

56

1 MARC A. LEVINSON (STATE BAR NO. 57613)
 malevinson@orrick.com
 2 NORMAN C. HILE (STATE BAR NO. 57299)
 nhile@orrick.com
 3 PATRICK B. BOCASH (STATE BAR NO. 262763)
 pbocash@orrick.com
 4 ORRICK, HERRINGTON & SUTCLIFFE LLP
 400 Capitol Mall, Suite 3000
 5 Sacramento, California 95814-4497
 Telephone: +1-916-447-9200
 6 Facsimile: +1-916-329-4900

7 Attorneys for Debtor
 City of Stockton
 8

9 UNITED STATES BANKRUPTCY COURT
 10 EASTERN DISTRICT OF CALIFORNIA
 11 SACRAMENTO DIVISION
 12

13 In re:
 14 CITY OF STOCKTON, CALIFORNIA,
 15 Debtor.

Case No. 2012-32118
 D.C. No. OHS-15
 Chapter 9

**EXHIBITS M THROUGH O TO
 DECLARATION OF ROBERT
 LELAND IN SUPPORT OF CITY'S
 SUPPLEMENTAL MEMORANDUM
 OF LAW IN SUPPORT OF
 CONFIRMATION OF FIRST
 AMENDED PLAN FOR THE
 ADJUSTMENT OF DEBTS OF CITY
 OF STOCKTON, CALIFORNIA
 (NOVEMBER 15, 2013)¹**

Date: May 12, 2014
 Time: 9:30 a.m.
 Dept: Courtroom 35
 Judge: Hon. Christopher M. Klein

24
 25
 26 ¹ Paragraph 13 of the Order Modifying Order Governing The Disclosure And Use Of Discovery Information And
 27 Scheduling Dates Related To The Trial In The Adversary Proceeding And Any Evidentiary Hearing Regarding
 28 Confirmation Of Proposed Plan Of Adjustment (Dkt. No. 1242, modifying Dkt. No. 1224) contemplates that the
 Parties will submit direct testimony declarations for their respective witnesses by April 21, 2014. Accordingly, the
 declarations submitted in support of this Supplemental Memorandum do not contain all of the information and do not
 attach all of the evidence that will be included in the direct testimony declarations that will be filed on April 21.

Exhibit M



BEST PRACTICE

Appropriate Level of Unrestricted Fund Balance in the General Fund (2002 and 2009) (BUDGET and CAAFR)

Background. Accountants employ the term *fund balance* to describe the net assets of governmental funds calculated in accordance with generally accepted accounting principles (GAAP). Budget professionals commonly use this same term to describe the net assets of governmental funds calculated on a government's budgetary basis.¹ In both cases, fund balance is intended to serve as a measure of the financial resources available in a governmental fund.

Accountants distinguish up to five separate categories of fund balance, based on the extent to which the government is bound to honor constraints on the specific purposes for which amounts can be spent: *nonspendable fund balance*, *restricted fund balance*, *committed fund balance*, *assigned fund balance*, and *unassigned fund balance*.² The total of the last three categories, which include only resources without a constraint on spending or for which the constraint on spending is imposed by the government itself, is termed *unrestricted fund balance*.

It is essential that governments maintain adequate levels of fund balance to mitigate current and future risks (e.g., revenue shortfalls and unanticipated expenditures) and to ensure stable tax rates. Fund balance levels are a crucial consideration, too, in long-term financial planning.

In most cases, discussions of fund balance will properly focus on a government's general fund. Nonetheless, financial resources available in other funds should also be considered in assessing the adequacy of unrestricted fund balance (i.e., the total of the amounts reported as committed, assigned, and unassigned fund balance) in the general fund.

Credit rating agencies monitor levels of fund balance and unrestricted fund balance in a government's general fund to evaluate a government's continued creditworthiness. Likewise, laws and regulations often govern appropriate levels of fund balance and unrestricted fund balance for state and local governments.

Those interested primarily in a government's creditworthiness or economic condition (e.g., rating agencies) are likely to favor increased levels of fund balance. Opposing pressures often come from unions, taxpayers and citizens' groups, which may view high levels of fund balance as "excessive."

Recommendation. The Government Finance Officers Association (GFOA) recommends that governments establish a formal policy on the level of unrestricted fund balance that should be maintained in the general fund.³ Such a guideline should be set by the appropriate policy body and should provide both a temporal framework and

¹ For the sake of clarity, this recommended practice uses the terms GAAP fund balance and budgetary fund balance to distinguish these two different uses of the same term.

² These categories are set forth in Governmental Accounting Standards Board (GASB) Statement No. 54, *Fund Balance Reporting and Governmental Fund Type Definitions*, which must be implemented for financial statements for periods ended June 30, 2011 and later.

³ Sometimes restricted fund balance includes resources available to finance items that typically would require the use of unrestricted fund balance (e.g., a contingency reserve). In that case, such amounts should be included as part of unrestricted fund balance for purposes of analysis.

specific plans for increasing or decreasing the level of unrestricted fund balance, if it is inconsistent with that policy.⁴

The adequacy of unrestricted fund balance in the general fund should be assessed based upon a government's own specific circumstances. Nevertheless, GFOA recommends, at a minimum, that general-purpose governments, regardless of size, maintain unrestricted fund balance in their general fund of no less than two months of regular general fund operating revenues or regular general fund operating expenditures.⁵ The choice of revenues or expenditures as a basis of comparison may be dictated by what is more predictable in a government's particular circumstances.⁶ Furthermore, a government's particular situation often may require a level of unrestricted fund balance in the general fund significantly in excess of this recommended minimum level. In any case, such measures should be applied within the context of long-term forecasting, thereby avoiding the risk of placing too much emphasis upon the level of unrestricted fund balance in the general fund at any one time.

In establishing a policy governing the level of unrestricted fund balance in the general fund, a government should consider a variety of factors, including:

- The predictability of its revenues and the volatility of its expenditures (i.e., higher levels of unrestricted fund balance may be needed if significant revenue sources are subject to unpredictable fluctuations or if operating expenditures are highly volatile);
- Its perceived exposure to significant one-time outlays (e.g., disasters, immediate capital needs, state budget cuts);
- The potential drain upon general fund resources from other funds as well as the availability of resources in other funds (i.e., deficits in other funds may require that a higher level of unrestricted fund balance be maintained in the general fund, just as, the availability of resources in other funds may reduce the amount of unrestricted fund balance needed in the general fund);⁷
- Liquidity (i.e., a disparity between when financial resources actually become available to make payments and the average maturity of related liabilities may require that a higher level of resources be maintained); and
- Commitments and assignments (i.e., governments may wish to maintain higher levels of unrestricted fund balance to compensate for any portion of unrestricted fund balance already committed or assigned by the government for a specific purpose).

Furthermore, governments may deem it appropriate to exclude from consideration resources that have been committed or assigned to some other purpose and focus on unassigned fund balance rather than on unrestricted fund balance.

Naturally, any policy addressing desirable levels of unrestricted fund balance in the general fund should be in conformity with all applicable legal and regulatory constraints. In this case in particular, it is essential that differences between GAAP fund balance and budgetary fund balance be fully appreciated by all interested parties.

Approved by the GFOA's Executive Board, October, 2009.

⁴ See Recommended Practice 4.1 of the National Advisory Council on State and Local Budgeting governments on the need to "maintain a prudent level of financial resources to protect against reducing service levels or raising taxes and fees because of temporary revenue shortfalls or unpredicted one-time expenditures" (Recommended Practice 4.1).

⁵ In practice, a level of unrestricted fund balance significantly lower than the recommended minimum may be appropriate for states and America's largest governments (e.g., cities, counties, and school districts) because they often are in a better position to predict contingencies (for the same reason that an insurance company can more readily predict the number of accidents for a pool of 500,000 drivers than for a pool of fifty), and because their revenues and expenditures often are more diversified and thus potentially less subject to volatility.

⁶ In either case, unusual items that would distort trends (e.g., one-time revenues and expenditures) should be excluded, whereas recurring transfers should be included. Once the decision has been made to compare unrestricted fund balance to either revenues or expenditures, that decision should be followed consistently from period to period.

⁷ However, except as discussed in footnote 4, not to a level below the recommended minimum.

Exhibit N



California Public Employees' Retirement System
 Actuarial Office
 P.O. Box 942701
 Sacramento, CA 94229-2701
 TTY: (916) 795-3240
 (888) 225-7377 phone • (916) 795-2744 fax
www.calpers.ca.gov

October 2013

**MISCELLANEOUS PLAN OF THE CITY OF STOCKTON (CalPERS ID: 6373973665)
 Annual Valuation Report as of June 30, 2012**

Dear Employer,

As an attachment to this letter, you will find a copy of the June 30, 2012 actuarial valuation report of your pension plan. Your 2012 actuarial valuation report contains important actuarial information about your pension plan at CalPERS. Your CalPERS staff actuary, whose signature appears in the Actuarial Certification Section on page 1, is available to discuss the report with you after October 31, 2013.

Future Contribution Rates

The exhibit below displays the Minimum Employer Contribution Rate for fiscal year 2014-15 and a projected contribution rate for 2015-16, before any cost sharing. The projected rate for 2015-16 is based on the most recent information available, including an estimate of the investment return for fiscal year 2012-13, namely 12 percent, and the impact of the new smoothing methods adopted by the CalPERS Board in April 2013 that will impact employer rates for the first time in fiscal year 2015-16. For a projection of employer rates beyond 2015-16, please refer to the "Analysis of Future Investment Return Scenarios" in the "Risk Analysis" section, which includes rate projections through 2019-20 under a variety of investment return scenarios. Please disregard any projections that we may have provided you in the past.

Fiscal Year	Employer Contribution Rate
2014-15	20.090%
2015-16	22.2% (projected)

Member contributions other than cost sharing, (whether paid by the employer or the employee) are in addition to the above rates. **The employer contribution rates in this report do not reflect any cost sharing arrangement you may have with your employees.**

The estimate for 2015-16 also assumes that there are no future contract amendments and no liability gains or losses (such as larger than expected pay increases, more retirements than expected, etc.). This is a very important assumption because these gains and losses do occur and can have a significant impact on your contribution rate. Even for the largest plans, such gains and losses often cause a change in the employer's contribution rate of one or two percent of payroll and may be even larger in some less common instances. These gains and losses cannot be predicted in advance so the projected employer contribution rates are just estimates. Your actual rate for 2015-16 will be provided in next year's report.

CTY022523

MISCELLANEOUS PLAN OF THE CITY OF STOCKTON
(CalPERS ID: 6373973665)
Annual Valuation Report as of June 30, 2012
Page 2

Changes since the Prior Year's Valuation

On January 1, 2013, the Public Employees' Pension Reform Act of 2013 (PEPRA) took effect. The impact of most of the PEPRA changes will first show up in the rates and the benefit provision listings of the June 30, 2013 valuation for the 2015-16 rates. For more information on PEPRA, please refer to the CalPERS website.

On April 17, 2013, the CalPERS Board of Administration approved a recommendation to change the CalPERS amortization and rate smoothing policies. Beginning with the June 30, 2013 valuations that set the 2015-16 rates, CalPERS will no longer use an actuarial value of assets and will employ an amortization and smoothing policy that will pay for all gains and losses over a fixed 30-year period with the increases or decreases in the rate spread directly over a 5-year period. The impact of this new actuarial methodology is reflected in the "Analysis of Future Investment Return Scenarios" subsection of the "Risk Analysis" section of your report.

A review of the preferred asset allocation mix for CalPERS investment portfolio will be performed in late 2013, which could influence future discount rates. In addition, CalPERS will review economic and demographic assumptions, including mortality rate improvements that are likely to increase employer contribution rates in future years. The "Analysis of Future Investment Return Scenarios" subsection does **not** reflect the impact of assumption changes that we expect will also impact future rates.

Besides the above noted changes, there may also be changes specific to your plan such as contract amendments and funding changes.

Further descriptions of general changes are included in the "Highlights and Executive Summary" section and in Appendix A, "Actuarial Methods and Assumptions." The effect of the changes on your rate is included in the "Reconciliation of Required Employer Contributions."

We understand that you might have a number of questions about these results. While we are very interested in discussing these results with your agency, in the interest of allowing us to give every public agency their results, we ask that you wait until after October 31 to contact us with actuarial questions. If you have other questions, you may call the Customer Contact Center at (888)-CalPERS or **(888-225-7377)**.

Sincerely,



ALAN MILLIGAN
Chief Actuary

CTY022524



ACTUARIAL VALUATION

as of June 30, 2012

**for the
MISCELLANEOUS PLAN
of the
CITY OF STOCKTON**

(CalPERS ID: 6373973665)

**REQUIRED CONTRIBUTIONS
FOR FISCAL YEAR
July 1, 2014 – June 30, 2015**

CTY022525

TABLE OF CONTENTS

ACTUARIAL CERTIFICATION	1
HIGHLIGHTS AND EXECUTIVE SUMMARY	
Introduction	5
Purpose of the Report	5
Required Employer Contribution	6
Plan's Funded Status	6
Cost	7
Changes Since the Prior Year's Valuation	8
Subsequent Events	8
ASSETS	
Reconciliation of the Market Value of Assets	11
Development of the Actuarial Value of Assets	11
Asset Allocation	12
CalPERS History of Investment Returns	13
LIABILITIES AND RATES	
Development of Accrued and Unfunded Liabilities	17
(Gain) / Loss Analysis 06/30/11 - 06/30/12	18
Schedule of Amortization Bases	19
Reconciliation of Required Employer Contributions	20
Employer Contribution Rate History	21
Funding History	21
RISK ANALYSIS	
Volatility Ratios	25
Projected Rates	26
Analysis of Future Investment Return Scenarios	26
Analysis of Discount Rate Sensitivity	27
Hypothetical Termination Liability	28
GASB STATEMENT NO. 27	
Information for compliance with GASB Statement No. 27	31
PLAN'S MAJOR BENEFIT PROVISIONS	
Plan's Major Benefit Options	35
APPENDIX A – ACTUARIAL METHODS AND ASSUMPTIONS	A1 - A17
APPENDIX B – PRINCIPAL PLAN PROVISIONS	B1 - B8
APPENDIX C – PARTICIPANT DATA	
Summary of Valuation Data	C-1
Active Members	C-2
Transferred and Terminated Members	C-3
Retired Members and Beneficiaries	C-4
APPENDIX D – GLOSSARY OF ACTUARIAL TERMS	D1 – D3

ACTUARIAL CERTIFICATION

To the best of our knowledge, this report is complete and accurate and contains sufficient information to disclose, fully and fairly, the funded condition of the MISCELLANEOUS PLAN OF THE CITY OF STOCKTON. This valuation is based on the member and financial data as of June 30, 2012 provided by the various CalPERS databases and the benefits under this plan with CalPERS as of the date this report was produced. It is our opinion that the valuation has been performed in accordance with generally accepted actuarial principles, in accordance with standards of practice prescribed by the Actuarial Standards Board, and that the assumptions and methods are internally consistent and reasonable for this plan, as prescribed by the CalPERS Board of Administration according to provisions set forth in the California Public Employees' Retirement Law.

The undersigned is an actuary for CalPERS, who is a member of the American Academy of Actuaries and the Society of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.



KELLY STURM, ASA, MAAA
Senior Pension Actuary, CalPERS

HIGHLIGHTS AND EXECUTIVE SUMMARY

- **INTRODUCTION**
- **PURPOSE OF THE REPORT**
- **REQUIRED EMPLOYER CONTRIBUTION**
- **PLAN'S FUNDED STATUS**
- **COST**
- **CHANGES SINCE THE PRIOR YEAR'S VALUATION**
- **SUBSEQUENT EVENTS**

CTY022528

Introduction

This report presents the results of the June 30, 2012 actuarial valuation of the MISCELLANEOUS PLAN OF THE CITY OF STOCKTON of the California Public Employees' Retirement System (CalPERS). This actuarial valuation sets the fiscal year 2014-15 required employer contribution rates.

On January 1, 2013, the Public Employees' Pension Reform Act of 2013 (PEPRA) took effect. The impact of most of the PEPRA changes will first show up in the rates and the benefit provision listings of the June 30, 2013 valuation, which sets the 2015-16 contribution rates. For more information on PEPRA, please refer to the CalPERS website.

On April 17, 2013, the CalPERS Board of Administration approved a recommendation to change the CalPERS amortization and smoothing policies. Prior to this change, CalPERS employed an amortization and smoothing policy, which spread investment returns over a 15-year period while experience gains and losses were amortized over a rolling 30-year period. Effective with the June 30, 2013 valuations, CalPERS will no longer use an actuarial value of assets and will employ an amortization and smoothing policy that will spread rate increases or decreases over a 5-year period, and will amortize all experience gains and losses over a fixed 30-year period.

The new amortization and smoothing policy will be used for the first time in the June 30, 2013 actuarial valuations. These valuations will be performed in the fall of 2014 and will set employer contribution rates for the fiscal year 2015-16.

As stewards of the System, CalPERS must ensure that the pension fund is sustainable over multiple generations. Our strategic plan calls for us to take an integrated view of our assets and liabilities and to take steps designed to achieve a fully funded plan. A review of the preferred asset allocation mix for CalPERS investment portfolio will be performed in late 2013, which could influence future discount rates. In addition, CalPERS will review economic and demographic assumptions, including mortality rate improvements that are likely to increase employer contribution rates in future years.

Purpose of the Report

The actuarial valuation was prepared by the CalPERS Actuarial Office using data as of June 30, 2012. The purpose of the report is to:

- Set forth the actuarial assets and accrued liabilities of this plan as of June 30, 2012;
- Determine the required employer contribution rate for the fiscal year July 1, 2014 through June 30, 2015;
- Provide actuarial information as of June 30, 2012 to the CalPERS Board of Administration and other interested parties, and to;
- Provide pension information as of June 30, 2012 to be used in financial reports subject to Governmental Accounting Standards Board (GASB) Statement Number 27 for a Single Employer Defined Benefit Pension Plan.

California Actuarial Advisory Panel Recommendations

This report includes all the basic disclosure elements as described in the *Model Disclosure Elements for Actuarial Valuation Reports* recommended in 2011 by the California Actuarial Advisory Panel (CAAP), with the exception of including the original base amounts of the various components of the unfunded liability in the Schedule of Amortization Bases shown on page 19.

Additionally, this report includes the following "Enhanced Risk Disclosures" also recommended by the CAAP in the Model Disclosure Elements document:

- A "Deterministic Stress Test," projecting future results under different investment income scenarios
- A "Sensitivity Analysis," showing the impact on current valuation results using a 1% plus or minus change in the discount rate.

The use of this report for any other purposes may be inappropriate. In particular, this report does not contain information applicable to alternative benefit costs. The employer should contact their actuary before disseminating any portion of this report for any reason that is not explicitly described above.

Required Employer Contribution

	Fiscal Year 2013-14	Fiscal Year 2014-15
Actuarially Determined Employer Contributions		
1. Contribution in Projected Dollars		
a) Total Normal Cost	\$ 10,319,364	\$ 9,534,932
b) Employee Contribution ¹	4,107,560	3,840,527
c) Employer Normal Cost [(1a) - (1b)]	6,211,804	5,694,405
d) Unfunded Contribution	4,314,437	5,327,732
e) Required Employer Contribution [(1c) + (1d)]	\$ 10,526,241	\$ 11,022,137
Projected Annual Payroll for Contribution Year	\$ 58,679,425	\$ 54,864,671
2. Contribution as a Percentage of Payroll		
a) Total Normal Cost	17.586%	17.379%
b) Employee Contribution ¹	7.000%	7.000%
c) Employer Normal Cost [(2a) - (2b)]	10.586%	10.379%
d) Unfunded Rate	7.353%	9.711%
e) Required Employer Rate [(2c) + (2d)]	17.939%	20.090%
Minimum Employer Contribution Rate²	17.939%	20.090%
Annual Lump Sum Prepayment Option ³	\$ 10,152,408	\$ 10,630,693

¹This is the percentage specified in the Public Employees Retirement Law, net of any reduction from the use of a modified formula or other factors. Employee cost sharing is not shown in this report.

²The Minimum Employer Contribution Rate under PEPRA is the greater of the required employer rate or the employer normal cost.

³Payment must be received by CalPERS before the first payroll reported to CalPERS of the new fiscal year and after June 30. If there is contractual cost sharing or other change, this amount will change.

Plan's Funded Status

	June 30, 2011	June 30, 2012
1. Present Value of Projected Benefits	\$ 639,969,106	\$ 652,666,337
2. Entry Age Normal Accrued Liability	568,852,600	584,540,872
3. Actuarial Value of Assets (AVA)	513,963,229	517,244,333
4. Unfunded Liability (AVA Basis) [(2) - (3)]	\$ 54,889,371	\$ 67,296,539
5. Funded Ratio (AVA Basis) [(3) / (2)]	90.4%	88.5%
6. Market Value of Assets (MVA)	\$ 450,853,223	\$ 431,187,495
7. Unfunded Liability (MVA Basis) [(2) - (6)]	\$ 117,999,377	\$ 153,353,377
8. Funded Ratio (MVA Basis) [(6) / (2)]	79.3%	73.8%
Superfunded Status	No	No

Cost

Actuarial Cost Estimates in General

What will this pension plan cost? Unfortunately, there is no simple answer. There are two major reasons for the complexity of the answer. First, actuarial calculations, including the ones in this report, are based on a number of assumptions about the future. These assumptions can be divided into two categories.

- Demographic assumptions include the percentage of employees that will terminate, die, become disabled, and retire in each future year.
- Economic assumptions include future salary increases for each active employee, and the assumption with the greatest impact, future asset returns at CalPERS for each year into the future until the last dollar is paid to current members of your plan.

While CalPERS has set these assumptions to reflect our best estimate of the real future of your plan, it must be understood that these assumptions are very long-term predictors and will surely not be realized in any one year. For example, while the asset earnings at CalPERS have averaged more than the assumed return of 7.5 percent for the past twenty year period ending June 30, 2013, returns for each fiscal year ranged from negative -24 percent to +21.7 percent.

Second, the very nature of actuarial funding produces the answer to the question of plan cost as the sum of two separate pieces.

- The Normal Cost (i.e., the future annual premiums in the absence of surplus or unfunded liability) expressed as a percentage of total active payroll.
- The Past Service Cost or Accrued Liability (i.e., the current value of the benefit for all credited past service of current members) which is expressed as a lump sum dollar amount.

The cost is the sum of a percent of future pay and a lump sum dollar amount (the sum of an apple and an orange if you will). To communicate the total cost, either the Normal Cost (i.e., future percent of payroll) must be converted to a lump sum dollar amount (in which case the total cost is the present value of benefits), or the Past Service Cost (i.e., the lump sum) must be converted to a percent of payroll (in which case the total cost is expressed as the employer's rate, part of which is permanent and part temporary). Converting the Past Service Cost lump sum to a percent of payroll requires a specific amortization period, and the employer rate will vary depending on the amortization period chosen.

Changes since the Prior Year's Valuation

Benefits

The standard actuarial practice at CalPERS is to recognize mandated legislative benefit changes in the first annual valuation following the effective date of the legislation. Voluntary benefit changes by plan amendment are generally included in the first valuation that is prepared after the amendment becomes effective even if the valuation date is prior to the effective date of the amendment.

This valuation generally reflects plan changes by amendments effective before the date of the report. Please refer to Appendix B for a summary of the plan provisions used in this valuation. The effect of any mandated benefit changes or plan amendments on the unfunded liability is shown in the "(Gain)/Loss Analysis" and the effect on your employer contribution rate is shown in the "Reconciliation of Required Employer Contributions." It should be noted that no change in liability or rate is shown for any plan changes, which were already included in the prior year's valuation.

Public Employees' Pension Reform Act of 2013 (PEPRA)

On January 1, 2013, the Public Employees' Pension Reform Act of 2013 (PEPRA) took effect, requiring that a public employer's contribution to a defined benefit plan, in combination with employee contributions to that defined benefit plan, shall not be less than the normal cost rate. Beginning July 1, 2013, this means that some plans with surplus will be paying more than they otherwise would. For more information on PEPRA, please refer to the CalPERS website.

Subsequent Events

Actuarial Methods and Assumptions

On April 17, 2013, the CalPERS Board of Administration approved a recommendation to change the CalPERS amortization and smoothing policies. Beginning with the June 30, 2013 valuations that set the 2015-16 rates, CalPERS will no longer use an actuarial value of assets and will employ an amortization and rate smoothing policy that will pay for all gains and losses over a fixed 30-year period with the increases or decreases in the rate spread directly over a 5-year period. The impact of this new actuarial methodology is reflected in the "Expected Rate Increases" subsection of the "Risk analysis" section of your report.

Not reflected in the "Expected Rate Increases" subsection of the "Risk analysis" section is the impact of assumption changes that we expect will also, impact future rates. A review of the preferred asset allocation mix for CalPERS investment portfolio will be performed in late 2013, which could influence future discount rates. In addition, CalPERS will review economic and demographic assumptions, including mortality rate improvements that are likely to increase employer contribution rates in future years.

Bankruptcy

On June 28, 2012, the City of Stockton filed a petition for Chapter 9 bankruptcy protection with the United States Bankruptcy Court. That petition was approved by the Judge on April 1, 2013. The bankruptcy did not have an impact on the valuation or the determination of the required contributions for the 2014-15 fiscal year.

ASSETS

- **RECONCILIATION OF THE MARKET VALUE OF ASSETS**
- **DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS**
- **ASSET ALLOCATION**
- **CALPERS HISTORY OF INVESTMENT RETURNS**

CTY022533

Reconciliation of the Market Value of Assets

1. Market Value of Assets as of 6/30/11 Including Receivables	\$	450,853,223
2. Receivables for Service Buybacks as of 6/30/11		367,537
3. Market Value of Assets as of 6/30/11		450,485,686
4. Employer Contributions		8,203,945
5. Employee Contributions		3,554,463
6. Benefit Payments to Retirees and Beneficiaries		(30,219,557)
7. Refunds		(188,037)
8. Lump Sum Payments		0
9. Transfers and Miscellaneous Adjustments		(565,132)
10. Investment Return		(987,180)
11. Market Value of Assets as of 6/30/12	\$	430,284,188
12. Receivables for Service Buybacks as of 6/30/12		903,307
13. Market Value of Assets as of 6/30/12 Including Receivables	\$	431,187,495

Development of the Actuarial Value of Assets

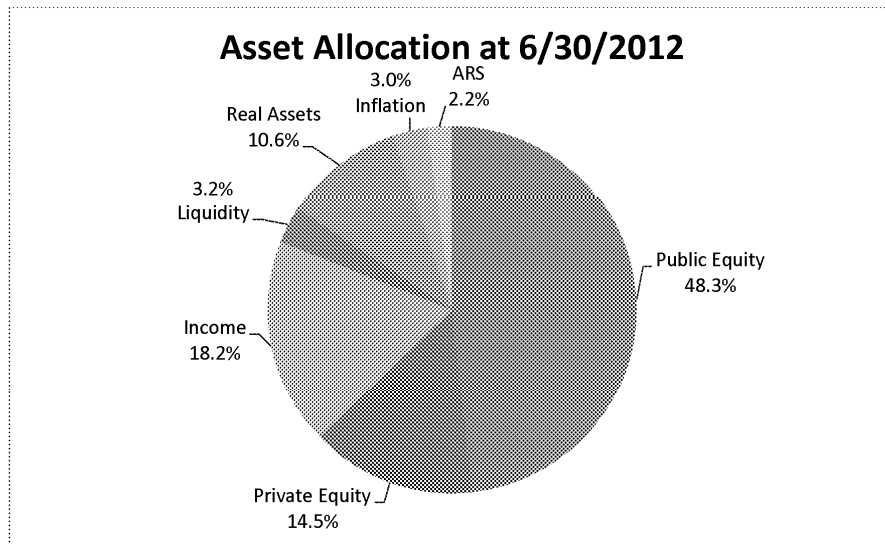
1. Actuarial Value of Assets as of 6/30/11 Used For Rate Setting Purposes	\$	513,963,229
2. Receivables for Service Buybacks as of 6/30/11		367,537
3. Actuarial Value of Assets as of 6/30/11		513,595,692
4. Employer Contributions		8,203,945
5. Employee Contributions		3,554,463
6. Benefit Payments to Retirees and Beneficiaries		(30,219,557)
7. Refunds		(188,037)
8. Lump Sum Payments		0
9. Transfers and Miscellaneous Adjustments		(565,132)
10. Expected Investment Income at 7.5%		37,812,166
11. Expected Actuarial Value of Assets	\$	532,193,540
12. Market Value of Assets as of 6/30/12	\$	430,284,188
13. Preliminary Actuarial Value of Assets $[(11) + ((12) - (11)) / 15]$		525,399,583
14. Maximum Actuarial Value of Assets (120% of (12))		516,341,026
15. Minimum Actuarial Value of Assets (80% of (12))		344,227,350
16. Actuarial Value of Assets {Lesser of [(14), Greater of ((13), (15))]}]		516,341,026
17. Actuarial Value to Market Value Ratio		120.0%
18. Receivables for Service Buybacks as of 6/30/12		903,307
19. Actuarial Value of Assets as of 6/30/12 Used for Rate Setting Purposes	\$	517,244,333

Asset Allocation

CalPERS adheres to an Asset Allocation Strategy which establishes asset class allocation policy targets and ranges, and manages those asset class allocations within their policy ranges. CalPERS recognizes that over 90 percent of the variation in investment returns of a well-diversified pool of assets can typically be attributed to asset allocation decisions. In December 2010 the Board approved the policy asset class targets and ranges listed below. These policy asset allocation targets and ranges are expressed as a percentage of total assets and were expected to be implemented over a period of one to two years beginning July 1, 2011 and reviewed again in December 2013.

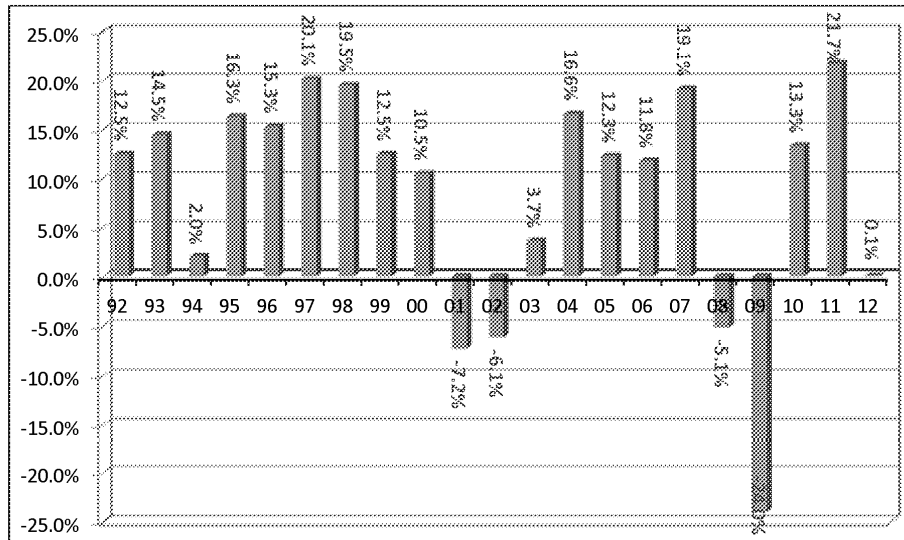
The asset allocation and market value of assets shown below reflect the values of the Public Employees Retirement Fund (PERF) in its entirety as of June 30, 2012. The assets for CITY OF STOCKTON MISCELLANEOUS PLAN are part of the Public Employees Retirement Fund (PERF) and are invested accordingly.

(A) Asset Class	(B) Market Value (\$ Billion)	(C) Policy Target Allocation	(D) Policy Target Range
1) Public Equity	113.0	50.0%	+/- 7%
2) Private Equity	33.9	14.0%	+/- 4%
3) Fixed Income	42.6	17.0%	+/- 5%
4) Cash Equivalents	7.5	4.0%	+/- 5%
5) Real Assets	24.8	11.0%	+/- 3%
6) Inflation Assets	7.0	4.0%	+/- 3%
7) Absolute Return Strategy (ARS)	5.1	0.0%	N/A
Total Fund	\$233.9	100.0%	N/A



CalPERS History of Investment Returns

The following is a chart with historical annual returns of the Public Employees Retirement Fund for each fiscal year ending on June 30. Beginning in 2002, the figures are reported as gross of fees.



LIABILITIES AND RATES

- **DEVELOPMENT OF ACCRUED AND UNFUNDED LIABILITIES**
- **(GAIN) / LOSS ANALYSIS 06/30/11 - 06/30/12**
- **SCHEDULE OF AMORTIZATION BASES**
- **RECONCILIATION OF REQUIRED EMPLOYER CONTRIBUTIONS**
- **EMPLOYER CONTRIBUTION RATE HISTORY**
- **FUNDING HISTORY**

CTY022537

Development of Accrued and Unfunded Liabilities

1.	Present Value of Projected Benefits		
	a) Active Members	\$	221,184,776
	b) Transferred Members		22,083,865
	c) Terminated Members		9,760,119
	d) Members and Beneficiaries Receiving Payments		<u>399,637,577</u>
	e) Total	\$	652,666,337
2.	Present Value of Future Employer Normal Costs	\$	39,662,466
3.	Present Value of Future Employee Contributions	\$	28,462,999
4.	Entry Age Normal Accrued Liability		
	a) Active Members [(1a) - (2) - (3)]	\$	153,059,311
	b) Transferred Members (1b)		22,083,865
	c) Terminated Members (1c)		9,760,119
	d) Members and Beneficiaries Receiving Payments (1d)		<u>399,637,577</u>
	e) Total	\$	584,540,872
5.	Actuarial Value of Assets (AVA)	\$	517,244,333
6.	Unfunded Accrued Liability (AVA Basis) [(4e) - (5)]	\$	67,296,539
7.	Funded Ratio (AVA Basis) [(5) / (4e)]		88.5%
8.	Market Value of Assets (MVA)	\$	431,187,495
9.	Unfunded Liability (MVA Basis) [(4e) - (8)]	\$	153,353,377
10.	Funded Ratio (MVA Basis) [(8) / (4e)]		73.8%

(Gain) /Loss Analysis 6/30/11 – 6/30/12

To calculate the cost requirements of the plan, assumptions are made about future events that affect the amount and timing of benefits to be paid and assets to be accumulated. Each year actual experience is compared to the expected experience based on the actuarial assumptions. This results in actuarial gains or losses, as shown below.

A Total (Gain)/Loss for the Year	
1. Unfunded Accrued Liability (UAL) as of 6/30/11	\$ 54,889,371
2. Expected Payment on the UAL during 2011/2012	3,515,013
3. Interest through 6/30/12 $[(.075 \times (A1) - ((1.075)^{1/2} - 1) \times (A2)]$	3,987,273
4. Expected UAL before all other changes $[(A1) - (A2) + (A3)]$	55,361,631
5. Change due to plan changes	0
6. Change due to assumption change	0
7. Expected UAL after all other changes $[(A4) + (A5) + (A6)]$	55,361,631
8. Actual UAL as of 6/30/12	67,296,539
9. Total (Gain)/Loss for 2011/2012 $[(A8) - (A7)]$	\$ 11,934,908
B Contribution (Gain)/Loss for the Year	
1. Expected Contribution (Employer and Employee)	\$ 13,242,003
2. Interest on Expected Contributions	487,598
3. Actual Contributions	11,758,408
4. Interest on Actual Contributions	432,969
5. Expected Contributions with Interest $[(B1) + (B2)]$	13,729,601
6. Actual Contributions with Interest $[(B3) + (B4)]$	12,191,377
7. Contribution (Gain)/Loss $[(B5) - (B6)]$	\$ 1,538,224
C Asset (Gain)/Loss for the Year	
1. Actuarial Value of Assets as of 6/30/11 Including Receivables	\$ 513,963,229
2. Receivables as of 6/30/11	367,537
3. Actuarial Value of Assets as of 6/30/11	513,595,692
4. Contributions Received	11,758,408
5. Benefits and Refunds Paid	(30,407,594)
6. Transfers and miscellaneous adjustments	(565,132)
7. Expected Int. $[(.075 \times (C3) + ((1.075)^{1/2} - 1) \times ((C4) + (C5) + (C6))]$	37,812,166
8. Expected Assets as of 6/30/12 $[(C3) + (C4) + (C5) + (C6) + (C7)]$	532,193,540
9. Receivables as of 6/30/12	903,307
10. Expected Assets Including Receivables	533,096,847
11. Actual Actuarial Value of Assets as of 6/30/12	517,244,333
12. Asset (Gain)/Loss $[(C10) - (C11)]$	\$ 15,852,514
D Liability (Gain)/Loss for the Year	
1. Total (Gain)/Loss (A9)	\$ 11,934,908
2. Contribution (Gain)/Loss (B7)	1,538,224
3. Asset (Gain)/Loss (C12)	15,852,514
4. Liability (Gain)/Loss $[(D1) - (D2) - (D3)]$	\$ (5,455,830)
Development of the (Gain)/Loss Balance as of 6/30/12	
1. (Gain)/Loss Balance as of 6/30/11	\$ 18,819,847
2. Payment Made on the Balance during 2011/2012	1,130,150
3. Interest through 6/30/12 $[(.075 \times (1) - ((1.075)^{1/2} - 1) \times (2)]$	1,369,874
4. Scheduled (Gain)/Loss Balance as of 6/30/12 $[(1) - (2) + (3)]$	\$ 19,059,571
5. (Gain)/Loss for Fiscal Year ending 6/30/12 $[(A9) \text{ above}]$	11,934,908
6. Final (Gain)/Loss Balance as of 6/30/12 $[(4) + (5)]$	\$ 30,994,479

CALPERS ACTUARIAL VALUATION - June 30, 2012
 MISCELLANEOUS PLAN OF THE CITY OF STOCKTON
 CalPERS ID: 6373973665

Schedule of Amortization Bases

There is a two-year lag between the Valuation Date and the Contribution Fiscal Year.

- The assets, liabilities and funded status of the plan are measured as of the valuation date; June 30, 2012.
- The employer contribution rate determined by the valuation is for the fiscal year beginning two years after the valuation date; fiscal year 2014-15.

This two-year lag is necessary due to the amount of time needed to extract and test the membership and financial data, and due to the need to provide public agencies with their employer contribution rates well in advance of the start of the fiscal year.

The Unfunded Liability is used to determine the employer contribution and therefore must be rolled forward two years from the valuation date to the first day of the fiscal year for which the contribution is being determined. The Unfunded Liability is rolled forward each year by subtracting the expected Payment on the Unfunded Liability for the fiscal year and adjusting for interest. The Expected Payment on the Unfunded Liability for a fiscal year is equal to the Expected Employer Contribution for the fiscal year minus the Expected Normal Cost for the year. The Employer Contribution Rate for the first fiscal year is determined by the actuarial valuation two years ago and the rate for the second year is from the actuarial valuation one year ago. The Normal Cost Rate for each of the two fiscal years is assumed to be the same as the rate determined by the current valuation. All expected dollar amounts are determined by multiplying the rate by the expected payroll for the applicable fiscal year, based on payroll as of the valuation date.

Reason for Base	Date Established	Amortization Period	2012-13			2013-14			2014-15		
			Balance 6/30/12	Expected Payment 2012-13	Balance 6/30/13	Expected Payment 2013-14	Balance 6/30/14	Expected Payment 2014-15	Percent-age of Payroll		
FRESH START	06/30/06	11	\$13,571,672	\$1,385,492	\$13,153,039	\$1,422,229	\$12,664,919	\$1,464,896	2.670%		
ASSUMPTION CHANGE	06/30/09	17	\$12,568,357	\$983,412	\$12,491,361	\$1,009,861	\$12,381,167	\$1,040,157	.896%		
SPECIAL (GAIN)/LOSS	06/30/09	27	\$16,229,684	\$993,626	\$16,416,697	\$1,020,794	\$16,589,568	\$1,051,417	.916%		
SPECIAL (GAIN)/LOSS	06/30/10	28	\$(7,362,580)	\$(443,158)	\$(7,455,298)	\$(455,325)	\$(7,542,354)	\$(468,985)	(0.855%)		
GOLDEN HANDSHAKE	06/30/11	19	\$4,335,945	\$0	\$4,661,141	\$351,941	\$4,645,826	\$362,500	0.651%		
ASSUMPTION CHANGE	06/30/11	19	\$688,979	\$(48,994)	\$791,450	\$19,920	\$830,155	\$64,774	0.118%		
SPECIAL (GAIN)/LOSS	06/30/11	29	\$(4,657,861)	\$0	\$(5,007,201)	\$(300,685)	\$(5,070,984)	\$(309,706)	(0.564%)		
PAYMENT (GAIN)/LOSS	06/30/12	30	\$97,865	\$(655,144)	\$1,676,722	\$(200,720)	\$2,010,587	\$120,737	0.220%		
(GAIN)/LOSS	06/30/12	30	\$30,994,478	\$1,147,289	\$32,129,529	\$1,158,945	\$33,337,624	\$2,001,942	3.649%		
TOTAL			\$67,296,539	\$3,362,523	\$68,857,440	\$4,026,960	\$69,846,508	\$5,327,732	9.711%		

The special (gain)/loss bases were established using the temporary modification recognized in the 2009, 2010 and 2011 annual valuations. Unlike the gain/loss occurring in previous and subsequent years, the gain/loss recognized in the 2009, 2010, and 2011 annual valuations will be amortized over fixed and declining 30-year periods so that these annual gain/losses will be fully paid off in 30 years. The gain/loss recognized in 2012 and later valuations will be combined with the gain/loss from 2008 and earlier valuations.

Reconciliation of Required Employer Contributions

	Percentage of Projected Payroll	Estimated \$ Based on Projected Payroll
1. Contribution for 7/1/13 – 6/30/14	17.939%	\$ 10,526,241
2. Effect of changes since the prior year annual valuation		
a) Effect of unexpected changes in demographics and financial results	2.151%	1,180,225
b) Effect of plan changes	0.000%	0
c) Effect of changes in Assumptions	0.000%	0
d) Effect of change in payroll	-	(684,329)
e) Effect of elimination of amortization base	0.000%	0
f) Effect of changes due to Fresh Start	0.000%	0
g) Net effect of the changes above [Sum of (a) through (f)]	2.151%	495,896
3. Contribution for 7/1/14 – 6/30/15 [(1)+(2g)]	20.090%	11,022,137

The contribution actually paid (item 1) may be different if a prepayment of unfunded actuarial liability is made or a plan change became effective after the prior year's actuarial valuation was performed.

Employer Contribution Rate History

The table below provides a recent history of the employer contribution rates for your plan, as determined by the annual actuarial valuation. It does not account for prepayments or benefit changes made in the middle of the year.

Required By Valuation

Fiscal Year	Employer Normal Cost	Unfunded Rate	Total Employer Contribution Rate
2010 - 2011	10.844%	3.243%	14.087%
2011 - 2012	10.546%	6.395%	16.941%
2012 - 2013	10.268%	6.613%	16.881%
2013 - 2014	10.586%	7.353%	17.939%
2014 - 2015	10.379%	9.711%	20.090%

Funding History

The Funding History below shows the recent history of the actuarial accrued liability, the market value of assets, the actuarial value of assets, funded ratios and the annual covered payroll. The Actuarial Value of Assets is used to establish funding requirements and the funded ratio on this basis represents the progress toward fully funding future benefits for current plan participants. The funded ratio based on the Market Value of Assets is an indicator of the short-term solvency of the plan.

Valuation Date	Accrued Liability	Actuarial Value of Assets (AVA)	Market Value of Assets (MVA)	Funded Ratio		Annual Covered Payroll
				AVA	MVA	
06/30/08	\$ 491,467,308	\$ 460,950,390	\$ 467,269,585	93.8%	95.1%	\$ 66,743,768
06/30/09	535,150,533	478,673,431	345,912,268	89.4%	64.6%	62,265,227
06/30/10	548,129,809	495,325,729	383,364,117	90.4%	69.9%	56,256,198
06/30/11	568,852,600	513,963,229	450,853,223	90.4%	79.3%	53,699,986
06/30/12	584,540,872	517,244,333	431,187,495	88.5%	73.8%	50,208,946

RISK ANALYSIS

- **VOLATILITY RATIOS**
- **PROJECTED RATES**
- **ANALYSIS OF FUTURE INVESTMENT RETURN SCENARIOS**
- **ANALYSIS OF DISCOUNT RATE SENSITIVITY**
- **HYPOTHETICAL TERMINATION LIABILITY**

CTY022543

Volatility Ratios

The actuarial calculations supplied in this communication are based on a number of assumptions about very long-term demographic and economic behavior. Unless these assumptions (terminations, deaths, disabilities, retirements, salary growth, and investment return) are exactly realized each year, there will be differences on a year-to-year basis. The year-to-year differences between actual experience and the assumptions are called actuarial gains and losses and serve to lower or raise the employer's rates from one year to the next. Therefore, the rates will inevitably fluctuate, especially due to the ups and downs of investment returns.

Asset Volatility Ratio (AVR)

Plans that have higher asset to payroll ratios produce more volatile employer rates due to investment return. For example, a plan with an asset to payroll ratio of 8 may experience twice the contribution volatility due to investment return volatility, than a plan with an asset to payroll ratio of 4. Below we have shown your asset volatility ratio, a measure of the plan's current rate volatility. It should be noted that this ratio is a measure of the current situation. It increases over time but generally tends to stabilize as the plan matures.

Liability Volatility Ratio

Plans that have higher liability to payroll ratios produce more volatile employer rates due to investment return and changes in liability. For example, a plan with a liability to payroll ratio of 8 is expected to have twice the contribution volatility of a plan with a liability to payroll ratio of 4. The liability volatility ratio is also included in the table below. It should be noted that this ratio indicates a longer-term potential for contribution volatility and the asset volatility ratio, described above, will tend to move closer to this ratio as the plan matures.

Rate Volatility	As of June 30, 2012	
1. Market Value of Assets without Receivables	\$	430,284,188
2. Payroll		50,208,946
3. Asset Volatility Ratio (AVR = 1. / 2.)		8.6
4. Accrued Liability	\$	584,540,872
5. Liability Volatility Ratio (4. / 2.)		11.6

Projected Rates

On April 17, 2013, the CalPERS Board of Administration approved a recommendation to change the CalPERS amortization and smoothing policies. Beginning with the June 30, 2013 valuations that will set the 2015-16 rates, CalPERS will employ an amortization and rate smoothing policy that will pay for all gains and losses over a fixed 30-year period with the increases or decreases in the rate spread directly over a 5-year period. The table below shows projected employer contribution rates (before cost sharing) for the next five Fiscal Years, **assuming CalPERS earns 12% for fiscal year 2012-13 and 7.50 percent every fiscal year thereafter**, and assuming that all other actuarial assumptions will be realized and that no further changes to assumptions, contributions, benefits, or funding will occur between now and the beginning of the fiscal year 2015-16. **Consequently, these projections do not take into account potential rate increases from likely future assumption changes.** Nor do they take into account the positive impact PEPRA is expected to gradually have on the normal cost.

	New Rate	Projected Future Employer Contribution Rates				
	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Contribution Rates:	20.090%	22.2%	24.3%	26.4%	28.6%	30.7%

Analysis of Future Investment Return Scenarios

In July 2013, the investment return for fiscal year 2012-13 was announced to be 12.5 percent. Note that this return is before administrative expenses and also does not reflect final investment return information for real estate and private equities. The final return information for these two asset classes is expected to be available later in October. For purposes of projecting future employer rates, we are assuming a 12 percent investment return for fiscal year 2012-13.

The investment return realized during a fiscal year first affects the contribution rate for the fiscal year 2 years later. Specifically, the investment return for 2012-13 will first be reflected in the June 30, 2013 actuarial valuation that will be used to set the 2015-16 employer contribution rates, the 2013-14 investment return will first be reflected in the June 30, 2014 actuarial valuation that will be used to set the 2016-17 employer contribution rates and so forth.

Based on a 12 percent investment return for fiscal year 2012-13 **and the April 17, 2013 CalPERS Board-approved amortization and rate smoothing method change**, and assuming that all other actuarial assumptions will be realized, and that no further changes to assumptions, contributions, benefits, or funding will occur between now and the beginning of the fiscal year 2015-16, the effect on the 2015-16 Employer Rate is as follows: (Note that this estimated rate does not reflect additional assumption changes as discussed in the "Subsequent Events" section.)

Estimated 2015-16 Employer Rate

22.2%

Estimated Increase in Employer Rate between 2014-15 and 2015-16

2.1%

As part of this report, a sensitivity analysis was performed to determine the effects of various investment returns during fiscal years 2013-14, 2014-15 and 2015-16 on the 2016-17, 2017-18 and 2018-19 employer rates. Once again, the projected rate increases assume that all other actuarial assumptions will be realized and that no further changes to assumptions, contributions, benefits, or funding will occur.

Five different investment return scenarios were selected.

- The first scenario is what one would expect if the markets were to give us a 5th percentile return from July 1, 2013 through June 30, 2016. The 5th percentile return corresponds to a -4.1 percent return for each of the 2013-14, 2014-15 and 2015-16 fiscal years.
- The second scenario is what one would expect if the markets were to give us a 25th percentile return from July 1, 2013 through June 30, 2016. The 25th percentile return corresponds to a 2.6 percent return for each of the 2013-14, 2014-15 and 2015-16 fiscal years.
- The third scenario assumed the return for 2013-14, 2014-15, 2015-16 would be our assumed 7.5 percent investment return which represents about a 49th percentile event.
- The fourth scenario is what one would expect if the markets were to give us a 75th percentile return from July 1, 2013 through June 30, 2016. The 75th percentile return corresponds to a 11.9 percent return for each of the 2013-14, 2014-15 and 2015-16 fiscal years.
- Finally, the last scenario is what one would expect if the markets were to give us a 95th percentile return from July 1, 2013 through June 30, 2016. The 95th percentile return corresponds to a 18.5 percent return for each of the 2013-14, 2014-15 and 2015-16 fiscal years.

The table below shows the estimated projected contribution rates and the estimated increases for your plan under the five different scenarios.

2013-16 Investment Return Scenario	Estimated Employer Rate			Estimated Change in Employer Rate between 2015-16 and 2018-19
	2016-17	2017-18	2018-19	
-4.1% (5th percentile)	25.8%	30.7%	36.7%	14.5%
2.6% (25th percentile)	24.9%	28.3%	32.2%	10.0%
7.5%	24.3%	26.4%	28.6%	6.4%
11.9%(75th percentile)	23.8%	24.7%	25.1%	2.9%
18.5%(95th percentile)	22.9%	22.1%	19.6%	-2.6%

Analysis of Discount Rate Sensitivity

The following analysis looks at the 2014-15 employer contribution rates under two different discount rate scenarios. Shown below are the employer contribution rates assuming discount rates that are 1 percent lower and 1 percent higher than the current valuation discount rate. This analysis gives an indication of the potential required employer contribution rates if the PERF were to realize investment returns of 6.50 percent or 8.50 percent over the long-term.

This type of analysis gives the reader a sense of the long-term risk to the employer contribution rates.

As of June 30, 2012	2014-15 Employer Contribution Rate		
	6.50% Discount Rate (-1%)	7.50% Discount Rate (assumed rate)	8.50% Discount Rate (+1%)
Employer Normal Cost	14.717%	10.379%	7.086%
Unfunded Rate Payment	20.180%	9.711%	(0.744%)
Total	34.897%	20.090%	6.342%

Hypothetical Termination Liability

Below is an estimate of the financial position of your plan if you had terminated your contract with CalPERS as of June 30, 2012 using the discount rates shown below. Your plan liability on a termination basis is calculated differently compared to the plan's ongoing funding liability. In December 2012, the CalPERS Board adopted a more conservative investment policy and asset allocation strategy for the Terminated Agency Pool. Since the Terminated Agency Pool has limited funding sources, expected benefit payments are secured by risk-free assets. With this change, CalPERS increased benefit security for members while limiting its funding risk. This asset allocation has a lower expected rate of return than the PERF. Consequently, the lower discount rate for the Terminated Agency pool results in higher liabilities for terminated plans.

In order to terminate your plan, you must first contact our Retirement Services Contract Unit to initiate a Resolution of Intent to Terminate. The completed Resolution will allow your plan actuary to give you a preliminary termination valuation with a more up-to-date estimate of your plan liabilities. CalPERS advises you to consult with your plan actuary before beginning this process.

Valuation Date	Hypothetical Termination Liability ¹	Market Value of Assets (MVA)	Unfunded Termination Liability	Termination Funded Ratio	Termination Liability Discount Rate ²
06/30/11	\$ 808,560,358	\$ 450,853,223	\$ 357,707,135	55.8%	4.82%
06/30/12	0	431,187,495	575,931,065	42.8%	2.98%

¹ The hypothetical liabilities calculated above include a 7 percent mortality contingency load in accordance with Board policy. Other actuarial assumptions, such as wage and inflation assumptions, can be found in appendix A.

² The discount rate assumption used for termination valuations is a weighted average of the 10 and 30-year US Treasury yields in effect on the valuation date that equal the duration of the pension liabilities. For purposes of this hypothetical termination liability estimate, the discount rate used, 2.98 percent, is the yield on the 30-year US Treasury Separate Trading of Registered Interest and Principal of Securities (STRIPS) as of June 30, 2012. In last year's report the May 2012 rate of 2.87 percent was inadvertently shown rather than the June rate of 2.98 percent. Please note, as of June 30, 2013 the 30-year STRIPS yield was 3.72 percent.

Exhibit O



California Public Employees' Retirement System
 Actuarial Office
 P.O. Box 942701
 Sacramento, CA 94229-2701
 TTY: (916) 795-3240
 (888) 225-7377 phone • (916) 795-2744 fax
www.calpers.ca.gov

October 2013

**SAFETY PLAN OF THE CITY OF STOCKTON (CalPERS ID: 6373973665)
 Annual Valuation Report as of June 30, 2012**

Dear Employer,

As an attachment to this letter, you will find a copy of the June 30, 2012 actuarial valuation report of your pension plan. Your 2012 actuarial valuation report contains important actuarial information about your pension plan at CalPERS. Your CalPERS staff actuary, whose signature appears in the Actuarial Certification Section on page 1, is available to discuss the report with you after October 31, 2013.

Future Contribution Rates

The exhibit below displays the Minimum Employer Contribution Rate for fiscal year 2014-15 and a projected contribution rate for 2015-16, before any cost sharing. The projected rate for 2015-16 is based on the most recent information available, including an estimate of the investment return for fiscal year 2012-13, namely 12 percent, and the impact of the new smoothing methods adopted by the CalPERS Board in April 2013 that will impact employer rates for the first time in fiscal year 2015-16. For a projection of employer rates beyond 2015-16, please refer to the "Analysis of Future Investment Return Scenarios" in the "Risk Analysis" section, which includes rate projections through 2019-20 under a variety of investment return scenarios. Please disregard any projections that we may have provided you in the past.

Fiscal Year	Employer Contribution Rate
2014-15	41.385%
2015-16	44.5% (projected)

Member contributions other than cost sharing, (whether paid by the employer or the employee) are in addition to the above rates. **The employer contribution rates in this report do not reflect any cost sharing arrangement you may have with your employees.**

The estimate for 2015-16 also assumes that there are no future contract amendments and no liability gains or losses (such as larger than expected pay increases, more retirements than expected, etc.). This is a very important assumption because these gains and losses do occur and can have a significant impact on your contribution rate. Even for the largest plans, such gains and losses often cause a change in the employer's contribution rate of one or two percent of payroll and may be even larger in some less common instances. These gains and losses cannot be predicted in advance so the projected employer contribution rates are just estimates. Your actual rate for 2015-16 will be provided in next year's report.

CTY022682

SAFETY PLAN OF THE CITY OF STOCKTON
(CalPERS ID: 6373973665)
Annual Valuation Report as of June 30, 2012
Page 2

Changes since the Prior Year's Valuation

On January 1, 2013, the Public Employees' Pension Reform Act of 2013 (PEPRA) took effect. The impact of most of the PEPRA changes will first show up in the rates and the benefit provision listings of the June 30, 2013 valuation for the 2015-16 rates. For more information on PEPRA, please refer to the CalPERS website.

On April 17, 2013, the CalPERS Board of Administration approved a recommendation to change the CalPERS amortization and rate smoothing policies. Beginning with the June 30, 2013 valuations that set the 2015-16 rates, CalPERS will no longer use an actuarial value of assets and will employ an amortization and smoothing policy that will pay for all gains and losses over a fixed 30-year period with the increases or decreases in the rate spread directly over a 5-year period. The impact of this new actuarial methodology is reflected in the "Analysis of Future Investment Return Scenarios" subsection of the "Risk Analysis" section of your report.

A review of the preferred asset allocation mix for CalPERS investment portfolio will be performed in late 2013, which could influence future discount rates. In addition, CalPERS will review economic and demographic assumptions, including mortality rate improvements that are likely to increase employer contribution rates in future years. The "Analysis of Future Investment Return Scenarios" subsection does **not** reflect the impact of assumption changes that we expect will also impact future rates.

Besides the above noted changes, there may also be changes specific to your plan such as contract amendments and funding changes.

Further descriptions of general changes are included in the "Highlights and Executive Summary" section and in Appendix A, "Actuarial Methods and Assumptions." The effect of the changes on your rate is included in the "Reconciliation of Required Employer Contributions."

We understand that you might have a number of questions about these results. While we are very interested in discussing these results with your agency, in the interest of allowing us to give every public agency their results, we ask that you wait until after October 31 to contact us with actuarial questions. If you have other questions, you may call the Customer Contact Center at (888)-CalPERS or (**888-225-7377**).

Sincerely,



ALAN MILLIGAN
Chief Actuary

CTY022683



ACTUARIAL VALUATION

as of June 30, 2012

**for the
SAFETY PLAN
of the
CITY OF STOCKTON**

(CalPERS ID: 6373973665)

**REQUIRED CONTRIBUTIONS
FOR FISCAL YEAR
July 1, 2014 – June 30, 2015**

CTY022684

TABLE OF CONTENTS

ACTUARIAL CERTIFICATION	1
HIGHLIGHTS AND EXECUTIVE SUMMARY	
Introduction	5
Purpose of the Report	5
Required Employer Contribution	6
Plan's Funded Status	6
Cost	7
Changes Since the Prior Year's Valuation	8
Subsequent Events	8
ASSETS	
Reconciliation of the Market Value of Assets	11
Development of the Actuarial Value of Assets	11
Asset Allocation	12
CalPERS History of Investment Returns	13
LIABILITIES AND RATES	
Development of Accrued and Unfunded Liabilities	17
(Gain) / Loss Analysis 06/30/11 - 06/30/12	18
Schedule of Amortization Bases	19
Reconciliation of Required Employer Contributions	20
Employer Contribution Rate History	21
Funding History	21
RISK ANALYSIS	
Volatility Ratios	25
Projected Rates	26
Analysis of Future Investment Return Scenarios	26
Analysis of Discount Rate Sensitivity	27
Hypothetical Termination Liability	28
GASB STATEMENT NO. 27	
Information for compliance with GASB Statement No. 27	31
PLAN'S MAJOR BENEFIT PROVISIONS	
Plan's Major Benefit Options	35
APPENDIX A – ACTUARIAL METHODS AND ASSUMPTIONS	A1 - A17
APPENDIX B – PRINCIPAL PLAN PROVISIONS	B1 - B8
APPENDIX C – PARTICIPANT DATA	
Summary of Valuation Data	C-1
Active Members	C-2
Transferred and Terminated Members	C-3
Retired Members and Beneficiaries	C-4
APPENDIX D – GLOSSARY OF ACTUARIAL TERMS	D1 – D3

ACTUARIAL CERTIFICATION

To the best of our knowledge, this report is complete and accurate and contains sufficient information to disclose, fully and fairly, the funded condition of the SAFETY PLAN OF THE CITY OF STOCKTON. This valuation is based on the member and financial data as of June 30, 2012 provided by the various CalPERS databases and the benefits under this plan with CalPERS as of the date this report was produced. It is our opinion that the valuation has been performed in accordance with generally accepted actuarial principles, in accordance with standards of practice prescribed by the Actuarial Standards Board, and that the assumptions and methods are internally consistent and reasonable for this plan, as prescribed by the CalPERS Board of Administration according to provisions set forth in the California Public Employees' Retirement Law.

The undersigned is an actuary for CalPERS, who is a member of the American Academy of Actuaries and the Society of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.



KELLY STURM, ASA, MAAA
Senior Pension Actuary, CalPERS

HIGHLIGHTS AND EXECUTIVE SUMMARY

- **INTRODUCTION**
- **PURPOSE OF THE REPORT**
- **REQUIRED EMPLOYER CONTRIBUTION**
- **PLAN'S FUNDED STATUS**
- **COST**
- **CHANGES SINCE THE PRIOR YEAR'S VALUATION**
- **SUBSEQUENT EVENTS**

CTY022687

Introduction

This report presents the results of the June 30, 2012 actuarial valuation of the SAFETY PLAN OF THE CITY OF STOCKTON of the California Public Employees' Retirement System (CalPERS). This actuarial valuation sets the fiscal year 2014-15 required employer contribution rates.

On January 1, 2013, the Public Employees' Pension Reform Act of 2013 (PEPRA) took effect. The impact of most of the PEPRA changes will first show up in the rates and the benefit provision listings of the June 30, 2013 valuation, which sets the 2015-16 contribution rates. For more information on PEPRA, please refer to the CalPERS website.

On April 17, 2013, the CalPERS Board of Administration approved a recommendation to change the CalPERS amortization and smoothing policies. Prior to this change, CalPERS employed an amortization and smoothing policy, which spread investment returns over a 15-year period while experience gains and losses were amortized over a rolling 30-year period. Effective with the June 30, 2013 valuations, CalPERS will no longer use an actuarial value of assets and will employ an amortization and smoothing policy that will spread rate increases or decreases over a 5-year period, and will amortize all experience gains and losses over a fixed 30-year period.

The new amortization and smoothing policy will be used for the first time in the June 30, 2013 actuarial valuations. These valuations will be performed in the fall of 2014 and will set employer contribution rates for the fiscal year 2015-16.

As stewards of the System, CalPERS must ensure that the pension fund is sustainable over multiple generations. Our strategic plan calls for us to take an integrated view of our assets and liabilities and to take steps designed to achieve a fully funded plan. A review of the preferred asset allocation mix for CalPERS investment portfolio will be performed in late 2013, which could influence future discount rates. In addition, CalPERS will review economic and demographic assumptions, including mortality rate improvements that are likely to increase employer contribution rates in future years.

Purpose of the Report

The actuarial valuation was prepared by the CalPERS Actuarial Office using data as of June 30, 2012. The purpose of the report is to:

- Set forth the actuarial assets and accrued liabilities of this plan as of June 30, 2012;
- Determine the required employer contribution rate for the fiscal year July 1, 2014 through June 30, 2015;
- Provide actuarial information as of June 30, 2012 to the CalPERS Board of Administration and other interested parties, and to;
- Provide pension information as of June 30, 2012 to be used in financial reports subject to Governmental Accounting Standards Board (GASB) Statement Number 27 for a Single Employer Defined Benefit Pension Plan.

California Actuarial Advisory Panel Recommendations

This report includes all the basic disclosure elements as described in the *Model Disclosure Elements for Actuarial Valuation Reports* recommended in 2011 by the California Actuarial Advisory Panel (CAAP), with the exception of including the original base amounts of the various components of the unfunded liability in the Schedule of Amortization Bases shown on page 19.

Additionally, this report includes the following "Enhanced Risk Disclosures" also recommended by the CAAP in the Model Disclosure Elements document:

- A "Deterministic Stress Test," projecting future results under different investment income scenarios
- A "Sensitivity Analysis," showing the impact on current valuation results using a 1% plus or minus change in the discount rate.

The use of this report for any other purposes may be inappropriate. In particular, this report does not contain information applicable to alternative benefit costs. The employer should contact their actuary before disseminating any portion of this report for any reason that is not explicitly described above.

Required Employer Contribution

	Fiscal Year 2013-14	Fiscal Year 2014-15
Actuarially Determined Employer Contributions		
1. Contribution in Projected Dollars		
a) Total Normal Cost	\$ 16,760,403	\$ 14,336,846
b) Employee Contribution ¹	5,011,749	4,401,856
c) Employer Normal Cost [(1a) - (1b)]	11,748,654	9,934,990
d) Unfunded Contribution	7,521,294	10,306,453
e) Required Employer Contribution [(1c) + (1d)]	\$ 19,269,948	\$ 20,241,443
Projected Annual Payroll for Contribution Year	\$ 55,686,101	\$ 48,909,515
2. Contribution as a Percentage of Payroll		
a) Total Normal Cost	30.098%	29.313%
b) Employee Contribution ¹	9.000%	9.000%
c) Employer Normal Cost [(2a) - (2b)]	21.098%	20.313%
d) Unfunded Rate	13.507%	21.072%
e) Required Employer Rate [(2c) + (2d)]	34.605%	41.385%
Minimum Employer Contribution Rate²	34.605%	41.385%
Annual Lump Sum Prepayment Option ³	\$ 18,585,588	\$ 19,522,581

¹This is the percentage specified in the Public Employees Retirement Law, net of any reduction from the use of a modified formula or other factors. Employee cost sharing is not shown in this report.

²The Minimum Employer Contribution Rate under PEPRA is the greater of the required employer rate or the employer normal cost.

³Payment must be received by CalPERS before the first payroll reported to CalPERS of the new fiscal year and after June 30. If there is contractual cost sharing or other change, this amount will change.

Plan's Funded Status

	June 30, 2011	June 30, 2012
1. Present Value of Projected Benefits	\$ 946,603,971	\$ 950,265,629
2. Entry Age Normal Accrued Liability	802,778,310	830,040,184
3. Actuarial Value of Assets (AVA)	685,732,778	685,764,728
4. Unfunded Liability (AVA Basis) [(2) - (3)]	\$ 117,045,532	\$ 144,275,456
5. Funded Ratio (AVA Basis) [(3) / (2)]	85.4%	82.6%
6. Market Value of Assets (MVA)	\$ 598,289,135	\$ 571,679,198
7. Unfunded Liability (MVA Basis) [(2) - (6)]	\$ 204,489,175	\$ 258,360,986
8. Funded Ratio (MVA Basis) [(6) / (2)]	74.5%	68.9%
Superfunded Status	No	No

Cost

Actuarial Cost Estimates in General

What will this pension plan cost? Unfortunately, there is no simple answer. There are two major reasons for the complexity of the answer. First, actuarial calculations, including the ones in this report, are based on a number of assumptions about the future. These assumptions can be divided into two categories.

- Demographic assumptions include the percentage of employees that will terminate, die, become disabled, and retire in each future year.
- Economic assumptions include future salary increases for each active employee, and the assumption with the greatest impact, future asset returns at CalPERS for each year into the future until the last dollar is paid to current members of your plan.

While CalPERS has set these assumptions to reflect our best estimate of the real future of your plan, it must be understood that these assumptions are very long-term predictors and will surely not be realized in any one year. For example, while the asset earnings at CalPERS have averaged more than the assumed return of 7.5 percent for the past twenty year period ending June 30, 2013, returns for each fiscal year ranged from negative -24 percent to +21.7 percent.

Second, the very nature of actuarial funding produces the answer to the question of plan cost as the sum of two separate pieces.

- The Normal Cost (i.e., the future annual premiums in the absence of surplus or unfunded liability) expressed as a percentage of total active payroll.
- The Past Service Cost or Accrued Liability (i.e., the current value of the benefit for all credited past service of current members) which is expressed as a lump sum dollar amount.

The cost is the sum of a percent of future pay and a lump sum dollar amount (the sum of an apple and an orange if you will). To communicate the total cost, either the Normal Cost (i.e., future percent of payroll) must be converted to a lump sum dollar amount (in which case the total cost is the present value of benefits), or the Past Service Cost (i.e., the lump sum) must be converted to a percent of payroll (in which case the total cost is expressed as the employer's rate, part of which is permanent and part temporary). Converting the Past Service Cost lump sum to a percent of payroll requires a specific amortization period, and the employer rate will vary depending on the amortization period chosen.

Changes since the Prior Year's Valuation

Benefits

The standard actuarial practice at CalPERS is to recognize mandated legislative benefit changes in the first annual valuation following the effective date of the legislation. Voluntary benefit changes by plan amendment are generally included in the first valuation that is prepared after the amendment becomes effective even if the valuation date is prior to the effective date of the amendment.

This valuation generally reflects plan changes by amendments effective before the date of the report. Please refer to Appendix B for a summary of the plan provisions used in this valuation. The effect of any mandated benefit changes or plan amendments on the unfunded liability is shown in the "(Gain)/Loss Analysis" and the effect on your employer contribution rate is shown in the "Reconciliation of Required Employer Contributions." It should be noted that no change in liability or rate is shown for any plan changes, which were already included in the prior year's valuation.

Public Employees' Pension Reform Act of 2013 (PEPRA)

On January 1, 2013, the Public Employees' Pension Reform Act of 2013 (PEPRA) took effect, requiring that a public employer's contribution to a defined benefit plan, in combination with employee contributions to that defined benefit plan, shall not be less than the normal cost rate. Beginning July 1, 2013, this means that some plans with surplus will be paying more than they otherwise would. For more information on PEPRA, please refer to the CalPERS website.

Subsequent Events

Actuarial Methods and Assumptions

On April 17, 2013, the CalPERS Board of Administration approved a recommendation to change the CalPERS amortization and smoothing policies. Beginning with the June 30, 2013 valuations that set the 2015-16 rates, CalPERS will no longer use an actuarial value of assets and will employ an amortization and rate smoothing policy that will pay for all gains and losses over a fixed 30-year period with the increases or decreases in the rate spread directly over a 5-year period. The impact of this new actuarial methodology is reflected in the "Expected Rate Increases" subsection of the "Risk analysis" section of your report.

Not reflected in the "Expected Rate Increases" subsection of the "Risk analysis" section is the impact of assumption changes that we expect will also, impact future rates. A review of the preferred asset allocation mix for CalPERS investment portfolio will be performed in late 2013, which could influence future discount rates. In addition, CalPERS will review economic and demographic assumptions, including mortality rate improvements that are likely to increase employer contribution rates in future years.

Bankruptcy

On June 28, 2012, the City of Stockton filed a petition for Chapter 9 bankruptcy protection with the United States Bankruptcy Court. That petition was approved by the Judge on April 1, 2013. The bankruptcy did not have an impact on the valuation or the determination of the required contributions for the 2014-15 fiscal year.

ASSETS

- **RECONCILIATION OF THE MARKET VALUE OF ASSETS**
- **DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS**
- **ASSET ALLOCATION**
- **CALPERS HISTORY OF INVESTMENT RETURNS**

CTY022692

Reconciliation of the Market Value of Assets

1. Market Value of Assets as of 6/30/11 Including Receivables	\$	598,289,135
2. Receivables for Service Buybacks as of 6/30/11		598,451
3. Market Value of Assets as of 6/30/11		597,690,684
4. Employer Contributions		13,384,977
5. Employee Contributions		4,392,327
6. Benefit Payments to Retirees and Beneficiaries		(42,339,890)
7. Refunds		(69,339)
8. Lump Sum Payments		0
9. Transfers and Miscellaneous Adjustments		(1,283,259)
10. Investment Return		(1,347,850)
11. Market Value of Assets as of 6/30/12	\$	570,427,650
12. Receivables for Service Buybacks as of 6/30/12		1,251,548
13. Market Value of Assets as of 6/30/12 Including Receivables	\$	571,679,198

Development of the Actuarial Value of Assets

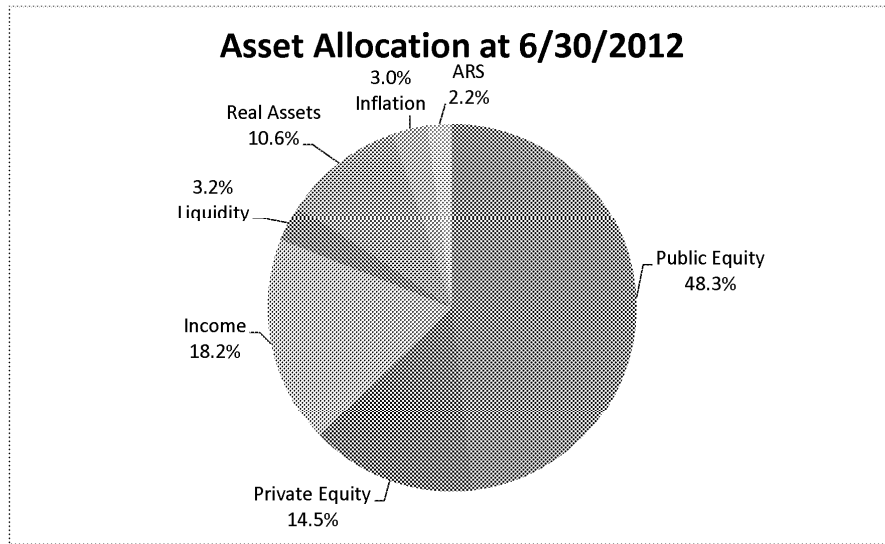
1. Actuarial Value of Assets as of 6/30/11 Used For Rate Setting Purposes	\$	685,732,778
2. Receivables for Service Buybacks as of 6/30/11		598,451
3. Actuarial Value of Assets as of 6/30/11		685,134,327
4. Employer Contributions		13,384,977
5. Employee Contributions		4,392,327
6. Benefit Payments to Retirees and Beneficiaries		(42,339,890)
7. Refunds		(69,339)
8. Lump Sum Payments		0
9. Transfers and Miscellaneous Adjustments		(1,283,259)
10. Expected Investment Income at 7.5%		50,430,824
11. Expected Actuarial Value of Assets	\$	709,649,967
12. Market Value of Assets as of 6/30/12	\$	570,427,650
13. Preliminary Actuarial Value of Assets $[(11) + ((12) - (11)) / 15]$		700,368,479
14. Maximum Actuarial Value of Assets (120% of (12))		684,513,180
15. Minimum Actuarial Value of Assets (80% of (12))		456,342,120
16. Actuarial Value of Assets {Lesser of [(14), Greater of ((13), (15))]}]		684,513,180
17. Actuarial Value to Market Value Ratio		120.0%
18. Receivables for Service Buybacks as of 6/30/12		1,251,548
19. Actuarial Value of Assets as of 6/30/12 Used for Rate Setting Purposes	\$	685,764,728

Asset Allocation

CalPERS adheres to an Asset Allocation Strategy which establishes asset class allocation policy targets and ranges, and manages those asset class allocations within their policy ranges. CalPERS recognizes that over 90 percent of the variation in investment returns of a well-diversified pool of assets can typically be attributed to asset allocation decisions. In December 2010 the Board approved the policy asset class targets and ranges listed below. These policy asset allocation targets and ranges are expressed as a percentage of total assets and were expected to be implemented over a period of one to two years beginning July 1, 2011 and reviewed again in December 2013.

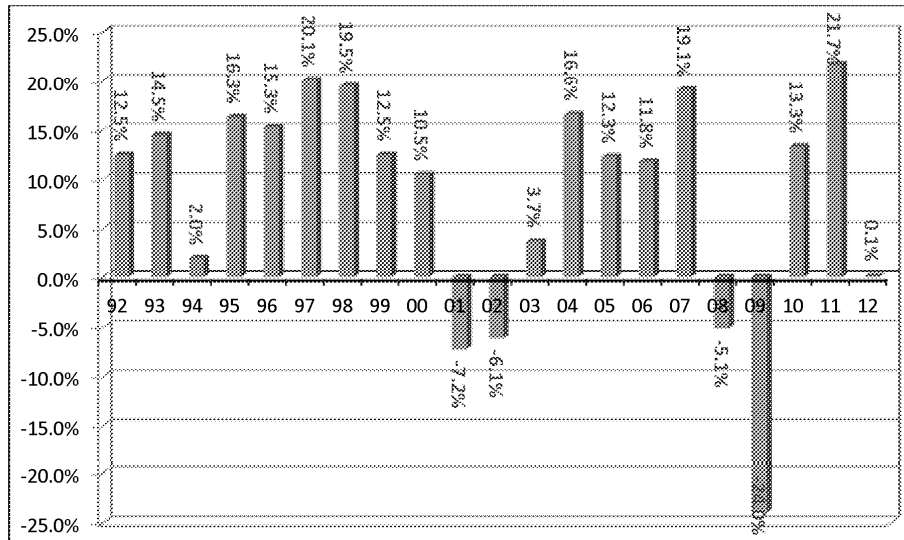
The asset allocation and market value of assets shown below reflect the values of the Public Employees Retirement Fund (PERF) in its entirety as of June 30, 2012. The assets for CITY OF STOCKTON SAFETY PLAN are part of the Public Employees Retirement Fund (PERF) and are invested accordingly.

(A) Asset Class	(B) Market Value (\$ Billion)	(C) Policy Target Allocation	(D) Policy Target Range
1) Public Equity	113.0	50.0%	+/- 7%
2) Private Equity	33.9	14.0%	+/- 4%
3) Fixed Income	42.6	17.0%	+/- 5%
4) Cash Equivalents	7.5	4.0%	+/- 5%
5) Real Assets	24.8	11.0%	+/- 3%
6) Inflation Assets	7.0	4.0%	+/- 3%
7) Absolute Return Strategy (ARS)	5.1	0.0%	N/A
Total Fund	\$233.9	100.0%	N/A



CalPERS History of Investment Returns

The following is a chart with historical annual returns of the Public Employees Retirement Fund for each fiscal year ending on June 30. Beginning in 2002, the figures are reported as gross of fees.



LIABILITIES AND RATES

- **DEVELOPMENT OF ACCRUED AND UNFUNDED LIABILITIES**
- **(GAIN) / LOSS ANALYSIS 06/30/11 - 06/30/12**
- **SCHEDULE OF AMORTIZATION BASES**
- **RECONCILIATION OF REQUIRED EMPLOYER CONTRIBUTIONS**
- **EMPLOYER CONTRIBUTION RATE HISTORY**
- **FUNDING HISTORY**

CTY022696

Development of Accrued and Unfunded Liabilities

1.	Present Value of Projected Benefits		
	a) Active Members	\$	334,080,503
	b) Transferred Members		17,477,674
	c) Terminated Members		6,534,659
	d) Members and Beneficiaries Receiving Payments		592,172,793
	e) Total	\$	<u>950,265,629</u>
2.	Present Value of Future Employer Normal Costs	\$	82,997,783
3.	Present Value of Future Employee Contributions	\$	37,227,662
4.	Entry Age Normal Accrued Liability		
	a) Active Members [(1a) - (2) - (3)]	\$	213,855,058
	b) Transferred Members (1b)		17,477,674
	c) Terminated Members (1c)		6,534,659
	d) Members and Beneficiaries Receiving Payments (1d)		592,172,793
	e) Total	\$	<u>830,040,184</u>
5.	Actuarial Value of Assets (AVA)	\$	685,764,728
6.	Unfunded Accrued Liability (AVA Basis) [(4e) - (5)]	\$	144,275,456
7.	Funded Ratio (AVA Basis) [(5) / (4e)]		82.6%
8.	Market Value of Assets (MVA)	\$	571,679,198
9.	Unfunded Liability (MVA Basis) [(4e) - (8)]	\$	258,360,986
10.	Funded Ratio (MVA Basis) [(8) / (4e)]		68.9%

(Gain) /Loss Analysis 6/30/11 – 6/30/12

To calculate the cost requirements of the plan, assumptions are made about future events that affect the amount and timing of benefits to be paid and assets to be accumulated. Each year actual experience is compared to the expected experience based on the actuarial assumptions. This results in actuarial gains or losses, as shown below.

A Total (Gain)/Loss for the Year	
1. Unfunded Accrued Liability (UAL) as of 6/30/11	\$ 117,045,532
2. Expected Payment on the UAL during 2011/2012	4,199,684
3. Interest through 6/30/12 $[(.075 \times (A1) - ((1.075)^{1/2} - 1) \times (A2)]$	8,623,774
4. Expected UAL before all other changes $[(A1) - (A2) + (A3)]$	121,469,622
5. Change due to plan changes	0
6. Change due to assumption change	0
7. Expected UAL after all other changes $[(A4) + (A5) + (A6)]$	121,469,622
8. Actual UAL as of 6/30/12	144,275,456
9. Total (Gain)/Loss for 2011/2012 $[(A8) - (A7)]$	\$ 22,805,834
B Contribution (Gain)/Loss for the Year	
1. Expected Contribution (Employer and Employee)	\$ 19,997,971
2. Interest on Expected Contributions	736,367
3. Actual Contributions	17,777,304
4. Interest on Actual Contributions	654,597
5. Expected Contributions with Interest $[(B1) + (B2)]$	20,734,338
6. Actual Contributions with Interest $[(B3) + (B4)]$	18,431,901
7. Contribution (Gain)/Loss $[(B5) - (B6)]$	\$ 2,302,437
C Asset (Gain)/Loss for the Year	
1. Actuarial Value of Assets as of 6/30/11 Including Receivables	\$ 685,732,778
2. Receivables as of 6/30/11	598,451
3. Actuarial Value of Assets as of 6/30/11	685,134,327
4. Contributions Received	17,777,304
5. Benefits and Refunds Paid	(42,409,229)
6. Transfers and miscellaneous adjustments	(1,283,259)
7. Expected Int. $[(.075 \times (C3) + ((1.075)^{1/2} - 1) \times ((C4) + (C5) + (C6))]$	50,430,824
8. Expected Assets as of 6/30/12 $[(C3) + (C4) + (C5) + (C6) + (C7)]$	709,649,967
9. Receivables as of 6/30/12	1,251,548
10. Expected Assets Including Receivables	710,901,515
11. Actual Actuarial Value of Assets as of 6/30/12	685,764,728
12. Asset (Gain)/Loss $[(C10) - (C11)]$	\$ 25,136,787
D Liability (Gain)/Loss for the Year	
1. Total (Gain)/Loss (A9)	\$ 22,805,834
2. Contribution (Gain)/Loss (B7)	2,302,437
3. Asset (Gain)/Loss (C12)	25,136,787
4. Liability (Gain)/Loss $[(D1) - (D2) - (D3)]$	\$ (4,633,390)
Development of the (Gain)/Loss Balance as of 6/30/12	
1. (Gain)/Loss Balance as of 6/30/11	\$ 20,156,066
2. Payment Made on the Balance during 2011/2012	1,210,391
3. Interest through 6/30/12 $[(.075 \times (1) - ((1.075)^{1/2} - 1) \times (2)]$	1,467,136
4. Scheduled (Gain)/Loss Balance as of 6/30/12 $[(1) - (2) + (3)]$	\$ 20,412,811
5. (Gain)/Loss for Fiscal Year ending 6/30/12 $[(A9) \text{ above}]$	22,805,834
6. Final (Gain)/Loss Balance as of 6/30/12 $[(4) + (5)]$	\$ 43,218,645

CALPERS ACTUARIAL VALUATION - June 30, 2012
 SAFETY PLAN OF THE CITY OF STOCKTON
 CalPERS ID: 6373973665

Schedule of Amortization Bases

There is a two-year lag between the Valuation Date and the Contribution Fiscal Year.

- The assets, liabilities and funded status of the plan are measured as of the valuation date; June 30, 2012.
- The employer contribution rate determined by the valuation is for the fiscal year beginning two years after the valuation date; fiscal year 2014-15.

This two-year lag is necessary due to the amount of time needed to extract and test the membership and financial data, and due to the need to provide public agencies with their employer contribution rates well in advance of the start of the fiscal year.

The Unfunded Liability is used to determine the employer contribution and therefore must be rolled forward two years from the valuation date to the first day of the fiscal year for which the contribution is being determined. The Unfunded Liability is rolled forward each year by subtracting the expected Payment on the Unfunded Liability for the fiscal year and adjusting for interest. The Expected Payment on the Unfunded Liability for a fiscal year is equal to the Expected Employer Contribution for the fiscal year minus the Expected Normal Cost for the year. The Employer Contribution Rate for the first fiscal year is determined by the actuarial valuation two years ago and the rate for the second year is from the actuarial valuation one year ago. The Normal Cost Rate for each of the two fiscal years is assumed to be the same as the rate determined by the current valuation. All expected dollar amounts are determined by multiplying the rate by the expected payroll for the applicable fiscal year, based on payroll as of the valuation date.

Reason for Base	Date Established	Amortization Period	Expected			Expected			Amounts for Fiscal 2014-15		
			Balance 6/30/12	Expected Payment 2012-13	Balance 6/30/13	Expected Payment 2013-14	Balance 6/30/14	Expected Payment 2014-15	Balance 6/30/14	Expected Payment 2014-15	Percent-age of Payroll
FRESH START	06/30/06	24	\$22,511,026	\$1,459,677	\$22,685,928	\$1,499,414	\$22,832,747	\$1,544,396	3.158%		
ASSUMPTION CHANGE	06/30/09	17	\$16,572,337	\$1,296,704	\$16,470,811	\$1,331,579	\$16,325,511	\$1,371,526	2.804%		
SPECIAL (GAIN)/LOSS	06/30/09	27	\$1,184,119	\$1,909,179	\$31,543,449	\$1,961,378	\$31,875,608	\$2,020,219	4.131%		
SPECIAL (GAIN)/LOSS	06/30/10	28	\$12,604,205	\$758,655	\$12,762,930	\$779,484	\$12,911,964	\$802,869	.642%		
GOLDEN HANDSHAKE	06/30/11	19	\$3,310,801	\$0	\$3,559,111	\$268,732	\$3,547,417	\$276,794	0.566%		
ASSUMPTION CHANGE	06/30/11	19	\$15,035,938	\$(310,328)	\$16,485,388	\$414,912	\$17,291,602	\$1,349,211	2.759%		
SPECIAL (GAIN)/LOSS	06/30/11	29	\$(1,449,577)	\$0	\$(1,558,296)	\$(93,576)	\$(1,578,147)	\$(96,384)	(0.197%)		
PAYMENT (GAIN)/LOSS	06/30/12	30	\$1,287,962	\$(1,051,519)	\$2,474,798	\$(616,603)	\$3,299,715	\$198,149	0.405%		
(GAIN)/LOSS	06/30/12	30	\$43,218,645	\$1,228,748	\$45,186,051	\$1,241,231	\$47,288,069	\$2,839,673	5.806%		
TOTAL			\$144,275,456	\$5,291,116	\$149,610,170	\$6,786,551	\$153,794,486	\$10,306,453	21.072%		

The special (gain)/loss bases were established using the temporary modification recognized in the 2009, 2010 and 2011 annual valuations. Unlike the gain/loss occurring in previous and subsequent years, the gain/loss recognized in the 2009, 2010, and 2011 annual valuations will be amortized over fixed and declining 30-year periods so that these annual gain/losses will be fully paid off in 30 years. The gain/loss recognized in 2012 and later valuations will be combined with the gain/loss from 2008 and earlier valuations.

Reconciliation of Required Employer Contributions

	Percentage of Projected Payroll	Estimated \$ Based on Projected Payroll
1. Contribution for 7/1/13 – 6/30/14	34.605%	\$ 19,269,948
2. Effect of changes since the prior year annual valuation		
a) Effect of unexpected changes in demographics and financial results	6.780%	3,316,533
b) Effect of plan changes	0.000%	0
c) Effect of changes in Assumptions	0.000%	0
d) Effect of change in payroll	-	(2,345,038)
e) Effect of elimination of amortization base	0.000%	0
f) Effect of changes due to Fresh Start	0.000%	0
g) Net effect of the changes above [Sum of (a) through (f)]	6.780%	971,495
3. Contribution for 7/1/14 – 6/30/15 [(1)+(2g)]	41.385%	20,241,443

The contribution actually paid (item 1) may be different if a prepayment of unfunded actuarial liability is made or a plan change became effective after the prior year's actuarial valuation was performed.

Employer Contribution Rate History

The table below provides a recent history of the employer contribution rates for your plan, as determined by the annual actuarial valuation. It does not account for prepayments or benefit changes made in the middle of the year.

Required By Valuation

Fiscal Year	Employer Normal Cost	Unfunded Rate	Total Employer Contribution Rate
2010 - 2011	19.193%	4.078%	23.271%
2011 - 2012	20.255%	8.844%	29.099%
2012 - 2013	20.675%	11.115%	31.790%
2013 - 2014	21.098%	13.507%	34.605%
2014 - 2015	20.313%	21.072%	41.385%

Funding History

The Funding History below shows the recent history of the actuarial accrued liability, the market value of assets, the actuarial value of assets, funded ratios and the annual covered payroll. The Actuarial Value of Assets is used to establish funding requirements and the funded ratio on this basis represents the progress toward fully funding future benefits for current plan participants. The funded ratio based on the Market Value of Assets is an indicator of the short-term solvency of the plan.

Valuation Date	Accrued Liability	Actuarial Value of Assets (AVA)	Market Value of Assets (MVA)	Funded Ratio		Annual Covered Payroll
				AVA	MVA	
06/30/08	\$ 664,028,434	\$ 625,633,414	\$ 630,768,567	94.2%	95.0%	\$ 56,811,031
06/30/09	724,324,197	644,939,577	461,800,556	89.0%	63.8%	58,595,623
06/30/10	758,325,561	662,601,684	509,873,530	87.4%	67.2%	54,798,082
06/30/11	802,778,310	685,732,778	598,289,135	85.4%	74.5%	50,960,671
06/30/12	830,040,184	685,764,728	571,679,198	82.6%	68.9%	44,759,135

RISK ANALYSIS

- **VOLATILITY RATIOS**
- **PROJECTED RATES**
- **ANALYSIS OF FUTURE INVESTMENT RETURN SCENARIOS**
- **ANALYSIS OF DISCOUNT RATE SENSITIVITY**
- **HYPOTHETICAL TERMINATION LIABILITY**

CTY022702

Volatility Ratios

The actuarial calculations supplied in this communication are based on a number of assumptions about very long-term demographic and economic behavior. Unless these assumptions (terminations, deaths, disabilities, retirements, salary growth, and investment return) are exactly realized each year, there will be differences on a year-to-year basis. The year-to-year differences between actual experience and the assumptions are called actuarial gains and losses and serve to lower or raise the employer's rates from one year to the next. Therefore, the rates will inevitably fluctuate, especially due to the ups and downs of investment returns.

Asset Volatility Ratio (AVR)

Plans that have higher asset to payroll ratios produce more volatile employer rates due to investment return. For example, a plan with an asset to payroll ratio of 8 may experience twice the contribution volatility due to investment return volatility, than a plan with an asset to payroll ratio of 4. Below we have shown your asset volatility ratio, a measure of the plan's current rate volatility. It should be noted that this ratio is a measure of the current situation. It increases over time but generally tends to stabilize as the plan matures.

Liability Volatility Ratio

Plans that have higher liability to payroll ratios produce more volatile employer rates due to investment return and changes in liability. For example, a plan with a liability to payroll ratio of 8 is expected to have twice the contribution volatility of a plan with a liability to payroll ratio of 4. The liability volatility ratio is also included in the table below. It should be noted that this ratio indicates a longer-term potential for contribution volatility and the asset volatility ratio, described above, will tend to move closer to this ratio as the plan matures.

Rate Volatility	As of June 30, 2012	
1. Market Value of Assets without Receivables	\$	570,427,650
2. Payroll		44,759,135
3. Asset Volatility Ratio (AVR = 1. / 2.)		12.7
4. Accrued Liability	\$	830,040,184
5. Liability Volatility Ratio (4. / 2.)		18.5

Projected Rates

On April 17, 2013, the CalPERS Board of Administration approved a recommendation to change the CalPERS amortization and smoothing policies. Beginning with the June 30, 2013 valuations that will set the 2015-16 rates, CalPERS will employ an amortization and rate smoothing policy that will pay for all gains and losses over a fixed 30-year period with the increases or decreases in the rate spread directly over a 5-year period. The table below shows projected employer contribution rates (before cost sharing) for the next five Fiscal Years, **assuming CalPERS earns 12% for fiscal year 2012-13 and 7.50 percent every fiscal year thereafter**, and assuming that all other actuarial assumptions will be realized and that no further changes to assumptions, contributions, benefits, or funding will occur between now and the beginning of the fiscal year 2015-16. **Consequently, these projections do not take into account potential rate increases from likely future assumption changes.** Nor do they take into account the positive impact PEPRA is expected to gradually have on the normal cost.

	New Rate	Projected Future Employer Contribution Rates				
	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Contribution Rates:	41.385%	44.5%	47.7%	50.8%	54.0%	57.1%

Analysis of Future Investment Return Scenarios

In July 2013, the investment return for fiscal year 2012-13 was announced to be 12.5 percent. Note that this return is before administrative expenses and also does not reflect final investment return information for real estate and private equities. The final return information for these two asset classes is expected to be available later in October. For purposes of projecting future employer rates, we are assuming a 12 percent investment return for fiscal year 2012-13.

The investment return realized during a fiscal year first affects the contribution rate for the fiscal year 2 years later. Specifically, the investment return for 2012-13 will first be reflected in the June 30, 2013 actuarial valuation that will be used to set the 2015-16 employer contribution rates, the 2013-14 investment return will first be reflected in the June 30, 2014 actuarial valuation that will be used to set the 2016-17 employer contribution rates and so forth.

Based on a 12 percent investment return for fiscal year 2012-13 **and the April 17, 2013 CalPERS Board-approved amortization and rate smoothing method change**, and assuming that all other actuarial assumptions will be realized, and that no further changes to assumptions, contributions, benefits, or funding will occur between now and the beginning of the fiscal year 2015-16, the effect on the 2015-16 Employer Rate is as follows: (Note that this estimated rate does not reflect additional assumption changes as discussed in the "Subsequent Events" section.)

Estimated 2015-16 Employer Rate

44.5%

Estimated Increase in Employer Rate between 2014-15 and 2015-16

3.1%

As part of this report, a sensitivity analysis was performed to determine the effects of various investment returns during fiscal years 2013-14, 2014-15 and 2015-16 on the 2016-17, 2017-18 and 2018-19 employer rates. Once again, the projected rate increases assume that all other actuarial assumptions will be realized and that no further changes to assumptions, contributions, benefits, or funding will occur.

Five different investment return scenarios were selected.

- The first scenario is what one would expect if the markets were to give us a 5th percentile return from July 1, 2013 through June 30, 2016. The 5th percentile return corresponds to a -4.1 percent return for each of the 2013-14, 2014-15 and 2015-16 fiscal years.
- The second scenario is what one would expect if the markets were to give us a 25th percentile return from July 1, 2013 through June 30, 2016. The 25th percentile return corresponds to a 2.6 percent return for each of the 2013-14, 2014-15 and 2015-16 fiscal years.
- The third scenario assumed the return for 2013-14, 2014-15, 2015-16 would be our assumed 7.5 percent investment return which represents about a 49th percentile event.
- The fourth scenario is what one would expect if the markets were to give us a 75th percentile return from July 1, 2013 through June 30, 2016. The 75th percentile return corresponds to a 11.9 percent return for each of the 2013-14, 2014-15 and 2015-16 fiscal years.
- Finally, the last scenario is what one would expect if the markets were to give us a 95th percentile return from July 1, 2013 through June 30, 2016. The 95th percentile return corresponds to a 18.5 percent return for each of the 2013-14, 2014-15 and 2015-16 fiscal years.

The table below shows the estimated projected contribution rates and the estimated increases for your plan under the five different scenarios.

2013-16 Investment Return Scenario	Estimated Employer Rate			Estimated Change in Employer Rate between 2015-16 and 2018-19
	2016-17	2017-18	2018-19	
-4.1% (5th percentile)	49.9%	57.1%	66.2%	21.7%
2.6% (25th percentile)	48.6%	53.6%	59.4%	14.9%
7.5%	47.7%	50.8%	54.0%	9.5%
11.9%(75th percentile)	46.8%	48.3%	48.8%	4.3%
18.5%(95th percentile)	45.6%	44.4%	40.6%	-3.9%

Analysis of Discount Rate Sensitivity

The following analysis looks at the 2014-15 employer contribution rates under two different discount rate scenarios. Shown below are the employer contribution rates assuming discount rates that are 1 percent lower and 1 percent higher than the current valuation discount rate. This analysis gives an indication of the potential required employer contribution rates if the PERF were to realize investment returns of 6.50 percent or 8.50 percent over the long-term.

This type of analysis gives the reader a sense of the long-term risk to the employer contribution rates.

As of June 30, 2012	2014-15 Employer Contribution Rate		
	6.50% Discount Rate (-1%)	7.50% Discount Rate (assumed rate)	8.50% Discount Rate (+1%)
Employer Normal Cost	28.173%	20.313%	14.374%
Unfunded Rate Payment	38.059%	21.072%	5.734%
Total	66.232%	41.385%	20.108%

Hypothetical Termination Liability

Below is an estimate of the financial position of your plan if you had terminated your contract with CalPERS as of June 30, 2012 using the discount rates shown below. Your plan liability on a termination basis is calculated differently compared to the plan's ongoing funding liability. In December 2012, the CalPERS Board adopted a more conservative investment policy and asset allocation strategy for the Terminated Agency Pool. Since the Terminated Agency Pool has limited funding sources, expected benefit payments are secured by risk-free assets. With this change, CalPERS increased benefit security for members while limiting its funding risk. This asset allocation has a lower expected rate of return than the PERF. Consequently, the lower discount rate for the Terminated Agency pool results in higher liabilities for terminated plans.

In order to terminate your plan, you must first contact our Retirement Services Contract Unit to initiate a Resolution of Intent to Terminate. The completed Resolution will allow your plan actuary to give you a preliminary termination valuation with a more up-to-date estimate of your plan liabilities. CalPERS advises you to consult with your plan actuary before beginning this process.

Valuation Date	Hypothetical Termination Liability ¹	Market Value of Assets (MVA)	Unfunded Termination Liability	Termination Funded Ratio	Termination Liability Discount Rate ²
06/30/11	\$ 1,186,712,063	\$ 598,289,135	\$ 588,422,928	50.4%	4.82%
06/30/12	1,614,069,650	571,679,198	1,042,390,452	35.4%	2.98%

¹ The hypothetical liabilities calculated above include a 7 percent mortality contingency load in accordance with Board policy. Other actuarial assumptions, such as wage and inflation assumptions, can be found in appendix A.

² The discount rate assumption used for termination valuations is a weighted average of the 10 and 30-year US Treasury yields in effect on the valuation date that equal the duration of the pension liabilities. For purposes of this hypothetical termination liability estimate, the discount rate used, 2.98 percent, is the yield on the 30-year US Treasury Separate Trading of Registered Interest and Principal of Securities (STRIPS) as of June 30, 2012. In last year's report the May 2012 rate of 2.87 percent was inadvertently shown rather than the June rate of 2.98 percent. Please note, as of June 30, 2013 the 30-year STRIPS yield was 3.72 percent.