

City of San Jose Federated Retiree Health Care Plan

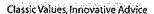
> June 30, 2010 Actuarial Valuation

Produced by Cheiron

January 2011

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Via Email and U.S. Mail

January 7, 2011

Retirement Board of the Federated City Employees' Retirement System 1737 North 1st Street, Suite 580 San Jose, CA 95112

Re: City of San Jose Federated Retiree Health Care Plan Valuation

Dear Members of the Board:

At your request, we performed the June 30, 2010 actuarial valuation of the City of San Jose Federated Retiree Health Care Plan. The valuation results with respect to Other Postemployment Benefits (OPEB), covering postretirement health and dental insurance benefits, are contained in this report. The prior valuation was performed by Gabriel, Roeder, Smith and Company.

Appendix A describes the Member Data, Assumptions, and Methods used in calculating the liabilities contained in the report. We relied, without audit, on information provided by the City. Appendix B contains a summary of the substantive plan provisions based on documentation provided by and discussions with City of San Jose's staff.

The results of this report depend on the future experience conforming to the actuarial assumptions used. The results will change to the extent that future experience differs from the assumptions. Actuarial computations are calculated based on our understanding of GASB 43/45 and are for purposes of fulfilling plan and employer financial accounting requirements. Determinations for purposes other than meeting plan or employer financial accounting requirements may be significantly different from the results in this report. This report also contains actuarial computations based on our understanding of the Plan's funding policy. We have not incorporated the impact of the Patient Protection and Affordable Care Act of 2010.

At its December 2010 meeting, the Board adopted a policy setting the Annual Required 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 applying the percent of payroll reported in the actuarial valuation to the actual payroll for the fiscal year. For example, based on this valuation report, the contribution required for the fiscal year ending June 30, 2012 is the greater of \$21,470,679 (if paid 7/1/2011) and 7.16% of actual payroll for the period from July 1, 2011 through June 30, 2012.

We hereby certify that, to the best of our knowledge, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the applicable Actuarial Standards of Practice as Promulgated by the Actuarial Standards Board. We are Members of the American Academy of Actuaries and, collectively, meet the Qualification Standards of the American Academy of Actuaries to render the actuarial 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.



Retirement Board of the Federated City Employees' Retirement System January 7, 2011 Page ii

Sincerely, Cheiron

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

Consulting Actuary

Margaret A. Tempkin, FSA, EA, MAAA Consulting Actuary

#### INTRODUCTION

The Retirement Board of the Federated City Employees' Retirement System has engaged Cheiron to provide a valuation of the City of San Jose Federated Retiree Health Care Plan. The primary purpose of performing this actuarial valuation is to:

- Determine employee and City contribution rates for the Fiscal Year ending June 30, 2012,
- Determine the accounting and financial reporting items under GASB 43 and 45 for the Plan and the City of the retiree health and dental insurance benefits;
- Show sensitivities to changes in trends and assumptions; and
- Illustrate the long-term effect of the funding strategy on projected contribution requirements and GASB accounting and financial reporting for the Plan and the City.

#### **Funding Policy**

The City has negotiated contracts with its labor unions that require both employee and City contributions to fund the Plan. The agreements call for a five year transition to fully funding the Annual Required Contribution (ARC) under GASB 43 and 45 using a straight line method, but limiting the incremental increase to 0.75% for the members and City during the phase-in period. The unfunded liability as of June 30, 2009 is amortized over a closed 30-year period as a level percentage of payroll, and subsequent gains and losses, changes in assumptions, and changes in plan provisions are amortized over 20-year periods from the first valuation recognizing the change.

The contributions for retiree medical benefits are split evenly between employees and the City, and the contributions for retiree dental benefits are split in the ratio of 8 to 3 with the City contributing 8/11 of the total contribution.

#### GASB's OPEB Requirements:

The Governmental Accounting Standards Board (GASB) has released Statement 43 regarding financial reporting for post-employment benefits plans other than pension plans and a companion Statement (number 45) regarding the employer accounting and financial reporting for these plans.

If an employer is not contributing the full ARC to the Plan, GASB requires the use of a discount rate that blends the expected return on plan assets (7.95%) with the expected return on employer assets (4.50%). For the 2010-11 fiscal year, the full ARC was 9.99% of pay, but under the phase-in, the City is only contributing 6.41% of pay, or 64% of the ARC. Consequently, following the method previously employed, we have calculated a blended discount rate of 6.71% for this valuation.



#### VALUATION RESULTS

The table below presents the key results of the 2010 valuation.

Table 1 Summary of Key Valuation Results (in thousands)							
Valuation Date	6/3	80/2010	6/30/2009				
Discount Rate	7.95%	6.71%	6.70%				
Actuarial Liability (AL)	\$ 789,486	\$ 926,371	\$ 796,448				
Assets	108,011	108,011	85,564				
Unfunded Actuarial Liability (UAL)	\$ 681,475	\$ 818,360	\$ 710,884				
Funding Ratio	14%	12%	11%				
Fiscal Year Ending		6/30/2012	6/30/2011				
Member Contribution Rate	·	6.51%	5.76%				
City Contribution Rate		7.16%	6.41%				
City Contribution Amount (beginning	of year)	\$ 21,471	\$ 18,530				
Fiscal Year Ending	*	6/30/2011	6/30/2010				
City ARC			• • • • • • • • • • • • • • • • • • • •				
- if paid as a percent of pay	15.86%	11.97%					
if paid throughout the fiscal year		\$ 47,593	\$ 38,599				

The remainder of this report provides additional detail on our analysis. First, we present the results of our baseline actuarial study and sensitivity analyses to both assumptions and benefits. We conclude with information to satisfy the GASB OPEB accounting and financial reporting requirements.

The fundamental principle underlying most actuarial methods, as well as the GASB accounting standards, is that the cost of a member's benefits should be recognized over the period in which benefits are earned, rather than the period of benefit distribution. The normal cost is the annual amount which would be sufficient to fund the plan benefits (net of retiree contributions) if it were paid from each employee's date of hire until termination or retirement. Under the method used in our analysis, the normal cost is determined as a percentage of pay. This means the underlying dollar amount is expected to increase each year as salary increases. The actuarial liability represents the portion of the value of the projected benefit at retirement that is allocated to service earned prior to the valuation date; that is, it represents the accumulation of past normal costs from date of hire until the valuation date. The unfunded actuarial liability represents the excess of the actuarial liability over plan assets. The pay-as-you-go cost represents the expected annual cost of health coverage less retiree contributions for current and future retirees based on the valuation assumptions. This figure can be significantly higher than the premiums because the premiums primarily reflect the cost of active, not retiree, coverage.

#### VALUATION RESULTS

The development of the unfunded actuarial liability of the Plan is shown in Table 2 below for the current and prior year's valuations.

Table 2 Unfunded Actuarial Liability								
	6/30/2009*							
Discount Rate	7.95%	6.71%	6.70%					
Present Value of Future Benefits								
Retirees and Beneficiaries	\$ 423,351,320	\$ 479,423,141	\$ 389,613,882					
Term Vested Members	30,982,620	35,860,649	31,753,307					
Active Employees	472,715,983	613,293,522	552,819,323					
Total	\$ 927,049,923	\$1,128,577,312	\$ 974,186,512					
Present Value of Future Normal Costs	137,563,578	202,206,450	177,738,237					
Actuarial Liability	\$ 789,486,345	\$ 926,370,862	\$ 796,448,275					
Assets	108,010,981	108,010,981	85,564,000					
Unfunded Actuarial Liability	\$ 681,475,364	\$ 818,359,881	\$ 710,884,275					

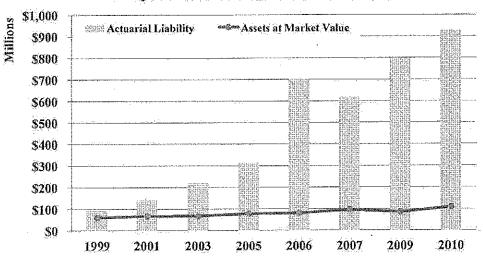
<sup>\*</sup> Calculated by prior actuary.

The chart below shows the historical trend of assets and liabilities for the City of San Jose Federated Retiree Healthcare Plan. While the Plan has been partially funded for many years, the first valuation complying with GASB 43 and 45 was performed in 2006 which resulted in a significantly lower discount rate and significantly higher liabilities. The funding policy, however, was not changed until 2009.



#### VALUATION RESULTS

#### The City of San Jose Federated Retiree Healthcare Plan



<sup>\* 2006</sup> was the first GASB 43/45 valuation.

Discount Rate Funded Ratio UAL/(Surplus) (In millions)

	1999	2001	2003	2005	2006	2007	2009	2010
ſ	8.25%	8.25%	8.25%	8.25%	5.60%	6.60%	6.70%	6.71%
ľ	66.2%	48.2%	34.2%	24,6%	11.6%	15.7%	10.7%	11.7%
	\$ 31.0	\$ 72.4	S 145.0	\$ 235,7	\$ 621.7	\$ 520.1	S 710.9	\$ 818.4

The Annual Required Contribution (ARC) under GASB 43 and 45 consists of two parts: (1) the normal cost, which represents the annual cost attributable to service earned in a given year, and (2) the amortization of the unfunded actuarial liability (UAL). Under the current funding method, the City pays for the implicit subsidy through the payment of active employee health premiums and also makes additional contributions to a 401(h) account.

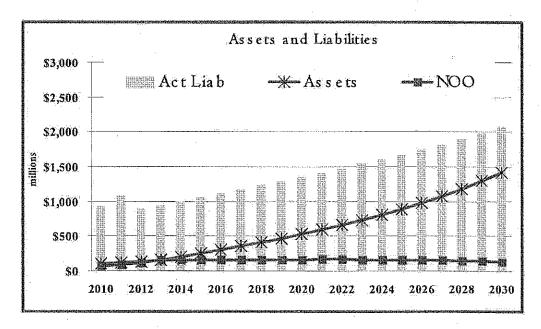
In Table 3 below, the ARC for the fiscal year ending June 30, 2011 is developed using a blended discount rate of 6.71%. The prior year's calculation is shown for comparison.

Table 3 GASB ARC							
Fiscal Year Ending	6/30/2011	6/30/2010*					
Discount Rate	6.71%	6.70%					
Total Normal Cost	\$ 22,195,786	\$ 20,568,707					
Less Employee Contribution towards Normal Cost	17,283,978	16,663,945					
Employer Normal Cost	4,911,808	3,904,762					
UAL Amortization	42,681,581	<u>34,694,460</u>					
Total ARC	\$ 47,593,389	\$ 38,599,222					

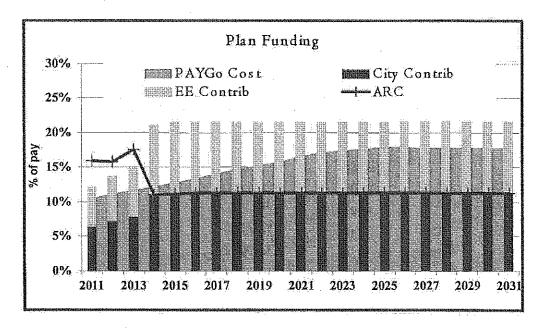
<sup>\*</sup>Calculated by Prior Actuary

#### VALUATION RESULTS

Looking beyond 2010, both the liability and assets are projected to increase as the City phases into fully-funding the ARC. The charts below project the assets, liabilities and the funding costs for the next 20 years.



The first chart shows the actuarial liability increasing from about \$926 million to about \$2.1 billion over the next 20 years. The red line on the same chart shows the Net OPEB Obligation (NOO), which is projected to be about \$139 million after 20 years.





#### VALUATION RESULTS

The second chart shows the projected annual contributions and ARC as a percentage of pay. Benefit payments, net of retiree contributions, are shown by the gray area and increase from 11% to 18% of pay. The teal bars represent the City's contributions, which are equal to the ARC starting in FY 2013-14. The City's contribution is expected to grow from 6.4% in FY 2010-11 to 11.2% of pay in FY 2014-15. The ARC, shown by the red line, is expected to increase to 17.5% of pay before the reduced discount rate (due to fully funding the ARC) and increased employee contributions due to the phase-in result in an ARC of about 11.2% of pay.

Below are the expected net benefit payments that we anticipate for the next 15 years under Pay-As-You-Go.

Table 4 Expected Net Benefit Payments								
Fiscal Year   Expected Net   Fiscal Year   Expected Net   Fiscal Year   Expected Net   Ending   Benefit   Ending   Benefit   Ending   Benefit   Fiscal Year   Expected Net   Ending   Benefit   Ending   Benefit   Ending   Benefit   Ending   Expected Net   Expecte								
2011	\$ 34,391,102	2016	\$ 51,521,671	2021	\$ 76,130,140			
2012	37,429,865	2017	56,333,709	2022	81,542,376			
2013	40,706,062	2018	60,913,899	2023	86,468,730			
2014	43,867,262	2019	65,237,193	2024	90,882,655			
2015	47,369,846	2020	70,446,495	2025	95,357,638			

#### RECONCILIATION

#### Liabilities

Table 4 provides an estimate of the major factors contributing to the change in liability since the last valuation report. Medical and dental liabilities have been grouped together in the reconciliation table below.

Table 5  Reconciliation of Actuarial Liability – GASB Basis						
Actuarial Liability as of June 30, 2009		6 796,448,275				
Changes due to:  Passage of Time  Demographic Changes  Change in Claims Assumptions  Change in Trend Assumptions  Change in Actuary and Other Assumptions	\$	49,391,867 14,153,905 29,592,153 35,517,187 1,267,475				
Total Changes	\$	129,922,587				
Actuarial Liability as of June 30, 2010	S	926,370,862				

- Passage of Time refers to the expected increase in actuarial liability from June 30, 2009 to June 30, 2010.
- Demographic Changes refers to the change in actual data and elections from June 30, 2009 to June 30, 2010.
- Change in Claims Assumptions refers to the change in expected current and future healthcare claims and expense costs.
- Change in Health Assumptions refers to the change the per person cost trends.
- Change in Other Assumptions refers to the change in the discount rate from 6.70% to 6.71%.

#### Assets

Table 6 below shows the reconciliation of assets for the fiscal year. This section reconciles to the assets of June 30, 2010 that were used to develop the FY 2010-11 ARC.

	able 6 ssets	North Annual Control of the Control
	6/30/2010	6/30/2009
Market Value, Beginning of Year	\$ 85,563,934	\$ 94,520,000
Contributions		1.0
Employee	15,815,227	15,076,000
City	17,027,157	16,368,000
Total	\$ 32,842,384	\$ 31,444,000
Net Investment Earnings	13,670,247	(18,675,000)
Benefit Payments	(24,065,584)	(21,725,000)
Market Value, End of Year	\$108,010,981	\$ 85,564,000



## SENSITIVITY OF RESULTS

The liabilities and ARC produced in this report are sensitive to the assumptions used. The tables below show the impact of a 1% increase or decrease in the health care trend rates on the actuarial liability using the blended discount rate and the ARC to provide some measure of sensitivity.

Table 7 Actuarial Liability 6.71% Blended Discount Rate (in thousands)							
Health Care Trend Rate		-1%	ganise's (ganis) (estimot) (	Base		+1%	
Present Value of Future Benefits Retirees and Beneficiaries Term Vested Members Active Employees	\$	430,441 31,625 491,802	\$	479,423 35,861 613,294	\$.	537,497 40,994 773,465	
Total Present Value of Future Normal Costs	\$ \$	953,868 145,078 808,790	\$ \$	1,128,578 202,207 926,371	<b>S</b>	1,351,956 287,386 1,064,570	
Actuarial Liability Assets UAL	<b>S</b>	108,011 700,779	\$	108,011 818,360	s S	108,011 956,559	

Table 8 GASB ARC – FY2011 6.71% Blended Discount Rate (in thousands)							
Health Care Trend Rate		- 1%		Base		+1%	
Total Normal Cost	\$	16,020	\$	22,196	\$	31,404	
Less Employee Contribution towards							
Normal Cost		<u>17,284</u>		<u>17,284</u>		17,284	
Employer Normal Cost	\$	(1,264)	\$	4,912	\$	14,120	
UAL Amortization		<u>34,948</u>		42,681		<u>51,771</u>	
Total ARC	\$	33,684	S	47,593	\$	65,891	

#### CITY OF SAN JOSE JULY 1, 2010 POST-RETIREMENT HEALTH VALUATION

#### **ACTUARIAL FUNDING**

The City has negotiated contracts with its labor unions that require both employee and City contributions to fund the Plan. The agreements call for a five year transition to fully funding the Annual Required Contribution (ARC) under GASB 43 and 45 using a straight line method. This section of the report calculates the current and expected future contribution requirements under these agreements. Contributions are currently made to a 401(h) account in the pension trust. This report ignores any potential limits to contributions to the 401(h) account, assuming the City will establish another trust vehicle if needed to accept the contributions required by the collective bargaining agreements.

The contributions for retiree medical benefits are split evenly between employees and the City, and the contributions for retiree dental benefits are split in the ratio of 8 to 3 with the City contributing 8/11 of the total contribution. The following table develops the UAL separately for medical and dental benefits based on the full funding discount rate of 7.95%.

Table 9 Unfunded Actuarial Liability Actuarial Funding							
Medical Dental Total							
Present Value of Future Benefits	× (40,000,000,000,000,000,000,000,000,000,	CONTRACTOR DESCRIPTION OF THE		**************************************			
Retirees and Beneficiaries	\$ 376,870,766	\$	46,480,554	\$ 423,351,320			
Term Vested Members	30,766,728		215,892	30,982,620			
Active Employees	431,534,893		41,181,090	472,715,983			
Total	\$ 839,172,387	\$	87,877,536	\$ 927,049,923			
Present Value of Future Normal Costs	124,354,586		13,208,992	137,563,578			
Actuarial Liability	\$ 714,817,801	\$	74,668,544	\$ 789,486,345			
Assets*	97,795,449		10,215,532	108,010,981			
Unfunded Actuarial Liability	\$ 617,022,352	\$	64,453,012	\$ 681,475,364			

<sup>\*</sup> Assets are allocated in proportion to Actuarial Liability

The UAL as of June 30, 2009 is amortized over a closed 30-year period as a level percentage of payroll, and subsequent gains and losses, changes in assumptions, and changes in plan provisions are amortized over 20-year periods from the first valuation recognizing the change. The outstanding balance of each amortization base established in a prior year is based on the amortization schedule used for GASB reporting purposes at the blended discount rate. The amortization base for the current year is equal to the UAL shown in the table above less the outstanding balance of prior year bases. The amortization payment is allocated to medical and dental in proportion to the Actuarial Liability. The following table shows the amortization schedule as of June 30, 2010.



## JULY 1, 2010 POST-RETIREMENT HEALTH VALUATION

#### **ACTUARIAL FUNDING**

	Amort	ization	Table 10 Schedule – Ful	l Fun	ding Basis	************	CONTENTION OF THE PROPERTY OF
Total Medical Dental							
Date Established	Outstanding Balance			Δ	mortization Payment	<u> </u>	<u>mortization</u> Payment
6/30/2009 6/30/2010	\$ 729,099,575 (47,624,211)	\$	Payment 45,784,596 (3,748,804)	\$	41,454,351 (3,394,247)	\$	4,330,245 (354,557)
Total	\$ 681,475,364	\$	42,035,792	\$	38,060,104	S	3,975,688

Due to the one-year lag between the valuation date and the effective date of new contribution rates, the amortization payments shown in the table above are assumed to be made 18 months after the valuation date and have been adjusted for interest accordingly.

The tables below develop the contribution amounts and rates for the fiscal year ending June 30, 2012 ignoring the phase-in of contribution rates.

Table 11 FY 2011-12 Contribution Amounts Actuarial Funding								
ACC 18 ST 20 TO TO TO TO THE TOTAL TO THE TOTAL TO THE TOTAL TO TOTAL TO THE TOTAL TO TOTAL TO THE TOTAL TO T		Medical		Dental		Total		
Normal Cost	\$	15,076,075	\$	1,875,729	\$	16,951,804		
Amortization Payment		38,060,104		3,975,688		42,035,792		
Contribution Amount without Phase-In								
Employees		26,568,089		1,595,841		28,163,930		
City		26,568,090	<u> </u>	4,255,576		30,823,665		
Total	\$	53,136,179	\$	5,851,417	\$	58,987,596		

Table 12 FY 2011-12 Contribution Rates Actuarial Funding							
	Medical	Dental	Total				
Normal Cost	4.84%	0.60%	5.44%				
Amortization Payment	12.21%	1.27%	13.48%				
Contribution Amount without Phase-In							
Employees	8.52%	0.51%	9.03%				
City	8.53%	1.36%	<u>9.89%</u>				
Total	17.05%	1.88%	18.92%				

The agreement to phase-in contributions to the full ARC by 2013-14 also contains a limit preventing either employee or City contribution rates from increasing by more than 0.75% per year until the last year of the phase-in when the full ARC must be contributed. The table below shows the projected contribution rates reflecting the phase-in.



### CITY OF SAN JOSE JULY 1, 2010 POST-RETIREMENT HEALTH VALUATION

### **ACTUARIAL FUNDING**

Table 13 Projected Phase-In Contribution Rates						
Fiscal Year	Employee	City	Total			
2008-09	4.65%	5.25%	9.90%			
2009-10	5.07%	5.70%	10.77%			
2010-11	5.76%	6.41%	12.17%			
2011-12	6.51%	7.16%	13.67%			
2012-13	7.26%	7.91%	15.17%			
2013-14	10.01%	10.95%	20.96%			

#### ACCOUNTING DISCLOSURES

Statement No. 43 and 45 of the Governmental Accounting Standards Board (GASB) established standards for accounting and financial reporting of Other Postemployment Benefit (OPEB) information by governmental employers and plans. In accordance with those statements, we have prepared the following disclosures:

### Net OPEB Obligation

Table 14 below shows the development of the Net OPEB Obligation.

Table 14 Development of Net OPEB Obligation (in thousands)						
	June	30, 2010*		ojected 30, 2011		
1. Net OPEB Obligation/(Asset) at beginning of fiscal year	\$	44,760	\$	62,589		
2. Annual Required Contribution for FYE	\$	38,599	\$	47,593		
3. Interest on Net OPEB Obligation/(Asset)		2,999		4,200		
4. Adjustment to Annual Required Contribution		2,184		<u>3,264</u>		
5. Annual OPEB Cost (2.) + (3.) - (4.)		39,414		48,529		
6. Employer Contributions Made (Actual/Estimated)		17,598		19,234		
7. Implicit Rate Subsidy (Actual/Estimated)		3,987				
8. Net OPEB Obligation/(Asset) at end of fiscal year (1.) + (5.) - (6.) - (7.)	S	62,589	\$	91,883		

<sup>\*</sup>As shown in the City's CAFR

#### Schedule of Funding Progress

The schedule of funding progress compares the assets used for funding purposes to the comparable liabilities to determine how well the Plan is funded and how this status has changed over the past several years. The actuarial liability is compared to the actuarial value of assets to determine the funding ratio. The Actuarial Liability under GASB is determined assuming that the Plan is ongoing and participants continue to terminate employment, retire, etc., in accordance with the actuarial assumptions.



#### **ACCOUNTING DISCLOSURES**

Table 15 Schedule of Funding Progress (in thousands)									
Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liabilities (b)	Unfunded Actuarial Accrued Liabilities (UAAL) (b-a)	Funded Ratio (a/b)	Annual Covered Payroll (c)	(UAAL) as Percentage of Covered Payroll ((b-a)/c)			
6/30/2010	\$ 108,011	\$926,371	\$ 818,360	12%	\$ 300,069	273%			
6/30/2009	85,564	796,448	710,884	11%	308,697	230%			
6/30/2007	96,601	616,749	520,148	16%	271,833	191%			
6/30/2006	81,288	702,939	621,651	12%	275,559	226%			

## Schedule of Employer Contributions

The schedule of employer contributions shows whether the employer has made contributions that are consistent with an actuarially sound method of funding the benefits to be provided.

Table 16 Schedule of Employer Contributions (in thousands)								
Fiscal Year Ended June 30	Annual OPEB Cost (AOC)	Employer Contributions Plus Implicit Subsidy	Percentage of AOC Contributed	Net OPEB Obligation				
2011	\$ 48,529	To be determined	To be determined	To be determined				
2010	39,414	\$ 21,585	55%	\$ 62,589				
2009	33,725	15,918	47%	44,760				
2008	38,513	11,560	30%	26,953				



#### ACCOUNTING DISCLOSURES

#### Amortization Schedule

Table 10 above shows the amortization schedule on a full funding basis. However, since the full ARC is not currently being contributed, the amortization schedule based on the blended discount rate of 6.71% that is used to calculate the ARC is shown in Table 17 below.

		Am	ortiz	Table 17 ation Schedule -	- ARC	Basis		
		$\mathbf{T}$	otal			Medical		Dental
Date	Outstanding		Outstanding Amortiza		Amortization		<u>Amortization</u>	
Established		Balance		Payment		Payment		Payment:
6/30/2009	\$	729,099,575	\$	36,810,713	\$	33,370,980	\$	3,439,733
6/30/2010		89,260,306	***	5,870,868		5,322,272	•	548,596
Total	\$	818,359,881	\$	42,681,581	\$	38,693,252	\$	3,988,329

We have also provided a Note to Required Supplementary Information for the financial statements.

Table 18 NOTE TO REQUIRED SUPPLEMENTARY INFORMATION						
	pplementary schedules was determined as part of Additional information as of the latest actuarial					
Valuation Date	June 30, 2010					
Actuarial Cost Method	Individual Entry Age					
Amortization Method	Level percentage of pay closed*					
Single Equivalent Amortization Period	27.6 years					
Asset Valuation Method	Market Value					
Actuarial Assumptions: Payroll Growth Rate Discount Rate Ultimate Rate of Medical Inflation	3.90% 6.71% 4.50%					

<sup>\*</sup> The 6/30/2009 UAL is amortized over a closed 30-year period. Subsequent changes to the UAL are amortized over closed 20year layered periods.



# APPENDIX A PARTICIPANT DATA, ASSUMPTIONS AND METHODS

## Participant Data as of June 30, 2010:

Eligible Active Employees Years of Service									
Age Group	< 5	5-9	10 - 14	15 - 19	20 - 24	25 - 29	30 – 34	35±	Total
Under 25	34	0	0	0	0	0	0	0	34
25 to 30	201	21	1	0	.0	Ó	0	0	223
30 to 35	205	123	36	.0	0	Ö	0	0	364
35 to 40	128	165	161	20	0	Ô	0	0	474
40 to 45	112	137	177	70	46	1	0	0	543
45 to 50	105	108	159	95	164	41	0	0.	672
50 to 55	97	93	123	95	171	96	7	0	682
55 to 60	64	87	118	55	107	36	6	1	474
60 to 65	27	46	69	38	51	20	2	2	255
Over 65	9	<u>15</u>	<u>45</u>	10	12	6	0	0	97
Total	982	795	889	383	551	$\overline{200}$	15	3	3,818

Average age of active employees: 45.9

Average service: 12.1 years Annual Earnings: \$300,069,063

Åσο	Me	Medical Insurance			Dental Insurance		
Age Group	Males	Females	Total	Males	Females	Total	
Under 50	12	24	36	11	17	28	
50 to 55	38	39	77	38	36	74	
55 to 60	169	139	308	178	137	315	
60 to 65	274	215	489	300	221	521	
65 to 70	219	184	403	248	211	459	
70 to 75	177	146	323	199	181	380	
75 to 80	136	116	252	157	140	297	
80 to 85	87	97	184	119	133	252	
85 to 90	67	52	119	97	90	187	
Over 90	22	32	54	<u>26</u>	49	75	
Total	1,201	1,044	2.245	1,373	1.215	2,588	

# APPENDIX A PARTICIPANT DATA, ASSUMPTIONS AND METHODS

Prior '	Vested T	'erminatio	ns
Age Group	Male	Female	Total
Under 55	0	2	2
55 to 60	23	18	41
60 to 65	23	15	38
65 to 70	10	7	17
70 to 75	5	3	8
75 to 80	8	3	11
Over 80	13	7	<u>20</u>
Total	82	55	137

Current	Vested	Terminati	ons*
Age Group	Male	Female	Total
Under 45	7	3	10
45 to 50	17	14	31
50 to 55	25	18	43
55 to 60	3	0	3:
60 to 65	1	1	2
Over 65	<u>0</u>	<u>0</u> :	<u>0</u>
Total	53	36	89

<sup>\*</sup>Includes those term vested participants with at least 15 years of service (37.5% pension multiplier)



# APPENDIX A PARTICIPANT DATA, ASSUMPTIONS AND METHODS

## **Economic Assumptions:**

1. Expected Return on Plan Assets:

7.90% per year

2. Expected Return on Employer Assets:

4.50% per year

3. Blended Discount Rate:

6.71% per year

4. Per Person Cost Trends:

Date		Annual Increase	
To Year Beginning July 1	Pre-Medicare	Medicare Eligible	Dental
2011	9.50%	7.00%	5.00%
2012	9.17	6.83	4.50
2013	8.83	6.67	4.50
2014	8.50	6.50	4.00
2015	8.17	6.33	4.00
2016	7.83	6.17	4.00
2017	7.50	6.00	4.00
2018	7.17	5.83	4.00
2019	6.83	5.67	4.00
2020	6.50	5.50	4.00
2021	6.17	5.33	4.00
2022	5.83	5.17	4.00
2023	5.50	5,00	4,00
2024	5.17	4.83	4.00
2025	4.83	4.67	4.00
2026+	4.50	4,50	4.00

Deductibles, Co-payments, Out-of-Pocket Maximums, and Annual Maximum are assumed to increase at the above trend rates.



# APPENDIX A PARTICIPANT DATA, ASSUMPTIONS AND METHODS

## Demographic Assumptions:

## 1. Retirement Rates:

The following rates of retirement are assumed for members eligible to retire.

Retirements by Age				
Age	Retirement			
50	0.00%			
51	0.00			
52	0.00			
53	0.00			
54	0.00			
55	15.00			
56	7.50			
57	7.50			
58	7.50			
59	7.50			
60	7.50			
61	7.50			
62	20.00			
63	10.00			
64	10.00			
65	25.00			
66	25.00			
67	25,00			
68	25.00			
69	25.00			
70 and over	100.00			

The probability of retirement increased to 50% each year after completion of 30 years of service and attainment of age 50.



# APPENDIX A PARTICIPANT DATA, ASSUMPTIONS AND METHODS

## 2. Termination / Withdrawal Rates:

Sample rates of withdrawal/termination are show in the following table

Rates of Termination / Withdrawal						
Age	Withdrawal	Vested Termination				
20	11.00%	0.00%				
25	7.00	3.00				
30	5.00	3.00				
35	2.50	2.75				
40	1.50	2.00				
45	1.25	2.00				
50	1.25	1.50				
55	1.00	0.00				
60	1.00	0.00				
65	0.00	0.00				

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



# APPENDIX A PARTICIPANT DATA, ASSUMPTIONS AND METHODS

## 3. Rate of Mortality:

### Healthy Lives:

Mortality rates for actives, retirees, beneficiaries, terminated vested and reciprocals are based on the sex distinct 1994 Group Annuity Mortality Tables setback three years for males and one year for females.

	Healthy Mortality Rates					
Age	Male Participants Pre- and Post- Retirement	Female Participants Pre- and Post- Retirement				
20	0.043%	0.028%				
25	0.056	0.029				
30	0.073	0.033				
35	0.084	0.045				
40	0.089	0.065				
45	0.125	0.092				
50	0.190	0.131				
55	0.321	0,208				
60	0.558	0.386				
65	1.015	0.762				
70	1.803	1.271				
75	2.848	2.038				
80	4.517	3.536				

### Disabled Lives:

Mortality rates for disabled retirees are based on the 1981 Disability Mortality Table.



APPENDIX A
PARTICIPANT DATA, ASSUMPTIONS AND METHODS

	Disabled Mortality Rates						
Аде	Male Participants Pre- and Post- Retirement	Female Participants Pre- and Post- Retirement					
20	0.660%	0,660%					
25	0.960	0.960					
30	1.220	1.220					
35	1.480	1,480					
40	1.760	1.760					
45	2.080	2.080					
50	2.440	2.440					
55	2.840	2.840					
60	3.300	3.300					
65	3.790	3.790					
70	4.370	4.370					
75	5.530	5,530					
80	8.740	8.740					

## 4. Disability Rates:

Sample rates of disability are show in the following table

Rates of Disability at Selected Ages				
Age	Disability			
20	0.04%			
25	0.06			
30	0.07			
35	0.09			
40	0.15			
45	0.25			
50	0.40			
55	0.50			
60	1.00			
65	2.00			
70	0.00			

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



# APPENDIX A PARTICIPANT DATA, ASSUMPTIONS AND METHODS

### 5. Salary Increase Rate:

Wage inflation component

3.90%

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

Salary Merit Increase					
Years of Service	Merit & Longevity				
0	5.75%				
1	3.75				
2	2.25				
. <b>3</b> .	1.75				
4	1.00				
5+	0.25				

6. Percent of Retirees Electing Coverage: 100% of employees are assumed to elect coverage at retirement. Future retirees plan elections are assumed to mirror current retiree plan elections. The following rates are used to determine blended claims and contributions for future retirees:

Assumed Plan Elections for Future Retirees							
Plan	Plan Pre-Medicare Med						
Medical							
• Kaiser	71%	46%					
• HMO	22%	6%					
• PPO	5%	42%					
• POS	2%	N/A					
<ul> <li>Secure Horizons</li> </ul>	N/A	4%					
• Pacificare	N/A	2%					
Dental	·						
Delta Dental PPO	1	97%					
<ul> <li>DeltaCare HMO</li> </ul>		3%					

- 7. Family Composition: 55% of employees will elect spouse coverage in a medical plan at retirement. 65% of employees will elect spouse coverage in a dental plan at retirement.
- 8. Dependent Age: For current active employees, males are assumed to be 3 years older than female spouses. For current retirees, actual spouse date of birth was used.
- 9. Married Percentage: 100% of employees are assumed to be married.

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# APPENDIX A PARTICIPANT DATA, ASSUMPTIONS AND METHODS

10. Administrative Expenses: Included in the average monthly premiums.

### **Changes Since Last Valuation**

The assumption for the expected rate of return on plan investments was changed from 7.75% to 7.95%. The payroll growth assumption was changed from 3.83% to 3.90%.



# APPENDIX A PARTICIPANT DATA, ASSUMPTIONS AND METHODS

## Claim and Expense Assumptions:

1. Average Annual Claims and Expense Assumptions: The following claim and expense assumptions are applicable to the 12-month period beginning July 1, 2010 and are based on the premiums in effect on the valuation date. Subsequent years' costs are based on the trended first year cost adjusted with trends listed above.

### Actives Employees:

	Medical				
Age	Male	Female			
40	\$3,216	\$5,724			
45	4,032	6,060			
50	5,340	7,188			
55	7,020	8,568			
60	9,120	10,224			
64	11,784	12,624			
65	5,148	5,484			
70.	6,036	6,060			
75	6,756	6,528			
80	7,176	6,744			
85	7,272	6,672			

### Current Retirees:

and the state of t	Kaiser - Male			ŀ	Caiser - Femal	2
Age	Blended Premium	Age-Based Cost	Implicit Subsidy	Blended Premium	Age-Based Cost	Implicit Subsidy
45	5,809	3,873	(1,936)	5,809	5,820	11
50	5,809	5,130	(679)	5,809	6,903	1,094
55	5,809	6,741	932	5,809	8,226	2,417
64	5,809	11,317	5,508	5,809	12,133	6,324
65	5,157	4,616	(541)	5,157	4,923	(234)
70	5,157	5,420	263	5,157	5,436	279
75	5,157	6,061	903	5,157	5,862	704
80	5,157	6,439	1,282	5,157	6,051	893



# APPENDIX A PARTICIPANT DATA, ASSUMPTIONS AND METHODS

******************************	HMO - Male			HMO - Female		
Age	Blended Premium	Age-Based Cost	Implicit Subsidy	Blended Premium	Age-Based Cost	Implicit Subsidy
45	6,482	4,285	(2,197)	6,482	6,439	(43)
50	6,482	5,675	(807)	6,482	7,637	1,155
55	6,482	7,458	975	6,482	9,101	2,619
64	6,482	12,521	6,038	6,482	13,424	6,941
65	4,950	4,825	(124)	4,950	5,146	197
70	4,950	5,666	716	4,950	5,683	733
75	4,950	6,335	1,386	4,950	6,127	1,178
80	4,950	6,731	1,781	4,950	6,325	1,375

	PPO - Male			PPO - Female		
Age	Blended Premium	Age-Based Cost	Implicit Subsidy	Blended Premium	Age-Based Cost	Implicit Subsidy
45	9,000	4,703	(4,297)	9,000	7,067	(1,933)
50	9,000	6,229	(2,771)	9,000	8,382	(618)
55	9,000	8,185	(815)	9,000	9,989	988
64	9,000	13,742	4,742	9,000	14,733	5,733
65	6,994	5,905	(1,089)	6,994	6,298	(696)
70	6,994	6,934	(61)	6,994	6,955	(40)
75	6,994	7,753	759	6,994	7,499	505
80	6,994	8,238	1,243	6,994	7,740	746

	**************************************	POS - Male			POS - Female		
	Age	Blended Premium	Age-Based Cost	Implicit Subsidy	Blended Premium	Age-Based Cost	Implicit Subsidy
l	45	9,000	5,388	(3,612)	9,000	8,097	(903)
	50	9,000	7,136	(1,864)	9,000	9,603	602
	55	9,000	9,377	377	9,000	11,444	2,443
	64	9,000	15,744	6,743	9,000	16,879	7,879

	Secure Horizons - Male			Secure Horizons - Female		
Age	Blended Premium	Age-Based Cost	Implicit Subsidy	Blended Premium	Age-Based Cost	Implicit Subsidy
65	5,335	4,235	(1,100)	5,335	4,516	(818)
70	5,335	4,972	(362)	5,335	4,987	(348)
75	5,335	5,560	225	5,335	5,377	43
80	5,335	5,907	573	5,335	5,551	216



# APPENDIX A PARTICIPANT DATA, ASSUMPTIONS AND METHODS

	Pacificare - Male			Pacificare - Female		
Age	Blended Premium	Age-Based Cost	Implicit Subsidy	Blended Premium	Age-Based Cost	Implicit Subsidy
65	4,746	3,950	(795)	4,746	4,213	(532)
70	4,746	4,639	(107)	4,746	4,653	(93)
75	4,746	5,187	441	4,746	5,017	271
80	4,746	5,511	765	4,746	5,178	433

Dental					
Plan	Monthly Premium (every age)				
Delta Dental PPO DeltaCare HMO	\$669 300				

- 2. Medicare Part D Subsidy: Per GASB guidance, the Part D Subsidy has not been reflected in this valuation.
- 3. Medicare Part B Premiums: Assumed that Medicare eligible retirees pay the Medicare Part B premiums.
- 4. Medicare Eligibility: Age 65
- 5. Annual Limits: Assumed to increase at the same rate as trend.
- 6. Lifetime Maximums: Are not assumed to have any financial impact.
- 7. Geography: Implicitly assumed to remain the same as current retirees.
- 8. Retirce Contributions:

Current retirees pay the difference between the actual premium for the elected plan and the Kaiser rate.

Future retirees are assumed to pay the following rates:

	Retiree	Spouse
Pre-Medicare	\$372	\$717
Medicare Eligible	498	0:



## APPENDIX A PARTICIPANT DATA, ASSUMPTIONS AND METHODS

### Methodology:

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 postemployment benefits between each member's date of hire and assumed retirement. The actuarial liability is the difference between the present value of future benefits and the present value of future normal cost. The unfunded actuarial liability is the difference between the actuarial liability and the actuarial value of assets.

The claims costs are based on the fully insured premiums charged to the City for the active and retiree population.

### Changes Since Last Valuation:

We modified the claim costs to reflect current retiree plan election experience.

We modified the trends to reflect current experience and our expectation for the future. We anticipate that the healthcare trends for the following years will be higher because of anticipated increases due to healthcare reform legislation, followed by trends decreasing to the lower ultimate trend level.

We did not make any adjustments for the Patient Protection and Affordable Care Act of 2010 or related legislation or regulations, except in reference to our industry trend assumptions.



## APPENDIX B SUBSTANTIVE PLAN PROVISIONS

## Summary of Key Substantive Plan Provisions:

### Eligibility:

#### Medical:

Employees who retire (include deferred vested members) at age 55 with 15 years of service, or with a monthly pension equal to at least 37.5% of final compensation, are eligible to elect medical coverage upon retirement.

Employees who become disabled with at least 15 years of service or have a monthly pension equal to at least 37.5% of final compensation are eligible to elect medical coverage upon retirement.

Spouses or domestic partners of retired members are allowed to participate if they were enrolled in the City's medical plan at the time of the member's retirement. Dependent children are eligible to receive coverage until the age of 19 (24 if a full-time student).

Surviving spouses / domestic partners / children of deceased members are eligible for coverage if the following conditions are met:

1. the employee has 15 years of service at time of death or is entitled to a monthly pension of at least 37.5% of final compensation; and

2. both the member and the survivors were enrolled in the active medical plan immediately before death; and

3. the survivor will receive a monthly pension benefit.

#### Dental:

Employees who retire or become disabled directly from City service with at least 5 years of service or with a monthly pension equal to at least 37.5% of final compensation, and are enrolled in a City dental plan at retirement are eligible to elect dental coverage upon retirement. Spouses, domestic partners, or children of retired members are allowed to participate if they were enrolled in the City's dental plan at the time of the member's retirement.

Surviving spouses / domestic partners / children of deceased members are eligible for coverage if the following conditions are met:

1. the employee has 5 years of service at time of death or is entitled to a monthly pension of at least 37.5% of final compensation; and

2. both the member and the survivors were enrolled in the active dental plan immediately before death; and

3. the survivor will receive a monthly pension benefit.



# APPENDIX B SUBSTANTIVE PLAN PROVISIONS

#### **Benefits for Retirees:**

Medical:

The Retirement System, through the medical benefit account, pays 100% of the premium for the lowest cost health plan available to active City employees. The member pays the difference if another plan is elected.

Effective January 1, 2010, the lowest cost health plan is the Kaiser plan. The single coverage amount is \$484.06 per month, and the family coverage amount is \$1,205.20 per month. These amounts are not adjusted once a retiree is eligible for Medicare.

Dental:

The Retirement System, through the medical benefit account, pays 100% of the dental insurance premiums.

Premiums: Monthly premiums before adjustments for 2010 are as follows.

Monthly Premiums for 2010						
	Single	% Increase	Family	% Increase		
Medical						
Non-Medicare Monthly Rates						
Kaiser – Traditional (CA)	\$484.06	9.0%	\$1,205.20	9.0%		
Blue Shield HMO	540.20	9.9%	1,387.72	9.9%		
Blue Shield PPO or POS	750.02	11.9%	1,927.48	11.9%		
Medicare Monthly Rates		.*		÷		
Kaiser – Senior Advantage	\$429.78	3.7%	\$859.56	3.7%		
Secure Horizons	444.55	10.5%	889.10	10.5%		
Blue Shield Medicare PPO	582.86	11.9%	1,165.72	11.9%		
Blue Shield Medicare HMO	412.46	9.9%	824.92	9.9%		
Pacificare Senior Supplement	395.48	4.4%	790.96	4.4%		
Dental				· · · · · · · · · · · · · · · · · · ·		
Delta Dental PPO	\$111.48	18.0%	\$111.48	18.0%		
DeltaCare HMO	49.98	(0.2)%	49.98	(0.2)%		

#### **Cost Sharing Provisions:**

It is assumed for the purpose of this valuation that the City of San Jose will in the future maintain a consistent level of cost sharing for benefits with the retirees. This may be achieved by adjusting benefit provisions, contributions or both.



## CITY OF SAN JOSE JULY 1, 2010 POSTRETIREMENT HEALTH VALUATION

#### APPENDIX C GLOSSARY OF TERMS

1. Actuarial Assumptions

Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, and retirement; changes in compensation; rates of investment earnings, and asset appreciation or depreciation; procedures used to determine the actuarial value of assets; and other relevant items.

#### 2. Actuarial Cost Method

A procedure for determining the actuarial present value of pension plan benefits and expenses and for developing an allocation of such value to each year of service, usually in the form of a normal cost and an actuarial liability.

3. Actuarial Gain (Loss)

A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

4. Actuarial Liability

The portion of the actuarial present value of projected benefits which will not be paid by future normal costs. It represents the value of the past normal costs with interest to the valuation date.

5. Actuarial Present Value (Present Value)

The value as of a given date of a future amount or series of payments. The actuarial present value discounts the payments to the given date at the assumed investment return and includes the probability of the payment being made. As a simple example: assume you owe \$100 to a friend one year from now. Also, assume there is a 1% probability of your friend dying over the next year, in which case you won't be obligated to pay him. If the assumed investment return is 10%, the actuarial present value is:

		Probability	1		
Amount		of Payment	(1+Discount Rate)		
\$100	X	(101)	1/(1+.1)	=	\$90

### 6. Actuarial Valuation

The determination, as of a specified date, of the normal cost, actuarial liability, actuarial value of assets, and related actuarial present values for a pension plan.

#### 7. Actuarial Value of Assets

The value of cash, investments and other property belonging to a pension plan as used by the actuary for the purpose of an actuarial valuation. The purpose of an actuarial value of assets is to smooth out fluctuations in market values. This way long-term costs are not distorted by short-term fluctuations in the market.



#### CITY OF SAN JOSE JULY 1, 2010 POSTRETIREMENT HEALTH VALUATION

#### APPENDIX C GLOSSARY OF TERMS

#### 8. Amortization Payment

The portion of the pension plan contribution which is designed to pay interest and principal on the unfunded actuarial liability in order to pay for that liability in a given number of years.

#### 9. Projected Unit Credit Actuarial Cost Method

A method under which the actuarial present value of the projected benefits of each individual included in an actuarial valuation accrued from the date of entry into the plan to the date of the valuation.

#### 10. Normal Cost

That portion of the actuarial present value of pension plan benefits and expenses which is allocated to a valuation year by the actuarial cost method.

#### 11. Unfunded Actuarial Liability

The excess of the actuarial liability over the actuarial value of assets.

#### 12. Funded Percentage

The ratio of the actuarial liabilities to the actuarial value of assets.

#### 13. Mortality Table

A set of percentages which estimate the probability of death at a particular point in time. Typically, the rates are annual and based on age and sex.

#### 14. Discount Rate

The assumed interest rate used for converting projecting dollar related values to a present value as of the valuation date.

#### 15. Medical Trend

The assumed increase in dollar related values in the future due to the increase in the cost of health care.



## CITY OF SAN JOSE JULY 1, 2010 POSTRETIREMENT HEALTH VALUATION

#### APPENDIX D LIST OF ABBREVIATIONS

Actuarial Accrued Liability (AAL)

Actuarial Valuation Report (AVR)

Annual Required Contribution (ARC)

Coordination of Benefits (COB)

Deductible and Coinsurance (DC)

Deferred Retirement Option Plan (DROP)

Durable Medical Equipment (DME)

Employee Assistance Program (EAP)

Employee Benefits Division (EBD)

Fiscal Year Ending (FYE)

Governmental Accounting Standards Board (GASB)

Hospital Emergency Room (ER)

In-Network (INN)

Inpatient (IP)

Medicare Eligible (ME)

Net Other Postemployment Benefit (NOO)

Non-Medicare Eligible (NME)

Not Applicable (NA)

Office Visit (OV)

Other Postemployment Benefit (OPEB)

Out-of-Network (OON)

Out-of-Pocket (OOP)

Outpatient (OP)

Pay-as-you-go (PAYGo)

Per Person Per Month (PPPM)

Pharmacy (Rx)

Preferred Provider Organization (PPO)

Primary Care Physician (PCP)

Specialist Care Provider (SCP)

Summary Plan Description (SPD)

Unfunded Actuarial Accrued Liability (UAAL)

Unfunded Actuarial Liability (UAL)

Urgent Care (UC)

