



# **City and County of San Francisco Employees' Retirement System**

## **GASB 67/68 Report as of June 30, 2015**

**Produced by Cheiron**

**October 2015**

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## LETTER OF TRANSMITTAL

October 28, 2015

Retirement Board  
City and County of San Francisco  
Employees' Retirement System  
1145 Market Street, 5<sup>th</sup> Floor  
San Francisco, CA 94103

Dear Members of the Board:

The purpose of this report is to provide accounting and financial reporting information under the Government Accounting Standards Board Statements 67 and 68 (GASB 67 and 68) for the City and County of San Francisco Employees' Retirement System ("System") and for the participating employers, respectively. This information includes:

- Determination of the discount rate as of June 30, 2015,
- Projection of the Total Pension Liability from the valuation date to the measurement date,
- Note disclosures and required supplementary information under GASB 67 for the System,
- Determination of collective amounts under GASB 68, and
- Schedules for the financial reporting of participating employers under GASB 68.

If you have any questions about the report or would like additional information, please let us know.

Sincerely,  
Cheiron



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



Janet H. Cranna, FSA, EA, FCA, MAAA  
Principal Consulting Actuary



Anne D. Harper, ASA, EA, MAAA  
Consulting Actuary

**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM  
GASB 67 AND 68 REPORTING FOR JUNE 30, 2015 MEASUREMENT DATE**

**SECTION I – BOARD SUMMARY**

**Highlights**

The measurement date for the City and County of San Francisco Employees' Retirement System ("System") is June 30, 2015. Measurements are based on the fair value of assets as of June 30, 2015 and the Total Pension Liability as of the valuation date, June 30, 2014, updated to June 30, 2015. There were no significant events between the valuation date and the measurement date so the update procedures only included the addition of service cost and interest cost offset by actual benefit payments.

The beginning and end of year measurements are based on different assumptions that result in different discount rates. The discount rate was 7.58% as of June 30, 2014 and 7.46% as of June 30, 2015. A detailed description of these changes is provided in the next section.

The table below provides a summary of the key collective results during this measurement period.

<b>Table I-1 Summary of Collective Results</b>			
		<b>Measurement Date</b>	
		<b>6/30/2015</b>	<b>6/30/2014</b>
Discount Rate		<b>7.46%</b>	<b>7.58%</b>
Net Pension Liability	\$	2,296,033	\$ 1,770,435
Deferred Outflows		(173,476)	0
Deferred Inflows		745,870	1,575,346
Net Impact on Statement of Net Position	\$	2,868,427	\$ 3,345,781
Pension Expense (\$ Amount)	\$	115,289	\$ 104,791
Pension Expense (% of Payroll)		3.98%	3.81%

*Amounts in Thousands*

The Net Pension Liability (NPL) increased approximately \$526 million since the prior measurement date, primarily due to investment losses. There were also actuarial gains that reduced the NPL and assumption changes that increased the NPL. The investment losses are recognized over five years, and the actuarial gains and assumption changes are recognized over the average remaining service life, which is also five years. Unrecognized amounts are reported as deferred inflows and deferred outflows. As of the end of the measurement year, the System and its participating employers would report a Net Pension Liability of \$2,296,033,000, Deferred Inflows of \$745,870,000, and Deferred Outflows of \$173,476,000. Consequently, the net impact on the aggregate of participating employers' Statements of Net Position due to the System would be \$2,868,427,000 at the end of the measurement year.

For the measurement year ending June 30, 2015, the collective annual pension expense is \$115,289,000 or 3.98% of covered-employee payroll. This amount is not related to participating employers' contributions to the System (\$592,643,000), but instead represents the change in the

**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM  
GASB 67 AND 68 REPORTING FOR JUNE 30, 2015 MEASUREMENT DATE**

**SECTION I – BOARD SUMMARY**

net impact on participating employers' Statements of Net Position plus employer contributions (\$2,868,427,000 – \$3,345,781,000 + \$592,643,000). The collective pension expense is larger than the collective expense for the prior year. Volatility in pension expense from year to year is to be expected. It will largely be driven by investment gains or losses, but other changes can also have a significant impact. A breakdown of the components of the net pension expense is shown in the report.

**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM  
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**SECTION II – CERTIFICATION**

The purpose of this report is to provide accounting and financial reporting information under GASB 67 for the City and County of San Francisco Employees' Retirement System ("System") and under GASB 68 for the employers that participate in the System. This report is for the use of the System, the participating employers, and their auditors in preparing financial reports in accordance with applicable law and accounting requirements. This report is not appropriate for other purposes, including the measurement of funding requirements for the System.

In preparing our report, we relied on information (some oral and some written) supplied by the System. 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.

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 or demographic 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 that are consistent with the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained in this report. This report does not address any contractual or legal issues. We are not attorneys and our firm does not provide any legal services or advice.

This report was prepared for the System for the purposes described herein and for the use by the plan auditor in completing an audit related to the matters herein. 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.

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Consulting Actuary

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### SECTION III – DETERMINATION OF DISCOUNT RATE

The discount rate used to measure the Total Pension Liability was 7.46%.

The projection of cash flows used to determine the discount rate assumed that plan member contributions will continue to be made at the rates specified in the Charter. Employer contributions were assumed to be made in accordance with the contribution policy in effect for the July 1, 2014 actuarial valuation. That policy includes contributions equal to the employer portion of the Entry Age normal cost for members as of the valuation date, a payment for the expected administrative expenses, and an amortization payment on the unfunded actuarial liability.

The amortization payment is based on closed periods that vary in length depending on the source. Charter amendments prior to July 1, 2014 are amortized over 20 years. After July 1, 2014, any Charter changes to active member benefits are amortized over 15 years and changes to inactive member benefits, including Supplemental COLAs, are amortized over 5 years. The remaining unfunded actuarial liability not attributable to Charter amendments as of July 1, 2013, is amortized over a 19-year period commencing July 1, 2014. Experience gains and losses and assumption or method changes on or after July 1, 2014 are amortized over 20 years. All amortization schedules are established as a level percentage of payroll so payments increase 3.75% each year.

The unfunded actuarial liability is based on an actuarial value of assets that smooths investment gains and losses over five years and a measurement of the actuarial liability that excludes the value of any future Supplemental COLAs.

While the contributions and measure of actuarial liability in the funding valuation do not anticipate any future Supplemental COLAs, the projected contributions for the determination of the discount rate include the anticipated future amortization payments on future Supplemental COLAs for current members when they are expected to be granted. For a Supplemental COLA to be granted the market value of assets must exceed the actuarial liability at the beginning of the year and the actual investment earnings during the year must exceed the expected investment earnings on the actuarial value of assets. When a Supplemental COLA is granted, the amount depends on the amount of excess earnings and the basic COLA amount for each membership group. In most cases, the large majority of members receive a 1.50% Supplemental COLA.

Because the probability of a Supplemental COLA depends on the current funded level of the System, we developed an assumption as of June 30, 2015 of the probability and amount of Supplemental COLA for each future year. The table on the following page shows the net assumed Supplemental COLA for members with a 2.00% Basic COLA for sample years. Appendix B contains complete information on the assumption.

**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM  
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**SECTION III – DETERMINATION OF DISCOUNT RATE**

<b>Assumed Supplemental COLA for Members with a 2.00% Basic COLA</b>	
<b>FYE</b>	<b>Assumption</b>
2016	0.000%
2021	0.345%
2026	0.375%
2031	0.375%
2036+	0.375%

The projection of benefit payments to current members for determining the discount rate includes the payment of anticipated future Supplemental COLAs.

Based on these assumptions, the System's fiduciary net position was projected to be available to make projected future benefit payments for current members until FYE 2076 when only a portion of the projected benefit payments are expected to be made from the projected fiduciary net position. Projected benefit payments are discounted at the long-term expected return on assets of 7.50% to the extent the fiduciary net position is available to make the payments and at the municipal bond rate of 3.85% to the extent they are not available. The single equivalent rate used to determine the Total Pension Liability as of June 30, 2015 is 7.46%.

Appendix D shows the details of this calculation.



**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM  
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**SECTION IV – PROJECTION OF TOTAL PENSION LIABILITY**

The Total Pension Liability (TPL) at the end of the measurement year, June 30, 2015, is measured as of a valuation date of June 30, 2014 and projected to June 30, 2015. There were no significant events during the projection period of which we are aware. Because the TPL shown in the prior report was measured as of June 30, 2013 and projected to June 30, 2014, it will not match the amounts measured as of June 30, 2014 that are shown in this exhibit.

The table below shows the projection of the TPL at discount rates equal to the rate used for disclosure and plus and minus one percent from the rate used for disclosure.

<b>Table IV-1</b>			
<b>Projection of Collective Total Pension Liability from Valuation to Measurement Date</b>			
<b>Discount Rate</b>	<b>6.46%</b>	<b>7.46%</b>	<b>8.46%</b>
<b>Collective Total Pension Liability at Valuation Date (6/30/2014)</b>			
Actives	\$ 9,978,266	\$ 8,562,384	\$ 7,393,217
Deferred Vested	484,673	412,085	354,878
Retirees	13,945,365	12,749,643	11,726,666
<b>Total</b>	<b>\$ 24,408,305</b>	<b>\$ 21,724,112</b>	<b>\$ 19,474,762</b>
<b>Service Cost</b>	666,123	532,332	429,347
<b>Benefit Payments</b>	(1,131,030)	(1,131,030)	(1,131,030)
<b>Interest</b>	1,561,995	1,598,689	1,618,486
<b>Collective Total Pension Liability, 6/30/2015</b>	<b>\$ 25,505,393</b>	<b>\$ 22,724,102</b>	<b>\$ 20,391,566</b>

*Amounts in Thousands*

**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM  
GASB 67 AND 68 REPORTING FOR JUNE 30, 2015 MEASUREMENT DATE**

**SECTION V – GASB 67 REPORTING INFORMATION**

**Note Disclosures**

The table below shows the changes in the Total Pension Liability, the Plan Fiduciary Net Position (i.e., fair value of System assets), and the Net Pension Liability during the measurement year.

<b>Table V-1 Change in Collective Net Pension Liability</b>			
	<b>Increase (Decrease)</b>		
	<b>Total Pension Liability</b>	<b>Plan Fiduciary Net Position</b>	<b>Net Pension Liability</b>
	<b>(a)</b>	<b>(b)</b>	<b>(a) - (b)</b>
<b>Balances at 6/30/2014</b>	\$ 21,691,042	\$ 19,920,607	\$ 1,770,435
<b>Changes for the year:</b>			
Service cost	523,644		523,644
Interest	1,621,582		1,621,582
Changes of benefits	0		0
Differences between expected and actual experience	(197,981)		(197,981)
Changes of assumptions	216,845		216,845
Contributions - employer		592,643	(592,643)
Contributions - member		301,682	(301,682)
Net investment income		763,429	(763,429)
Benefit payments	(1,131,030)	(1,131,030)	0
Administrative expense		(19,262)	19,262
<b>Net changes</b>	<u>1,033,060</u>	<u>507,462</u>	<u>525,598</u>
<b>Balances at 6/30/2015</b>	<u>\$ 22,724,102</u>	<u>\$ 20,428,069</u>	<u>\$ 2,296,033</u>

*Amounts in Thousands*

During the measurement year, the collective NPL increased by approximately \$526 million. The service cost and interest cost increased the collective NPL by approximately \$2,145 million while contributions and investment income offset by administrative expenses decreased the collective NPL by approximately \$1,638 million.

There were no changes in benefits during the year. The discount rate was reduced from 7.58% to 7.46%, which increased the TPL by approximately \$217 million. There were actuarial experience gains during the year of approximately \$198 million.

Changes in the discount rate affect the measurement of the TPL. Lower discount rates produce a higher TPL and higher discount rates produce a lower TPL. Because the discount rate does not affect the measurement of assets, the percentage change in the NPL can be very significant for a relatively small change in the discount rate. The table on the next page shows the sensitivity of the collective NPL to the discount rate.

**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM  
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**SECTION V – GASB 67 REPORTING INFORMATION**

Table V-2 Sensitivity of Collective Net Pension Liability to Changes in Discount Rate			
	1% Decrease 6.46%	Discount Rate 7.46%	1% Increase 8.46%
Total Pension Liability	\$ 25,505,393	\$ 22,724,102	\$ 20,391,566
Plan Fiduciary Net Position	<u>20,428,069</u>	<u>20,428,069</u>	<u>20,428,069</u>
Collective Net Pension Liability	<u>\$ 5,077,324</u>	<u>\$ 2,296,033</u>	<u>\$ (36,503)</u>
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	80.1%	89.9%	100.2%

*Amounts in Thousands*

A one percent decrease in the discount rate increases the TPL by approximately 12% and increases the collective NPL by approximately 121%. A one percent increase in the discount rate decreases the TPL by approximately 10% and decreases the collective NPL by approximately 102%.

**Required Supplementary Information**

The schedules of Required Supplementary Information generally start with information as of the implementation of GASB 67, and eventually will build up to 10 years of information. The schedule on the next page shows the changes in collective NPL and related ratios required by GASB for the two years since implementation.

**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM  
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**SECTION V – GASB 67 REPORTING INFORMATION**

Table V-3 Schedule of Changes in Collective Net Pension Liability and Related Ratios		
	FYE 2015	FYE 2014
<b><u>Total Pension Liability</u></b>		
Service cost (MOY)	\$ 523,644	\$ 509,200
Interest (includes interest on service cost)	1,621,582	1,542,266
Changes of benefit terms	0	0
Differences between expected and actual experience	(197,981)	0
Changes of assumptions	216,845	(73,315)
Benefit payments, including refunds of member contributions	(1,131,030)	(1,072,526)
<b>Net change in total pension liability</b>	<b>\$ 1,033,060</b>	<b>\$ 905,625</b>
<b>Total pension liability - beginning</b>	<b><u>21,691,042</u></b>	<b><u>20,785,417</u></b>
<b>Total pension liability - ending</b>	<b><u>\$ 22,724,102</u></b>	<b><u>\$ 21,691,042</u></b>
<b><u>Plan fiduciary net position</u></b>		
Contributions - employer	\$ 592,643	\$ 532,882
Contributions - member	301,682	289,020
Net investment income	763,429	3,175,431
Benefit payments, including refunds of member contributions	(1,131,030)	(1,072,526)
Administrative expense	(19,262)	(15,745)
<b>Net change in plan fiduciary net position</b>	<b>\$ 507,462</b>	<b>\$ 2,909,062</b>
<b>Plan fiduciary net position - beginning</b>	<b><u>19,920,607</u></b>	<b><u>17,011,545</u></b>
<b>Plan fiduciary net position - ending</b>	<b><u>\$ 20,428,069</u></b>	<b><u>\$ 19,920,607</u></b>
<b>Net pension liability - ending</b>	<b><u>\$ 2,296,033</u></b>	<b><u>\$ 1,770,435</u></b>
<b>Plan fiduciary net position as a percentage of the total pension liability</b>	89.90%	91.84%
<b>Covered employee payroll</b>	\$ 2,895,443	\$ 2,749,444
<b>Net pension liability as a percentage of covered employee payroll</b>	79.30%	64.39%

*Amounts in Thousands*

Because an Actuarially Determined Contribution (ADC) has been calculated historically, technically the full 10 years of information in the following schedule is required. The actual covered-employee payroll and the ratio of contributions to covered-employee payroll has been left blank prior to FYE 2013 because we do not have that information.



**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM  
GASB 67 AND 68 REPORTING FOR JUNE 30, 2015 MEASUREMENT DATE**

**SECTION VI – GASB 68 COLLECTIVE AMOUNTS**

Employers that participate in the System are required to implement GASB 68 for their first fiscal year that commenced after June 15, 2014. The amounts reported as of their fiscal year end (their reporting date) must be based on a measurement date no more than 12 months prior to their reporting date. For employers with a reporting date of June 30, their 2015 disclosures can be based on either the June 30, 2014 or 2015 measurement dates. We understand that all of the employers have elected to implement GASB 68 based on the 2014 measurement date. As a result, the GASB 68 schedules are based on deferred inflows and outflows equal to \$0 as of June 30, 2013.

Because the System is a cost-sharing multiple-employer pension plan, each employer participating in the System must reflect a portion of the collective Net Pension Liability, Pension Expense, and Deferred Outflows and Inflows in their financial statements. This section develops the collective amounts that are allocated to participating employers.

The impact of experience gains or losses and assumption changes on the TPL are recognized in expense over the average expected remaining service life of all active and inactive members of the System. As of the measurement date, this recognition period was 5.0 years.

During the year, there was an experience gain of approximately \$198 million. Approximately \$40 million of that gain was recognized as a reduction in collective pension expense in the current year and an identical amount will be recognized in each of the next four years, resulting in a collective deferred inflow of resources as of June 30, 2015 of approximately \$158 million.

Assumption changes since the last measurement date increased the TPL approximately \$217 million. Approximately \$43 million of that increase was recognized as an increase in pension expense in the current year and an identical amount will be recognized in each of the next four years, resulting in a collective deferred outflow of resources as of June 30, 2015 of approximately \$173 million. Unrecognized amounts due to assumption changes from prior periods were reductions to the TPL of approximately \$59 million of which approximately \$15 million was recognized as a decrease in collective pension expense in the current year, leaving a collective deferred inflow of resources as of June 30, 2015 of approximately \$44 million.

The impact of investment gains or losses is recognized over a period of five years. During the measurement year, there was an investment loss of approximately \$743 million. Approximately \$149 million of that loss was recognized in the current year and an identical amount will be recognized in each of the next four years. Unrecognized investment gains from prior periods were approximately \$1,517 million of which \$379 million was recognized as a reduction in collective pension expense in the current year. The combination of unrecognized investment losses this year and unrecognized net investment gains from prior periods results in a collective deferred inflow of resources as of June 30, 2015 of approximately \$543 million.

The table on the next page summarizes the current balances of collective deferred outflows and deferred inflows of resources along with the net recognition over the next five years.

**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM  
GASB 67 AND 68 REPORTING FOR JUNE 30, 2015 MEASUREMENT DATE**

**SECTION VI – GASB 68 COLLECTIVE AMOUNTS**

<b>Table VI-1</b>														
<b>Schedule of Collective Deferred Inflows and Outflows of Resources</b>														
	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>												
Differences between expected and actual experience	\$ 0	\$ 158,385												
Changes in assumptions	173,476	43,989												
Net difference between projected and actual earnings on pension plan investments	0	543,496												
<b>Total</b>	<b><u>\$ 173,476</u></b>	<b><u>\$ 745,870</u></b>												
<p>Amounts reported as deferred outflows and deferred inflows of resources will be recognized in pension expense as follows:</p> <p style="text-align: center;"><b>Measurement year ended June 30:</b></p> <table style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: right;">2016</td> <td style="text-align: right;">(241,557)</td> </tr> <tr> <td style="text-align: right;">2017</td> <td style="text-align: right;">(241,557)</td> </tr> <tr> <td style="text-align: right;">2018</td> <td style="text-align: right;">(241,557)</td> </tr> <tr> <td style="text-align: right;">2019</td> <td style="text-align: right;">152,279</td> </tr> <tr> <td style="text-align: right;">2020</td> <td style="text-align: right;">0</td> </tr> <tr> <td style="text-align: right;">Thereafter</td> <td style="text-align: right;">\$ 0</td> </tr> </table>			2016	(241,557)	2017	(241,557)	2018	(241,557)	2019	152,279	2020	0	Thereafter	\$ 0
2016	(241,557)													
2017	(241,557)													
2018	(241,557)													
2019	152,279													
2020	0													
Thereafter	\$ 0													

*Amounts in Thousands*

The collective annual pension expense recognized by the City can be calculated two different ways. First, it is the change in the amounts reported on the City's Statements of Net Position that relate to the System and are not attributable to employer contributions. That is, it is the change in collective NPL plus the changes in collective deferred outflows and inflows plus participating employer contributions.

Alternatively, annual pension expense can be calculated by its individual components. While GASB does not require or suggest the organization of the individual components shown in the table on the next page, we believe it helps to understand the level and volatility of the collective pension expense.

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GASB 67 AND 68 REPORTING FOR JUNE 30, 2015 MEASUREMENT DATE**

**SECTION VI – GASB 68 COLLECTIVE AMOUNTS**

<b>Table VI-2 Calculation of Collective Pension Expense</b>		
	<b>Measurement Year Ending</b>	
	<b>2015</b>	<b>2014</b>
Change in Net Pension Liability	\$ 525,598	\$ (2,003,437)
Change in Deferred Outflows	(173,476)	0
Change in Deferred Inflows	(829,476)	1,575,346
Employer Contributions	<u>592,643</u>	<u>532,882</u>
<b>Pension Expense</b>	<b>\$ 115,289</b>	<b>\$ 104,791</b>
<b>Pension Expense as % of Payroll</b>	<b>3.98%</b>	<b>3.81%</b>
<b>Operating Expenses</b>		
Service cost	\$ 523,644	\$ 509,200
Employee contributions	(301,682)	(289,020)
Administrative expenses	<u>19,262</u>	<u>15,745</u>
Total	\$ 241,224	\$ 235,925
<b>Financing Expenses</b>		
Interest cost	\$ 1,621,582	\$ 1,542,266
Expected return on assets	<u>(1,505,960)</u>	<u>(1,279,564)</u>
Total	\$ 115,622	\$ 262,702
<b>Changes</b>		
Benefit changes	\$ 0	\$ 0
Recognition of assumption changes	28,706	(14,663)
Recognition of liability gains and losses	(39,596)	0
Recognition of investment gains and losses	<u>(230,667)</u>	<u>(379,173)</u>
Total	\$ (241,557)	\$ (393,836)
<b>Pension Expense</b>	<b>\$ 115,289</b>	<b>\$ 104,791</b>

*Amounts in Thousands*

First, there are components referred to as operating expenses. These are items directly attributable to the operation of the plan during the measurement year. Service cost less employee contributions represents the increase in employer-provided benefits attributable to the year, and administrative expenses are the cost of operating the System for the year.

Second, there are the financing expenses: the interest on the Total Pension Liability, including service cost, less the expected return on assets.

The final category is changes. This category will drive most of the volatility in pension expense from year to year. It includes any changes in benefits made during the year and the recognized amounts due to assumption changes, gains or losses on the TPL, and investment gains or losses. The total collective pension expense increased from the prior year by about \$10 million. The recognition of changes increased by approximately \$152 million, which is significantly more than the total increase in pension expense.



**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM  
GASB 67 AND 68 REPORTING FOR JUNE 30, 2015 MEASUREMENT DATE**

**SECTION VII – GASB 68 REPORTING INFORMATION FOR EMPLOYERS**

**Proportionate Shares**

GASB 68 requires that the proportionate share for each employer be determined based on the “employer’s projected long-term contribution effort to the pension ... as compared to the total projected long-term contribution effort of all employers ...” Proportionate shares for each participating employer in the System are determined based on the ratio of each participating employer’s actual contribution to the System during the measurement year to the sum of the actual contributions for all participating employers. The table below shows the actual employer contributions and proportionate shares for each participating employer for the current and prior measurement years.

<b>Table VII-1 Determination of Employers' Proportionate Share</b>					
<b>Employer</b>	<b>June 30, 2015</b>			<b>June 30, 2014</b>	
	<b>Employer Contribution</b>	<b>Proportionate Share</b>		<b>Employer Contribution</b>	<b>Proportionate Share</b>
City and County	\$ 556,511	93.9032%		\$ 499,752	93.7829%
Trial Courts	8,288	1.3985%		7,935	1.4891%
Unified School District	18,483	3.1187%		15,858	2.9759%
Community College District	9,361	1.5795%		9,337	1.7522%
<b>Total</b>	<b>\$ 592,643</b>	<b>100.0000%</b>		<b>\$ 532,882</b>	<b>100.0000%</b>

*Amounts in Thousands*

**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM  
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**SECTION VII – GASB 68 REPORTING INFORMATION FOR EMPLOYERS**

The table below shows the proportionate share of the collective NPL (under three discount rates), the collective deferred outflows, the collective deferred inflows, and the collective pension expense allocated to each participating employer as of June 30, 2015.

Table VII-2 Schedule of Employers' Proportionate Share of Collective Amounts at June 30, 2015							
Employer	Proportionate Share	Share of NPL @ 6.46%	Share of NPL @ 7.46%	Share of NPL @ 8.46%	Share of Deferred Outflows	Share of Deferred Inflows	Share of Pension Expense
City and County	93.9032%	\$ 4,767,771	\$ 2,156,049	\$ (34,278)	\$ 162,900	\$ 700,395	\$ 108,260
Trial Courts	1.3985%	71,009	32,111	(511)	2,426	10,431	1,612
Unified School District	3.1187%	158,348	71,607	(1,138)	5,410	23,262	3,596
Community College District	1.5795%	80,197	36,266	(577)	2,740	11,781	1,821
<b>Total</b>	<b>100.0000%</b>	<b>\$ 5,077,324</b>	<b>\$ 2,296,033</b>	<b>\$ (36,503)</b>	<b>\$ 173,476</b>	<b>\$ 745,870</b>	<b>\$ 115,289</b>

*Amounts in Thousands*

The proportionate share allocated to each individual employer will change on each measurement date. The net effect of the change in proportion on the share of the collective NPL, collective deferred outflows, and collective deferred inflows allocated to each employer becomes a deferred outflow or inflow for that employer and is recognized over the average future working life of the System's active and inactive members (5 years).

Similarly, the difference between each employer's actual contributions and the employer's proportionate share of collective employer contributions becomes a deferred outflow or inflow for that employer and is recognized over the average future working life of the System's active and inactive members (5 years). Because proportionate shares are determined based on each employer's actual contributions, there is no difference between the actual contributions and the proportionate share of collective contributions for each employer.

The table on the following page shows the change in proportion and the impact of that change in proportion on the proportionate share of the collective NPL, collective deferred outflows, and collective deferred inflows. It also shows any contribution differences.

**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM  
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**SECTION VII – GASB 68 REPORTING INFORMATION FOR EMPLOYERS**

**Table VII-3  
Schedule of Employers' Changes in Proportion and Contribution Differences**

Employer	Proportionate Shares		Impact of Change in Proportion				Contributions		
	6/30/2014	6/30/2015	Net Pension Liability	Deferred Outflows	Deferred Inflows	Net Effect	Actual	Proportionate Share	Difference
City and County	93.7829%	93.9032%	\$ 2,131	\$ 0	\$ (1,896)	\$ 4,026	\$ 556,511	\$ 556,511	\$ 0
Trial Courts	1.4891%	1.3985%	(1,603)	0	1,426	(3,029)	8,288	8,288	0
Unified School District	2.9759%	3.1187%	2,529	0	(2,250)	4,779	18,483	18,483	0
Community College District	1.7522%	1.5795%	(3,057)	0	2,720	(5,777)	9,361	9,361	0
<b>Total</b>	<b>100.0000%</b>	<b>100.0000%</b>	<b>\$ 0</b>	<b>\$ 0</b>	<b>\$ 0</b>	<b>\$ 0</b>	<b>\$ 592,643</b>	<b>\$ 592,643</b>	<b>\$ 0</b>

*Amounts in Thousands*

The table below shows the reconciliation of deferred outflows and inflows due to proportion changes for each participating employer from the prior measurement date to the current measurement date.

**Table VII-4  
Reconciliation of Deferred Outflows and Inflows Due to Proportion Change**

Employer	Deferred Outflows				Deferred Inflows			
	6/30/2014	Current Year Net Effect	Recognition	6/30/2015	6/30/2014	Current Year Net Effect	Recognition	6/30/2015
City and County	\$ 0	\$ 4,026	\$ 805	\$ 3,221	\$ (10,263)	\$ 0	\$ (2,566)	\$ (7,698)
Trial Courts	563	0	141	422	0	(3,029)	(606)	(2,423)
Unified School District	5,392	4,779	2,304	7,867	0	0	0	0
Community College District	4,308	0	1,077	3,231	0	(5,777)	(1,155)	(4,622)
<b>Total</b>	<b>\$ 10,263</b>	<b>\$ 8,806</b>	<b>\$ 4,327</b>	<b>\$ 14,742</b>	<b>\$ (10,263)</b>	<b>\$ (8,806)</b>	<b>\$ (4,327)</b>	<b>\$ (14,742)</b>

*Amounts in Thousands*

**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM  
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**SECTION VII – GASB 68 REPORTING INFORMATION FOR EMPLOYERS**

The table below shows the reconciliation of deferred outflows and inflows due to contribution differences for each participating employer from the prior measurement date to the current measurement date.

Table VII-5 Reconciliation of Deferred Outflows and Inflows Due to Contribution Differences									
Employer	Deferred Outflows				Deferred Inflows				
	6/30/2014	Current Year Difference	Recognition	6/30/2015	6/30/2014	Current Year Difference	Recognition	6/30/2015	
City and County	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Trial Courts	0	0	0	0	0	0	0	0	0
Unified School District	0	0	0	0	0	0	0	0	0
Community College District	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>\$ 0</b>	<b>\$ 0</b>	<b>\$ 0</b>	<b>\$ 0</b>	<b>\$ 0</b>	<b>\$ 0</b>	<b>\$ 0</b>	<b>\$ 0</b>	<b>\$ 0</b>

*Amounts in Thousands*

The table below summarizes the deferred outflows allocated to each employer for experience, assumption changes, investment returns, proportion changes, and contribution differences.

Table VII-6 Schedule of Employers' Deferred Outflows at June 30, 2015							
Employer	Proportionate Shares	Experience	Assumption Changes	Investment Return	Proportion Change	Contribution Difference	
City and County	93.9032%	\$ 0	\$ 162,900	\$ 0	\$ 3,221	\$ 0	
Trial Courts	1.3985%	0	2,426	0	422	0	
Unified School District	3.1187%	0	5,410	0	7,867	0	
Community College District	1.5795%	0	2,740	0	3,231	0	
<b>Total</b>	<b>100.0000%</b>	<b>\$ 0</b>	<b>\$ 173,476</b>	<b>\$ 0</b>	<b>\$ 14,742</b>	<b>\$ 0</b>	

*Amounts in Thousands*

**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM  
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**SECTION VII – GASB 68 REPORTING INFORMATION FOR EMPLOYERS**

The table below summarizes the deferred inflows allocated to each employer for experience, assumption changes, investment returns, proportion changes, and contribution differences.

Table VII-7 Schedule of Employers' Deferred Inflows at June 30, 2015						
Employer	Proportionate Shares	Experience	Assumption Changes	Investment Return	Proportion Change	Contribution Difference
City and County	93.9032%	\$ 148,728	\$ 41,307	\$ 510,360	\$ 7,698	\$ 0
Trial Courts	1.3985%	2,215	615	7,601	2,423	0
Unified School District	3.1187%	4,940	1,372	16,950	0	0
Community College District	1.5795%	2,502	695	8,585	4,622	0
<b>Total</b>	<b>100.0000%</b>	<b>\$ 158,385</b>	<b>\$ 43,989</b>	<b>\$ 543,496</b>	<b>\$ 14,742</b>	<b>\$ 0</b>

*Amounts in Thousands*

The table below shows the net amount of deferred outflows and inflows to be recognized in each of the next five years and the total thereafter.

Table VII-8 Schedule of Employers' Recognition of Deferred Outflows and Inflows at June 30, 2015						
Employer	Recognition for Measurement Year Ending					Thereafter
	2016	2017	2018	2019	2020	
City and County	\$ (228,591)	\$ (228,591)	\$ (228,591)	\$ 143,800	\$ 0	\$ 0
Trial Courts	(3,843)	(3,843)	(3,843)	1,524	0	0
Unified School District	(5,230)	(5,230)	(5,230)	5,705	0	0
Community College District	(3,894)	(3,894)	(3,894)	1,250	0	0
<b>Total</b>	<b>\$ (241,557)</b>	<b>\$ (241,557)</b>	<b>\$ (241,557)</b>	<b>\$ 152,279</b>	<b>\$ 0</b>	<b>\$ 0</b>

*Amounts in Thousands*

**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM  
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**SECTION VII – GASB 68 REPORTING INFORMATION FOR EMPLOYERS**

The table below shows the calculation of the pension expense for each participating employer. The calculation is shown first as the sum of the proportionate share of the collective pension expense and the amounts recognized for proportion changes and contribution differences. The right side of the table shows the calculation as the sum of the changes in NPL and deferred amounts not attributable to contributions.

Table VII-9 Schedule of Employers' Pension Expense for the Measurement Year Ending June 30, 2015										
Employer	Collective			Employer Pension Expense	Change in Employer			Employer Contributions	Employer Pension Expense	
	Pension Expense	Change in Proportion	Contribution Difference		Net Pension Liability	Deferred Outflows	Deferred Inflows			
City and County	\$ 108,260	\$ (1,761)	\$ 0	\$ 106,500	\$ 495,684	\$ 166,121	\$ 779,575	\$ 556,511	\$ 106,500	
Trial Courts	1,612	(465)	0	1,147	5,748	2,285	10,604	8,288	1,147	
Unified School District	3,596	2,304	0	5,899	18,921	7,886	23,619	18,483	5,899	
Community College District	1,821	(78)	0	1,743	5,245	1,663	11,200	9,361	1,743	
<b>Total</b>	<b>\$ 115,289</b>	<b>\$ 0</b>	<b>\$ 0</b>	<b>\$ 115,289</b>	<b>\$ 525,598</b>	<b>\$ 177,955</b>	<b>\$ 824,997</b>	<b>\$ 592,643</b>	<b>\$ 115,289</b>	

*Amounts in Thousands*

The table below summarizes the information needed for each employer's schedules of required supplementary information.

Table VII-10 Schedule of Employers' RSI Information at June 30, 2015										
Employer	Proportionate Shares	Proportionate Share of NPL	Covered- Employee Payroll	Share of NPL as a % of Payroll	Plan Fiduciary Net Position as % of TPL	Contractually Required Contribution	Actual Contributions	Contribution Deficiency	Contributions as a % of Payroll	
City and County	93.9032%	\$ 2,156,049	\$ 2,740,926	78.7%	89.9%	\$ 556,511	\$ 556,511	\$ 0	20.3%	
Trial Courts	1.3985%	32,111	39,083	82.2%	89.9%	8,288	8,288	0	21.2%	
Unified School District	3.1187%	71,607	75,982	94.2%	89.9%	18,483	18,483	0	24.3%	
Community College District	1.5795%	36,266	39,452	91.9%	89.9%	9,361	9,361	0	23.7%	
<b>Total</b>	<b>100.0000%</b>	<b>\$ 2,296,033</b>	<b>\$ 2,895,443</b>	<b>79.3%</b>	<b>89.9%</b>	<b>\$ 592,643</b>	<b>\$ 592,643</b>	<b>\$ 0</b>	<b>20.5%</b>	

*Amounts in Thousands*

**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM  
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**APPENDIX A – MEMBERSHIP INFORMATION**

<b>ACTIVE MEMBER DATA</b>			
	<b>July 1, 2014</b>	<b>July 1, 2013</b>	<b>% Change</b>
<b>Total</b>			
Count	29,516	28,717	2.8%
Average Current Age	47.7	47.9	-0.2
Average Service	12.0	12.2	-0.2
Annual Pensionable Earnings*	\$ 2,538,718,769	\$ 2,449,531,019	3.6%
Average Pensionable Earnings	\$ 86,012	\$ 85,299	0.8%
<b>Police</b>			
Count	2,048	1,967	4.1%
Average Current Age	42.1	42.3	-0.2
Average Service	13.4	13.8	-0.4
Annual Pensionable Earnings*	\$ 248,894,514	\$ 241,398,947	3.1%
Average Pensionable Earnings	\$ 121,531	\$ 122,724	-1.0%
<b>Fire</b>			
Count	1,415	1,358	4.2%
Average Current Age	45.2	45.2	0.0
Average Service	14.7	14.8	-0.1
Annual Pensionable Earnings*	\$ 180,724,242	\$ 176,144,261	2.6%
Average Pensionable Earnings	\$ 127,720	\$ 129,709	-1.5%
<b>Miscellaneous</b>			
Count	26,053	25,392	2.6%
Average Current Age	48.3	48.4	-0.1
Average Service	11.8	11.9	-0.1
Annual Pensionable Earnings*	\$ 2,109,100,013	\$ 2,031,987,811	3.8%
Average Pensionable Earnings	\$ 80,954	\$ 80,025	1.2%

\* Fiscal Year ending June 30, 2014 and June 30, 2013, excludes DROP members

<b>Active DROP Member Data - TOTAL SYSTEM</b>			
	<b>July 1, 2014</b>	<b>July 1, 2013</b>	<b>%Change</b>
<b>Total Active DROP</b>			
Count	10	72	-86.1%
Average Current Age	57.7	57.3	0.4
Total Annual Benefit*	\$ 1,071,691	\$ 7,760,263	-86.2%
Average Annual Benefit	\$ 107,169	\$ 107,781	-0.6%
Total DROP Account Balance	\$ 2,775,810	\$ 15,879,699	-82.5%

\* Benefits provided in June 30, valuation data.

**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM  
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**APPENDIX A – MEMBERSHIP INFORMATION**

<b>Non-Active Member Data - TOTAL SYSTEM</b>			
	<b>July 1, 2014</b>	<b>July 1, 2013</b>	<b>Change</b>
<b>Retired</b>			
Count	20,408	19,525	4.5%
Average Age	70.0	69.8	0.2
Total Annual Benefit*	\$ 847,676,865	\$ 795,092,010	6.6%
Average Annual Benefit	\$ 41,536	\$ 40,722	2.0%
<b>Disabled</b>			
Count	2,611	2,672	-2.3%
Average Age	67.8	67.5	0.3
Total Annual Benefit*	\$ 143,550,974	\$ 140,408,629	2.2%
Average Annual Benefit	\$ 54,979	\$ 52,548	4.6%
<b>Beneficiaries</b>			
Count	3,833	3,837	-0.1%
Average Age	77.4	77.2	0.2
Total Annual Benefit*	\$ 112,731,965	\$ 110,047,161	2.4%
Average Annual Benefit	\$ 29,411	\$ 28,681	2.5%
<b>Payee Total</b>			
Count	26,852	26,034	3.1%
Average Age	70.8	70.7	0.1
Total Annual Benefit*	\$1,103,959,803	\$1,045,547,799	5.6%
Average Annual Benefit	\$ 41,113	\$ 40,161	2.4%
<b>Inactives</b>			
Count	6,441	5,973	7.8%
Average Age	48.2	47.8	0.4
Total Contribution Balance with Interest	\$ 180,445,160	\$ 176,568,594	2.2%
Average Contribution Balance with Interest	\$ 28,015	\$ 29,561	-5.2%

\* Benefits provided in June 30, valuation data

Please refer to the July 1, 2014 actuarial valuation report for a more complete summary of the data.



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**APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS**

A summary of the actuarial assumptions and methods used to calculate the Total Pension Liability as of June 30, 2015 is provided below, including any assumptions that differ from those used in the July 1, 2014 actuarial valuation. Please refer to the July 1, 2014 actuarial valuation report for a complete description of all other assumptions.

**Key Actuarial Assumptions**

**Expected Return on Assets**      7.58 percent net of investment expenses effective July 1, 2013 - June 30, 2014  
7.50 percent net of investment expenses effective July 1, 2014 - June 30, 2015

**Municipal Bond Yield**      4.31 percent as of June 30, 2014  
3.85 percent as of June 30, 2015  
Bond Buyer 20-Bond GO Index, July 2, 2014 and July 2, 2015

**Discount Rate**      7.58 percent as of June 30, 2014  
7.46 percent as of June 30, 2015

**Administrative Expenses**      0.45 percent of payroll

**Basic COLA**

Old Miscellaneous and all New Plans	Old Police & Fire, Pre 7/1/75 Retirements	Old Police & Fire, Charters A8.595 and A8.596	Old Police & Fire, Charters A8.559 and A8.585
2.00%	3.00%	4.00%	5.00%

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**APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS**

**Supplemental  
COLA**

FYE	June 30, 2014		June 30, 2015	
	Old Miscellaneous and all New Plans	Old Police & Fire, pre 7/1/75 Retirement s	Old Miscellaneous and all New Plans	Old Police & Fire, pre 7/1/75 Retirements
2016	0.000%	0.000%	0.000%	0.000%
2017	0.244%	0.081%	0.000%	0.000%
2018	0.308%	0.103%	0.225%	0.075%
2019	0.338%	0.113%	0.285%	0.095%
2020	0.364%	0.121%	0.315%	0.105%
2021	0.364%	0.121%	0.345%	0.115%
2022	0.368%	0.123%	0.345%	0.115%
2023	0.375%	0.125%	0.360%	0.120%
2024	0.375%	0.125%	0.375%	0.125%
2025	0.375%	0.125%	0.375%	0.125%
2026	0.375%	0.125%	0.375%	0.125%
2027	0.375%	0.125%	0.375%	0.125%
2028	0.375%	0.125%	0.375%	0.125%
2029	0.375%	0.125%	0.375%	0.125%
2030	0.375%	0.125%	0.375%	0.125%
2031	0.375%	0.125%	0.375%	0.125%
2032	0.375%	0.125%	0.375%	0.125%
2033	0.375%	0.125%	0.375%	0.125%
2034	0.375%	0.125%	0.375%	0.125%
2035	0.375%	0.125%	0.375%	0.125%
2036	0.375%	0.125%	0.375%	0.125%
2037+	0.375%	0.125%	0.375%	0.125%

**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM  
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**APPENDIX B – ACTUARIAL 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 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 retirement benefits between each member's date of hire and assumed retirement. The actuarial liability is the difference between the present value of future benefits and the present value of future normal costs. 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 System.

**2. Asset Valuation Method**

For the purpose of determining contribution rates, an actuarial value of assets is used that dampens the volatility in the market value of assets, resulting in a smoother pattern of contribution rates.

The actuarial value of assets is calculated by recognizing 20% of each of the past five years of actual investment earnings compared to the expected earnings on the actuarial value of assets.

**3. Amortization Method**

The unfunded actuarial liability is the difference between the actuarial liability and the actuarial value of assets. Effective with the July 1, 2014 actuarial valuation, the Board adopted changes to the amortization methods. The amortization is based on level percent of pay, assuming pay increases 3.75% a year.

Source	Method
Charter amendments	15-year closed for active members and 5-year closed for inactive members effective July 1, 2014 20-year closed for amortizations established prior to July 1, 2014
Actuarial gains and losses, assumption and method changes	20-year closed Remaining portion of 2013 amortization is re-amortized over 19 years as of July 1, 2014
Supplemental COLAs	5-year closed Remaining portion of 2013 amortization is re-amortized over 19 years as of July 1, 2014

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**APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS**

**4. Contributions**

The normal cost for members as of the valuation date, increased with interest to the middle of the year, is divided by the total salary expected to be paid during the year (including new entrants) to determine the total normal cost rate. The employer's normal cost rate is the total normal cost rate less the employee contribution rate.

The total employer contribution rate is the sum of the employer normal cost rate, the administrative expense rate, and the UAL rate. The UAL payments are adjusted for interest from the valuation date to the date of expected payment in the following fiscal year. The UAL rate is determined by dividing the UAL payments by the total expected payroll for the fiscal year (including new entrants).

**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM  
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**APPENDIX C – SUMMARY OF PLAN PROVISIONS**

The plan provisions are the same as those summarized in the July 1, 2014 actuarial valuation report.

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**APPENDIX D – DETERMINATION OF DISCOUNT RATE**

FYE	Projected Beginning Fiduciary Net Position	Normal Cost Contribution - Employer and Employee	UAL Contribution	Projected Admin Expenses	Projected Benefit Payments	Projected Investment Earnings	Projected Ending Fiduciary Net Position	"Funded" Portion of Benefit Payments	"Unfunded" Portion of Benefit Payments
2016*	\$ 20,289,115	\$ 479,315	\$ 250,727	\$ 11,124	\$ 1,222,091	\$ 1,503,565	\$ 21,300,631	\$ 1,222,091	\$ 0
2017	21,300,631	470,121	237,404	10,903	1,285,323	1,576,272	22,299,104	1,285,323	0
2018	22,299,104	460,503	216,029	10,678	1,351,030	1,647,596	23,272,202	1,351,030	0
2019	23,272,202	449,097	205,515	10,418	1,421,372	1,717,181	24,222,624	1,421,372	0
2020	24,222,624	437,001	230,909	10,148	1,498,281	1,786,121	25,178,374	1,498,281	0
2021	25,178,374	423,161	206,168	9,845	1,581,410	1,853,320	26,079,614	1,581,410	0
2022	26,079,614	408,277	224,109	9,522	1,665,934	1,917,914	26,963,980	1,665,934	0
2023	26,963,980	392,447	198,188	9,178	1,753,282	1,979,487	27,780,821	1,753,282	0
2024	27,780,821	375,468	211,009	8,813	1,842,613	2,037,308	28,561,993	1,842,613	0
2025	28,561,993	357,760	230,235	8,435	1,932,582	2,092,639	29,310,045	1,932,582	0
2026	29,310,045	339,452	237,080	8,047	2,023,425	2,144,976	30,008,129	2,023,425	0
2027	30,008,129	320,901	247,012	7,656	2,113,621	2,193,694	30,656,115	2,113,621	0
2028	30,656,115	302,498	258,096	7,264	2,201,773	2,238,777	31,253,712	2,201,773	0
2029	31,253,712	284,505	156,458	6,877	2,286,836	2,276,060	31,683,899	2,286,836	0
2030	31,683,899	267,032	163,249	6,497	2,368,672	2,304,917	32,050,426	2,368,672	0
2031	32,050,426	249,488	170,012	6,108	2,447,916	2,329,091	32,351,102	2,447,916	0
2032	32,351,102	232,436	176,730	5,725	2,523,047	2,348,495	32,585,716	2,523,047	0
2033	32,585,716	215,587	183,380	5,343	2,593,931	2,363,106	32,753,856	2,593,931	0
2034	32,753,856	198,917	(201,887)	4,963	2,659,807	2,358,490	32,449,570	2,659,807	0
2035	32,449,570	182,468	(97,652)	4,587	2,720,253	2,336,675	32,150,808	2,720,253	0
2036	32,150,808	166,485	2,549	4,219	2,774,709	2,315,364	31,860,497	2,774,709	0
2037	31,860,497	150,769	29,526	3,856	2,823,838	2,292,197	31,509,151	2,823,838	0
2038	31,509,151	135,015	92,238	3,490	2,868,101	2,265,945	31,134,248	2,868,101	0
2039	31,134,248	118,947	131,441	3,115	2,908,049	2,237,208	30,713,794	2,908,049	0
2040	30,713,794	103,247	114,080	2,746	2,940,750	2,203,253	30,193,624	2,940,750	0

\* Fiduciary Net Position based on Chief Investment Officer's Report at the July 8, 2015 Board Meeting

Amounts in Thousands

**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM  
GASB 67 AND 68 REPORTING FOR JUNE 30, 2015 MEASUREMENT DATE**

**APPENDIX D – DETERMINATION OF DISCOUNT RATE**

FYE	Projected Beginning Fiduciary Net Position	Normal Cost Contribution - Employer and Employee	UAL Contribution	Projected Admin Expenses	Projected Benefit Payments	Projected Investment Earnings	Projected Ending Fiduciary Net Position	"Funded" Portion of Benefit Payments	"Unfunded" Portion of Benefit Payments
2041	30,193,624	88,394	117,697	2,391	2,965,539	2,162,913	29,597,090	2,965,539	0
2042	29,597,090	74,591	119,643	2,054	2,981,262	2,117,158	28,927,219	2,981,262	0
2043	28,927,219	61,657	120,151	1,730	2,989,047	2,066,173	28,186,154	2,989,047	0
2044	28,186,154	49,770	119,992	1,422	2,988,153	2,010,183	27,377,947	2,988,153	0
2045	27,377,947	39,099	119,651	1,136	2,977,670	1,949,548	26,508,574	2,977,670	0
2046	26,508,574	29,905	118,853	885	2,956,495	1,884,756	25,585,593	2,956,495	0
2047	25,585,593	22,423	117,607	676	2,924,065	1,816,406	24,617,964	2,924,065	0
2048	24,617,964	16,449	115,902	506	2,881,202	1,745,129	23,614,242	2,881,202	0
2049	23,614,242	11,805	113,731	371	2,828,869	1,671,526	22,582,433	2,828,869	0
2050	22,582,433	8,216	111,089	265	2,768,353	1,596,139	21,529,525	2,768,353	0
2051	21,529,525	5,597	108,007	185	2,700,228	1,519,470	20,462,370	2,700,228	0
2052	20,462,370	3,664	104,543	125	2,625,825	1,441,974	19,386,726	2,625,825	0
2053	19,386,726	2,361	100,764	83	2,545,618	1,364,067	18,308,300	2,545,618	0
2054	18,308,300	1,500	96,729	54	2,460,619	1,286,134	17,232,045	2,460,619	0
2055	17,232,045	917	92,502	34	2,371,767	1,208,510	16,162,208	2,371,767	0
2056	16,162,208	544	88,150	21	2,279,640	1,131,490	15,102,752	2,279,640	0
2057	15,102,752	319	83,719	13	2,184,738	1,055,354	14,057,407	2,184,738	0
2058	14,057,407	178	79,256	7	2,087,657	980,359	13,029,543	2,087,657	0
2059	13,029,543	91	74,805	4	1,988,811	906,741	12,022,369	1,988,811	0
2060	12,022,369	45	70,405	2	1,888,551	834,731	11,038,999	1,888,551	0
2061	11,038,999	21	66,084	1	1,787,351	764,545	10,082,298	1,787,351	0
2062	10,082,298	7	61,808	0	1,685,624	696,380	9,154,869	1,685,624	0
2063	9,154,869	2	57,560	0	1,583,784	630,417	8,259,063	1,583,784	0
2064	8,259,063	1	53,350	0	1,482,273	566,814	7,396,955	1,482,273	0
2065	7,396,955	0	49,187	0	1,381,553	505,711	6,570,300	1,381,553	0

*Amounts in Thousands*

**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM  
GASB 67 AND 68 REPORTING FOR JUNE 30, 2015 MEASUREMENT DATE**

**APPENDIX D – DETERMINATION OF DISCOUNT RATE**

FYE	Projected Beginning Fiduciary Net Position	Normal Cost Contribution - Employer and Employee	UAL Contribution	Projected Admin Expenses	Projected Benefit Payments	Projected Investment Earnings	Projected Ending Fiduciary Net Position	"Funded" Portion of Benefit Payments	"Unfunded" Portion of Benefit Payments
2066	6,570,300	0	45,075	0	1,282,055	447,224	5,780,544	1,282,055	0
2067	5,780,544	0	41,095	0	1,184,207	391,449	5,028,881	1,184,207	0
2068	5,028,881	0	37,293	0	1,088,434	338,461	4,316,201	1,088,434	0
2069	4,316,201	0	33,680	0	995,169	288,311	3,643,024	995,169	0
2070	3,643,024	0	30,264	0	904,819	241,024	3,009,492	904,819	0
2071	3,009,492	0	27,049	0	817,763	196,596	2,415,374	817,763	0
2072	2,415,374	0	24,040	0	734,374	154,997	1,860,037	734,374	0
2073	1,860,037	0	21,241	0	655,008	116,166	1,342,436	655,008	0
2074	1,342,436	0	18,652	0	579,997	80,013	861,103	579,997	0
2075	861,103	0	16,272	0	509,636	46,416	414,156	509,636	0
2076	414,156	0	14,100	0	444,175	15,225	(694)	443,481	694
2077	(694)	0	12,131	0	383,828	(13,739)	(386,130)	0	383,828
2078	(386,130)	0	10,360	0	328,738	(40,683)	(745,191)	0	328,738
2079	(745,191)	0	8,779	0	278,966	(65,838)	(1,081,216)	0	278,966
2080	(1,081,216)	0	7,381	0	234,491	(89,454)	(1,397,781)	0	234,491
2081	(1,397,781)	0	6,153	0	195,209	(111,795)	(1,698,631)	0	195,209
2082	(1,698,631)	0	5,087	0	160,925	(133,136)	(1,987,604)	0	160,925
2083	(1,987,604)	0	4,169	0	131,366	(153,754)	(2,268,555)	0	131,366
2084	(2,268,555)	0	3,386	0	106,193	(173,927)	(2,545,290)	0	106,193
2085	(2,545,290)	0	2,725	0	85,019	(193,927)	(2,821,510)	0	85,019
2086	(2,821,510)	0	2,173	0	67,426	(214,016)	(3,100,780)	0	67,426
2087	(3,100,780)	0	1,716	0	52,980	(234,446)	(3,386,490)	0	52,980
2088	(3,386,490)	0	1,342	0	41,250	(255,456)	(3,681,854)	0	41,250
2089	(3,681,854)	0	1,039	0	31,830	(277,273)	(3,989,919)	0	31,830
2090	(3,989,919)	0	795	0	24,344	(300,111)	(4,313,578)	0	24,344

*Amounts in Thousands*



**CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM  
GASB 67 AND 68 REPORTING FOR JUNE 30, 2015 MEASUREMENT DATE**

**APPENDIX D – DETERMINATION OF DISCOUNT RATE**

FYE	Projected Beginning Fiduciary Net Position	Normal Cost Contribution - Employer and Employee	UAL Contribution	Projected Admin Expenses	Projected Benefit Payments	Projected Investment Earnings	Projected Ending Fiduciary Net Position	"Funded" Portion of Benefit Payments	"Unfunded" Portion of Benefit Payments
2091	(4,313,578)	0	602	0	18,452	(324,176)	(4,655,603)	0	18,452
2092	(4,655,603)	0	450	0	13,857	(349,664)	(5,018,675)	0	13,857
2093	(5,018,675)	0	331	0	10,309	(376,768)	(5,405,421)	0	10,309
2094	(5,405,421)	0	239	0	7,593	(405,677)	(5,818,452)	0	7,593
2095	(5,818,452)	0	169	0	5,535	(436,582)	(6,260,400)	0	5,535
2096	(6,260,400)	0	115	0	3,990	(469,673)	(6,733,947)	0	3,990
2097	(6,733,947)	0	75	0	2,844	(505,148)	(7,241,864)	0	2,844
2098	(7,241,864)	0	46	0	2,003	(543,212)	(7,787,033)	0	2,003
2099	(7,787,033)	0	24	0	1,392	(584,078)	(8,372,480)	0	1,392
2100	(8,372,480)	0	8	0	956	(627,971)	(9,001,399)	0	956
2101	(9,001,399)	0	(4)	0	648	(675,129)	(9,677,180)	0	648
2102	(9,677,180)	0	(12)	0	434	(725,805)	(10,403,431)	0	434
2103	(10,403,431)	0	(18)	0	287	(780,269)	(11,184,005)	0	287
2104	(11,184,005)	0	(22)	0	188	(838,808)	(12,023,022)	0	188
2105	(12,023,022)	0	(24)	0	122	(901,732)	(12,924,900)	0	122
2106	(12,924,900)	0	(26)	0	78	(969,371)	(13,894,375)	0	78
2107	(13,894,375)	0	(27)	0	49	(1,042,081)	(14,936,532)	0	49
2108	(14,936,532)	0	(28)	0	31	(1,120,242)	(16,056,833)	0	31
2109	(16,056,833)	0	(28)	0	19	(1,204,264)	(17,261,145)	0	19
2110	(17,261,145)	0	(28)	0	12	(1,294,587)	(18,555,772)	0	12
2111	(18,555,772)	0	(29)	0	7	(1,391,684)	(19,947,492)	0	7
2112	(19,947,492)	0	(29)	0	4	(1,496,063)	(21,443,588)	0	4
2113	(21,443,588)	0	(29)	0	2	(1,608,270)	(23,051,889)	0	2
2114	(23,051,889)	0	(28)	0	1	(1,728,893)	(24,780,812)	0	1
2115	(24,780,812)	0	(28)	0	1	(1,858,562)	(26,639,403)	0	1
Discount Rate:								7.50%	3.85%
Present Value:								\$ 26,067,010	\$ 179,487
Total Present Value:								\$ 26,246,497	
GASB Discount Rate:								7.46%	

*Amounts in Thousands*

## APPENDIX E – GLOSSARY OF TERMS

### 1. Actuarially Determined Contribution

A target or recommended contribution for the reporting period, determined in conformity with Actuarial Standards of Practice based on the most recent measurement available when the contribution for the reporting period was adopted.

### 2. Actuarial Valuation Date

The date as of which an actuarial valuation is performed. This date may be up to 24 months prior to the measurement date and up to 30 months prior to the employer's reporting date.

### 3. Deferred Inflow of Resources

An acquisition of net assets by a government employer that is applicable to a future reporting period. In the context of GASB 68, these are experience gains on the Total Pension Liability, assumption changes reducing the Total Pension Liability, or investment gains that are recognized in future reporting periods.

### 4. Deferred Outflow of Resources

A consumption of net assets by a government employer that is applicable to a future reporting period. In the context of GASB 68, these are experience losses on the Total Pension Liability, assumption changes increasing the Total Pension Liability, or investment losses that are recognized in future reporting periods.

### 5. Entry Age Actuarial Cost Method

The actuarial cost method required for GASB 67 and 68 calculations. Under this method, the actuarial present value of the projected benefits of each individual included in an actuarial valuation is allocated on a level basis over the earnings of the individual between entry age and assumed exit ages. The portion of this actuarial present value allocated to a valuation year is called the Service Cost. The portion of this actuarial present value not provided for at a valuation date by the actuarial present value of future service costs is called the Total Pension Liability.

### 6. Measurement Date

The date as of which the Total Pension Liability and Plan Fiduciary Net Position are measured. The Total Pension Liability may be projected from the Actuarial Valuation Date to the Measurement Date. The Measurement Date must be the same as the Reporting Date for the plan.

**APPENDIX E – GLOSSARY OF TERMS**

**7. Net Pension Liability**

The liability of employers and nonemployer contributing entities to employees for benefits provided through a defined benefit pension plan. It is calculated as the Total Pension Liability less the Plan Fiduciary Net Position.

**8. Plan Fiduciary Net Position**

The fair or market value of assets.

**9. Reporting Date**

The last day of the plan or employer's fiscal year.

**10. Service Cost**

The portion of the actuarial present value of projected benefit payments that is attributed to the current period of employee service in conformity with the requirements of GASB 67 and 68. The Service Cost is the normal cost calculated under the entry age actuarial cost method.

**11. Total Pension Liability**

The portion of the actuarial present value of projected benefit payments that is attributed to past periods of employee service in conformity with the requirements of GASB 67 and 68. The Total Pension Liability is the actuarial liability calculated under the entry age actuarial cost method.