



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

**July 1, 2011  
Actuarial Valuation**

**Produced by [Cheiron](#)**

**February 2012**

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LETTER OF TRANSMITTAL

February 2, 2012

Retirement Board of the City and County of  
 San Francisco Employees' Retirement System  
 c/o Mr. Gary A. Amelio, Executive Director  
 30 Van Ness Avenue, Suite 3000  
 San Francisco, CA 94102

Dear Members of the Board:

The purpose of this report is to present the July 1, 2011 actuarial valuation of the City and County of San Francisco Employees' Retirement System (SFERS). This report is for the use of the Retirement Board and its auditors in preparing financial reports in accordance with applicable laws and accounting requirements. Any other user of this report is not an intended user and is considered a third party.

The table below presents the key results of the 2011 and 2010 valuations for SFERS.

<b>Table I-1</b>		
<b>City and County of San Francisco Employees' Retirement System</b>		
<b>Summary of Key Valuation Results</b>		
(in millions)		
<b>Valuation Date</b>	<b>July 1, 2011</b>	<b>July 1, 2010</b>
<b>Fiscal Year End</b>	<b>2013</b>	<b>2012</b>
Actuarial Liability	\$ 18,598.7	\$ 17,643.4
Actuarial Value of Assets	16,313.1	16,069.1
Unfunded Actuarial Liability (actuarial value)	\$ 2,285.6	\$ 1,574.3
Funding Ratio (actuarial value)	87.7%	91.1%
Market Value of Assets	15,598.8	13,136.8
Unfunded Liability (market value)	\$ 2,999.9	\$ 4,506.6
Funding Ratio (market value)	83.9%	74.5%
Net Employer Contribution Rate	20.71%	18.09%

- Unfunded Actuarial Liability (UAL):* SFERS' UAL based on the actuarial value of assets increased by \$711.3 million. The primary cause of this increase is the investment experience during the 12 months ended June 30, 2009 that is being recognized over five years, but assumption changes also added to the UAL. SFERS' unfunded liability based on the market value of assets decreased by \$1,506.7 million primarily due to the actual investment returns during the 12 months ended June 30, 2011.



- *Funding Ratio:* The ratio of the actuarial value of assets to actuarial liabilities declined since the last valuation from 91.1% to 87.7%. The actuarial value of assets is smoothed in order to mitigate the impact of investment performance volatility on employer contribution rates. Without the asset smoothing, the ratio of the market value of assets to actuarial liabilities increased from 74.5% to 83.9% reflecting the greater than expected investment return on a market value basis during the 12 months ended June 30, 2011.
- *Net Employer Contribution Rate:* The recommended contribution rate to be made by the Employer for the fiscal year ending June 30, 2013 increased by 2.62% of payroll. This increase is primarily attributable to the continued recognition of the investment experience during the 12 months ended June 30, 2009. The contribution rate increase is less than had been projected last year because the actual investment returns for the year ending June 30, 2011 were better than expected. This reduction in contribution rate was partially offset by the assumption changes.

More details on the plan experience for the past year, including the changes listed above and their impact on these July 1, 2011 valuation results can be found in this report.

In preparing our report, we relied without audit, on information (some oral and some written) supplied by the City and County of San Francisco Employees' Retirement System. This information includes, but is not limited to, the plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice #23.

We hereby certify that, to the best of our knowledge, this report and its contents, which are based on the information and data supplied by the staff at the City and County of San Francisco Employees' Retirement System, are work products of Cheiron, Inc. These work products are complete and accurate and have 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. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained in this report. This report does not address any contractual or legal issues. We are not attorneys and our firm does not provide any legal services or advice.

This actuarial valuation report was prepared solely for the System for the purposes described herein, except that the plan auditor may rely on this report solely for the purpose of completing an audit related to the matters herein. This actuarial valuation report is not intended to benefit any third party, and Cheiron assumes no duty or liability to any such party.

Board of Administration

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Finally, it's important to note that this valuation, which was prepared using census data and financial information as of July 1, 2011, does not reflect any subsequent changes in the membership or the assets.

Sincerely,

Cheiron



Kenneth A. Kent, FSA, FCA, EA, MAAA  
Principal Consulting Actuary



William R. Hallmark, ASA, FCA, EA, MAAA  
Consulting Actuary

**SECTION I  
BOARD SUMMARY**

The primary purpose of this actuarial valuation 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 the Fiscal Year Ending June 30, 2013, and
- Information required by the Governmental Accounting Standards Board (GASB).

We note, however, that GASB has issued exposure drafts that would change the reporting requirements effective for large, single-employer plans for periods beginning after June 15, 2012. If GASB issues final statements with the same effective date, the information in this report that would traditionally be used for financial reporting purposes for the fiscal year ending June 30, 2013 will need to be revised to comply with the new requirements. These changes would not affect the contribution rates in this report.

In this Section, we present a summary of the principal valuation results. This includes the basis upon which the July 1, 2011 valuation was completed and an examination of the current financial condition of SFERS. In addition, we review the key historical trends and project the financial outlook for SFERS assuming all assumptions are met.

**A. Valuation Basis**

SFERS funding policy sets employer contributions equal to the sum of:

- The normal cost under the Entry Age Normal Cost Method, plus
- Expected administrative expenses, and plus
- Amortization payments for changes in the unfunded actuarial liability.

Changes in the unfunded actuarial liability due to assumption changes and actuarial gains and losses are amortized over a rolling 15-year period. Changes due to Propositions are amortized over 20-year closed periods.

The results in this report incorporate the assumption changes adopted by the Board at the December 2011 Board Meeting. The Board changed the investment return assumption from 7.75% to 7.50% over a three-year period: 7.66% for the 2011 valuation, 7.58% for the 2012 valuation, and 7.50% for the 2013 and future valuations. The Board changed the wage inflation assumption from 4.00% to 3.75% over the same three-year period: 3.91% for the 2011 valuation, 3.83% for the 2012 valuation, and 3.75% for the 2013 and future valuations. Hence, this valuation is based on an investment return assumption of 7.66% and a wage inflation assumption of 3.91%. We have incorporated the Board adopted rates for future valuations in all projections shown in this report.

**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM  
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**SECTION I  
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**B. Current Financial Condition of SFERS**

On the following pages, the key results of the July 1, 2011 valuation are summarized and compared to the results from the July 1, 2010 valuation.

1. SFERS Membership:

As shown in Table I-2 below, total membership in SFERS increased slightly in total. Active membership decreased 0.9%, active DROP membership increased 118.9%, and retiree membership increased 4.7%. Total payroll decreased by 2.4% for active members and increased 117.2% for DROP members. The average pay per active and DROP member decreased by 1.2%. The significant increase in DROP participation is likely due to the closure of the DROP effective June 30, 2011.

<b>Table I-2</b>				
<b>Membership Total</b>				
<b>Item</b>	<b>July 1, 2011</b>	<b>July 1, 2010</b>	<b>% Change</b>	
Actives	27,955	28,222	-0.9%	
Active DROP	267	122	118.9%	
Terminated Vested	5,520	5,493	0.5%	
Retirees	17,841	17,040	4.7%	
Disabled	2,700	2,677	0.9%	
Beneficiaries	3,751	3,783	-0.8%	
<b>Total SFERS Members</b>	<b>58,034</b>	<b>57,337</b>	<b>1.2%</b>	
Active Member Payroll (FYE 2012)	\$ 2,324,090,053	\$ 2,382,101,666	-2.4%	
DROP Member Payroll (FYE 2012)	\$ 36,323,172	\$ 16,721,371	117.2%	
Average Pay per Active/DROP	\$ 83,637	\$ 84,632	-1.2%	

Included in the active counts above are 1,099 new members who were hired with benefits under Proposition D (See Appendix C for a description of the changes in plan provisions contained in Proposition D). These members have an expected payroll for FYE 2012 of approximately \$80 million and a normal cost rate that is approximately 0.5% of pay less than it would have been without Proposition D.

2. SFERS Assets and Liabilities:

Table I-3, on the following page, compares the July 1, 2011 and July 1, 2010 SFERS assets, liabilities, unfunded actuarial liability (UAL), and funding ratios.

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The key results shown in Table I-3 indicate that the total actuarial liability increased 5.4% and the market value of assets increased by 18.7%. SFERS employs an asset smoothing method which dampens investment market volatility. For this year the smoothed value of assets (called the actuarial value of assets) increased by 1.5%. Finally, SFERS' UAL (actuarial liabilities less actuarial value of assets) increased from \$1.57 billion to \$2.29 billion, resulting in a decrease in the funding ratio from 91.1% to 87.7%. Based on the market value of assets, the funding ratio increased from 74.5% to 83.9%.

<b>Table I-3</b>				
<b>Assets &amp; Liabilities</b>				
(in millions)				
<b>Item</b>	<b>July 1, 2011</b>	<b>July 1, 2010</b>	<b>% Change</b>	
Actives	\$ 7,157.8	\$ 7,263.3	-1.5%	
Active DROP	453.8	209.5	116.6%	
Terminated Vested	371.3	409.5	-9.3%	
Retirees	7,870.7	7,164.4	9.9%	
Disabled	1,799.9	1,701.9	5.8%	
Beneficiaries	945.2	894.8	5.6%	
Total Actuarial Liability	\$ 18,598.7	\$ 17,643.4	5.4%	
Market Value Assets	\$ 15,598.8	\$ 13,136.8	18.7%	
Actuarial Value Assets	\$ 16,313.1	\$ 16,069.1	1.5%	
Unfunded Actuarial Liability	\$ 2,285.6	\$ 1,574.3	45.2%	
Funding Ratio - Market Value	83.9%	74.5%	9.4%	
Funding Ratio - Actuarial Value	87.7%	91.1%	-3.4%	

3. Components of UAL Increase between July 1, 2010 and July 1, 2011:

The UAL of \$1,574.3 million last year grew to a UAL of \$2,285.6 million this year, representing an increase of \$711.3 million. Table I-4 presents the specific components of this change in the UAL.

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<b>Table I-4</b>	
<b>Increase in Unfunded Actuarial Liability</b>	
<b>Experience</b>	<b>in millions</b>
1. Unfunded actuarial liability, 7/1/2010	\$ 1,574.3
2. Expected change in unfunded actuarial liability	\$ (51.9)
3. Unfunded increase due to investment loss and expenses	563.3
4. Unfunded decrease due to liability gain	(71.0)
5. Unfunded increase due to contributions less than expected	122.1
6. Unfunded increase due to assumption changes	148.8
7. Total change in unfunded actuarial liability	\$ 711.3
8. Unfunded actuarial liability, 7/1/2011	\$ 2,285.6

The key findings in Table I-4 are that investment losses and expenses increased the UAL by \$563.3 million, assumption changes added \$148.8 million, and liability experience gains decreased the UAL by \$71.0 million. In addition, the one-year lag between the valuation date and the change in the employer contribution rate from 13.56% to 18.09% (augmented somewhat by the lower than expected payroll) increased the UAL by \$122.1 million.

4. SFERS Contributions:

Table I-5 shows that the SFERS contribution rate for FYE 2013, measured as a percent of membership payroll, increased from 18.09% to 20.71%.

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<b>Table I-5 Contributions</b>			
<b>Item</b>	<b>FYE 2013</b>	<b>FYE 2012</b>	<b>Change</b>
1. Gross Normal Cost %	17.90%	17.90%	0.00%
2. Member Cost %	7.51%	7.50%	0.01%
3. Employer Normal Cost %	10.39%	10.40%	-0.01%
4. Amortization of Remaining UAL%	3.66%	0.73%	2.93%
5. Amortization of Proposition UAL%	6.21%	6.51%	-0.30%
6. Total Employer Unfunded Liability Cost %	9.87%	7.24%	2.63%
7. Administrative Expenses %	0.45%	0.45%	0.00%
8. Net Employer Contribution Rate: (3 + 6 + 7)	20.71%	18.09%	2.62%

Table I-6 shows sources for the change in the net employer contribution rate. The contribution rate increase is primarily attributable to the smoothed asset loss and is less than was projected to occur because of the favorable investment returns achieved in the last year.

<b>Table I-6 Contribution Reconciliation</b>			
<b>Item</b>	<b>Total</b>	<b>Normal Cost*</b>	<b>Amortization</b>
FYE 2012 Net Employer Contribution Rate	18.09%	10.85%	7.24%
Change due to asset loss	2.49%	0.00%	2.49%
Change due to liability gain	-0.44%	-0.18%	-0.26%
Change due to effect of payroll on amortization	0.50%	0.00%	0.50%
Change due to assumptions	0.75%	0.18%	0.57%
Completion of 1991 proposition amortization and other	-0.68%	-0.01%	-0.67%
FYE 2013 Net Employer Contribution Rate	20.71%	10.84%	9.87%

\* Includes administrative expenses

In Section IV of this report, more detail is provided on the development of this contribution rate.

**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM  
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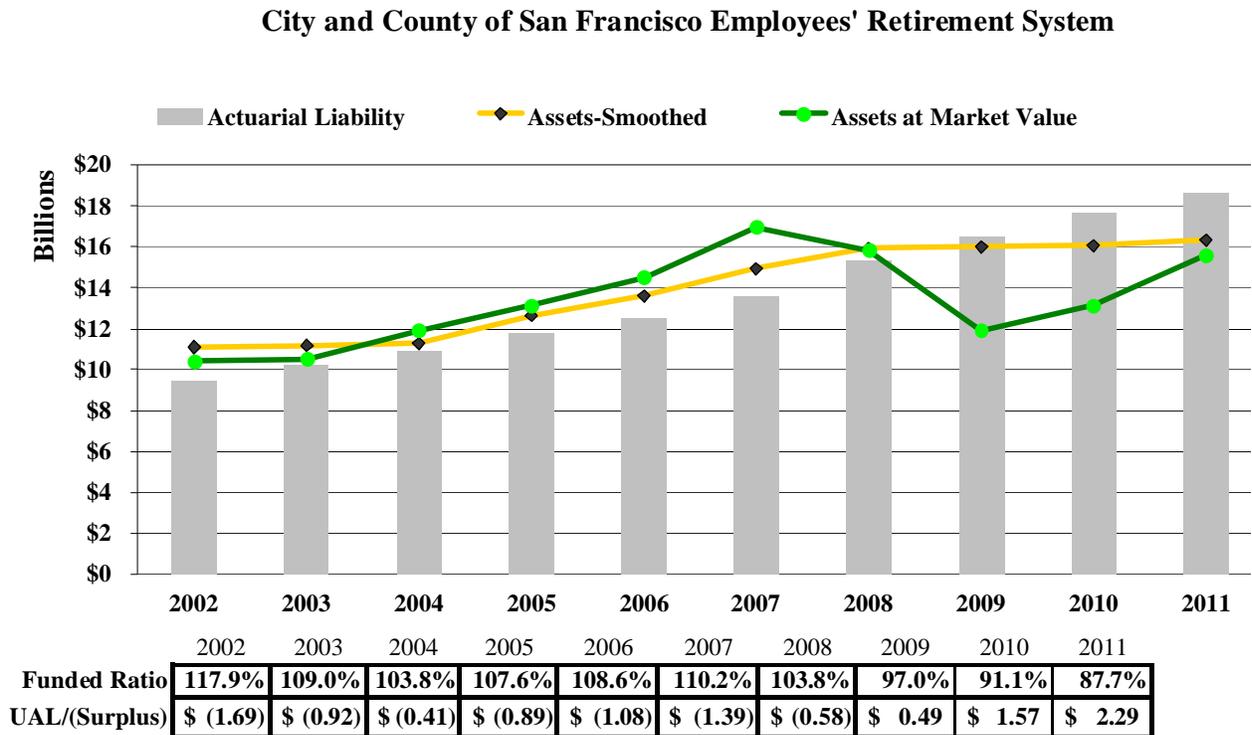
**SECTION I  
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**C. Historical Trends**

It is important to remember that each valuation is merely a snapshot of the long-term progress of a pension fund. It is important to judge a current year's valuation result relative to historical trends, as well as trends expected into the future.

The chart below shows the historical trends for assets (both market and smoothed) versus the actuarial liability, and also shows the progress of SFERS' funding ratios since 2001.

**SFERS- Assets and Liabilities 2001-2011**



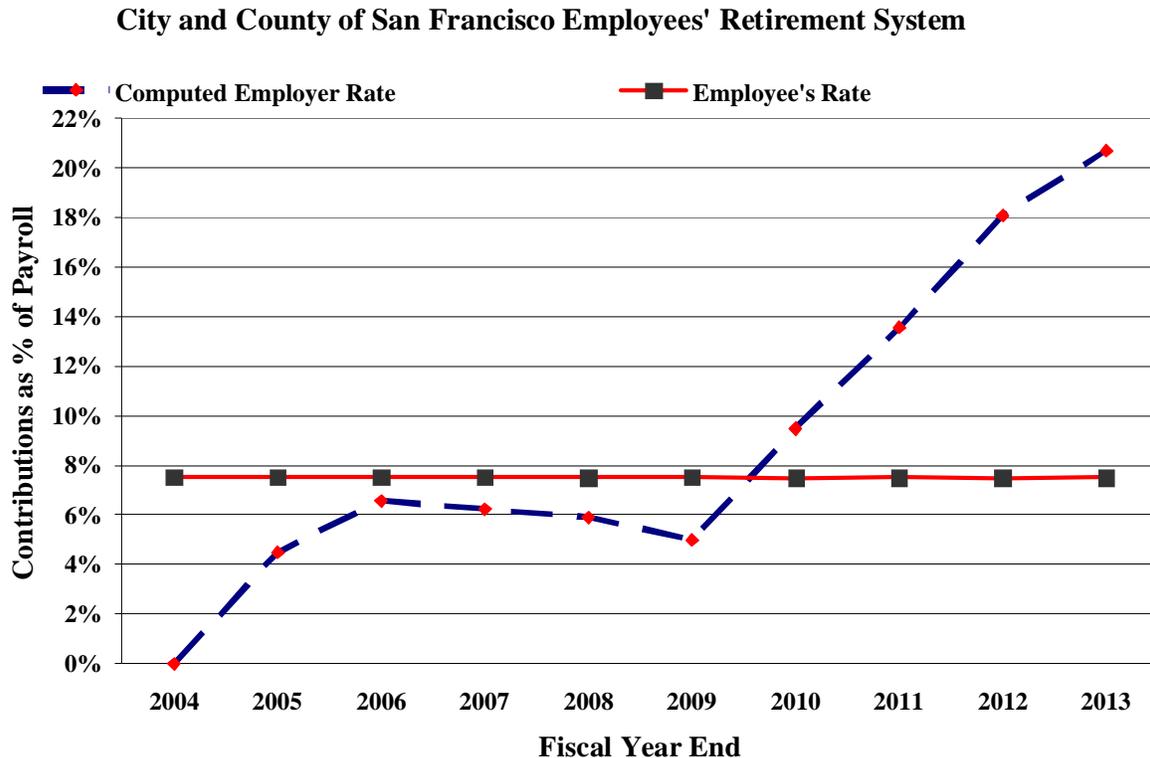
The chart above indicates that from 2002 to 2004, the funding ratio declined but remained in a surplus status with ending the period at 103.8%. From 2004 to 2007, the ratio improved, primarily due to strong asset performance. From 2008 to 2011, the ratio declined primarily due to investment experience, Proposition B and assumption changes. In 2009, the actuarial value of assets was 34 percent greater than the market value of assets. This gap, however, has closed significantly such that the actuarial value of assets is now only about 5 percent greater than the market value.

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In the chart below, the historical trends for SFERS' contribution rates since the Fiscal Year Ending June 30, 2003 are shown. All information shown prior to the Fiscal Year Ending June 30, 2010 was calculated by the prior actuary.

**Employer and Member Contribution Rates for Fiscal Years Ending 2004-2013**



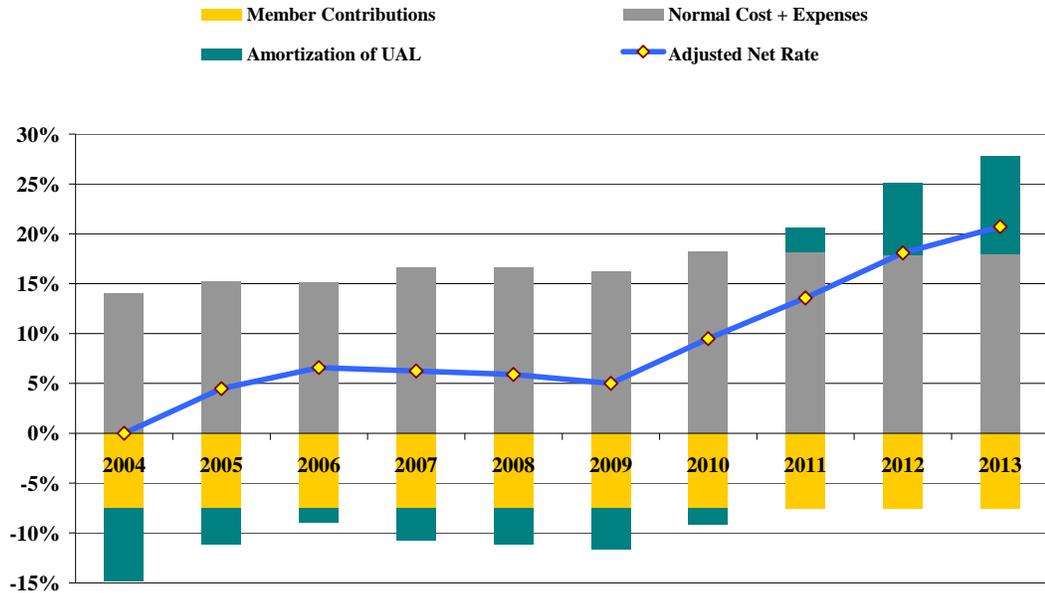
The key information in this chart is the increase in the employer contribution rate since 2004. The increase for the Fiscal Year Ending in 2010 is primarily due to benefit changes under Proposition B and decreasing the investment return assumption from 8.00% to 7.75%. The increases for the Fiscal Years Ending in 2011, 2012, 2013 are primarily due to the investment losses from 2008-2009 being phased-in and assumption changes adopted in November 2010 and December 2011 for FYE 2012 and FYE 2013, respectively. Employer contribution rate increases are expected for the next two years as the balance of the investment losses are recognized under the asset smoothing method and the investment return and wage inflation assumptions are completely phased-in.

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The chart below shows historical trends of SFERS' contribution rate components since the Fiscal Year Ending June 30, 2004, and the table below it shows the detail of the components of the contribution rates. All information shown prior to the Fiscal Year Ending June 30, 2010 was calculated by the prior actuary.

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



**Historic Cost as a Percentage of Pay**

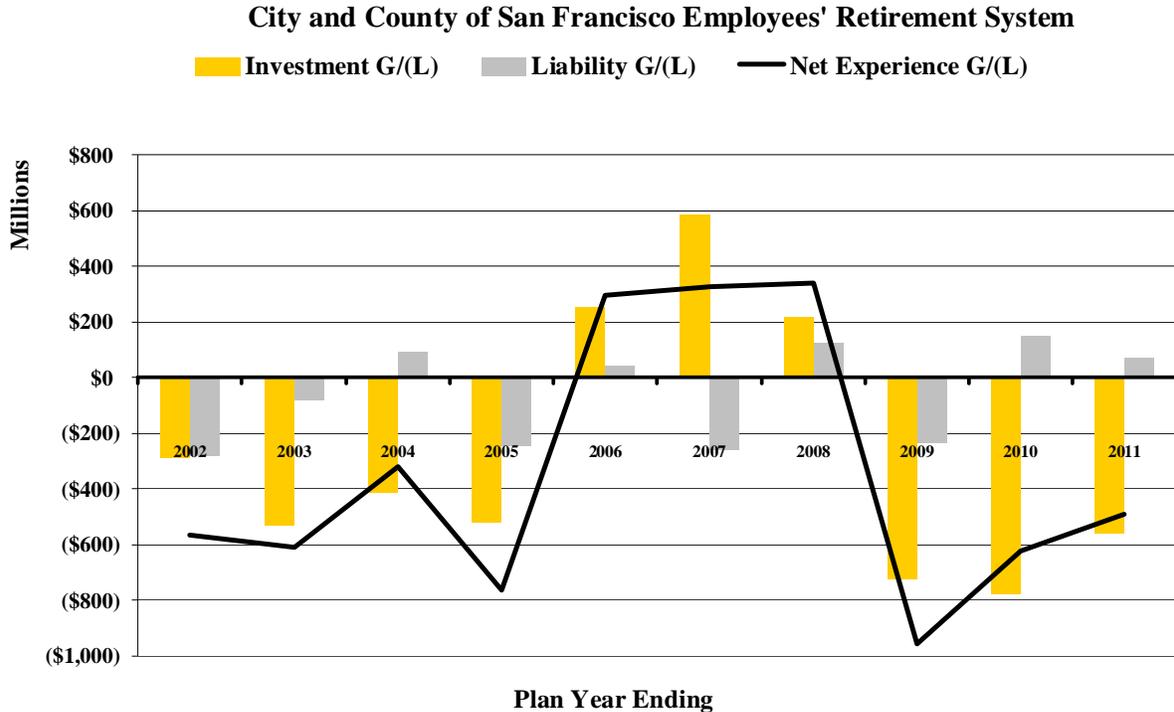
Fiscal Year End	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Normal Cost + Expenses	14.42%	15.64%	15.51%	17.01%	17.05%	16.64%	18.61%	18.63%	18.35%	18.35%
Amortization of UAL	-7.32%	-3.63%	-1.41%	-3.25%	-3.63%	-4.13%	-1.62%	2.44%	7.24%	9.87%
Member Contributions	-7.52%	-7.53%	-7.52%	-7.52%	-7.51%	-7.52%	-7.50%	-7.51%	-7.50%	-7.51%
Adjusted Net Rate	0.00%	4.48%	6.58%	6.24%	5.91%	4.99%	9.49%	13.56%	18.09%	20.71%

The key information above is that the amortization of the UAL has changed over the last decade from -7.32% to 9.87% accounting for the majority of the increase in contribution rates. This increase is due to plan changes, lower than expected investment returns, as well as changes in assumptions. The normal cost as a percent of payroll has also increased from the Fiscal Year Ending in 2004 to the Fiscal Year Ending in 2013, due to plan changes and assumption changes. The chart demonstrates how the total annual cost is offset by member contributions and the amortization of surplus assets (prior to FYE 2011).

The chart below illustrates 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.

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SFERS Historical Gain/(Loss) 2001-2011



The key insights from this chart are:

- On a smoothed asset basis, the investment gains and losses (gold bars) for the last decade reflect material net investment losses driven by the market declines of 2001 and 2008 which are spread over successive years. Since the actuarial value of assets only recognizes a portion of the recent market losses, additional investment losses on the actuarial value of assets are expected over the next two years.
- On the liability side, there have been greater losses than gains. This trend has been mitigated with the assumption changes adopted beginning with the July 1, 2010 valuation. Recent limits on salary increases have had a significant impact in 2010 and 2011, but this impact has been somewhat offset by the increased number of retirements and members entering DROP.

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**D. Projected Financial Trends**

Our analysis of SFERS projected financial trends is an important part of this valuation. In this Section, we examine the implications of the July 1, 2011 valuation results on the future outlook for SFERS in terms of benefit security (assets over liabilities) and expected future contribution rates.

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 7.66% returns for FYE 2012, 7.58% for FYE 2013, and 7.50% for FYE 2014 and every year thereafter, and
- 2) Assuming returns shown in the table below. These are rates of return that vary each year but over the projection period equal on average the assumed 7.51% return (the average over 20 years reflecting the phase-in described above). We do this because SFERS' returns will never be level each and every year.
- 3) The liabilities and future contribution rates also reflect the phase-in of the assumption changes the Board has adopted.

<b>FYE</b>	<b><u>2012</u></b>	<b><u>2013</u></b>	<b><u>2014</u></b>	<b><u>2015</u></b>	<b><u>2016</u></b>	<b><u>2017</u></b>	<b><u>2018</u></b>	<b><u>2019</u></b>	<b><u>2020</u></b>	<b><u>2021</u></b>
<b>Return</b>	20.0%	8.0%	3.0%	20.0%	-4.0%	18.0%	13.0%	9.0%	-7.0%	16.0%
<b>FYE</b>	<b><u>2022</u></b>	<b><u>2023</u></b>	<b><u>2024</u></b>	<b><u>2025</u></b>	<b><u>2026</u></b>	<b><u>2027</u></b>	<b><u>2028</u></b>	<b><u>2029</u></b>	<b><u>2030</u></b>	<b><u>2031</u></b>
<b>Return</b>	9.0%	-8.0%	8.0%	13.0%	16.0%	-8.0%	-16.0%	30.0%	25.0%	-1.0%

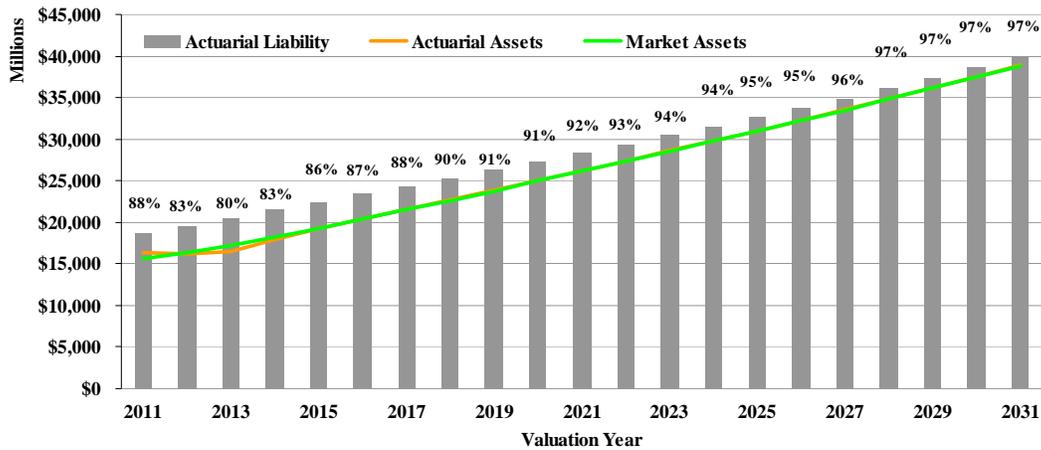
**The investment returns shown above were selected solely to illustrate the impact of investment volatility on the pattern of funded status and employer contribution rates while producing the same average long-term rate of return. They are not intended to be predictive of actual future contribution rates or funded status or even to represent a realistic pattern of investment returns.**

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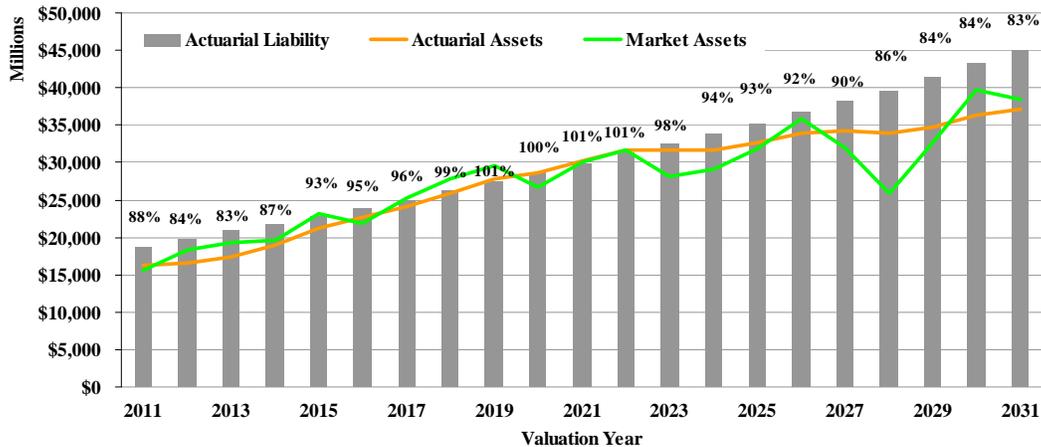
Projection Set 1: Assets and Liabilities - SFERS

The two charts below show asset measures (green and gold lines) compared to liabilities (gray bars). At the top of each chart is the progression of SFERS funding ratios. The key insights from these two charts are the projected declines in funded ratios over the next couple of years, as recent market losses become fully recognized and the changes in assumptions are phased-in, and how varying investment returns can impact SFERS' funding ratios.

**Chart 1: Projection of Assets and Liabilities, assumed return each year**



**Chart 2: Projection of Assets and Liabilities, varying returns averaging 7.51% over time**



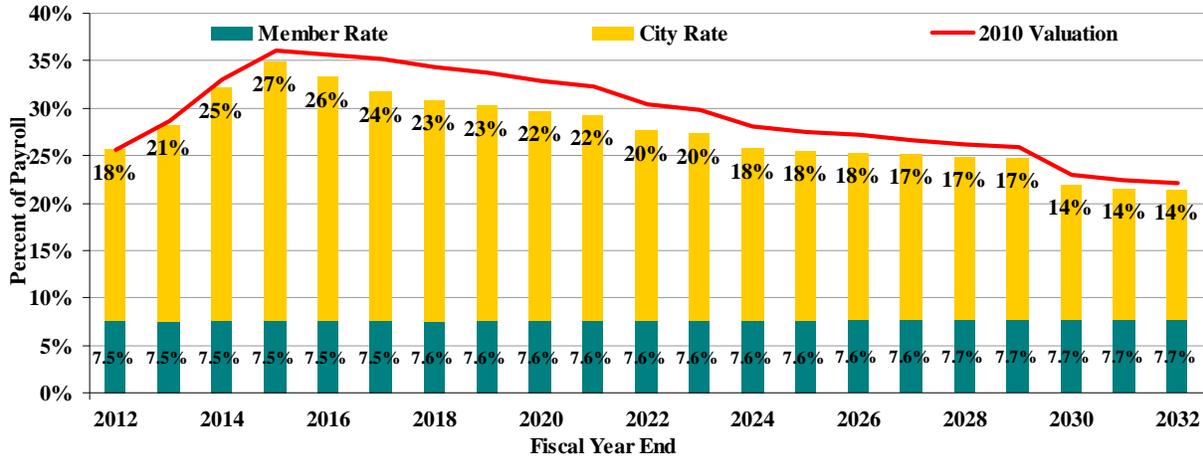
The investment returns used in the projection above were selected solely to illustrate the impact of investment volatility on the pattern of funded status and employer contribution rates while producing the same average long-term rate of return. They are not intended to be predictive of actual future contribution rates or funded status or even to represent a realistic pattern of investment returns.

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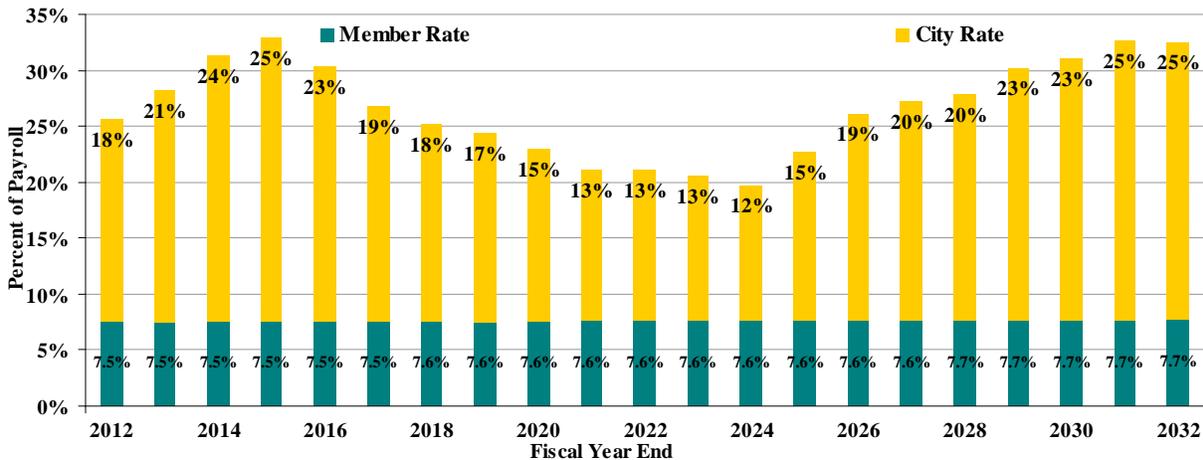
Projection Set 2: Projected Employer Contribution Rate

As seen in the charts below, employer contribution rates are expected to increase over the next couple of years. In addition, varying returns will also have a significant impact on the pattern and magnitude of actuarially computed employer contribution rates.

**Chart 1: assumed return each year**



**Chart 2: varying returns averaging 7.51% over time**



The investment returns used in the projection above were selected solely to illustrate the impact of investment volatility on the pattern of funded status and employer contribution rates while producing the same average long-term rate of return. They are not intended to be predictive of actual future contribution rates or funded status or even to represent a realistic pattern of investment returns.

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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 the value of the assets if they were liquidated on the valuation date. The actuarial value of assets is a value that attempts to smooth annual investment return performance over multiple years to reduce the impact of investment volatility on SFERS' contribution rates.

This section includes the following detailed information on SFERS' assets:

- A. Statement of changes in the market value of assets during the year,
- B. Development of the actuarial value of assets, and
- C. Discussion of investment performance for the year.

**A. Changes in the Market Value of Assets**

<b>Table II-1</b>		
<b>Change in Market Value of Assets</b>		
(in thousands)		
<b>Item</b>	<b>FYE 2011</b>	<b>FYE 2010</b>
1. Market Value, Beginning of Year*	\$ 13,136,786	\$ 11,886,728
2. Additions		
a. Employer contributions	308,822	223,614
b. Member contributions	<u>181,756</u>	<u>189,949</u>
c. Total Additions: (2a + 2b)	\$ 490,578	\$ 413,563
3. Net Investment Income	2,887,576	1,655,101
4. Benefits and Administrative Expenses	<u>(916,100)</u>	<u>(818,606)</u>
5. Net Increase/(Decrease): (2c + 3 + 4)	\$ 2,462,054	\$ 1,250,058
6. <b>Market Value, End of Year</b>	<b>\$ 15,598,840</b>	<b>\$ 13,136,786</b>

\* The Market Value as of July 1, 2010 differs slightly from last year's report due to a change in net appreciation in fair value of investments reported in the final asset statements.

**B. 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 is based on 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 the variance of each of the prior five years of actual investment returns compared to the expected return on the actuarial value of assets. The expected return on the actuarial value of assets is determined using the Fund's actual cash flows and the assumed rate of return (7.75% for years ending 2009-2011, and

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**SECTION II  
ASSETS**

8.0% for prior years). (See Appendix B on page 54 for further explanation of the asset valuation method).

<b>Table II-2</b>	
<b>Development of Actuarial Value of Assets for 7/1/2011</b>	
(in thousands)	
<b>Item</b>	<b>Total</b>
1. Actuarial Value as of 7/1/2010	\$ 16,069,058
2. Non-Investment Cash Flow for 2010-2011	(425,522)
3. Expected Return in 2010-2011	1,229,171
4. Expected Actuarial Value as of 7/1/2011: (1 + 2 + 3)	\$ 16,872,707
5. Actual Return in 2010-2011	2,887,576
6. Actual Return Above Expected in 2010-2011: (5 - 3)	1,658,405
7. Recognition of Returns Above Expected	
a. 2010-2011 (20% of 6.)	331,681
b. 2009-2010	86,011
c. 2008-2009	(938,819)
d. 2007-2008	(382,947)
e. 2006-2007	344,487
f. Total: (7a + 7b + 7c + 7d + 7e)	\$ (559,587)
<b>8. Actuarial Value as of 7/1/2011: (4 + 7f)</b>	<b>\$ 16,313,120</b>

**C. Investment Performance**

The market value of assets internal rate of return, net of investment expenses, was 22.34% for the year ending June 30, 2011. This is compared to an assumed rate of return of 7.75%.

On an actuarial value of assets basis, the return for the year ending June 30, 2011 was 4.22%. The difference is largely due to the deferred recognition of losses from 2009. This return produced an overall SFERS investment loss on the actuarial value of assets of \$559.6 million for the year ending June 30, 2011.

**SECTION III  
LIABILITIES**

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

- Disclosure of liabilities as of July 1, 2010 and July 1, 2011, and
- Statement of changes in the unfunded actuarial liability during the year.

**A. Disclosure**

Several types of liability 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 expected 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.

Table III-1 on the following page discloses 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  
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**SECTION III  
LIABILITIES**

<b>Table III-1</b>		
<b>Present Value of Future Benefits and Actuarial Liability</b>		
(in thousands)		
<b>Item</b>	<b>July 1, 2011</b>	<b>July 1, 2010</b>
<b>Present Value of Future Benefits</b>		
Actives	\$ 11,172,300	\$ 11,364,187
Active DROP	453,771	209,505
Terminated Vested	371,334	409,472
Retirees	7,870,695	7,164,362
Disabled	1,799,939	1,701,901
Beneficiaries	<u>945,217</u>	<u>894,808</u>
<b>Total SFERS</b>	<b>\$ 22,613,256</b>	<b>\$ 21,744,235</b>
<b>Actuarial Liability</b>		
Total Present Value of Benefits	\$ 22,613,256	\$ 21,744,235
Present Value of Future Normal Costs		
Employer Portion	2,466,156	2,510,470
Employee Portion	<u>1,548,374</u>	<u>1,590,371</u>
<b>Actuarial Liability</b>	<b>\$ 18,598,727</b>	<b>\$ 17,643,394</b>
Actuarial Value of Assets	\$ 16,313,120	\$ 16,069,058
<b>Unfunded Actuarial Liability/(Surplus)</b>	<b>\$ 2,285,606</b>	<b>\$ 1,574,336</b>

**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM  
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**SECTION III  
LIABILITIES**

Table III-2 shows the actuarial liability as of July 1, 2011 for each of the Miscellaneous, Police, and Fire members of SFERS.

<b>Table III-2</b>				
<b>Liabilities by Group as of July 1, 2011</b>				
(in thousands)				
<b>Present Value of Future Benefits</b>	<b>Police</b>	<b>Fire</b>	<b>Miscellaneous</b>	<b>Total</b>
Actives	\$ 1,801,625	\$ 1,469,962	\$ 7,900,713	\$ 11,172,300
Active DROP	453,771	0	0	453,771
Terminated Vested	14,663	8,824	347,847	371,334
Retirees	1,308,933	1,120,501	5,441,261	7,870,695
Disabled	537,608	895,587	366,744	1,799,939
Beneficiaries	326,737	258,467	360,013	945,217
<b>Total SFERS</b>	<b>\$ 4,443,337</b>	<b>\$ 3,753,341</b>	<b>\$ 14,416,578</b>	<b>\$ 22,613,256</b>
<b>Actuarial Liability</b>				
Actives	\$ 1,041,333	\$ 911,473	\$ 5,204,965	\$ 7,157,771
Active DROP	453,771	0	0	453,771
Terminated Vested	14,663	8,824	347,847	371,334
Retirees	1,308,933	1,120,501	5,441,261	7,870,695
Disabled	537,608	895,587	366,744	1,799,939
Beneficiaries	326,737	258,467	360,013	945,217
<b>Total SFERS</b>	<b>\$ 3,683,045</b>	<b>\$ 3,194,852</b>	<b>\$ 11,720,830</b>	<b>\$ 18,598,727</b>

**B. Changes in Unfunded Actuarial Liability**

The UAL of any retirement plan is expected to change at each subsequent valuation for a variety of reasons. In each valuation, we 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 the UAL since the last valuation.

**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM  
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**SECTION III  
LIABILITIES**

<b>Table III-3</b>	
<b>Development of 2011 Experience Gain/(Loss)</b>	
(in millions)	
<b>Item</b>	<b>Cost</b>
1. Unfunded Actuarial Liability at July 1, 2010	\$ 1,574.3
2. Middle of year actuarial liability payment	(167.5)
3. Interest to end of year on 1 and 2	<u>115.6</u>
4. Expected Unfunded Actuarial Liability at July 1, 2011 (1+2+3)	\$ 1,522.4
5. Actual Unfunded Liability at July 1, 2011	<u>\$ 2,285.6</u>
6. Difference: (4 - 5)	\$ (763.2)
7. Portion of difference due to:	
a. Investment experience	(559.6)
b. One-year lag in contribution rate change	(112.8)
c. Supplemental COLA	(112.6)
d. Salary increases and total payroll	314.2
e. Retirements and DROP entry	(97.5)
f. Assumption changes	(148.8)
g. Other experience	<u>(46.1)</u>
h. Total	(763.2)

**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 are needed to achieve and maintain an appropriate funded status of a plan. Typically, the actuarial valuation 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 in this valuation 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 changes and method changes.

Table IV-1 on the following page develops the employer's contribution rate for FY 2012-2013. 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 of gains/losses and 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.

CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM  
JULY 1, 2011 ACTUARIAL VALUATION

**SECTION IV  
CONTRIBUTIONS**

<b>Table IV-1</b>					
<b>Development of the Net Employer Contribution Rates of July 1, 2011 for FYE 2013</b>					
(dollars in millions)					
	July 1, 2011				July 1, 2010
	Police	Fire	Miscellaneous	COMPOSITE	COMPOSITE
1. Total Normal Cost Rate	24.28%	32.76%	15.66%	<b>17.90%</b>	<b>17.90%</b>
2. Member Contribution Rate	<u>7.51%</u>	<u>7.51%</u>	<u>7.50%</u>	<b>7.51%</b>	<b>7.50%</b>
3. Employer Normal Cost Rate (1-2)	16.77%	25.25%	8.16%	<b>10.39%</b>	<b>10.40%</b>
4. a. UAL- Proposition balance as of 7/1/2011	\$199.7	\$192.8	\$940.8	<b>\$1,333.3</b>	<b>\$1,382.6</b>
b. Remaining balance of 7/1/2011 UAL	<u>107.8</u>	<u>70.5</u>	<u>774.0</u>	<b>952.3</b>	<b>191.7</b>
c. Net UAL- as of 7/1/2011 (4a +4b)	\$307.5	\$263.3	\$1,714.8	<b>\$2,285.6</b>	<b>\$1,574.3</b>
5. a. Amortization of 4.a., Proposition UAL	8.86%	13.26%	5.20%	<b>6.21%</b>	<b>6.51%</b>
b. Amortization of 4.b., Remaining UAL	<u>3.66%</u>	<u>3.66%</u>	<u>3.66%</u>	<b>3.66%</b>	<b>0.73%</b>
c. Amortization of Net UAL (5a + 5b)	12.52%	16.92%	8.86%	<b>9.87%</b>	<b>7.24%</b>
6. Administrative Expenses	<u>0.45%</u>	<u>0.45%</u>	<u>0.45%</u>	<b>0.45%</b>	<b>0.45%</b>
7. Net Employer Contribution Rate (3+5c+6)	29.74%	42.62%	17.47%	<b>20.71%</b>	<b>18.09%</b>

The employer pays the composite contribution rate on the payroll for all employees. The contribution rates shown above for Police, Fire, and Miscellaneous are for illustrative purposes only.

**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM  
JULY 1, 2011 ACTUARIAL VALUATION**

**SECTION IV  
CONTRIBUTIONS**

<b>Table IV-2</b>													
<b>Development of the Proposition Amortization Rate as of July 1, 2011 (FYE 2013)</b>													
(dollars in thousands)													
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	Total As a % of Pay
1992 Prop F - Retiree Bft Increase	1	31	35	0.01%	18	20	0.01%	5,278	5,896	0.30%	5,327	5,950	0.24%
1994 Prop H - Domestic Partners	3	1,981	764	0.28%	2,209	852	0.47%	3,350	1,292	0.06%	7,540	2,908	0.12%
1996 Prop C - Retiree Benefits	5	132	32	0.01%	53	13	0.01%	24,132	5,780	0.29%	24,317	5,825	0.24%
1996 Prop D - New Fire Ret Bfts	5	0	0	0.00%	10,126	2,426	1.34%	0	0	0.00%	10,126	2,426	0.10%
1998 Prop A - New Police Ret Bfts	7	25,710	4,552	1.64%	0	0	0.00%	0	0	0.00%	25,710	4,552	0.19%
1998 Prop C - Paramedics Bfts	7	0	0	0.00%	5,328	943	0.52%	0	0	0.00%	5,328	943	0.04%
2000 Prop C - New Misc Ret Bfts	9	0	0	0.00%	0	0	0.00%	226,896	32,317	1.62%	226,896	32,317	1.32%
6.25% Credited Interest on EE ctrbs	11	72	9	0.00%	17	2	0.00%	9,972	1,202	0.06%	10,062	1,212	0.05%
2002 Prop H - Safety Ret Bfts	11	126,831	15,282	5.50%	134,834	16,246	8.95%	0	0	0.00%	261,665	31,528	1.29%
5.0% Credited Interest on EE ctrbs	13	(494)	(52)	-0.02%	(235)	(25)	-0.01%	(45,271)	(4,770)	-0.24%	(46,000)	(4,847)	-0.20%
2004 Prop E - New Safety LOD Bfts	14	5,845	581	0.21%	8,210	816	0.45%	0	0	0.00%	14,055	1,398	0.06%
2003 Prop F - Misc 3+3 Early Ret Bfts	14	0	0	0.00%	0	0	0.00%	17,682	1,759	0.09%	17,682	1,759	0.07%
Liability of 2003 Prop F (extended) - Misc 3+3 Early Ret Bfts	15	0	0	0.00%	0	0	0.00%	10,354	977	0.05%	10,354	977	0.04%
Liability of 2003 Prop F (extended) - Misc 3+3 Early Ret Bfts	16	0	0	0.00%	0	0	0.00%	4,694	422	0.02%	4,694	422	0.02%
2008 Prop B - New Misc Ret Bfts and Compound COLA	17	39,567	3,401	1.22%	32,288	2,775	1.53%	683,710	58,769	2.95%	755,565	64,946	2.65%
<b>Total of Propositions</b>		<b>\$ 199,676</b>	<b>\$ 24,603</b>	<b>8.86%</b>	<b>\$ 192,849</b>	<b>\$ 24,069</b>	<b>13.26%</b>	<b>\$ 940,797</b>	<b>\$ 103,643</b>	<b>5.20%</b>	<b>\$ 1,333,322</b>	<b>\$ 152,315</b>	<b>6.21%</b>

**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM  
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**SECTION V  
ACCOUNTING STATEMENT INFORMATION**

Statement No. 25 of the Governmental Accounting Standards Board (GASB) establishes financial reporting standards for public employee retirement systems. GASB Statement No. 27 establishes accounting and financial reporting standards for pension plans by governmental employers.

The actuarial liability is 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 7.66% per annum. 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, 2010 and July 1, 2011 are presented in Table V-1.

<b>Table V-1</b>				
<b>GASB No. 25</b>				
(in thousands)				
<b>Item</b>	<b>July 1, 2011</b>	<b>July 1, 2010</b>	<b>% Change</b>	
<b>GASB No. 25 Basis</b>				
1. Actuarial Liabilities				
a. Members Currently Receiving Payments	\$ 10,615,852	\$ 9,761,070		8.8%
b. Active DROP members	453,771	209,505		116.6%
c. Vested Terminated and Inactive Members	371,334	409,472		-9.3%
d. Active Members	<u>7,157,771</u>	<u>7,263,347</u>		<u>-1.5%</u>
e. Total Actuarial Liability	\$ 18,598,728	\$ 17,643,394		5.4%
2. Actuarial Value of Assets	\$ 16,313,120	\$ 16,069,058		1.5%
3. Unfunded Actuarial Liability	\$ 2,285,608	\$ 1,574,335		45.2%
4. Ratio of Actuarial Value of Assets to Actuarial Liability (2)/(1)(e)	87.71%	91.08%		-3.4%

**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM  
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**SECTION V  
ACCOUNTING STATEMENT INFORMATION**

Tables V-2 through V-5 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, Table V-4 presents the Solvency Test which shows the portion of actuarial liability covered by assets, and Table V-5 shows the Schedule of Funding Progress.

**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, 2011										
Actuarial funding method	Entry Age Normal										
Amortization method	Rolling and Fixed depending upon the source										
Equivalent single amortization period	12.8 Years										
Asset valuation method	5 year smoothing of return over or under expected returns										
Actuarial assumptions:											
Investment rate of return	7.66%										
Projected salary increases due to inflation <sup>1</sup>	3.91%										
Cost-of-living adjustments	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">Old Safety Plans – Charters 8.559 and 8.585</td> <td style="width: 50%; text-align: right;">5.0% per year</td> </tr> <tr> <td>Old Safety Plans – Charters 8.595 and 8.596</td> <td style="text-align: right;">4.0% per year</td> </tr> <tr> <td>Old Safety - Pre 7/1/75 Date of Retirement</td> <td style="text-align: right;">3.0% per year</td> </tr> <tr> <td>Old Plans – Miscellaneous</td> <td style="text-align: right;">2.0% per year</td> </tr> <tr> <td>New Plans – Police, Fire, and Miscellaneous</td> <td style="text-align: right;">2.0% per year</td> </tr> </table>	Old Safety Plans – Charters 8.559 and 8.585	5.0% per year	Old Safety Plans – Charters 8.595 and 8.596	4.0% per year	Old Safety - Pre 7/1/75 Date of Retirement	3.0% per year	Old Plans – Miscellaneous	2.0% per year	New Plans – Police, Fire, and Miscellaneous	2.0% per year
Old Safety Plans – Charters 8.559 and 8.585	5.0% per year										
Old Safety Plans – Charters 8.595 and 8.596	4.0% per year										
Old Safety - Pre 7/1/75 Date of Retirement	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 2010. The assumed investment rate of return and wage inflation assumptions were updated in 2011.

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.

<sup>1</sup> Additional merit salary increases of 0.85% to 15.00% 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  
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**SECTION V**  
**ACCOUNTING STATEMENT INFORMATION**

<b>Table V-3</b>	
<b>ANALYSIS OF FINANCIAL EXPERIENCE</b>	
<b>Gain (or Loss) in Actuarial Liability During Years Ended July 1</b>	
<b>Resulting from Differences Between Assumed Experience</b>	
<b>and Actual Experience</b>	
(in thousands)	
<b>Type of Activity</b>	<b>Gain (or Loss) for Year Ending July 1, 2011</b>
Investment Income and Expenses	\$ (563,305)
Contribution Income (Due to Payroll Changes and One-Year Lag)	(122,074)
Combined Liability Experience	<u>70,969</u>
Gain (or Loss) During Year from Financial Experience	\$ (614,409)
Non-Recurring Gain (or Loss) Items	<u>(148,758)</u>
Composite Gain (or Loss) During Year	\$ (763,167)

<b>Table V-4</b>								
<b>GASB SOLVENCY TEST</b>								
(dollars in thousands)								
<b>Valuation Date July 1,</b>	<b>(A)</b>	<b>(B)</b>	<b>(C)</b>		<b>Portion of Actuarial Liabilities Covered by Reported Assets</b>			
	<b>Active Member Contributions</b>	<b>Retirees And Beneficiaries</b>	<b>Remaining Active Members' Liabilities</b>	<b>Reported Assets<sup>1</sup></b>	<b>(A)</b>	<b>(B)</b>	<b>(C)</b>	
2011 <sup>2</sup>	\$ 2,663,625	\$ 10,615,852	\$ 5,319,251	\$ 16,313,120	100%	100%	57%	
2010 <sup>3</sup>	2,593,076	9,761,070	5,289,247	16,069,058	100%	100%	70%	
2009	2,528,667	8,720,050	5,249,932	16,004,730	100%	100%	91%	
2008 <sup>4</sup>	2,411,027	8,013,456	4,934,341	15,941,390	100%	100%	100%	
2007 <sup>5</sup>	2,251,564	7,423,580	3,866,243	14,929,287	100%	100%	100%	

<sup>1</sup> Actuarial Value of Assets

<sup>2</sup> Reflects revised discount rate and wage inflation

<sup>3</sup> Reflects revised economic and demographic assumptions

<sup>4</sup> Reflects revised economic assumptions and Prop B changes

<sup>5</sup> July 1, 2007 numbers calculated by prior actuary

CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM  
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**SECTION V**  
**ACCOUNTING STATEMENT INFORMATION**

<b>Table V-5</b>						
<b>Schedule of Funding Progress</b>						
(dollars in thousands)						
<b>Actuarial Valuation Date</b>	<b>Actuarial Value of Assets</b>	<b>Actuarial Liability (AL)</b>	<b>Unfunded AL</b>	<b>Funded Ratio</b>	<b>Covered Payroll</b>	<b>Unfunded AL as a % of Covered Payroll</b>
July 1, 2011	\$ 16,313,120	\$ 18,598,728	\$ 2,285,608	88%	\$ 2,360,413	97%
July 1, 2010	16,069,058	17,643,394	1,574,336	91%	2,398,823	66%
July 1, 2009	16,004,730	16,498,649	493,919	97%	2,544,939	19%
July 1, 2008	15,941,390	15,358,823	(582,567)	104%	2,457,196	-24%
July 1, 2007*	14,929,287	13,541,388	(1,387,899)	110%	2,376,221	-58%
July 1, 2006	13,597,646	12,515,463	(1,082,183)	109%	2,161,261	-50%
July 1, 2005	12,659,698	11,765,737	(893,961)	108%	2,052,862	-44%
July 1, 2004	11,299,997	10,885,455	(414,542)	104%	2,155,252	-19%
July 1, 2003	11,173,636	10,249,896	(923,740)	109%	2,130,071	-43%
July 1, 2002	11,102,516	9,415,905	(1,686,611)	118%	2,019,097	-84%

\* Amounts for July 1, 2007 and earlier were calculated by the prior actuary

**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM  
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**APPENDIX A  
MEMBERSHIP INFORMATION**

<b>Active Member Data - TOTAL SYSTEM</b>			
	<b>July 1, 2011</b>	<b>July 1, 2010</b>	<b>Change</b>
<b>Total</b>			
Count**	27,956	28,222	-0.9%
Average Current Age	47.8	47.6	0.4%
Average Service	12.2	12.2	0.0%
Annual Pensionable Earnings*	\$ 2,263,580,379	\$ 2,315,432,384	-2.2%
Average Pensionable Earnings	\$ 80,969	\$ 82,044	-1.3%

<b>Active Member Data - POLICE</b>			
	<b>July 1, 2011</b>	<b>July 1, 2010</b>	<b>Change</b>
<b>Total</b>			
Count	1,908	2,139	-10.8%
Average Current Age	41.8	42.4	-1.4%
Average Service	13.5	14.3	-5.6%
Annual Pensionable Earnings*	\$ 216,325,059	\$ 236,132,709	-8.4%
Average Pensionable Earnings	\$ 113,378	\$ 110,394	2.7%
<b>Old</b>			
Count	1	10	-90.0%
Average Current Age	71.0	64.0	10.9%
Average Service	35.7	40.7	-12.3%
Annual Pensionable Earnings*	\$ 141,573	\$ 1,487,270	-90.5%
Average Pensionable Earnings	\$ 141,573	\$ 148,727	-4.8%
<b>New</b>			
Count	1,907	2,129	-10.4%
Average Current Age	41.8	42.3	-1.2%
Average Service	13.5	14.2	-4.9%
Annual Pensionable Earnings*	\$ 216,183,486	\$ 234,645,439	-7.9%
Average Pensionable Earnings	\$ 113,363	\$ 110,214	2.9%

\* Fiscal Year ending June 30, excludes DROP members

\*\* Includes 1,095 members hired on or after July 1, 2010 covered under Prop D

**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM  
JULY 1, 2011 ACTUARIAL VALUATION**

**APPENDIX A  
MEMBERSHIP INFORMATION**

<b>Active Member Data - FIRE</b>				
	<b>July 1, 2011</b>	<b>July 1, 2010</b>	<b>Change</b>	
<b>Total</b>				
Count	1,347	1,394	-3.4%	
Average Current Age	44.7	44.4	0.7%	
Average Service	14.3	14.2	0.7%	
Annual Pensionable Earnings*	\$ 164,132,980	\$ 164,130,070	0.0%	
Average Pensionable Earnings	\$ 121,851	\$ 117,740	3.5%	
<b>Old</b>				
Count	6	9	-33.3%	
Average Current Age	63.8	64.9	-1.7%	
Average Service	40.6	39.9	1.8%	
Annual Pensionable Earnings*	\$ 1,023,558	\$ 1,585,701	-35.5%	
Average Pensionable Earnings	\$ 170,593	\$ 176,189	-3.2%	
<b>New</b>				
Count	1,341	1,385	-3.2%	
Average Current Age	44.6	44.3	0.7%	
Average Service	14.2	14.0	1.4%	
Annual Pensionable Earnings*	\$ 163,109,422	\$ 162,544,369	0.3%	
Average Pensionable Earnings	\$ 121,633	\$ 117,361	3.6%	

<b>Active Member Data - MISCELLANEOUS</b>				
	<b>July 1, 2011</b>	<b>July 1, 2010</b>	<b>Change</b>	
<b>Total</b>				
Count	24,701	24,689	0.0%	
Average Current Age	48.4	48.2	0.4%	
Average Service	12.0	11.9	0.8%	
Annual Pensionable Earnings*	\$ 1,883,122,340	\$ 1,915,169,605	-1.7%	
Average Pensionable Earnings	\$ 76,237	\$ 77,572	-1.7%	
<b>Old</b>				
Count	178	223	-20.2%	
Average Current Age	62.1	61.3	1.3%	
Average Service	37.3	36.3	2.8%	
Annual Pensionable Earnings*	\$ 15,106,183	\$ 19,487,340	-22.5%	
Average Pensionable Earnings	\$ 84,866	\$ 87,387	-2.9%	
<b>New</b>				
Count	24,523	24,466	0.2%	
Average Current Age	48.3	48.1	0.4%	
Average Service	11.8	11.7	0.9%	
Annual Pensionable Earnings*	\$ 1,868,016,157	\$ 1,895,682,265	-1.5%	
Average Pensionable Earnings	\$ 76,174	\$ 77,482	-1.7%	

\* Fiscal Year ending June 30

**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM  
JULY 1, 2011 ACTUARIAL VALUATION**

**APPENDIX A  
MEMBERSHIP INFORMATION**

<b>Non-Active Member Data - TOTAL SYSTEM</b>						
	<b>Count</b>			<b>Average Age</b>		
	<b>July 1, 2011</b>	<b>July 1, 2010</b>	<b>% Change</b>	<b>July 1, 2011</b>	<b>July 1, 2010</b>	<b>Change</b>
<b>Total</b>						
Retired	17,841	17,040	4.7%	69.8	69.8	0.0
Disabled	2,700	2,677	0.9%	66.8	66.6	0.2
Beneficiaries	3,751	3,783	-0.8%	76.9	77.1	-0.2
Payee Total	24,292	23,500	3.4%	70.6	70.6	0.0
Inactives	5,520	5,493	0.5%	46.7	46.8	-0.1

<b>Non-Active Member Data - TOTAL SYSTEM</b>						
	<b>Total Annual Benefit*</b>			<b>Average Annual Benefit*</b>		
	<b>July 1, 2011**</b>	<b>July 1, 2010</b>	<b>% Change</b>	<b>July 1, 2011</b>	<b>July 1, 2010</b>	<b>% Change</b>
<b>Total</b>						
Retired	\$ 674,332,516	\$ 615,328,927	9.6%	\$ 37,797	\$ 36,111	4.7%
Disabled	129,971,776	122,582,029	6.0%	48,138	45,791	5.1%
Beneficiaries	100,749,179	96,514,958	4.4%	26,859	25,513	5.3%
Payee Total	\$ 905,053,471	\$ 834,425,915	8.5%	\$ 37,257	\$ 35,507	4.9%
Inactives***	\$ 176,807,170	\$ 187,199,190	-5.6%	\$ 32,030	\$ 34,080	-6.0%

\* Benefits provided in June 30 valuation data

\*\* After adjusting for the expected Supplemental COLA benefit effective July 1, 2011 and Old Safety Basic COLA for FYE 2012, the total annual benefit increased from \$905,053,471 to \$925,077,498

\*\*\* For Inactives, total contribution balance with interest is shown

**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM  
JULY 1, 2011 ACTUARIAL VALUATION**

**APPENDIX A  
MEMBERSHIP INFORMATION**

<b>Active DROP Member Data - TOTAL SYSTEM</b>			
	<b>July 1, 2011</b>	<b>July 1, 2010</b>	<b>%Change</b>
<b>Total Active DROP</b>			
Count	266	122	118.0%
Average Current Age	56.8	57.6	-1.5%
Total Annual Benefit	\$ 29,775,543	\$ 13,660,598	118.0%
Average Annual Benefit	\$ 111,938	\$ 111,972	0.0%
Total DROP Account Balance	\$ 18,656,995	\$ 10,913,447	71.0%
<b>Old Police</b>			
Count	14	15	-6.7%
Average Current Age	64.1	60.9	5.3%
Total Annual Benefit	\$ 1,759,396	\$ 1,674,492	5.1%
Average Annual Benefit	\$ 125,671	\$ 111,633	12.6%
Total DROP Account Balance	\$ 2,405,000	\$ 2,853,329	-15.7%
<b>New Police</b>			
Count	252	107	135.5%
Average Current Age	56.4	57.2	-1.5%
Total Annual Benefit	\$ 28,016,147	\$ 11,986,105	133.7%
Average Annual Benefit	\$ 111,175	\$ 112,020	-0.8%
Total DROP Account Balance	\$ 16,251,995	\$ 8,060,118	101.6%

**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM  
JULY 1, 2011 ACTUARIAL VALUATION**

**APPENDIX A  
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<b>Non-Active Member Data - POLICE</b>						
	<b>Count</b>			<b>Average Age</b>		
	<b>July 1, 2011</b>	<b>July 1, 2010</b>	<b>%Change</b>	<b>July 1, 2011</b>	<b>July 1, 2010</b>	<b>Change</b>
<b>Total</b>						
Retired	1,148	1,100	4.4%	67.3	67.2	0.1
Disabled	532	531	0.2%	67.4	67.3	0.1
Beneficiaries	583	583	0.0%	76.2	76.1	0.1
Payee Total	2,263	2,214	2.2%	69.6	69.6	0.0
Inactives	121	121	0.0%	44.0	43.5	0.5
<b>Old</b>						
Retired	699	711	-1.7%	71.9	71.2	0.7
Disabled	354	373	-5.1%	72.5	71.9	0.6
Beneficiaries	534	538	-0.7%	77.9	77.7	0.2
Payee Total	1,587	1,622	-2.2%	74.1	73.5	0.6
Inactives	0	0	0.0%	0	0	0.0
<b>New</b>						
Retired	449	389	15.4%	60.2	60.0	0.2
Disabled	178	158	12.7%	57.3	56.3	1.0
Beneficiaries	49	45	8.9%	57.4	57.6	-0.2
Payee Total	676	592	14.2%	59.2	58.8	0.4
Inactives	121	121	0.0%	44.0	43.5	0.5

<b>Non-Active Member Data - POLICE</b>						
	<b>Total Annual Benefit*</b>			<b>Average Annual Benefit*</b>		
	<b>July 1, 2011</b>	<b>July 1, 2010</b>	<b>%Change</b>	<b>July 1, 2011</b>	<b>July 1, 2010</b>	<b>%Change</b>
<b>Total</b>						
Retired	\$ 92,387,918	\$ 83,556,851	10.6%	\$ 80,477	\$ 75,961	5.9%
Disabled	35,833,098	33,918,066	5.6%	67,355	63,876	5.4%
Beneficiaries	30,612,416	29,197,207	4.8%	52,508	50,081	4.8%
Payee Total	\$ 158,833,431	\$ 146,672,124	8.3%	\$ 70,187	\$ 66,248	5.9%
Inactives**	\$ 5,758,051	\$ 5,440,651	5.8%	\$ 47,587	\$ 44,964	5.8%
<b>Old</b>						
Retired	\$ 59,185,017	\$ 58,018,067	2.0%	\$ 84,671	\$ 81,601	3.8%
Disabled	23,121,465	23,428,085	-1.3%	65,315	62,810	4.0%
Beneficiaries	28,610,283	27,412,509	4.4%	53,577	50,953	5.2%
Payee Total	\$ 110,916,766	\$ 108,858,661	1.9%	\$ 69,891	\$ 67,114	4.1%
Inactives**	\$ 0	\$ 0	0.0%	\$ 0	\$ 0	0.0%
<b>New</b>						
Retired	\$ 33,202,901	\$ 25,538,784	30.0%	\$ 73,949	\$ 65,652	12.6%
Disabled	12,711,632	10,489,981	21.2%	71,414	66,392	7.6%
Beneficiaries	2,002,132	1,784,697	12.2%	40,860	39,660	3.0%
Payee Total	\$ 47,916,666	\$ 37,813,463	26.7%	\$ 70,883	\$ 63,874	11.0%
Inactives**	\$ 5,758,051	\$ 5,440,651	5.8%	\$ 47,587	\$ 44,964	5.8%

\* Benefits provided in June 30 valuation data

\*\* For Inactives, total contribution balance with interest is shown

**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM  
JULY 1, 2011 ACTUARIAL VALUATION**

**APPENDIX A  
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Non-Active Member Data - FIRE						
	Count			Average Age		
	July 1, 2011	July 1, 2010	% Change	July 1, 2011	July 1, 2010	Change
<b>Total</b>						
Retired	882	854	3.3%	67.1	67.2	-0.1
Disabled	753	735	2.4%	68.9	68.6	0.3
Beneficiaries	<u>457</u>	<u>470</u>	-2.8%	<u>78.5</u>	<u>78.4</u>	0.1
Payee Total	2,092	2,059	1.6%	70.2	70.3	-0.1
Inactives	64	71	-9.9%	43.2	44.4	-1.2
<b>Old</b>						
Retired	536	558	-3.9%	71.8	71.3	0.5
Disabled	545	556	-2.0%	72.6	71.9	0.7
Beneficiaries	<u>424</u>	<u>437</u>	-3.0%	<u>80.4</u>	<u>80.3</u>	0.1
Payee Total	1,505	1,551	-3.0%	74.5	74.0	0.5
Inactives	0	0	0.0%	0	0	0.0
<b>New</b>						
Retired	346	296	16.9%	59.8	59.5	0.3
Disabled	208	179	16.2%	59.2	58.5	0.7
Beneficiaries	<u>33</u>	<u>33</u>	0.0%	<u>54.0</u>	<u>53.1</u>	0.9
Payee Total	587	508	15.6%	59.3	58.7	0.6
Inactives	64	71	-9.9%	43.2	44.4	-1.2

Non-Active Member Data - FIRE						
	Total Annual Benefit*			Average Annual Benefit*		
	July 1, 2011	July 1, 2010	%Change	July 1, 2011	July 1, 2010	%Change
<b>Total</b>						
Retired	\$ 79,879,466	\$ 73,171,702	9.2%	\$ 90,566	\$ 85,681	5.7%
Disabled	60,492,599	56,598,993	6.9%	80,335	77,005	4.3%
Beneficiaries	<u>27,722,422</u>	<u>26,934,487</u>	2.9%	<u>60,662</u>	<u>57,307</u>	5.9%
Payee Total	\$ 168,094,487	\$ 156,705,182	7.3%	\$ 80,351	\$ 76,107	5.6%
Inactives**	\$ 3,799,165	\$ 5,905,546	-35.7%	\$ 59,362	\$ 83,177	-28.6%
<b>Old</b>						
Retired	\$ 47,015,081	\$ 47,074,428	-0.1%	\$ 87,715	\$ 84,363	4.0%
Disabled	45,447,638	44,552,493	2.0%	83,390	80,130	4.1%
Beneficiaries	<u>26,311,936</u>	<u>25,564,287</u>	2.9%	<u>62,056</u>	<u>58,500</u>	6.1%
Payee Total	\$ 118,774,654	\$ 117,191,209	1.4%	\$ 78,920	\$ 75,558	4.4%
Inactives**	\$ 0	\$ 0	0.0%	\$ 0	\$ 0	0.0%
<b>New</b>						
Retired	\$ 32,864,385	\$ 26,097,275	25.9%	\$ 94,984	\$ 88,166	7.7%
Disabled	15,044,962	12,046,499	24.9%	72,332	67,299	7.5%
Beneficiaries	<u>1,410,487</u>	<u>1,370,200</u>	2.9%	<u>42,742</u>	<u>41,521</u>	2.9%
Payee Total	\$ 49,319,833	\$ 39,513,974	24.8%	\$ 84,020	\$ 77,783	8.0%
Inactives**	\$ 3,799,165	\$ 5,905,546	-35.7%	\$ 59,362	\$ 83,177	-28.6%

\* Benefits provided in June 30 valuation data

\*\* For Inactives, total contribution balance with interest is shown

**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM  
JULY 1, 2011 ACTUARIAL VALUATION**

**APPENDIX A  
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<b>Non-Active Member Data - MISCELLANEOUS</b>						
	<b>Count</b>			<b>Average Age</b>		
	<b>July 1, 2011</b>	<b>July 1, 2010</b>	<b>%Change</b>	<b>July 1, 2011</b>	<b>July 1, 2010</b>	<b>Change</b>
<b>Total</b>						
Retired	15,811	15,086	4.8%	70.1	70.2	-0.1
Disabled	1,415	1,411	0.3%	65.5	65.3	0.2
Beneficiaries	<u>2,711</u>	<u>2,730</u>	-0.7%	<u>76.9</u>	<u>77.1</u>	-0.2
Payee Total	19,937	19,227	3.7%	70.7	70.8	-0.1
Inactives	5,335	5,301	0.6%	46.8	46.9	-0.1
<b>Old</b>						
Retired	6,102	6,312	-3.3%	75.5	75.1	0.4
Disabled	565	598	-5.5%	74.2	73.6	0.6
Beneficiaries	<u>2,064</u>	<u>2,135</u>	-3.3%	<u>79.5</u>	<u>79.4</u>	0.1
Payee Total	8,731	9,045	-3.5%	76.4	76.0	0.4
Inactives	28	63	-55.6%	70.5	67.4	3.1
<b>New</b>						
Retired	9,709	8,774	10.7%	66.7	66.6	0.1
Disabled	850	813	4.6%	59.8	59.2	0.6
Beneficiaries	<u>647</u>	<u>595</u>	8.7%	<u>68.5</u>	<u>68.7</u>	-0.2
Payee Total	11,206	10,182	10.1%	66.3	66.1	0.2
Inactives	5,307	5,238	1.3%	46.7	46.7	0.0

<b>Non-Active Member Data - MISCELLANEOUS</b>						
	<b>Total Annual Benefit*</b>			<b>Average Annual Benefit*</b>		
	<b>July 1, 2011</b>	<b>July 1, 2010</b>	<b>%Change</b>	<b>July 1, 2011</b>	<b>July 1, 2010</b>	<b>%Change</b>
<b>Total</b>						
Retired	\$ 502,065,132	\$ 458,600,374	9.5%	\$ 31,754	\$ 30,399	4.5%
Disabled	33,646,080	32,064,970	4.9%	23,778	22,725	4.6%
Beneficiaries	<u>42,414,341</u>	<u>40,383,265</u>	5.0%	<u>15,645</u>	<u>14,792</u>	5.8%
Payee Total	\$ 578,125,552	\$ 531,048,608	8.9%	\$ 28,998	\$ 27,620	5.0%
Inactives**	\$ 167,249,954	\$ 175,852,993	-4.9%	\$ 31,350	\$ 33,174	-5.5%
<b>Old</b>						
Retired	\$ 252,955,292	\$ 247,387,525	2.3%	\$ 41,454	\$ 39,193	5.8%
Disabled	13,362,160	13,571,785	-1.5%	23,650	22,695	4.2%
Beneficiaries	<u>34,557,303</u>	<u>33,653,301</u>	2.7%	<u>16,743</u>	<u>15,763</u>	6.2%
Payee Total	\$ 300,874,754	\$ 294,612,612	2.1%	\$ 34,461	\$ 32,572	5.8%
Inactives**	\$ 1,732,596	\$ 9,261,202	-81.3%	\$ 61,878	\$ 147,003	-57.9%
<b>New</b>						
Retired	\$ 249,109,840	\$ 211,212,848	17.9%	\$ 25,658	\$ 24,073	6.6%
Disabled	20,283,920	18,493,185	9.7%	23,863	22,747	4.9%
Beneficiaries	<u>7,857,038</u>	<u>6,729,963</u>	16.7%	<u>12,144</u>	<u>11,311</u>	7.4%
Payee Total	\$ 277,250,798	\$ 236,435,997	17.3%	\$ 24,741	\$ 23,221	6.5%
Inactives**	\$ 165,517,358	\$ 166,591,791	-0.6%	\$ 31,188	\$ 31,804	-1.9%

\* Benefits provided in June 30 valuation data

\*\* For Inactives, total contribution balance with interest is shown

**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM  
JULY 1, 2011 ACTUARIAL VALUATION**

**APPENDIX A  
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**Distribution of Active Members as of July 1, 2011  
Total System**

Age	Years of Service										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	81	80	0	0	0	0	0	0	0	0	0	161
25 to 29	309	719	108	1	0	0	0	0	0	0	0	1,137
30 to 34	356	1,090	643	122	0	0	0	0	0	0	0	2,211
35 to 39	246	963	858	675	94	1	0	0	0	0	0	2,837
40 to 44	204	843	969	1,215	551	110	1	0	0	0	0	3,893
45 to 49	205	704	845	1,307	843	540	136	4	0	0	0	4,584
50 to 54	134	609	726	1,199	746	813	722	117	3	2	2	5,071
55 to 59	97	357	543	984	665	732	738	285	56	4	4	4,461
60 to 64	34	201	355	584	397	417	416	228	78	10	10	2,720
65 to 69	6	50	97	177	105	83	83	39	16	14	14	670
70 and up	1	15	31	51	38	26	25	10	5	9	9	211
<b>Total Count</b>	1,673	5,631	5,175	6,315	3,439	2,722	2,121	683	158	39	39	27,956

**Distribution of Active Members as of July 1, 2011  
Total System**

Age	Average Expected Salary Years of Service										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	\$ 48,762	\$ 50,179	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 49,466
25 to 29	58,702	69,945	78,160	53,126	0	0	0	0	0	0	0	67,655
30 to 34	65,561	71,177	82,558	86,109	0	0	0	0	0	0	0	74,407
35 to 39	65,748	73,859	84,252	88,093	98,983	55,398	0	0	0	0	0	80,511
40 to 44	63,711	73,724	83,148	88,869	101,024	99,337	116,960	0	0	0	0	84,870
45 to 49	59,405	72,270	78,229	84,388	96,464	98,039	86,768	62,632	0	0	0	84,155
50 to 54	61,841	71,511	76,043	77,535	86,271	94,311	92,047	105,199	128,517	151,337	151,337	82,922
55 to 59	65,905	70,077	73,823	75,780	83,702	88,972	91,502	95,374	89,860	137,019	137,019	82,301
60 to 64	69,529	71,364	72,973	75,346	78,351	81,633	86,075	87,571	92,167	115,081	115,081	79,366
65 to 69	97,789	67,367	74,231	76,927	76,160	81,388	73,223	81,170	81,417	88,272	88,272	76,575
70 and up	89,941	62,890	68,794	67,509	67,328	71,513	67,735	75,834	83,900	98,368	98,368	70,063
<b>Avg. Salary</b>	\$ 62,461	\$ 71,615	\$ 79,424	\$ 81,850	\$ 89,552	\$ 91,249	\$ 89,336	\$ 93,163	\$ 90,689	\$ 105,710	\$ 105,710	\$ 80,969

**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM  
JULY 1, 2011 ACTUARIAL VALUATION**

**APPENDIX A  
MEMBERSHIP INFORMATION**

**Distribution of Active Members as of July 1, 2011  
Police**

Age	Years of Service										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	0	4	0	0	0	0	0	0	0	0	0	4
25 to 29	5	150	25	0	0	0	0	0	0	0	0	180
30 to 34	5	122	107	32	0	0	0	0	0	0	0	266
35 to 39	2	52	79	123	40	0	0	0	0	0	0	296
40 to 44	1	34	45	123	174	20	0	0	0	0	0	397
45 to 49	1	11	29	60	151	84	20	0	0	0	0	356
50 to 54	0	9	3	26	42	67	119	30	0	0	0	296
55 to 59	0	3	0	13	18	26	14	10	2	0	0	86
60 to 64	0	2	0	4	5	4	4	0	0	1	0	20
65 to 69	0	0	0	3	1	0	0	0	0	0	0	4
70 and up	0	0	0	0	1	0	0	0	1	1	0	3
<b>Total Count</b>	14	387	288	384	432	201	157	40	3	2	0	1,908

**Distribution of Active Members as of July 1, 2011  
Police**

Age	Average Expected Salary Years of Service										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	\$ 0	\$ 87,895	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 87,895
25 to 29	85,916	94,012	105,392	0	0	0	0	0	0	0	0	95,368
30 to 34	86,814	94,288	107,745	113,679	0	0	0	0	0	0	0	101,893
35 to 39	82,920	95,661	107,198	113,678	116,176	0	0	0	0	0	0	108,913
40 to 44	82,920	97,264	108,271	112,827	120,269	130,715	0	0	0	0	0	115,065
45 to 49	82,920	96,612	108,219	111,806	118,269	129,110	134,048	0	0	0	0	119,037
50 to 54	0	100,480	108,475	113,380	114,086	120,023	132,894	156,647	0	0	0	126,772
55 to 59	0	111,365	0	113,464	115,462	121,680	127,143	144,199	154,762	0	0	123,054
60 to 64	0	105,873	0	114,990	112,441	130,519	130,202	0	0	196,371	0	123,658
65 to 69	0	0	0	115,760	116,346	0	0	0	0	0	0	115,906
70 and up	0	0	0	0	117,262	0	0	0	141,573	104,601	0	121,145
<b>Avg. Salary</b>	\$ 85,381	\$ 94,963	\$ 107,528	\$ 113,115	\$ 118,283	\$ 125,307	\$ 132,459	\$ 153,535	\$ 150,365	\$ 150,486	\$ 0	\$ 113,378

**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM  
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**Distribution of Active Members as of July 1, 2011  
Fire**

Age	Years of Service										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	0	1	0	0	0	0	0	0	0	0	0	1
25 to 29	3	28	7	0	0	0	0	0	0	0	0	38
30 to 34	4	26	52	11	0	0	0	0	0	0	0	93
35 to 39	3	20	63	76	8	0	0	0	0	0	0	170
40 to 44	2	17	64	165	81	30	1	0	0	0	0	360
45 to 49	3	6	31	111	108	71	2	0	0	0	0	332
50 to 54	0	5	10	51	48	88	16	5	0	0	1	224
55 to 59	0	1	1	12	16	27	24	12	3	0	0	96
60 to 64	0	1	0	0	9	9	3	5	3	1	0	31
65 to 69	0	0	0	0	0	0	0	0	0	0	0	-
70 and up	0	0	1	0	0	0	0	0	0	0	1	2
<b>Total Count</b>	15	105	229	426	270	225	46	22	6	3		1,347

**Distribution of Active Members as of July 1, 2011  
Fire**

Age	Average Expected Salary Years of Service										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	\$ 0	\$ 79,172	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 79,172
25 to 29	65,511	83,883	108,362	0	0	0	0	0	0	0	0	86,942
30 to 34	65,511	87,168	117,320	115,873	0	0	0	0	0	0	0	106,491
35 to 39	65,511	88,947	115,997	121,412	127,048	0	0	0	0	0	0	114,865
40 to 44	76,408	93,012	111,909	121,243	128,084	130,182	116,960	0	0	0	0	120,274
45 to 49	71,490	82,258	114,381	121,845	127,641	135,439	117,819	0	0	0	0	124,746
50 to 54	0	123,430	114,359	121,610	126,532	134,508	136,366	146,990	0	188,854	0	129,369
55 to 59	0	56,146	111,157	121,308	121,685	131,399	150,618	160,321	179,161	0	0	137,436
60 to 64	0	45,000	0	0	123,587	128,263	161,387	130,704	141,560	190,880	0	131,126
65 to 69	0	0	0	0	0	0	0	0	0	0	0	-
70 and up	0	0	155,807	0	0	0	0	0	0	0	211,830	183,819
<b>Avg. Salary</b>	\$ 68,160	\$ 88,250	\$ 114,784	\$ 121,337	\$ 127,071	\$ 133,602	\$ 144,205	\$ 150,560	\$ 160,361	\$ 197,188	\$ 197,188	\$ 121,851

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**Distribution of Active Members as of July 1, 2011  
Miscellaneous**

Age	Years of Service										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	81	75	0	0	0	0	0	0	0	0	156
25 to 29	301	541	76	1	0	0	0	0	0	0	919
30 to 34	347	942	484	79	0	0	0	0	0	0	1,852
35 to 39	241	891	716	476	46	1	0	0	0	0	2,371
40 to 44	201	792	860	927	296	60	0	0	0	0	3,136
45 to 49	201	687	785	1,136	584	385	114	4	0	0	3,896
50 to 54	134	595	713	1,122	656	658	587	82	3	1	4,551
55 to 59	97	353	542	959	631	679	700	263	51	4	4,279
60 to 64	34	198	355	580	383	404	409	223	75	8	2,669
65 to 69	6	50	97	174	104	83	83	39	16	14	666
70 and up	1	15	30	51	37	26	25	10	4	7	206
<b>Total Count</b>	1,644	5,139	4,658	5,505	2,737	2,296	1,918	621	149	34	24,701

**Distribution of Active Members as of July 1, 2011  
Miscellaneous**

Age	Average Expected Salary										Total
	Years of Service										
	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	\$ 48,762	\$ 47,781	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 48,290
25 to 29	58,182	62,551	66,420	53,126	0	0	0	0	0	0	61,429
30 to 34	65,256	67,743	73,256	70,797	0	0	0	0	0	0	68,848
35 to 39	65,608	72,248	78,927	76,161	79,152	55,398	0	0	0	0	74,503
40 to 44	63,489	72,299	79,693	79,928	82,306	73,455	0	0	0	0	76,984
45 to 49	59,108	71,793	75,693	79,279	85,061	84,362	77,928	62,632	0	0	77,508
50 to 54	61,841	70,637	75,369	74,701	81,545	86,317	82,558	83,828	128,517	113,820	77,783
55 to 59	65,905	69,765	73,754	74,699	81,833	86,033	88,762	90,554	82,062	137,019	80,245
60 to 64	69,529	71,149	72,973	75,073	76,843	80,110	85,091	86,604	90,191	95,444	78,433
65 to 69	97,789	67,367	74,231	76,258	75,773	81,388	73,223	81,170	81,417	88,272	76,339
70 and up	89,941	62,890	65,894	67,509	65,979	71,513	67,735	75,834	69,482	81,269	68,214
<b>Avg. Salary</b>	\$ 62,214	\$ 69,517	\$ 75,948	\$ 76,614	\$ 81,316	\$ 84,118	\$ 84,490	\$ 87,241	\$ 86,682	\$ 95,004	\$ 76,237



**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM  
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**APPENDIX A  
MEMBERSHIP INFORMATION**

**Retirees, Disabled, and Beneficiaries by Attained Age and Benefit Effective Date  
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-1993	1	4	15	31	53	94	143	163	107	62	673
1993	0	0	2	0	11	14	2	1	2	3	35
1994	0	0	2	2	12	13	12	5	2	1	49
1995	0	0	0	2	20	26	6	3	2	3	62
1996	0	0	2	7	21	8	4	5	5	4	56
1997	0	0	2	5	25	18	3	4	2	2	61
1998	1	2	1	12	11	17	7	3	2	3	59
1999	1	0	1	9	16	8	4	6	3	1	49
2000	1	2	6	27	31	8	2	7	6	1	91
2001	2	3	2	28	34	9	10	9	2	1	100
2002	3	2	3	30	18	7	2	4	3	3	75
2003	0	1	11	43	25	14	4	5	3	1	107
2004	3	3	11	43	22	6	4	5	4	2	103
2005	2	3	18	31	22	9	4	5	2	1	97
2006	6	4	20	32	11	4	3	5	4	2	91
2007	3	6	31	29	7	6	9	4	5	2	102
2008	5	18	29	27	7	5	2	3	1	2	99
2009	4	5	41	19	6	5	1	6	6	0	93
2010	4	14	55	25	8	2	10	4	5	2	129
2011	8	28	60	13	5	6	4	5	3	0	132
<b>Total</b>	<b>44</b>	<b>95</b>	<b>312</b>	<b>415</b>	<b>365</b>	<b>279</b>	<b>236</b>	<b>252</b>	<b>169</b>	<b>96</b>	<b>2,263</b>

Average Age at Retirement/Disability                      51.8  
Average Current Age    69.6  
Average Annual Pension    \$ 70,187

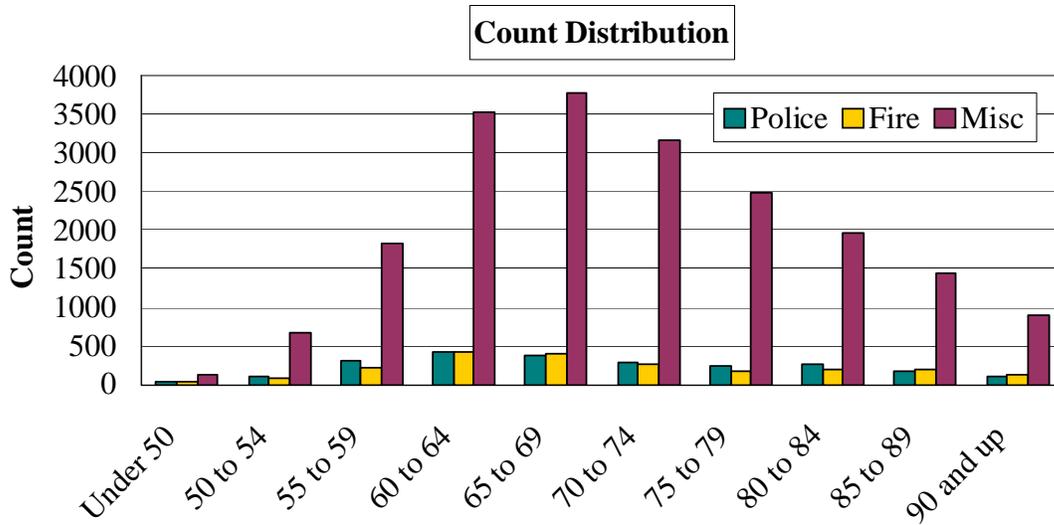




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**APPENDIX A  
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<b>Distribution of Retirees, Disabled Members, and Beneficiaries as of July 1, 2011</b>				
<b>Age</b>	<b>Count</b>			<b>Total</b>
	<b>Police</b>	<b>Fire</b>	<b>Misc</b>	
Under 50	44	37	134	215
50 to 54	95	70	676	841
55 to 59	312	225	1,823	2,360
60 to 64	415	429	3,533	4,377
65 to 69	365	391	3,789	4,545
70 to 74	279	255	3,167	3,701
75 to 79	236	170	2,496	2,902
80 to 84	252	189	1,972	2,413
85 to 89	169	200	1,451	1,820
90 and up	96	126	896	1,118
<b>Total</b>	<b>2,263</b>	<b>2,092</b>	<b>19,937</b>	<b>24,292</b>

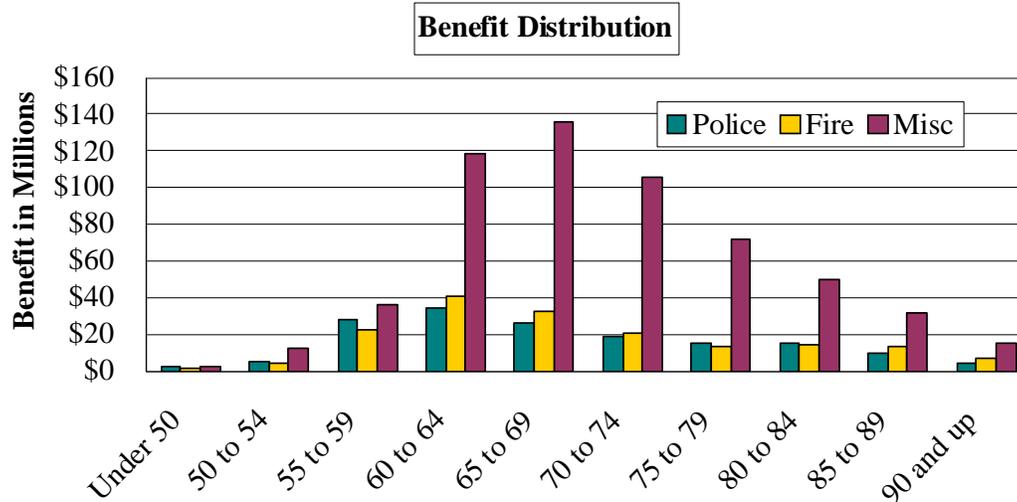


**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM  
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**APPENDIX A  
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<b>Distribution of Retirees, Disabled Members, and Beneficiaries as of July 1, 2011</b>				
<b>Annual Benefit *</b>				
<b>Age</b>	<b>Police</b>	<b>Fire</b>	<b>Misc</b>	<b>Total</b>
Under 50	\$ 2,235,114	\$ 1,437,453	\$ 2,524,284	\$ 6,196,851
50 to 54	5,101,672	3,942,703	12,181,669	21,226,045
55 to 59	27,702,300	22,283,535	36,100,483	86,086,318
60 to 64	34,079,955	40,303,383	118,146,498	192,529,836
65 to 69	26,443,978	32,873,540	135,580,744	194,898,262
70 to 74	19,174,790	20,249,644	105,359,752	144,784,186
75 to 79	15,121,274	12,914,385	72,037,323	100,072,982
80 to 84	15,003,603	13,885,657	49,501,842	78,391,102
85 to 89	9,627,499	13,336,516	31,740,191	54,704,206
90 and up	4,343,245	6,867,672	14,952,765	26,163,682
<b>Total</b>	<b>\$ 158,833,431</b>	<b>\$ 168,094,487</b>	<b>\$ 578,125,552</b>	<b>\$ 905,053,471</b>

\* Benefits provided in June 30 valuation data



**APPENDIX A**  
**MEMBERSHIP INFORMATION**

**Data Assumptions and Methods**

In preparing our valuation results, 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 added to the “Yrs Svc” field. Service buyback that is under contract, but not paid in full, as of the valuation date is assumed to be paid in full per the contract and this service is reflected in the projected benefit. An adjusted date of hire is retroactively calculated from the valuation date.
- Valuation Salary for the fiscal year ending 6/30/2011 is equal to “Covered Pay” reported for members hired before the beginning of the previous plan year and “Calculated Pay”, which is an annualized pay rate, reported for new hires. “Covered Pay” is adjusted so that furloughs do not affect pensionable salaries. A minimum of \$45,000 annual pay is used for all active members. Valuation Salary for the fiscal year ending 6/30/2012 is equal to Valuation Salary for the prior fiscal year increased for merit according to our assumptions and for wage inflation of 4.5% for Fire and Police and 0.0% for Miscellaneous in accordance with the latest MOUs. All furloughs described in the MOUs are assumed to end on June 30, 2012.
- All benefits for members in pay status as of June 30, 2011 were adjusted for the Supplemental COLA effective July 1, 2011.
- 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 6/30/2011, 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 6/30/2011, or their “Cvd Pay” is \$0. If these inactive members have less than 5 years of service (non-vested), they are assumed to receive a lump sum distribution on the valuation date. If these inactive members have 5 or more years of service (vested), they are assumed to have elected a deferred benefit and to retire at age 55.
- For Safety members, Final Average Compensation is determined using the greater of data fields “Cvd Pay” or “Calc Pay”. If both these fields are \$0, then the pay “Rate” field is used and annualized based on the compensation frequency “Cmp Frq”.
- For Safety members, the deferred benefit is estimated using Final Average Compensation multiplied by years of service (including service purchased) multiplied by the appropriate age

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factor. For Miscellaneous members, the deferred benefit at retirement is the twice the member's contribution account balance with interest as of the valuation date projected with the assumed interest crediting rate to age 55 and then divided by the appropriate annuity factor from Table 9 of the Operating Tables.

- Members on the "Inactive" data file are assumed to have elected a refund and receive a lump sum distribution on the valuation date if their "Withdrawal Date" is on or after the valuation date. If their "Withdrawal Date" is before the valuation date, they are assumed to have taken a full refund prior to the valuation date.
- Records on the "Retiree" file are considered in pay status if their benefit is not suspended or terminated.
- Members may retire and receive benefits under multiple Charter sections (e.g. - a police officer can have two benefits, one for the service during the academy training which is considered Miscellaneous service and a second benefit for all other service as a police officer). We value each component of a member's benefit separately under the applicable Charter section. Consequently, the member counts reported in this valuation are slightly higher than the actual number of members due to some individual members being reported under multiple groups.
- We assume any member reported in last year's "Retiree" file and not in this year's file is deceased without a beneficiary and is removed from the valuation data.
- We assume all deceased members with payments continuing to a beneficiary have been reported in the "Retiree" file.

CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM  
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**APPENDIX B  
ACTUARIAL ASSUMPTIONS AND METHODS**

**A. Actuarial Assumptions**

**1. Investment Return Assumption**

SFERS' assets are assumed to earn 7.66% net of investment expenses.

**2. Inflation**

Wage inflation: 3.91% compounded annually

Consumer Price Inflation: 3.41% compounded annually

**3. Interest Credited to Member Contributions**

4.50%, compounded annually.

**4. Salary Increase Rate**

Wage inflation component                      3.91%

The additional merit component:

Years of Service	Salary Merit Increases				
	Police	Fire	Muni Drivers	Craft	Misc.
1	11.00%	15.00%	15.00%	4.50%	7.00%
2	8.50	8.00	10.00	3.25	5.25
3	6.50	6.00	2.00	2.50	4.00
4	4.50	4.25	1.00	2.00	3.00
5	3.25	3.00	0.00	1.50	2.50
6	2.30	2.30	0.00	1.25	2.00
7	1.95	1.95	0.00	1.00	1.75
8	1.70	1.70	0.00	0.90	1.65
9	1.50	1.50	0.00	0.85	1.45
10	1.50	1.50	0.00	0.85	1.30
11	1.50	1.50	0.00	0.85	1.20
12	1.50	1.50	0.00	0.85	1.15
13	1.50	1.50	0.00	0.85	1.10
14	1.50	1.50	0.00	0.85	1.05
15 & over	1.50	1.50	0.00	0.85	1.00

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Extra covered wages in the last year before service retirement are assumed to be as follows:

Safety	3.0%
Muni Drivers	6.0%
Craft Workers	4.0%
Miscellaneous	1.5%

**5. Administrative 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, Charters 8.559 and 8.585	5.00% per year
Old Plans - Police and Fire, Charters 8.595 and 8.596	4.00% 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

**7. Rates of Termination of Employment**

Sample rates of termination by age and service for Miscellaneous members are shown below.

<b>Misc. Rates of Termination by Age and Service Years</b>			
<b>Age</b>	<b>Service</b>		
	<b>0</b>	<b>3</b>	<b>5+</b>
20	37.50%	12.00%	6.50%
25	27.50	9.00	6.50
30	24.00	9.00	5.50
35	20.00	7.00	4.25
40	17.50	6.00	3.00
45	15.00	4.50	2.50
50	15.00	4.50	2.60
55	15.00	4.50	3.15
60	15.00	4.50	4.00
65	15.00	4.50	4.00

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Sample rates of termination by service for Police, Fire, Muni Drivers and Craft members are shown below.

<b>Rates of Termination</b>				
<b>Service</b>	<b>Police</b>	<b>Fire</b>	<b>Muni Drivers</b>	<b>Craft</b>
0	10.00%	4.00%	12.00%	8.00%
1	4.00	1.50	6.00	7.00
2	2.00	1.50	5.00	6.00
3	2.00	1.50	4.00	5.00
4	2.00	1.50	3.50	4.00
5	1.00	1.50	3.25	3.25
6	1.00	1.00	3.00	2.75
7	1.00	1.00	3.00	2.50
8	1.00	1.00	3.00	2.25
9	1.00	1.00	3.00	2.00
10	1.00	1.00	3.00	1.75
11	1.00	0.50	3.00	1.75
12	1.00	0.50	3.00	1.75
13	1.00	0.50	3.00	1.75
14	1.00	0.50	3.00	1.75
15	1.00	0.50	3.00	1.75
16	0.50	0.50	3.00	1.75
17	0.50	0.50	3.00	1.75
18	0.50	0.20	3.00	1.75
19	0.50	0.10	3.00	1.75
20	0.50	0.05	3.00	1.75
21	0.00	0.00	3.00	1.75
22	0.00	0.00	0.00	1.75
23	0.00	0.00	0.00	0.00

30% of terminating employees are assumed to subsequently work for a reciprocal employer and receive pay increases equal to the wage inflation assumption.

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**8. Member Refunds**

Non-vested terminated members are assumed to receive a refund of their contributions with interest. The rates of refund for terminated vested members in the year of termination are shown below.

<b>Vested Terminated Rates of Refund</b>		
<b>Age</b>	<b>Police &amp; Fire</b>	<b>Miscellaneous</b>
Under 25	100%	70%
25	75	55
30	50	40
35	30	35
40	20	30
45	10	20
50 & over	0	0

**9. Rates of Disability**

Sample disability rates of active participants are provided below. 100% of safety and 0% of miscellaneous disabilities are assumed to be duty related.

<b>Rates of Disability at Selected Ages</b>						
<b>Age</b>	<b>Police</b>	<b>Fire</b>	<b>Muni Drivers</b>	<b>Craft</b>	<b>Misc. Females</b>	<b>Misc. Males</b>
30	0.05%	0.06%	0.01%	0.01%	0.01%	0.01%
35	0.09	0.15	0.06	0.06	0.05	0.04
40	0.16	0.38	0.11	0.12	0.10	0.08
45	0.37	0.60	0.17	0.24	0.28	0.11
50	0.79	1.20	0.75	0.44	0.55	0.30
55	3.00	5.00	1.20	0.64	0.60	0.42
60	6.10	12.75	0.00	0.00	0.00	0.00
65	7.50	15.00	0.00	0.00	0.00	0.00

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

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 ACTUARIAL ASSUMPTIONS AND METHODS**

**10. Rates of Mortality for Healthy Lives**

Mortality rates for actives, retirees, beneficiaries, terminated vested and reciprocals are based on the sex distinct RP 2000 Mortality Tables. The Employee table is used for active employees and the Annuitant table is used for those receiving benefits. To reflect mortality improvements since the date of the table and to project future mortality improvements, the tables have been projected using scale AA to future years as follows:

Active Females: 2030  
 Active Males: 2005  
 Annuitant Females: 2020  
 Annuitant Males: 2020

The table below provides a sample of these rates.

<b>Rates of Mortality for Actives and Annuitants</b>					
<b>Healthy Lives at Selected Ages</b>					
<b>Age</b>	<b>Actives</b>		<b>Age</b>	<b>Annuitants</b>	
	<b>Male</b>	<b>Female</b>		<b>Male</b>	<b>Female</b>
25	0.036%	0.014%	50	0.372%	0.166%
30	0.043	0.020	55	0.402	0.301
35	0.075	0.034	60	0.594	0.561
40	0.104	0.045	65	1.012	0.938
45	0.141	0.069	70	1.641	1.515
50	0.195	0.100	75	2.854	2.394
55	0.275	0.199	80	5.265	3.987
60	0.450	0.338	85	9.624	6.866
65	0.706	0.501	90	16.928	12.400
70	0.920	0.655	95	25.699	18.688
			100	33.773	23.276

For active members, 25% of Safety deaths and 0% of Miscellaneous deaths are assumed to be duty related.

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 ACTUARIAL ASSUMPTIONS AND METHODS**

**11. Rates of Mortality for Retired Disabled Lives**

For Safety, all disabilities are assumed to be duty related and therefore all death benefits of disabled members are assumed to generate duty death benefits. The table below provides a sample of the mortality rates for members with disability retirement.

<b>Rates of Mortality for Disabled Lives at Selected Ages</b>				
<b>Age</b>	<b>Police and Fire</b>		<b>All Miscellaneous</b>	
	<b>Male</b>	<b>Female</b>	<b>Male</b>	<b>Female</b>
50	0.40%	0.33%	1.63%	1.11%
55	0.53	0.50	1.94	1.56
60	0.74	0.74	2.29	1.61
65	1.26	1.09	3.17	1.80
70	2.04	1.59	3.87	2.84
75	3.18	2.47	6.00	3.65
80	6.09	4.08	8.39	5.23
85	10.80	7.16	14.04	8.42
90	15.09	12.35	21.55	14.14
95	23.77	21.24	31.03	20.92
100	37.44	32.55	45.91	34.18

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**12. Rates of Retirement**

Rates of retirement are based on age and service according to the following tables below.

<b>Rates of Retirement by Age and Service 29 Years of Service or less (24 or less for Safety)</b>						
<b>Age</b>	<b>Police</b>	<b>Fire</b>	<b>Muni Drivers</b>	<b>Craft</b>	<b>Misc. Females</b>	<b>Misc. Males</b>
50	0.0150	0.0200	0.0700	0.0300	0.0300	0.0300
51	0.0150	0.0100	0.0250	0.0250	0.0250	0.0250
52	0.0150	0.0100	0.0250	0.0250	0.0250	0.0250
53	0.0300	0.0100	0.0500	0.0400	0.0400	0.0400
54	0.0300	0.0100	0.0500	0.0400	0.0400	0.0400
55	0.1000	0.0300	0.0600	0.0500	0.0400	0.0400
56	0.1000	0.0300	0.0600	0.0500	0.0450	0.0450
57	0.1000	0.0300	0.1000	0.0500	0.0500	0.0500
58	0.1000	0.0500	0.1000	0.0500	0.0600	0.0600
59	0.1000	0.1000	0.1000	0.0750	0.0750	0.0750
60	0.1000	0.2500	0.1000	0.1000	0.1100	0.1100
61	0.1000	0.2500	0.1250	0.1300	0.1400	0.1400
62	0.3000	0.2500	0.2500	0.2250	0.2250	0.2250
63	0.1000	0.2500	0.2000	0.1750	0.1750	0.1750
64	0.1000	0.2500	0.2000	0.1750	0.1750	0.1750
65	1.0000	1.0000	0.2500	0.2750	0.2250	0.2250
66	1.0000	1.0000	0.2500	0.2750	0.2250	0.2250
67	1.0000	1.0000	0.2500	0.1750	0.2000	0.2000
68	1.0000	1.0000	0.2500	0.1750	0.2000	0.2000
69	1.0000	1.0000	0.2500	0.1750	0.2000	0.2000
70 & over	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

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<b>Rates of Retirement by Age and Service 30 Years of Service or more (25 or more for Safety)</b>						
<b>Age</b>	<b>Police</b>	<b>Fire</b>	<b>Muni Drivers</b>	<b>Craft</b>	<b>Misc. Females</b>	<b>Misc. Males</b>
50	0.0300	0.0200	0.0300	0.0300	0.0300	0.0300
51	0.0300	0.0200	0.0300	0.0300	0.0300	0.0300
52	0.0400	0.0200	0.0300	0.0300	0.0300	0.0300
53	0.0700	0.1000	0.0300	0.0300	0.0300	0.0300
54	0.1000	0.2000	0.0300	0.0300	0.0750	0.0300
55	0.1200	0.2250	0.3000	0.0750	0.0750	0.0750
56	0.1400	0.2250	0.3000	0.0750	0.0750	0.0750
57	0.1600	0.2250	0.3000	0.0750	0.0750	0.0750
58	0.1800	0.2500	0.3000	0.1500	0.1250	0.1200
59	0.2000	0.3000	0.3000	0.3000	0.1750	0.1500
60	0.2200	0.3500	0.3000	0.3000	0.2500	0.3000
61	0.2500	0.4000	0.3000	0.3000	0.2500	0.3000
62	0.2500	0.4000	0.3500	0.3500	0.3750	0.3500
63	0.2500	0.3000	0.3000	0.3000	0.2500	0.2500
64	0.2500	0.3000	0.3000	0.3000	0.2500	0.2500
65	1.0000	1.0000	0.4500	0.3000	0.3750	0.2500
66	1.0000	1.0000	0.4500	0.3000	0.3750	0.2500
67	1.0000	1.0000	0.4500	0.3000	0.3750	0.2500
68	1.0000	1.0000	0.4500	0.3000	0.3750	0.2500
69	1.0000	1.0000	0.4500	0.3000	0.3750	0.2500
70 & over	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

**13. Family Composition**

The percentage assumed to be married (including assumption for Domestic Partners, 1994 Proposition H) is shown below. Spouses of male members are assumed to be three years younger than the member and spouses of female members are assumed to be three years older than the member. And, then the spouse is assumed to be an additional year younger in order to value continuance to children and dependent parents.

<b>Percentage Married</b>	
Safety Males	85%
Safety Females	48
Miscellaneous Males	75
Miscellaneous Females	48

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**13. 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, limited experience data, and the sunset of the program in 2011, no adjustment to the retirement rates has been made for DROP in this valuation. Because contributions continue to be made by Members in DROP and employers on the payroll of Members in DROP, the payroll for Members in DROP is used as active payroll in the development of contribution rates.

**14. 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.

**15. 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.

**16. Changes Since Last Valuation**

The investment return assumption decreased from 7.75% to 7.66% and the wage inflation assumption decreased from 4.00% to 3.91%.

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**ACTUARIAL ASSUMPTIONS AND METHODS**

**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 liability 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 is calculated by recognizing 20% of each of the past five years of actual investment experience relative the expected return (7.75% for 2008-2011 and 8.0% for prior years) on the actuarial asset value. The expected return on actuarial value of 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.

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

APPENDIX C  
SUMMARY OF PLAN PROVISIONS  
OLD POLICE AND FIRE

**I. Old Police and Fire Members – Charter Sections 8.559 and 8.595 (Police) and 8.585 and 8.596 (Fire)**

**1. Membership Requirement**

**Charter Sections 8.559 and 8.585:** 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.

**Charter Sections 8.595 and 8.596:** Active members on November 5, 2002 in Section 8.559 (Police) or Section 8.585 (Fire) who 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 are credited with interest annually as determined by the Board.

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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 SUMMARY OF PLAN PROVISIONS  
 OLD POLICE AND FIRE

**Benefit - Member**

**Charter Sections 8.559 and 8.585:** 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.

**Charter Sections 8.595 and 8.596:** 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.

<b>Table C-1</b>	
<b>City and County of San Francisco Employees' Retirement System</b>	
<b>Sections 8.595 (Police) and 8.596 (Fire) – Service Retirement Factors</b>	
<b>Retirement Age</b>	<b>Retirement Factors</b>
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 75% of Final Compensation for Charter Sections 8.559 and 8.585 or 90% of Final Compensation for Charter Sections 8.595 and 8.596.

*At least 25 years of credited service:*

Service retirement benefit determined at date of disability.

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SUMMARY OF PLAN PROVISIONS  
OLD POLICE AND FIRE

**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:*

Service retirement benefit determined at date of disability, 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, 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.

APPENDIX C  
SUMMARY OF PLAN PROVISIONS  
OLD POLICE AND FIRE

**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 of all 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, 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.

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SUMMARY OF PLAN PROVISIONS  
OLD POLICE AND FIRE

**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. **Charter Sections 8.559 and 8.585:** 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.

**Charter Sections 8.595 and 8.596:** 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.

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%.

**12. Changes in this Valuation – None**

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SUMMARY OF PLAN PROVISIONS  
NEW POLICE AND FIRE

**II. New Police and Fire Members – Charter Sections (Police) 8.586, 8.597 and 8.602; (Fire) 8.588, 8.598 and 8.601**

**1. Membership Requirement**

**Charter Sections 8.586 and 8.588:** Police Officers and Firefighters who became members on or after November 2, 1976.

**Charter Sections 8.597 and 8.598:** 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).

**Charter Sections 8.601 and 8.602:** Persons who become members of the fire or police department on or after July 1, 2010.

**2. Final Compensation**

**Charter Sections 8.586, 8.588, 8.597 and 8.598:** Average monthly total compensation earnable during any 12 months of credited service which average compensation is the highest.

**Charter Sections 8.601 and 8.602:** Average monthly total compensation earnable during the higher of any two consecutive fiscal years of earnings or the twenty-four months of earnings immediately prior to retirement.

*(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:

**Charter Sections 8.586, 8.588, 8.597 and 8.598:** 7.5% of salary, excluding overtime and most premium pay. These contributions are credited with interest annually as determined by the Board.

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SUMMARY OF PLAN PROVISIONS  
NEW POLICE AND FIRE**

**Charter Sections 8.601 and 8.602:** 9.0% of salary, excluding overtime and most premium pay. These contributions are credited with interest annually as determined by the Board.

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**

**Charter Sections 8.586 and 8.588:** 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*);
- 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.

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

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 SUMMARY OF PLAN PROVISIONS  
 NEW POLICE AND FIRE

**Charter Sections 8.597, 8.598, 8.601 and 8.602:** 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.

<b>Table C-3</b>	
<b>City and County of San Francisco Employees’ Retirement System                  Sections 8.597 and 8.601 (Police) and 8.598 and 8.602 (Fire) - Service                  Retirement Factors</b>	
<b>Retirement Age</b>	<b>Retirement Factors</b>
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 Average Compensation for each year of credited service, subject to a minimum of 33.3% of Final Compensation, subject to a maximum of 75% of Final Compensation for Charter Sections 8.586 and 8.588 or 90% of Final Compensation for Charter Sections 8.597, 8.598, 8.601, and 8.602.

**Benefit - Survivor**

50% 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**

*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 using the service and salary rate for the current rank held. The recalculated benefit is based on a minimum of 50% of Final Compensation (not to exceed 90% of Final Compensation for Charter Sections 8.597, 8.598, 8.601, and 8.602).

*Age 50 with 25 Years of Service:*

The service 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 of all 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.

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- 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. For Charter Sections 8.586 and 8.588, 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 completed 25 years of service and attained age 50, 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 (For Chapter Sections 8.597, 8.598, 8.601 and 8.602 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% (*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. **Charter Sections 8.586 and 8.588:** 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.

**Charter Sections 8.597, 8.598, 8.601 and 8.602:** A specified percent of Final Compensation at termination based on the member's age at retirement (factors shown in Table C-3 above) for each year of credited service, subject to a maximum of 90% of Final Compensation, payable at age 50.

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SUMMARY OF PLAN PROVISIONS  
NEW POLICE AND FIRE

**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%.

**12. Changes in this Valuation**

Charter sections 8.601 and 8.602 (Proposition D) were added, increasing the Final Compensation period from 12 months to 24 months and increasing Member contributions from 7.5% of pay to 9.0% of pay. These changes only affect Members hired on or after July 1, 2010.

**APPENDIX C**  
**SUMMARY OF PLAN PROVISIONS**  
**DROP PROVISIONS**

**III. Deferred Retirement Option Program (DROP) – Charter Section 8.900**

**Effective Date – July 1, 2008 through June 30, 2011**

Section 8.900 – effective July 1, 2008 through June 30, 2011. DROP sunsets on June 30, 2011. The Board of Supervisors voted not to renew DROP.

**1. Membership Requirement**

Active, full duty sworn officers occupying one of the eligible ranks; Police Officer, Sergeant, Inspector, Lieutenant, or Captain.

**2. Eligibility**

Age 50 with 25 years of credited service as a sworn member, including any service as a member of the San Francisco Airport Police. To participate, the member must agree to terminate employment through retirement at the end of their participation in DROP. No member shall be eligible for a promotion during their participant in DROP.

**3. Length of DROP period**

Once a member enters DROP, participation continues until either termination of employment the maximum DROP participation period has been reached.

<b>Rank</b>	<b>Maximum DROP Period</b>
Police Officer	36 months
Sergeant/Inspector	24 months
Lieutenant/Captain	12 months

**4. DROP Benefit**

***DROP Account Balance***

The service pension, which is calculated based on age, compensation and length of service as of their date of entry into the Program, is credited monthly into a DROP Account including any Basic or Supplemental Cost of Living Adjustments. The DROP Account is also credited on a monthly basis with interest at an annual effective rate of 4% throughout the member's DROP period.

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**SUMMARY OF PLAN PROVISIONS**  
**DROP PROVISIONS**

***Retirement Benefit***

At the end of the DROP period, a lump sum distribution of the DROP Account Balance will be made and monthly retirement benefits will commence based on the initial DROP benefit calculated based on age, compensation and service at the date of entry into DROP including any cost of living adjustments to which the member would otherwise be entitled.

**5. Employee Contributions while in DROP**

The member still makes employee contributions into the retirement system which are deemed contributions to the general assets of SFERS, and shall not be part of the member's DROP Account.

**6. Effect of Disability on DROP participation**

***Duty Related Disability***

The Member will receive an industrial disability benefit as though the participant was never enrolled in DROP. Service, compensation, and age at the time of disability will be used to calculate the disability benefit. The DROP Account will be waived.

***Non-Duty Related Disability***

Member will terminate participation in DROP and is paid the balance in their DROP Account. They will begin receiving a monthly payment equal to the service retirement benefit determined as of the DROP entry date including any cost of living adjustments to which the member would otherwise be entitled.

**7. Effect of Member Death on DROP participation**

***Duty Related Death***

The member's qualified surviving spouse, domestic partner or other qualified dependent will receive a death allowance as though the participant was never enrolled in DROP. Service, compensation, and age at the time of death will be used to calculate the benefit. The DROP Account will be waived. The qualified spouse, domestic partner or qualified dependent may elect to receive a non-work related death benefit specific below instead.

***Non-Duty Related Death***

Participation in DROP is terminated and the balance in the Member's DROP Account is paid to the Member's beneficiary. In addition, any qualified survivor will begin receiving a post-retirement continuation allowance determined on the basis of beneficiary elections made by the member at the time of entry into DROP including any cost of living adjustments to which the Member would otherwise be entitled.

**8. Changes in this Valuation** – The Board of Supervisors did not renew DROP. As a result, no Member can enter DROP after June 30, 2011.

**APPENDIX C**  
**SUMMARY OF PLAN PROVISIONS**  
**MISCELLANEOUS**

**9. IV. Miscellaneous Members – Charter Sections 8.509, 8.587 & 8.600**

**1. Membership Requirement**

***Charter Section 8.509***

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

***Charter Section 8.587***

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.

***Charter Section 8.600***

Employees and Officers, other than Police Officers or Firefighters, who become employed on or after July 1, 2010.

**2. Average Final Compensation**

***Charter Sections 8.509 and 8.587***

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

***Charter Section 8.600***

Average monthly compensation earned during any two consecutive fiscal years of earnings or the twenty-four months of earnings immediately prior to retirement.

**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: for Charter 8.509 members, in the year of retirement, the denominator in the fraction is equal to 12).

**4. Member Contributions**

a. Member:

***Charter 8.509***

8.0% of salary.

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**SUMMARY OF PLAN PROVISIONS**  
**MISCELLANEOUS**

***Charter 8.587 and 8.600***

7.5% of salary, excluding overtime and most premium pay.

These contributions are credited with interest annually as determined by the Board.

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 by the shortage, which is the difference between contributions paid at the 8%/7.5% rate and contributions actually paid, plus plan interest.

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.

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**SUMMARY OF PLAN PROVISIONS**  
**MISCELLANEOUS**

- 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.

<b>Table C-4</b>			
<b>City and County of San Francisco Employees' Retirement System</b>			
<b>Section 8.509 Member Service Retirement Factors</b>			
<b>Retirement Age</b>	<b>Retirement Factors</b>	<b>Retirement Age</b>	<b>Retirement Factors</b>
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.

**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.

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**SUMMARY OF PLAN PROVISIONS**  
**MISCELLANEOUS**

**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 of a violent nature and 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**

*Charter 8.509 members with less than ten years of credited service or less than \$1,000 in accumulated contributions and Charter 8.587 and 8.600 members with less than five years of credited service:*

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

*Charter 8.509 members with ten or more years of credited service or accumulated contributions exceeding \$1,000 and Charter 8.587 members with 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.

**APPENDIX C**  
**SUMMARY OF PLAN PROVISIONS**  
**MISCELLANEOUS**

**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 prior year's monthly benefit. 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%.

**11. Changes in this Valuation**

Charter section 8.600 (Proposition D) was added, increasing the Final Compensation period from 12 months to 24 months for Members hired on or after July 1, 2010.

**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. Demographic 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 2011 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).