City of San Jose Police and Fire Department Retirement Plan (Pension Plan Only)

Actuarial Valuation and Review as of June 30, 2010

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December 22, 2010

Board of Retirement City of San Jose Police and Fire Department Retirement Plan 1737 North First Street, Suite 580 San Jose, CA 95112-4505

Dear Board Members:

We are pleased to submit this Actuarial Valuation and Review as of June 30, 2010, for the Pension Plan only. It summarizes the actuarial data used in the valuation, establishes the funding requirements for fiscal 2011-2012 and analyzes the preceding year's experience.

The census information on which our calculations were based and the financial information were prepared by the City of San Jose Police and Fire Department Retirement Plan. That assistance is gratefully acknowledged. The actuarial calculations were completed under the supervision of Andy Yeung, ASA, MAAA, Enrolled Actuary.

This actuarial valuation has been completed in accordance with generally accepted actuarial principles and practices, including Actuarial Standards of Practice (ASOPs) Nos. 4, 27, 35, 44, and all other relevant ASOPs. To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate. Further, in our opinion, the assumptions as approved by the Board of Retirement are reasonably related to the experience of and the expectations for the Plan. The undersigned are Members of the American Academy of Actuaries and meet the qualification standards to render the actuarial opinion contained herein.

We look forward to reviewing this report at your next meeting and to answering any questions.

Sincerely,

THE SEGAL COMPANY

By:

Paul Angelo, FSA, EA, MAAA, FCA

Senior Vice President and Actuary

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## **SECTION 1**

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## Purpose

This report has been prepared by The Segal Company to present a valuation of the City of San Jose Police and Fire Department Retirement Plan as of June 30, 2010. The valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits. The contribution requirements presented in this report are based on:

- > The benefit provisions of the Retirement Plan, as administered by the Board of Retirement;
- > The characteristics of covered active members, inactive vested members, retired members and beneficiaries as of June 30, 2010, provided by the Retirement Plan;
- > The assets of the Plan as of June 30, 2010, provided by the Retirement Plan;
- > Economic assumptions regarding future salary increases and investment earnings; and
- > Other actuarial assumptions, regarding employee terminations, retirement, death, etc.

One of the general goals of an actuarial valuation is to establish contributions that fully fund the Plan's liabilities, and that, as a percentage of payroll, remain as level as possible for each generation of active members. An actuarial valuation measures the progress toward this goal, as well as tests the adequacy of the contribution rates.

In preparing this valuation, we have employed generally accepted actuarial methods and assumptions to evaluate the Plan's assets, liabilities and future contribution requirements. Our calculations are based upon member data and financial information provided to us by the Plan's staff. This information has not been audited by us, but it has been reviewed and found to be reasonably consistent, both internally and with prior period's information.

The contribution requirements are determined as a percentage of payroll. The Plan's employer rates provide for both normal cost and a contribution to amortize any unfunded or overfunded actuarial accrued liabilities. Our calculations reflect the Board's funding policy to amortize the Plan's unfunded actuarial accrued liability as follows: (1) outstanding balance of the unfunded actuarial accrued liability established as of June 30, 2003 amortized over the next 7 years; (2) prior service cost for the February 4, 1996 benefit improvement amortized over the next 7 years; and (3) actuarial experience gains and losses, changes in assumptions, and benefit improvements amortized over 16 years from the date of each such event, beginning with the June 30, 2005 valuation.

The rates calculated in this report may be adopted by the Board for the fiscal year that extends from July 1, 2011 through June 30, 2012.

#### **SECTION 1:** Valuation Summary for the City of San Jose Police and Fire Department Retirement Plan

## Significant Issues in This Valuation

The following key findings were the result of this actuarial valuation:

Reference: pg. 33

- The results of this valuation reflect a reduction in the annual investment return assumption from 8.00% to 7.75% as adopted by the Board for the June 30, 2010 Actuarial Valuation. This change was discussed and recommended in our June 30, 2010 Review of Economic Actuarial Assumptions. This assumption together with the other actuarial assumptions used in this valuation are outlined in Section 4, Exhibit IV of this report.
- In our letter dated October 28, 2010, we provided the amounts of interest credits (\$296,147 for 2008/2009 and \$719,742 for 2009/2010) that might be available for transfer into the Supplemental Retiree Benefit Reserve (SRBR) as of June 30, 2010. While the Board has not decided on such transfers, we have followed directions provided by the Plan's staff to include those amounts in the SRBR for this valuation.

Reference: pg. 26 The ratio of the valuation value of assets to actuarial accrued liabilities decreased from 86.7% as determined in the June 30, 2009 valuation to 79.8% as determined in the June 30, 2010 valuation. The Plan's unfunded actuarial accrued liability has increased from \$393.9 million as of June 30, 2009 to \$653.8 million as of June 30, 2010. The change to the UAAL was primarily the net result of (a) unfavorable investment return (after smoothing) during the last year, (b) lower than expected salary increases, (c) more deaths than expected among retirees/beneficiaries, (d) more service retirements offset by fewer disability retirements, (e) other actuarial experience, and (f) reduction in the investment return assumption. A detailed reconciliation of the Plan's unfunded actuarial accrued liability is provided in Section 3, Exhibit G.

Reference: pg. 15

- The aggregate employer rate calculated in this valuation has increased from 39.48% to 50.44% of payroll. The 50.44% rate is before applying the charge to the SRBR (see discussion that follows). The rate after applying the charge to the SRBR is 49.95% for the 2011/2012 plan year only. The employer rate increased for the same reasons that the UAAL increased, A detailed reconciliation of the employer contribution rate is provided in Section 2, Chart 14.

Reference: pg. 43 As mentioned above, the City's contribution rate determined in the June 30, 2010 valuation increased significantly, due in part to lower than assumed investment performance (on a smoothed basis) since the last valuation. It is our understanding that in accordance with Section 3.36.580 of the City's Municipal Code, there would be a charge to the Supplemental Retiree Benefit Reserve (SRBR) to reduce the increase in the City's contribution rate that is attributable to the poor investment performance (after smoothing) between July 1, 2009 and June 30, 2010. The charge to the SRBR was determined to be \$1,285,087 and the calculation of this amount is included in Section 4, Appendix B. This SRBR charge will reduce the City's contribution rate to the pension plan by 0.49% of pay for the 2011/2012 plan year only.

## SECTION 1: Valuation Summary for the City of San Jose Police and Fire Department Retirement Plan

Reference: pg. 16

> The individual member rates are changing mainly as a result of the reduction in the investment return assumption adopted by the Board for the June 30, 2010 valuation. The average member rate calculated in this valuation has increased from 9.91% of payroll to 10.57% of payroll. A detailed reconciliation of the Plan's average member rate is provided in Section 2, Subsection D (see Chart 15).

Reference: pg. 6

- As indicated in Section 2, Subsection B (see Chart 7) of this report, the total unrecognized investment loss as of June 30, 2010 was \$353.8 million both before and after the application of the 120% Market Value of Assets (MVA) corridor applicable as of June 30, 2010. This is reduced from the unrecognized loss of \$658.2 million before the application of the 130% MVA corridor and \$613.3 million after the application of the 130% MVA corridor in the June 30, 2009 valuation. This investment loss will be recognized in the determination of the actuarial value of assets for funding purposes over the next few years, to the extent it is not offset by recognition of investment gains derived from future experience. This implies that earning the assumed rate of investment return of 7.75% per year (net of expenses) on a market value basis will result in investment losses on the actuarial value of assets in the next few years. Therefore, if the actual market return is equal to the assumed 7.75% rate and all other actuarial assumptions are met, the contribution requirements would increase in each of the next few years.
- > The deferred losses of \$353.8 million represent 15% of the market value of assets as of June 30, 2010. Unless offset by future investment gains or other favorable experience, the recognition of the \$353.8 million market losses is expected to have a significant impact on the Plan's future funded percentage and contribution rate requirements. This potential impact may be illustrated as follows:
  - > If the pension plan component of the deferred losses were recognized immediately in the valuation value of assets, the funded percentage would decrease from 79.8% vs. 69.1%.
  - > If the pension plan component of the deferred losses were recognized immediately in the valuation value of assets, the aggregate employer rate would increase from 50.44% vs. 61.80% of payroll. Again, these employer rates are before applying the charge to the SRBR to reduce the contribution rate by 0.49% of pay for 2011/2012 only.
- > The actuarial valuation report as of June 30, 2010 is based on financial information as of that date. Changes in the value of assets subsequent to that date, to the extent that they exist, are not reflected. Declines in asset values will increase the actuarial cost of the plan, while increases will decrease the actuarial cost of the plan.

## SECTION 1: Valuation Summary for the City of San Jose Police and Fire Department Retirement Plan

Reference: pg. 44

> As we have indicated in the reconciliation of the UAAL (See Exhibit G) and the City contribution rate (See Chart 14), when the Plan's contribution rates go up (as they are expected to do in each of the next several valuations to recognize prior deferred investment losses under the asset smoothing method) the Plan incurs additional contribution losses due to the one year delay between the rate calculation and the rate implementation. Another factor that may give rise to additional contribution losses is when the City's actual payroll during the fiscal year of rate implementation is less than that anticipated by the valuation.

Under the current actuarial procedure used by the Plan, the City's ARC is developed by taking the total of the dollar Normal Cost and the dollar amount required to amortize the UAAL for the year immediately following the date of the valuation and expressing that contribution amount as a percent of projected payroll over that same period. If actual payroll is less than projected, then the actual dollar amount of UAAL amortization contributions will be less than the amount required in the valuation. This will cause a contribution loss and will result in an increase in the employer's rate for the next year. The Plan's staff has requested Segal to comment of a proposed change to the current actuarial procedure to mitigate the contribution loss from a decline in the actual payroll. A discussion of that proposed methodology is provided in Appendix C.

## **Impact of Future Experience on Contribution Rates**

Future contribution requirements may differ from those determined in the valuation because of:

- > difference between actual experience and anticipated experience;
- > changes in actuarial assumptions or methods;
- changes in statutory provisions; and
- > difference between the contribution rates determined by the valuation and those adopted by the Board.

SECTION 1: Valuation Summary for the City of San Jose Police and Fire Department Retirement Plan

	June	30, 2010	June	30, 2009
City Contribution Rates:  Police Fire All categories combined	Total Rate 49.78% <sup>(3)</sup> 51.54% <sup>(3)</sup> 50.44% <sup>(3)</sup>	Estimated Annual Amount <sup>(1)</sup> \$78,455,898 48,165,787 126,621,685	Total Rate 38.77% <sup>(2)</sup> 40.69% <sup>(2)</sup> 39.48% <sup>(2)</sup>	Estimated Annual Amount <sup>(1)</sup> \$61,103,558 38,026,114 99,129,672
Member Contribution Rates:		Estimated		Estimated
	Total Rate	Annual Amount <sup>(1)</sup>	Total Rate	Annual Amount <sup>(1)</sup>
Police	10.46%	\$16,485,510	9.81%	\$15,461,076
Fire	10.76%	10,055,566	10.09%	9,429,429
All categories combined	10.57%	26,541,076	9.91%	24,890,505
Funded Status:				
Actuarial accrued liability	\$3,230,456,034		\$2,963,482,288	
Valuation value of pension assets	2,576,704,563		2,569,569,225	
Funded percentage	79.8%		86.7%	
Unfunded actuarial accrued liability	\$653,751,471		\$393,913,063	
Key Assumptions:				
Interest rate	7.75%		8.00%	
Inflation rate	3.50%		3.50%	
Across the board salary increases	0.75%		0.75%	

<sup>(1)</sup> Based on June 30, 2010 projected annual payroll.

<sup>(2)</sup> Before applying the charge to the SRBR to reduce the contribution rate by 0.45% of pay for 2010/2011 only.

<sup>(3)</sup> Before applying the charge to the SRBR to reduce the contribution rate by 0.49% of pay for 2011/2012 only.

SECTION 1: Valuation Summary for the City of San Jose Police and Fire Department Retirement Plan

	June 30, 2010	June 30, 2009	Percentage Change
Active Members:			
Police:			
Number of members	1,295	1,382	(6.3)%
Average age	40.0	40.2	N/A
Average service	12.7	12.9	N/A
Projected total compensation	\$157,605,258	\$165,038,514	(4.5)%
Average projected compensation	\$121,703	\$119,420	1.9%
Fire:			
Number of members	726	701	3.6%
Average age	40.5	40.8	N/A
Average service	11.7	12.1	N/A
Projected total compensation	\$93,453,215	\$90,184,038	3.6%
Average projected compensation	\$128,723	\$128,651	0.1%
Total:			
Number of members	2,021	2,083	(3.0)%
Average age	40.2	40.4	N/A
Average service	12.3	12.6	N/A
Projected total compensation	\$251,058,473	\$255,222,552	(1.6)%
Average projected compensation	\$124,225	\$122,526	1.4%

SECTION 1: Valuation Summary for the City of San Jose Police and Fire Department Retirement Plan

	June 30, 2010	June 30, 2009	Percentage Change
Retired Member and Beneficiaries:			
Number of members:			
Service retired	752	675	11.4%
Disability retired	801	776	3.2%
Beneficiaries	257	249	3.2%
Total	1,810	1,700	6.5%
Average age	64.3	64.4	N/A
Average monthly benefit	\$6,032	\$5,669	6.4%
Vested Terminated Members;			
Number of terminated vested members	79	74	6.8%
Average age	44.2	43.7	N/A
Summary of Financial Data (dollar amounts in thousands):			
Market value of pension and health assets	\$2,314,870	\$2,044,242	13.2%
Return on market value of pension and health assets <sup>(1)</sup>	15.5%	(12.5)%	N/A
Actuarial value of pension and health assets	\$2,668,634	\$2,657,515	0.4%
Return on actuarial value of pension and health assets(1)	2.2%	5.3%	N/A
Valuation value of pension assets <sup>(2)</sup>	\$2,576,705	\$2,569,569	0.3%
Return on valuation value of pension assets <sup>(1)</sup>	2.2%	5.2%	N/A

<sup>(1)</sup> As of June 30, 2009, the returns are annualized over a two-year period from July 1, 2007 to June 30, 2009. As of June 30, 2010, the returns are annualized over a one-year period from July 1, 2009 to June 30, 2010.

<sup>(2)</sup> Excludes assets for health benefits and the SRBR.

#### A. MEMBER DATA

The Actuarial Valuation and Review considers the number and demographic characteristics of covered members, including active members, vested terminated members, retired members and beneficiaries. This section presents a summary of significant statistical data on these member groups.

More detailed information for this valuation period and the preceding valuation can be found in Section 3, Exhibits A, B, and C.

A historical perspective of how the member population has changed over the past 5 valuations can be seen in this chart.

**CHART 1** 

Member Population: 2003 - 2010

Period Ended June 30	Active Members	Vested Terminated Members	Retired Members and Beneficiaries	Ratio of Non-Actives to Actives
2003	2,104	58	1,271	0.63
2005	2,003	69	1,385	0.73
2007	2,136	71	1,477	0.72
2009	2,083	74	1,700	0.85
2010	2,021	79	1,810	0.93

#### **Active Members**

Plan costs are affected by the age, years of service and compensation of active members. In the current valuation, there were 2,021 active members with an average age of 40.2, average years of service of 12.3 years and average projected compensation of \$124,225. The 2,083 active members in the prior valuation had an average age of 40.4, average service of 12.6 years and average projected compensation of \$122,526.

Among the active members, there were none with unknown age.

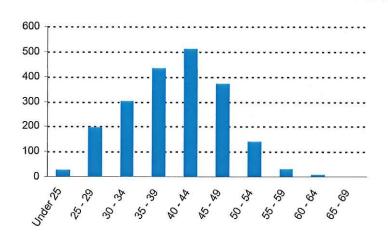
#### **Inactive Members**

In the current valuation, there were 79 members with a vested right to a deferred or immediate vested benefit or entitled to a return of their member contributions versus 74 in the prior valuation.

These graphs show a distribution of active members by age and by years of service.

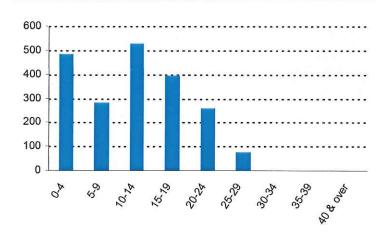
## CHART 2

Distribution of Active Members by Age as of June 30, 2010



**CHART 3** 

Distribution of Active Members by Years of Service as of June 30, 2010



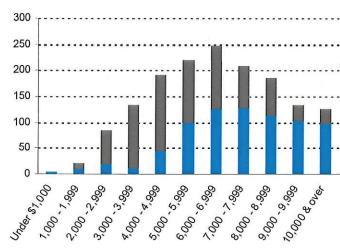
#### **Retired Members and Beneficiaries**

As of June 30, 2010, 1,553 retired members and 257 beneficiaries were receiving total monthly benefits of \$10,917,793. For comparison, in the previous valuation, there were 1,451 retired members and 249 beneficiaries receiving monthly benefits of \$9,631,069.

These graphs show a distribution of the current retired members based on their monthly amount and age, by type of pension.

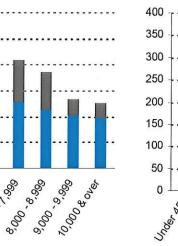
**CHART 4** 

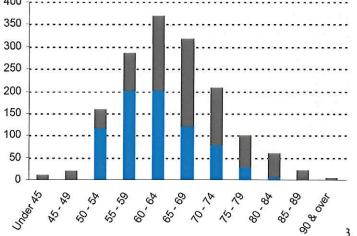
Distribution of Retired Members by Type and by Monthly Amount as of June 30, 2010 (Excluding Beneficiaries)



## **CHART 5**

Distribution of Retired Members by Type and by Age as of June 30, 2010 (Excluding Beneficiaries)





■ Disability Regular

#### Valuation Results for the City of San Jose Police and Fire Department Retirement Plan **SECTION 2:**

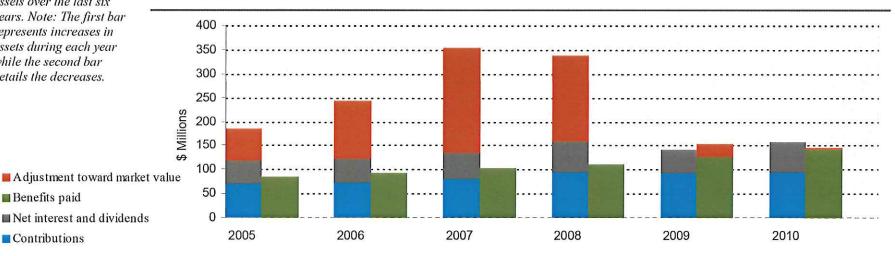
#### **B. FINANCIAL INFORMATION**

Retirement plan funding anticipates that, over the long term, both contributions and net investment earnings (less investment fees and administrative expenses) will be needed to cover benefit payments.

Retirement plan assets change as a result of the net impact of these income and expense components. The adjustment toward market value shown in the chart is the "non-cash" earnings on investments implicitly included in the actuarial value of assets. Additional financial information, including a summary of these transactions for the valuation period, is presented in Section 3, Exhibits D, E and F.

The chart depicts the components of changes in the actuarial value of assets over the last six years. Note: The first bar represents increases in assets during each year while the second bar details the decreases.

**CHART 6** Comparison of Increases and Decreases in the Actuarial Value of Assets for Years Ended June 30, 2005 - 2010



■ Benefits paid

■ Contributions

It is desirable to have level and predictable plan costs from one year to the next. For this reason, the Board of Retirement has approved an asset valuation method that gradually adjusts to market value. Under this method, the full value of market fluctuations is not recognized in a single year and, as a result, the asset value and the plan costs are more stable.

The amount of the adjustment to recognize market value is treated as income, which may be positive or negative. Realized and unrealized gains and losses are treated equally and, therefore, the sale of assets has no immediate effect on the actuarial value.

The determination of the actuarial value of assets is provided on the following pages.

The chart shows the determination of the actuarial value of assets as of the valuation date.

CHART 7

Determination of the Actuarial Value of Assets for Year Ended June 30, 2010

	Plan Yea	ar Ending	(net)	(net)	Investment	Deferral	Deferr	ed
	From	То	<ul> <li>Total Actual</li> <li>Market Return</li> </ul>	Expected Market Return	Gain/(Loss)	Factor	Retur	
	7/1/2005	6/30/2006	\$232,101,000	\$167,148,640	\$64,952,360	0	\$	0
	7/1/2006	6/30/2007	446,863,000	183,993,000	262,870,000	0.20	52,574	4,000
	7/1/2007	6/30/2008	(159,466,000)	218,213,440	(377,679,440)	0.40	(151,071	,776)
	7/1/2008	6/30/2009	(481,764,000)	205,451,335	(504,803,408)**	0.75	(378,60)	2,556)
	7/1/2009	6/30/2010	318,302,000	164,132,047	154,169,953	0.80	123,33	35,962
1.	Total deferred i	eturn *					\$(353,76	4,370)
2.	Net market valu	ie of pension and hea	lth assets				\$2,314,870	0,000
3.	Actuarial value	of pension and healtl	ı assets					
	a. Preliminar	y (item 2 – item 1)					\$2,668,634	1,370
	b. Adjustmer	nt to be within 20% o	f market value					0
	c. Final						\$2,668,634	1,370
4.	Actuarial value	as a percentage of m	arket value:					
	a. Preliminar	y (item 3a ÷ item 2)					11.	5.3%
	b. Final (iten	3c ÷ item 2)					11.	5.3%
5.	Non-valuation a	ussets (end of year)						
	a. Valuation	value of assets for he	alth (market value of \$5	0,820,000 x item 3e ÷ it	em 2)		\$58,580	5,443
	b. SRBR				•		33,343	3,364
	c. Subtotal						\$91,929	
6.	Valuation value	of pension assets (ite	em 3c – item 5c)				\$2,576,704	-

Note: Results may not add due to rounding.

<sup>\*</sup> The amount of deferred return that will be recognized in each subsequent year is as follows:

6/30/2011	\$(118,328,749)
6/30/2012	(170,902,749)
6/30/2013	(95,366,861)
6/30/2014	30,833,991

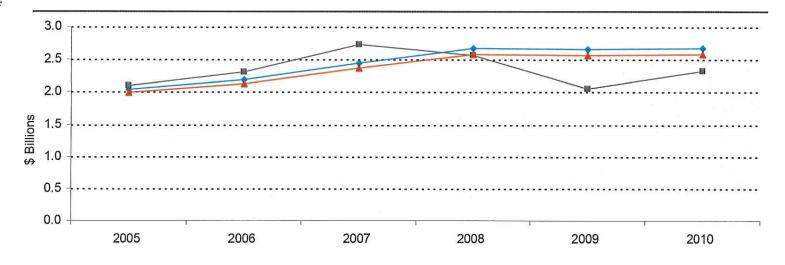
<sup>\*\*</sup> Based on direction from the Plan's staff, this amount has been calculated as the unrecognized (deferred) balance as of June 30, 2009 of the FY 2008/2009 investment loss, adjusted to reflect the immediate recognition of \$44,968,860 due to the 130% market value corridor adjustment from June 30, 2009.

The market value, actuarial value and valuation value of assets are representations of the Plan's financial status. As investment gains and losses are gradually taken into account, the actuarial value of assets tracks the market value of assets, but with less volatility. The valuation value of assets is the actuarial value, excluding the valuation value of health assets and the SRBR. The valuation asset value is significant because the Plan's liabilities are compared to these assets to determine what portion, if any, remains unfunded. Amortization of the unfunded actuarial accrued liability is an important element in determining the contribution requirement.

This chart shows the change in market value, actuarial value and valuation value over the past six years.

CHART 8

Market Value, Actuarial Value and Valuation Value of Assets as of June 30, 2005 –2010



→ Actuarial Value

— Market Value

— Valuation Value

#### C. ACTUARIAL EXPERIENCE

To calculate the required contribution, assumptions are made about future events that affect the amount and timing of benefits to be paid and assets to be accumulated. Each period actual experience is measured against the assumptions. If overall experience is more favorable than anticipated (an actuarial gain), the contribution requirement will decrease from the prior period. On the other hand, the contribution requirement will increase if overall actuarial experience is less favorable than expected (an actuarial loss).

Taking account of experience gains or losses in one period without making a change in assumptions reflects the belief that the single period's experience was a short-term development and that, over the long term, experience will return to the original assumptions. For contribution requirements to remain stable, assumptions should approximate experience.

If assumptions are changed, the contribution requirement is adjusted to take into account a change in experience anticipated for all future years.

The total experience loss was \$159.2 million, a loss of \$149.6 million from investments and a loss of \$9.6 million from all other sources. The loss from all other sources was 0.3% of the actuarial accrued liability. These losses do not include changes in the actuarial accrued liability due to assumption changes. Those changes, along with the experience loss, are further detailed in Section 3, Exhibit G. A discussion of the major components of the actuarial experience is on the following pages.

This chart provides a summary of the actuarial experience during the past year.

#### CHART 9

## Actuarial Experience for the Year Ended June 30, 2010

1.	Net loss from investments on valuation value of assets <sup>(1)</sup>	\$149,621,497
2.	Net loss from other experience <sup>(2)</sup>	<u>9,580,671</u>
3.	Net experience loss: (1) + (2)	\$159,202,168

<sup>(1)</sup> Details in Chart 10

<sup>(2)</sup> Includes contribution loss of \$53,460,718 due to the normal 12-month delay in implementing contribution rates determined in the June 30, 2009 valuation until the 2010/2011 plan year. See Section 3, Exhibit G for details.

## **Investment Rate of Return**

A major component of projected asset growth is the assumed rate of return. The assumed return should represent the expected long-term rate of return, based on the Plan's investment policy. For valuation purposes, the assumed rate of return on the actuarial value of assets was 8.00% (based on June 30, 2009 valuation). The actual rate of return on an actuarial basis from June 30, 2009 to June 30, 2010 was 2.21%.

Since the actual return for the valuation period was less than the assumed return, the Plan experienced an actuarial loss during the year ended June 30, 2010 with regard to its investments.

CHART 10
Investment Experience for Period Ended June 30, 2010 – Market Value, Actuarial Value and Valuation Value of Assets

This chart shows the gain/(loss) due to investment experience.

	Market Value	Actuarial Value	Valuation Value
Year ended June 30, 2010	market falas	A Committee Fund	valuation value
1. Actual return	\$318,302,000	\$58,793,770	\$56,042,338
2. Average value of assets	2,051,650,581	2,664,923,181	2,570,797,941
3. Actual rate of return: (1) ÷ (2)	15.51%	2.21%	2.18%
4. Assumed rate of return	8.00%	8.00%	8.00%
5. Expected return: (2) x (4)	164,132,047	213,193,854	205,663,835
6. Actuarial gain/(loss): (1) – (5)	<u>\$154,169,953</u>	\$(154,400,084)	\$(149,621,497)

Because actuarial planning is long term, it is useful to see how the assumed investment rate of return has followed actual experience over time. The chart below shows the rate of return on a market, actuarial and valuation basis for the last six years. Based upon this experience and future expectations, the Board has adopted a lower investment return assumption of 7.75% for the June 30, 2010 valuation.

CHART 11
Investment Return – Market Value, Actuarial Value and Valuation Value: 2005 – 2010 (dollar amount in thousands)

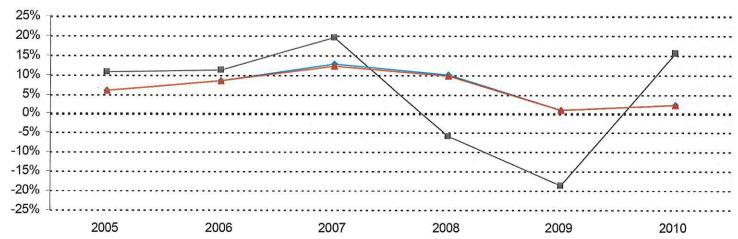
	Market Investmen		Actuarial Value Investment Return		Valuation Value Investment Return	
Year Ended June 30	Amount	Percent	Amount	Percent	Amount	Percent
2005	\$204,224	10.73%	\$115,478	5.98%	\$111,439	5.93%
2006	232,101	11.11%	171,607	8.46%	166,137	8.42%
2007	446,863	19.43%	274,456	12.60%	257,779	12.16%
2008	(159,466)	(5.85)%	242,902	9.98%	230,868	9.79%
2009	(481,764)	(18.76)%	23,466	0.88%	22,668	0.88%
2010	318,302	15.51%	58,794	2.21%	56,042	2.18%
Total	\$560,260		\$886,703		\$844,933	
verage Last 6 Years		4.45%		6.60%		6.48%

Subsection B described the actuarial asset valuation method that gradually takes into account fluctuations in the market value rate of return. The effect of this is to stabilize the actuarial rate of return, which contributes to leveling pension plan costs.

This chart illustrates how this leveling effect has actually worked over the years 2005 - 2010.

CHART 12

Market Value, Actuarial Value and Valuation Value Rates of Return for Years Ended June 30, 2005 - 2010



## Other Experience

There are other differences between the expected and the actual experience that appear when the new valuation is compared with the projections from the previous valuation.

## These include:

- > the extent of turnover among the participants,
- > retirement experience (earlier or later than expected),
- > mortality (more or fewer deaths than expected),
- > the number of disability retirements,

- > salary increases different than assumed, and
- > data adjustments for previously unreported beneficiaries, and
- > contributions (more or less than expected)

The net loss from this other experience for the year ended June 30, 2010 amounted to \$9.6 million, which was 0.3% of the actuarial accrued liability. See Exhibit G for a detailed development of the Unfunded Actuarial Accrued Liability.

#### D. CITY AND MEMBER CONTRIBUTIONS

Employer contributions consist of two components:

Normal Cost

The annual contribution rate that, if paid annually from a member's first year of membership through the year of retirement, would accumulate to the amount necessary to fully fund the member's retirement-related benefits. Accumulation includes annual crediting of interest at the assumed investment earning rate. The contribution rate is expressed as a level percentage of the member's compensation.

Contribution to the Unfunded
Actuarial Accrued Liability (UAAL)

The annual contribution rate that, if paid annually over the UAAL amortization period, would accumulate to the amount necessary to fully fund the UAAL. Accumulation includes annual crediting of interest at the assumed investment earning rate. The contribution (or rate credit in the case of a negative unfunded actuarial accrued liability) is calculated to remain as a level percentage of future active member payroll (including payroll for new members as they enter the Plan) assuming a constant number of active members. In order to remain as a level percentage of payroll, amortization payments (credits) are scheduled to increase at the combined annual inflation and across the board salary increase rate of 4.25%. The Board's funding policy is to amortize the Plan's unfunded actuarial accrued liability as follows: (1) outstanding balance of the unfunded actuarial accrued liability established as of June 30, 2003 amortized over the next 7 years; (2) prior service cost for the February 4, 1996 benefit improvement amortized over the next 7 years; and (3) actuarial experience gains and losses, changes in assumptions, and benefit improvements amortized over 16 years from the date of each such event effective, beginning with the June 30, 2005 valuation.

The recommended employer contributions are provided on Chart 13.

SECTION 2: Valuation Results for the San Jose Police and Fire Department Retirement Plan

CHART 13
Recommended Contribution Rates

	June 30, 2010	Actuarial Valuation	June 30, 2009	Actuarial Valuation
Police Members	Rate	Estimated Annual Amount <sup>(1)</sup>	Rate	Estimated Annual Amount <sup>(1)</sup>
Normal Cost – City	27.69%	\$43,640,896	25.96%	\$40,914,325
Normal Cost – Member	10.38%	16,359,426	9.74%	15,350,752
UAAL - City - Benefit Improvement	2.49%	3,924,371	2.31%	3,640,681
UAAL - City - Other	19.60%	30,890,631	10.50%	16,548,552
UAAL – Member	0.08%	126,084	0.07%	110,324
Police Rate – City	49.78% <sup>(3)</sup>	78,455,898	38.77% <sup>(2)</sup>	61,103,558
Police Rate – Member	10.46%	16,485,510	9.81%	15,461,076
Fire Members				
Normal Cost – City	28.53%	\$26,662,202	26.75%	\$24,998,735
Normal Cost – Member	10.70%	9,999,494	10.03%	9,373,357
UAAL - City - Benefit Improvement	3.41%	3,186,755	3.44%	3,214,791
UAAL – City – Other	19.60%	18,316,830	10.50%	9,812,588
UAAL – Member	0.06%	56,072	0.06%	56,072
Fire Rate – City	51.54% <sup>(3)</sup>	48,165,787	40.69%(2)	38,026,114
Fire Rate – Member	10.76%	10,055,566	10.09%	9,429,429
Police and Fire Combined – City	50.44% <sup>(3)</sup>	\$126,621,685	39.48% <sup>(2)</sup>	\$99,129,672
Police and Fire Combined – Member	10.57%	26,541,076	9.91%	24,890,505

<sup>(1)</sup> Amounts are based on June 30, 2010 projected annual payroll of \$157,605,258 for Police and \$93,453,215 for Fire.

1/1/10 / 11

<sup>(2)</sup> Before applying the charge to reduce the contribution rate by 0.45% of pay for 2010/2011 only.

<sup>(3)</sup> Before applying the charge to reduce the contribution rate by 0.49% of pay for 2011/2012 only.

The contribution rates as of June 30, 2010 are based on all of the data described in the previous sections, the actuarial assumptions described in Section 4, and the Plan provisions adopted at the time of preparation of the Actuarial Valuation. They include all changes affecting future costs, adopted benefit changes, actuarial gains and losses and changes in the actuarial assumptions.

## **Reconciliation of Recommended Contribution**

The chart below details the changes in the recommended contribution from the prior valuation to the current year's valuation.

The chart reconciles the contribution from the prior valuation to the amount determined in this valuation.

CHART 14

Reconciliation of Recommended Employer Contribution from June 30, 2009 to June 30, 2010 (Dollar Amounts in Thousands)

	Contribution Rate	Estimated Annual Dollar Cost (1)
Recommended Average Employer Contribution Rate as of June 30, 2009 <sup>(2)</sup>	39.48%	\$99,130
1. Effect of investment losses (3)	5.00%	\$12,541
2. Effect of contributions less than expected due to one year delay between rate calculation and rate implementation	1.78%	4,481
3. Effect of lower than expected salary increases	(1.20)%	(3,021)
4. Effect of increase in UAAL rate from aggregate payroll increase less than 4.25%	0.78%	1,958
5. Effect of gain due to more deaths than expected among retirees/beneficiaries	(0.15)%	(386)
6. Effect of loss from more service retirements offset by fewer disability retirements (4)	0.19%	478
7. Effect of other experience gains <sup>(5)</sup>	(0.22)%	(542)
8. Effect of reduction in investment return assumption	4.78%	11,983
Subtotal	10,96%	\$27,492
decommended Average Employer Contribution Rate as of June 30, 2010 <sup>(6)</sup>	50.44%	\$126,622

<sup>(1)</sup> Based on June 30, 2010 projected annual payroll of \$251,058,473.

<sup>(2)</sup> Before applying the charge to the SRBR to reduce the contribution rate by 0.45% of pay for 2010/2011 only,

<sup>(3)</sup> Return on valuation assets for the year ended June 30, 2010 was 2.18% and less than the 8.00% assumed in the valuation.

<sup>(4)</sup> These amounts may not fully reflect actual experience because the data required to analyze the number of service retirements that may subsequently be reclassified as disability retirements is not available.

<sup>(5)</sup> Other differences in actual versus expected actuarial experience.

<sup>(6)</sup> Before applying the charge to the SRBR to reduce the contribution rate by 0.49% of pay for 2011/2012 only.

The member contribution rates as of June 30, 2010 have been recalculated based on the membership demographics and all of the actuarial assumptions adopted by the Board for the June 30, 2010 valuation.

Reconciliation of Recommended Contribution Rate The chart below details the changes in the aggregate member contribution rate from the prior valuation to the current year's valuation.

The chart reconciles the member contribution from the prior valuation to the amount determined in this valuation.

# CHART 15 Reconciliation of Recommended Member Contribution from June 30, 2009 to June 30, 2010 (Dollar Amounts in Thousands)

	Contribution Rate	Estimated Annual Dollar Cost*
Recommended Contribution Rate as of June 30, 2009	9.91%	\$24,891
1. Effect of reduction in investment return assumption	0.62%	\$1,557
2. Effect of demographic changes and adjustments on normal cost	0.04%	93
Subtotal	0.66%	\$1,650
Recommended Contribution Rate as of June 30, 2010	10.57%	\$26,541

<sup>\*</sup>Based on June 30, 2010 projected annual payroll of \$251,058,473.

### E. INFORMATION REQUIRED BY GASB

Governmental Accounting Standards Board (GASB) reporting information provides standardized information for comparative purposes of governmental pension plans. This information allows a reader of the financial statements to compare the funding status of one governmental plan to another on relatively equal terms.

Critical information to GASB is the historical comparison of the GASB required contributions to the actual contributions. This comparison demonstrates whether a plan is being funded on an actuarially sound basis and in accordance with the GASB funding requirements. Chart 16 below presents a graphical representation of this information for the Plan

The other critical piece of information regarding the Plan's financial status is the funded ratio. This ratio compares the valuation value of assets to the actuarial accrued liabilities of the plan as calculated under GASB. High ratios indicate a well-funded plan with assets sufficient to pay most benefits. Lower ratios may indicate recent changes to benefit structures, funding of the plan below actuarial requirements, poor asset performance, or a variety of other changes.

The details regarding the calculations of these values and other GASB numbers may be found in Section 4, Exhibits I, II, and III.

These graphs show key GASB factors.

CHART 16
Required Versus Actual Contributions

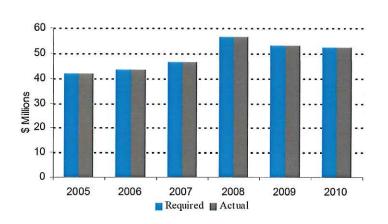
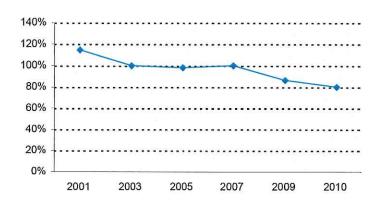


CHART 17 Funded Ratio



SECTION 3: Supplemental Information for the City of San Jose Police and Fire Department Retirement Plan

**EXHIBIT A Table of Plan Coverage** i. Active Members

	Period En	Period Ended June 30		
Category	2010	2009	Change From Prior Valuation	
Police				
Number	1,295	1,382	(6.3)%	
Average age	40.0	40.2	N/A	
Average service	12.7	12.9	N/A	
Projected total compensation	\$157,605,258	\$165,038,514	(4.5)%	
Projected average compensation	\$121,703	\$119,420	1.9%	
Account balances	\$159,112,675	\$161,249,195	(1.3)%	
Total active vested members	848	888	(4.5)%	
Fire				
Number	726	701	3.6%	
Average age	40.5	40.8	N/A	
Average service	11.7	12.1	N/A	
Projected total compensation	\$93,453,215	\$90,184,038	3.6%	
Projected average compensation	\$128,723	\$128,651	0.1%	
Account balances	\$87,243,212	\$82,052,327	6.3%	
Total active vested members	408	403	1.2%	
Combined				
Number	2,021	2,083	(3.0)%	
Average age	40.2	40.4	N/A	
Average service	12.3	12.6	N/A	
Projected total compensation	\$251,058,473	\$255,222,552	(1.6)%	
Projected average compensation	\$124,225	\$122,526	1.4%	
Account balances	\$246,355,887	\$243,301,522	1.3%	
Total active vested members	1,256	1,291	(2.7)%	

SECTION 3: Supplemental Information for the City of San Jose Police and Fire Department Retirement Plan

## **EXHIBIT A**

**Table of Plan Coverage** 

ii. Nonactive Members

	Year Ende			
Category	2010	2009	Change From Prior Valuation	
Vested terminated members	79	74	6.8%	
Retired members				
Number in pay status	752	675	11.4%	
Average age	61.7	61.9	N/A	
Average monthly benefit	\$7,551	\$7,165	5.4%	
Disabled members				
Number in pay status	801	776	3.2%	
Average age	66.7	66.5	N/A	
Average monthly benefit	\$5,710	\$5,398	5.8%	
Beneficiaries				
Number in pay status	257	249	3.2%	
Average age	64.8	64.6	N/A	
Average monthly benefit	\$2,590	\$2,460	5.3%	

SECTION 3: Supplemental Information for the City of San Jose Police and Fire Department Retirement Plan

**EXHIBIT B** 

Members in Active Service and Projected Average Compensation as of June 30, 2010 By Age and Years of Service

i. Police

	Years of Service									
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over
Under 25	15	15								
	\$91,560	\$91,560								
25 - 29	136	129	7				• •			
	99,800	98,873	\$116,890							
30 - 34	181	69	87	25						
	112,663	99,694	119,454	\$124,821						-
35 - 39	299	43	63	164	29					-
	121,111	101,290	120,581	124,736	\$131,158					-
40 - 44	319	12	11	126	143	27				
	126,968	103,194	122,161	124,189	130,203	\$135,330				-
45 - 49	245	3	5	34	78	93	32			-
	131,752	104,772	122,465	123,501	129,102	133,886	\$144,760			-
50 - 54	81		2	9	20	41	9			-
	132,013		117,575	122,141	124,844	134,106	151,491			-
55 - 59	13			1	5	4	3			
	135,927			122,378	130,389	127,204	161,301	* *		-
60 - 64	6	+ -	1		2	2	1			-
	135,420		113,840		122,378	156,120	141,682			-
65 - 69										-
	<del></del>									-
70 & over								••		-
		••								-
Total	1,295	271	176	359	277	167	45			-
	\$121,703	\$99,318	\$119,957	\$124,361	\$129,553	\$134,280	\$147,141			

SECTION 3: Supplemental Information for the City of San Jose Police and Fire Department Retirement Plan

EXHIBIT B

Members in Active Service and Projected Average Compensation as of June 30, 2010

By Age and Years of Service

ii. Fire

	Years of Service									
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over
Under 25	11	11								-
	\$97,950	\$97,950								-
25 - 29	60	58	2							-
	100,880	100,886	\$100,703							-
30 - 34	122	91	28	3						-
	112,085	106,129	130,187	\$123,828						-
35 - 39	133	31	41	54	7					-
	127,747	109,444	129,851	135,361	\$137,743					-
40 - 44	191	21	27	83	50	10				
	132,953	110,409	130,595	134,273	137,575	\$152,589				-
45 - 49	128		7	23	47	41	10			_
	144,136		129,279	135,921	141,191	152,694	\$152,184			-
50 - 54	60		1	5	11	30	13			-
	143,338	*	117,018	136,243	140,027	145,682	145,482		н	-
55 - 59	17				2	8	6	1		-
	152,750				139,204	153,762	157,043	\$145,990		
60 - 64	3			1		1	1			
	156,096			127,526		149,352	191,411			-
65 - 69	1									:
	149,558									\$149,558
70 & over										
										-
Total	726	212	106	169	117	90	30	1		
	\$128,723	\$105,179	\$129,420	\$134,678	\$139,296	\$150,403	\$151,559	\$145,990		\$149,558

SECTION 3: Supplemental Information for the City of San Jose Police and Fire Department Retirement Plan

EXHIBIT C

Reconciliation of Member Data – June 30, 2009 to June 30, 2010

	Active Members	Vested Terminated Members	Disabled Pensioners	Retired Members	Beneficiaries	Total
Number as of June 30, 2009	2,083	74	776	675	249	3,857
New members	86	0	N/A	N/A	N/A	86
Terminations - with vested rights	-9	9	0	0	0	0
Contribution refunds	-10	0	N/A	N/A	N/A	-10
Retirements	-113	-2	N/A	115	N/A	0
New disabilities	-15	0	43	-28	N/A	0
Return to work	2	-2	0	0	N/A	0
Died with or without beneficiary	-2	0	-18	-10	8*	-22
Data adjustments	<u>-1</u>	_0	_0	_0	_0	1
Number as of June 30, 2010	2,021	79	801	752	257	3,910

<sup>\*</sup>Net increase in the number of beneficiaries.

SECTION 3: Supplemental Information for the City of San Jose Police and Fire Department Retirement Plan

# EXHIBIT D Summary Statement of Income and Expenses on an Actuarial Value Basis

	One-Year Period Ended June 30, 2010		Two-Year Period Ended June 30, 2009		
Contribution income:					
Employee contributions	\$30,747,000		\$57,902,000		
Employer contributions	63,599,000		129,981,000		
Net contribution income		\$94,346,000		\$187,883,000	
Investment income		61,814,770		271,823,512	
Total income available for benefits		\$156,160,770		\$459,706,512	
Less benefit payments:					
Retirement benefits	-\$114,604,000		-\$192,067,000		
Healthcare insurance premiums	-20,701,000		-34,013,000		
Death benefits	-6,519,000		-11,449,000		
Refund of contributions	<u>-196,000</u>		-531,000		
Net benefit payments		-\$142,020,000		-\$238,060,000	
Less administrative expenses		-\$3,021,000		-\$5,455,000	
Change in assets held for future benefits		\$11,119,770		\$216,191,512	

SECTION 3: Supplemental Information for the City of San Jose Police and Fire Department Retirement Plan

EXHIBIT E
Summary Statement of Plan Assets

	As of Jun	e 30, 2010	As of June 30, 2009		
Cash equivalents		\$204,362,000		\$224,998,000	
Accounts receivable:					
Employee contributions	\$1,569,000		\$1,366,000		
Employer contributions	3,547,000		4,413,000		
Brokers and others	28,493,000		43,673,000		
Accrued income/other liabilities	8,884,000		8,011,000		
Total accounts receivable		\$42,493,000		\$57,463,000	
Investments:					
Domestic equity securities and cash	\$468,971,000		\$621,868,000		
International equity securities and eash	422,708,000		519,715,000		
Private equity securities	106,298,000		75,905,000		
Fixed income – domestic	954,502,000		418,274,000		
Fixed income – international	25,143,000		40,584,000		
Real estate	189,070,000		182,526,000		
Other investments	(5,199,000)		(71,000)		
Total investments at market value		<u>\$2,161,493,000</u>		\$1,858,801,000	
Total assets		\$2,408,348,000		\$2,141,262,000	
Less accounts payable:					
Payable to brokers	-\$82,330,000		-\$81,349,000		
Net securities lending	-4,316,000		-10,705,000		
Other liabilities	<u>-6,832,000</u>		<u>-4,966,000</u>		
Total accounts payable		-\$93,478,000		-\$97,020,000	
Net assets at market value		<u>\$2,314,870,000</u>		\$2,044,242,000	
Net assets at actuarial value		<u>\$2,668,634,370</u>		<u>\$2,657,514,600</u>	
Net assets at valuation value (pension benefits)		<u>\$2,576,704,563</u>		\$2,569,569,225	

Note: Results may not add due to rounding.

## SECTION 3: Supplemental Information for the City of San Jose Police and Fire Department Retirement Plan

#### **EXHIBIT F**

#### **Actuarial Balance Sheet**

An overview of the Plan's funding is given by an Actuarial Balance Sheet. In this approach, we first determine the amount and timing of all future payments that are anticipated to be made by the Plan for current participants. We then discount these payments at the valuation interest rate to the date of the valuation, thereby determining their present value. We refer to this present value as the "liability" of the Plan.

Second, we determine how this liability will be met. These actuarial "assets" include the net amount of assets already accumulated by the Plan, the present value of future member contributions, the present value of future employer normal cost contributions, and the present value of future employer amortization payments.

## **Actuarial Balance Sheet (Dollar Amounts in Thousands)**

As	sets	
1.	Total valuation assets	\$2,576,705
2.	Present value of future contributions by members (including unfunded actuarial accrued liability of \$1,205)	303,033
3.	Present value of future employer contributions for:	
	a. Entry age normal cost	804,877
	b. Unfunded actuarial accrued liability	652,547
4.	Total current and future assets	\$4,337,162
Li	abilities	
5.	Present value of benefits for retirees and beneficiaries	\$1,885,289
6.	Present value of benefits for terminated vested members	22,642
7.	Present value of benefits for active members	2,429,231
8.	Total liabilities	\$4,337,162

SECTION 3: Supplemental Information for the City of San Jose Police and Fire Department Retirement Plan

# EXHIBIT G Development of Unfunded Actuarial Accrued Liability for the Year Ended June 30, 2010

1.	Unfunded actuarial accrued liability as of June 30, 2009		\$393,913,063
2.	Normal cost from July 1, 2009 to June 30, 2010		88,617,750
3.	Total employer and member contributions from July 1, 2009 to June 30, 2010		(72,412,000)
4.	Interest (includes weighted averages on 2009/2010 contributions)		33,651,408
5.	Expected unfunded actuarial accrued liability <sup>(1)</sup>		\$443,770,221
6.	Changes due to:		
	(a) Loss from investments	\$149,621,497	
	(b) Gain due to lower than expected salary increases <sup>(2)</sup>	(35,814,120)	
	(c) Gain due to more deaths than expected among retirees/beneficiaries <sup>(2)</sup>	(4,573,588)	
	(d) Loss from more service retirements offset by fewer disability retirements <sup>(2),(3)</sup>	5,664,455	
	(e) Other experience gains <sup>(2)</sup>	(9,156,794)	
	(f) Assumption changes	104,239,800	
	(g) Total changes		209,981,250
7.	Unfunded actuarial accrued liability as of June 30, 2010		\$653,751,471

<sup>(</sup>i) Includes a \$53,460,718 increase in the UAAL from contribution loss due to the normal 12-month delay in implementing contribution rates determined in the June 30, 2009 valuation until the 2010/2011 plan year.

<sup>(2)</sup> See Section 2, Chart 9. Losses from other experience in Chart 9 include losses detailed in Items 6(b), 6(c), 6(d) and 6(e), and the \$53,460,718 contribution loss discussed above.

<sup>(3)</sup> This amount may not fully reflect actual experience because the data required to analyze the number of service retirements that may subsequently be reclassified as disability retirements is not available.

#### **EXHIBIT H**

#### **Section 415 Limitations**

Section 415 of the Internal Revenue Code (IRC) specifies the maximum benefits that may be paid to an individual from a defined benefit plan and the maximum amounts that may be allocated each year to an individual's account in a defined contribution plan.

A qualified pension plan may not pay benefits in excess of the Section 415 limits. The ultimate penalty for noncompliance is disqualification: active participants could be taxed on their vested benefits and the IRS may seek to tax the income earned on the plan's assets.

In particular, Section 415(b) of the IRC limits the maximum annual benefit payable at the Normal Retirement Age to a dollar indexed for inflation. That limit is \$195,000 for 2010 and 2011. Normal Retirement Age for these purposes is age 62. These are the limits in simplified terms. They must be adjusted based on each participant's circumstances, for such things as age at retirement, form of benefits chosen and after tax contributions.

Benefits in excess of the limits may be paid through a qualified governmental excess plan that meets the requirements of Section 415(m).

Legal Counsel's review and interpretation of the law and regulations should be sought on any questions in this regard.

Contributions rates determined in this valuation have not been reduced for the Section 415 limitations. Actual limitations will result in gains as they occur.

#### **EXHIBIT I**

#### **Definitions of Pension Terms**

The following list defines certain technical terms for the convenience of the reader:

## Assumptions or Actuarial Assumptions:

The estimates on which the cost of the Plan is calculated including:

- (a) <u>Investment return</u> the rate of investment yield that the Plan will earn over the long-term future;
- (b) <u>Mortality rates</u> the death rates of employees and pensioners; life expectancy is based on these rates;
- (c) Retirement rates the rate or probability of retirement at a given age; and
- (d) <u>Turnover rates</u> the rates at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement.

#### **Normal Cost:**

The amount of contributions required to fund the level cost allocated to the current year of service.

### Actuarial Accrued Liability For Actives:

The equivalent of the accumulated normal costs allocated to the years before the valuation date.

## Actuarial Accrued Liability For Pensioners:

The single sum value of lifetime benefits to existing pensioners. This sum takes account of life expectancies appropriate to the ages of the pensioners and the interest that the sum is expected to earn before it is entirely paid out in benefits.

## Unfunded Actuarial Accrued Liability:

The extent to which the actuarial accrued liability of the Plan exceeds (or is exceeded by) the assets of the Plan. There are many approaches to recognizing the unfunded or overfunded actuarial accrued liability, from meeting the interest accrual only to amortizing it over a specific period of time.

Amortization of the Unfunded (Overfunded) Actuarial Accrued Liability:

Payments made over a period of years equal in value to the Plan's unfunded or

overfunded actuarial accrued liability.

**Investment Return:** 

The rate of earnings of the Plan from its investments, including interest, dividends and capital gain and loss adjustments, computed as a percentage of the average value of the fund. For actuarial purposes, the investment return often reflects a smoothing of the market gains and losses to avoid significant swings in the value of assets from one year to the next.

**SECTION 4:** 

Reporting Information for the City of San Jose Police and Fire Department Retirement Plan

EXHIBIT I
Supplementary Information Required by GASB – Schedule of Employer Contributions (Dollar Amounts in Thousands)

Plan Year Ended June 30	Annual Required Contributions	Actual Contributions	Percentage Contributed
2005	\$41,835	\$41,835	100.0%
2006	43,473	43,473	100.0%
2007	46,625	46,625	100.0%
2008	56,372	56,372	100.0%
2009	53,103	53,103	100.0%
2010	52,315	52,315	100.0%

Source for results prior to June 30, 2007: City of San Jose Comprehensive Annual Financial Report for the plan year ended June 30, 2007.

EXHIBIT II

Supplementary Information Required by GASB – Schedule of Funding Progress (Dollar Amounts in Thousands)

Actuarial Valuation Date	Valuation Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b) - (a)] / (c)
06/30/1993	\$714,592	\$716,123	\$1,531	99.8%	\$98,831	1.5%
06/30/1995	854,414	828,739	(25,675)	103.1%	109,196	(23.5%)
06/30/1997	1,124,294	1,030,168	(94,126)	109.1%	129,850	(72.0%)
06/30/1999	1,440,117	1,276,364	(163,753)	112.8%	144,125	(113.6%)
06/30/2001	1,713,812	1,492,732	(221,080)	114.8%	171,779	(128.7%)
06/30/2003	1,826,287	1,823,200	(3,087)	100.2%	202,222	(1.5%)
06/30/2005	1,983,090	2,027,432	44,342	97.8%	210,018	21.1%
06/30/2007	2,365,790	2,372,386	6,596	99.7%	227,734	2.9%
06/30/2009	2,569,569	2,963,482	393,913	86.7%	255,223	154.3%
06/30/2010	2,576,705	3,230,456	653,751	79.8%	251,058	260.4%

Source for results prior to June 30, 2007: City of San Jose Comprehensive Annual Financial Report for the plan year ended June 30, 2007.

# EXHIBIT III Supplementary Information Required by GASB

Valuation date	June 30, 2010				
Actuarial cost method	Entry Age Normal Actuarial Cost Method				
	Level percent of payroll for total unfunded liability (assuming a 4.25% total payroll increase)				
i i	For unfunded liabilities calculated through the June 30, 2003 actuarial valuation, the amortization period ends June 30, 2017 (7 years). For the prior service cost of the benefit improvement effective July 1, 1996, the amortization period also ends June 30, 2017 (7 years). Gains and losses, changes in actuarial assumptions, and benefit improvements are amortized over separate 16-year periods.				
1 6 1 1	Market Value of Assets less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between the actual market return and the expected return on market value and is recognized over a five-year period. The Actuarial Value of Assets is limited to 80%-120% of the Market Value of Assets. The 80%-120% MVA corridor was temporarily expanded to 70%-130% for the June 30, 2009 valuation. The Actuarial Value of Assets is reduced by the value of the non-valuation reserves and designations.				
Actuarial assumptions:					
Investment rate of return	7.75%				
Inflation rate	3.50%				
Across the board salary increase	0.75%				
Projected salary increases (8+ years of service)	6.00%*				
Cost of living adjustments	3.00% of retirement income				
Plan membership:					
Retired members and beneficiaries receiving bene	fits 1,810				
Terminated members entitled to, but not yet receiv benefits	ving 79				
Active members	<u>2,021</u>				

<sup>\*</sup> Includes inflation at 3.50%, across the board increase of 0.75%, plus merit and longevity increases. See Exhibit IV for salary increases.

#### **EXHIBIT IV**

#### **Actuarial Assumptions and Actuarial Cost Method**

#### **Post-Retirement Mortality Rates:**

Healthy:

RP-2000 Combined Healthy Mortality Table (separate tables for males and females)

with no collar adjustment, projected 10 years. The male table is set back four years.

Disabled:

RP-2000 Combined Healthy Mortality Table for males with no collar adjustment,

projected 10 years, set back one year of age.

#### **Termination Rates Before Retirement:**

Mortality							
	Rate (%)						
Age	Service-C	Service-Connected		e-Connected			
	Male	Female	Male	Female			
25	0.0149	0.0090	0.0149	0.0090			
35	0.0237	0.0213	0.0237	0.0213			
45	0.0522	0.0478	0.0522	0.0478			
55	0.1011	0.1254	0.1011	0.1254			

SECTION 4: Reporting Information for the City of San Jose Police and Fire Department Retirement Plan

Service C	onnected Disability	Rates (%)
Age	Police	Fire
20	0.064	0.064
25	0.093	0.093
30	0.134	0.134
35	0.199	0.199
40	0.314	0.314
45	0.505	0.505
50	2.138	2.138
55	9.075	11.069
60	15,000	20.000
	Turnover	·
Years of Service		Rate (%)
< 1		8.00
1 – 4		1.00
5 – 9		0.50
10 +		0.40
R	etirement Rates (%	)*
		-

20.00

30.00

50.00

50.00

17.00

17.00

17.00

35.00

100,00

50 - 54

55 - 59

60 - 64

65 - 69

70

<sup>100,00</sup> \*Applies to active members eligible for unreduced benefits.

SECTION 4: Reporting Information for the City of San Jose Police and Fire Department Retirement Plan

Retirement Age and Benefit for Deferred Vested Members:	For current deferred vested members, the retirement assumption is age 55. It is assumed that 75% of future deferred vested members will work for a reciprocal employer. For these members, we assume 4.25% compensation increases per annum.				
Future Benefit Accruals:	1.0 year of service per year.				
Inclusion of Deferred Vested Members:	All deferred vested members are included in the valuation.				
Percent Married:	85%				
Age of Spouse:	Female (or male) spouses are 3 years younger (or older) than their spouses.				
Net Investment Return:	7.75%, net of administration and investment expenses.				
Consumer Price Index:	Increase of 3.50% per year.				
Salary Increases:					
	Annual Rate of Compensation Increase				
	Inflation: 3.50% per year; plus 0.75% real across-the-board salary increase; plus the following Merit and Promotion increases				

based on completed years of service.

Years of Service	Annual Increase		
0-5	5.50%		
6 - 7	2.50		
8 +	1.75		

SECTION 4: Reporting Information for the City of San Jose Police and Fire Department Retirement Plan

Actuarial Value of Assets:	The Actuarial Value of Assets is determined by phasing in any difference between actual and expected return on market value of assets over 5 years.
Actuarial Cost Method:	Entry Age Normal Actuarial Cost Method. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis and are based on costs allocated as a level percentage of compensation.
Changes in Assumptions:	Based on the June 30, 2010 Review of Economic Assumptions, the following actuarial assumption was changed. Previously, this assumption was as follows:
Net Investment Return:	8.00%, net of administration and investment expenses.

EXHIBIT V	
Summary of Plan Provisions	
	r provisions of the City of San Jose Police and Fire Department Retirement Plan included in be, nor should it be interpreted as, a complete statement of all plan provisions.
Membership Eligibility:	Any person employed as a police officer or fire fighter in the City of San Jose, except the following:
	> Independent contractors
	> Person in city service for training/educational purposes
	> Auxiliary or voluntary police officers or fire fighters
	> Part-time or non-salaried employees
	> Receiving credit in any other retirement or pension system
Final Compensation (FAS) for Benefit Determination:	The highest 12 consecutive months of compensation earnable, not to exceed 108% of compensation paid to the member during the 12 months immediately preceding the last 12 months of service. FAS excludes overtime pay and expense allowances.
Service:	Years of service (Yrs).
Service Retirement Eligibility:	
Normal Retirement	Age 55 with 20 years of service, or age 50 with 25 years of service, or age 70 with no service requirement, or 30 years of service regardless of age.
Early Retirement	Age 50 with 20 years of service.

Benefit Formula:

Police

2.5% of FAS per year of service up to 20 years of service, and 4.0% of FAS per year

of service over 20 years, not to exceed 90% of FAS.

Fire

Less than 20 years of service: 2.5% of FAS per year of service.

20 or more years of service:

3.0% of FAS per year of service, not to exceed 90% of FAS.

For early retirement for Police and Fire groups, the Service Retirement Benefit accrued to date of termination, then reduced pursuant to Municipal Code 3.36.810.

**Deferred Vested Benefit:** 

Eligibility

Age 55 with 10 years of service and 20 years have elapsed from date of membership.

Benefit

The Service Retirement Benefit accrued to date of termination.

Service Connected Disability:

Eligibility

No age or service requirements.

Benefit Formula

Police

50% of FAS for the first 20 years of service, and 4.0% of FAS per year of service over

20 years, not to exceed 90% of FAS.

Fire

Less than 20 years of service:

50% of FAS.

20 or more years of service:

3.0% of FAS per year of service, not to exceed 90% of FAS.

#### **Non-Service Connected Death:**

#### Less than 2 Years of Service

Eligibility

Death prior to 2 years of service.

Benefit

The greater of return of contributions, plus interest, or \$1,000.

#### Disabled Retirees or Members Ineligible for Service Retirement

Eligibility

Death after 2 years of service, regardless of age.

Benefit

Spouse receives 24% of FAS for the first 2 years of service plus 0.75% of FAS for each successive year, not to exceed 37.5% of FAS.

If a member has eligible dependent children (under age 18, or age 22 if a full time student), the benefits are as follows:

1 child

25% of FAS

2 children

37.5% of FAS

3 or more children

50% of FAS

The total benefits payable to a family shall not exceed 75% of FAS.

If a member does not have a spouse nor dependent children at death, a lump sum equal to the greater of the member's contributions with interest or \$1,000 is paid to the estate.

SECTION 4: Reporting Information for the City of San Jose Police and Fire Department Retirement Plan

Eligibility	Death after 2 years of service and eligible for Service Retirement				
Benefit	Spouse receives the greater of 37.5% of FAS or 50% of the member's Service Retirement Benefit, with a maximum continuance benefit of 42.5% of FAS for Police and 45% of FAS for Fire.				
	Eligible dependent children will receive the same benefit as defined for Disabled Retirees or Members Ineligible for Service Retirement. The total benefits payable to a family shall not exceed 75% of FAS.				
Service-Connected Death:					
Eligibility	Death in the course of employment with the City.				
Benefit	Spouse receives the greater of 37.5% of FAS or 50% of the member's Service Retirement Benefit, with a maximum continuance benefit of 42.5% of FAS for Police and 45% of FAS for Fire.				
	Eligible dependent children will receive 25% of FAS per child. The total benefits payable to a family shall not exceed 75% of FAS.				
Refund of Contributions:	Refund of accumulated employee contributions plus 2% interest per annum.				
Post-Retirement					
Cost-of-Living Benefits:	The increase in retirement allowance is subject to a maximum of 3% per year.				
Member Contribution Rate:	Equals 3/11 of the Normal Cost plus the amortization payment on the prior service cost for a February 4, 1996 benefit improvement. For Police members, there is also an additional amortization payment for the member contributions not made between July 2006 and December 2006.				
City Contribution Rate:	Equals 8/11 of the Normal Cost plus any amortization payments or credits on the unfunded liability.				

# Supplemental Retiree Benefit Reserve (SRBR): Annual Transfer 10% of earnings in excess of the actuarially assumed rate on the actuarial value of assets. Benefit Interest on the principal equal to the rate of earnings on the actuarial value of assets (but not less than 0) distributed by the Board to retirees and beneficiaries to provide supplemental benefits. Charge to Principal If the City's contribution rate increases due to poor investment returns, 10% of the increased contribution for a one-year period is deducted from the SRBR principal. However, this deduction cannot be more than 5% of the total SRBR principal.

**NOTE:** The summary of major plan provisions is designed to outline principal plan benefits as interpreted for purposes of the actuarial valuation. If the Retirement Plan should find the plan summary not in accordance with the actual provisions, the Retirement Plan should alert the actuary so they can both be sure the proper provisions are

APPENDIX A
Unfunded Actuarial Accrued Liability (UAAL) Amortization Schedule as of June 30, 2010

Date Established	Description	Initial Amount	Outstanding Balance	Years Remaining	Payment
June 30, 1996	2/4/1996 benefit improvement (paid by all members)	N/A	\$971,292	7	\$159,173
June 30, 2003	UAAL	N/A	(3,272,272)	7	(536,251)
June 30, 2005	Experience loss	\$47,304,922	43,196,811	11	4,796,667
June 30, 2005	Benefit improvement (Police)	36,542,591	35,382,951 <sup>(1)</sup>	11 <sup>(3)</sup>	3,928,999
December 17, 2006	Rate increase delay (paid by Police members only)	258,900	233,210	11.5 <sup>(4)</sup>	25,034
June 30, 2007	Benefit improvement (Fire)	34,110,693 <sup>(2)</sup>	32,868,117 <sup>(2)</sup>	13 <sup>(5)</sup>	3,184,994
June 30, 2007	Experience gain	(142,368,305)	(137,182,149)	13	(13,293,257)
June 30, 2007	Assumption change	33,097,752	31,892,076	13	3,090,413
June 30, 2009	Experience loss	243,523,562	241,860,577	15	20,940,696
June 30, 2009	Assumption change	145,351,473	144,358,890	15	12,498,836
June 30, 2010	Experience loss	159,202,168	159,202,168	16	13,119,215
June 30, 2010	Assumption change	104,239,800	104,239,800	16	8,589,986
	_		\$653,751,471		\$56,504,505

<sup>(1)</sup> The outstanding balance calculated in the June 30, 2007 valuation reflected an adjustment to the initial amount, based on payroll for Police members as of June 30, 2007. The adjustment was made in order to maintain the same UAAL contribution rate determined in the original Police benefit improvement study. The initial amount was further adjusted at June 30, 2007 to reflect the delay in the payment of the employer contribution rate until December 17, 2006. The outstanding balance as of June 30, 2010 reflects these two adjustments to the initial amount that was made in the June 30, 2007 valuation.

<sup>(2)</sup> The initial amount shown includes an adjustment made in the June 30, 2007 valuation to the amount originally determined in the Fire benefit improvement study, based on payroll for Fire members as of June 30, 2007. This adjustment was made in order to maintain the same UAAL contribution rate determined in the original Fire benefit improvement study. The outstanding balance as of June 30, 2010 reflects the adjustment to the initial amount that was made in the June 30, 2007 valuation.

<sup>(3)</sup> The UAAL associated with the Police benefit improvement is amortized over 16 years effective July 1, 2006. There are 11 years remaining in the amortization period as of July 1, 2011.

<sup>(4)</sup> The rate increase as a result of the Police benefit improvement was not paid by the members until December 17, 2006. There are about 11.5 years remaining in the amortization period as of July 1, 2011 for the member contribution shortfall. This payment would end on December 17, 2022.

<sup>(5)</sup> The UAAL associated with the Fire benefit improvement is amortized over 16 years effective July 1, 2008. There are 13 years remaining in the amortization period as of July 1, 2011.

SECTION 4: Reporting Information for the City of San Jose Police and Fire Department Retirement Plan

# APPENDIX B Determination of Charge to SRBR

1.	1. Calculation of investment gain/(loss) from July 1, 2009 to June 30, 2010		2.	Calculation of charge to SRBR	
a.	Actuarial value of assets for pension (net of the assets for the SRBR program) at June 30, 2009	\$2,569,569,225	a.	Increase in UAAL due to investment loss for the period July 1, 2009 to June 30, 2010	\$149,621,497
b.	Contributions for 12 months ending June 30, 2010	72,412,000	ъ.	Amortization factor	8.241%
c.	Benefits for 12 months ending June 30, 2010	(121,319,000)	c.	June 30, 2010 projected payroll	251,058,473
d.	Expected investment income for 12 months ending June 30, 2010 (8% * (1.a. + weighted average of 1.b. + 1.c. / 2))	205,663,835	d.	Increase in City contribution rate calculated in the June 30, 2010 valuation due to investment loss only (2.a. x 2.b. / 2.c.)	4.91%*
e.	Expected actuarial value of assets for pension (net of the assets for the SRBR program) as June 30, 2010 (1.a. + 1.b. + 1.c. + 1.d.)	2,726,326,060	e.	Projected covered payroll for 2011/2012 (2.e. x 1.0425)	261,728,458
f.	Actual actuarial value of assets for pension (net of the assets for the SRBR program) at June 30, 2010	2,576,704,563	f.	Projected dollar amount of the City's increased contribution for 2011/2012 due to investment loss only (2.d x 2.e.)	12,850,867
g.	Investment gain/(loss) for the period July 1, 2009 to June 30, 2010 (1.f 1.c.)	(149,621,497)	g.	SRBR principal as of June 30, 2010	33,343,364
			h.	Charge to SRBR on July 1, 2011 (minimum of 2.f. x 10% and 2.g. x 5%)	1,285,087
			i.	Decrease in the City's contribution rate for 2011/2012 only (2.h. / 2.e.)	0.49%

<sup>\*</sup> This rate is less than the rate in item 1 on page 15, as that rate increase was calculated using the old investment return assumption of 8.00% and before reflecting the new investment return assumption of 7.75% adopted by the Board for the June 30, 2010 valuation. (see item 8 on page 15).

#### APPENDIX C

Possible Change in the Current Actuarial Procedure Used in Determining the City's Annual Required Contribution (ARC)

Under the current actuarial procedure used by the Plan, the City's ARC is developed by taking the total of the dollar Normal Cost and the dollar amount required to amortize the UAAL for the year that starts immediately following the date of the valuation and expressing that as a percent of projected payroll over the same period.

As we have indicated in the schedules of reconciliation of the UAAL (see Exhibits G) and the City contribution rate (see Chart 14), when the Plan's contribution rates are expected to go up in each of the next several valuations to recognize prior deferred investment losses under the asset smoothing method, the Plan is expected to incur additional contribution losses due to the one year delay between the rate calculation and the rate implementation.

Another factor that may give rise to additional contribution losses is when the City's actual payroll during the fiscal year of rate implementation is less than that anticipated by the valuation. We had several discussions with the Plan's staff on methodologies that may be considered by the Board in managing this source of contribution loss. In particular, to address the possibility of declining City payroll, the Plan's staff has asked us to comment on a possible change in the current procedure which would set ARC for 2011/2012 based on the greater of:

- 1. Contribution rate determined in the June 30, 2010 valuation times the actual payroll for the 2011/2012 fiscal year, or
- 2. Dollar amount of annual required contributions calculated in the June 30, 2010 valuation based on dollar Normal Cost and dollar amount required to amortize the UAAL for the year that stars immediately following the date of the valuation (i.e., 2010/2011).

We believe that proposal would mitigate some of the underpayment of UAAL contributions when there is a decline in the City's payroll. The higher dollar contributions that would be collected on the Normal Cost even when there is a decline in the City's payroll would also be available as an additional payment towards the UAAL. As the proposed procedure is relatively easy to administer, especially if the City continues with its practice from the last several years to prepay its contributions for the fiscal year, we are in agreement with the Plan's staff that it is one of the steps that may be considered by the Board in controlling the growth of the UAAL.

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