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CHEIRON

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City of San José Police and Fire Department Postemployment Healthcare Plan

Actuarial Valuation Report as of June 30, 2016

Produced by Cheiron

January 2017

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January 25, 2017

Via Email

Board of Administration
City of San José Police and Fire Department Retirement Plan
1737 North First Street, Suite 580
San José, California 95112

Re: City of San José Police and Fire Department Postemployment Healthcare Plan Valuation

Dear Members of the Board:

The purpose of this report is to present the annual actuarial valuation report of the City of San José Police and Fire Department Postemployment Healthcare Plan. This report is for the use of the Board and its auditors in preparing financial reports in accordance with applicable law and accounting requirements.

Appendix A describes the member data, assumptions, and methods used in calculating the figures throughout the report. In preparing our report, we relied on information (some oral and some written) supplied by the City. 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 No. 23.

Appendix B contains a summary of the substantive plan provisions based on documentation provided by and discussions with the City of San José's staff.

The discount rate, health care claims, and trends were adopted at the January 5, 2017 Board meeting. All of the other assumptions in this report were adopted at the December 3, 2015 Board meeting based on recommendations from our experience study covering plan experience during the period from July 1, 2009 through June 30, 2015. Please refer to the experience study report and our Board presentations for an explanation of the rationale for each assumption.

The liability measures and funding ratios in this report are for the purposes of establishing contribution rates and for financial reporting under GASB Statements 43 and 45. These measures are not appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligations.

Future actuarial measurements may differ significantly from the current measurements due to such factors as the following: plan experience differing from that anticipated by the economic, demographic or health assumptions; changes in economic or demographic assumptions; and, changes in plan provisions or applicable law.

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, collectively 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 valuation report was prepared for the Board for the purposes described herein and for the use by the plan auditor in completing an audit related to the matters herein. Other users of this report are not intended users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to any other user.

This valuation report does not reflect future changes in benefits, penalties, taxes, or administrative costs that may be required as a result of the Patient Protection and Affordable Care Act of 2010, related legislation, or regulations.

Sincerely,
Cheiron

William R. Hallmark

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

Michael W. Schionning, FSA, MAAA
Principal Consulting Actuary

John L. Colberg, FSA, EA, MAAA
Principal Consulting Actuary

SECTION I – BOARD SUMMARY

The Board of Administration of the City of San José Police and Fire Department Retirement Plan has engaged Cheiron to provide a valuation of the City of San José Police and Fire Department Postemployment Healthcare Plan. The primary purpose of performing this actuarial valuation is to:

- Determine the Annual Required Contribution (ARC), Annual OPEB Cost (AOC), and the Net Other Postemployment Benefit (OPEB) Obligation (NOO) of the Postemployment Healthcare Plan under GASB 43 and 45 for the fiscal year ending June 30, 2017;

- Provide information for financial statement disclosures under GASB 43 and 45; and,

- Show the sensitivity of the valuation results to changes in health trend assumptions.

We have determined costs and measured liabilities for the Plan using actuarial assumptions and methods that have been adopted by the Board or are prescribed by the collective bargaining agreement.

Contribution Policy

On November 8, 2016, Measure F was passed. Measure F significantly changed the benefits and contribution agreements between the City and its employees. Once Measure F is fully implemented, we understand that the members who remain under the Plan will contribute a fixed percentage of pay and the City will pay a contribution determined by the Board, subject to a cap. Prior to the time that Measure F is implemented, we understand the City and members will continue paying the contributions rates that were first set for FYE 2014 for Police members and FYE 2016 for Fire members. We understand the City intends to implement Measure F in stages as ordinances are adopted, approvals are received from the IRS, and member elections are implemented. For purposes of this report, we have valued the plan provisions in effect as of June 30, 2016 and assumed that no changes affecting contributions to the Plan under Measure F are implemented until after June 30, 2017.

Accounting Policy

The Board's current policy sets the Annual Required Contribution (ARC) for the fiscal year immediately following the valuation date equal to the normal cost plus a rolling 30-year amortization of the Unfunded Actuarial Liability (including the implicit subsidy). Once actual contributions reach that level, it is anticipated that the ARC will change to the contribution basis.

SECTION I – BOARD SUMMARY

Valuation Results

The tables below present the key results of the 2016 valuation. Table I-1 provides results on a funding basis. Currently this only provides an alternative measure of funding progress and is not used directly to determine contribution rates given the negotiated contribution rates and pending implementation of Measure F; and, Table I-2 provides the results on a GASB reporting basis.

Table I-1
Summary of Key Valuation Results
Funding Valuation Basis[1]

Valuation Date Discount Rate	6/30/2016 6.875%	6/30/2015 7.00%
Actuarial Liability (AL)	624,228	591,996
Actuarial Value of Assets (AVA)	135,207	114,565
Unfunded Actuarial Liability (UAL)	489,021	477,430
AVA Funding Ratio	21.7%	19.4%
Market Value of Assets (MVA)	123,425	109,627
Unfunded Liability (MVA basis)	500,803	482,369
MVA Funded Ratio	19.8%	18.5%

[1] *Excludes implicit subsidy*

Dollar amounts in thousands

Table I-2
Summary of Key Valuation Results
GASB Valuation Basis[1]

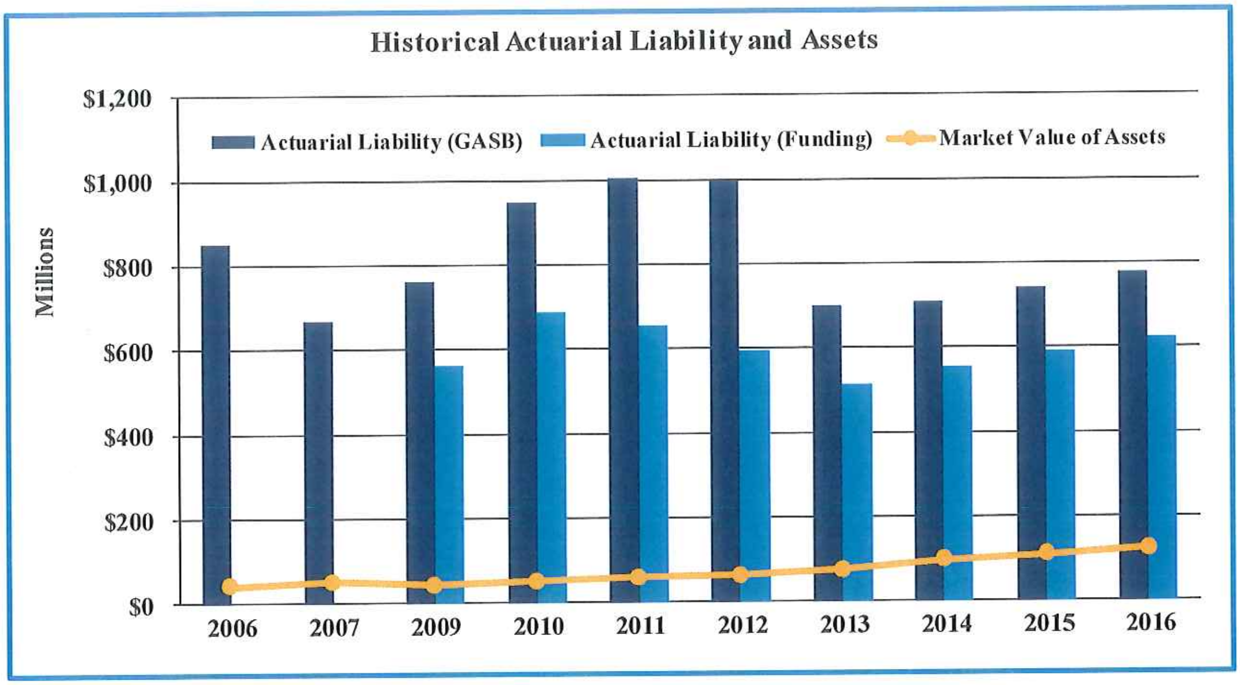
Valuation Date Discount Rate		6/30/2016 5.90%		6/30/2015 6.00%
Actuarial Liability (AL)	$	778,871	$	739,753
Actuarial Value of Assets (AVA)		135,207		114,565
Unfunded Actuarial Liability (UAL)	$	643,664	$	625,188
AVA Funding Ratio		17.4%		15.5%
Market Value of Assets (MVA)	$	123,425	$	109,627
Unfunded Liability (MVA basis)		655,446		630,126
MVA Funded Ratio		15.8%		14.8%
Fiscal Year Ending		**6/30/2017**		**6/30/2016**
City ARC				
-- if paid as percent of pay		17.20%		17.70%
-- if paid as dollar amount (MOY)	$	33,381	$	32,694
Expected /Actual City Contribution[1]	*$*	*21,865*	$	21,064
Expected /Actual Net Benefit Payments[1]	*$*	*24,588*	$	23,449

[1] *Includes implicit subsidy* *Dollar amounts in thousands*

The discount rate on a GASB basis decreased from 6.00% to 5.90% in this valuation and the discount rate used for funding decreased from 7.00% to 6.875%. There were also changes to the plan since the prior valuation. On a funding basis, these changes, together with other experience during the year, resulted in an increase in the UAL of $11.6 million and $18.4 million on an actuarial and market basis respectively. On a GASB basis, the changes lead to an increase in the UAL of $18.5 million on an actuarial basis and an increase in the UAL of $25.3 million on a market basis. Under all measures, the funding ratio (the ratio of assets to liabilities) has improved. More detail on the effects of these changes can be found in the GASB valuation results section of this report.

Historical Trends

The chart below shows the historical trend of assets and the Actuarial Liability on a GASB and Funding basis for the City of San José Police and Fire Department Postemployment Healthcare Plan. The significant fluctuations in the Actuarial Liability reflect changes in the blended discount rate, changes in health trend assumptions, and changes in the lowest cost health plan which is the basis of the City's contribution towards coverage.



Funding Valuation Basis	**2006**	**2007**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
Funded Ratio			9.9%	8.5%	9.2%	11.1%	14.7%	16.8%	19.4%	21.7%
UAL/(Surplus) *(in millions)*			$507.2	$627.8	$596.8	$529.8	$437.0	$462.1	$477.4	$489.0
Discount Rate			8.00%	7.75%	7.50%	7.25%	7.13%	7.00%	7.00%	6.875%
GASB Valuation Basis	**2006**	**2007**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
Funded Ratio	4.5%	6.8%	7.3%	6.2%	6.0%	6.7%	10.7%	13.2%	15.5%	17.4%
UAL/(Surplus) *(in millions)*	$812.8	$620.8	$706.0	$887.7	$943.1	$930.9	$625.5	$613.1	$625.2	$643.7
Discount Rate	5.30%	6.40%	6.70%	6.30%	5.70%	4.40%	6.00%	6.00%	6.00%	5.90%

* *Funding valuation information performed by prior actuary not available before 2009*

SECTION I – BOARD SUMMARY

The table below shows the expected net benefit payments for the next 20 years. These payments include the expected annual implicit subsidy as well as expected plan premium payments.

Table I-3
Expected Net Benefit Payments

Fiscal Year Ending June 30	Explicit Medical	Dental	Total Explicit Subsidy	Implicit Subsidy	Total Expected Payments
2017	$ 20,471,538	$ 2,517,310	$ 22,988,848	$ 1,598,907	$ 24,587,755
2018	22,384,226	2,683,473	25,067,699	1,546,971	26,614,670
2019	24,707,621	2,863,863	27,571,484	1,513,055	29,084,539
2020	27,221,970	3,049,993	30,271,963	1,688,779	31,960,742
2021	29,842,578	3,245,453	33,088,031	1,783,090	34,871,121
2022	32,674,574	3,461,001	36,135,575	1,790,159	37,925,734
2023	35,698,221	3,690,383	39,388,604	1,923,343	41,311,947
2024	38,844,052	3,922,244	42,766,296	2,215,185	44,981,481
2025	41,821,575	4,144,443	45,966,018	2,637,224	48,603,242
2026	44,426,629	4,346,473	48,773,102	3,157,539	51,930,641
2027	47,051,983	4,560,263	51,612,246	3,684,771	55,297,017
2028	49,535,423	4,771,370	54,306,793	4,335,624	58,642,417
2029	51,758,618	4,970,300	56,728,918	4,958,653	61,687,571
2030	53,808,878	5,156,453	58,965,331	5,649,349	64,614,680
2031	55,499,212	5,337,364	60,836,576	6,337,929	67,174,505
2032	57,196,246	5,524,985	62,721,231	6,821,366	69,542,597
2033	58,790,757	5,721,244	64,512,001	7,041,938	71,553,939
2034	60,398,076	5,924,036	66,322,112	7,224,146	73,546,258
2035	61,989,688	6,112,530	68,102,218	7,301,902	75,404,120
2036	63,261,611	6,282,431	69,544,042	7,029,652	76,573,694

In this valuation, the amount of the estimated implicit subsidy increased from $1,388,504 for the fiscal year ending June 30, 2016 to $1,598,907 for the fiscal year ending June 30, 2017.

The remainder of this report provides additional detail. First, the assets are presented. Then, the GASB valuation results are developed and the sensitivity of the GASB results to changes in the health care trend rates are illustrated. Finally, disclosure information needed to satisfy the GASB OPEB accounting and financial reporting requirements is presented.

SECTION II – ASSETS

Market Value of Assets

The assets for the Plan are maintained in two separate trusts: a 401(h) account within the pension plan and a Section 115 trust. The 115 trust consists of two sub-trusts: one for Police and one for Fire. Member contributions are deposited in the 401(h) account and City contributions (other than the implicit subsidy) are deposited in the 115 trust. Benefits can be paid from either trust, but currently all benefits are paid from the 401(h) account. The implicit subsidy is shown as a contribution to and a benefit payment from the 401(h) account, but it is actually paid directly by the City on a pay-as-you-go basis.

Table II-1 below shows the changes in the Market Value of Assets for the last two fiscal years. In the last year, investment earnings were about -1.4% compared to an assumed return of 7.0%, resulting in an actuarial loss of approximately $10.7 million on a funding basis. The assets in the 401(h) account returned approximately -1.1%, the assets in the Police 115 trust returned approximately -1.7%, and the assets in the Fire 115 trust returned approximately -1.6%.

Table II-1
Market Value of Assets

	Fiscal Year Ending 2016				
	401(h)	Police 115	Fire 115	Total	FYE 2015
Market Value, Beginning of Year	$ 51,342,693	$ 38,864,443	$ 19,419,945	$ 109,627,081	$ 97,644,503
Contributions					
Member	18,006,791	0	0	18,006,791	17,016,537
City	0	11,575,683	8,099,537	19,675,220	20,909,116
Implicit Subsidy	1,388,501	0	0	1,388,501	2,050,492
Total	$ 19,395,292	$ 11,575,683	$ 8,099,537	$ 39,070,512	$ 39,976,145
Net Investment Earnings	(539,503)	(843,239)	(440,986)	(1,823,728)	(1,737,631)
Benefit Payments					
Premium Payments	22,060,338	0	0	22,060,338	24,205,444
Implicit Subsidy	1,388,501	0	0	1,388,501	2,050,492
Total	$ 23,448,839	$ 0	$ 0	$ 23,448,839	$ 26,255,936
Market Value, End of Year	$ 46,749,643	$ 49,596,887	$ 27,078,496	$ 123,425,026	$ 109,627,081
Estimated Rate of Return	-1.1%	-1.7%	-1.6%	-1.4%	-1.5%

Actuarial Value of Assets

To determine on-going contribution amounts, most pension funds use an Actuarial Value of Assets that smooths year-to-year market value returns in order to reduce the volatility of contribution rates. The same approach is used for this OPEB valuation although, given the size of the current assets, the smoothing effect is minimal. As the assets grow, smoothing may become more important in controlling the volatility of contribution rates.

The Actuarial Value of Assets is calculated by recognizing the deviation of actual investment returns compared to the expected return over a five-year period. The dollar amount of the expected return on the Market Value of Assets is determined using the actual contributions and benefit payments during the year. Any difference between this amount and the actual net investment earnings is considered a gain or loss. Table II-2 shows the development of the Actuarial Value of Assets as of the valuation date. For each of the last four years, it shows the actual earnings, the expected earnings, the gain or loss and the portion of the gain or loss that is not recognized in the current Actuarial Value of Assets. These deferred amounts will be recognized in future years.

Table II-2
Development of Actuarial Value of Assets

	FYE 2013	FYE 2014	FYE 2015	FYE 2016	June 30, 2016
Market Value of Assets					$ 123,425,026
Actual Earnings	$ 6,367,119	$ 12,497,077	$ (1,737,631)	$ (1,823,728)	
Expected Earnings	5,333,899	6,314,473	8,051,397	8,911,686	
Gain or (Loss)	1,033,220	6,182,604	(9,789,028)	(10,735,414)	
Deferred %	20%	40%	60%	80%	
Deferred Amount	$ 206,644	$ 2,473,042	$ (5,873,417)	$ (8,588,332)	$ (11,782,063)
Preliminary Actuarial Value of Assets					$ 135,207,089
Minimum (80% of Market Value)					98,740,021
Maximum (120% of Market Value)					148,110,031
Actuarial Value of Assets					$ 135,207,089
Ratio of Actuarial to Market Value					109.55%
Estimated Rate of Return on Actuarial Value					3.8%
Actuarial Gain or (Loss)					$ (4,237,239)

Asset Values by Department

The Market Value of Assets is reported separately for the Police and Fire Departments. Within each department, the dental assets were set equal to 10% of the total assets as of June 30, 2010. Since that date, contributions (excluding the implicit subsidy) are allocated to medical and dental in proportion to the contribution rates, and benefit payments are allocated to medical and dental in proportion to the expected payments from the prior valuation. Tables II-3 and II-4 on the following pages show the development of the Market Value of Assets and Actuarial Value of Assets for medical and dental within the Police and Fire Departments respectively.

SECTION II – ASSETS

Table II-3
Market Value of Assets – Police Department

	Medical	Dental	Total
Market Value, 6/30/2015	$ 75,217,590	$ 6,426,851	$ 81,644,441
Contributions			
Member	9,815,268	430,967	10,246,235
City	10,239,595	1,336,088	11,575,683
Implicit Subsidy	654,038	0	654,038
Total	$ 20,708,901	$ 1,767,055	$ 22,475,956
Net Investment Earnings	(1,178,804)	(101,497)	(1,280,301)
Benefit Payments			
Premium Payments	11,834,072	1,428,579	13,262,651
Implicit Subsidy	654,038	0	654,038
Total	$ 12,488,110	$ 1,428,579	$ 13,916,689
Market Value, 6/30/2016	$ 82,259,577	$ 6,663,830	$ 88,923,407
Estimated Return on Market Value	-1.4%	-1.4%	-1.4%
Ratio of AVA / MVA	109.5%	109.5%	109.5%
Actuarial Value of Assets	$ 90,112,016	$ 7,299,955	$ 97,411,971
Estimated Return on Actuarial Value	3.7%	3.2%	3.7%

SECTION II – ASSETS

Table II-4
Market Value of Assets – Fire Department

	Medical	Dental	Total
Market Value, 6/30/2015	$ 26,294,719	$ 1,687,921	$ 27,982,640
Contributions			
Member	7,402,009	358,547	7,760,556
City	7,085,188	1,014,349	8,099,537
Implicit Subsidy	734,463	0	734,463
Total	$ 15,221,660	$ 1,372,896	$ 16,594,556
Net Investment Earnings	(506,919)	(36,508)	(543,427)
Benefit Payments			
Premium Payments	7,803,460	994,227	8,797,687
Implicit Subsidy	734,463	0	734,463
Total	$ 8,537,923	$ 994,227	$ 9,532,150
Market Value, 6/30/2016	$ 32,471,537	$ 2,030,082	$ 34,501,619
Estimated Return on Market Value	-1.5%	-1.5%	-1.5%
Ratio of AVA / MVA	109.5%	109.5%	109.5%
Actuarial Value of Assets	$ 35,571,246	$ 2,223,872	$ 37,795,118
Estimated Return on Actuarial Value	4.1%	3.3%	4.0%

SECTION III – FUNDING VALUATION RESULTS

The funding valuation results are not currently used to determine contributions. They are shown here simply as reference to the prior year. When Measure F is fully implemented, this section will develop contribution amounts reflecting the new OPEB plan and Board policy.

The following tables develop the UAL for the Police and Fire Departments for the explicit subsidy of medical and dental benefits based on the funding discount rate of 6.875%.

Table III-1
Unfunded Actuarial Liability – Police Department
Funding Basis

	Medical	Dental	Total
Present Value of Future Benefits			
Retirees and Beneficiaries	$ 225,630,640	$ 25,021,064	$ 250,651,704
Term Vested Members	2,331,595	224,902	2,556,497
Active Employees	187,685,811	17,692,710	205,378,521
Total	$ 415,648,046	$ 42,938,676	$ 458,586,722
Present Value of Future Normal Costs	55,399,165	5,138,748	60,537,913
Actuarial Liability	**$ 360,248,881**	**$ 37,799,928**	**$ 398,048,809**
Actuarial Value of Assets	90,112,016	7,299,955	97,411,971
Unfunded Actuarial Liability	**$ 270,136,865**	**$ 30,499,973**	**$ 300,636,838**

Table III-2
Unfunded Actuarial Liability – Fire Department
Funding Basis

	Medical	Dental	Total
Present Value of Future Benefits			
Retirees and Beneficiaries	$ 120,939,506	$ 13,776,263	$ 134,715,769
Term Vested Members	250,371	26,294	276,665
Active Employees	136,874,279	12,871,632	149,745,911
Total	$ 258,064,156	$ 26,674,189	$ 284,738,345
Present Value of Future Normal Costs	53,605,785	4,953,091	58,558,876
Actuarial Liability	**$ 204,458,371**	**$ 21,721,098**	**$ 226,179,469**
Actuarial Value of Assets	35,571,246	2,223,872	37,795,118
Unfunded Actuarial Liability	**$ 168,887,125**	**$ 19,497,226**	**$ 188,384,351**

SECTION IV – GASB VALUATION RESULTS

GASB's OPEB Requirements

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

In general, Statements 43 and 45 define a trust as a plan. The 401(h) account and the 115 trust are separate trusts, but they are not treated as separate plans because they cover the same employee populations. For funding purposes, assets are tracked separately for Police and Fire within the 401(h) account and within sub-trusts in the 115 trust. However, for financial reporting purposes, the Plan is reported as one plan covering both, Police and Fire.

For plans where the contribution equals the Annual Required Contribution under GASB 43 based on a discount rate equal to the expected return on plan assets, the discount rate for GASB purposes is also the expected return on plan assets. Where the contribution equals the pay-as-you-go cost (annual benefit payments), the discount rate for GASB purposes is equal to the expected return on the City's unrestricted assets. Where the contribution is between these two amounts, GASB requires the use of a blended discount rate that is prorated between the expected return on plan assets and the expected return on City assets. For FYE 2017, the full ARC will not be contributed, and the table on the following page develops the blended discount rate that is used in the remainder of the GASB calculations.

SECTION IV – GASB VALUATION RESULTS

Table IV-1 Development of Blended Discount Rate	
Expected FYE 2017 Contributions	
Member Contribution	$18,647,256
City Contribution	$20,266,267
Implicit Subsidy	$1,598,907
Total Contribution	**$40,512,430**
FYE 2017 Full ARC	
Normal Cost (Middle of Year)	$16,111,857
Amortization of UAL	$29,430,057
Total ARC	$45,541,914
Pay-as-you-go Costs	
Pay-as-you-go Cost	$24,587,752
Contribution in Excess of Pay-Go	$15,924,678
Full ARC in Excess of Pay-Go	$20,954,162
Weight to System Return	75.998%
Expected Returns	
Expected Return on Plan Assets	6.875%
Expected Return on City Assets	3.00%
Blended Discount Rate	**5.90%**

The expected return on plan assets was reduced to 6.875% and the expected return on City assets remained at 3.50%. The discount rate decreased from 6.00% to 5.90% primarily due to the changes in the expected return on Plan and City assets. When contributions equal the ARC, the discount rate will equal the expected return on plan assets.

SECTION IV – GASB VALUATION RESULTS

The development of the Unfunded Actuarial Liability based on the blended discount rate is shown in the table below for retiree medical and dental benefits. For GASB purposes, the implicit subsidy is included as part of the liability.

Table IV-2
Unfunded Actuarial Liability (UAL) – GASB Basis

	Medical							
		Implicit		Explicit		Dental		Total
Present Value of Future Benefits								
Retirees and Beneficiaries	$	34,904,198	$	389,728,102	$	43,598,963	$	468,231,263
Term Vested Members		351,968		3,114,702		305,608		3,772,278
Active Employees		35,873,113		405,960,964		38,584,651		480,418,728
Total	$	71,129,279	$	798,803,768	$	82,489,222	$	952,422,269
Present Value of Future Normal		10,638,236		148,979,331		13,933,227		173,550,794
Actuarial Liability	**$**	**60,491,043**	**$**	**649,824,437**	**$**	**68,555,995**	**$**	**778,871,475**
Actuarial Value of Assets		0		125,683,261		9,523,827		135,207,088
Unfunded Actuarial Liability	**$**	**60,491,043**	**$**	**524,141,176**	**$**	**59,032,168**	**$**	**643,664,387**

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).

For GASB purposes, the UAL is amortized as a level percentage of payroll over 30 years. In the table below, the Annual Required Contribution (ARC) for the fiscal year ending June 30, 2017 is developed using a blended discount rate of 5.90%. The prior year's calculation is shown for comparison.

Table IV-3
GASB ARC

Fiscal Year Ending **Discount Rate**		**6/30/2017** **5.90%**		**6/30/2016** **6.00%**
Total Normal Cost	$	20,898,459	$	19,822,219
UAL Amortization		31,129,640		30,611,811
Total Cost	$	52,028,099	$	50,434,029
Employee Contributions		18,647,256		17,740,499
Total ARC	**$**	**33,380,843**	**$**	**32,693,530**

Reconciliation

Table IV-4 provides an estimate of the major factors contributing to the change in the Actuarial Liability since the last valuation report. The Actuarial Liability for medical and dental benefits has been combined in the reconciliation table below.

Table IV-4
Reconciliation of Actuarial Liability – GASB Basis

Actuarial Liability as of June 30, 2015	$	739,753
Normal Cost		19,822
Benefit Payments		(23,449)
Interest		44,881
Expected Actuarial Liability, June 30, 2016	$	781,008
Actuarial Liability as of June 30, 2016		778,871
(Gain) or Loss	$	(2,137)
Changes due to:		
Demographic experience	$	2,728
Change in health assumptions		(16,667)
Change in discount rate		11,803
Total Changes	$	(2,137)

Dollar amounts in thousands

- *Demographic experience* refers to the change in actual data and elections from June 30, 2015 to June 30, 2016 as compared to the changes expected in the prior valuation.

- *Change in health assumptions* refers to the change in expected current and future healthcare claims and expense costs based on the 2016 and 2017 medical premium experience as well as the change in the pre-Medicare plan offerings. This item also includes the effect of updating the claims cost trend assumptions, and plan and tier election percentages for future retirees.

- *Change in Discount Rate* refers to the change in the discount rate from 6.00% to 5.90%

SECTION V – SENSITIVITY OF RESULTS

The measure of liability 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 GASB Actuarial Liability and the ARC to provide some measure of sensitivity.

Table V-1
Sensitivity to Healthcare Trend Rates
Unfunded Actuarial Liability (GASB basis)

Health Care Trend Rate	-1%	Base	+1%
Present Value of Future Benefits			
Retirees and Beneficiaries	$ 416,479	$ 468,231	$ 530,899
Term Vested Members	3,121	3,772	4,609
Active Employees	381,465	480,419	614,207
Total	$ 801,065	$ 952,422	$ 1,149,714
Present Value of Future Normal Costs	133,082	173,551	230,279
Actuarial Liability	**$ 667,983**	**$ 778,871**	**$ 919,435**
Actuarial Value of Assets	135,207	135,207	135,207
UAL	**$ 532,776**	**$ 643,664**	**$ 784,228**

Dollar amounts in thousands

Table V-2
Sensitivity to Healthcare Trend Rates
GASB ARC for FYE 2017

Health Care Trend Rate	-1%	Base	+1%
Total Normal Cost	$ 15,472	$ 20,898	$ 24,898
UAL Amortization	25,767	31,130	37,928
Total Cost	$ 41,239	$ 52,028	$ 62,826
Employee Contributions	18,647	18,647	18,647
Total ARC	**$ 22,592**	**$ 33,381**	**$ 44,179**

Dollar amounts in thousands

SECTION VI – ACCOUNTING DISCLOSURES

Statements 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 VI-1 below shows the development of the Net OPEB Obligation for the fiscal year ending June 30, 2016 and projects the Net OPEB Obligation for the fiscal year ending June 30, 2017.

Table VI-1
Development of Net OPEB Obligation

	Projected 6/30/2017	6/30/2016
1. Net OPEB Obligation, beginning of year	**$ 284,027,011**	**$ 269,423,883**
2. Annual Required Contribution	$ 33,380,844	$ 32,693,530
3. Interest on Net OPEB Obligation	16,757,594	16,165,433
4. Adjustment to Annual Required Contribution	(13,736,442)	(13,192,114)
5. Annual OPEB Cost *(2.) + (3.) – (4.)*	**$ 36,401,995**	**$ 35,666,849**
6. Employer Contributions	20,266,267	19,675,220
7. Implicit Rate Subsidy	1,598,907	1,388,501
8. Net OPEB Obligation, end of year ***(1.) + (5.) - (6.) - (7.)***	**$ 298,563,832**	**$ 284,027,011**

Table VI-2 shows the solvency test and Table VI-3 shows the analysis of financial experience, both as recommended by the Government Finance Officers Association for inclusion in the plan's Comprehensive Annual Financial Report.

SECTION VI – ACCOUNTING DISCLOSURES

Table VI-2
Solvency Test

Actuarial Valuation Date	Actuarial Liability: Retirees, Beneficiaries and Other (A)	Actuarial Liability: Active Members (B)	Reported Assets	Portion of Liability Covered by Reported Assets (A)	Portion of Liability Covered by Reported Assets (B)
6/30/2016	$ 472,004	$ 306,868	$ 135,207	29%	0%
6/30/2015	451,735	288,019	114,565	25%	0%
6/30/2014	429,034	277,676	93,605	22%	0%
6/30/2013	421,999	278,526	75,035	18%	0%
6/30/2012	600,869	396,452	66,385	11%	0%
6/30/2011	622,691	381,104	60,709	10%	0%
6/30/2010	568,611	377,697	58,586	10%	0%
6/30/2009	436,249	325,355	55,618	13%	0%
6/30/2007	336,899	329,328	45,393	13%	0%
6/30/2006	422,457	428,761	38,381	9%	0%

Dollar amounts in thousands

The Government Finance Officers Association named the above exhibit the Solvency Test. It should be noted, however, that it doesn't test the solvency of the Plan in the sense understood by financial economists in that a 100 percent ratio would mean that there were sufficient assets to settle the obligation on the valuation date. Instead, a 100 percent ratio only means that assets are expected to be sufficient if all assumptions are met in the future, including the expected rate of return on investments.

Table VI-3
Analysis of Financial Experience

Actuarial Valuation Date	Gain or (Loss) for Year Ending on Valuation Date Due to: Investment Income	Combined Liability Experience	Total Financial Experience	Non-Recurring Items	Total Experience
6/30/2016	$ (2,914)	$ (2,728)	$ (5,642)	$ 4,864	$ (778)
6/30/2015	582	7,990	8,572	(3,449)	5,123
6/30/2014	2,802	16,222	19,024	13,689	32,713
6/30/2013	2,437	(4,536)	(2,099)	258,939	256,840
6/30/2012	(6,011)	4,760	(1,251)	58,173	56,922
6/30/2011	(2,661)	5,967	3,306	1,146	4,452
6/30/2010	(3,067)	(11,242)	(14,309)	(122,599)	(136,908)

Dollar amounts in thousands

Schedule of Funding Progress

The schedule of funding progress compares the assets used for funding purposes to the Actuarial Liability 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.

Table VI-4
Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Liability (b)	Unfunded Actuarial Liability (UAL) (b-a)	Funded Ratio (a/b)	Annual Covered Payroll (c)	(UAAL) as Percentage of Covered Payroll ((b-a)/c)
6/30/2016	$ 135,207	$ 778,871	$ 643,664	17%	$ 194,072	332%
6/30/2015	114,565	739,753	625,188	15%	184,733	338%
6/30/2014	93,605	706,710	613,105	13%	188,189	326%
6/30/2013	75,035	700,525	625,490	11%	184,645	339%
6/30/2012	66,385	997,321	930,936	7%	172,626	539%
6/30/2011	60,709	1,003,795	943,086	6%	190,726	494%
6/30/2010	58,586	946,308	887,722	6%	222,699	399%
6/30/2009	55,618	761,604	705,986	7%	243,196	290%
6/30/2007	45,393	666,227	620,834	7%	227,734	273%
6/30/2006	38,381	851,218	812,837	5%	218,521	372%

Dollar amounts in thousands

Schedule of Employer Contributions

The schedule of employer contributions shows whether the employer has made contributions that are consistent with the parameters established by GASB for calculating the ARC and the annual OPEB expense. Note that Table VI-5 provides the information in a format for the City's reporting while Table VI-6 provides the format for the Plan's reporting.

SECTION VI – ACCOUNTING DISCLOSURES

Table VI-5
Schedule of Employer Contributions - City

Fiscal Year Ending	Annual OPEB Cost (AOC)	City Contributions (Including Implicit Subsidy)	Percentage of AOC Contributed	Net OPEB Obligation
2017	$ 36,406	To Be Determined	To Be Determined	To Be Determined
2016	35,667	$ 21,064	59%	$ 284,424
2015	36,106	22,960	64%	269,424
2014	35,791	20,131	56%	254,748
2013	56,712	15,980	28%	234,259
2012	65,747	21,205	32%	198,108
2011	64,105	17,001	27%	154,566
2010	51,734	15,546	30%	106,990
2009	50,651	13,063	26%	71,314
2008	48,191	13,624	28%	34,138

Dollar amounts in thousands

Table VI-6
Schedule of Employer Contributions - Plan

Fiscal Year Ending	Annual Required Contribution (ARC)	City Contributions to Trust	Implicit Subsidy	Total Contributions	Percentage of ARC Contributed
2017	$ 33,381		<== To Be Determined ==>		
2016	32,694	$ 19,675	$ 1,389	$ 21,064	64%
2015	33,295	20,910	2,050	22,960	69%
2014	32,798	17,268	2,863	20,131	61%
2013	55,824	15,808	172	15,980	29%
2012	62,079	16,455	4,750	21,205	34%
2011	62,322	12,062	4,939	17,001	27%
2010	50,438	11,284	4,262	15,546	31%
2009	50,119	9,888	3,175	13,063	26%
2008	61,344	10,618	3,006	13,624	22%

Dollar amounts in thousands

SECTION VI – ACCOUNTING DISCLOSURES

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

Table VI-7
Note to Required Supplementary Information

The information presented in the required supplementary schedules 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, 2016
Actuarial Cost Method	Individual Entry Age
Amortization Method	Level percentage of pay open
Single Equivalent Amortization Period	30 years
Asset Valuation Method	Five-year smoothed value
Actuarial Assumptions:	
Payroll Growth Rate	3.25%
Discount Rate	5.90%
Ultimate Rate of Medical Inflation	4.25%

APPENDIX A – MEMBER DATA, ASSUMPTIONS, AND METHODS

Member Data:

Valuation Date	June 30, 2016	June 30, 2015	% Change
Active Employees			
Police Tier 1			
Count	790	842	-6.18%
Average Age	44.1	43.4	1.75%
Average OPEB Benefit Service	16.5	15.7	4.81%
Total Payroll	99,891,582	102,217,827	-2.28%
Police Tier 2			
Count	121	87	39.08%
Average Age	30.2	29.4	2.82%
Average OPEB Benefit Service	2.3	1.6	40.07%
Total Payroll	11,137,200	7,650,749	45.57%
Fire Tier 1			
Count	604	626	-3.51%
Average Age	43.7	42.8	2.08%
Average OPEB Benefit Service	14.1	13.3	6.31%
Total Payroll	77,838,064	73,041,454	6.57%
Fire Tier 2			
Count	67	22	204.55%
Average Age	31.1	29.9	4.26%
Average OPEB Benefit Service	0.8	0.5	72.80%
Total Payroll	5,205,246	1,571,807	231.16%
Total			
Count	1,582	1,577	0.32%
Average Age	42.4	42.2	0.38%
Average OPEB Benefit Service	13.8	13.8	0.47%
Total Payroll	194,072,092	184,481,838	5.20%
Retirees and Spouses with Medical Coverage			
Pre-65	1,623	1,685	-3.68%
Post 65	1,582	1,504	5.19%
Total	3,205	3,189	0.50%
Retirees with Dental Coverage	2,018	1,992	1.31%
Term Vested Members*	11	9	22.22%

** Includes only those members with 20 or more years of OPEB benefit service.*

Active Member Data as of June 30, 2016:

Eligible Active Employees Years of OPEB Benefit Service								
Age Group	< 5	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 +	Total
Under 25	16	0	0	0	0	0	0	16
25 to 29	126	3	0	0	0	0	0	129
30 to 34	82	78	14	0	0	0	0	174
35 to 39	58	100	70	28	0	0	0	256
40 to 44	13	49	72	139	25	0	0	298
45 to 49	5	25	45	181	172	36	2	466
50 to 54	3	2	15	54	96	46	1	217
55 to 59	0	0	1	8	11	5	0	25
60 to 64	0	0	0	1	0	0	0	1
65 and up	0	0	0	0	0	0	0	0
Total	**303**	**257**	**217**	**411**	**304**	**87**	**3**	**1,582**

Inactive Member Data as of June 30, 2016:

Retirees, Disabled Retirees and Surviving Spouses						
	Medical Insurance			Dental Insurance		
Age Group	Males	Females	Total	Males	Females	Total
Under 50	53	14	67	57	14	71
50 to 54	158	25	183	159	28	187
55 to 59	254	38	292	264	37	301
60 to 64	279	23	302	290	26	316
65 to 69	336	36	372	354	45	399
70 to 74	280	44	324	291	48	339
75 to 79	174	34	208	182	37	219
80 to 84	70	28	98	76	30	106
85 to 89	38	18	56	39	20	59
Over 90	7	12	19	8	13	21
Total	**1,649**	**272**	**1,921**	**1,720**	**298**	**2,018**

Counts do not include dependent spouses

APPENDIX A – MEMBER DATA, ASSUMPTIONS, AND METHODS

Medical Plan	Medical Plan Elections Retirees & Surviving Spouses	Spouses	Total
Pre-Medicare Medical Plans			
Kaiser DHMO	103	182	285
Kaiser $25 Co-pay	443	310	753
Kaiser $15 Co-pay (Hawaii)	4	8	12
Kaiser $25 Co-pay (Northwest)	2	2	4
Sutter Health DHMO	7	4	11
Sutter Health $20 Co-pay	40	36	76
PPO / POS $25 Co-pay	245	237	482
Total	**844**	**779**	**1,623**
Medicare Medical Plans			
Kaiser Senior Advantage	428	203	631
Kaiser Senior Advantage (Hawaii)	8	3	11
Kaiser Senior Advantage (Northwest)	5	3	8
BS Medicare HMO	66	32	98
BS Medicare PPO/POS	570	264	834
Total	**1077**	**505**	**1,582**

Current Vested Terminations*			
Age Group	**Male**	**Female**	**Total**
Under 45	0	0	0
45 to 49	8	0	8
50 to 54	1	1	2
55 to 59	1	0	1
60 to 64	0	0	0
Over 65	0	0	0
Total	**10**	**1**	**11**

* *Includes only those term vested participants with at least 20 years of OPEB benefit service*

APPENDIX A – MEMBER DATA, ASSUMPTIONS, AND METHODS

Status Reconciliation	Active	Terminated Vested	Retiree	Surviving Spouse	Disabled	Total
Beginning of Year	**1,577**	**9**	**873**	**207**	**912**	**3,578**
New Hires	82	0	0	0	0	82
Rehires	4	0	0	0	0	4
Non-vested terminations	(27)	0	0	0	0	(27)
Vested Terminations	(4)	4	0	0	0	0
Service Retirements	(38)	(2)	40	0	0	0
Disabled Retirements	(12)	0	(6)	0	18	0
Death	0	0	(8)	(2)	(27)	(37)
New Survivors	0	0	0	12	0	12
No longer covered	0	0	0	0	0	0
Data corrections	0	0	0	0	1	1
End of Year	**1,582**	**11**	**899**	**217**	**904**	**3,613**

Counts do not include dependent spouses

APPENDIX A – MEMBER DATA, ASSUMPTIONS, AND METHODS

Economic Assumptions

The expected return on plan assets, expected return on employer assets, and per person cost trend assumptions shown on the next page were adopted by the Board of Administration with our input at the January 5, 2017 Board meeting.

1. **Expected Return on Plan Assets:**

   6.875% per year net of investment expenses. The long-term expected return on assets based on NEPC's capital market assumptions for a 30-year time horizon is 7.92%. The Board applied a margin for adverse deviation to improve the probability of achieving the discount rate.

2. **Expected Return on Employer Assets:**

   3.00% per year.

3. **Blended Discount Rate:**

   5.90% per year.

APPENDIX A – MEMBER DATA, ASSUMPTIONS, AND METHODS

4. Per Person Cost Trends:

	Annual Increase			
To Calendar Year	Pre-Medicare	Medicare Eligible	Dental	Part B Premiums
2018	8.50%	6.50%	4.00%	-7.16%
2019	8.20	6.34	4.00	5.79
2020	7.89	6.18	4.00	5.55
2021	7.59	6.02	4.00	4.18
2022	7.29	5.86	4.00	4.28
2023	6.98	5.70	4.00	5.77
2024	6.68	5.54	4.00	5.14
2025	6.38	5.38	4.00	5.07
2026	6.07	5.21	4.00	4.97
2027	5.77	5.05	4.00	4.87
2028	5.46	4.89	4.00	4.77
2029	5.16	4.73	4.00	4.67
2030	4.86	4.57	4.00	4.58
2031	4.55	4.41	4.00	4.48
2032	4.25	4.25	4.00	4.38
2033	4.25	4.25	4.00	4.28
2034	4.25	4.25	4.00	4.19
2035	4.25	4.25	4.00	4.09
2036	4.25	4.25	4.00	3.99
2037	4.25	4.25	4.00	3.89
2038	4.25	4.25	4.00	3.80
2039	4.25	4.25	4.00	3.70
2040	4.25	4.25	4.00	3.60
2041+	4.25	4.25	4.00	3.60

Actual premium increases for 2017 were reflected with the above rates applying after Deductibles, Co-payments, Out-of-Pocket Maximums, and Annual Maximum (where applicable) are assumed to increase at the above trend rates.

APPENDIX A – MEMBER DATA, ASSUMPTIONS, AND METHODS

5. Changes Since Last Valuation

The funding discount rate decreased from 7.00% to 6.875%. Plan enrollment assumptions were updated based on recent experience and the expected impact of added and dropped plans. The blended discount rate decreased from 6.00% to 5.90%. The expected return on employer assets decreased from 3.50% to 3.00%. The per person cost trends were moved forward one year.

APPENDIX A – MEMBER DATA, ASSUMPTIONS, AND METHODS

Demographic Assumptions

The plan election assumptions were adopted by the Board of Administration at the January 5, 2017 Board meeting based on our recommendations. The other demographic assumptions shown below were adopted by the Board of Administration at the December 3, 2015 Board meeting based on recommendations from our experience study covering the plan experience during the period from July 1, 2009 through June 30, 2015. Please refer to the full experience study report for details, including the rationale for each assumption.

1. Retirement Rates:

The following rates of retirement apply only to those eligible for unreduced benefits.

Rates of Retirement by Age						
	Police			Fire		
Age	Tier 1	Tier 2 <30 Years	Tier 2 30+ Years	Tier 1	Tier 2 <30 Years	Tier 2 30+ Years
50	60.00%	0.00%	0.00%	35.00%	0.00%	0.00%
51 – 55	50.00	0.00	0.00	35.00	0.00	0.00
56 - 59	40.00	0.00	0.00	27.50	0.00	0.00
60 - 61	50.00	50.00	100.00	27.50	25.00	50.00
62 - 64	100.00	50.00	100.00	100.00	25.00	50.00
65 - 69	100.00	50.00	100.00	100.00	35.00	100.00
70+	100.00	100.00	100.00	100.00	100.00	100.00

Tier 1 vested terminated members are assumed to retire at age 55 and Tier 2 vested terminated members are assumed to retire at age 60.

2. Disability Rates:

Police: Non-Industrial plus Industrial CalPERS Public Agency disability rates for Police multiplied by 90% prior to age 50 and 140% for ages 50+.

Fire: Non-Industrial plus Industrial CalPERS Public Agency disability rates for Fire multiplied by 90% prior to age 50 and 180% for ages 50+.

Rates of Disability at Selected Ages		
Age	Police	Fire
30	0.446%	0.076%
40	1.026%	0.279%
50	2.696%	5.080%
60	8.714%	10.769%

100% of disabilities are assumed to be duty related.

APPENDIX A – MEMBER DATA, ASSUMPTIONS, AND METHODS

3. Rates of Mortality

Mortality rates for actives, retirees, beneficiaries, terminated vested, and reciprocals are based on the sex-distinct employee and annuitant mortality tables shown below. Future mortality improvements are reflected by applying the SOA MP-2015 projection scale on a generational basis from the base year of 2009.

Category	Base Mortality Tables Male	Female
Healthy Annuitant	0.948 times the CalPERS 2009 Healthy Annuitant Mortality Table (Male), projected using Scale MP-2015 on a generational basis	1.048 times the CalPERS 2009 Healthy Annuitant Mortality Table (Female), projected using Scale MP-2015 on a generational basis
Healthy Non-Annuitant	0.948 times the CalPERS 2009 Employee Mortality Table (Male), projected using Scale MP-2015 on a generational basis	1.048 times the CalPERS 2009 Employee Mortality Table (Female), projected using Scale MP-2015 on a generational basis
Disabled Annuitant	0.903 times the CalPERS 2009 Industrial Disability Mortality Table (Male), projected using Scale MP-2015 on a generational basis	0.903 times the CalPERS 2009 Industrial Disability Mortality Table (Male), projected using Scale MP-2015 on a generational basis

4. Termination Rates:

Sample rates of termination are shown in the following table.

	Rates of Termination	
Service	Police	Fire
0	13.75%	20.00%
1	11.75	20.00
2	9.85	3.50
3	8.35	2.00
4	7.00	1.30
5	5.75	1.10
6	4.60	1.00
7	3.80	0.90
8	3.10	0.80
9	2.65	0.70
10	2.20	0.60
11	2.00	0.50
12	1.85	0.50
13	1.70	0.50
14	1.65	0.50
15+	1.60	0.50

* *Termination rates do not apply once a member is eligible for retirement.*

5. Salary Increase Rate:

Wage inflation component is assumed to be 3.25%.

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

Salary Merit Increases	
Years of Service	Merit/ Longevity
0	6.75%
1	6.00
2	5.25
3	4.50
4	3.75
5	3.25
6	2.75
7	2.25
8	1.75
9	1.25
10+	1.00

APPENDIX A – MEMBER DATA, ASSUMPTIONS, AND METHODS

6. Percent of Retirees Electing Coverage:

100% of future retirees are assumed to elect coverage at retirement. Retirees are assumed to continue coverage in their current plan.

The HMO $25 Co-pay, HMO $45 Co-pay, HMO $25 SaveNet, and HMO $45 SaveNet plans will discontinue as of 1/1/2017. Sutter Health Plus $20 Co-pay and Sutter Health Plus $1,500 Deductible plans will be offered as of 1/1/2017.

Retirees who are not yet age 65 are assumed to be eligible for Medicare when they reach age 65 and are assumed to enroll in the Medicare-eligible plan corresponding to their current Pre-Medicare plan election. Future retirees' are assumed to elect plans in the proportions shown below.

Assumed Plan Elections for Future Retirees			
	% Electing		% Electing
Pre-Medicare Medical Plans		**Medicare-Eligible Medical Plans**	
· Kaiser DHMO	12%	· Kaiser Senior Advantage	41%
· Kaiser $25 Co-pay	54%	· BS Medicare HMO	6%
· Sutter Health DHMO	1%	· BS Medicare PPO	53%
· Sutter Health $20 Co-pay	5%		
· PPO $25 Co-pay	28%	**Dental Plans (All Retirees)**	
		· Delta Dental PPO	99%
		· DeltaCare HMO	1%

7. Family Composition:

80% of married males and 50% of married females will elect spouse coverage in a medical plan at retirement.

100% of married employees will elect spouse coverage in a dental plan at retirement.

Pre-Medicare, 48% of males, and 42% of females will cover children.

8. Enrollment by Rating Tier:

For current retirees, their actual enrollment by rating tier is used to value the explicit subsidy. For future retirees, the following assumptions on the next page are used:

APPENDIX A – MEMBER DATA, ASSUMPTIONS, AND METHODS

Assumed Rating Tier Elections for Future Retirees	Single	Emp/Sp	Emp/Chd	Family
Pre-Medicare Medical Plans				
Males	19%	34%	7%	40%
Females	39%	22%	19%	20%
Medicare Medical Plans				
Males	26%	74%	0%	0%
Females	58%	42%	0%	0%

9. Dependent Age:

For current retirees, actual spouse date of birth was used when available. For future retirees, husbands are assumed to be three years older than their wives.

10. Married Percentage:

Percentage Married	
Gender	Percentage
Males	85%
Females	85%

11. Administrative Expenses:

Included in the average monthly premiums.

12. Changes since Last Valuation

Plan enrollment assumptions were updated based on recent experience and the expected impact of added and dropped plans.

Claim and Expense Assumptions

The claim and expense assumptions shown below were adopted by the Board of Administration at the January 5, 2017 Board meeting based upon our recommendations.

The claims costs are based on the fully insured premiums charged to the City for the active and retiree population in 2016 and 2017. For non-Medicare adults, the premiums for each coverage tier (retiree only, retiree plus spouse, retiree plus child(ren), and retiree plus family) were blended based on enrollment data for the 2016 calendar year. The same process was used for Medicare adults, except only Medicare-eligible retirees were included. Individuals on the HMO $25 Co-pay, HMO $45 Co-pay, HMO $25 SaveNet, and HMO $45 SaveNet plans were assumed to transition to the Sutter Plus $20 Co-Pay and Sutter Health Plus $1,500 Deductible (DHMO) plans based on the actual 1/1/2017 elections. The resulting per person per month (PPPM) cost was then adjusted using age curves. The pre-Medicare adult claims curves were then loaded for the cost of children; the load for children decreases by retiree age since older retirees have fewer children. The impact of children on Medicare costs was assumed to be de minimis. All claims costs are developed jointly for the Federated and Police and Fire Postemployment Healthcare Plans of the City of San José; the combined population participates in the same health insurance plans and pays the same premiums.

This report does not reflect future changes in benefits, penalties, taxes, or administrative costs that may be required as a result of the Patient Protection and Affordable Care Act of 2010 related legislation and regulations.

1. **Average Annual Claims and Expense Assumptions:**

   The following claim and expense assumptions were developed as of July 1, 2016 based on the premiums for 2016 and 2017. The explicit subsidy amount (100% of the premium for the lowest cost health plan available to active City employees) is assumed to grow based on the Pre-Medicare cost trend rates.

   The following tables show the claims costs for each medical plan as of the valuation date:

	Sample Claims Costs - Non-Medicare Eligible					
	Kaiser DHMO		Kaiser $25 Co-Pay		PPO $25 Co-pay	
Age	Male	Female	Male	Female	Male	Female
40	5,125	7,213	6,467	9,242	7,585	11,311
45	5,311	7,001	6,783	9,031	8,231	11,247
50	5,909	7,449	7,649	9,696	9,614	12,361
55	6,816	8,105	8,925	10,639	11,547	13,848
60	8,078	8,997	10,673	11,894	14,114	15,754
64	9,428	9,857	12,523	13,095	16,774	17,541

APPENDIX A – MEMBER DATA, ASSUMPTIONS, AND METHODS

Sample Claims Costs - Non-Medicare Eligible				
	Sutter DHMO		Sutter $20 Co-pay	
Age	Male	Female	Male	Female
40	6,846	9,534	7,934	11,070
45	7,035	9,211	8,165	10,705
50	7,755	9,737	9,018	11,330
55	8,872	10,532	10,333	12,270
60	10,446	11,629	12,182	13,562
64	12,144	12,697	14,172	14,818

Sample Claims Costs - Medicare Eligible						
	Kaiser Senior Adv		BS Med HMO		BS Med PPO	
Age	Male	Female	Male	Female	Male	Female
65	2,831	3,020	6,567	7,004	5,924	6,318
70	3,324	3,334	7,711	7,735	6,956	6,977
75	3,717	3,595	8,623	8,340	7,778	7,523
80	3,950	3,711	9,162	8,609	8,264	7,765
85	4,003	3,673	9,284	8,519	8,375	7,685

Sample Claims Costs - Dental				
	Delta Dental PPO		DeltaCare HMO	
Age	Male	Female	Male	Female
All	717	717	311	311

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 participate in Medicare Part B.

4. **Medicare Eligibility:**

   All retirees who turn age 65 are assumed to be eligible for Medicare.

5. **Annual Limits:**

   Assumed to increase at the same rate as trend.

APPENDIX A – MEMBER DATA, ASSUMPTIONS, AND METHODS

6. **Lifetime Maximums:**

   Are not assumed to have any financial impact.

7. **Geography:**

   Implicitly assumed to remain the same as current retirees.

8. **Retiree Contributions:**

   Retirees pay the difference between the actual premium for the elected plan and the lowest cost plan available to active members, if the retiree is eligible to receive the explicit subsidy. No retiree contributions are required for dental.

9. **Changes since Last Valuation:**

   There was no change to the claims cost process other than reflecting that different options are available to retirees beginning January 1, 2017.

APPENDIX A – MEMBER DATA, ASSUMPTIONS, AND METHODS

Contribution Allocation Procedure

The contribution allocation procedure primarily consists of an actuarial cost method, an asset smoothing method, and an amortization method as described below.

1. Actuarial Cost Method

The Entry Age Normal actuarial cost 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. Or, equivalently, it is the accumulation of normal costs for all periods prior to the valuation date. The normal cost and Actuarial Liability are calculated on an individual basis. The sum of the individual amounts is the normal cost and Actuarial Liability for the Plan. The Actuarial Liability for the Plan represents the target amount of assets the Plan should have as of the valuation date according to the actuarial cost method.

2. Asset Valuation Method

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

The Actuarial Value of Assets is calculated by recognizing the deviation of actual investment returns compared to the expected return (7.000% for 2015-16 and 2014-15, 7.125% for 2013-14, 7.25% for 2012-13, 7.50% for 2011-12, 7.75% for 2010-11, 8.00% for prior years) over a five-year period. The dollar amount of the expected return on the market value of assets is determined using the actual contributions and benefit payments during the year. Any difference between this amount and the actual net investment earnings is considered a gain or loss.

Finally, the Actuarial Value of Assets is restricted to a corridor between 80 percent and 120 percent of 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. For financial reporting purposes, the Unfunded Actuarial Liability is amortized over an open 30-year period. Current contribution rates are fixed, so no specific amortization method is applied.

APPENDIX A – MEMBER DATA, ASSUMPTIONS, AND METHODS

4. Contributions

Funding Policy

On November 8, 2016, Measure F was passed. Measure F significantly changed the benefits and contribution agreements between the City and its employees. Once Measure F is fully implemented, we understand that the members who remain under the Plan will contribute a fixed percentage of pay and the City will pay a contribution determined by the Board, subject to a cap. Prior to the time that Measure F is implemented, we understand the City and members will continue paying the contributions rates that were first set for FYE 2014 for Police members and FYE 2016 for Fire members. We understand the City intends to implement Measure F in stages as ordinances are adopted, approvals are received from the IRS, and member elections are implemented. For purposes of this report, we have assumed that no changes affecting contributions to the Plan under Measure F are implemented until after June 30, 2017.

Accounting Policy

The Board's current policy sets the Annual Required Contribution (ARC) for the fiscal year immediately following the valuation date equal to the normal cost plus a rolling 30-year amortization of the Unfunded Actuarial Liability (including the implicit subsidy). Once actual contributions reach that level, it is anticipated that the ARC will change to the contribution basis.

5. Changes since Last Valuation:

None.

APPENDIX B – SUBSTANTIVE PLAN PROVISIONS

Summary of Key Substantive Plan Provisions:

Eligibility:

Employees who retire (include deferred vested members) with at least 15 years of service with the City ("OPEB benefit service"), or with a monthly pension equal to at least 37.5% of final compensation, are eligible to elect medical coverage upon retirement. Tier 1 employees (hired before August 4, 2013) are eligible for unreduced service retirement at age 55 with 20 years of service, age 50 with 25 years of service, age 70 with no service requirement, or any age with 30 years of service. Reduced service retirement is available at age 50 with 20 years of service. Tier 2 employees (hired on or after August 4, 2013) are eligible for unreduced service retirement at age 60 with 10 years of service or reduced service retirement at age 50 with 10 years of service. Service credited through reciprocity agreements counts towards an employee's required service to retire, but only service with the City counts towards the required years of service to receive OPEB benefits.

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 26.

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.

Employees who separate from service after July 5, 1992 with 20 years of service, leaving contributions in the retirement plan, are eligible to elect medical and/or dental coverage upon retirement.

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.

To the extent that the elected plan premium is less than the maximum subsidy amount, Medicare-eligible retirees receive reimbursement of Medicare Part B premiums for themselves and their covered spouse, if applicable.

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

Premiums: Monthly premiums before adjustments for 2015 and 2016 are as follows.

2016 Monthly Premiums				
	Single	Emp/Sp	Emp/Chd	Family
Medical				
Non-Medicare Monthly Rates				
Kaiser DHMO	$466.92	$933.84	$817.12	$1,400.78
Kaiser $25 Co-pay	570.24	1,140.48	997.88	1,710.66
Blue Shield HMO $45 Co-pay	722.04	1,444.06	1,263.54	2,166.06
Blue Shield HMO $45 SaveNet	628.34	1,256.64	1,099.56	1,884.96
Blue Shield HMO $25 Co-pay	811.48	1,622.94	1,420.10	2,434.42
Blue Shield HMO $25 SaveNet	706.18	1,412.34	1,235.82	2,118.52
Blue Shield PPO $25 Co-pay	945.26	1,890.50	1,654.20	2,835.74
Medicare-Eligible Monthly Rates				
Kaiser Senior Advantage	$272.34	$544.68	$544.68	$817.02
Blue Shield Medicare HMO	707.14	1,414.28	1,414.28	2,123.24
Blue Shield Medicare PPO	673.36	1,346.72	1,346.72	1,955.36
Dental				
Delta Dental PPO	$48.92	$107.62	$117.42	$151.66
DeltaCare HMO	24.44	48.86	42.74	73.30

APPENDIX B – SUBSTANTIVE PLAN PROVISIONS

2017 Monthly Premiums	Single	Emp/Sp	Emp/Chd	Family
Medical				
Non-Medicare Monthly Rates				
Kaiser DHMO	$490.20	$980.40	$857.86	$1,470.62
Kaiser $25 Co-pay	598.66	1,197.32	1,047.62	1,795.94
Sutter Health DHMO	513.62	1,027.22	898.84	1,540.86
Sutter Health $20 Co-pay	627.26	1,254.52	1,097.66	1,881.72
Blue Shield PPO $25 Co-pay	1,003.76	2,007.50	1,756.60	3,011.26
Medicare-Eligible Monthly Rates				
Kaiser Senior Advantage	$289.12	$578.24	$578.24	$867.36
Blue Shield Medicare PPO	509.21	1,018.42	1,018.42	1,771.26
Blue Shield Medicare HMO	598.82	1,197.64	1,197.64	1,824.90
Dental				
Delta Dental PPO	$50.88	$111.92	$122.12	$157.72
DeltaCare HMO	24.44	48.86	42.74	73.30

Blue Shield Medicare family rates assume the children are on the Non-Medicare $25 Co-pay HMO or PPO

APPENDIX B – SUBSTANTIVE PLAN PROVISIONS

Summary of 2017 Benefit Plans:

Non-Medicare Plans:	Kaiser $25 Co-Pay	Kaiser DHMO	Sutter Health Plus $20 Co-Pay HMO	Sutter Health Plus $1,500 Deductible	Blue Shield PPO $25 Co-Pay (In Network)
Annual Out-of-Pocket Maximum (one person/family)	$1,500/$3,000	$4,000/$8,000	$1,500/$3,000	$4,000/$8,000	$2,100/$4,200
Annual Deductible (one person/family)	None	$1,500/$3,000	None	$1,500/$3,000	$100/$200
Office Visit copay	$25	$40	$20	$20	$25
Emergency Room copay	$100	30%*	$100	30%*	$100
Hospital Care copay	$100	30%*	$100	30%*	$100
Prescription Drug retail copay (30-day supply):					
Generic	$10	$10	$10	$10	$10
Brand	$25	$30	$30	$30	$25
Non-Formulary	N/A	N/A	$60	$60	$40

* *After deductible is paid.*

Medicare-Eligible Plans:	Kaiser	BS HMO	BS PPO
Annual Out-of-Pocket Maximum (one person/family)	$1,500/$3,000	$1,000/$2,000	$2,000/$4,000
Annual Deductible (one person/family)	None	None	$100/$200
Office Visit copay	$25	$25	$25
Emergency Room copay	$50	$100	$100
Hospital Care copay	$250	$100	$100 + 10%
Prescription Drug retail copay (30-day supply):			
Generic	$10	$10	$10
Brand	$10	$25	$25
Non-Formulary	N/A	$40	$40

Cost Sharing Provisions:

It is assumed for the purpose of this valuation that the City of San José 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.

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:

Amount		Probability of Payment	$\frac{1}{\text{(1+Discount Rate)}}$		
$100	x	(1 - .01)	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.

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. **Entry Age Normal Actuarial Cost Method**
   A method under which the actuarial present value of the projected benefits of each individual included in an actuarial valuation is allocated as a level percentage of pay from the individual's date of entry into the plan to the individual's assumed cessation of employment.

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 Value of Assets to the Actuarial Liability.

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.

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)

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