Orange County Employees Retirement System

Governmental Accounting Standards Board (GASB) Statement 67
Actuarial Valuation as of December 31, 2014
(Revised to use Final Audited Market Value of Assets)

This report has been prepared at the request of the Board of Retirement to assist in administering the Fund. This valuation report may not otherwise be copied or reproduced in any form without the consent of the Board of Retirement and may only be provided to other parties in its entirety. The measurements shown in this actuarial valuation may not be applicable for other purposes.

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June 1, 2015

Board of Retirement
Orange County Employees Retirement System
2223 Wellington Avenue
Santa Ana, CA 92701

Dear Board Members:

We are pleased to submit this Governmental Accounting Standards Board (GASB) Statement 67 Actuarial Valuation as of December 31, 2014. It contains various information that will need to be disclosed in order to comply with GASB Statement 67.[1]

This report was prepared in accordance with generally accepted actuarial principles and practices at the request of the Board to assist in administering the System. The census and financial information on which our calculations were based was prepared by OCERS. That assistance is gratefully acknowledged.

The measurements shown in this actuarial valuation may not be applicable for other purposes. Future actuarial measurements may differ significantly from the current measurements presented in this report 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.

The actuarial calculations were completed under the supervision of Andy Yeung, ASA, MAAA, FCA, Enrolled Actuary. We are members of the American Academy of Actuaries and we meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. To the best of our knowledge, the information supplied in the actuarial valuation is complete and accurate. Further, in our opinion, the assumptions as approved by the Board are reasonably related to the experience of and expectations for the System.

We look forward to reviewing this report with you and to answering any questions.

Sincerely,

Segal Consulting, a Member of The Segal Group, Inc.

By:

Paul Angelo, FSA, MAAA, FCA, EA	*Andy Yeung, ASA, MAAA, FCA, EA*
Senior Vice President and Actuary	*Vice President and Associate Actuary*

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[1] *The results in this report are comparable to those provided in our earlier report dated April 9, 2015 except we have updated those results to use the final audited market value of assets (that shows a reduction in the market value by about $1.2 million) provided by OCERS subsequent to the issuance of that report.*

SECTION 1

VALUATION SUMMARY

SECTION 2

GASB STATEMENT 67 INFORMATION

Purpose

This report has been prepared by Segal Consulting to present certain disclosure information required by Governmental Accounting Standards Board (GASB) Statement 67 as of December 31, 2014. This valuation is based on:

- The benefit provisions of the Retirement System, as administered by the Board of Retirement;
- The characteristics of covered active members, inactive vested members, and retired members and beneficiaries as of December 31, 2013, provided by the Retirement System;
- The assets of the Plan as of December 31, 2014, provided by the Retirement System;
- Economic assumptions regarding future salary increases and investment earnings adopted by the Board for the December 31, 2014 valuation; and
- Other actuarial assumptions, regarding employee terminations, retirement, death, etc. adopted by the Board for the December 31, 2014 valuation.

Significant Issues in Valuation Year

The following key findings were the result of this actuarial valuation:

- The Governmental Accounting Standards Board (GASB) approved two new Statements affecting the reporting of pension liabilities for accounting purposes. Statement 67 replaces Statement 25 and is for plan reporting. Statement 68 replaces Statement 27 and is for employer reporting. Statement 67 is effective with the 2014 calendar year for Plan reporting and Statement 68 is effective with the fiscal year ending June 30, 2015 for employer reporting. The information contained in this valuation is intended to be used (along with other information) in order to comply with Statement 67.
- It is important to note that the new GASB rules only redefine pension liability and expense for financial reporting purposes, and do not apply to contribution amounts for pension funding purposes. Employers and plans can still develop and adopt funding policies under current practices.
- When measuring pension liability GASB uses the same actuarial cost method (Entry Age method) and the same type of discount rate (expected return on assets) as OCERS uses for funding. This means that the Total Pension Liability (TPL) measure for financial reporting shown in this report is determined on the same basis as OCERS' Actuarial Accrued Liability (AAL) measure for funding. We note that the same is generally true for the Normal Cost component of the annual plan cost for funding and financial reporting.

- The Net Pension Liability (NPL) is equal to the difference between the TPL and the Plan's Fiduciary Net Position. The Plan's Fiduciary Net Position is equal to the market value of assets and therefore, the NPL measure is very similar to an Unfunded Actuarial Accrued Liability (UAAL) calculated on a market value basis.
- The NPL measured as of December 31, 2014 and 2013 have been determined by rolling forward the TPL as of December 31, 2013 and December 31, 2012, respectively.

  The NPL decreased from $5,291.1 million as of December 31, 2013 to $5,082.5 million as of December 31, 2014 primarily as a result of the gain from lower than expected salary increase during calendar year 2013 (because liabilities are rolled forward from December 31, 2013 to December 31, 2014, this gain is first reported in the December 31, 2014 results), an adjustment between the preliminary unaudited financial statements and the final market value of assets as of December 31, 2013 and others gains, offset by the investment losses during calendar year 2014. The $5,082.5 million was measured using the new actuarial assumptions (see additional discussions below) and the NPL would have been higher by about $127.7 million if measured using the old assumptions. Changes in these values during the last two fiscal years ending December 31, 2013 and December 31, 2014 can be found in Exhibit 3.
- The discount rate used to determine the TPL and NPL as of December 31, 2014 and 2013 was 7.25%, following the same assumptions used by the System in the pension funding valuations as of the same dates. However, as the Retirement Board has approved other new actuarial assumptions for use in the next pension funding valuation as of December 31, 2014, we have estimated the impact of those assumption changes by (1) revaluing the TPL as of December 31, 2013 (before the roll forward) using the new assumptions and (2) using this revalued TPL in rolling forward the results from December 31, 2013 to December 31, 2014. The detailed calculations of the discount rate of 7.25% used in calculation of the TPL and NPL as of December 31, 2014 can be found in Exhibit 5 of Section 2. Various other information that is required to be disclosed can be found throughout Exhibits 1 through 4 in Section 2.
- The Plan's Fiduciary Net Position of $10,821,318,000 as of December 31, 2013 is equal to the final market value of assets in the Pension Trust Fund as of December 31, 2013. This differs from the $10,679,507,000 market value of assets used in our December 31, 2013 valuation because (1) our valuation was based on the preliminary unaudited financial statements and (2) the market value of assets in the valuation excludes $109,254,000 in the County Investment Account.

  Similarly, the Plan's Fiduciary Net Position of $11,536,106,000 as of December 31, 2014 is equal to the final market value of assets in the Pension Trust Fund as of December 31, 2014. This differs from the $11,428,223,000 market value of assets used in our December 31, 2014 valuation because (1) our valuation was based on the preliminary unaudited financial statements and (2) the market value of assets in the valuation excludes $109,103,000 in the County Investment Account.

Summary of Key Valuation Results

	2014	2013
Disclosure elements for plan year ending December 31:		
Service cost[1]	$438,599,931	$444,837,765
Total pension liability	16,618,586,673	16,112,444,088
Plan fiduciary net position	11,536,106,000	10,821,318,000
Net pension liability	5,082,480,673	5,291,126,088
Schedule of contributions for plan year ending December 31:		
Actuarially determined contributions[2]	$476,320,000	$426,020,000
Actual contributions[2]	625,520,000	427,095,000
Contribution deficiency (excess)	(149,200,000)[3]	(1,075,000)[4]
Demographic data for plan year ending December 31:		
Number of retired members and beneficiaries	15,169	14,505
Number of vested terminated members	4,789	4,613
Number of active members	21,459	21,368
Key assumptions as of December 31:		
Investment rate of return	7.25%	7.25%
Inflation rate	3.00%	3.25%
Projected salary increases[5]	General: 4.25% to 13.50% and Safety: 5.00% to 17.50%	General: 4.75% to 13.75% and Safety: 4.75% to 17.75%

(1) *Please note that service cost is always based on the previous year's assumptions, meaning both values are based on those assumptions shown as of December 31, 2013.*

(2) *Reduced by discount for prepaid contributions and transfers from County Investment Account.*

(3) *Includes $1,663,000 in additional contributions made by O.C. Cemetery District, $22,537,000 in additional contributions made by OCFA and $125,000,000 in additional contributions made by O.C. Sanitation District towards the reduction of their UAAL.*

(4) *Includes $1,075,000 in additional contributions made by OCFA towards the reduction of their UAAL.*

(5) *Includes inflation at 3.00% plus real across-the-board salary increases of 0.50% plus merit and longevity increases for 2014 and includes inflation at 3.25% plus real across-the-board salary increases of 0.50% plus merit and longevity increases for 2013.*

EXHIBIT 1

General Information – "Financial Statements", Note Disclosures and Required Supplementary Information for a Cost-Sharing Pension Plan

Plan Description

Plan administration. The Orange County Employees Retirement System (OCERS) was established by the County of Orange in 1945. OCERS is administered by the Board of Retirement and governed by the County Employees' Retirement Law of 1937 (California Government Code Section 31450 et. seq.) OCERS is a cost-sharing multiple employer public employee retirement system whose main function is to provide service retirement, disability, death and survivor benefits to the Safety and General members employed by the County of Orange. OCERS also provides retirement benefits to the employee members of the Orange County Courts, the Orange County Retirement System, one city and twelve special districts.

The management of OCERS is vested with the Orange County Board of Retirement. The Board consists of nine members and one alternate. The County Treasurer is a member of the Board of Retirement by law. Four members are appointed by the Board of Supervisors, one of whom may be a County Supervisor. Two members are elected by the General membership; one member and one alternate are elected by the Safety membership, one member is elected by the retired members of the System. All members of the Board of Retirement serve terms of three years except for the County Treasurer whose term runs concurrent with her term as County Treasurer.

Plan membership. At December 31, 2014, pension plan membership consisted of the following:

Retired members or beneficiaries currently receiving benefits	15,169
Vested terminated members entitled to, but not yet receiving benefits	4,789
Active members	21,459
Total	41,417

Benefits provided. OCERS provides service retirement, disability, death and survivor benefits to eligible employees. All regular full-time employees of the County of Orange or contracting agencies who work a minimum of 20 hours per week become members of OCERS effective on the first day of employment in an eligible position. There are separate retirement plans for General and Safety member employees. Safety membership is extended to those involved in active law enforcement, fire suppression, and certain probation officers. Any new Safety Member who becomes a member on or after January 1, 2013 is designated PEPRA Safety and is subject to the provisions of California Public Employees' Pension Reform Act of 2013

(PEPRA), California Government Code 7522 et seq. and Assembly Bill (AB) 197. All other employees are classified as General members. New General Members employed after January 1, 2013 are designated as PEPRA General subject to the provisions of California Government Code 7522 et seq. and AB 197.

General members prior to January 1, 2013, including all members of Plan T hired on or after January 1, 2013, are eligible to retire once they attain the age of 50 and have acquired 10 or more years of retirement service credit. A member with 30 years of service is eligible to retire regardless of age. General members who are first hired on or after January 1, 2013, excluding members of Plan T, are eligible to retire once they have attained the age of 52, and have acquired five years of retirement service credit.

Safety members prior to January 1, 2013, are eligible to retire once they attain the age of 50 and have acquired 10 or more years of retirement service credit. A member with 20 years of service is eligible to retire regardless of age. Safety members who are first hired on or after January 1, 2013, are eligible to retire once they have attained the age of 50, and have acquired five years of retirement service credit.

All General and Safety members can also retire at the age of 70 regardless of service.

The retirement benefit the member will receive is based upon age at retirement, final average compensation, years of retirement service credit and retirement plan and tier.

General member benefits are calculated pursuant to the provisions of Sections 31676.01, 31676.1, 31676.12, 31676.16, 31676.18 or 31676.19. For Section 31676.01, the monthly allowance is equal to 1/90th of final compensation times years of accrued retirement service credit times age factor from that Section. For Section 31676.1, the monthly allowance is equal to 1/60th of final compensation times years of accrued retirement service credit times age factor from that Section. For Sections 31676.12, 31676.16, 31676.18 or 31676.19, the monthly allowance is equal to 1/50th of final compensation times years of accrued retirement service credit times age factor from the corresponding Section. General member benefits for those who are first hired on or after January 1, 2013, excluding members of Plan T, are calculated pursuant to the provision California Government Code Section 7522.20(a). The monthly allowance is equal to the final compensation multiplied by years of accrued retirement credit multiplied by the age factor from Section 7522.20(a).

Safety member benefits are calculated pursuant to the provisions of California Government Code Sections 31664.1 and 31664.2. The monthly allowance is equal to 3% of final compensation times years of accrued retirement service credit times age factor from the corresponding Section. Safety member benefits for those who are first hired on or after January 1, 2013, are calculated pursuant to the provision California Government Code Section 7522.25(d). The monthly allowance is equal to the final compensation multiplied by years of accrued retirement credit multiplied by the age factor from Section 7522.25(d).

For members with membership dates before January 1, 2013, including all members of Plan T, the maximum monthly retirement allowance is 100% of final compensation. There is no maximum for members with membership dates on or after January 1, 2013, excluding members of Plan T.

Final average compensation consists of the highest 12 consecutive months for a General Tier 1 or Safety Tier 1 member and the highest 36 consecutive months for a General Tier 2, General PEPRA, Safety Tier 2 or Safety PEPRA member.

The member may elect an unmodified retirement allowance, or choose an optional retirement allowance. The unmodified retirement allowance provides the highest monthly benefit and a 60% continuance to an eligible surviving spouse or domestic partner. An eligible surviving spouse or domestic partner is one married to or registered with the member one year prior to the effective retirement date. Certain surviving spouses or domestic partners may also be eligible if marriage or domestic partnership was at least two years prior to the date of death and the surviving spouse or domestic partner has attained age 55. There are four optional retirement allowances the member may choose. Each of the optional retirement allowances requires a reduction in the unmodified retirement allowance in order to allow the member the ability to provide certain benefits to a surviving spouse, domestic partner, or named beneficiary having an insurable interest in the life of the member.

OCERS provides an annual cost-of-living benefit to all retirees. The cost-of-living adjustment, based upon the Consumer Price Index for All Urban Consumers for the Los Angeles-Riverside-Orange County Area, is capped at 3.0%.

The County of Orange and contracting agencies contribute to the retirement plan based upon actuarially determined contribution rates adopted by the Board of Retirement. Employer contribution rates are adopted annually based upon recommendations received from OCERS' actuary after the completion of the annual actuarial valuation. The average employer contribution rate for the first six months of calendar year 2014 or the second half of fiscal year 2013-2014 (based on the December 31, 2011 valuation) was 34.71% of compensation. The average employer contribution rate for the last six months of calendar year 2014 or the first half of fiscal year 2014-2015 (based on the December 31, 2012 valuation) was 39.32% of compensation.

All members are required to make contributions to OCERS regardless of the retirement plan or tier in which they are included. The average member contribution rate for the first six months of calendar year 2014 or the second half of fiscal year 2013-2014 (based on the December 31, 2011 valuation) was 11.47% of compensation. The average member contribution rate for the last six months of calendar year 2014 or the first half of fiscal year 2014-2015 (based on the December 31, 2012 valuation) was 12.87% of compensation.

(It should be noted that the contribution rates provided above have not been adjusted to reflect any pick-up or reverse pick-up.)

EXHIBIT 2

Net Pension Liability

The components of the net pension liability of the OCERS as follows:

	December 31, 2014	December 31, 2013
Total pension liability	$16,618,586,673	$16,112,444,088
Plan fiduciary net position	-11,536,106,000	-10,821,318,000
System's net pension liability	$5,082,480,673	$5,291,126,088
Plan fiduciary net position as a percentage of the total pension liability	69.42%	67.16%

The net pension liability was measured as of December 31, 2014 and 2013 and determined based upon plan assets as of each measurement date and upon rolling forward to each measurement date the total pension liability from actuarial valuations as of December 31, 2013 and 2012, respectively.

Actuarial assumptions. The total pension liability as of December 31, 2014 was remeasured by (1) revaluing the TPL as of December 31, 2013 (before the roll forward) to include the following actuarial assumptions that the Retirement Board has already approved for use in the next pension funding valuation as of December 31, 2014 and (2) using this revalued TPL in rolling forward the results from December 31, 2013 to December 31, 2014:

Inflation	3.00%
Salary increases	General: 4.25% to 13.50% and Safety: 5.00% to 17.50%, vary by service, including inflation
Investment rate of return	7.25%, net of pension plan investment expense, including inflation

The long-term expected rate of return on pension plan investments was determined using a building-block method in which expected future real rates of return (expected returns, net of inflation) are developed for each major asset class. These returns are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation and deducting expected investment expenses and a risk margin. The target allocation and projected arithmetic real rates of return for each major asset class, after deducting inflation, but before investment expenses, used in the derivation of the long-term expected investment rate of return assumption are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Large Cap U.S. Equity	14.90%	5.92%
Small/Mid Cap U.S. Equity	2.73%	6.49%
Developed International Equity	10.88%	6.90%
Emerging International Equity	6.49%	8.34%
Core Bonds	10.00%	0.73%
Global Bonds	2.00%	0.30%
Emerging Market Debt	3.00%	4.00%
Real Estate	10.00%	4.96%
Diversified Credit (US Credit)	8.00%	4.97%
Diversified Credit (Non-US Credit)	2.00%	6.76%
Hedge Funds	7.00%	4.13%
GTAA	7.00%	4.22%
Real Return	10.00%	5.86%
Private Equity	6.00%	9.60%
Total	100.00%	

Discount rate: The discount rates used to measure the total pension liability were 7.25% and 7.25% as of December 31, 2014 and December 31, 2013, respectively. The projection of cash flows used to determine the discount rate assumed plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the actuarially determined contribution rates. For this purpose, only employer contributions that are intended to fund benefits for current plan members and their beneficiaries are included. Projected employer contributions that are intended to fund the service costs for future plan members and their beneficiaries, as well as projected contributions from future plan members, are not included. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments for current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability as of both December 31, 2014 and December 31, 2013.

Sensitivity of the net pension liability to changes in the discount rate. The following presents the net pension liability of the OCERS as of December 31, 2014, calculated using the discount rate of 7.25%, as well as what the OCERS' net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.25%) or 1-percentage-point higher (8.25%) than the current rate:

	1% Decrease (6.25%)	Current Discount Rate (7.25%)	1% Increase (8.25%)
OCERS's net pension liability as of December 31, 2014	$7,412,679,084	$5,082,480,673	$3,166,486,387

EXHIBIT 3

Schedule of Changes in OCERS Net Pension Liability – Last Two Plan Years

	2014	2013
Total pension liability		
Service cost	$438,599,931	$444,837,765
Interest	1,153,351,962	1,109,002,323
Change of benefit terms	0	0
Differences between expected and actual experience	-327,402,088	-295,483,447
Changes of assumptions	-127,729,220	0
Benefit payments, including refunds of employee contributions	-630,678,000	-586,284,000
Net change in total pension liability	$506,142,585	$672,072,641
Total pension liability – beginning	16,112,444,088	15,440,371,447
Total pension liability – ending (a)	$16,618,586,673	$16,112,444,088
Plan fiduciary net position		
Contributions – employer[1]	$625,520,000	$427,095,000
Contributions – employee	232,656,000	209,301,000
Net investment income[1]	499,195,000	1,155,967,000
Benefit payments, including refunds of employee contributions	-630,678,000	-586,284,000
Administrative expense	-11,905,000	-15,025,000
Other	0	0
Net change in plan fiduciary net position	$714,788,000	$1,191,054,000
Plan fiduciary net position – beginning	10,821,318,000	9,630,264,000
Plan fiduciary net position – ending (b)	$11,536,106,000	$10,821,318,000
System's net pension liability – ending (a) – (b)	$5,082,480,673	$5,291,126,088
Plan fiduciary net position as a percentage of the total pension liability	69.42%	67.16%
Covered employee payroll	$1,585,453,000	$1,564,158,000
Plan net pension liability as percentage of covered employee payroll	320.57%	338.27%

[1] *Reduced by discount for prepaid contributions and transfers from County Investment Account.*

Notes to Schedule:

Benefit changes: All members with membership dates on or after January 1, 2013 enter the new Plans T, U or V created by the California Public Employees' Pension Reform Act of 2013 (PEPRA).

EXHIBIT 4

Schedule of OCERS' Contributions – Last Ten Plan Years

Year Ended December 31	Actuarially Determined Contributions(1)(2)	Contributions in Relation to the Actuarially Determined Contributions(1)(2)	Contribution Deficiency (Excess)	Covered-Employee Payroll	Contributions as a Percentage of Covered Employee Payroll(1)(2)
2005	$227,892,000	$227,892,000	$0	$1,313,839,000	17.35%
2006	277,368,000	277,368,000	0	1,376,138,000	20.16%
2007	326,736,000	326,736,000	0	1,492,671,000	21.89%
2008	359,673,000	360,365,000(3)	(692,000)	1,605,500,000	22.45%
2009	337,496,000	338,387,000(4)	(891,000)	1,657,297,000	20.42%
2010	372,437,000	372,437,000	0	1,552,354,000	23.99%
2011	387,585,000	387,585,000	0	1,551,531,000	24.98%
2012	406,521,000	406,521,000	0	1,560,287,000	26.05%
2013	426,020,000	427,095,000(5)	(1,075,000)	1,564,158,000	27.31%
2014	476,320,000	625,520,000(6)	(149,200,000)	1,585,453,000	39.45%

(1) *Reduced by transfers from County Investment Account (funded by pension obligation proceeds held by OCERS). Those transfers are as follows:*

Plan Year Ended December 31	*Transfers from County Investment Account*
2008	*$0*
2009	*34,900,000*
2010	*11,000,000*
2011	*11,000,000*
2012	*5,500,000*
2013	*5,000,000*
2014	*5,000,000*

(2) *Reduced by discount for prepaid contributions.*

(3) *Includes $692,000 in additional contributions made by O.C. Fire Authority towards the reduction of their UAAL.*

(4) *Includes $891,000 in additional contributions made by O.C. Fire Authority towards the reduction of their UAAL.*

(5) *Includes $1,075,000 in additional contributions made by O.C. Fire Authority towards the reduction of their UAAL.*

(6) *Includes $1,663,000 in additional contributions made by O.C. Cemetery District, $22,537,000 in additional contributions made by O.C. Fire Authority and $125,000,000 in additional contributions made by O.C. Sanitation District towards the reduction of their UAAL.*

Notes to Exhibit 4

Methods and assumptions used to establish "actuarially determined contribution" rates:	
Valuation date	Actuarially determined contribution rates for the first six months of calendar year 2014 or the second half of fiscal year 2013-2014 are calculated based on the December 31, 2011 valuation. Actuarially determined contribution rates for the last six months of calendar year 2014 or the first half of fiscal year 2014-2015 are calculated based on the December 31, 2012 valuation.
Actuarial cost method	Entry Age Actuarial Cost Method
Amortization method	Level percent of payroll for total unfunded actuarial accrued liability
Remaining amortization period	
December 31, 2011 valuation	23 years closed (declining) amortization of outstanding balance of December 31, 2004 UAAL. The outstanding balance of the UAAL established in the December 31, 2009 valuation as a result of including additional premium pay items as pensionable salary and the new UAAL established in the December 31, 2010 valuation as a result of reallocating contributions and benefit payments among Rate Groups are also amortized over a 23-year period, in the December 31, 2011 valuation. Any increases or decreases in UAAL that arise in future years due to actuarial gains or losses will be amortized over separate 15-year periods. Any increases or decreases in UAAL due to changes in actuarial assumptions are amortized over separate 30-year periods.
December 31, 2012 valuation	22 years closed (declining) amortization of outstanding balance of December 31, 2004 UAAL. The outstanding balance of the UAAL established in the December 31, 2009 valuation as a result of including additional premium pay items as pensionable salary and the new UAAL established in the December 31, 2010 valuation as a result of reallocating contributions and benefit payments among Rate Groups are also amortized over a 22-year period, in the December 31, 2012 valuation. Any increases or decreases in UAAL that arise in future years due to actuarial gains or losses will be amortized over separate 15-year periods. Any increases or decreases in UAAL due to changes in actuarial assumptions are amortized over separate 30-year periods.
Asset valuation method	The Actuarial Value of Assets is determined by recognizing any difference between the actual and the expected market return over a five-year period. The Valuation Value of Assets is the Actuarial Value of Assets reduced by the value of the non-valuation reserves. For valuation purposes, the Valuation Value of Assets is reduced by the value of the non-valuation reserves.

Notes to Exhibit 4 – continued

Actuarial assumptions:

December 31, 2011 valuation	
Investment rate of return	7.75%, net of pension plan investment expense, including inflation
Inflation rate	3.50%
Real across-the-board salary increase	0.25%
Projected salary increases	General: 4.75% to 13.75% and Safety: 4.75% to 17.75%, vary by service, including inflation
Cost of living adjustments	3.00% of retirement income
Other assumptions	Same as those used in the December 31, 2011 funding actuarial valuation
December 31, 2012 valuation	
Investment rate of return	7.25%, net of pension plan investment expense, including inflation
Inflation rate	3.25%
Real across-the-board salary increase	0.50%
Projected salary increases	General: 4.75% to 13.75% and Safety: 4.75% to 17.75%, vary by service, including inflation
Cost of living adjustments	3.00% of retirement income
Other assumptions	Same as those used in the December 31, 2012 funding actuarial valuation

EXHIBIT 5

Projection of Pension Plan's Fiduciary Net Position for Use in Calculation of Discount Rate as of December 31, 2014

($ in millions)

Year Beginning January 1,	Projected Beginning Plan Fiduciary Net Position (a)	Projected Total Contributions * (b)	Projected Benefit Payments (c)	Projected Administrative Expenses (d)	Projected Investment Earnings (e)	Projected Ending Plan Fiduciary Net Position (f) = (a) + (b) - (c) - (d) + (e)
2014	$10,821	$858	$631	$12	$499	$11,536
2015	11,536	786	703	13	841	12,448
2016	12,448	798	755	14	906	13,383
2017	13,383	800	810	15	972	14,330
2018	14,330	807	868	16	1,039	15,292
2019	15,292	818	930	17	1,107	16,270
2020	16,270	824	994	18	1,176	17,258
2021	17,258	831	1,060	19	1,246	18,256
2022	18,256	838	1,127	20	1,316	19,264
2023	19,264	842	1,199	21	1,387	20,272
2039	31,195	104	2,365	34	2,186	31,086
2040	31,086	90	2,421	34	2,176	30,897
2041	30,897	76	2,472	34	2,160	30,626
2042	30,626	64	2,515	34	2,138	30,280
2043	30,280	54	2,546	33	2,112	29,866
2088	18,743	0	68	21	1,356	20,010
2089	20,010	0	53	22	1,448	21,382
2090	21,382	0	41	24	1,548	22,866
2091	22,866	0	31	25	1,656	24,465
2092	24,465	0	24	27	1,772	26,187
2125	237,197	0	0 **	261	17,187	254,123
2126	254,123					
2126 Discounted Value:	107 ***					

* Of all the projected total contributions, only the first year's (i.e., 2014) contribution has been reduced by discount for prepaid contributions and transfers from County Investment Account.

** Less than $1 million, when rounded.

*** $254,123 million when discounted with interest at the rate of 7.25% per annum has a value of $107 million as of December 31, 2014. Of this amount, about $109 million is due to the balance available in the County Investment Account as of December 31, 2014.

EXHIBIT 5

Projection of Pension Plan's Fiduciary Net Position for Use in Calculation of Discount Rate as of December 31, 2014

($ in millions) – continued

Notes:

(1) Amounts may not total exactly due to rounding.

(2) Amounts shown in the year beginning January 1, 2014 row are actual amounts, based on the financial statements provided by OCERS.

(3) Years 2024-2038, 2044-2087, and 2093-2124 have been omitted from this table.

(4) Column (a): Except for the "discounted value" shown for 2126, all of the projected beginning plan fiduciary net position amounts shown have not been adjusted for the time value of money.

(5) Column (b): Projected total contributions include employee and employer normal cost rates applied to closed group projected payroll (based on covered active members as of December 31, 2013), plus employer contributions to the unfunded actuarial accrued liability. Contributions are assumed to occur halfway through the year, on average.

(6) Column (c): Projected benefit payments have been determined in accordance with paragraph 39 of GASB Statement No. 67, and are based on the closed group of active, inactive vested, retired members, and beneficiaries as of December 31, 2013. The projected benefit payments reflect the cost of living increase assumptions used in the December 31, 2013 valuation report. The 2015 benefit payments have been increased by the balance of the Medicare Insurance Reserve as of December 31, 2014.

(7) Column (d): Projected administrative expenses are calculated as approximately 0.10% of the projected beginning plan fiduciary net position amount. The 0.10% portion was based on the actual calendar year 2014 administrative expenses (unaudited) as a percentage of the actual beginning plan fiduciary net position as of January 1, 2014. Administrative expenses are assumed to occur halfway through the year, on average.

(8) Column (e): Projected investment earnings are based on the assumed investment rate of return of 7.25% per annum and reflect the actual timing of benefit payments, which are made at the end of each month.

(9) As illustrated in this Exhibit, the Plan's fiduciary net position was projected to be available to make all projected future benefit payments for current Plan members. In other words, there is no projected "cross-over date" when projected benefits are not covered by projected assets. Therefore, the long-term expected rate of return on Plan investments of 7.25% per annum was applied to all periods of projected benefit payments to determine the total pension liability as of December 31, 2013 shown earlier in this report, pursuant to paragraph 44 of GASB Statement No. 67.