

**City of Sacramento**  
**Additional Continuing Disclosure**  
**Fiscal Year 2014/15**

<b>Issue</b>	Sacramento Public Financing Authority 2015 Lease Revenue Bonds (Golden 1 Center) (Federally Taxable)
<b>Par</b>	\$ 272,870,000
<b>Issued</b>	September 24, 2015
<b>CUSIP Numbers</b>	78605QAC1 78605QAD9 78605QAE7 78605QAF4 78605QAG2 78605QAH0 78605QAJ6

**Content of Additional Report.**

See Exhibit A – SCERS Actuarial Valuation as of June 30, 2015



**BARTEL**  
ASSOCIATES, LLC

**City of Sacramento**

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**Sacramento City Employees' Retirement System**

**June 30, 2015**

**Actuarial Valuation**

December 2015



**ACTUARIAL VALUATION**  
**CITY OF SACRAMENTO**  
**SACRAMENTO CITY EMPLOYEES' RETIREMENT SYSTEM (SCERS)**  
**DEFINED BENEFIT PLAN**

We are pleased to present the results of our June 30, 2015 actuarial valuation of the Sacramento City Employees' Retirement System (SCERS).

The purpose of this valuation is to:

- Determine the System's June 30, 2015 Funded Status, and
- Calculate the fiscal year 2016/17 Actuarially Determined Contribution (ADC).

The information in this report may not be appropriate for purposes other than System funding but may be useful to the City for the System's financial management. Future valuations may differ significantly if the System's experience differs from our assumptions or if there are changes in plan design, actuarial methods or actuarial assumptions. The project scope did not include an analysis of this potential variation.

The valuation is based on the System's benefit provisions summarized in Section 9, employee data, and on the System's financial information, all furnished by the City. We reviewed the financial and employee data for reasonableness, including comparing to prior year data, but did not perform an audit.

To the best of our knowledge, this report is complete and accurate and has been conducted using generally accepted actuarial principles and practices. As members of the American Academy of Actuaries, meeting Academy Qualification Standards, we certify the actuarial results and opinions herein.

Respectfully submitted,



Mary Elizabeth Redding, FSA, MAAA, EA  
Vice President



Deanna Van Valer, ASA, MAAA, EA  
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Katherine Moore, ASA, MAAA  
Associate Actuary

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# SECTION 1

## EXECUTIVE SUMMARY

Following are the valuation results. See notes following the table for a description of terms. Results from the June 30, 2013 valuation are provided for comparative purposes.

	-----amounts in \$000's-----		
	June 30, 2013	June 30, 2015	% change
<b>■ Participant Counts</b>			
• Actives	35	19	-45.7%
• Terminated Vesteds	13	11	-15.4%
• Reciprocals	7	3	-57.1%
• Service Retirees	722	662	-8.3%
• Disableds	161	145	-9.9%
• Beneficiaries	335	334	-0.3%
• Total	1,273	1,174	-7.8%
<b>■ Actuarial Liabilities</b>			
• Present Value of Projected Benefits	\$ 382,930	\$ 376,767	-1.6%
• Actuarial Accrued Liability	382,403	376,479	-1.5%
<b>■ Assets</b>			
• Market Value of Assets	295,975	301,263	1.8%
• Approximate Annual Rate of Return	7.8%	4.5%	
• Actuarial Value of Assets	292,035	293,036	0.3%
• Approximate Annual Rate of Return	7.2%	8.0%	
<b>■ Plan Funded Status</b>			
• Actuarial Accrued Liability	382,403	376,479	-1.5%
• Actuarial Value of Plan Assets	292,035	293,036	0.3%
• Unfunded Actuarial Accrued Liability	90,368	83,443	-7.7%
• Funded Ratio	76.4%	77.8%	1.8%
• Funded Ratio, Market Value Basis	77.4%	80.0%	3.4%
	<b>2014/15<sup>1</sup></b>	<b>2016/17</b>	<b>% change</b>
<b>■ Annual Cost<sup>2</sup></b>	\$ 9,183	\$ 8,330	-2.6%
<b>■ Annual Cost (% Proj. Plan Payroll)<sup>1</sup></b>	509.7%	953.6%	
<b>■ Annual Cost (% Proj. City Payroll)</b>	3.4%	2.9%	

<sup>1</sup> The June 30, 2013 valuation report also provided the 2015/16 contribution.

<sup>2</sup> See page 11 for details.

# SECTION 1

## EXECUTIVE SUMMARY

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### **Purpose of Actuarial Valuation**

The actual costs of a defined benefit plan are determined entirely by the amount of the benefit promise, the actual salaries and service of the plan participants, and how long they and their beneficiaries live to receive payments. An actuarial valuation is a mathematical model which attempts to quantify this actual cost by setting assumptions that, it is hoped, duplicate reality as closely as possible. In addition, the actuarial methodology provides a reasonable plan, or method, towards funding the expected plan costs. This information assists the plan trustees so they can make informed decisions regarding plan investments and how much in contributions will be required from the employer to eventually fully pay the plan's costs.

### **Summary Information & Results**

The Sacramento City Employees' Retirement System (SCERS) is a closed defined benefit pension plan. It has not accepted new members since January 28, 1977, and only 19 active members (out of a total plan membership of 1,174) remain.

Usually an actuarial valuation is done each year, and it provides the actuarially determined contribution to fund the plan for the fiscal year beginning one year from the valuation date. The last valuation was performed as of June 30, 2013. In 2014 Bartel Associates was retained to recalculate benefits for 321 retirees who had either retired or turned age 62 since January 1, 2005. The City corrected benefit amounts paid on and after July 1, 2015 including certain retroactive payments. In addition, the City updated the COLA bank calculations and adjusted the COLA calculation procedures beginning at July 1, 2015 to correctly reflect each retiree's bank. The result of these adjustments was a reduction in the actuarial accrued liability of \$12.3 million at June 30, 2015.

Since the last valuation, the plan experienced overall gains on liabilities and gains on market assets. Plan liabilities decreased more than expected, by a net \$9.1 million. This was slightly offset by demographic losses of \$3.7 million, mostly due to retirees living longer than expected, and an increase in liabilities of \$200 thousand due to a clarification of the disability pension offset.

Market value return on assets was more than expected, resulting in a gain of \$13.2 million on the actuarial value of assets. The resulting July 1, 2015 total plan Unfunded Actuarial Accrued Liability (UAAL) prior to assumption changes is \$60.3 million, as compared to an expected UAAL of \$82.6 million.

The only assumption change made to the valuation was to reflect improved mortality and to provide for future mortality improvements. The base mortality tables were updated to the newest CalPERS experience study and a new mortality improvement projection was used. This assumption change resulted in a loss on liabilities of \$23.1 million. The resulting July 1, 2015 UAAL is \$83.4 million, slightly greater than the amount expected based on the 2013 valuation results.

The plan's funded ratio on an actuarial value of assets basis is 77.8%, an increase from 76.4% in the prior valuation. The plan's funded ratio on a market value of assets basis is 80.0%, an increase from 77.4% in the prior valuation.

The City's contribution has decreased from \$8.6 million in fiscal year 2014/15 to \$8.3 million for fiscal year 2016/17. The prior valuation projected a 2016/17 contribution of \$8.165 million, slightly lower than the actual contribution of \$8.330 million calculated in the current valuation.

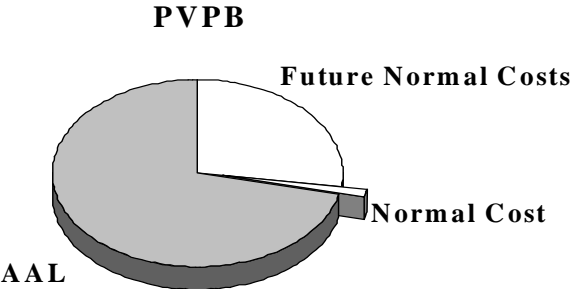
# SECTION 1

## EXECUTIVE SUMMARY

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### Definitions

The Present Value of Projected Benefits (PVPB) is the present value of all future benefits for current plan participants. The Actuarial Accrued Liability (AAL) represents the portion of the PVPB attributable to past service. The AAL is recognized over service through the date a participant is expected to commence benefits. Therefore, the AAL is equal to the PVPB for current retirees. The Normal Cost is the portion of the PVPB allocated or earned during the year following the valuation date.





## SECTION 2

### LIABILITY INFORMATION & FUNDED STATUS

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A comparison of the Present Value of Benefits, Actuarial Accrued Liability, Employer Normal Cost, and the Funded Ratio for the current and prior valuations follows. (Note that numbers throughout the report may not add due to rounding.)

(amounts in \$000's)

	June 30, 2013	June 30, 2015
<b>Present Value of Projected Benefits</b>		
■ Active Employees	\$ 16,354	\$ 8,678
■ Vested Terminated & Reciprocal	2,186	2,796
■ Service Retirees	270,856	265,580
■ Disabled Participants	44,460	43,990
■ Beneficiaries	49,075	55,724
■ Total	382,930	376,767

#### Actuarial Accrued Liability

■ Active Employees	\$ 15,827	\$ 8,390
■ Vested Terminated & Reciprocal	2,186	2,796
■ Service Retirees	270,856	265,580
■ Disabled Participants	44,460	43,990
■ Beneficiaries	49,075	55,724
■ Total	382,403	376,479

2013/14

2015/16

#### Normal Cost

■ Employer Normal Cost (beginning of year)	\$ 62	\$ 57
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June 30, 2013

June 30, 2015

#### Plan Funded Status

■ Total Actuarial Accrued Liability	\$ 382,403	\$ 376,479
■ Actuarial Value of Plan Assets	292,035	293,036
■ Unfunded Actuarial Accrued Liability	90,368	83,443
■ Funded Ratio	76.4%	77.8%
■ Market Value of Assets	295,975	301,263
■ Funded Ratio – Market Value Basis	77.4%	80.0%



## SECTION 2

### LIABILITY INFORMATION & FUNDED STATUS

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Details of the June 30, 2015 Present Value of Benefits, Actuarial Accrued Liability and Employer Normal Cost by employee category:

(amounts in \$000's)

	Safety	Miscellaneous	Total
<b>Present Value of Projected Benefits</b>			
■ Active Employees	\$ 0	\$ 8,678	\$ 8,678
■ Vested Terminated & Reciprocals		2,796	2,796
■ Service Retirees	29,175	236,405	265,580
■ Disabled Participants	20,439	23,550	43,990
■ Beneficiaries	18,272	37,452	55,724
■ Total	67,886	308,880	376,767

#### Actuarial Accrued Liability

■ Active Employees	0	8,390	8,390
■ Vested Terminated & Reciprocals	0	2,796	2,796
■ Service Retirees	29,175	236,405	265,580
■ Disabled Participants	20,439	23,550	43,990
■ Beneficiaries	18,272	37,452	55,724
■ Total	67,886	308,592	376,479

	Safety	Miscellaneous	Total
<b>Normal Cost</b>			
■ Employer Normal Cost (on June 30, 2015)	\$ 0	\$ 57	\$ 57

## SECTION 2

### LIABILITY INFORMATION & FUNDED STATUS

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Details of the June 30, 2015 Present Value of Benefits, Actuarial Accrued Liability and Employer Normal Cost by benefit section:

(amounts in \$000's)

	Section 175	Sections 302 & 399	Total
<b>Present Value of Projected Benefits</b>			
■ Active Employees	\$ 0	\$ 8,678	\$ 8,678
■ Vested Terminated & Reciprocal	728	2,068	2,796
■ Service Retirees	8,725	256,855	265,580
■ Disabled Participants	2,461	41,529	43,990
■ Beneficiaries	4,540	51,184	55,724
■ Total	<u>16,454</u>	<u>360,313</u>	<u>376,767</u>

#### Actuarial Accrued Liability

■ Active Employees	0	8,390	8,390
■ Vested Terminated & Reciprocal	728	2,068	2,796
■ Service Retirees	8,725	256,855	265,580
■ Disabled Participants	2,461	41,529	43,990
■ Beneficiaries	4,540	51,184	55,724
■ Total	<u>16,454</u>	<u>360,025</u>	<u>376,479</u>

#### Normal Cost

	Section 175	Sections 302 & 399	Total
■ Employer Normal Cost (on 6/30/15)	\$ 0	\$ 57	\$ 57

## SECTION 3

### ASSET INFORMATION

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Assets for SCERS are held in trust. Trust monies may be used to pay benefits to plan participants and their beneficiaries. The trust is managed under the direction of the Administration, Investment, and Fiscal Management Board. Asset information is provided by the City of Sacramento, and has not yet been audited.

#### Asset Reconciliation – Market Value of Assets

Following reconciles the June 30, 2013 through June 30, 2014 and the June 30, 2014 through June 30, 2015 market value of assets.

	(amounts in \$000's)	
	2013/14	2014/15
■ Beginning of Year Balance:	\$ 295,975	\$ 312,414
• Member Contributions	\$ 161	\$ 82
• City Contributions	9,649	9,183
• Investment Income	41,613	14,662
■ Total Additions	51,423	23,927
• Benefit Payments	33,487	33,590
• Member Refunds	201	201
• Investment Expenses	1,296	1,287
■ Total Deductions	34,984	35,078
■ Net Assets at End of Year	312,414	301,263
■ Approximate Return on Assets	14.2%	4.5%

## SECTION 3

### ASSET INFORMATION

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#### Asset Allocation – Market Value of Assets

The July 1, 2015 trust asset allocation is provided by the City of Sacramento and based on an allocation strategy of 40% fixed income and 60% equity. Details are shown below.

(amounts in \$000's)

	Market Value	Percentage
■ Cash & Short Term Investments	\$ 7,970	2.6%
■ Securities Lending Collateral	0	0.0%
■ Receivables	2,147	0.7%
■ Investments		
• US Agencies	\$ 1,859	0.6%
• Corporate Bonds	59,085	19.6%
• Equities	102,566	34.0%
• Exchange Traded Funds	81,426	27.0%
• Mortgage Loans	4,022	1.3%
• Municipal Bonds	44,985	14.9%
■ Total Investments	293,943	
■ Total Assets	304,060	
■ Securities Lending Obligation		0.0%
■ Other Liabilities Payable	(2,797)	-0.9%
■ Net Pension Benefit Trust Assets	301,263	100.0%

#### Target Allocation by Asset Class

The Administration, Investment and Fiscal Management Board of the Sacramento City Employees' Retirement System last adopted a new asset allocation in February 2014, effective July 1, 2014, as shown below. The fund is rebalanced each year.

	Prior Allocation	Current Allocation
■ Fixed Bonds/Real Estate	45%	40%
Total Fixed	45%	40%
■ Large Cap Growth	30%	35%
■ Equity Income	15%	15%
■ International Equities	10%	10%
Total Equity	55%	60%
Total Fixed & Equity	100%	100%

## SECTION 3

### ASSET INFORMATION

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#### Discount Rate Development

We recommend the following discount rate assumption for the June 30, 2015 valuation, based upon a 55% confidence level:

Confidence Level	50%	55%	60%
■ Inflation Adjusted Return	7.30%	6.99%	6.70%
■ Investment Expenses <sup>3</sup>	<u>0.30%</u>	<u>0.30%</u>	<u>0.30%</u>
■ Net Return after Expenses	7.00%	6.69%	6.40%
■ <b>Discount Rate Assumption</b>		<b>6.50%</b>	

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<sup>3</sup> Based on average investment expenses for a typical passive investment strategy. This is not plan specific.

## SECTION 3

### ASSET INFORMATION

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#### Development of Actuarial Value of Assets

The Actuarial Value of Assets is based upon a three year smoothing of market assets. This method reduces volatility in contribution rates, and also reduces volatility in the size of the actuarial gains and losses due to asset returns. Because the plan is frozen to new membership and the membership is primarily composed of retirees and beneficiaries, it is important from a cash flow perspective that asset values used in calculating contribution rates not stray too far from market value. For this reason, a corridor of 15% around the market value is imposed upon the actuarial value.

	(amounts in \$000's)	
	2013/14	2014/15
■ <b>Actuarial Value of Assets, Beginning of Year</b>	\$ 292,035	\$ 295,055
• Contributions	9,810	9,265
• Expected Earnings	18,218	18,394
• Benefit Payments	(33,688)	(33,791)
■ Expected Actuarial Value of Assets, End of Year	286,375	288,923
■ Market Value of Assets, End of Year	312,414	301,263
■ Difference between MVA & Expected AVA	26,039	12,340
■ <b>Preliminary Actuarial Value of Assets, End of Year</b> <i>(Expected AVA + 1/3 Difference)</i>	295,055	293,036
■ Actuarial Value of Assets Corridor		
• Cap: 115% of Market Value	359,276	346,452
• Min: 85% of Market Value	265,552	256,074
■ <b>Actuarial Value of Assets, End of Year</b> <i>(No greater than Cap, not less than Min)</i>	295,055	293,036
■ Approximate Annual Rate of Return	9.6%	8.0%

## SECTION 4

### CONTRIBUTION DEVELOPMENT

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#### Actuarially Determined Contribution

Following is the development of the 2016/17 Actuarially Determined Contribution. The 2014/15 and 2015/16 Actuarially Determined Contributions, which were calculated in the June 30, 2013 actuarial valuation, are shown for comparison.

Contribution Year	(amounts in \$000's)		
	2014/15	2015/16	2016/17
■ Actuarially Determined Contribution			
• Employer Normal Cost	\$ 50	\$ 38	\$ 43
• UAAL Amortization <sup>4</sup>	9,133	8,607	8,287
• Total Cost	9,183	8,645	8,330
■ Projected Plan Payroll	1,802	1,370	874
■ Actuarially Determined Contribution (as a percent of plan payroll)			
• Employer Normal Cost	2.8%	2.8%	5.0%
• UAAL Amortization	506.9%	628.2%	948.6%
• Total Contribution	509.7%	631.0%	953.6%
■ Projected Total City Payroll	267,048	276,395	283,330
■ Actuarially Determined Contribution (as a percent of total City payroll)			
• Employer Normal Cost	0.0%	0.0%	0.0%
• UAAL Amortization	3.4%	3.1%	2.9%
• Total Contribution	3.4%	3.1%	2.9%

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<sup>4</sup> The Unfunded Actuarial Accrued Liability (UAAL) is being amortized as a level dollar amount over a 14 year period for the 2014/15, 2015/16, and 2016/17 ADC. As the plan continues to mature, this amortization period should be reviewed.



**SECTION 5**  
**SCHEDULE OF FUTURE CONTRIBUTIONS**

Year Ending <sup>5</sup>	Member Contributions	City Contributions	Benefit Payments
6/30/1986	\$ 3,953,000	\$ 14,143,000	\$ 14,693,000
6/30/1987	4,178,000	15,415,000	15,973,000
6/30/1988	4,233,000	14,057,000	17,400,000
6/30/1989	4,146,000	12,188,000	19,000,000
6/30/1990	3,305,000	9,664,000	20,000,000
6/30/1991	1,704,000	6,017,000	20,400,000
6/30/1992	1,818,000	2,984,000	22,000,000
6/30/1993	1,672,000	857,000	23,042,000
6/30/1994	1,432,000	0	24,165,000
6/30/1995	1,320,000	0	24,565,000
6/30/1996	1,228,000	0	25,027,000
6/30/1997	1,080,000	0	23,274,000
6/30/1998	1,090,000	0	23,825,000
6/30/1999	1,136,000	0	24,249,000
6/30/2000	1,079,000	0 <sup>6</sup>	24,901,000
6/30/2001	989,000	0	25,087,000
6/30/2002	1,011,000	0	25,588,000
6/30/2003	978,000	0	26,619,000
6/30/2004	1,056,000	0	26,772,000
6/30/2005	809,000	0	27,524,000
6/30/2006	789,000	0	28,749,000
6/30/2007	699,000	0	29,604,000
6/30/2008	596,000	3,534,000	29,896,000
6/30/2009	607,000	3,159,000	30,707,000
6/30/2010	377,000	3,431,000	31,719,000
6/30/2011	342,000	10,547,000	33,003,000
6/30/2012	332,000	10,361,000	33,057,000
6/30/2013	219,000	10,573,000	33,237,000
6/30/2014	161,000	9,649,000	33,688,000
6/30/2015	82,000	9,183,000	33,791,000
6/30/2016	54,000	8,645,000	32,790,000
6/30/2017	40,000	8,330,000	32,714,000
6/30/2018	29,000	7,715,000	32,591,000
6/30/2019	20,000	7,194,000	32,364,000
6/30/2012	14,000	6,745,000	32,048,000

<sup>5</sup> Information prior to 6/30/2006 valuation is taken from prior actuary's valuation report. Member contributions and benefit payments for years ending 6/30/2016 and later are estimated. City contributions for years ending 6/30/2018 and later are estimated (assuming 6/30/16 and subsequent market value of assets earn 6.5%).

<sup>6</sup> Shown as a negative 1.367 million by prior actuary.

## SECTION 6

### ACTUARIAL (GAIN)/LOSS ANALYSIS

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The gain/loss analysis of plan assets, actuarial liability, and unfunded actuarial liability for the one year period between valuation dates:

	(amounts in \$000's)		
	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Actuarial Accrued Liability
■ <b>June 30, 2013 Actual Value</b>	\$ 382,403	\$ 292,035	\$ 90,368
■ <b>June 30, 2015 Expected Value</b>	362,421	279,862	82,559
• Revised Benefit Calculations (Gain)/Loss	(12,253)		
• Actual COLA Less Than Expected (Gain)/Loss	(734)		
• No Social Security Offset for Disability Retirees (Gain)/Loss	203		
• Other Demographic (Gain)/Loss <sup>7</sup>	3,724		
	(9,060)		
■ Total Liability (Gain)/Loss	(9,060)		
■ Investment Gain/(Loss)		13,174	
■ <b>Total (Gain)/Loss</b>			(22,233)
■ <b>June 30, 2015 Actual Value Prior to Changes in Assumptions</b>	353,362	293,036	60,326
■ Change in Mortality Assumption (Gain)/Loss	23,117		23,117
■ <b>June 30, 2015 Actual Value After Changes in Assumptions</b>	376,479	293,036	83,443

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<sup>7</sup> Primarily due to retirees and beneficiaries living longer than expected.

## SECTION 7

### SENSITIVITY ANALYSIS

The Plan's June 30, 2015 funded status and 2016/17 fiscal year contribution are shown below at 5.5%, 6.5% and 7.5% discount rates.

Discount Rate	(amounts in \$000's)		
	5.5%	6.5%	7.5%
■ Present Value of Projected Benefits	\$ 412,093	\$ 376,767	\$ 346,597
■ Funded Status			
• Actuarial Accrued Liability	411,703	376,479	346,382
• Actuarial Value of Assets	<u>293,036</u>	<u>293,036</u>	<u>293,036</u>
• Unfunded Actuarial Accrued Liability	118,667	83,443	53,346
■ Funded Ratio	71.2%	77.8%	84.6%
■ 2016/17 Actuarially Determined Contribution			
• Employer Normal Cost	69	43	25
• UAAL Amortization <sup>8</sup>	<u>11,525</u>	<u>8,287</u>	<u>5,166</u>
• Total Contribution	11,594	8,330	5,191
• Total Employer Contribution (as a percent of Plan payroll)	1327.1%	953.6%	594.2%
• Total Employer Contribution (as a percent of total City payroll)	4.1%	2.9%	1.8%

The Plan's 2016/17 fiscal year contribution would increase if the amortization period of the Unfunded Actuarial Accrued Liability were shorter. Shown below are results based on the current 14-year period, as well as for 13, 12 and 10 year periods.

Amortization Years	(amounts in \$000's)			
	14	13	12	10
■ 2016/17 Actuarially Determined Contribution				
• Employer Normal Cost	\$ 43	\$ 43	\$ 43	\$ 43
• UAAL Amortization	<u>8,287</u>	<u>8,686</u>	<u>9,156</u>	<u>10,391</u>
• Total Employer Contribution	8,330	8,729	9,199	10,434
• Total Employer Contribution (as a percent of Plan payroll)	953.6%	999.2%	1053.0%	1194.4%
• Total Employer Contribution (as a percent of total City payroll)	2.9%	3.1%	3.2%	3.7%

<sup>8</sup> 14 year period

## SECTION 8

### HEADCOUNT AND BENEFIT PAYMENT PROJECTION

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#### Headcount and Benefit Payment Projection

Fiscal Year Ending June 30,	Active Count	Term Vested Count	Retiree Count	Benefit Payments (000's)
2016	19	14	1,141	\$ 32,790
2017	14	14	1,116	32,714
2018	9	14	1,088	32,591
2019	6	14	1,057	32,364
2020	4	14	1,023	32,048
2021	3	14	988	31,643
2022	2	14	952	31,170
2023	1	14	914	30,635
2024	1	14	876	30,038
2025	0	14	838	29,389
2026	0	13	799	28,692
2027	0	13	761	27,954
2028	0	13	723	27,177
2029	0	13	685	26,366
2030	0	13	647	25,521
2031	0	13	611	24,643
2032	0	12	574	23,733
2033	0	12	539	22,792
2034	0	12	504	21,819
2035	0	12	470	20,817
2036	0	11	437	19,785
2037	0	11	404	18,726
2038	0	10	373	17,643
2039	0	10	342	16,539
2040	0	9	312	15,421
2041	0	9	284	14,295
2042	0	8	256	13,170
2043	0	7	230	12,054
2044	0	7	206	10,956
2045	0	6	182	9,887

**SECTION 8**  
**HEADCOUNT AND BENEFIT PAYMENT PROJECTION**

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Fiscal Year Ending June 30,	Active Count	Term Vested Count	Retiree Count	Benefit Payments (000's)
2046	0	5	160	\$ 8,854
2047	0	5	140	7,867
2048	0	4	122	6,934
2049	0	3	105	6,058
2050	0	3	89	5,247
2051	0	2	76	4,505
2052	0	2	63	3,835
2053	0	1	53	3,239
2054	0	1	44	2,718
2055	0	1	36	2,268
2056	0	1	29	1,885
2057	0	0	24	1,563
2058	0	0	19	1,296
2059	0	0	16	1,080
2060	0	0	13	909
2061	0	0	10	777
2062	0	0	8	677
2063	0	0	7	603
2064	0	0	6	548
2065	0	0	5	508

## SECTION 9 PLAN PROVISIONS

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**A. Plan Effective Date**

Originally established effective April 1, 1935.

**B. Plan Year**

July 1 to June 30.

**C. Participation**

The plan is closed with no new members since January 28, 1977.

**D. Eligibility to Retire**

Section 175: Age 70, or age 55 and 20 years of service.

Sections 302 and 399: Age 70, or age 50 and 5 years of service.

**E. Vesting**

100% vesting with five years of participation.

**F. Average Monthly Compensation**

Average monthly salary for the 36 months prior to termination.

**G. Employee Contributions**

Each participant contributes a certain percentage based on his or her age at entry into the plan.

**H. Service Retirement Benefit**

**Section 175:**

Average Monthly Compensation times years of service times Benefit Factor. For retirement after age 65 with 20 years of service, benefit is a minimum of \$60 per month.

**Sections 302 and 399:**

Average Monthly Compensation times years of service times Benefit Factor, but no larger than 75% of final average earnings.

Benefit Factors at sample ages:

<u>Retirement Age</u>	<u>Section 175</u>	<u>Sections 302 and 399</u>
50	n/a	1.10%
55	1.10%	1.75%
60	1.67%	2.40%
65	2.44%	2.40%

## SECTION 9 PLAN PROVISIONS

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### **I. Vested Termination Benefit**

Return of employee contributions with interest, or if the value is greater than \$500, the member may choose to leave the contributions in the system. The member may become eligible in the future for retirement, disability or death benefits.

### **J. Non-Industrial (Ordinary) Disability Benefit**

Eligibility is ten years of service.

#### **Section 175:**

With 16 2/3 years of service: 1½% of final average salary times years of service to disability.

Less than 16 2/3 years of service: Minimum of 1½% of final average salary times years of service would have earned to age 60, or 25% of final average earnings.

#### **Sections 302 and 399:**

Not Eligible for Retirement: Lesser of 1½% of Final Average Earnings times years of service or final average earnings times benefit factor at age 50 times years of service at age 50, minimum of 25% of final average earnings.

Eligible for Retirement: Maximum of retirement allowance or 25% of final average earnings.

### **K. Industrial Disability Benefit**

#### **Sections 302 and 399:**

Not Eligible for Retirement: 50% of final average earnings.

Eligible for retirement: Maximum of retirement allowance or 50% of final average earnings.

### **L. Death Benefit – Pre Retirement Eligibility**

Return of employee contributions with interest, plus 1/12 of salary in the year preceding death multiplied by the smaller of 6 or years of service.

### **M. Death Benefit – Post Retirement Eligibility**

50% of the member's benefit as if the member retired at the time of death, paid as a lifetime benefit to the spouse.

### **N. Death Benefit – Post Retirement Death**

\$500 paid to the member's estate upon death.

## SECTION 9 PLAN PROVISIONS

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### **O. Social Security Reduction at age 62**

For members participating in Social Security, their benefit will be reduced at the later of age 62 or actual retirement age. The amount of the reduction is one half of the PIA from Social Security, multiplied by the ratio of the sum of salary earned from the City to the sum of salary from all sources used in the calculation of the Social Security amount. The member's benefit under the System plus the amount received from Social Security cannot be less than the member's benefit under the System calculated with no reductions as of his retirement age. The City applies this offset to service retirees, not to disabled retirees.

### **P. Reduction Account**

A member can choose to reduce his normal contributions to the System by an amount equal to the taxes paid for Social Security coverage. At the time of retirement, the regular retirement benefit will be reduced by the actuarial equivalent of the accumulated value of the reduction of contributions.

### **Q. Cost of Living**

Benefits will be increased each July 1 by the change in the CPI for the San Francisco/Oakland area for the preceding calendar year limited to 3% (with COLA bank).

### **R. Benefit Forms**

#### **Section 175:**

Lifetime benefit to the member, which may be actuarially reduced to provide a continuance to a beneficiary.

#### **Section 302 and 399:**

Lifetime benefit to the member, with an automatic 50% continuance to the spouse.



## SECTION 10

### METHODS AND ASSUMPTIONS

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#### **Actuarial Methods**

The actuarial cost method used for this valuation is the Entry Age Normal (EAN) method. The Present Value of Projected Benefits (PVPB) is the present value of all future benefits for current plan participants. The Actuarial Accrued Liability (AAL) represents the portion of the PVPB attributable to past service. The AAL is recognized over service through the date a participant is expected to commence benefits.

The current unfunded AAL will be amortized over a 14 year rolling period as a level dollar amount. Because the plan is closed the amortization period should be regularly reviewed. Under current Board policy, when the average future life expectancy of the plan participants drops below 5 years, the amortization period will be reduced to no more than 5 years.

Plan funded status based on excess of

- 1) Value of Normal Retirement Benefit in excess of employee contributions over
- 2) Actuarial Value of Assets

The contribution generated by the current valuation will be payable for the City's fiscal year beginning one year later (2016/17). The June 30, 2013 valuation generated a contribution for fiscal years 2014/15 and 2015/16.

The Actuarial Value of Assets is a 3-year smoothed market value. Gains and losses will be recognized over a three year period. For June 30, 2006, the first year of this method, the Actuarial Asset Value was set equal to the Market Value. The Actuarial Value of Assets will be limited by a 15% corridor. The Actuarial Value of Assets will be no greater than 115% of Market Value of Assets and no less than 85% of Market Value of Assets.

#### **Data**

The City provided participant data as of 7/1/2015. We reviewed the data, but did not perform an audit. The data in this valuation reflects recalculated benefits for retirees and corrected COLA banks based on the 2014/15 review.

# SECTION 10

## METHODS AND ASSUMPTIONS

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### Actuarial Assumptions

Assumptions used in the valuation are as follows:

- **Discount Rate**

6.50%, net of investment expenses<sup>9</sup>

- **Inflation**

3.0%

- **Salary Scale**

3.00% CPI

0.50% Merit

- **Social Security Wage Base**

3.25%

- **Termination**

Rates vary based on age and gender. Sample rates follow:

<u>Age</u>	<u>Male</u>	<u>Female</u>
30	9.56%	11.32%
35	6.92%	8.58%
40	4.48%	5.82%
45	2.28%	3.08%
50	0.00%	0.00%

- **Retirement**

Rates vary based on age. Sample rates follow:

<u>Age</u>	<u>Non Sec 175</u>
50	1%
55	6%
60	26%
65	40%
70	100%

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<sup>9</sup> Administrative expenses are not paid from plan assets.

## SECTION 10

### METHODS AND ASSUMPTIONS

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■ **Disability**

Rates vary based on age, gender and if the disability is job-related or not. Sample rates follow:

	<u>Job Related</u>		<u>Ordinary</u>	
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
40	.00075	.00045	.00204	.00123
45	.00192	.00093	.00525	.00252
50	.00351	.00180	.00966	.00495
55	.00502	.00273	.01374	.00747
60	.00639	.003512	.01761	.00969

■ **Healthy Mortality**

CalPERS 1997-2011 Pre-Retirement Mortality table for males and females and CalPERS 1997-2011 Post-Retirement Mortality table for males and females. Mortality projected fully generational with Scale MP-2014 modified to converge to ultimate improvement rates in 2022. For the June 30, 2013 valuation, the CalPERS 1997-2007 tables were used with generational projection scale AA applied. Sample rates are as follows:

<u>Age</u>	<u>Pre-Retirement</u>		<u>Post-Retirement</u>	
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
50	0.14%	0.10%	0.46%	0.47%
60	0.34%	0.20%	0.78%	0.48%
70	0.61%	0.40%	1.53%	1.08%
80	1.14%	0.90%	4.48%	3.21%
90	1.17%	0.90%	14.13%	10.67%
100	1.24%	0.95%	31.93%	29.08%

■ **Post-Retirement Disabled Mortality**

For Miscellaneous retirees, CalPERS 1997-2011 Non-Work-Related Disability table for males and females. For Safety retirees, CalPERS 1997-2011 Work-Related Disability table for males and females. Mortality projected fully generational with Scale MP-2014 modified to converge to ultimate improvement rates in 2022. For the June 30, 2013 valuation, the CalPERS 1997-2007 tables were used with generational projection scale AA applied. Sample rates are as follows:

<u>Age</u>	<u>Non-Work-Related</u>		<u>Work-Related</u>	
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
50	1.55%	1.16%	0.46%	0.47%
60	2.51%	1.36%	0.83%	0.57%
70	3.37%	2.41%	1.92%	1.52%
80	7.00%	5.23%	5.63%	4.33%
90	16.12%	13.91%	14.13%	10.67%
100	31.93%	29.08%	31.93%	29.08%

## SECTION 10

### METHODS AND ASSUMPTIONS

---

- **Social Security Offset**

Monthly benefits for current retirees and vested terminated assumed to decrease at the later of age 62 or actual retirement, based on the average expected offset of future retirees.

- **Marriage**

85% of male employees and 60% of female employees are assumed to be married. Wives are assumed to be four years younger than husbands.

- **Retirement Age**

Deferred vested members covered under Section 399 are assumed to retire at age 62; those covered under Section 175 are assumed to retire at age 65.

- **Reciprocal Members**

All remaining deferred vested members are assumed to have reciprocity with other retirement systems, and their pay is assumed to increase with salary scale after separation from the City.

## SECTION 11 PARTICIPANT DATA

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### Data Summary

Following summarizes participant demographic information for the June 30, 2013 and June 30, 2015 actuarial valuations.

	June 30, 2013	June 30, 2015
<b>■ Participant Counts</b>		
• Actives	35	19
• Terminated Vesteds	13	11
• Reciprocals	7	3
• Service Retirees	722	662
• Disableds	161	145
• Beneficiaries	335	334
• Total	1,273	1,174
<b>■ Actives</b>		
• Average Age	59.3	61.0
• Average Service	32.9	33.5
• Salary		
> Total	\$ 2,279,093	\$ 1,179,884
> Average	65,117	62,099
• Overall City Payroll	249,292,000	264,491,000
<b>■ Terminated Vesteds &amp; Reciprocals</b>		
• Average Age	63.5	65.1
<b>■ Retirees, Disableds &amp; Beneficiaries</b>		
• Average Age	76.3	76.9
• Average Monthly Benefit	\$ 2,304	\$ 2,406

# SECTION 11 PARTICIPANT DATA

## June 30, 2015 Participant Data

Following summarizes participant demographic information for the June 30, 2015 actuarial valuation, broken out by employee category and benefit section.

	Safety		Miscellaneous		Total
	Section 175	Section 302 & 399	Section 175	Section 302 & 399	
<b>■ Actives</b>					
• Count	-	-	-	19	19
• Average Age	n/a	n/a	n/a	61.0	61.0
• Average Service	n/a	n/a	n/a	33.5	33.5
• Salary					
➤ Average	\$ -	\$ -	\$ -	\$62,099	\$62,099
➤ Total (000's)	-	-	-	1,180	1,180
<b>■ Vested Terms &amp; Reciprocals</b>					
• Count	-	-	2	12	14
• Average Age	n/a	n/a	66.8	64.8	65.1
<b>■ All Inactives</b>					
• Count	33	196	37	875	1,141
• Average Age	84.5	81.2	80.3	75.5	76.9
• Avg. Monthly Benefit	\$2,373	\$3,017	\$1,656	\$2,303	\$2,406
<b>■ Service Retirees</b>					
• Count	12	68	18	564	662
• Average Age	86.3	86.2	78.5	74.4	75.9
• Average Retirement Age	55.6	55.1	63.4	59.5	59.1
• Avg. Monthly Benefit	\$3,055	\$4,427	\$2,091	\$2,747	\$2,907
<b>■ Disabled Retirees</b>					
• Count	7	52	4	82	145
• Average Age	84.4	74.6	79.3	72.2	73.9
• Average Retirement Age	48.3	42.2	50.0	48.7	46.4
• Avg. Monthly Benefit	\$2,696	\$2,598	\$1,220	\$1,957	\$2,202
<b>■ Beneficiaries</b>					
• Count	14	76	15	229	334
• Average Age	83.1	81.3	82.7	79.3	80.1
• Avg. Monthly Benefit	\$1,626	\$2,042	\$1,251	\$1,333	\$1,503

## SECTION 11 PARTICIPANT DATA

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### Data Reconciliation 6/30/2013 to 6/30/2015

	Actives	Terminated		Receiving Payments			Total
		Vested	Reciprocal	Disabled	Benefic.	Retirees	
■ <b>June 30, 2013</b>	35	13	7	161	335	722	1,273
• New Hires	-	-	-	-	-	-	-
• Disabled	(1)	-	-	1	-	-	-
• Terminated	-	-	-	-	-	-	-
• Deceased	-	(1)	-	(17)	(43)	(80)	(141)
• New Beneficiaries	-	-	-	-	42	-	42
• Retired	(15)	(1)	(4)	-	-	20	-
• Adjustment	-	-	-	-	-	-	-
■ <b>June 30, 2015</b>	19	11	3	145	334	662	1,174

## SECTION 11 PARTICIPANT DATA

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### Active Age/Service

Following are active counts by age and service groups:

Age	Service							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30 & Over	
<b>Under 25</b>	-	-	-	-	-	-	-	-
<b>25-29</b>	-	-	-	-	-	-	-	-
<b>30-34</b>	-	-	-	-	-	-	-	-
<b>35-39</b>	-	-	-	-	-	-	-	-
<b>40-44</b>	-	-	-	-	-	-	-	-
<b>45-49</b>	-	-	-	-	-	-	-	-
<b>50-54</b>	-	-	-	-	-	-	-	-
<b>55-59</b>	-	-	-	1	-	1	5	7
<b>60-64</b>	-	-	-	-	-	3	8	11
<b>65 &amp; Over</b>	-	-	-	-	-	-	1	1
<b>Total</b>	-	-	-	1	-	4	14	19



## SECTION 11 PARTICIPANT DATA

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### Inactives Age/Status/Monthly Benefit

Following are inactive counts and monthly benefit by age and status.

#### Safety

Age		Service Retirees	Disability Retirees	Beneficiaries	Total
<b>Under 50</b>	Count	-	-	-	-
	Avg. Benefit	-	-	-	-
<b>50-54</b>	Count	-	-	-	-
	Avg. Benefit	-	-	-	-
<b>55-59</b>	Count	-	-	-	-
	Avg. Benefit	-	-	-	-
<b>60-64</b>	Count	-	-	1	1
	Avg. Benefit	-	-	1,883	1,883
<b>65-69</b>	Count	1	12	10	23
	Avg. Benefit	6,354	2,934	1,836	2,605
<b>70-74</b>	Count	4	20	13	37
	Avg. Benefit	2,419	2,148	1,970	2,115
<b>75-79</b>	Count	3	10	10	23
	Avg. Benefit	5,145	2,893	2,548	3,036
<b>80-84</b>	Count	21	10	19	50
	Avg. Benefit	3,870	2,871	1,770	2,872
<b>85 &amp; Over</b>	Count	51	7	37	95
	Avg. Benefit	4,411	2,591	1,973	3,327
<b>Total</b>	Count	80	59	90	229
	Avg. Benefit	4,221	2,609	1,977	2,924

## SECTION 11 PARTICIPANT DATA

### Miscellaneous

Age		Service Retirees	Disability Retirees	Beneficiaries	Total
<b>Under 50</b>	<b>Count</b>	-	-	-	-
	<b>Avg. Benefit</b>	-	-	-	-
<b>50-54</b>	<b>Count</b>	-	-	3	3
	<b>Avg. Benefit</b>	-	-	1,377	1,377
<b>55-59</b>	<b>Count</b>	5	2	8	15
	<b>Avg. Benefit</b>	3,288	1,803	1,017	1,878
<b>60-64</b>	<b>Count</b>	73	19	13	105
	<b>Avg. Benefit</b>	3,081	2,103	1,260	2,679
<b>65-69</b>	<b>Count</b>	125	15	29	169
	<b>Avg. Benefit</b>	2,828	2,341	1,466	2,551
<b>70-74</b>	<b>Count</b>	124	12	26	162
	<b>Avg. Benefit</b>	2,748	1,437	1,565	2,461
<b>75-79</b>	<b>Count</b>	98	21	38	157
	<b>Avg. Benefit</b>	2,587	1,921	1,580	2,254
<b>80-84</b>	<b>Count</b>	76	9	43	128
	<b>Avg. Benefit</b>	2,785	1,878	1,339	2,236
<b>85 &amp; Over</b>	<b>Count</b>	81	8	84	173
	<b>Avg. Benefit</b>	2,293	1,522	1,127	1,691
<b>Total</b>	<b>Count</b>	582	86	244	912
	<b>Avg. Benefit</b>	2,726	1,922	1,328	2,276