0012	0.0070	0.0011	0.0012	0.0025	0.0023
41	0.0012	0.0090	0.0012	0.0014	0.0030	0.0026
42	0.0013	0.0100	0.0013	0.0016	0.0033	0.0029
43	0.0013	0.0110	0.0014	0.0018	0.0036	0.0030
44	0.0013	0.0120	0.0015	0.0020	0.0050	0.0031
45	0.0010	0.0050	0.0017	0.0024	0.0060	0.0032
46	0.0010	0.0060	0.0020	0.0027	0.0060	0.0033
47	0.0011	0.0070	0.0023	0.0030	0.0070	0.0034
48	0.0011	0.0080	0.0027	0.0040	0.0070	0.0035
49	0.0012	0.0090	0.0030	0.0050	0.0070	0.0036
50	0.0160	0.0100	0.0080	0.0060	0.0060	0.0037
51	0.0160	0.0150	0.0120	0.0062	0.0065	0.0038
52	0.0180	0.0200	0.0150	0.0065	0.0070	0.0042
53	0.0180	0.0250	0.0180	0.0068	0.0072	0.0047
54	0.0180	0.0350	0.0200	0.0070	0.0075	0.0050
55	0.0300	0.0500	0.0180	0.0200	0.0100	0.0055
56	0.0380	0.0800	0.0150	0.0200	0.0090	0.0060
57	0.0420	0.1000	0.0120	0.0180	0.0080	0.0070
58	0.0460	0.1200	0.0100	0.0150	0.0050	0.0080
59	0.0500	0.1300	0.0005	0.0100	0.0030	0.0090
60	0.0008	0.1300				
61	0.0007	0.1400				
62	0.0005	0.1400				
63	0.0003	0.1500				
64	0.0002	0.1500				
65	0.0000	0.0000				

*For Police and Fire, 100% assumed duty.

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Level of duty disability benefits (if projected to be disabled before service retirement eligibility)	
Police	55% of pay
Fire	60% of pay

11. Rates of Mortality for Active Lives

Mortality rates for actives, retirees, beneficiaries, terminated vested and reciprocals are based on the sex distinct 1994 Group Annuity Mortality Tables with not net backs. 25% of safety deaths are assumed to be service related.

Table B-5				
Retired and Disabled Life Mortality Rates				
Active, Reciprocal, Vested Term and Service Retirees				
For Safety, 25% of deaths are assumed eligible for line of duty death benefits				
Age	Death Per Thousand		Life Expectancy	
	Male	Female	Male	Female
50	2.58	1.43	30.7	34.9
55	4.43	2.29	26.2	30.2
60	7.98	4.44	21.9	25.6
65	14.54	8.64	17.9	21.3
70	23.73	13.73	14.3	17.3
75	37.21	22.69	11.2	13.6
80	62.03	39.40	8.4	10.4
85	97.24	67.74	6.2	7.6
90	152.93	116.27	4.5	5.4

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12. Rates of Mortality for Retired Disabled Lives

For Safety, all disabilities are assumed due to line of duty and therefore all death benefits of disabled members are assumed to generate duty death benefits. Table B-6 provides a sample of the mortality rates of members are disability retirement

Table B-6								
<u>Age</u>	<u>Deaths Per Thousand</u>				<u>New Life Expectancy</u>			
	<u>Safety</u>		<u>Miscellaneous</u>		<u>Safety</u>		<u>Miscellaneous</u>	
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
25	0.5	0.7	7.5	5.4	53.9	50.0	40.4	46.9
30	0.7	1.0	7.7	5.7	49.1	45.2	36.8	43.1
35	1.1	1.5	8.0	6.0	44.3	40.5	33.2	39.3
40	1.7	2.6	8.7	6.3	39.5	35.8	29.5	35.5
45	2.8	3.8	10.6	7.6	34.9	31.3	25.8	31.6
50	4.0	5.4	14.6	10.0	30.5	27.0	22.2	27.8
55	5.9	8.9	21.2	13.4	26.1	22.8	19.0	24.3
60	9.8	14.5	28.7	17.1	22.0	18.9	16.1	21.0
65	16.3	24.0	36.2	21.6	18.2	15.5	13.5	17.8
70	26.1	36.1	46.7	27.1	14.8	12.5	10.9	14.8
75	38.9	53.1	65.5	36.9	11.9	9.8	8.6	11.8
80	57.7	80.9	94.8	55.2	9.4	7.6	6.5	9.1

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13. Rates of Retirement

Rates of retirement are based on age according to the following Table B-7. Old safety plan members are assumed to retire immediately.

Table B-7						
New Plan Safety and Non-Safety Members						
<u>Age</u>	<u>New Police</u>	<u>New Fire</u>	<u>Muni</u>	<u>Craft</u>	<u>Misc. Females</u>	<u>Misc. Male</u>
50	0.0586	0.0200	0.0700	0.0300	0.0300	0.0200
51	0.0300	0.0200	0.0250	0.0200	0.0200	0.0200
52	0.0300	0.0200	0.0250	0.0200	0.0200	0.0200
53	0.0300	0.0200	0.0250	0.0300	0.0200	0.0200
54	0.0300	0.0200	0.0250	0.0300	0.0300	0.0450
55	0.1000	0.1000	0.0600	0.0400	0.0300	0.0450
56	0.1000	0.1000	0.0250	0.0400	0.0500	0.0450
57	0.1200	0.2000	0.0250	0.0400	0.0600	0.0450
58	0.1200	0.2000	0.1000	0.0275	0.0300	0.0225
59	0.1200	0.2000	0.1500	0.0275	0.0300	0.0500
60	0.3500	0.2000	0.2000	0.1000	0.1100	0.0700
61	0.2500	0.4000	0.1000	0.1300	0.1100	0.0900
62	0.2500	0.3500	0.3500	0.2500	0.1500	0.2300
63	0.2500	0.3000	0.0750	0.1300	0.1300	0.1500
64	0.2500	0.3000	0.1500	0.1300	0.1500	0.1500
65	1.0000	1.0000	0.2500	0.1500	0.1500	0.1500
66	1.0000	1.0000	0.2500	0.1500	0.1500	0.1500
67	1.0000	1.0000	0.2500	0.1500	0.1500	0.1500
68	1.0000	1.0000	0.2500	0.1500	0.1500	0.1500
69	1.0000	1.0000	0.2500	0.1500	0.1500	0.1500
70 & over	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

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14. Deferred Retirement Option Program (DROP)

Effective July 1, 2008 new police plan members may be eligible to enter a DROP. Based on the current plan design and lack of experience data it is assumed for this valuation that the introduction of the DROP will have no impact on the retirement rates for this group of participants.

15. Deferred Member Benefit

The benefit was estimated based on information provided by SFERS staff. The data used to value the estimated deferred benefit were date of birth, date of hire, date of termination, and last pay. Based on the data provided, service credit, highest average salary, and deferred retirement age were estimated. The estimates were used to compute the retirement benefit, upon which the liabilities are based. For those members without sufficient data or service, accumulated member contribution balances, with interest, were used as the actuarial accrued liability.

16. Other

The contribution requirements and benefit values of a plan are calculated by applying actuarial assumptions to the benefit provisions and member information, using the actuarial funding methods described in the following section.

Actual experience of SFERS will not coincide exactly with assumed experiences, regardless of the choice of the assumptions, the skill of the actuary or 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.

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B. Actuarial Methods

1. Actuarial Funding Method

The Entry Age Normal actuarial funding method was used for active employees, whereby the normal cost is computed as the level annual percentage of pay required to fund the retirement benefits between each member's date of hire and assumed retirement. The actuarial liability is the difference between the present value of future benefits and the present value of future normal cost. The unfunded actuarial liability is the difference between the actuarial liability and the actuarial value of assets.

The unfunded actuarial accrued liabilities due to net actuarial gains and losses, Supplemental COLAs and assumption changes are amortized as a level percentage of payroll over a 15-year period beginning with the valuation date. Additional liabilities generated by Charter amendments and Board-approved changes in the credited interest rate on member contribution accounts are amortized as a level percentage of payroll over a 20-year period beginning with the year the amendment is first reflected in the valuation.

2. Asset Valuation Method

For the purposes of determining the Employer's contribution to SFERS, we use an actuarial value of assets. The asset adjustment method dampens the volatility in asset values that could occur because of the fluctuations in market conditions. Use of an asset smoothing method is consistent with the long-term nature of the actuarial valuation process. Assets are assumed to be used exclusively for the provision of retirement benefits and expenses.

The actuarial value of assets is calculated by adjusting the market value on the valuation date, less the following percentages of prior years' market returns above (below) the expected (8%) return on the actuarial value of assets:

- 80% of the prior year
- 60% of the second prior year
- 40% of the third prior year
- 20% of the fourth prior year.

This asset smoothing method started with the market value as of July 1, 2004.

The value is then allocated among Police, Fire and Miscellaneous Plans according to the method described on Section II.

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3. Changes Since Last Valuation

As was stated in this report, there have been changes in actuarial assumptions since the July 1, 2007 actuarial valuation:

- The discount rate assumption was lowered from 8.00% to 7.75%.
- Proposition B became effective for the 7/1/2008 valuation report. The changes to the plan for Proposition B are all combined for purposes of amortizing the change in the unfunded actuarial liability. These changes are as follows:
 - Service retirement accrual factors for all miscellaneous members have been increased from 2.0% at age 60 and above. The factors are now 2.1% (Age 60), 2.2% (Age 61), and 2.3% (Age 62 and above).
 - Retirement rates were changed for miscellaneous members (split by municipal, craft, and miscellaneous male and females) between the ages of 58-64 to reflect i) participants approaching age 60 delaying retirement as a result of the benefit formula increases, and ii) retirement for participants who have reached 65 and hit the maximum benefit percentage are assumed to retire immediately.
 - The annual post-retirement COLA provision for all new police, fire, and miscellaneous members was changed from a 2.0% simple COLA (based on initial benefit) to a 2.0% compound COLA (based on previous year benefit).

Also the following minor changes were made in the valuation of benefits based on differences in Cheiron’s interpretation of the System’s provisions to better represent the obligation over the methods used by the prior actuary.

Subject/Issue	PLAN	TOWER'S METHOD	CHEIRON'S METHOD
Service retirement eligibility	New Police and Fire	Using age 50 with 25 years of service for eligibility	Use age 50 with 5 years of service for eligibility
Deferred vested benefit	New Police and Fire	If member has 5 or more years of service, value a lump sum equal to: 2 x employee contributions with interest	If member has 5 or more years of service, value the annuity benefit with COLA. Benefit equal to: Age Multiplier x Svc x FAE

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Subject/Issue	PLAN	TOWER'S METHOD	CHEIRON'S METHOD
Deferred vested benefit	Misc groups	If member has 5 or more years of service, value a lump sum equal to: 2 x employee contributions with interest	If a member has 5 or more years of service, value the annuity benefit with COLA. Benefit equal to: 2 x employee contributions with interest annuitized
Disability benefits when eligible to retire	All	Value the cost of the service retirement benefit if disability occurs following service retirement eligibility	Value the greater of the disability benefit and service retirement benefit once eligible to retire
Re-calculation of benefit for disabled members once they reach the QSR date	New Police & Fire (old P&F members are all past age 50 with 25 yrs svc)	Did not value the cost of the benefit when member reaches his QSR Date	Value the cost of the re-calculated benefit when member reaches his QSR Date
Option 1 Survivor Benefits	ALL	No adjustment made to the survivor benefit, data provided by SFERS includes only the Modified Benefit	Adjustment will be made to survivor benefit based on the SFERS operating factors Table 9, the factors used to convert the Unmodified Benefit to the Option 1 Benefit
Buybacks/Purchase Service	ALL	Potential service available for purchase was added to actual plan service. However, service purchased and currently under contract not added to plan service. Plan liabilities were offset with cost of potential purchases	Add service currently under contract for buyback to plan service. Add outstanding balance of the cost of service purchase contract to assets
Employee Contributions Shortages	Misc groups	Assume 100% of shortages with interest paid at valuation date. All shortage amounts were added to employee contribution balances. Liabilities were offset by the total shortage plus interest	Annuitize the shortage amount including interest using plan actuarial equivalent factors and subtract from plan benefits

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Subject/Issue	PLAN	TOWER'S METHOD	CHEIRON'S METHOD
<p align="center">Determining member status for active and inactive employees on the Active data file</p>	<p align="center">All</p>	<p align="center">If a participant' service is less than 1/2 length of participation (val date - date of participation), pay=\$0, Schedule < "I", valued as an inactive member</p>	<p align="center">If a member has \$0 pay, they are deemed inactive. If the member has less than 5 yrs of service their liability is a lump sum benefit equal to their employee contributions with interest. If the member has 5 or more years of service then the liability is a deferred benefit payable at retirement age</p>
<p align="center">Valuation Pay</p>	<p align="center">All</p>	<p align="center">Compensation data from client is increased based on specific salary merit assumption by group and service (Table B-1) plus wage inflation of 4.5% for each individual. Compensation before increase is a minimum of \$45,000</p>	<p align="center">Compensation data from client is increased by the wage inflation of 4.5% for each individual. Compensation before increase is a minimum of \$45,000</p>

**APPENDIX C
SUMMARY OF PLAN PROVISIONS**

I. Police and Fire Members – Charter Sections 8.559 (Police) and 8.585 (Fire)

1. Membership Requirement

Police Officers and Firefighters who became members before November 2, 1976 and retired on or before December 31, 2002 without electing membership in another Section.

2. Final Compensation

Monthly salary earnable at the final rank held at termination date, or monthly salary at next lower rank if final rank held for less than one year.

3. Credited Service

One year of service credit is given for each fiscal year with 10 or more full months worked. A partial year (fraction with the numerator equal to months including partial months, and the denominator equal to 10) is given for each fiscal year with less than 10 full months worked.

4. Member Contributions

a. Member:

7.0% of salary, excluding overtime and most premium pay. These contributions earn interest at 5.0% per year, compounded annually.

b. Employer:

The Employer contributes the remaining amounts necessary to maintain the soundness of the Retirement System.

5. Service Retirement

Eligibility

Age 50 with 25 years of credited service.

Benefit - Member

55% of Final Compensation plus an additional 4% of Final Compensation for each year of credited service in excess of 25 years, subject to a maximum of 75% of Final Compensation.

Benefit - Survivor

75% of the service retirement benefit paid to a qualified survivor.

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6. Non-Industrial Disability

Eligibility

10 years of credited service.

Benefit - Member

At least 10 but less than 25 years of credited service:

1.5% of Final Compensation for each year of credited service between 10 and 25 years, subject to a minimum of 33.3% and a maximum of 75% of Final Compensation.

At least 25 years of credited service:

55% of Final Compensation plus an additional 4% of Final Compensation for each year of credited service in excess of 25 years, subject to a maximum of 75% of Final Compensation.

Benefit - Survivor

75% of the disability retirement benefit paid to a qualified survivor.

7. Industrial Disability

Eligibility

No age or service requirement.

Benefit - Member

If Not Eligible for Service Retirement:

Final Compensation times a percentage of disability, subject to a minimum of 50% and a maximum of 90%, as determined by the Workers' Compensation Appeals Board. Once the member becomes eligible for service retirement, assuming that member earned service and salary increases during the period of disability, the benefit is recalculated using the service and salary rate for the current rank held. The recalculated benefit is based on a minimum of 55% of Final Compensation.

If Eligible for Service Retirement:

55% of Final Compensation plus an additional 4% of Final Compensation for each year of credited service in excess of 25 years, subject to a maximum of 75% of Final Compensation.

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SUMMARY OF PLAN PROVISIONS

Benefit - Survivor

If Not Eligible for Service Retirement:

100% of the disability retirement benefit paid to a qualified survivor. Once the member would have become eligible for service retirement, assuming that member earned service and salary increases from the date of disability to the eligible service retirement date, the benefit is recalculated at 100% of the service retirement benefit, using the service and salary at the eligible service retirement date, not less than 55% of Final Compensation.

If Eligible for Service Retirement:

100% of the disability retirement benefit paid to a qualified survivor, not less than 55% of Final Compensation.

8. Death while an Active Employee

If Death is due to a Non-Work-Related Cause:

- a. Less than 10 Years of Credited Service, or No Qualified Survivor – Lump sum benefit equal to the accumulated refund all of employee contributions with interest, plus six months salary to a designated beneficiary.
- b. At least 10 but less than 25 years of Credited Service – Monthly continuation allowance to a qualified survivor equal to the non-industrial disability benefit the member would have been entitled to on the date of death, subject to a minimum of 33.3% of compensation at the time of death.
- c. At Least 25 Years of Credited Service but Less than Age 50 – Monthly continuation allowance to a qualified survivor equal to 75% of the monthly service retirement benefit the member would have received had the member been age 50 and retired on the date of death.
- d. Eligible for Service Retirement – Monthly continuation allowance to a qualified survivor equal to 75% of the monthly service retirement benefit the member would have received had the member been retired on the date of death.

If Death is due to a Work-Related Cause:

- a. No Qualified Survivor – Lump sum benefit equal to the accumulated refund of all employee contributions with interest, plus six months salary to a designated beneficiary. If the death is of a violent nature, an additional lump sum equivalent benefit equal to 12 months salary is payable.
- b. Qualified Survivor and Not Eligible for Service Retirement – Monthly continuation allowance to a qualified survivor equal to the salary at the date of death. Once the member would have become eligible for service retirement, assuming that member earned service and salary increases from the date of death to the eligible service retirement date, the benefit is recalculated at 100% of the service retirement benefit,

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using the service and salary at the eligible service retirement date, such allowance shall not be less than 55% of Final Compensation.

- c. Qualified Survivor and Eligible for Service Retirement – Monthly continuation allowance to a qualified survivor equal to 100% of the monthly service retirement benefit the member would have received had the member been retired on the date of death, but such allowance shall not be less than 55% of Final Compensation.

9. Withdrawal Benefits

Less than five years of credited service:

Lump sum benefit equal to the accumulated employee contributions with interest.

Five or more years of credited service:

The member may choose one of the following:

- a. Lump sum benefit equal to the accumulated employee contributions with interest.
- b. Retirement benefit first payable at age 50 equal to 55% of Final Compensation at termination, multiplied by a service fraction, the numerator being the credited service of the member at termination, and a denominator of 25. Cost-of-living adjustments are prorated if the member's accrued service is less than 25 years. COLA will be multiplied by a fraction where the denominator is 25 and the numerator is equal to service at date of termination.

10. Additional Post-retirement Death Benefit

A death benefit payable as a lump sum equal to \$100 for each full year of credited service, subject to a maximum of \$3,000, will be paid to a qualified survivor upon the member's death.

11. Post-retirement Cost-of-Living Benefit

Basic

Monthly benefits are adjusted by 50% of the actual dollar increase or decrease in the salary rank or position the member's Final Compensation used to calculate the monthly benefit was based on. A member's monthly benefit will never decrease below its original amount.

Supplemental

Effective July 1 of each fiscal year, if there are sufficient "excess" investment earnings on the Retirement fund for the previous fiscal year-end, the adjustment could be increased to 3.5% of that member's current monthly benefit less the amount of the Basic COLA above. If "excess" earnings are insufficient to fund a 3.5% increase, then to the extent of "excess" earnings, benefits are increased in increments of .5% up to a maximum of 3.5%.

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II. Police and Fire Members – Charter Sections 8.595 (Police) and 8.596 (Fire)

1. Membership Requirement

Active members on November 5, 2002 in Section 8.559 (Police) or Section 8.585 (Fire) who had elected to switch to Section 8.595 (Police) or Section 8.596 (Fire) by December 31, 2002.

2. Final Compensation

Monthly salary earnable at the final rank held at termination date, or monthly salary at next lower rank if final rank held for less than one year.

3. Credited Service

One year of service credit is given for each fiscal year with 10 or more full months worked. A partial year (fraction with the numerator equal to months including partial months, and the denominator equal to 10) is given for each fiscal year with less than 10 full months worked.

4. Member Contributions

a. Member:

7.0% of salary, excluding overtime and most premium pay. These contributions earn interest at 5.0% per year, compounded annually.

b. Employer:

The Employer contributes the remaining amounts necessary to maintain the soundness of the Retirement System.

5. Service Retirement

Eligibility

Age 50 with 25 years of credited service.

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Benefit – Member

A specified percent of Final Compensation based on the member’s age at retirement (factors shown in Table C-1 below) for each year of credited service, subject to a maximum of 90% of Final Compensation.

Retirement Age	Retirement Factors
50	2.40%
51	2.52%
52	2.64%
53	2.76%
54	2.88%
55 or above	3.00%

Benefit – Survivor

75% of the service retirement benefit paid to a qualified survivor.

6. Non-Industrial Disability

Eligibility

10 years of credited service.

Benefit – Member

At least 10 but less than 25 years of credited service:

1.5% of Final Compensation for each year of credited service between 10 and 25 years, subject to a minimum of 33.3% and a maximum of 90% of Final Compensation.

At least 25 years of credited service:

A specified percent of Final Compensation based on the member’s age at the date of disability (factors shown in Table C-1 above, age 50 factor is used if member is less than 50 at date of disability) for each year of credited service, subject to a maximum of 90% of Final Compensation.

Benefit – Survivor

75% of the disability retirement benefit paid to a qualified survivor.

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7. Industrial Disability

Eligibility

No age or service requirement.

Benefit – Member

If Not Eligible for Service Retirement:

Final Compensation times a percentage of disability, subject to a minimum of 50% and a maximum of 90%, as determined by the Workers' Compensation Appeals Board. Once the member becomes eligible for service retirement, assuming that member earned service and salary increases during the period of disability, the benefit is recalculated using the service and salary rate for the current rank held. The recalculated benefit is based on a minimum of 55% of Final Compensation.

If Eligible for Service Retirement:

A specified percent of Final Compensation based on the member's age at the date of disability (factors shown in Table C-1 above) for each year of credited service, subject to a maximum of 90% of Final Compensation, but not less than 55% of Final Compensation.

Benefit – Survivor

If Not Eligible for Service Retirement:

100% of the disability retirement benefit paid to a qualified survivor. Once the member would have become eligible for service retirement, assuming that member earned service and salary increases from the date of disability to the eligible service retirement date, the benefit is recalculated at 100% of the service retirement benefit, using the service and salary at the eligible service retirement date, but not less than 55% of Final Compensation.

If Eligible for Service Retirement:

100% of the disability retirement benefit paid to a qualified survivor, not less than 55% of Final Compensation.

8. Death while an Active Employee

If Death is due to a Non-Work-Related Cause:

- a. Less than 10 Years of Credited Service, or No Qualified Survivor – Lump sum benefit equal to the accumulated refund all of employee contributions with interest, plus six months salary to a designated beneficiary.
- b. At least 10 but less than 25 years of Credited Service – Monthly continuation allowance to a qualified survivor equal to the non-industrial disability benefit the

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member would have been entitled to on the date of death, subject to a minimum of 33.3% of compensation at the time of death.

- c. At Least 25 Years of Credited Service but Less than Age 50 – Monthly continuation allowance to a qualified survivor equal to 75% of the monthly service retirement benefit the member would have received had the member been age 50 and retired on the date of death.
- d. Eligible for Service Retirement – Monthly continuation allowance to a qualified survivor equal to 75% of the monthly service retirement benefit the member would have received had the member been retired on the date of death.

If Death is due to a Work-Related Cause:

- a. No Qualified Survivor – Lump sum benefit equal to the accumulated refund of all employee contributions with interest, plus six months salary to a designated beneficiary. If the death is of a violent nature, an additional lump sum equivalent benefit equal to 12 months salary is payable.
- b. Qualified Survivor and Not Eligible for Service Retirement – Monthly continuation allowance to a qualified survivor equal to the salary at the date of death. Once the member would have become eligible for service retirement, assuming that member earned service and salary increases from the date of death to the eligible service retirement date, the benefit is recalculated at 100% of the service retirement benefit, using the service and salary at the eligible service retirement date, such allowance shall not be less than 55% of Final Compensation.
- c. Qualified Survivor and Eligible for Service Retirement – Monthly continuation allowance to a qualified survivor equal to 100% of the monthly service retirement benefit the member would have received had the member been retired on the date of death, not less than 55% of Final Compensation.

9. Withdrawal Benefits

Less than five years of credited service:

Lump sum benefit equal to the accumulated employee contributions with interest.

Five or more years of credited service:

The member may choose one of the following:

- a. Lump sum benefit equal to the accumulated employee contributions with interest.
- b. A specified percent of Final Compensation at termination based on the member's age at retirement (factors shown in Table C-1 above) for each year of credited service, subject to a maximum of 90% of Final Compensation. Cost-of-living adjustments are prorated if the member's accrued service is less than 25 years. COLA will be multiplied by a fraction where the denominator is 25 and the numerator is equal to service at date of termination, payable at age 50.

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10. Additional Post-retirement Death Benefit

A death benefit payable as a lump sum equal to \$100 for each full year of credited service, subject to a maximum of \$3,000, will be paid to a qualified survivor upon the member's death.

11. Post-retirement Cost-of-Living Benefit

Basic

Monthly benefits are adjusted by 50% of the actual dollar increase or decrease in the salary rank or position the member's Final Compensation used to calculate the monthly benefit was based on. A member's monthly benefit will never decrease below its original amount.

Supplemental

Effective July 1 of each fiscal year, if there are sufficient "excess" investment earnings on the Retirement fund for the previous fiscal year-end, the adjustment could be increased to 3.5% of that member's current monthly benefit less the amount of the Basic COLA above. If "excess" earnings are insufficient to fund a 3.5% increase, then to the extent of "excess" earnings, benefits are increased in increments of .5% up to a maximum of 3.5%.

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III. Police and Fire Members – Charter Sections 8.586 (Police) and 8.588 (Fire)

1. Membership Requirement

Police Officers and Firefighters who became members on or after November 2, 1976.

2. Final Compensation

Average monthly total compensation earnable during any 12 months of credited service which average compensation is the highest.

(Pre 1998 – 3 year average of monthly compensation)

3. Credited Service

One year of service credit is given for each fiscal year with 10 or more full months worked. A partial year (fraction with the numerator equal to months including partial months, and the denominator equal to 10) is given for each fiscal year with less than 10 full months worked.

4. Member Contributions

a. Member:

7.5% of salary, excluding overtime and most premium pay. These contributions earn interest at 5.0% per year, compounded annually.

b. Employer:

The Employer contributes the remaining amounts necessary to maintain the soundness of the Retirement System.

5. Service Retirement

Eligibility

Age 50 with 5 years of credited service. *(Pre 1998 – 50 with 25 years of credited service)*

Benefit – Member

The monthly service retirement benefit is the greater of i) and ii) below, subject to a maximum of 75% of Final Compensation *(Pre 1998 – 70%)*

- i) 2% of Final Compensation for each of the first 25 years of service plus an additional 3% of Average Compensation for each year of credited service in excess of 25 years; *(Pre 1998 – benefit is calculated under i) only);*

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- ii) A specified percent of Final Compensation based on the member’s age at retirement (factors shown in Table C-2 below) for each year of credited service.

Table C-2	
City and County of San Francisco Employees’ Retirement System	
Sections 8.586 (Police) and 8.588 (Fire) – Service Retirement Factors	
Retirement Age	Retirement Factors
50	2.00%
51	2.14%
52	2.28%
53	2.42%
54	2.56%
55 or above	2.70%

Benefit - Survivor

50% of the service retirement benefit paid to a qualified survivor.

6. Non-Industrial Disability

Eligibility

10 years of credited service.

Benefit – Member

1.5% of Average Compensation for each year of credited service, subject to a minimum of 33.3% of 75% of Final Compensation.

Benefit - Survivor

50% of the disability retirement benefit paid to a qualified survivor

7. Industrial Disability

Eligibility

No age or service requirement.

Benefit – Member

Less than age 50 with 25 Years of Service:

Final Compensation times a percentage of disability, subject to a minimum of 50% and a maximum of 90%, as determined by the Workers’ Compensation Appeals Board. Once the member becomes eligible for service retirement, assuming that member earned service and salary increases during the period of disability, the benefit is recalculated

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using the service and salary rate for the current rank held. The recalculated benefit is based on a minimum of 50% of Final Compensation.

Age 50 with 25 Years of Service:

The retirement allowance, but not less than 50% of Final Compensation.

Benefit - Survivor

75% of the disability retirement benefit paid to a qualified survivor

8. Death while an Active Employee

If Death is Due to a Non-Work-Related Cause:

- a. Less than 10 Years of Credited Service, or No Qualified Survivor – Lump sum benefit equal to the accumulated refund all of employee contributions with interest, plus six months salary to a designated beneficiary.
- b. At least 10 but less than 25 years of Credited Service – Monthly continuation allowance to a qualified survivor equal to the non-industrial disability benefit the member would have been entitled to on the date of death, subject to a minimum of 33.3% of Average Compensation at the time of death.
- c. At Least 25 Years of Credited Service but Less than Age 50 – Monthly continuation allowance to a qualified survivor equal to 50% of the monthly service retirement benefit the member would have received had the member been age 50 and retired on the date of death.
- d. Age 50 with 25 Years of Credited Service – Monthly continuation allowance to a qualified survivor equal to 50% of the monthly service retirement benefit the member would have received had the member been retired on the date of death.

If Death is Due to a Work-Related Cause:

- a. No Qualified Survivor – Lump sum benefit equal to the accumulated refund of all employee contributions with interest, plus six months salary to a designated beneficiary. If the death is of a violent nature, an additional lump sum equivalent benefit equal to 12 months salary is payable.
- b. Qualified Survivor and Less than Age 50 with 25 Years of Service – Monthly continuation allowance to a qualified survivor equal to 100% (*Pre 1998 – 75%*) of Final Compensation at the date of death. Once the member would have become eligible for service retirement, assuming that member earned service and salary increases from the date of death to the eligible service retirement date, the benefit is recalculated at 100% of the service retirement benefit, using the service and salary at the eligible service retirement date, such allowance shall not be less than 50% of Final Compensation.

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- c. Qualified Survivor and Age 50 with 25 Years of Service – Monthly continuation allowance to a qualified survivor equal to 100% (*Pre 1998* – 75%) of the monthly service retirement benefit the member would have received had the member been retired on the date of death, not less than 50% of Final Compensation.

9. Withdrawal Benefits

Less than five years of credited service:

Lump sum benefit equal to the accumulated employee contributions with interest.

Five or more years of credited service:

The member may choose one of the following:

- a. Lump sum benefit equal to the accumulated refund all of employee contributions with interest.
- b. Retirement benefit first payable at age 50 equal to 2% of Final Compensation at termination for each year of credited service of the member at the date of termination.

10. Additional Post-retirement Death Benefit

A death benefit payable as a lump sum equal to \$100 for each full year of credited service, subject to a maximum of \$3,000, will be paid to a qualified survivor upon the member's death.

11. Post-retirement Cost-of-Living Benefit

Basic

Monthly benefits are increased or decreased each July 1 by a maximum of 2% per year of the initial monthly benefit. A member's monthly benefit will never decrease below its original amount. Effective July 1, 2009, monthly benefits are increased or decreased by a maximum of 2% of the prior year's monthly benefit.

Supplemental

Effective July 1 of each fiscal year, if there are sufficient "excess" investment earnings on the Retirement fund for the previous fiscal year-end, the adjustment could be increased to 3.5% of that member's current monthly benefit less the amount of the Basic COLA above. If "excess" earnings are insufficient to fund a 3.5% increase, then to the extent of "excess" earnings, benefits are increased in increments of .5% up to a maximum of 3.5%.

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IV. Police and Fire Members – Charter Sections 8.597 (Police) and 8.598 (Fire)

1. Membership Requirement

Active members on January 1, 2003 in Section 8.586 (Police) or Section 8.588 (Fire) who had elected to switch to Section 8.597 (Police) or Section 8.598 (Fire) by December 31, 2002; or new members becoming active on or after January 1, 2003 in Section 8.597 (Police) or Section 8.598 (Fire).

2. Final Compensation

Average monthly total compensation earnable during any 12 months of credited service which average compensation is the highest.

3. Credited Service

One year of service credit is given for each fiscal year with 10 or more full months worked. A partial year (fraction with the numerator equal to months including partial months, and the denominator equal to 10) is given for each fiscal year with less than 10 full months worked.

4. Member Contributions

a. Member:

7.5% of salary, excluding overtime and most premium pay. These contributions earn interest at 5.0% per year, compounded annually.

b. Employer:

The Employer contributes the remaining amounts necessary to maintain the soundness of the Retirement System.

5. Service Retirement

Eligibility

Age 50 with five years of credited service.

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Benefit - Member

A specified percent of Final Compensation based on the member's age at retirement (factors shown in Table C-3 below) for each year of credited service, subject to a maximum of 90% of Final Compensation.

Retirement Age	Retirement Factors
50	2.40%
51	2.52%
52	2.64%
53	2.76%
54	2.88%
55 or above	3.00%

Benefit - Survivor

50% of the service retirement benefit paid to a qualified survivor.

6. Non-Industrial Disability

Eligibility

10 years of credited service.

Benefit - Member

1.5% of Final Compensation for each year of credited service, subject to a minimum of 33.3% and a maximum of 90% of Final Compensation.

Benefit - Survivor

50% of the disability retirement benefit paid to a qualified survivor.

7. Industrial Disability

Eligibility

No age or service requirement.

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Benefit – Member

Less than Age 50 with 25 Years of Service:

Average Final Compensation times a percentage of disability, subject to a minimum of 50% and a maximum of 90%, as determined by the Workers' Compensation Appeals Board. Once the member is 50 years old with 25 years of service, assuming that member earned service and salary increases during the period of disability, the benefit is recalculated using the service and salary rate for the current rank held. The recalculated benefit is a minimum of 50% of Final Compensation, but not to exceed 90% of Final Compensation.

Age 50 with 25 Years of Service:

A specified percent of Average Final Compensation based on the member's age at the date of disability (factors shown in Table C-2 above) for each year of credited service, not less than 50% of Final Compensation, but not to exceed 90% of Final Compensation.

Benefit - Survivor

If Not Eligible for Service Retirement:

75% of the disability retirement benefit paid to a qualified survivor. Once the member would have become eligible for service retirement, assuming that member earned service and salary increases from the date of disability to the eligible service retirement date, the benefit is recalculated at 100% of the retirement benefit, using the service and salary at the eligible service retirement date, not less than 50% of Final Compensation.

If Eligible for Service Retirement:

75% of the disability retirement benefit paid to a qualified survivor, not less than 50% of Final Compensation.

8. Death while an Active Employee

If Death is due to a Non-Work-Related Cause:

- a. Less than 10 Years of Credited Service, or No Qualified Survivor – Lump sum benefit equal to the accumulated refund all of employee contributions with interest, plus six months salary to a designated beneficiary.
- b. At least 10 but less than 25 years of Credited Service – Monthly continuation allowance to a qualified survivor equal to the non-industrial disability benefit the member would have been entitled to on the date of death, subject to a minimum of 33.3% of compensation at the time of death.
- c. At Least 25 Years of Credited Service but Less than Age 50 – Monthly continuation allowance to a qualified survivor equal to 50% of the monthly service retirement benefit the member would have received had the member been age 50 and retired on the date of death.

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- d. Age 50 with 25 Years of Service – Monthly continuation allowance to a qualified survivor equal to 50% of the monthly service retirement benefit the member would have received had the member been retired on the date of death.

If Death is due to a Work-Related Cause:

- a. No Qualified Survivor – Lump sum benefit equal to the accumulated refund of all employee contributions with interest, plus six months salary to a designated beneficiary.
- b. Qualified Survivor and Less than Age 50 and 25 Years of Service – Monthly continuation allowance to a qualified survivor equal to the compensation at the date of death. Once the member would have completed 25 years of service and attained age 50, assuming that the member earned service and salary increases from the date of death to the said date, the benefit is recalculated at 100% of the service retirement benefit. The recalculated benefit is a minimum of 50% of Final Compensation, but not to exceed 90% of Final Compensation.
- c. Qualified Survivor and Age 50 with 25 Years of Service – Monthly continuation allowance to a qualified survivor equal to 100% of the monthly service retirement benefit the member would have received had the member been retired on the date of death, not less than 50% of Final Compensation.

9. Withdrawal Benefits

Less than five years of credited service:

Lump sum benefit equal to the accumulated employee contributions with interest.

Five or more years of credited service:

The member may choose one of the following:

- a. Lump sum benefit equal to the accumulated refund all of employee contributions with interest.
- b. A specified percent of Final Compensation at termination based on the member's age at retirement (factors shown in Table C-2 above) for each year of credited service, subject to a maximum of 90% of Final Compensation, payable at age 50.

10. Additional Post-retirement Death Benefit

A death benefit payable as a lump sum equal to \$100 for each full year of credited service, subject to a maximum of \$3,000, will be paid to a qualified survivor upon the member's death.

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11. Post-retirement Cost-of-Living Benefit

Basic

Monthly benefits are adjusted each July 1 by the accumulated change in the Consumer Price Index to the nearest 1%, with a maximum increase or decrease of 2% per year of the initial monthly benefit. A member's monthly benefit will never decrease below its original amount.

Effective July 1, 2009, monthly benefits are increased or decreased by a maximum of 2% of the prior year's monthly benefit.

Supplemental

Effective July 1 of each fiscal year, if there are sufficient "excess" investment earnings on the Retirement fund for the previous fiscal year-end, the adjustment could be increased to 3.5% of that member's current monthly benefit less the amount of the Basic COLA above. If "excess" earnings are insufficient to fund a 3.5% increase, then to the extent of "excess" earnings, benefits are increased in increments of .5% up to a maximum of 3.5%.

V. Miscellaneous Members – Charter Section 8.509

1. Membership Requirement

Employees and Officers, other than Police Officers or Firefighters, who became members before November 2, 1976 and continued as a member without interruption.

2. Average Final Compensation

Average monthly compensation earned during any year of credited service which average compensation is the highest.

3. Credited Service

One year of service credit is given for each fiscal year with 10 or more full months worked. A partial year (fraction with the numerator equal to months including partial months, and the denominator equal to 10) is given for each fiscal year with less than 10 full months worked. (Exception: in the year of retirement, the denominator in the fraction is equal to 12).

4. Member Contributions

a. Member:

8.0% of salary, excluding overtime and most premium pay. These contributions earn interest at 5.0% per year, compounded annually.

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If the member elects Social Security, the contributions to the System may be reduced by the amount contributed to Social Security (excluding the Medicare portion). Retirement benefits are actuarially reduced.

b. Employer:

The Employer contributes the remaining amounts necessary to maintain the soundness of the Retirement System.

5. Service Retirement

Eligibility

Age 50 with 20 years of credited service, or age 60 with 10 years of credited service.

Benefit - Member

The monthly service retirement benefit is the greater of i) and ii) below, subject to a maximum of 75% of Average Final Compensation.

- i) A specified percent of Average Final Compensation based on the member's age at retirement (factors shown in Table C-4 below) for each year of credited service, effective January 11, 2009.

Retirement Age	Retirement Factors	Retirement Age	Retirement Factors
50	1.0%	57	1.7%
51	1.1%	58	1.8%
52	1.2%	59	1.9%
53	1.3%	60	2.1%
54	1.4%	61	2.2%
55	1.5%	62 or above	2.3%
56	1.6%		

- ii) The actuarial equivalent of twice the member's accumulated contributions with interest.

Benefit - Survivor

50% of the service retirement benefit paid to a qualified survivor.

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6. Disability

Eligibility

10 years of credited service.

Benefit - Member

1.8% of Average Final Compensation for each year of credited service, maximum of 75% of Average Final Compensation. If the benefit is less than 40% of Average Final Compensation, additional credited service had the member worked to age 60 can be added to the current credited service, in order to adjust the benefit to 40% of Average Final Compensation.

Benefit - Survivor

50% of the disability retirement benefit paid to a qualified survivor.

7. Death while an Active Employee

If Not Eligible for Service Retirement:

Lump sum benefit equal to the accumulated refund of all employee contributions with interest, plus six months salary to a designated beneficiary. If the death is job-related, an additional lump sum equivalent benefit equal to 12 months salary is payable.

If Eligible for Service Retirement:

A qualified spouse may elect i) or ii) below:

- i) Lump sum benefit equal to the accumulated refund of all employee contributions with interest, plus six months salary to a designated beneficiary.
- ii) A benefit equal to 50% of the service retirement benefit the member would have received had the member retired for service on the date of death.

8. Withdrawal Benefits

Less than ten years of credited service or less than \$1,000 in accumulated contributions:
Lump sum benefit equal to the accumulated employee contributions with interest.

Ten or more years of credited service or accumulated contributions exceeding \$1,000:

The member may choose one of the following:

- i) Lump sum benefit equal to the accumulated refund all of employee contributions with interest.
- ii) A deferred retirement benefit payable on or after age 50 equal to the actuarial equivalent of twice the member's accumulated contributions with interest as of the retirement date.

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9. Additional Post-retirement Death Benefit

A death benefit payable as a lump sum equal to \$100 for each full year of credited service, subject to a maximum of \$3,000, will be paid to a qualified survivor upon the member's death.

10. Post-retirement Cost-of-Living Benefit

Basic

Monthly benefits are adjusted each July 1 by the accumulated change in the Consumer Price Index to the nearest 1%, with a maximum increase or decrease of 2% per year of the initial monthly benefit. A member's monthly benefit will never decrease below its original amount.

Effective July 1, 2009, monthly benefits are increased or decreased by a maximum of 2% of the prior year's monthly benefit.

Supplemental

Effective July 1 of each fiscal year, if there are sufficient "excess" investment earnings on the Retirement fund for the previous fiscal year-end, the adjustment could be increased to 3.5% of that member's current monthly benefit less the amount of the Basic COLA above. If "excess" earnings are insufficient to fund a 3.5% increase, then to the extent of "excess" earnings, benefits are increased in increments of .5% up to a maximum of 3.5%.

VI. Miscellaneous Members – Charter Section 8.587

1. Membership Requirement

Active Employees and Officers, other than Police Officers or Firefighters, who were members under Section A8.584, and members under A8.587 whose accumulated contributions were in the retirement fund on November 7, 2000 and were not retired. After November 7, 2000, all full time employees, certified Civil Service employees, or temporary employees who work more than 1,040 hours in any 12-month period; excluding all Police Officers and Firefighters.

2. Average Final Compensation

Average monthly compensation earned during any year of credited service which average compensation is the highest.

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3. Credited Service

One year of service credit is given for each fiscal year with 10 or more full months worked. A partial year (fraction with the numerator equal to months including partial months, and the denominator equal to 10) is given for each fiscal year with less than 10 full months worked.

4. Member Contributions

a. Member:

7.5% of salary, excluding overtime and most premium pay. These contributions earn interest at 5.0% per year, compounded annually.

b. Employer:

The Employer contributes the remaining amounts necessary to maintain the soundness of the Retirement System.

5. Service Retirement

Eligibility

Age 50 with 20 years of credited service, or age 60 with 10 years of credited service.

Benefit - Member

The monthly service retirement benefit is the greater of i) and ii) below:

- i) A specified percent of Average Final Compensation based on the member's age at retirement (factors shown in Table C-5 below) for each year of credited service, subject to a maximum of 75% of Average Final Compensation, effective date January 11, 2009.

Table C-5			
City and County of San Francisco Employees' Retirement System			
Sections 8.584 and 8.587 Member Service Retirement Factors			
Retirement Age	Retirement Factors	Retirement Age	Retirement Factors
50	1.0%	57	1.7%
51	1.1%	58	1.8%
52	1.2%	59	1.9%
53	1.3%	60	2.1%
54	1.4%	61	2.2%
55	1.5%	62 or above	2.3%
56	1.6%		

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- ii) The actuarial equivalent of twice the member's accumulated contributions with interest.

Benefit - Survivor

50% of the service retirement benefit paid to a qualified survivor.

6. Disability

Eligibility

10 years of credited service.

Benefit - Member

1.8% of Average Final Compensation for each year of credited service, maximum of 75% of Average Final Compensation. If the benefit is less than 40% of Average Final Compensation, additional credited service had the member worked to age 60 can be added to the current credited service, in order to adjust the benefit up to 40% of Average Final Compensation.

Benefit - Survivor

50% of the disability retirement benefit paid to a qualified survivor.

7. Death while an Active Employee

If Not Eligible for Service Retirement:

Lump sum benefit equal to the accumulated refund of all employee contributions with interest, plus six months salary to a designated beneficiary. If the death is job-related, an additional lump sum equivalent benefit equal to 12 months salary is payable.

If Eligible for Service Retirement:

A qualified spouse may elect i) or ii) below:

- i) Lump sum benefit equal to the accumulated refund of all employee contributions with interest, plus six months salary to a designated beneficiary.
- ii) A benefit equal to 50% of the service retirement benefit the member would have received had the member retired for service on the date of death.

8. Withdrawal Benefits

Less than five years of credited service:

Lump sum benefit equal to the accumulated refund all of employee contributions with interest.

APPENDIX C
SUMMARY OF PLAN PROVISIONS

Five or more years of credited service:

The member may choose one of the following:

- i) Lump sum benefit equal to the accumulated refund all of employee contributions with interest.
- ii) A deferred retirement benefit payable on or after age 50 equal to the actuarial equivalent of twice the member's accumulated contributions with interest as of the retirement date.

9. Additional Post-retirement Death Benefit

A death benefit payable as a lump sum equal to \$100 for each full year of credited service, subject to a maximum of \$3,000, will be paid to a qualified survivor upon the member's death.

10. Post-retirement Cost-of-Living Benefit

Monthly benefits are adjusted each July 1 by the accumulated change in the Consumer Price Index to the nearest 1%, with a maximum increase or decrease of 2% per year of the initial monthly benefit. A member's monthly benefit will never decrease below its original amount.

Effective July 1, 2009, monthly benefits are increased or decreased by a maximum of 2% of the prior year's monthly benefit.

Supplemental

Effective July 1 of each fiscal year, if there are sufficient "excess" investment earnings on the Retirement fund for the previous fiscal year-end, the adjustment could be increased to 3.5% of that member's current monthly benefit less the amount of the Basic COLA above. If "excess" earnings are insufficient to fund a 3.5% increase, then to the extent of "excess" earnings, benefits are increased in increments of .5% up to a maximum of 3.5%.

Note: The summary of major plan provisions is designed to outline principal plan benefits. If the SFERS staff should find the plan summary not in accordance with the actual provisions, the actuary should immediately be alerted so the proper provisions are valued.

**APPENDIX D
GLOSSARY OF TERMS**

1. Actuarial Liability

The Actuarial Liability is the difference between the present value of all future system benefits and the present value of total future normal costs. This is also referred to by some actuaries as the “accrued liability” or “actuarial liability”.

2. 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.

3. Accrued Service

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

4. 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.

5. Actuarial Funding Method

A mathematical budgeting procedure for allocating the dollar amount of the actuarial present value of a retirement system benefit between future normal cost and actuarial accrued liability. Sometimes referred to as the “actuarial funding method”.

6. Actuarial Gain (Loss)

The difference between actual experience and actuarial assumption anticipated experience during the period between two actuarial valuation dates.

7. 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.

**APPENDIX D
GLOSSARY OF TERMS**

8. Amortization

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

9. Annual Required Contribution (ARC) under GASB 25

The Governmental Accounting Standards Board (GASB) Statement No. 25 defines the Plan Sponsor's "Annual Required Contribution" (ARC) that must be disclosed annually. The SFERS Employer computed contribution rate for FY 2010 meets the parameters of GASB 25.

10. Normal Cost

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

11. Set back/Set forward

Set back is a period of years that a standard published table (i.e. mortality) is referenced backwards in age. For instance, if the set back period is 2 years and the participant's age is currently 40, then the table value for age 38 is used from the standard published table. It is the opposite for set forward. A system would use set backs or set forwards to compensate for mortality experience in their work force.

12. Unfunded Actuarial Liability (UAL)

The unfunded actuarial liability represents the difference between actuarial liability and valuation assets. This value is sometimes referred to as "unfunded actuarial accrued liability".

Most retirement systems have unfunded actuarial liabilities. They typically arise each time new benefits are added and each time experience losses are realized.

The existence of unfunded actuarial accrued liability is not in itself an indicator of poor funding. Also, unfunded actuarial liabilities do not represent a debt that is payable today. What is important is the ability of the plan sponsor to amortize the unfunded actuarial liability and the trend in its amount (after due allowance for devaluation of the dollar).