

Federated City Employees'
Retirement System

June 30, 2012 Actuarial Valuation

**Produced by Cheiron** 

December 2012

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#### LETTER OF TRANSMITTAL

December 13, 2012

Retirement Board of the Federated City Employees' Retirement System 1737 North 1<sup>st</sup> Street, Suite 580 San Jose, California 95112

#### Dear Members of the Board:

The purpose of this report is to present the June 30, 2012 actuarial valuation of the City of San Jose Federated City Employees' Retirement System ("System"). 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.

On June 5, 2012, voters approved Measure B which would make a number of changes to the System. We understand that the City does not intend to implement most of the changes until a court rules on the legality of the changes. Consequently, the provisions of Measure B are not reflected in this valuation unless explicitly disclosed.

The table below presents the key results of the 2012 valuation compared to the 2011 valuation. It also shows 2012 valuation results both assuming the Supplemental Retirement Benefit Reserve (SRBR) continues and that it is eliminated pursuant to the recently enacted City ordinance. Except where otherwise noted, the results in this report assume the SRBR continues.

Summary	Summary of Key Valuation Results											
,	Without SRBR	With SRBR										
	6/30/2012	6/30/2012	6/30/2011									
Discount Rate	7.50%	7.50%	7.50%									
Actuarial Liability (AL)	\$ 2,841,000	\$ 2,884,109	\$ 2,770,227									
Actuarial Value of Assets (AVA)	1,762,973	1,762,973	1,788,660									
Unfunded Actuarial Liability (UAL)	\$ 1,078,027	\$ 1,121,136	\$ 981,568									
Funding Ratio - AVA	62%	61%	65%									
Market Value of Assets (MVA)	\$ 1,649,249	\$ 1,649,249	\$ 1,760,617									
Funding Ratio - MVA	58%	57%	64%									

Amounts in thousands

As shown in the table above, if the SRBR is eliminated, the Actuarial Liability and the Unfunded Actuarial Liability would decrease by \$43 million, the balance of the SRBR as of June 30, 2012. The SRBR is currently included as part of the System's assets for valuation



purposes. If eliminated, the amount in the SRBR would be transferred to the General Reserve, but there would be no change to the assets used in the actuarial valuation.

In addition to the reduction in the UAL, the City's contribution rate would also be reduced for the elimination of the 0.35% of assets that is added to the City's normal cost for the expected annual transfer to the SRBR. The table below shows a summary of the contribution rates for the fiscal years ending in 2013 and 2014. For 2014, rates are shown both if the SRBR continues and if it is eliminated.

Summary of Key Valuation Results (continued)										
	With	out SRBR	W	ith SRBR						
Fiscal Year Ending		6/30/2014		6/30/2014		6/30/2013				
Tier 1										
Member Contribution Rate		5.97%		5.97%		5.74%				
City Contribution Rate		50.85%		55.33%		44.45%				
City Contribution Amount										
- if paid at beginning of the year	\$	100,671	\$	109,544	\$	102,972				
- if paid throughout the year	\$	104,378	\$	113,577	\$	106,763				
Projected Payroll	\$	205,277	\$	\$ 205,277		240,187				
Tier 2										
Member Contribution Rate		6.68%		6.68%		6.68%				
City Contribution Rate		6.68%		6.68%		6.68% *				
Est. City Contribution Amount										
- if paid at beginning of the year	\$	1,799	\$	1,799		N/A				
- if paid throughout the year	\$	1,865	\$	1,865		N/A				
Projected Payroll	\$	27,922	\$	27,922		N/A				
Total City										
Estimated Aggregate Rate		45.56%		49.50%		N/A				
Estimated Aggregate Amount										
- if paid at beginning of the year	\$	102,470	\$	111,343	\$	102,972				
- if paid throughout the year	\$	106,244	\$ 115,443 \$ 106,763							
Projected Payroll	\$	233,200	\$	233,200	\$	240,187				

Amounts in thousands

The City Council adopted final ordinances to implement a new Tier of pension benefits, for members hired on or after September 30, 2012, with equal cost-sharing between members and the City. The Board adopted member and City contribution rates for Tier 2 on August 16, 2012 for the fiscal year ending June 30, 2013. As of the valuation date, there are no Tier 2



<sup>\*</sup> In addition to this amount, 28.94% of FYE 2013 Tier 2 payroll is contributed toward the Tier 1 UAL

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members, so we have continued the same contribution rates for Tier 2 for the fiscal year ending June 30, 2014. A summary of plan benefits for Tier 2 can be found in Appendix C of this report and more detail on the development of Tier 2 contribution rates is provided in our August 16, 2012 presentation.

A summary of the key results of the June 30, 2012 valuation is as follows:

- *Unfunded Actuarial Liability (UAL)/Surplus:* The UAL increased by approximately \$140 million primarily due to the investment loss of the System (\$119 million).
- Funding Ratio: The ratio of the actuarial value of assets to the actuarial liability decreased since the last valuation from 65% to 61%. 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 the actuarial liability decreased from 64% to 57%.

#### • *Member Contribution Rate:*

*Tier 1:* The member contribution rate is a proportion (3/11ths) of the service normal cost rate (including administrative expenses). The Member contribution rate increased from 5.74% to 5.97% due to demographic experience.

*Tier 2:* The member contribution rate is 50% of the total cost of Tier 2 pension benefits. Since there are no Tier 2 members as of June 30, 2012, the Board approved the continuation of the member rate of 6.68% set for FYE 2013 and FYE 2014 as well.

#### • City Contributions:

*Tier 1:* City contributions are a proportion (8/11ths) of the service normal cost rate (including administrative expenses) plus the reciprocity normal cost rate plus an amortization payment on the UAL. City contributions as a percent of payroll increased from 44.45% of payroll to 55.33% of Tier 1 payroll. The contribution amount if paid on July 1, 2014 increased from \$103.0 million to \$109.5 million. The large increase in the contribution rate is mainly due to a decreasing Tier 1 payroll which causes the UAL rate to increase. The expected Tier 1 payroll decreased 15%, from \$240 million for FYE 2013 before Tier 2 was created to \$205 million for FYE 2014. However, the normal cost is paid on the lower Tier 1 payroll so the dollar amount is less.

If the SRBR is eliminated, the contribution rate for Tier 1 would decrease from 55.33% to 50.85% and the contribution amount, if paid on July 1, 2013, would decrease from \$109.5 million to 100.7 million.

The policy for determining the City's ARC for Tier 1 is the greater of: (1) the dollar amount determined in the actuarial valuation or (2) the percentage of payroll determined in the actuarial valuation multiplied by actual payroll throughout the year.



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> Tier 2: The city contribution rate is 50% of the total contribution rate for Tier 2. The City contribution rate is 6.68% of Tier 2 payroll. The city contribution for Tier 2 paid throughout the year is \$1.8 million.

> At its November 15, 2012 meeting, the Board voted that the City's contribution for Tier 2 will be the contribution rate determined in the actuarial valuation multiplied by actual payroll throughout the year in order to maintain the equal cost-sharing between members and the City.

More details on the plan experience for the past year, including the changes listed above and their impact on these June 30, 2012 valuation results can be found in our report which follows.

In preparing our report, we relied on information (some oral and some written) supplied by the City of San Jose Department of Retirement Services. 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 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 for the System for the purposes described herein and for the use by the plan auditor in 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.

Sincerely, Cheiron

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

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

Willie R. Hall whe

**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 Federated City Employees' Retirement System,
- Past and expected trends in the financial condition of the System,
- Member and City contribution rates and amounts for the Fiscal Year Ending June 30, 2014, and
- Information required by the Governmental Accounting Standards Board (GASB).

In this Section, we present a summary of the principal valuation results. This includes the basis upon which the June 30, 2012 valuation was completed and an examination of the current financial condition of the System. In addition, we present a review of the key historical trends followed by the projected financial outlook for the System.

#### A. Valuation Basis

The System's funding policy sets City contributions for Tier 1 equal to the sum of:

- A portion (8/11<sup>th</sup>) of the Service Normal Rate (Regular Current Service Rate) including administrative expenses.
- The Reciprocity Rate, which is the prefunding of the liability for reciprocal benefits with certain other California public pension plans.
- The SRBR Rate, which is the annual amount expected to be transferred to the SRBR.
- The Deficiency Rate, which is the amortization of the funding deficiency.
- The Golden Handshake Rate, which is the cost for funding the additional benefits granted in the past to certain retiring employees.

The unfunded actuarial liability as of June 30, 2009 (including the Golden Handshake) is amortized over 30 years from that date, and any subsequent gains or losses or assumption changes are amortized as part of the Deficiency Rate over 20 years from the valuation in which they are first recognized. The amortizations are a level percent of expected Tier 1 and Tier 2 payroll.

For Tier 2, City contributions equal 50% of the total contribution rate for Tier 2.

Member contributions equal  $3/11^{th}$  of the Service Normal Rate for Tier 1 and 50% of the total contribution rate for Tier 2.



#### SECTION I BOARD SUMMARY

#### **B.** Current Financial Condition

The following pages provide a summary of the key results of the June 30, 2012 valuation and how they compare to the results from the June 30, 2011 valuation.

### 1. Membership:

As shown in Table I-1 below, total membership in Federated increased slightly from 2011 to 2012, but the changes between categories of membership were more significant. Active membership decreased 6.0%, terminated vested membership increased 11.3%, and retiree membership (including beneficiaries) increased 5.1%. Total payroll decreased by 1.3%, and the average pay per active member increased by 5.0%.

	Table I-1										
<b>Total Membership Counts</b>											
Item	June 30, 2012	June 30, 2011	% Change								
Active	3,076	3,274	(6.0%)								
Terminated Vesteds	967	869	11.3%								
Retirees	2,936	2,769	6.0%								
Beneficiaries	459	449	2.2%								
Disabled	207	210	(1.4%)								
Total City Members	7,645	7,571	1.0%								
Active Member Payroll	\$ 225,859,144	\$ 228,936,398	(1.3%)								
Average Pay per Active Member	73,426	69,926	5.0%								

#### 2. Assets and Liabilities:

Table I-2 on the following page presents a comparison between the June 30, 2012 and June 30, 2011 assets, liabilities, UAL, and funding ratios.

The key results shown in Table I-2 indicate that the total actuarial liability increased 4.1% and the market value of assets decreased by 6.3%. The System employs an asset smoothing method which dampens the impact of investment market volatility on City contribution rates. For this year the smoothed value of assets (called the actuarial value of assets) decreased by 1.4%. The ratio of the actuarial value of assets to the market value of assets increased from 102% to 107%, indicating that the deferred losses are now slightly greater than the deferred gains. Finally, the UAL increased from \$981.6 million



### SECTION I BOARD SUMMARY

to \$1,121.1 million, resulting in a decrease in the funding ratio from 64.6% to 61.1%. Based on the market value of assets, the funding ratio decreased from 63.6% to 57.2%.

	,	Table I-2										
Assets & Liabilities												
Item (EAN)	Ju	ne 30, 2012	Ju	ne 30, 2011	% Change							
Actives	\$	839,502	\$	878,864	(4.5%)							
Terminated Vesteds		122,674		111,225	10.3%							
Retirees		1,707,675		1,570,604	8.7%							
Beneficiaries		99,309		93,751	5.9%							
Disabled		71,840		72,674	(1.1%)							
SRBR Balance		43,109		43,109	(0.0%)							
Total Actuarial Liability		2,884,109		2,770,227	4.1%							
Market Value of Assets	\$	1,649,249	\$	1,760,617	(6.3%)							
Actuarial Value of Assets	\$	1,762,973	\$	1,788,660	(1.4%)							
Unfunded Actuarial Liability	\$	1,121,136	\$	981,568	14.2%							
Funding Ratio - Market Value		57.2%		63.6%	(6.4%)							
Funding Ratio - Actuarial Value		61.1%		64.6%	(3.5%)							



### SECTION I BOARD SUMMARY

### 3. Contributions:

Table I-3 shows the components of the contribution rates for both Tier 1 and Tier 2. In Section IV of this report, we provide more detail on the development of these contribution rates.

	Table I-3 Components of Contribution Rates												
	FYE 2014 FYE 2013												
		FYE 2014			YE 2013								
	Member	City	Total	Member	City	Total							
Tier 1													
Normal Cost	5.78%	15.61%	21.39%	5.55%	15.00%	20.55%							
Administrative Expenses	0.19%	0.51%	0.70%	0.19%	0.51%	0.70%							
SRBR	0.00%	2.81%	2.81%	0.00%	2.57%	2.57%							
UAL	0.00%	36.40%	36.40%	0.00%	26.37%	26.37%							
Total	5.97%	55.33%	61.30%	5.74%	44.45%	50.19%							
Tier 2													
Normal Cost	6.33%	6.33%	12.66%	6.33%	6.33%	12.66%							
Administrative Expenses	0.35%	0.35%	0.70%	0.35%	0.35%	0.70%							
SRBR	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%							
UAL	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%							
Total	6.68%	6.68%	13.36%	6.68%	6.68%	13.36%							



### SECTION I BOARD SUMMARY

Table I-4 shows sources for the change in the Tier 1 net contribution rates and the City's Tier 1 contribution amount from the rates and amount calculated in the prior report. The increase in the Member contribution rate is due to demographic experience. The increase in the City's contribution rate is primarily due to investment losses and the decreased payroll over which the UAL is spread. Payroll for Tier 1 is expected to decrease over time as members leave the System and new entrants after September 30, 2012 join Tier 2.

Table I-4 City Contribution Reconciliation for Tier 1										
City										
Item	Member	Normal	UAL	Total	Total City \$					
1. FYE 2013 Tier 1 Contribution Rate	5.74%	18.08%	26.37%	44.45%	\$ 103.0					
2. Change due to investment loss	0.00%	0.00%	3.83%	3.83%	9.2					
3. Change due to SRBR	0.00%	(0.24%)	(0.20%)	(0.44%)	(1.1)					
4. Change due to other experience	0.23%	0.61%	0.13%	0.74%	1.5					
5. Change due to decreasing payroll	0.00%	0.48%	6.27%	6.75%	(3.0)					
6. FYE 2014 Tier 1 Contribution Rate	5.97%	18.93%	36.40%	55.33%	\$ 109.5					



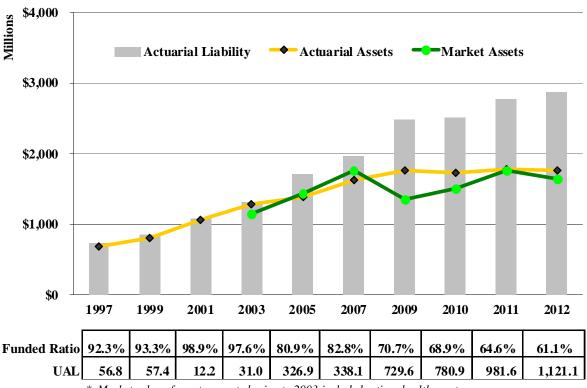
#### SECTION I BOARD SUMMARY

#### C. Historical Trends

Despite the fact that most of the attention given to the valuation is with respect to the most recently computed unfunded actuarial liability, funding ratio, and the System's contribution rates, it is important to remember that each valuation is merely a snapshot of the long-term progress of a pension fund. It is more important to judge a current year's valuation result relative to historical trends, as well as trends expected into the future. In the following charts, we present the historical trends based on prior actuarial valuations. Please note that prior to June 30, 2009, valuations were performed every other year. Beginning June 30, 2009, valuations are performed every year.

The chart below shows the historical trends for assets (both market and smoothed) versus the actuarial liability, and also shows the progress of the funding ratios since 1997.

### Federated Assets and Liabilities 1997-2012



<sup>\*</sup> Market value of assets reported prior to 2003 included retiree health assets

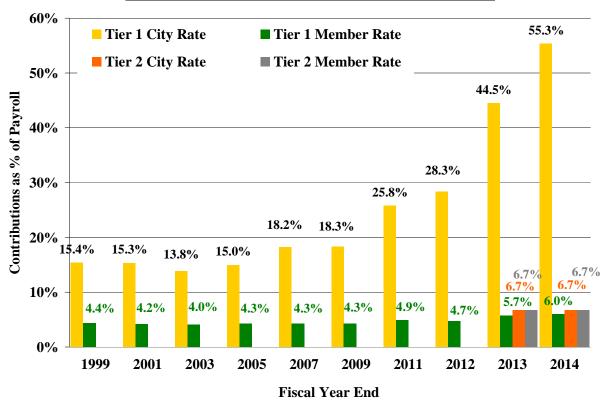
The chart above indicates that from 1997 to 2001, the System's funding ratio improved, but was still in deficit status. Then, from 2001 to 2012 (with the exception of 2007), the funding ratio steadily declined. The decline is due primarily to investment experience.



#### SECTION I BOARD SUMMARY

The chart below shows the historical trends for the System's contribution rates since the Fiscal Year Ending June 30, 1999. Beginning with the Fiscal Year Ending 2013, contribution rates are shown for Tier 1 and Tier 2. Tier 2 rates are effective September 30, 2013. All information shown prior to the Fiscal Year Ending June 30, 2012 was calculated by the prior actuary. Also, please note that the Fiscal Year Ending 2011 rates shown do not reflect the phase-in of contribution rates that was adopted for Members. The phased-in rate was 4.54%.

### **Employer and Member Contribution Rates 1999-2014**



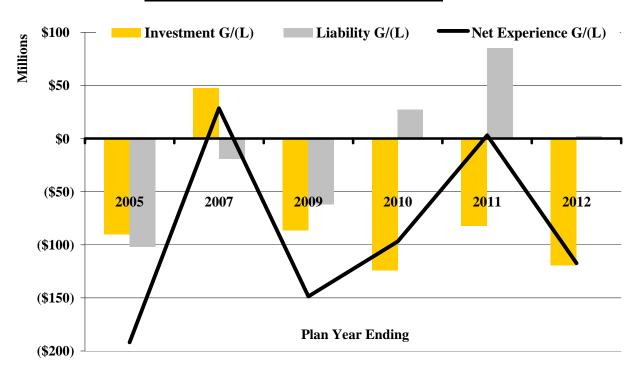
The key information in this chart is the increase in the City contribution rate since 2003 and particularly since 2009. Rates have increased primarily due to investment losses, assumption changes, and reductions in payroll that increased the UAL rate. The increase in Tier 1 contribution rate scheduled for the Fiscal Year Ending in 2014 is primarily due to investment losses and the reduction in expected Tier 1 payroll due to the creation of Tier 2.

The following chart represents the pattern of the System's actuarial 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.



### SECTION I BOARD SUMMARY

#### SJFCERS Historical Gain/(Loss) 2005-2012



The key insights from this chart are:

- Investment losses (gold bars) in 2005 are partially offset by investment gains from 2006 and 2007. From 2008 to 2012, there were additional investment losses. Since the actuarial value of assets only recognizes a portion of the recent market losses, additional investment losses and gains on the actuarial value of assets are expected over the four years as the recent market returns are fully recognized.
- On the liability side, half of the valuations showed actuarial losses. The actuarial gains in 2010 and 2011 are primarily due to actual salaries being less than expected. The small actuarial gain in 2012 indicates that the demographic assumptions adopted for the June 30, 2011 valuation more accurately reflect current demographic experience.



### SECTION I BOARD SUMMARY

### **D.** Projected Financial Trends

Our analysis of projected financial trends is an important part of this valuation. In this Section, the implications of the June 30, 2012 valuation results on the future outlook for the System in terms of benefit security (assets over liabilities) and expected future contribution rates are illustrated.

In the charts that follow, we project assets and liabilities, the pay down of UAL, and the City and Member contributions on two different bases:

- 1) Assuming all assumptions are met including a 7.5% return for 2012-13 and each and every year that follows, and
- 2) Assuming all assumptions are met except for the investment 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 7.5% return. We do this in order to illustrate the impact of volatility because the System's investment returns will never be level each and every year.

FYE Return	 	2015 3.0%	 <u>2017</u> -4.0%	 2019 13.0%	 <u>2021</u> -7.0%	2022 16.0%
				<u>2029</u> -16.0%		2032 -1.0%

Please note that the investment returns shown above were selected solely to illustrate the impact of investment volatility on the pattern of funded status and City and member contribution rates. 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.



#### SECTION I BOARD SUMMARY

### **Projection Set 1: Assets and Liabilities**

The chart below shows asset measures (green and orange lines) compared to the actuarial liability (gray bars). At the top of each chart is the progression of funding ratios. The key insight from this chart is the steady projected improvement in funded ratios in the first chart, and how varying investment returns can impact the progression of funding ratios.

Chart 1: Projection of Assets and Liabilities, 7.5% return each year

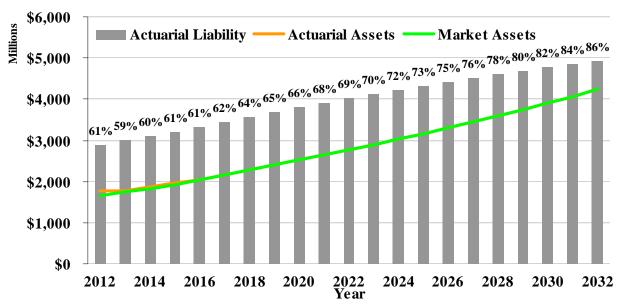
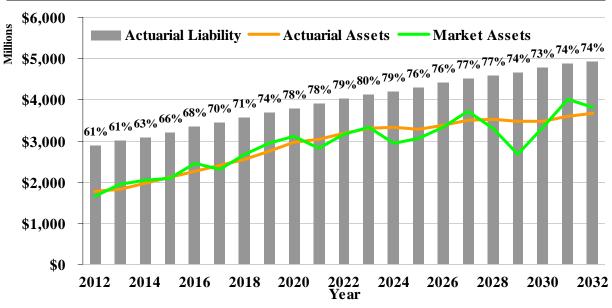


Chart 2: Projection of Assets and Liabilities, varying returns averaging 7.5% over time





#### SECTION I BOARD SUMMARY

### **Projection Set 2: Projected Employer Contribution Rate**

As shown in Chart 1 below, City contribution rates are expected to increase over the next two years as investment losses are recognized, and then stabilize for a few years before gradually declining as Tier 2 becomes more significant. These contribution rates are slightly higher than those projected in the prior valuation (red line). The increase is mostly due to the investment losses for the 2011-12 plan year as well as a slight reduction in total payroll. As shown in Chart 2 below, the projected amount of the contribution is very similar to the prior valuation projections.

Chart 1: 7.5% return each year – Percentage of Pay

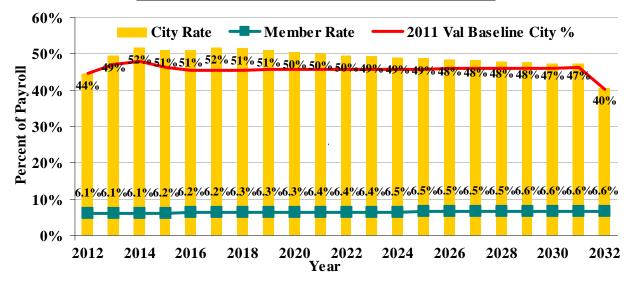
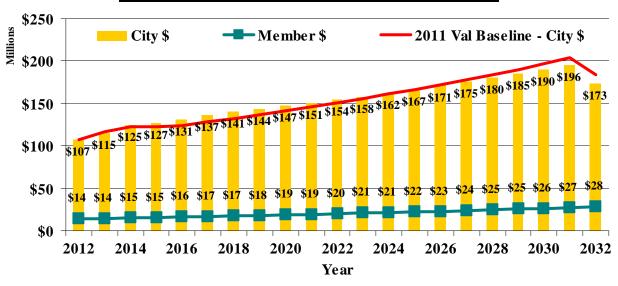


Chart 2: 7.5% return each year – Dollar Contributions





### SECTION I BOARD SUMMARY

Varying investment returns can significantly alter the projected contribution rates and amounts. As shown in Charts 3 and 4, varying returns that average the assumed rate of return over the projection period can result in much lower (or higher) contribution rates and amounts at different points in the projection. The asset smoothing and amortizations smooth out these variations, but significant variability in contribution rates remains.

City Rate — Member Rate

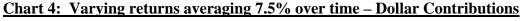
50%

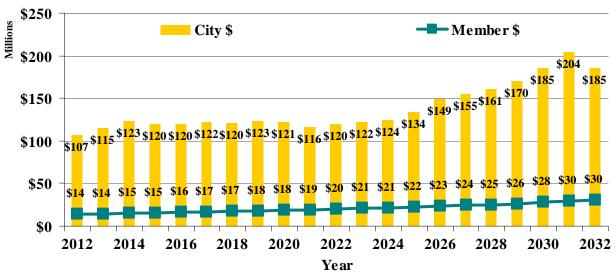
49% 51% 48% 47% 46% 44% 42% 39% 39% 38% 37% 39% 42% 42% 43% 44% 46% 43%

10% -6.1%6.1%6.1%6.2%6.2%6.2%6.3%6.3%6.3%6.3%6.4%6.4%6.4%6.5%6.6%6.7%6.7%6.8%7.0%7.2%7.1%

0%

Chart 3: Varying returns averaging 7.5% over time – Percentage of Pay







#### SECTION II ASSETS

The System 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 smoothes annual investment return performance over multiple years to reduce the impact of short-term investment volatility on employer contribution rates.

On the following pages we present the following information on the System's assets:

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

### A. Statement of Change in Market Value of Assets

Table II-1 shows sources for the change in the market value of assets.

		Ta	able	II-1								
	Change in Market Value of Assets											
	J	<b>June 30, 2011</b>										
		Basic*	Co	st of Living	To	otal Retirement	To	tal Retirement				
Market Value, Beginning of Year	\$	1,291,485	\$	469,133	\$	1,760,618	\$	1,512,802				
Contributions												
Member		7,994		2,561		10,554		24,602				
City		69,496		17,586		87,082		59,180				
Total	\$	77,490	\$	20,147	\$	97,637	\$	83,782				
Net Investment Earnings**	\$	(51,611)	\$	(17,290)	\$	(68,901)	\$	284,312				
Benefit Payments	\$	(107,106)	\$	(29,692)	\$	(136,798)	\$	(120,278)				
Administrative Expenses	\$	(2,455)	\$	(850)	\$	(3,306)	\$	-				
Market Value, End of Year	\$	1,207,803	\$	441,447	\$	1,649,250	\$	1,760,618				

Table II-2 shows the development of excess earnings.



<sup>\*</sup> Includes SRBR of \$43,109 at the beginning and at the end of the year.

<sup>\*\*</sup> Gross investment earnings less investment expenses

#### SECTION II ASSETS

	Table II-2											
Developn	nent	t of Excess E	arn	ings as of Ju	ne	30, 2012						
Retirement Fund Reserve												
	]	Employee		SRBR		General		Total				
1. Total Earnings							\$	(54,067)				
2. Balance, July 1, 2011	\$	192,822	\$	43,109	\$	1,055,554	\$	1,291,485				
3. Net Cashflow	\$	(15,016)	\$	0	\$	(14,600)	\$	(29,616)				
4. Crediting Rate		3.00%		0.00%		0.00%						
5. Primary Interest Crediting	\$	6,034	\$	-	\$	-	\$	6,034				
6. Balance, June 30, 2012	\$	183,840	\$	43,109	\$	1,040,954	\$	1,267,903				
7.Excess Earnings			\$	-	\$	(60,101)	\$	(60,101)				
8. Balance, July 1, 2012	\$	183,840	\$	43,109	\$	980,853	\$	1,207,803				

Amounts in thousands

#### **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 averaging or smoothing year-to-year market value returns for purposes of reducing the resulting volatility on contributions.

The actuarial value is calculated by recognizing 20% of each of the prior four years of actual investment experience relative to the expected return on the actuarial asset value (7.5% for 2011-2012, 7.95% for 2010-2011, 7.75% for 2009-2010, 8.25% for prior years). The expected return on the actuarial value of assets is determined using the System's actual cash flows and the assumed rate of return. The balance of the actual investment experience is recognized in a similar fashion in future years. (See Appendix B for further explanation of the asset valuation method).



### SECTION II ASSETS

		Table II-3				
Development of Actua	ari	al Value of A	Ass	ets as of June 3	30, 201	12
		Basic	C	ost of Living	Total	Retirement
Market Value of Assets	\$	1,207,803	\$	441,447	\$	1,649,249
Gains/(Losses)						
Current Year		(149,934)		(52,760)		(202,694)
Prior Year		125,205		38,797		164,003
2nd Prior Year		72,529		18,926		91,456
3rd Prior Year		(343,206)		(89,559)		(432,764)
Deferred Gains/(Losses)						
Current Year (80% deferred)		(119,947)		(42,208)		(162,155)
Prior Year (60% deferred)		75,123		23,278		98,402
2nd Prior Year (40% deferred)		29,012		7,571		36,582
3rd Prior Year (20% deferred)		(68,641)		(17,912)		(86,553)
Total	\$	(84,453)	\$	(29,271)	\$	(113,724)
Actuarial Value of Assets	\$	1,292,256	\$	470,717	\$	1,762,973

Amounts in thousands

#### **C.** Investment Performance

The market value of assets internal rate of return, net of investment expenses, was -3.9% for the year ending June 30, 2012. This is compared to an assumed return of 7.50%.

On an actuarial value of assets basis, the return for the year ending June 30, 2012 was 0.9%. The difference is largely due to the recognition of deferred gains from prior years while 80% of the loss for 2011-12 is deferred to future years. This return produced an overall investment loss of \$119.3 million for the year ending June 30, 2012.



#### SECTION III LIABILITIES

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

- Disclosure of liabilities at June 30, 2011 and June 30, 2012, and
- Statement of changes in the unfunded actuarial liability during the year.

#### A. Disclosure

Two measures 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 obligations, represents the expected amount of money needed today to fully pay off all benefits both earned as of the valuation date and those to be earned in the future by current plan members under the current Plan provisions.
- Actuarial Liability Entry Age (EA): Used for determining employer contributions and GASB accounting disclosures. This measure of 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 EA actuarial cost method. It represents the expected amount of money needed today to pay for benefits attributed to service prior to the valuation date.

Table III-1 and Table III-2 on the following page disclose these measures of liability for the current and prior valuations. By subtracting the actuarial value of assets from the actuarial liability, the net surplus or unfunded actuarial liability (UAL) is determined.

Table III-3 shows the Entry Age Normal Cost as a percentage of pay. The Entry Age Normal Cost represents the expected amount of money needed to fund the benefits attributed to the next year of service under the EA actuarial cost method. Administrative expenses and the SRBR are explicitly valued as an addition to normal cost (0.70% of payroll for administrative expenses and 0.35% of the market value of assets for the SRBR).



### SECTION III LIABILITIES

Table III-1 Present Value of Future Benefits													
	June 30, 2012 June 30, 201												
		Basic	Co	st of Living	Tot	al Retirement	Tot	al Retirement					
Actives													
Retirement	\$	778,851	\$	273,926	\$	1,052,777	\$	1,083,290					
Termination		62,237		20,434		82,671		82,354					
Death		18,699		5,940		24,639		23,782					
Disability		30,271		10,562		40,833		40,718					
Total Actives	\$	890,058	\$	310,862	\$	1,200,920	\$	1,230,144					
Retirees		1,057,827		649,848		1,707,675		1,570,604					
Beneficiaries		50,282		49,027		99,309		93,751					
Disabled		39,958		31,882		71,840		72,674					
Deferred Vested		90,450		32,224		122,674		111,225					
SRBR Balance		43,109		-		43,109		43,109					
Total	\$	2,171,684	\$	1,073,843	\$	3,245,527	\$	3,121,507					

Amounts in thousands

			Ac	Table III-2 tuarial Liab						
June 30, 2012 June 30										
		Basic	Cos	t of Living	Tota	l Retirement	Tota	l Retirement		
Actives										
Retirement	\$	580,720	\$	204,462	\$	785,182	\$	815,306		
Termination		12,719		8,811		21,530		31,003		
Death		10,822		3,295		14,117		13,795		
Disability		14,147		4,526		18,673		18,760		
Total Actives	\$	618,408	\$	221,094	\$	839,502	\$	878,864		
Retirees		1,057,827		649,848		1,707,675		1,570,604		
Beneficiaries		50,282		49,027		99,309		93,751		
Disabled		39,958		31,882		71,840		72,674		
Deferred Vested		90,450		32,224		122,674		111,225		
SRBR Balance		43,109		-		43,109		43,109		
Total	\$	1,900,034	\$	984,075	\$	2,884,109	\$	2,770,227		



### SECTION III LIABILITIES

	7	Table III-3 Fier 1 Normal Cost*	•	
		June 30, 2012		June 30, 2011
	Basic	<b>Cost of Living</b>	Total	Total
Retirement	11.97%	4.16%	16.13%	15.90%
Termination	2.52%	0.57%	3.09%	2.55%
Death	0.49%	0.16%	0.65%	0.61%
Disability	0.96%	0.35%	1.31%	1.28%
Reciprocity	0.16%	0.05%	0.21%	0.21%
Sub-Total	16.10%	5.29%	21.39%	20.55%
Admin Expense	0.70%	0.00%	0.70%	0.70%
SRBR	2.81%	0.00%	2.81%	2.57%
Total	19.61%	5.29%	24.90%	23.82%

<sup>\*</sup> No Tier 2 Members as of 6/30/2012

### B. Changes in the 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. Table III-4 on the following page summarizes the key changes in the UAL since the last valuation.



### SECTION III LIABILITIES

Table III-4									
Development of 2012 Experience Gain/(Loss)									
Item			I	Amount					
1. Unfunded Actuarial Liability at June 30, 2011			\$	981,568					
2. Expected unfunded accrued liability payment				47,774					
3. Interest accrued				70,034					
4. Expected Unfunded Actuarial Liability at June 30, 2012 (1-2+3)			\$	1,003,828					
5. Actual Unfunded Liability at June 30, 2012			\$	1,121,136					
6. Difference: (5 - 6)				(117,308)					
a. Portion of (6) due to investment gain or (loss)	\$	(119,331)							
b. Portion of (6) due to earlier than expected retirements		(23,943)							
c. Portion of (6) due to due to retiree spouse data		7,978							
d. Portion of (6) due to no excess earnings transferred to SRBR		6,162							
e. Portion of (6) due to other experience		11,826							
f. Total	\$	(117,308)							



#### 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 process will use an actuarial funding method that will result in a pattern of contributions that are both stable and predictable.

The actuarial funding methodology employed is the Entry Age actuarial cost 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 each member's expected future salary. The normal cost rate is multiplied by current salary to determine each member's normal cost. Administrative expenses and the expected net transfer to the SRBR are added to the entry age normal cost. Finally, the normal cost is reduced by the member contribution to produce the employer normal cost. The difference between the actuarial liability and the actuarial value of assets is the unfunded actuarial liability. The UAL is made up of the unamortized UAL as of June 30, 2011 plus the impact of the 2012 experience and the 2011 UAL payment that is made on July 1, 2012.

Table IV-1 provides the payment schedules to amortize the unfunded liability as of June 30, 2009 over 30 years, and any additional actuarial gains/(losses), assumption or method changes after June 30, 2009 over 20 years. The amortizations are a level percent of expected Tier 1 and Tier 2 payroll.

Table IV-2 shows how the City's contribution rate for FYE 2014 is developed. The methodology and assumptions used are in full compliance with the parameters set in GASB Statement No. 25 for purposes of determining the annual required contribution (ARC).

Table IV-3 shows the City's contribution dollar amounts for FYE 2014 assuming contributions are made at the beginning of the fiscal year. To the extent contributions are made after the beginning of the fiscal year, the amounts should be increased at an annual rate of 7.50 percent.



# SECTION IV CONTRIBUTIONS

Table IV-1 UAL Amortization								
	O	utstanding	Remaining		Paym	ent		
		Balance	Period	\$	Amount	% of Pay		
Basic Retirement Benefit								
Golden Handshake	\$	16,727	27	\$	1,071	0.54%		
2009 UAL		599,341	27		38,391	19.39%		
2010 (Gain) or Loss		47,487	18		3,910	1.97%		
2010 Assumption Change		(38,147)	18		(3,141)	(1.6%)		
2011 (Gain) or Loss		9,355	19		743	0.38%		
2011 Assumption Changes		116,812	19		9,274	4.68%		
2012 (Gain) or Loss		(192,463)	20		(14,773)	(7.5%)		
7/1/2012 Payment		48,667			0	0.00%		
Total	\$	607,779		\$	35,475	17.92%		
Cost of Living Benefit								
Golden Handshake	\$	4,067	27	\$	261	0.13%		
2009 UAL		146,770	27		9,401	4.75%		
2010 (Gain) or Loss		3,461	18		285	0.14%		
2010 Assumption Change		(21,176)	18		(1,744)	(0.9%)		
2011 (Gain) or Loss		(12,351)	19		(981)	-0.50%		
2011 Assumption Changes		70,406	19		5,590	2.82%		
2012 (Gain) or Loss		309,771	20		23,777	12.01%		
7/1/2012 Payment		12,409			0	0.00%		
Total	\$	513,357		\$	36,590	18.48%		
Total	\$	1,121,136		\$	72,065	36.40%		

Amounts in thousands

If the SRBR is eliminated, a base equal to the SRBR balance of (\$43,109,000) as of June 30, 2012 would be amortized over 20 years with a payment of (\$3,309,000) or -1.61% of pay.



# SECTION IV CONTRIBUTIONS

	Table IV-2 Contribution Rates									
	Fiscal Year 2013-14 Fiscal Year 2012-13									
	Basic	COLA	Total	Basic	COLA	Total				
<u>Tier 1</u> Member Rate	4.53%	1.44%	5.97%	4.32%	1.42%	5.74%				
City Service Normal Rate	14.91%	3.81%	18.72%	14.11%	3.76%	17.87%				
City Reciprocity Normal Rate  City Normal Rate	0.16% <b>15.07%</b>	0.05% <b>3.86%</b>	0.21% 18.93%	0.15% <b>14.26%</b>	0.06% <b>3.82%</b>	0.21% 18.08%				
City Deficiency Rate	17.38%	18.35%	35.73%	20.56%	5.25%	25.81%				
City Golden Handshake Rate	0.54%	0.13%	0.67%	0.45%	0.11%	0.56%				
City UAL Rate	17.92%	18.48%	36.40%	21.01%	5.36%	26.37%				
City Rate	32.99%	22.34%	55.33%	35.27%	9.18%	44.45%				
Tier 2										
Member Normal Rate	6.13%	0.55%	6.68%	6.13%	0.55%	6.68%				
Member UAL Rate	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%				
Member Rate	6.13%	0.55%	6.68%	6.13%	0.55%	6.68%				
City Normal Rate	6.13%	0.55%	6.68%	6.13%	0.55%	6.68%				
City UAL Rate	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%				
City Rate	6.13%	0.55%	6.68%	6.13%	0.55%	6.68%				



### SECTION IV CONTRIBUTIONS

#### Table IV-2(a) **Contribution Rates - Tier 1** With Elimination of SRBR Fiscal Year 2013-14 **Basic COLA Total Member Contribution Rate** 4.53% 1.44% 5.97% City Service Normal Rate 12.10% 3.81% 15.91% City Reciprocity Normal Rate 0.16% 0.05% 0.21% 3.86% **City Tier 1 Normal Rate** 12.26% 16.12% City Deficiency Rate 15.71% 34.05% 18.35% City Golden Handshake Rate 0.54% 0.13% 0.67% **City Tier 1 UAL Rate** 16.25% 18.48% 34.73% **Tier 1 City Rate** 28.51% 22.34% 50.85%



# SECTION IV CONTRIBUTIONS

	C	City Cont		Table IV ution An		ınts (BO	Y)					
			Jul	y 1, 2013	3				Jul	ly 1, 2012	2	
		Basic	(	COLA		Total		Basic	(	COLA		Total
<u>Tier 1</u>												
City Service Normal Cost	\$	29,520	\$	7,543	\$	37,063	\$	32,687	\$	8,710	\$	41,397
City Reciprocity Normal Cost		317		99		416		347		139		486
<b>City Normal Cost</b>	\$	29,837	\$	7,642	\$	37,479	\$	33,034	\$	8,849	\$	41,884
City Deficiency Cost	\$	34,404	\$	36,329	\$	70,733	\$	47,629	\$	12,162	\$	59,791
City Golden Handshake Cost		1,071		261		1,332		1,042		255		1,297
City UAL Cost	\$	35,475	\$	36,590	\$	72,065	\$	48,671	\$	12,417	\$	61,088
City Contribution	\$	65,312	\$	44,232	\$	109,544	\$	81,705	\$	21,266	\$	102,972
Tier 2												
City Normal Cost	\$	1,651	\$	148	\$	1,799		N/A		N/A		N/A
City UAL Cost		-		-		-		N/A		N/A		N/A
City Contribution	\$	1,651	\$	148	\$	1,799		N/A		N/A		N/A

Amounts in thousands

Table IV-3(a) City Contribution Amounts (BOY) - Tier 1 With Elimination of SRBR									
			Jul	y 1, 2013	3				
		Basic	(	COLA		Total			
City Service Normal Cost	\$	23,956	\$	7,543	\$	31,500			
City Reciprocity Normal Cost		317		99		416			
City Tier 1 Normal Cost	\$	24,273	\$	7,642	\$	31,915			
City Deficiency Cost	\$	31,095	\$	36,329	\$	67,424			
City Golden Handshake Cost		1,071		261		1,332			
City Tier 1 UAL Cost	\$	32,166	\$	36,590	\$	68,756			
Tier 1 City ARC	\$	56,440	\$	44,232	\$	100,671			



### SECTION V ACCOUNTING STATEMENT INFORMATION

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

The GASB No. 25 disclosure compares the actuarial liability computed for funding purposes to the actuarial value of assets to determine a funded ratio. The actuarial liability is determined assuming that members continue to terminate employment, retire, etc., in accordance with the actuarial assumptions. Liabilities are discounted at the assumed valuation interest rate of 7.50% per annum as of June 30, 2011 and June 30, 2012.

GASB Statement No. 25 requires the actuarial liability be compared with the actuarial value of assets for funding purposes. The relevant amounts as of June 30, 2011 and June 30, 2012 are presented in Table V-1.

GASB Statement No. 67 will replace GASB Statement No. 25 for System reporting effective for the Fiscal Year Ending June 30, 2014.

Table V-1 Federated City Employees' Retirement System								
Item	Ju	ne 30, 2012	Ju	ne 30, 2011	% Change			
GASB No. 25 Basis 1. Actuarial Liabilities								
<ul><li>a. Members Currently Receiving Payments</li><li>b. Vested Terminated and Inactive Members</li><li>c. Active Members</li><li>d. Total Actuarial Liability</li></ul>	\$ \$	1,921,933 122,674 839,503 2,884,109	\$ \$	1,780,139 111,225 878,864 2,770,227	8.0% 10.3% (4.5%) 4.1%			
2. Actuarial Value of Assets	\$	1,762,973	\$	1,788,660	-1.4%			
3. Unfunded Actuarial Liability	\$	1,121,136	\$	981,568	14.2%			
4. Ratio of Actuarial Value of Assets to Actuarial Liability (2)/(1)(d)		61.13%		64.57%	(3.5%)			



### SECTION V ACCOUNTING STATEMENT INFORMATION

Tables V-2 through V-5 are exhibits for use in the System's 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 presents the Schedule of Funding Progress.

# Table V-2 Federated City 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

June 30, 2012

Actuarial funding method Entry Age

Amortization method Level percent of pay, closed, layered

Equivalent single amortization period 26.8 Years

Asset valuation method 5-year smoothing of return over or under expected returns

Actuarial assumptions:

Investment rate of return 7.50% Projected salary increases due 3.25%

to wage inflation

Cost-of-living adjustments\*\* Tier 1 - 3.0% per year; Tier 2 – 1.5% per year

The actuarial assumptions used have been recommended by the actuary and adopted by the Federated Board in October 2011 based on the most recent review of Federated experience.

The rate of employer contributions to Federated is composed of the normal cost, reciprocity normal cost, amortization of the unfunded actuarial liability and the Golden Handshake rate. The implementation of Tier 2 effective September 30, 2012 has been included. 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>\*</sup> Additional merit salary increases of 0.25% to 4.50% based on a participant's years of service are also assumed. These increases are not used in the amortization of the UAL.

<sup>\*\*</sup> Cost-of-living adjustments are fixed at 3% by the plan provisions for Tier 1 and do not fluctuate with actual inflation. For Tier 2, adjustments fluctuate with actual inflation and are capped at 1.5%

## SECTION V ACCOUNTING STATEMENT INFORMATION

#### Table V-3

City of San Jose Federated City Employees' Retirement System

### ANALYSIS OF FINANCIAL EXPERIENCE

Gain (or Loss) in Actuarial Liability during Years Ended June 30 Resulting from Differences between Assumed Experience and Actual Experience

Type of Activity	Y	ear Ending ne 30, 2012
Investment Income	\$	(119,331)
Combined Liability Experience		2,023
Gain (or Loss) during Year from Financial Experience	\$	(117,308)
Non-Recurring Gain (or Loss) Items		
Composite Gain (or Loss) During Year	\$	(117,308)



### SECTION V ACCOUNTING STATEMENT INFORMATION

Table V-4 City of San Jose Federated City Employees' Retirement System GASB SOLVENCY TEST											
Actuarial Liabilities for											
	<b>(A)</b>	<b>(B)</b>	<b>(C)</b>								
		Retirees,	Remaining		Portion	of Actu	ıarial				
Valuation	Active	Beneficiaries	aries Active		<b>Liabilities Covered</b>						
Date	Member	and Other	Members'	Reported	by Reported Assets						
June 30, *	Contributions	Inactives	Liabilities	Assets**	<b>(A)</b>	<b>(B)</b>	<b>(C)</b>				
2012	\$ 234,619	\$ 2,044,607	\$ 604,883	\$ 1,762,973	100%	75%	0%				
2011	234,574	1,848,254	687,400	1,788,660	100%	84%	0%				
2010	242,944	1,504,698	762,716	1,729,413	100%	99%	0%				
2009	228,967	1,393,114	864,074	1,756,558	100%	100%	16%				
2007	214,527	1,003,001	743,415	1,622,851	100%	100%	55%				
2005	230,027	824,043	657,300	1,384,454	100%	100%	50%				
2003	224,875	635,092	451,724	1,280,719	100%	100%	93%				

<sup>\*</sup> Results prior to 6/30/2010 calculated by prior actuary

Amounts in thousands

Actuarial Valuation Date	Actuarial Value of Assets (AVA)	Actuarial Liability (AL)	Unfunded AL	Funded Ratio	Covered Payroll	Unfunded AL as a % of Covered Payroll
June 30, 2012	\$ 1,762,973	\$ 2,884,109	\$ 1,121,136	61%	\$ 225,859	496%
June 30, 2011 <sup>4</sup>	1,788,660	2,770,227	981,567	65%	228,936	429%
June 30, 2010 <sup>3</sup>	1,729,413	2,510,358	780,945	69%	300,811	260%
June 30, 2009 <sup>2</sup>	1,756,558	2,486,155	729,597	71%	323,020	226%
June 30, 2007	1,622,851	1,960,943	338,092	83%	291,405	116%
June 30, 2005 <sup>1</sup>	1,384,454	1,711,370	326,916	81%	286,446	114%
June 30, 2003	1,280,719	1,311,691	30,972	98%	292,961	11%
June 30, 2001	1,060,144	1,072,333	12,189	99%	252,696	5%

Note: Results prior to 6/30/2010 were calculated by the prior actuary



<sup>\*\*</sup> Actuarial Value of Assets

Demographic assumption changes increased AL by \$83 million.

<sup>&</sup>lt;sup>2</sup> Demographic and economic assumption changes, including reducing the investment return assumption from 8.25% to 7.75% increased the AL by \$229 million.

<sup>&</sup>lt;sup>3</sup> Increasing the investment return assumption from 7.75% to 7.95% decreased the AL by \$59 million.

Demographic and economic assumption changes, including reducing the investment return assumption from 7.95% to 7.5% increased the AL by \$188 million.

### APPENDIX A MEMBERSHIP INFORMATION

Table A-1 San Jose Federated City Employees' Retirement System Active Member Data									
	J	une 30, 2012	•	June 30, 2011	% Change				
<u>Total</u>									
Count		3,076		3,274	(6.0%)				
Average Current Age		46.0		45.9	0.2%				
Average Service		12.4		12.3	0.8%				
Annual Expected Pensionable Earnings	\$	225,859,144	\$	228,936,398	(1.3%)				
Average Expected Pensionable Earnings	\$	73,426	\$	69,926	5.0%				

	Table A-2 San Jose Federated City Employees' Retirement System Non-Active Member Data												
	Co June 30, 2012	unt June 30, 2011	%Change	Averaş June 30, 2012	%Change								
Total	·												
Retired & Disabled	3,143	2,979	5.5%	68.0	67.9	0.1%							
Beneficiaries	459	449	2.2%	74.0	73.0	1.4%							
Payee Total	3,602	3,428	5.1%	68.8	68.5	0.4%							
Inactives	967	869	11.3%	45.3	45.6	-0.7%							

Table A-3 San Jose Federated City Employees' Retirement System Non-Active Member Data													
	Total Annual Benefit*					Average Annual Benefit*							
	J	une 30, 2012	J	une 30, 2011	%Change	Ju	ne 30, 2012	Jı	ıne 30, 2011	%Change			
<u>Total</u>													
Retired & Disabled	\$	132,923,227	\$	121,366,908	9.5%	\$	42,292	\$	40,741	3.8%			
Beneficiaries		9,140,022		8,501,980	7.5%		19,913		18,935	5.2%			
Payee Total	\$	142,063,249	\$	129,868,888	9.4%	\$	39,440	\$	37,885	4.1%			
Inactives**	\$	13,409,571	\$	11,556,900	16.0%	\$	13,867	\$	13,299	4.3%			



<sup>\*</sup> Benefits provided in June 30 valuation data
\*\* For Inactives, benefit is calculated based on the data assumptions and methods outlined in Appendix A.

# APPENDIX A MEMBERSHIP INFORMATION

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# APPENDIX A MEMBERSHIP INFORMATION

# Table A-6 San Jose Federated City Employees' Retirement System Retirees and Disabled by Attained Age and Benefit Effective Date as of June 30, 2012

Benefit Effective					Age						
Fiscal Year End	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	Total
Prior to 1994	1	1	5	8	14	99	159	163	151	72	673
1995	1	1	1	2	0	14	10	8	3	1	41
1996	2	0	1	1	1	19	9	4	1	0	38
1997	1	0	0	1	7	41	14	4	2	0	70
1998	0	1	3	1	12	27	14	4	0	0	62
1999	0	0	2	4	34	23	10	6	0	1	80
2000	0	0	1	5	52	21	6	4	0	0	89
2001	0	1	2	3	43	29	5	2	0	0	85
2002	0	2	1	15	80	31	14	4	1	0	148
2003	1	0	4	38	43	25	7	2	1	0	121
2004	2	2	7	62	43	19	8	0	0	0	143
2005	0	0	11	77	43	31	10	3	0	0	175
2006	5	3	14	70	39	26	2	0	0	0	159
2007	1	1	18	81	35	15	3	3	0	0	157
2008	2	4	29	77	43	12	5	0	0	0	172
2009	4	4	65	36	31	6	0	0	0	0	146
2010	0	13	99	57	38	5	3	0	0	0	215
2011	1	25	147	113	53	14	2	1	0	0	356
2012	2	18	107	48	28	10	0	0	0	0	213
Total	23	76	517	699	639	467	281	208	159	74	3,143

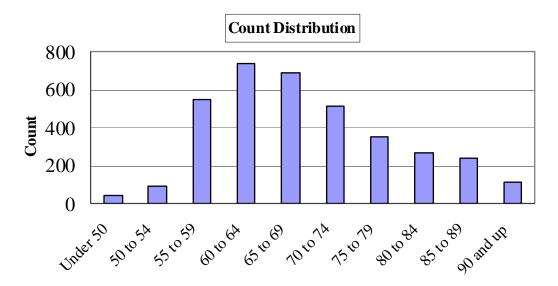
Average Age at Retirement/Disability57.6Average Current Age68.0Average Annual Pension\$ 42,292



# APPENDIX A MEMBERSHIP INFORMATION

Table A-7 San Jose Federated City Employees' Retirement System Distribution of Retirees, Disabled Members, and Beneficiaries as of June 30, 2012			
Age	Count		
Under 50	41		
50 to 54	90		
55 to 59	551		
60 to 64	740		
65 to 69	692		
70 to 74	513		
75 to 79	355		
80 to 84	270		
85 to 89 239			
90 and up 111			
Total 3,602			

# Chart A-1

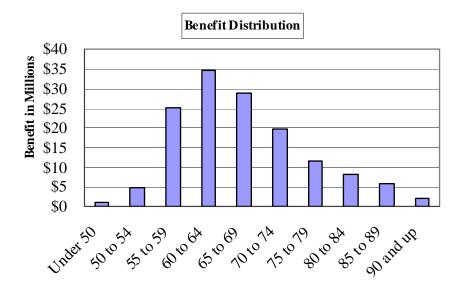




# APPENDIX A MEMBERSHIP INFORMATION

Table A-8 San Jose Federated City Employees' Retirement System Distribution of Retirees, Disabled Members, and Beneficiaries as of June 30, 2012			
Age Annual Benefit			
Under 50	\$ 966,	099	
50 to 54	4,786,	408	
55 to 59	25,111,	197	
60 to 64	34,527,2	296	
65 to 69	29,006,	419	
70 to 74	19,805,3	331	
75 to 79	11,586,	892	
80 to 84	8,110,:	577	
85 to 89	5,865,	279	
90 and up 2,297,751			
Total	\$ 142,063,	249	

## **Chart A-2**





# APPENDIX A MEMBERSHIP INFORMATION

### **Data Assumptions and Methods**

In preparing our data, we relied without audit on information supplied by the San Jose Department of Retirement Services. 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:

- Records on the "Active" data file are considered to be Active if they do not have a reason for termination.
- Records on any of the data files are considered to be Inactive if they have a reason for termination of deferred vested or leave of absence/inactive.
- Records on the "Retiree" and "Beneficiary/QDRO" files are considered in pay status if they do not have a date of death, are not inactive and have not withdrawn from the plan.
- Service for actives that have no service amount is calculated to be the time from date of hire to the valuation date.
- Service for inactives that have no service amount is calculated to be the time from date of hire to date of termination.
- The most recent annual salary for actives is set to be "earnable income." If "earnable income" was not provided, then the most recent annual salary is calculated to be "compensation rate 2" multiplied by 26.
- The annual benefit for inactives is equal to 2.5% of final compensation per year of service, up to a maximum of 75% of final compensation. Members who terminated prior to June 30, 2001 have their final compensation adjusted for a three-year average rather than a 12-month average.
- We assume any member found in last year's "Retiree" file and not in this year's file has deceased without a beneficiary and should be removed from the valuation data.
- We assume all deceased members with payments continuing to a beneficiary have already been accounted for in the "Retiree" file.



# APPENDIX B ACTUARIAL ASSUMPTIONS AND METHODS

### A. Actuarial Assumptions

### 1. Investment Return Assumption

Assets are assumed to earn 7.5% net of investment.

### 2. Interest Credited to Member Contributions

3.00%, compounded annually.

### 3. Administrative Expenses

0.70% of payroll is added to the normal cost of the system for expected administrative expenses.

#### 4. Future SRBR transfers

0.35% of the Market Value of Assets is added to the employer normal cost to estimate the average net transfer to the SRBR.



# APPENDIX B ACTUARIAL ASSUMPTIONS AND METHODS

### 5. Salary Increase Rate

Wage inflation component: 3.25%

In addition, the following merit component is added based on an individual member's years of service:

Table B-1 Salary Merit Increases				
Years of Service Merit/ Longevity				
0	4.50%			
1	3.50			
2	2.50			
3	1.85			
4	1.40			
5	1.15			
6	0.95			
7	0.75			
8	0.60			
9	0.50			
10	0.45			
11	0.40			
12	0.35			
13	0.30			
14	0.25			
15+	0.25			

### 6. Family Composition

Percentage married is shown in the following Table B-2. Male retirees are assumed to be three years older than their partner, and female retirees are assumed to be two years younger than their partner.

Table B-2 Percentage Married		
Gender Percentage		
Males	80%	
Females 60%		



# APPENDIX B ACTUARIAL ASSUMPTIONS AND METHODS

### 7. Rates of Termination

Sample rates of termination are shown in the following Table B-3.

Table B-3 Rates of Termination				
Age	0 Years of Service	1-4 Years of Service	5 or more Years of Service	
20	20%	10.00%	5.50%	
25	20	10.00	5.30	
30	20	9.50	4.85	
35	20	7.20	4.20	
40	20	5.60	3.00	
45	20	4.60	1.85	
50	20	4.00	1.75	
55	20	4.00	0.00	
60	20	4.00	0.00	
65	0	0.00	0.00	

<sup>\*</sup> Withdrawal/termination rates do not apply once a member is eligible for retirement

20% of terminating employees are assumed to subsequently work for a reciprocal employer and receive 3.25% pay increases per year.

### 8. Rates of Refund

Sample rates of vested terminated employees electing a refund of contributions are shown in the following Table B-4.

Table B-4 Rates of Refund			
Age Refund			
20	40.0%		
25	30.0		
30	25.0		
35	20.0		
40	15.0		
45	10.0		
50	4.0		
55 0.0			



# APPENDIX B ACTUARIAL ASSUMPTIONS AND METHODS

## 9. Rates of Disability

Sample disability rates of active participants are provided in Table B-5.

Table B-5 Rates of Disability at Selected Ages			
Age	Disability		
20	0.030%		
25	0.033		
30	0.056		
35	0.098		
40	0.162		
45	0.232		
50	0.302		
55	0.376		
60	0.455		
65	0.504		
70	0.000		

50% of disabilities are assumed to be duty related, and 50% are assumed to be non-duty.



# APPENDIX B 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 male and female RP-2000 combined employee and annuitant tables. To reflect mortality improvements since the date of the table and to project future mortality improvements, the tables are projected to 2015 using scale AA and setback two years. The resulting rates are used for all age cohorts.

Table B-6 Rates of Mortality for Active and Retired Healthy Lives at Selected Ages			
Age	Male	Female	
20	0.0237%	0.0152%	
25	0.0297	0.0155	
30	0.0365	0.0196	
35	0.0585	0.0344	
40	0.0881	0.0484	
45	0.1100	0.0747	
50	0.1460	0.1092	
55	0.2154	0.1841	
60	0.4140	0.3639	
65	0.8104	0.7094	
70	1.4464	1.2471	
75	2.4223	2.0673	
80	4.3489	3.3835	



# APPENDIX B ACTUARIAL ASSUMPTIONS AND METHODS

## 11. Rates of Mortality for Retired Disabled Lives

Mortality rates for disabled retirees are based on the CALPERS ordinary disability mortality tables from their 2000-04 study for miscellaneous employees.

Table B-7 Rates of Mortality for Disabled Lives at Selected Ages				
Age	Male	Female		
20	0.664%	0.478%		
25	0.719	0.492		
30	0.790	0.512		
35	0.984	0.548		
40	1.666	0.674		
45	1.646	0.985		
50	1.632	1.245		
55	1.936	1.580		
60	2.293	1.628		
65	3.174	1.969		
70	3.870	3.019		
75	6.001	3.915		
80	8.388	5.555		



# APPENDIX B ACTUARIAL ASSUMPTIONS AND METHODS

### 12. Rates of Retirement

Rates of retirement for Tier 1 members are based on age according to the following Table  $B-8-Tier\ 1$ .

Table B-8 – Tier 1 Rates of Retirement by Age and Service				
Age	Less than 30 Years of Service	30 or more Years of Service		
50	0.0%	60.0%		
51	0.0	60.0		
52	0.0	60.0		
53	0.0	60.0		
54	0.0	60.0		
55	17.5	50.0		
56	8.5	50.0		
57	8.5	50.0		
58	8.5	50.0		
59	9.5	50.0		
60	9.5	50.0		
61	16.0	50.0		
62	16.0	50.0		
63	16.0	50.0		
64	16.0	50.0		
65	25.0	60.0		
66	25.0	60.0		
67	25.0	60.0		
68	25.0	60.0		
69	25.0	60.0		
70 & over	100.0	100.0		



# APPENDIX B ACTUARIAL ASSUMPTIONS AND METHODS

Rates of retirement for Tier 2 members are based on age according to the following Table B-8 – Tier 2.

Table B-8 – Tier 2 Rates of Retirement by Age and Service				
Age	Less than 32.5 Years of Service	32.5 or more Years of Service		
55	4.0%	7.0%		
56	3.0	6.0		
57	3.0	6.0		
58	3.0	6.0		
59	5.0	10.0		
60	7.5	15.0		
61	10.0	25.0		
62	10.0	25.0		
63	10.0	25.0		
64	10.0	25.0		
65	40.0	70.0		
66	25.0	50.0		
67	25.0	50.0		
68	25.0	50.0		
69	25.0	50.0		
70 & over	100.0	100.0		

#### 13. Deferred Member Benefit

The benefit was estimated based on information provided by the Department of Retirement Services. The data used to value the estimated deferred benefit were credited service, date of termination, and last pay rate. Based on the data provided, highest average salary was estimated.

#### 14. 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 Federated 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.



# APPENDIX B ACTUARIAL ASSUMPTIONS AND METHODS

# 15. Changes Since Last Valuation

None.



# APPENDIX B 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 costs and represents the target amount of assets the System should have as of the valuation date to fund the benefits as a level percentage of payroll.

#### 2. Asset Valuation Method

For the purpose of determining the Employer's contribution, an actuarial value of assets is used. The asset smoothing method dampens the volatility in asset values that occur because of fluctuations in market conditions, resulting in a smoother pattern of contribution rates.

The actuarial value of assets is calculated by recognizing 20% of the difference in each of the prior four years of actual investment returns compared to the expected return on the market value of assets.

#### 3. Amortization Method

The unfunded actuarial liability is the difference between the actuarial liability and the actuarial value of assets. The unfunded actuarial liability as of June 30, 2009 is amortized as a level percentage of Tier 1 and Tier 2 pay over a closed 30-year period commencing June 30, 2009. Actuarial gains and losses, assumption changes, and plan changes are amortized as a level percentage of Tier 1 and Tier 2 pay over 20-year periods beginning with the valuation date in which they first arise. To remain a level percentage of expected future payroll, each annual amortization payment increases by the payroll growth assumption of 3.25%.

### 4. Supplemental Retiree Benefit Reserve (SRBR)

Beginning with last year's valuation, the SRBR balance is added to the actuarial liability and the assets are included in the actuarial value of assets. In prior valuations, the SRBR balance was excluded from both the actuarial liability and the actuarial value of assets.

#### 5. Contributions

At its November 2010 meeting, the Board adopted a policy setting the City's contribution to be the greater of the dollar amount reported in the actuarial valuation (adjusted for interest based on the time of the contribution) and the dollar amount determined by



# APPENDIX B ACTUARIAL ASSUMPTIONS AND METHODS

applying the percent of payroll reported in the actuarial valuation to the actual payroll for the fiscal year. The City and Member contributions determined by a valuation become effective for the fiscal year commencing one year after the valuation date.



### APPENDIX C SUMMARY OF PLAN PROVISIONS TIER 1

### 1. Membership Requirement

Participation in the Plan is immediate upon the first day of full-time employment for members hired before September 30, 2012.

### 2. Final Compensation

### Members who separated from city service prior to June 30, 2001

The highest average annual compensation earnable during any period of three consecutive years.

### Members who separated from city service on or after June 30, 2001

The highest average annual compensation earnable during any period of twelve consecutive months.

#### 3. Credited Service

One year of service credit is given for 1,739 or more hours of Federated city service rendered in any calendar year. A partial year (fraction with the numerator equal to the hours worked, and the denominator equal to 1,739) is given for each calendar year with less than 1,739 hours worked.

#### 4. Member Contributions

#### **Member**

The amount needed to fund 3/11 of benefits accruing for the current year. These contributions are credited with interest at 3.0% per year, compounded annually.

### **Employer**

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

#### 5. Service Retirement

#### **Eligibility**

Age 55 with five years of service, or any age with 30 years of service.

### Benefit – Member

2.5% of Final Compensation for each year of credited service, subject to a maximum of 75% of Final Compensation.



### APPENDIX C SUMMARY OF PLAN PROVISIONS TIER 1

#### **Benefit - Survivor**

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

#### 6. Service-Connected Disability Retirement

#### **Eligibility**

No age or service requirement.

#### **Benefit - Member**

2.5% of Final Compensation for each year of credited service, subject to a minimum of 40% and a maximum of 75% of Final Compensation. Workers' Compensation benefits are generally offset from the service-connected benefits under this system.

### **Benefit - Survivor**

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

### 7. Non-Service Connected Disability Retirement

#### **Eligibility**

Five years of service.

#### **Benefit - Member**

Members who were hired prior to September 1, 1998:

The amount of the service-connected benefit reduced by 0.5% for each year that the disability age preceded 55.

Members who were hired on or after September 1, 1998:

20% of Final Compensation, plus 2% of Final Compensation for each year of credited service between six and 16 years, plus 2.5% of Final Compensation for each year of credited service in excess of 16 years, subject to a maximum of 75% of Final Compensation.

### **Benefit - Survivor**

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



### APPENDIX C SUMMARY OF PLAN PROVISIONS TIER 1

#### 8. Death While an Active Employee

#### Less than five Years of Service, or No Qualified Survivor

Lump sum benefit equal to the accumulated refund of all employee contributions with interest, plus one month of salary for each year of service, up to a maximum of six years.

#### Five or more Years of Service

2.5% of Final Compensation for each year of credited service, subject to a minimum of 40% and a maximum of 75% of Final Compensation. The benefit is payable until the spouse or registered domestic partner marries or establishes a domestic partnership. If the member was age 55 with 20 years of service at death, the benefit is payable for the lifetime of the member's spouse or registered domestic partner.

#### 9. Withdrawal Benefits

#### Less than five Years of Service

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

#### Five or more years of credited service

The amount of the service retirement benefit, payable at age 55.

#### 10. Additional Post-retirement Death Benefit

A death benefit payable as a lump sum equal to \$500 will be paid to a qualified survivor upon the member's death.

#### 11. Post-retirement Cost-of-Living Benefit

Benefits are increased every April 1 by 3.0%, regardless of actual inflation.

### 12. Supplemental Retiree Benefit Reserve (SRBR)

Each year, 10% of Excess Earnings, if any, are transferred to the SRBR, and the SRBR balance is credited with interest equal to the actual rate of return up to the actuarially assumed investment return, but not less than \$0. The interest credited to the SRBR balance is distributed to retirees and beneficiaries along with any balance (before interest crediting) in excess of the minimum balance established by the Board (\$7,000 per retiree/beneficiary).



### APPENDIX C SUMMARY OF PLAN PROVISIONS TIER 2

### 1. Membership Requirement

Any person who is hired, rehired or reinstated by the City on or after September 30, 2012.

### 2. Final Compensation

The average annual compensation earnable during the highest three consecutive years of service. Final compensation only includes base pay, excluding premium pay and any other additional compensation.

#### 3. Credited Service

One year of service credit is given for 2,080 or more hours of Federated city service rendered in any calendar year. A partial year (fraction with the numerator equal to the hours worked, and the denominator equal to 2,080) is given for each calendar year with less than 2,080 hours worked.

#### 4. Member Contributions

50% of total Tier 2 contributions to the pension plan, including, but not limited to administrative expenses, normal cost and unfunded actuarial liability.

#### 5. Unreduced Service Retirement

#### **Eligibility**

Age 65 with five years of service.

#### <u>Benefit – Member</u>

2.0% of Final Compensation for each year of credited service, subject to a maximum of 65% of Final Compensation.

#### **Benefit - Survivor**

Single life annuity.



### APPENDIX C SUMMARY OF PLAN PROVISIONS TIER 2

### 6. Early Service Retirement

### **Eligibility**

Age 55 with five years of service.

#### Benefit - Member

Reduced benefit actuarially equivalent to the unreduced service retirement benefit commencing at age 65. The early retirement reduction is applied to the benefit after the application of the maximum of 65% of final compensation.

#### 7. Service-Connected Disability Retirement

### **Eligibility**

No age or service requirement.

### **Benefit - Member**

Monthly benefit equivalent to 50% of Final Compensation less the amounts specified in Section 3.28.1330 and Section 3.28.1340.

#### 8. Non-Service Connected Disability Retirement

#### **Eligibility**

Five years of service.

#### **Benefit - Member**

2.0% of Final Compensation for each year of credited service, subject to a minimum of 20% of Final Compensation and a maximum of 50% of Final Compensation less the amounts specified in Section 3.28.1330 and Section 3.28.1340.

#### 9. Death Before Retirement

#### If death occurs before retirement eligibility is reached

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

### If death occurs after retirement eligibility is reached

Benefit equivalent to what the employee would have received if retired at the time of death.



### APPENDIX C SUMMARY OF PLAN PROVISIONS TIER 2

### **Employees killed in the line of duty**

Monthly benefit equivalent to 50% of Final Compensation.

#### 10. Withdrawal Benefits

### **Less than five Years of Service**

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

#### Five or more years of credited service

The amount of the service retirement benefit, actuarially reduced for early retirement, and payable when retirement eligibility is reached.

#### 11. Benefit Forms

Annuity benefits are paid in the form of a life annuity or an actuarially equivalent annuity with 50%, 75% or 100% continuance to a survivor.

### 12. Post-retirement Cost-of-Living Benefit

Benefits are increased every April 1 by the change in the December CPI-U for San Jose-San Francisco-Oakland, subject to a cap of 1.5%. The first COLA after retirement shall be prorated based on the number of months retired.

Note: The summary of major plan provisions is designed to outline principal plan benefits. If the Department of Retirement Services 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 accrued 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 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 System Employer computed contribution rate for FYE 2014 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 two 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).

