EMPLOYEES' RETIREMENT SYSTEM OF THE STATE OF HAWAII

COMPREHENSIVE ANNUAL FINANCIAL REPORT

FOR THE FISCAL YEAR ENDED JUNE 30, 2014

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Prepared by the Staff of the:
Employees' Retirement System of the State of Hawaii
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WESLEY K. MACHIDA, Executive Director
KANOE MARGOL, Deputy Executive Director
VIJOY P. CHATTERGY, Chief Investment Officer

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Employees' Retirement System

of the State of Hawaii

INTRODUCTORY SECTION

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NEIL ABERCROMBIE
GOVERNOR

STATE OF HAWAII
EMPLOYEES' RETIREMENT SYSTEM

December 14, 2015

Board of Trustees
Employees' Retirement System of the State of Hawaii

Dear Board Members:

We present the Comprehensive Annual Financial Report (CAFR) of the Employees' Retirement System for the fiscal year ended June 30, 2014. This report reflects the first year of substantial changes in the accounting and reporting requirements of the ERS and participating employers as issued by the Governmental Accounting Standards Board (GASB) to enhance comparability of financial statements among governments by requiring measurement of certain assets and liabilities at fair value by participating employers using a consistent and more detailed definition of fair value and accepted valuation techniques. This is discussed later in the notes to the financial statement. Responsibility for both the accuracy of the data, as well as the completeness and fairness of the presentation, rests with the management of the ERS. We trust that you and the members of the ERS will find this report useful in understanding your retirement system.

BACKGROUND

The ERS was established by the Legislature in 1925 to administer a retirement, disability, and survivor benefits program for State and county employees including teachers, professors, police officers, firefighters, judiciary employees, judges, and elected officials. The ERS is a qualified defined benefit public pension plan covered under Section 401(a) of the Internal Revenue Code. Hawaii Revised Statutes Chapter 88 and Hawaii Administrative Rules Title 6, Chapters 20 – 29 contain the language governing the pension trust. The ERS covers all eligible full-time and part-time State and county employees in the State of Hawaii. The ERS uses the entry age normal funding method to determine its current and future costs and appropriateness of its funding requirements. Funding for benefit payments comes from employer and member contributions, and investments.

Members of the Pension Trust belong to either the Contributory, Hybrid (a contributory Class), or Noncontributory Class. Contributory and Hybrid Members make employee contributions to the Pension Trust and employers make contributions for employees of all three classes. Since 2006 most new employees of participating employers in the Pension Trust are required to join the Hybrid Class, except for certain employee groups that are required to be members of the Contributory Class. New benefit structures were established in 2011 for new members hired after June 30, 2012.

On March 31, 2014 the ERS' total membership of 129,645 was comprised of 67,206 active members, 43,087 retirees and beneficiaries, 8,105 inactive vested members and 11,247 inactive non-vested members. This compares to 118,398 under historical methodology used in the actuarial valuation that excludes

-inactive non vested members. Participating employers include the State of Hawaii, City and County of Honolulu, and the counties of Hawaii, Maui, and Kauai.

The ERS is also responsible for the custody of the Social Security Contribution Fund for the State of Hawaii. The Social Security contributions withheld from employees are remitted directly to the Internal Revenue Service by the State. As an agency type fund that is custodial in nature, the ERS has limited discretion in the management of this fund.

MAJOR ACCOMPLISHMENTS AND INITIATIVES IN FY 2014

We are pleased to report that the ERS had another good year in the investment markets, where investment returns exceeded 17.8% for the 2014 fiscal year with ERS net assets at $14.2 billion. Over the past ten years, about 20% of the pension benefit payments were funded by investments, and projections estimate that more than 28% of pension benefit payments will come from investments over the next ten years. During the year we obtained resources for managing the ERS investment Office with the hiring of 3 investment officers approved by the 2013 legislature. The additional resources for the ERS Investment Office will help implement the future structure of the ERS investment portfolio approved by the Board of Trustees to meet the challenges of an increasing complexity of financial markets help the ERS improve its long-term funding of the pension liabilities.

During the year, the ERS reviewed our investment program with an emphasis on identifying the types of risk, rewards and to improve understanding about the major macroeconomic risks facing the plan’s investments to improve the long-term funding of the ERS. As a result the Board of Trustees updated the asset allocation plan effective October 1, 2014 that places risk management at the center of asset allocation. While the Board has updated the asset allocation plan for subsequent periods, this report is based on the asset allocation plan that was in effect for FY 2014. Overall, the change in asset allocation is not expected to materially affect the long-term funding of the ERS, however it provides for a better framework to understand and monitor the risks of the investment portfolio.

During the year, the ERS received its current favorable determination letter as a qualified plan received from the Internal Revenue Service that expires on January 31, 2019. This designation benefits members by accumulating retirement benefits on a tax-deferred basis with creditor protection, allows for pre-tax contributions and helps employers attract and retain qualified employees.

In terms of legislation there was no significant legislation that passed to affect the funding, benefits or overall investment performance of the Pension Trust. Related to the System’s investments, Act 35/2014, which was passed by the legislature and approved by the governor during the legislative session, will provide our Board with the authority to make more prudent and timely decisions regarding the ERS’ real estate portfolio.

The ERS expanded the counseling to mid-career members to help them be informed of the ERS benefits program. We will continue to expand our membership information and education programs.

ACCOUNTING SYSTEM AND REPORTS

The accrual basis of accounting is used to record financial transactions. Expenses are recorded when the liability is incurred, and revenues are recorded in the accounting period in which they are earned and become measurable. Interest earned is accrued on a monthly basis. Accounts receivable at year end, in addition to accrued interest receivable, reflect accrued employer charges and investment proceeds due on sales that have not yet settled. Investments are recorded at fair value. Fixed assets are recorded at cost less accumulated depreciation.

The Governmental Accounting Standards Board (GASB) issued two related statements which substantially change the accounting and financial reporting of pensions for ERS and ERS participating employers. GASB Statement No. 67 (GASB 67), *Financial Reporting for Pension Plans,* affects the financial statements of and is effective for this and future fiscal years. Participating employers are required to implement GASB Statement No. 68 (GASB 68), *Accounting and Financial Reporting for Pensions,* for fiscal years beginning after June 15, 2014 (fiscal years 2015 and later).

The *Notes to the Financial Statements (Notes)* contain additional detailed information on the statutory provisions under which the ERS operates. In addition, the Notes include a summary of significant accounting policies, and provide explanatory information to help readers better understand the data contained in the financial statements.

The management of the ERS is responsible for and has implemented systems of internal accounting controls designed to provide reasonable assurances for the safeguarding of assets and the reliability of financial records. We believe that the internal accounting controls currently in place are adequate to meet the purpose for which they were intended. To the best of our knowledge and belief, the enclosed data, including the financial statements, supporting schedules and statistical tables is accurate in all material respects and is reported in a manner that fairly presents the financial position and results of the ERS' operations.

INVESTMENTS

The Board of Trustees diversified the ERS' investment portfolio to secure consistent, positive long-term investment returns while preserving capital. The diversification of investments through a long-term asset allocation strategy is generally regarded as the most important decision made in the investment process. A summary of the ERS' long-term asset allocation strategy for the fiscal year may be found in the Investment Section of this report. The new asset allocation strategy effective on October 1, 2014 is available on the ERS website at ers.ehawaii.gov.

Professional investment managers have been retained to execute the Board's investment strategies and have full discretion within statutory provisions, Board policies and their respective guidelines. The investment managers retained by the Board as of June 30, 2014 are listed in the Investment Section.

Net investment income, including dividends, interest, other investment earnings, and gains/losses on the sale of investments was slightly less than $2.2 billion in FY2014. This resulted in an investment gain of approximately 17.8% for the year, using rate of return methodologies that are generally accepted by the Global Investment Performance Standards (GIPS).

FUNDING AND ACTUARIAL OVERVIEW

In the June 30, 2014 report of the Fund's valuation by our actuaries, Gabriel Roeder Smith & Company, I am proud to note that although our unfunded actuarial accrued liability (UAAL) remains at $8.5 billion based on the previous GASB reporting standards. Based on the new GASB standards effective this fiscal year on a market basis, the Net Pension Liability decreased from $8.9 billion as of June 30, 2013 to $8.0 billion as of

Letter of Transmittal (continued)

June 30, 2014. On a market basis, this represents an improvement in funded position from 58.2% for FY 2013 to 63.9% for FY 2014. The ERS full funding period has reduced from 28 to 26 years. The reduction in funding period means that more than $1 billion will be saved over that time period. This is a direct result of positive investment returns during fiscal year 2014 and the effects of the 2011 pension reforms which became effective on July 1, 2012.

PROFESSIONAL SERVICES

Professional consultants are appointed by the Board of Trustees to perform professional services that are essential to the effective and efficient operation of the ERS. Opinions from KPMG LLP, the auditors for the ERS, and the actuary, Gabriel, Roeder, Smith & Company, are included in this report. Pension Consulting Alliance, Inc. is the ERS' investment consultant, and their report on the ERS' investment program and performance results is also included in this report.

ACKNOWLEDGEMENTS

This report is from the collaborative efforts of the ERS staff and consultants to provide extensive and reliable information as a basis for making management decisions, determining compliance with legal provisions, and for determining responsible stewardship of the assets contributed by the ERS' members and their employers. This report will be provided to the Governor, legislators, State and county departments and other interested parties.

As some of you may be aware, effective on December 27, 2014 I have left my position as the Executive Director of the ERS to become the Director of Finance for the State of Hawaii Department of Budget and Finance. Although it was an extremely difficult decision for me and my family, I take comfort in knowing that our Board of Trustees and ERS staff will continue to do their best for you, the ERS members. While I leave the ERS as Executive Director, as the State's Director of Finance, I am fortunate to return as an ERS Trustee.

In closing, I want to take this opportunity to express our gratitude to the Board of Trustees, ERS Staff, advisors, to the many people who worked so diligently to help our members and, finally, to our members, retirees, and beneficiaries -- it has been a pleasure for me to work for you and I pledge to continue our goal of a sustainable and viable retirement system.

Aloha,

for Kanoe Margol

Wesley K. Machida
Executive Director

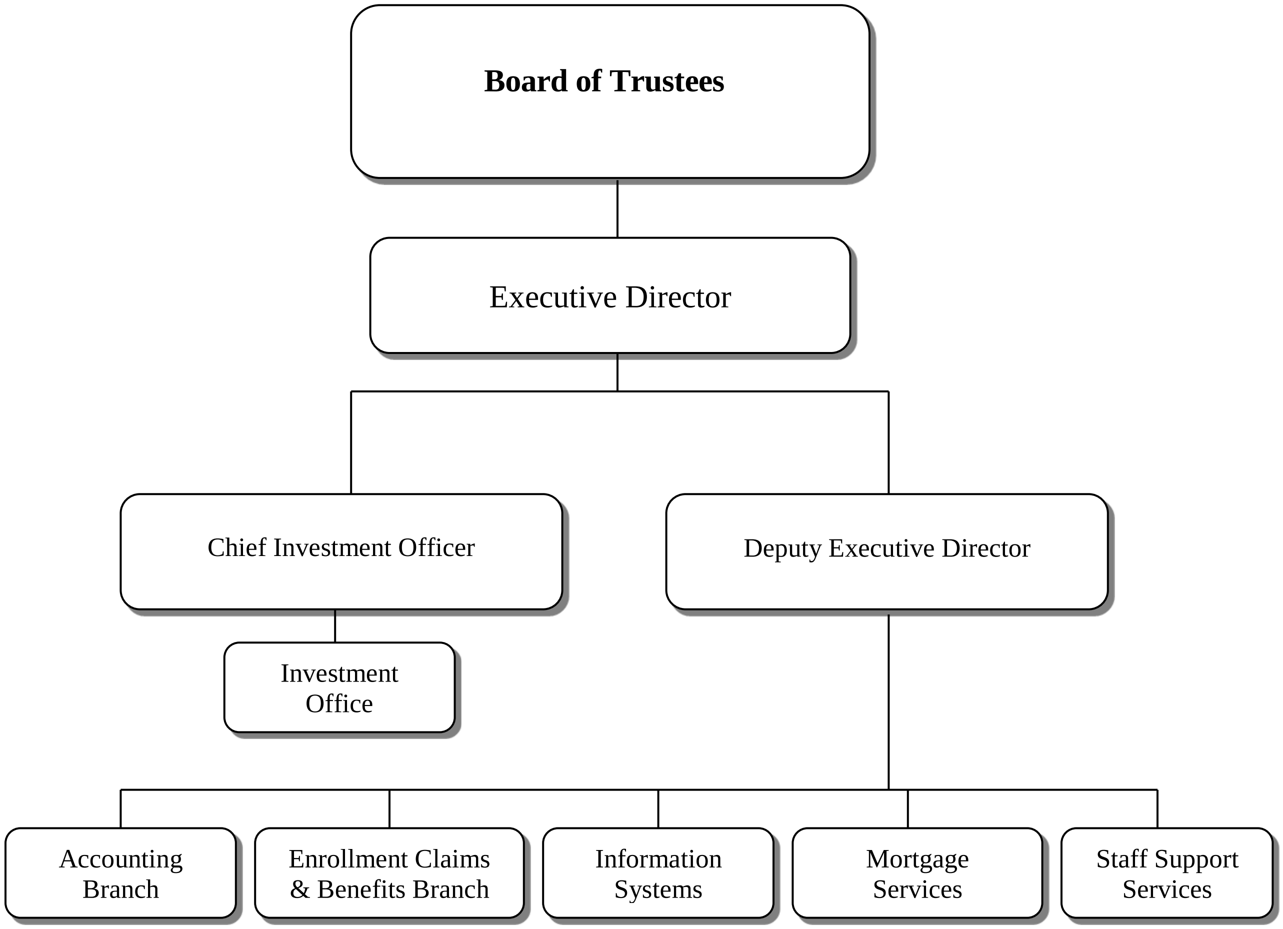
Board of Trustees

The Board of Trustees is the governing body of the Employees' Retirement System of the State of Hawaii, with certain areas of administrative control vested in the State Department of Budget and Finance.

Four of the eight members on the Board are elected by the membership: two general employees, a teacher and a retiree. Three members are citizens of the State, one of whom is an officer of a bank authorized to do business in the State or a person of similar experience, who are not employees and are appointed by the Governor. The State Director of Finance is an ex-officio member by statute.

	Date Current Term Began	**Date Term Ends**
Elected:		
Ms. Pilialoha E. Lee Loy, Chair	January 2, 2010	January 1, 2016
Mr. Patrick Frane	November 19, 2013	January 1, 2018
Ms. Jackie Ferguson-Miyamoto	January 2, 2014	January 1, 2020
Mr. Emmit A. Kane	January 2, 2014	January 1, 2020
Appointed:		
Mr. Vincent Barfield	August 11, 2011	January 1, 2017
Mr. Colbert M. Matsumoto	January 2, 2013	January 1, 2019
Mr. Jerry E. Rauckhorst	January 2, 2014	January 1, 2020
Ex-Officio:		
Mr. Kalbert Young	December 2, 2010	December 26, 2014

Organizational Structure



Executive Director Wesley K. Machida
Deputy Executive Director Kanoe Margol
Chief Investment Officer Vijoy P. Chattergy

Actuary
Gabriel, Roeder, Smith and Company

Auditors
State of Hawaii, Office of the Auditor
KPMG LLP

Legal Advisor
Attorney General of the State of Hawaii

Medical Board
Dr. Patricia L. Chinn, Chair
Dr. Howman Lam, Member
Dr. Gerald J. McKenna, Member

** A list of investment professionals is located in the *Investment Section* of this CAFR.

Plan Summary

The Employees' Retirement System (ERS) of the State of Hawaii was established by the Legislature in 1925 to provide retirement, disability and survivor benefits for State employees, teachers, professors, county employees, police officers, firefighters, judges and elected officials.

The ERS is a qualified defined benefit pension plan under Section 401(a) of the Internal Revenue Code. As such, the ERS is exempt from federal income taxation on its investment earnings. Since January 1, 1988, member contributions have been tax deferred under Section 414(h) of the Internal Revenue Code.

Members are covered by the provisions of the Contributory, Hybrid or Noncontributory retirement class. Except for employees in certain positions who are required to be Contributory members, most new employees from July 1, 2006 are enrolled as Hybrid Members.

Those in the Contributory Class are required to make contributions to the ERS and may also be covered by Social Security. Employees in the following occupational groups are required to be members of the Contributory Class: police officers, firefighters, judges, elected officials, legislative officers, attorney general investigators, narcotics enforcement investigators, and public safety investigations staff investigators. As of March 31, 2014, 6,283 active employees were enrolled in the Contributory Class, or about 9.3% of our active members.

On July 1, 2006, the Hybrid Class became effective pursuant to Act 179/2004. Members in the Hybrid Class (a contributory benefit structure) must also contribute to the ERS and are generally covered by Social Security. The Hybrid Class covers most employees hired from July 1, 2006, as well as certain employees hired before July 1, 2006 who elected to change to Hybrid Membership. The Hybrid membership will continue to increase going forward as most new employees hired from July 1, 2006 will be required to become a Hybrid members. As of March 31, 2014, the Hybrid Class had 43,864 members or about 65.3% of the ERS' active membership.

Noncontributory Members do not make contributions to the ERS and are covered by Social Security. The Noncontributory Class covers employees hired from July 1 , 1984 to June 30, 2006, as well as employees hired before July 1, 1984 who elected to join the Noncontributory Class. As of March 31, 2014, there were 17,061 active employees in the Noncontributory Class, which represents over 25.4% of all active members on this date.

Most employees hired after June 30, 2012 fall under the new tier of benefits, contributions and vesting requirements as a result of legislation passed in 2011.

A summary of the general retirement benefits, including retirement options, for Contributory, Hybrid and Noncontributory members are on the following pages. For more detailed and current information on the contributions, benefits, eligibility and other plan details please visit the ERS website at http://ers.ehawaii.gov/.

Summary of Retirement Benefit Plan Provisions

Membersship for employees hired prior to July 1, 2012 [a]

	Noncontributory	**Contributory**	**Hybrid**
Employee Contributions	No employee contributions	7.8% of salary	6.0% of salary
Normal Retirement			
Eligibility	Age 62 and 10 years credited service; ***or*** Age 55 and 30 years credited service	Age 55 and 5 years credited service	Age 62 and 5 years credited service; ***or*** Age 55 and 30 years credited service
Benefit	1-1/4% of average final compensation* times years of credited service	2% of average final compensation* times years of credited service	2% of average final compensation* times years of credited service, with a split formula for Noncontributory service at 1-1/4%

* Average final compensation (AFC) is an average of the highest salaries during any three years of credited service, excluding any salary paid in lieu of vacation or if ERS membership occurred prior to 1/1/71, AFC may be an average of the highest salaries during any five years of credited service including any salary paid in lieu of vacation.

	Noncontributory	**Contributory**	**Hybrid**
Early Retirement			
Eligibility	Age 55 and 20 years credited service	Any age and 25 years credited service	Age 55 with 20 years credited service
Benefit	Maximum allowance reduced 6% per year under age 62	Maximum allowance reduced 5% per year under age 55 plus 4% per year under age 50	Maximum allowance reduced 5% per year under age 62
Deferred Vesting			
Eligibility	10 years credited service	5 years credited service and contributions left in the ERS	5 years credited service and contributions left in the ERS
Benefit	Accrued maximum allowance payable as early as age 55 or at age 65 with 10 but less than 20 years of credited service	Accrued maximum allowance payable at age 55	Accrued maximum allowance payable as early as age 55 or at age 62 with 5 but less than 20 years of credited service

[a] Per Act 163/2012, SLH, the major changes to membership requirements, contribution amounts, and benefits structures for employees hired after June 30, 2012 are discussed on pages 17-21.

Summary of Retirement Benefit Plan Provisions (continued)

Membersship for employees hired prior to July 1, 2012 (continued) [(a)]

	Noncontributory	**Contributory**	**Hybrid**
Annuity Savings Account			
Interest	Not applicable	4.5% per annum on employee contributions and accrued interest, ***or*** If hired after June 30, 2011, 2.0% per annum on employee contributions and accrued interest	4.5% per annum on employee contributions and accrued interest, ***or*** If hired after June 30, 2011, 2.0% per annum on employee contributions and accrued interest
Refund Eligibility	Not applicable	Contributions may be withdrawn upon retirement or termination of employment; upon refund, all service and any future retirement benefit will be forfeited	Contributions may be withdrawn upon retirement or termination of employment; upon refund, all service and any future retirement benefit will be forfeited
Refund Benefit			
- Terminates with less than 5 years credited service	Not applicable	Return of member's contributions and accrued interest	Return of member's contributions and accrued interest
- Terminates with 5 or more years of credited service	Not applicable	Return of member's contributions and accrued interest	Return of member's Hybrid contributions and accrued interest, times 150%; plus any non-Hybrid contributions and accrued interest
Ordinary Disability			
Eligibility	10 years credited service	10 years credited service	10 years credited service
Benefit	1-1/4% of AFC times years of credited service, unreduced for age (Minimum is 12.5% of AFC)	1-3/4% of AFC times years of credited service, unreduced for age (Minimum is 30% of AFC)	2% of AFC times years of credited service, unreduced for age; split formula for Noncontributory service at 1-1/4% (Minimum is 25% of AFC)

[(a)] Per Act 163/2012, SLH, the major changes to membership requirements, contribution amounts, and benefits structures for employees hired after June 30, 2012 are discussed on pages 17-21.

Summary of Retirement Benefit Plan Provisions (continued)

Membership for employees hired prior to July 1, 2012 (continued) [(a)]

	Noncontributory	Contributory	Hybrid
Service-Connected Disability			
Eligibility	Any age or credited service	Any age or credited service	Any age or credited service
Benefit	Lifetime pension of 35% of AFC ** For accidents occurring before July 1, 2004, accrued maximum allowance, but not less than 15% of AFC	Lifetime pension of 50% of AFC plus refund of member's contributions and accrued interest ** For accidents occurring before July 7, 1998, a different benefit is used	Lifetime pension of 35% of AFC plus refund of member's contributions and accrued interest
Ordinary Death			
Eligibility	Active employee at time of death with at least 10 years of credited service	Active employee at time of death with at least 1 year of service	Active employee at time of death with at least 5 years of service
Benefit	Surviving spouse/reciprocal beneficiary (until remarriage or reentry into a new reciprocal beneficiary relationship) and dependent children (up to age 18) receive a benefit equal to a percentage of member's accrued maximum allowance unreduced for age; ***or*** Option B (100% Joint and Survivor) lifetime pension for surviving spouse/reciprocal beneficiary if member was eligible for retirement at time of death.	Lump sum payment of member's contributions and accrued interest plus a percentage of the salary earned in the 12 months preceding death; ***or*** Option 3 (50% Joint and Survivor) lifetime pension if member was not eligible for retirement at the time of death, credited with at least 10 years of service, and one beneficiary designated; ***or*** Option 2 (100% Joint and Survivor) lifetime pension if member was eligible for retirement at the time of death and one beneficiary designated; ***or*** If less than 1 year of service, return of member's contributions and accrued interest.	Lump sum payment of member's Hybrid contributions and accrued interest (times 150%) plus return of non-Hybrid contributions and accrued interest; ***or*** Option 3 (50% Joint Survivor) lifetime pension if member was not eligible for retirement at the time of death, credited with at least 10 years of service and one beneficiary designated; ***or*** Option 2 (100% Joint Survivor) lifetime pension if member was eligible for retirement at the time of death, and one beneficiary designated; ***or*** If less than 5 years of service, return of member's contributions and accrued interest.

[(a)] Per Act 163/2012, SLH, the major changes to membership requirements, contribution amounts, and benefits structures for employees hired after June 30, 2012 are discussed on pages 17-21.

Summary of Retirement Benefit Plan Provisions (continued)

Membership for employees hired prior to July 1, 2012 (continued) [(a)]

	Noncontributory	**Contributory**	**Hybrid**
Service-Connected Death			
Eligibility	Any age or service	Any age or service	Any age or service
Benefit	Surviving spouse/reciprocal beneficiary receives monthly benefit equal to 30% of AFC (until remarriage or re-entry into a new reciprocal beneficiary relationship); additional benefits payable to surviving dependent children (up to age 18). If there is no spouse/reciprocal beneficiary or dependent children, no benefit is payable.	Lump sum payment of member's contributions and accrued interest to designated beneficiary, plus monthly benefit of 50% of AFC to surviving spouse/reciprocal beneficiary (until remarriage or re-entry into a new reciprocal beneficiary relationship). If there is no surviving spouse or reciprocal beneficiary, surviving dependent children (up to age 18) or dependent parents shall be eligible for a monthly benefit. If there is no spouse/reciprocal beneficiary or dependent children/parents, the ordinary death benefit shall be payable to the designated beneficiary.	Lump sum payment of member's contributions and accrued interest to designated beneficiary, plus monthly benefit of 50% of AFC to surviving spouse/reciprocal beneficiary (until remarriage or re-entry into a new reciprocal beneficiary relationship). If there is no surviving spouse or reciprocal beneficiary, surviving dependent children (up to age 18) or dependent parents shall be eligible for a monthly benefit. If there is no spouse/reciprocal beneficiary or dependent children/parents, the ordinary death benefit shall be payable to the designated beneficiary.
Post Retirement Benefit - For all types of retirements (service, disability or death)	Each retiree's original retirement allowance is increased by 2.5% on each July 1 beginning the calendar year after retirement. This cumulative benefit is not compounded and increases each year by another 2.5% of the original retirement allowance without a ceiling (i.e., 2.5% of the original retirement allowance the first year, 5% the second year, 7.5% the third year, etc.).		

[(a)] Per Act 163/2012, SLH, the major changes to membership requirements, contribution amounts, and benefits structures for employees hired after June 30, 2012 are discussed on pages 17-21.

Summary of Retirement Benefit Plan Provisions (continued)

Membership for employees hired prior to July 1, 2012 (continued) [(a)]

The plan provisions summarized in the preceding pages apply to teachers and most State and County employees, hired before July 1, 2012. Special provisions applicable to other groups of employees, hired by July 1, 2012, are summarized in Item A to D below:

A) Police officers, firefighters, investigators of the Department of the Attorney General, narcotic enforcement investigators, and public safety investigations staff investigators contribute 12.2% of their monthly salary to the ERS instead of 7.8%. These members may retire at age 55 with 10 years of credited service or at any age with 25 years of credited service and receive a retirement benefit of 2-1/2% of average final compensation (AFC) for each year of such service up to a maximum of 80% AFC, provided the last 5 years is credited service in any of these occupations.

B) Judges, elected officials, and legislative officers may retire at age 55 with at least 5 years of credited service, or at any age with at least 10 years of credited service and receive a pension of 3-1/2% of AFC for each year of such service plus an annuity from their contributions allocable to the period of such service. This benefit cannot exceed 75% of the AFC. Judges hired after June 30, 1999 need 25 years of credited service in order to retire before age 55.

C) Sewer workers in specified classifications and water safety officers may retire at any age if they are credited with 25 years of such service with the last 5 or more years in these occupations. Hybrid members in this job category are required to contribute 9.75% of their salary to the ERS.

D) Emergency medical technicians (EMT) may retire at any age if they are credited with 30 years of such service with the last 5 or more years in these occupations effective June 30, 2003. The years of service to qualify for early retirement is gradually being reduced through June 30, 2008 when 25 years of EMT service will qualify these members for early retirement. Hybrid members in this job category are required to contribute 9.75% of their salary to the ERS.

[(a)] Per Act 163/2012, SLH, the major changes to membership requirements, contribution amounts, and benefits structures for employees hired after June 30, 2012 are discussed on pages 17-21.

Summary of Retirement Benefit Plan Provisions (continued)

Membership for employees hired after June 30, 2012 [b]

	Noncontributory	**Contributory**	**Hybrid**
Employee Contributions	No employee contributions	9.8% of salary	8.0% of salary
Normal Retirement			
Eligibility	Age 62 and 10 years credited service; ***or*** Age 55 and 30 years credited service	Age 60 and 10 years credited service	Age 65 and 10 years credited service; ***or*** Age 60 and 30 years credited service
Benefit	1-1/4% of average final compensation* times years of credited service	1.75% of average final compensation* times years of credited service	1.75% of average final compensation* times years of credited service, with a split formula for Noncontributory service at 1-1/4%

* Average final compensation (AFC) is an average of the highest salaries (limited to base pay and shortage differentials) during any five years of credited service, excluding any salary paid in lieu of vacation.

	Noncontributory	**Contributory**	**Hybrid**
Early Retirement			
Eligibility	Age 55 and 20 years credited service	Age 55 with 25 years credited service	Age 55 with 20 years credited service
Benefit	Maximum allowance reduced 6% per year under age 62	Maximum allowance reduced 5% per year under age 60 plus 4% per year under age 55	Maximum allowance reduced 5% per year under age 65
Deferred Vesting			
Eligibility	10 years credited service	10 years credited service and contributions left in the ERS	10 years credited service and contributions left in the ERS
Benefit	Accrued maximum allowance payable as early as age 55 or at age 65 with 10 but less than 20 years of credited service	Accrued maximum allowance payable at age 60, or at age 55 with 25 years of service with age reduction	Accrued maximum allowance payable as early at age 65 or at age 60 with 30 years of service, or at age 55 with 20-29 years of credited service with age reduction

[b] **M**embership requirements, contribution amounts, and benefits structures for employees hired before July 1, 2012 are discussed on pages 12-16.

Summary of Retirement Benefit Plan Provisions (continued)

Membership for employees hired after June 30, 2012 (continued) [(b)]

	Noncontributory	**Contributory**	**Hybrid**
Annuity Savings Account			
Interest	Not applicable	2.0% per annum on employee contributions and accrued interest	2.0% per annum on employee contributions and accrued interest
Refund Eligibility	Not applicable	Contributions may be withdrawn upon retirement or termination of employment; upon refund, all service and any future retirement benefit will be forfeited	Contributions may be withdrawn upon retirement or termination of employment; upon refund, all service and any future retirement benefit will be forfeited
Refund Benefit			
- Terminates with less than 10 years credited service	Not applicable	Return of member's contributions and accrued interest	Return of member's contributions and accrued interest
- Terminates with 10 or more years of credited service	Not applicable	Return of member's contributions and accrued interest	Return of member's Hybrid contributions and accrued interest, times 120%; plus any non-Hybrid contributions and accrued interest
Ordinary Disability			
Eligibility	10 years credited service	10 years credited service	10 years credited service
Benefit	1-1/4% of AFC times years of credited service, unreduced for age (Minimum is 12.5% of AFC)	1-3/4% of AFC times years of credited service, unreduced for age (Minimum is 30% of AFC)	1-3/4% of AFC times years of credited service, unreduced for age (Minimum is 25% of AFC)

[(b)] Membership requirements, contribution amounts, and benefits structures for employees hired before July 1, 2012 are discussed on pages 12-16.

Summary of Retirement Benefit Plan Provisions (continued)

Membership for employees hired after June 30, 2012 (continued) [b]

	Noncontributory	Contributory	Hybrid
Service-Connected Disability			
Eligibility	Any age or credited service	Any age or credited service	Any age or credited service
Benefit	Lifetime pension of 35% of AFC	Lifetime pension of 50% of AFC plus refund of member’s contributions and accrued interest	Lifetime pension of 35% of AFC plus refund of member’s contributions and accrued interest
Ordinary Death			
Eligibility	Active employee at time of death with at least 10 years of credited service	Active employee at time of death with at least 1 year of service	Active employee at time of death with at least 10 years of service
Benefit	Surviving spouse/reciprocal beneficiary (until remarriage or reentry into a new reciprocal beneficiary relationship) and dependent children (up to age 18) receive a benefit equal to a percentage of member’s accrued maximum allowance unreduced for age; ***or*** Option B (100% Joint and Survivor) lifetime pension for surviving spouse/reciprocal beneficiary if member was eligible for retirement at time of death.	Lump sum payment of member’s contributions and accrued interest plus a percentage of the salary earned in the 12 months preceding death; ***or*** Option 3 (50% Joint and Survivor) lifetime pension if member was not eligible for retirement at the time of death, credited with at least 10 years of service, and one beneficiary designated; ***or*** Option 2 (100% Joint and Survivor) lifetime pension if member was eligible for retirement at the time of death and one beneficiary designated; ***or*** If less than 1 year of service, return of member's contributions and accrued interest.	Lump sum payment of member’s Hybrid contributions and accrued interest (times 120%) plus return of non-Hybrid contributions and accrued interest; ***or*** Option 3 (50% Joint Survivor) lifetime pension if member was not eligible for retirement at the time of death, credited with at least 10 years of service and one beneficiary designated; ***or*** Option 2 (100% Joint Survivor) lifetime pension if member was eligible for retirement at the time of death, and one beneficiary designated; ***or*** If less than 10 years of service, return of member's contributions and accrued interest.

[b] Membership requirements, contribution amounts, and benefits structures for employees hired before July 1, 2012 are discussed on pages 12-16.

Summary of Retirement Benefit Plan Provisions (continued)

Membership for employees hired after June 30, 2012 (continued) [(b)]

	Noncontributory	Contributory	Hybrid
Service-Connected Death			
Eligibility	Any age or service	Any age or service	Any age or service
Benefit	Surviving spouse/reciprocal beneficiary receives monthly benefit equal to 30% of AFC (until remarriage or re-entry into a new reciprocal beneficiary relationship); additional benefits payable to surviving dependent children (up to age 18). If there is no spouse/reciprocal beneficiary or dependent children, no benefit is payable.	Lump sum payment of member's contributions and accrued interest to designated beneficiary, plus monthly benefit of 50% of AFC to surviving spouse/reciprocal beneficiary (until remarriage or re-entry into a new reciprocal beneficiary relationship). If there is no surviving spouse or reciprocal beneficiary, surviving dependent children (up to age 18) or dependent parents shall be eligible for a monthly benefit. If there is no spouse/reciprocal beneficiary or dependent children/parents, the ordinary death benefit shall be payable to the designated beneficiary.	Lump sum payment of member's contributions and accrued interest to designated beneficiary, plus monthly benefit of 50% of AFC to surviving spouse/reciprocal beneficiary (until remarriage or re-entry into a new reciprocal beneficiary relationship). If there is no surviving spouse or reciprocal beneficiary, surviving dependent children (up to age 18) or dependent parents shall be eligible for a monthly benefit. If there is no spouse/reciprocal beneficiary or dependent children/parents, the ordinary death benefit shall be payable to the designated beneficiary.

Post Retirement Benefit - For all types of retirements (service, disability or death)

Each retiree's original retirement allowance is increased by 1.5% on each July 1 beginning the calendar year after retirement. This cumulative benefit is not compounded and increases each year by another 1.5% of the original retirement allowance without a ceiling (i.e., 1.5% of the original retirement allowance the first year, 3% the second year, 4.5% the third year, etc.).

[(b)] Membership requirements, contribution amounts, and benefits structures for employees hired before July 1, 2012 are discussed on pages 12-16.

Summary of Retirement Benefit Plan Provisions (continued)

Membership for employees hired after June 30, 2012 (continued) [(b)]

The plan provisions summarized in the preceding pages apply to teachers and most State and County employees, hired after June 30, 2012. Special provisions applicable to other groups of employees, hired after June 30, 2012, are summarized in Item A to D below:

A) Police officers, firefighters, investigators of the Department of the Attorney General, narcotic enforcement investigators, and public safety investigations staff investigators contribute 14.2 % of their monthly salary to the ERS instead of 9.8%. These members may retire at age 60 with 10 years of credited service or at age 55 with 25 years of credited service and receive a retirement benefit of 2-1/4% of average final compensation (AFC) for each year of such service up to a maximum of 80% AFC, provided the last 5 years is credited service in any of these occupations.

B) Judges may retire at age 60 with at least 10 years of credited service, or at age 55 with at least 25 years of credited service and receive a pension of 3% of AFC for each year of such service plus an annuity from their contributions allocable to the period of such service. Similarly, elected officials and legislative officers may retire at any age with 10 years of elected, legislative or mixed service and receive a pension of 3% of AFC for each year of service plus an annuity from their contributions allocable to the period of such service. These benefits cannot exceed 75% of the AFC.

C) Contributory Class sewer workers in specified classifications, water safety officers and emergency medical technicians may retire at age 60 with 10 years of credited service or at age 55 with 25 years of such service with the last 5 or more years in these occupations.

D) Hybrid Class sewer workers in specified classifications, water safety officers and emergency medical technicians may retire at age 65 with 10 years of credited service or at age 55 with 25 years of such service with the last 5 or more years in these occupations. They are required to contribute 11.75% instead of 8% of their salary to the ERS.

[(b)] Membership requirements, contribution amounts, and benefits structures for employees hired before July 1, 2012 are discussed on pages 12-16.

Taxation of Benefits

All retirement benefits are subject to Federal income tax but are exempt from Hawaii State income tax. Certain occupational (work related) disability benefits are exempt from Federal income tax. Arrangements to initiate voluntary withholding of Federal income tax can be made at any time. The ERS provides retirees with a 1099-R tax form on or before January 31 of each year.

Additional Benefits

Retirees, their spouses and dependent children under age 19 are eligible to receive life insurance, medical, dental, vision, and prescription drug coverage from the Employer-Union Health Benefits Trust Fund (EUTF) if they were hired before July 1, 1996, and retire with at least 10 years of continuous credited service. If they were first hired after June 30, 1996, health benefits are available on a cost-sharing basis as long as the member retires with at least 10 years of continuous service. A dependent of a retiree who is a full-time student at an accredited college, university or technical school and who is 19 through 26 years old is also eligible for coverage. A retiree with a hire date after July 1, 2001 will only receive coverage for him or herself on a cost sharing basis.

Unused sick leave is excluded from credited service in determining health benefit coverage.

Retirees are responsible for premiums in excess of the amount of employer contributions. Retirees and their spouses are eligible to receive a reimbursement of the Medicare Part B medical insurance premium. More information is available on the EUTF's website at www.eutf.hawaii.gov.

Applying for Retirement

A service retirement application can be filed with the ERS 150 days but no less than 30 days prior to the effective date of retirement. Once the application has been filed, cancellation prior to the effective date of retirement is permitted; however, the law requires mandatory retirement upon the third application. Members may obtain retirement information and application forms at the following locations:

Oahu Office
City Financial Tower
201 Merchant Street, Suite 1400
Honolulu, HI 96813
Phone: (808) 586-1735
Fax: (808) 587-5766

Kauai Office
3060 Eiwa Street, Room 302
Lihue, Hawaii 96766
Phone: (808) 274-3010
Fax: (808) 241-3193

Hawaii Office
101 Aupuni Street, Suite 208
Hilo, Hawaii 96720
Phone: (808) 974-4076
Fax: (808) 974-4078

Maui Office
54 S. High Street, Room 218
Wailuku, Hawaii 96793
Phone: (808) 984-8181
Fax: (808) 984-8183

Molokai and Lanai
Toll-free to Oahu:
1-800-468-4644, ext 61735

Continental U.S. only
Toll free to Oahu
1-888-659-0708

Counseling Service

It is the policy of the ERS to render every possible service to its members; however, as thousands of inquiries are received and answered annually, in addition to the actual processing of claims and benefits, present staff and appropriations restrict this service to those members whose immediate welfare is dependent upon the prompt settlement of benefits. Members who are definite about retirement should contact the ERS to request formal retirement estimates. For members who are not planning immediate retirement and interested in their benefit status a retirement benefit calculator and other retirement information are available on the ERS' website at http://ers.ehawaii.gov/.

Retirement Options

CONTRIBUTORY AND HYBRID MEMBERS

Maximum Allowance: The member receives a lifetime maximum allowance; at death, the difference between the value of the member's contributions at the time of retirement and the retirement allowance paid prior to death is paid to the designated beneficiary(ies) or estate.

Option One: The member receives a reduced lifetime allowance based on age; at death, the difference between the initial insurance reserve and the retirement allowance paid prior to death is paid to the designated beneficiary(ies) or estate. In lieu of the lump-sum balance, the beneficiary may elect to receive an allowance for life based on the value of the balance; provided that the allowance is not less than $100 per month.

Option Two (100% Joint and Survivor): The member receives a reduced lifetime allowance based on ages of both the member and the sole beneficiary and at death; the same allowance is paid to the designated beneficiary for life. Should the designated beneficiary predecease the retiree, another beneficiary cannot be named and all payments will cease at the retiree's death. For retirements on or after December 1, 2004, should the beneficiary predecease the retiree, the retiree's reduced pension "pops up" or increases to the corresponding Maximum Allowance instead of remaining at the reduced amount.

Option Three (50% Joint and Survivor): This option is similar to Option Two. The member receives a reduced lifetime allowance which is higher than Option Two and is based on ages of both the member and the sole beneficiary; however, at death one-half of the allowance is paid to the designated beneficiary for life. Like Option Two, should the designated beneficiary predecease the retiree, another beneficiary cannot be named and all payments will cease at the retiree's death. For retirements on or after December 1, 2004, should the beneficiary predecease the retiree, the retiree's reduced pension "pops up" or increases to the corresponding Maximum Allowance instead of remaining at the reduced amount.

Option Four: This option allows the member to devise a plan that will provide a benefit according to the member's specifications. It requires certification by the Actuary and approval of the Board of Trustees. The following Option Four plans have been approved:

Combination of Options Five and Maximum Allowance: The member receives a reduced lifetime allowance and is allowed to withdraw the pre-1987 nontaxable contributions, 50% of accumulated contributions, or 75% of accumulated contributions (Hybrid members are not allowed the 75% option); at death, the difference between the value of the member's contributions at the time of retirement and the retirement allowance paid prior to death is paid to the designated beneficiary(ies) or estate.

Combination of Options Five and One: The member receives a reduced lifetime allowance and is allowed to withdraw the pre-1987 nontaxable contributions, 50% of accumulated contributions, or 75% of accumulated contributions (Hybrid members are not allowed the 75% option); at death, the difference between the initial insurance reserve and the retirement allowance paid prior to death is paid to the designated beneficiary(ies) or estate.

Combination of Options Five and Two: The member receives a reduced lifetime allowance based on ages of both the member and the sole beneficiary, and is allowed to withdraw the pre-1987 nontaxable contributions, 50% of accumulated contributions, or 75% of accumulated contributions (Hybrid members are not allowed the 75% option); at death, the same allowance is paid to the designated beneficiary for life. As in the case of Option Two, should the designated beneficiary predecease the retiree, another beneficiary cannot be named and all payments will cease at the retiree's death. For retirements on or after December 1, 2004, should the beneficiary predecease the retiree, the retiree's reduced pension "pops up" or increases to the corresponding Maximum Allowance instead of remaining at the reduced amount.

Retirement Options (continued)

CONTRIBUTORY AND HYBRID MEMBERS (continued)

Combination of Options Five and Three: The member receives a reduced lifetime allowance based on ages of both the member and the sole beneficiary, and is allowed to withdraw the pre-1987 nontaxable contributions, 50% of accumulated contributions, or 75% of accumulated contributions (Hybrid members are not allowed the 75% option); at death, one-half of the allowance is paid to the designated beneficiary for life. As in the case of Option Three, should the designated beneficiary predecease the retiree, another beneficiary cannot be named and all payments will cease at the retiree's death. For retirements on or after December 1, 2004, should the beneficiary predecease the retiree, the retiree's reduced pension "pops up" or increases to the corresponding Maximum Allowance instead of remaining at the reduced amount.

Option Five: The member receives a reduced lifetime allowance and is allowed to withdraw all accumulated contributions; at death, there is no further benefits payable.

Option Four and Option Five are restricted to those members with at least ten years of credited service excluding unused sick leave credit.

Regardless of the option selected, should death of the Contributory or Hybrid member occur during the first year of retirement, the designated beneficiary may elect to receive benefits as if death had occurred immediately prior to retirement in lieu of the death benefits described above.

NONCONTRIBUTORY MEMBERS

Maximum Allowance: The member receives a lifetime pension and at death, there is no further benefit payable.

Option A (50% Joint and Survivor): The member receives a reduced lifetime pension and at death, one-half of the pension is paid to the sole designated beneficiary for life. Should the designated beneficiary predecease the retiree, another beneficiary cannot be named and all payments will cease upon the retiree's death. For retirements on or after December 1, 2004, should the beneficiary predecease the retiree, the retiree's reduced pension "pops up" or increases to the corresponding Maximum Allowance instead of remaining at the reduced amount.

Option B (100% Joint and Survivor): The member receives a reduced lifetime pension and at death, the same pension is paid to the sole designated beneficiary for life. Like Option A, should the designated beneficiary predecease the retiree, another beneficiary cannot be named and all payments will cease upon the retiree's death. For retirements on or after December 1, 2004, should the beneficiary predecease the retiree, the retiree's reduced pension "pops up" or increases to the corresponding Maximum Allowance instead of remaining at the reduced amount.

Option C (Ten-Year Guarantee): The member receives a reduced lifetime pension. Should death occur within ten years of retirement, the same pension will be paid to the designated beneficiary, or otherwise to the retiree's estate for the balance of the ten-year period. Should the designated beneficiary predecease the retiree, another beneficiary can be named.

Regardless of the option selected, should death occur during the first year of retirement, the designated beneficiary may elect to receive benefits under Option B in lieu of the death benefits described above, provided that if the retiree would not have been permitted by applicable law or the rules of the Board to name the designated beneficiary under Option B, the designated beneficiary may elect to receive the death benefit under Option A.

Legislative Highlights 2014

The following Acts were passed by the 2014 Legislature and approved by the Governor. . For more information on these and other legislation, you may visit the website at www.capitol.hawaii.gov.

Act 35 (H.B. 2264): Relating to the Investment Authority of the Employees' Retirement System–
In order to prudently manage the Employees' Retirement System's real estate portfolio, the Board of Trustees of the Employees' Retirement System needs to be able to evaluate and plan for the retention or disposition of the real estate without distinction as to how the real estate was acquired.

- This Act eliminates the limitation on the holding period for real estate acquired by the Employees' Retirement System through foreclosure, enforcement of security, or in satisfaction of debts that predates the enactment of legislation authorizing the Employees' Retirement System to invest in real estate.
- Effective: April 23, 2014

Employees' Retirement System
of the State of Hawaii

Submitted by

THE AUDITOR
STATE OF HAWAII

FINANCIAL SECTION

KPMG LLP
Suite 2100
1003 Bishop Street
Honolulu, HI 96813-6400

The Auditor
State of Hawaii:

Report on the Financial Statements

We have audited the accompanying financial statements of the Employees' Retirement System of the State of Hawaii (the ERS) as of and for the year ended June 30, 2014 and the related notes to the financial statements, which collectively comprise the ERS' basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with U.S. generally accepted accounting principles; this includes the design, implementation, and maintenance of internal controls relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting principles used and the reasonableness of significant estimates made by management, as well as evaluating the overall presentation of the financial statements.

Independent Auditors' Report

The Auditor
State of Hawaii:

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position of the Employees' Retirement System of the State of Hawaii as of June 30, 2014, and the changes in fiduciary net position for the year then ended, in conformity with U.S. generally accepted accounting principles.

Emphasis of Matter

As discussed in Note C(1) to the financial statements, in 2014, the ERS adopted Government Accounting Standards Board Statement No. 67, *Financial Reporting for Pension Plans – an amendment to GASB No. 25*. Our opinion is not modified with respect to this matter.

Other Matters

Required Supplementary Information

U.S. generally accepted accounting principles require that the management's discussion and analysis on pages 31 through 37 and required supplementary information including the schedule of changes in the employers' net pension liability and related ratios, employers' net pension liability, employer contributions and investment returns on pages 70 through 75 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplementary and Other Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the ERS' basic financial statements. The combining schedule of changes in fiduciary net position, social security contribution

The Auditor
State of Hawaii

fund, statement of changes in assets and liabilities, schedules of administrative expenses and investment expenses, and the Introductory, Investment, Actuarial and Statistical sections are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The combining schedule of changes in fiduciary net position, social security contribution fund, statement of changes in assets and liabilities, schedules of administrative expenses and investment expenses are the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the combining schedule of changes in fiduciary net position, social security contribution fund, statement of changes in assets and liabilities, schedules of administrative expenses and fairly stated in all material respects in relation to the basic financial statements taken as a whole.

The information contained in the Introductory, Investment, Actuarial, and Statistical sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on them.

Other Reporting Required by *Government Auditing Standards*

In accordance with Government Auditing Standards, we have also issued our report dated December 14, 2015 on our consideration of the ERS' internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with Government Auditing Standards in considering the ERS' internal control over financial reporting and compliance.

KPMG LLP

Honolulu, Hawaii
December 14, 2015

Management's Discussion and Analysis (Unaudited)

This Management's Discussion and Analysis (MD&A) of the Employees' Retirement System of the State of Hawaii (the ERS) provides highlights and comparisons of the financial position and performance of the ERS as of and for the year ended June 30, 2014. The MD&A is presented as a narrative overview and analysis in conjunction with the Letter of Transmittal, which is included in the Introductory Section of the ERS Comprehensive Annual Financial Report (CAFR). For more detailed information pertaining to the ERS' financial activities, the reader is encouraged to review the actual financial statements, including the notes and supplementary schedules.

Overview of the Financial Statements

The ERS is responsible for administering a defined-benefit pension plan for state government, local government, and public education employees in the State of Hawaii (the State). The ERS also oversees the short-term investments of the federal Social Security employer contributions for the State in the Social Security Contribution Fund (Contribution Fund).

The ERS' financial statements include fiduciary type funds that are used to account for resources held for the benefit of parties outside of the ERS. The primary fund is defined as a Pension Trust Fund as these assets are held for the benefit of its members and their beneficiaries for the payment of pension benefits, while the Contribution Fund is an agency type fund that is custodial in nature. Throughout this discussion and analysis, units of measure (i.e., billions, millions, and thousands) are approximate, being rounded up or down to the nearest tenth of the respective unit value.

The ERS adopted Governmental Accounting Standards Board (GASB) Statement No. 67, *Financial Reporting for Pension Plans-an amendment of GASB Statement No. 25* in 2014. The objective of GASB Statement No. 67 is to improve financial reporting with enhancements to footnote disclosure and required supplementary information for pension plans that separates the accounting and reporting requirements from the funding decisions and require the unfunded portion of the pension liability to be apportioned among the participating employers. The previous standards followed a long-term funding policy perspective for the accounting and reporting requirements of the pension related liabilities. While this implementation requires almost all "member contributions" to be classified for financial statement reporting as "employer contributions" since these member contributions are "picked up" by the employer and treated as employer contributions under Internal Revenue Code section 414(h)(2), it does not change the funding policy of the ERS. The new standards are discussed in more detail later in the applicable sections of this MD&A and the Notes to Financial Statements.

This discussion and analysis is intended to serve as an introduction to the ERS' financial reporting, which comprises the following components:

- The two main basic financial statements include the statement of fiduciary net position as of June 30, 2014, and the related statement of changes in fiduciary net position during the fiscal year from July 1, 2013 to June 30, 2014 (FY 2014). These provide a snapshot of the resources available at the end of the fiscal year and a summary of changes in resources available to pay pension benefits to members, retirees, and beneficiaries.
- The related notes to financial statements are an integral part of the basic financial statements and include detailed information that is essential to a full understanding of the data provided in the basic financial statements.
- The Required Supplementary Schedules of Changes in the Employers' Net Pension Liability and Related Ratios, Employers' Net Pension Liability, Employer Contributions and Investment Returns, and the related Notes to Required Supplementary Information, are required to be

presented to supplement the basic financial statements for placing the financial statements in an appropriate operational, economic, or historical context.

- The remaining supplementary information are derived from and relate directly to the underlying accounting and other records used to prepare the financial statements, and provides additional detailed information concerning the changes in operating reserves established by legislation, and the operating and investment related expenses of the ERS.

Financial Highlights

- The overall financial position of the ERS improved during the year ended June 30, 2014. As of June 30, 2014, fiduciary net position restricted for pension benefits was $14.2 billion, or an increase of about $1.9 billion during the fiscal year then ended. This represents an increase of approximately 15.4% from the $12.3 billion in fiduciary net position restricted for pension benefits as of June 30, 2013. The increase in fiduciary net position restricted for pension benefits in FY 2014 reflects the second year of strong returns in the worldwide equity markets.

- During FY 2014, the ERS achieved the second year of double-digit returns of 17.8% (gross of fees) on its investment portfolio following the 12.6% return in FY 2013, using the time-weighted rate of return methodologies that are generally accepted by the Global Investment Performance Standards (GIPS) (that is shown in the *Investment Section* of this CAFR). The investment program outperformed its actuarial goal of 7.75% and outperformed the total market return objective of 7.9% for the one-year period based on the 2013 Pension Consulting Alliance long-term capital markets outlook. Under new GASB Statement No. 67 pension reporting standards, the annual money-weighted return on ERS' pension plan investments, net of pension plan investment expense, was 17.9%.

- There was no legislation implemented in 2014 that significantly impacts the pension trust. The nominal investment return target rate for the ERS investment portfolio remained unchanged at 7.75% while the payroll growth and inflation assumptions remained constant at 3.5% and 3.0%, respectively.

- Total pension liability as of June 30, 2014 was $22.2 billion compared to $21.2 billion as of June 30, 2013, while the corresponding net pension liability was $8.0 billion and $8.9 billion, respectively. Covered payroll for the ERS totaled $3.8 billion in FY 2014, up from $3.7 billion in FY 2013, for 2.7% increase.

- The fiduciary net position as a percentage of total pension liability was 63.9% as of June 30, 2014 and 58.2% as of June 30, 2013, while the funded ratio on an actuarial basis increased to 61.4% from 60.0% June 30, 2013, respectively. The main difference between the two methods is under GASB Statement No. 67 the fiduciary net position is based only on the market value of assets while under GASB Statement No. 25 actuarial value for the net assets allows for a four-year market smoothing of assets of net appreciation. On an actuarial funding basis, there were deferred investment losses of $391.0 million as of June 30, 2013.

- Contributions from members and employers increased by a total of $91.9 million during FY 2014, or 12.0%. Most of the increase is due to an increase in required contribution rates paid by the employers for all employee groups, and to a lesser extent an increase in member contributions ("picked up" as employer contributions beginning in FY 2014) with more active members being required to contribute, and an increase in new employees contributing at higher contribution rates. Per 2011 legislation, the employer contribution rate will increase annually over the next two fiscal years and new members will pay a higher contributions rate. The historical summary of legislation impacting the ERS actuarial valuations is discussed in more detail in the "Summary of Plan Changes" in the Actuarial Section.

- Total retirement benefit payments increased by $61.8 million, or 5.8%, to $1,122.4 million in FY 2014 compared to $1,060.6 million in FY 2013. Pension benefits continues to increase due to 3.0% more retirees and beneficiaries (43,087 in 2014 compared to 41,812 in 2013), an increase in the average pension benefit for new retirees, and the annual 2.5% postretirement increase.
- Administrative expenses increased by $0.7 million in FY 2014 to $12.6 million compared to $11.9 million in FY 2013. Administrative expenses for all years were within the ERS' budgeted amounts. The increase for FY 2014 was primarily due to an increase in payroll costs.

Analysis of Fiduciary Net Position Restricted for Pension Trust

Summary of Fiduciary Net Position
June 30, 2014 and 2013
(Dollars in millions)

	2014	2013	FY 2014 % change
Assets:			
Cash and cash equivalents and short-term investments	$ 421.3	$ 378.1	11.4 %
Receivables	189.1	506.3	(62.7)
Investments	14,064.0	12,210.3	15.2
Invested securities lending collateral	1,233.1	-	100.0
Equipment	10.1	9.4	7.4
Total assets	15,917.6	13,104.1	21.5
Liabilities			
Securities lending liability	1,233.1	-	100.0
Investment accounts and other payables	481.5	792.3	(39.2)
Total liabilities	1,714.6	792.3	116.4
Net position restricted for pensions	$ 14,203.0	$ 12,311.8	15.4

Summary of Changes in Fiduciary Net Position
June 30, 2014 and 2013
(Dollars in millions)

	2014	2013	FY 2014 % change
Additions:			
Contributions	$ 859.2	$ 767.3	12.0 %
Net investment income	2,175.5	1,331.2	63.4
Total additions	3,034.7	2,098.5	44.6
Deductions:			
Retirement benefit payments	1,122.4	1,060.6	5.8
Refund of contributions	8.5	7.2	18.1
Administrative expenses	12.6	11.9	5.9
Total deductions	1,143.5	1,079.7	5.9
Increase in net position	$ 1,891.2	$ 1,018.8	85.6

Investments, Investment Income, and Investment Expense

The ERS is a long-term investor and manages its pension assets with long-term objectives in mind. A primary element of the ERS' investment philosophy is diversification among various asset classes. The ERS makes estimates of long-term market returns and establishes an asset allocation strategy taking into account the risks associated with each asset class.

The ERS investment portfolio earned 17.8% on investments (gross of fees time-weighted rate of returns) during FY 2014 following a gain of 12.6% during FY 2013 due to the strength of the equity markets during the year. For the second year, total net investment income of $2,175.5 in FY 2014 exceeded the target investment rate and compared to $1,331.2 in FY 2013.

Domestic equity, international equity from the public markets, and private equity from the illiquid markets were the top performing asset classes with superior returns of 26.5%, 20.4%, and 20.4%, respectively, followed by covered calls at 13.5% and real return at 8.0% for the FY 2014. While all asset classes had positive returns, the other asset classes did not beat the portfolio benchmark. This includes international equity, at 6.9%, diversified fixed income at 6.3% and real estate at 6.5%.

The ERS participates in a securities lending program through its global custodian as a way to earn incremental income to enhance the investment portfolio yield. There were no assets or liabilities for the securities lending program reflected on the summary of fiduciary net position above as of June 30, 2013 due to temporary suspension of the ERS securities lending program in mid-June 2013 to late-July 2013 as part of the transition to the new ERS custodian bank on July 1, 2013.

The asset distribution of the ERS' investment securities for the pension trust, excluding pending trade settlements and securities lending collateral, at June 30, 2014 and 2013 is presented below at fair value. Investment balances between the asset classes will change over time based on market sectors' performance and our rebalancing efforts to maintain asset allocation targets. Changes will also occur for financial reporting since certain real estate and alternative investments are reported on the consolidated method of accounting using the value of the underlying investments since ERS is the majority owner of the business organization. Please refer to the Investment Section of the CAFR for a discussion on asset allocation plan targets and investments by investment strategy.

Investments in short-term securities and cash are generally held by external investment managers for liquidity to settle pending trades and investments, and should not exceed 5-10 percent of the investments for certain managers based on their investment mandate. These amounts reported on the financial statements also include cash requirements used by ERS to fund pension benefits and transition amounts between individual investments. Fluctuations will occur based on the trading activity and timing of the settlements. The increase in all asset classes is mainly due to positive investment returns during FY 2014.

Asset Class
June 30, 2014 and 2013
(Dollars in millions)

	2014	%	2013	%
Short term investments and cash	$ 421.3	2.9 %	$ 378.1	3.0 %
Equity securities	9,450.3	65.2	7,801.9	62.0
Fixed income	2,670.1	18.4	2,630.7	20.9
Real estate	1,192.6	8.2	1,153.7	9.2
Alternative investments	751.1	5.3	624.1	4.9
Total investment assets	14,485.4	100.0	12,588.5	100.0
Less loans on real estate and alternative investments	251.1		247.9	
	$ 14,234.3		$ 12,340.6	

Investment expenses includes (a) investment management fees paid to external investment advisor firms that oversee the ERS' investment portfolio and (b) operational activities of certain real estate and alternative investments since these assets are reported on the consolidated method of accounting using the activity of the underlying investments since ERS is the majority owner of the business organization.

Total investment management fees earned by external investment advisors decreased approximately 9.5% during FY 2014 compared to FY 2013 with the reduction of incentive fees for certain real estate investment managers. The reduction in incentive fees during the year was offset by an increase in regular investment management fees attributable to an overall increase in asset values. The real estate investment managers may receive an incentive fee for superior investment returns by the manager above their corresponding benchmark, while maintaining an acceptable level of investment risk. Incentive fees are recognized on the accrual basis of accounting for the increase or decrease of the change in real estate values during the year, and are only paid upon the sale of the asset if the asset has "excess earnings" when the real estate asset is actually sold. Incentive fees earned during FY 2013 were significantly higher than normal when the real estate asset class returned 20.8%. The ERS requires external managers to provide the ERS with a "most favored nations" contract clause that guarantees the ERS with the lowest management fees the managers offer their clients for investment accounts with similar investment mandates and similar account size.

Contributions

Contributions from employers and employees totaled $859.2 million and $767.3 million during FY 2014 and FY 2013, respectively. During FY 2014, total contributions increased by $91.9 million, or 12.0%, with the continued implementation of legislation passed in 2011 and 2012 that raised employer contribution rates for all employee groups and increased contribution rates for new members. The increase in contributions is mainly due to an increase in employer contribution rates effective July 1, 2013, and to a lesser extent, an increase in covered payroll and an increase in the percentage of active members required to make during the year. The 2011 legislation further increases employer contribution rates again on July 1, 2014 and 2015. As mentioned above, most member contributions are now classified as being "picked up" as employer contributions for financial statement reporting purposes. Please refer to the Financial Section in the ERS 2014 and 2013 CAFR for more information.

Pension Plan Benefits and Expenses

Pension benefit payments continue to be the primary expense of the ERS with payments totaling $1,122.4 million during FY 2014 and $1,060.6 million during FY 2013. The pension benefits increase can be attributed to an additional number of new retirees, higher pension benefits for recent retirees, and the annual postretirement increase for ERS' retirees.

Refunds to terminating Hybrid and Contributory Class members increased slightly during the year.

The $0.7 million increase in administrative expenses in FY 2014 is from an increase in payroll-related costs (salaries and fringe benefits), annual computer maintenance fees, legal services, and other professional services related to the calculation of benefit payments, which was partially offset by a decrease in auditing and accounting services.

Pension Plan Changes

There was no significant legislation passed in 2014 that affects pension plan provisions. Pension plan changes, including legislative and Board of Trustees' actions, are summarized in the Introductory Section and Actuarial Section of the CAFR.

Actuarial Valuations and Measurement of Net Pension Liability

As discussed later in the Notes to Financial Statements, the adoption of GASB Statement No. 67 includes changes to the reporting requirements for defined-benefit pension plans and changes the terminology used to evaluate the effectiveness of its funding policy.

The total pension liability for these financial statements is based on the actuarial valuation performed as of June 30, 2014 and a measurement date of June 30, 2014. Per the valuation as of June 30, 2014, the ERS' total pension liability was $22.2 billion, covered payroll totaled $3.8 billion, and the ERS' fiduciary net position was $14.2 billion resulting in a net pension liability of $8.0 billion. The corresponding amounts from the June 30, 2013 valuation (measurement date of June 30, 2013) were $21.2 billion, $3.7 billion, $12.3 billion, and $8.9 billion, respectively. The ERS' fiduciary net position as a percentage of total pension liability was 63.9% and 58.2% as of June 30, 2014 and 2013, and the net pension liability as a percentage of covered payroll was 209.4% and 240.0%, respectively.

Future Events Affecting the ERS (effective after June 30, 2014)

Change in Strategic Asset Classes - Effective October 1, 2014, the ERS adopted a risk-based, functional framework for allocating capital within the total portfolio. This framework shifts the portfolio asset allocation from a return-based process to a risk-based process that makes use of strategic/functional classes that in-turn utilize underlying asset classes and strategies. Each of these classes is designed to achieve a certain goal (e.g., Real Return class) and/or be exposed to a specific set of macroeconomic risks that are common among the different strategy types and/or assets within the class (e.g., Broad Growth class). As a result of this structure, each strategic class is expected to be exposed to a set of major and minor macroeconomic risks. The new strategic class targets and ranges effective October 1, 2014 are:

	Strategic Allocation
Broad Growth	76%
Principal Protection	12%
Real Return	5%
Real Estate	7%

Requests for Information

This financial report is designed to provide a general overview of the Employees' Retirement System of the State of Hawaii's finances. For questions concerning any information in this report or for additional information, contact the Employees' Retirement System of the State of Hawaii, 201 Merchant Street, Suite 1400, Honolulu, Hawaii 96813.

Financial Statements

Combining Statement of Fiduciary Net Position

June 30, 2014

Assets		
Cash and cash equivalents and short-term investments		
Cash and cash equivalents	$	46,305,580
Short-term investments		374,947,434
		421,253,014
Receivables		
Accounts receivable and others		7,784,674
Investment sales proceeds		77,668,068
Accrued investment income		42,264,207
Employer and member contributions		61,374,980
		189,091,929
Investments, at fair value		
Equity securities		9,450,253,187
Fixed income securities		2,670,088,796
Real estate investments		1,192,580,701
Alternative investments		751,113,517
		14,064,036,201
Other		
Invested securities lending collateral		1,233,104,953
Equipment, at cost, net of depreciation		10,104,068
		1,243,209,021
Total assets		15,917,590,165
Liabilities		
Accounts and other payables		48,132,737
Payable for securities purchased		182,232,054
Securities lending collateral		1,233,104,953
Notes payable		251,105,118
Total liabilities		1,714,574,862
Commitments and contingencies		
Net position restricted for pensions	$	14,203,015,303

See accompanying notes to financial statements

Financial Statements (continued)

Statement of Changes in Fiduciary Net Position

Year ended June 30, 2014

Additions		
Contributions		
Employer contributions	$	653,127,697
Employer contributions (picked-up member contributions)		204,821,010
Member contributions		1,306,327
Total contributions		859,255,034
Investment income		
From investing activities		
Net appreciation in fair value of investments		1,801,813,303
Interest on fixed income securities		127,882,319
Dividends on equity securities		148,740,435
Income on real estate investments		115,563,334
Interest on short-term investments		101,025
Alternative investment income		69,900,564
Miscellaneous		785,772
		2,264,786,752
Less investment expenses		93,325,027
Net investment income from investing activities		2,171,461,725
From securities lending activities		
Securities lending income		3,439,425
Securities lending expenses, net		(578,811)
Net investment income from securities lending activities		4,018,236
Total net investment income		2,175,479,961
Total additions		3,034,734,995
Deductions		
Benefit payments		1,122,445,642
Refunds of member contributions		8,475,969
Administrative expenses		12,626,030
Total deductions		1,143,547,641
Net increase in net position		1,891,187,354
Net position restricted for pensions		
Beginning of year		12,311,827,949
End of year	$	14,203,015,303

See accompanying notes to financial statements.

June 30, 2014

Note A – Description of the ERS

1. General

The Employees' Retirement System of the State of Hawaii (the ERS) began operations on January 1, 1926, having been established by the Territorial Legislature in the preceding year. The provisions of the ERS are contained in Chapter 88 of the Hawaii Revised Statutes (HRS) and applicable provisions of the federal Internal Revenue Code. The ERS is a cost-sharing, multiple-employer public employee retirement system established as a defined benefit pension plan to administer a pension benefits program for all State and county employees, including teachers, professors, police officers, firefighters, correction officers, judges, and elected officials.

The ERS is a qualified defined-benefit pension plan under Section 401(a) of the Internal Revenue Code. The ERS' current favorable determination letter from the Internal Revenue Service expires on January 31, 2019. Since January 1, 1988, member contributions have been tax deferred under Section 414(h)(2) of the Internal Revenue Code, and Chapter 88 mandates that employers pick up the employee contributions which means that they are treated as "employer contributions" based on the new GASB Statement No. 67 reporting requirements effective this fiscal year. As a public entity, the ERS is not required to file a federal income tax return with the Internal Revenue Service. As a defined-benefit pension plan, the ERS is required to withhold federal income tax from member and benefit recipient payments in accordance with the Internal Revenue Code.

The ERS Pension Trust is comprised of three classes for membership purposes and considered to be a single plan for accounting purposes because all assets of the ERS may legally be used to pay the benefits of any of the ERS members or beneficiaries, as defined by the terms of the ERS. The ERS provides retirement, survivor, and disability benefits for three membership classes known as the contributory, hybrid, and noncontributory members.

Generally, all full-time employees of State and counties of Hawaii are required to be members of the ERS. Some positions of the State and counties of Hawaii are not eligible for ERS membership and may be covered by another separate retirement program. Membership of the plan and the benefits provided are based on the individual's employment group and ERS membership date. A member may belong to only one class based on their latest employment. A member may change classes in certain situations due to a change in their employment date or job classification. If a member earns service in different classes or benefit structures, the member's retirement benefit is bifurcated based on the applicable membership service earned (such as service credits and benefit multiplier percentage of such service).

The two major employment groups applicable to employer and member contribution rates, vesting requirements, and benefit provisions are (a) Police and Firefighters and (b) All Other Employees. There are four major benefit structures for contributory class members based on employment group and membership date while there are two benefit structures for hybrid class members based on their membership date as discussed below. The noncontributory class has one benefit structure.

Note A – Description of the ERS (continued)

1. General (continued)

Employer, pensioner, and employee membership data as of March 31, 2014 are as follows:

Employers:	
State	1
County	4
Total employers	5
Pensioners and beneficiaries currently receiving benefits:	
Pensioners currently receiving benefits:	
Police and firefighters	3,384
All other employees	36,296
Total pensioners	39,680
Beneficiaries currently receiving benefits:	
Police and firefighters	248
All other employees	3,159
Total beneficiaries	3,407
Total pensioners and beneficiaries	43,087
Terminated vested members entitled to benefits but not yet receiving benefits:	
Police and firefighters	245
All other employees	7,860
Total terminated vested members	8,105
Inactive members	
Police and firefighters	612
All other employees	10,635
Total inactive members	11,247
Total terminated vested and inactive members	19,352
Active members:	
Vested:	
Police and firefighters	4,156
All other employees	45,255
Total vested members	49,411
Nonvested:	
Police and firefighters	850
All other employees	16,945
Total nonvested members	17,795
Total active members	67,206
Total membership	129,645

Note A – Description of the ERS (continued)

2. The Financial Reporting Entity

As required by U.S. generally accepted accounting principles, these financial statements present the ERS (the primary government) as a separate reporting entity from the State of Hawaii (the State). The ERS is not part of the State's financial reporting entity because it is a separate legal entity that is fiscally independent of the State. The ERS was established by Chapter 88 of the HRS and is governed by a Board of Trustees (the Board) as discussed below.

The Board administers the ERS on behalf of public employees of both the State and county governments. Except for limited administrative functions, the State does not have the power to supervise or control the Board in the exercise of its functions, duties, and powers. The Board consists of eight members. The State Director of Finance is a statutory member of the Board. Four members of the Board are elected by members and retirants of the ERS and the other three members of the Board are appointed by the Governor. Decisions are made with the concurring vote of five members of the Board. The Board appoints the Executive Director and Chief Investment Officer and engages actuarial and other services required to transact the business of the ERS.

3. Plan Descriptions and Funding Policy

Members of the ERS belong to the contributory, hybrid, or noncontributory class. All assets of the ERS (in the Pension Trust) may be used to pay benefits to any member of the ERS. Contribution rates are determined by state law as a percentage-of-payroll.

The statutory employer contribution rate includes the normal cost and accrued liability contribution and is determined separately for two groups of employees: (a) police officers and firefighters and (b) all other employees. Employer contribution rates are subject to adjustment in certain situations based on the plan's funded status or actuarial investigations. The ERS performs an actuarial investigation of the experience at least once every five years, plus an annual actuarial valuation of the assets and liabilities of the funds of the pension trust. The Board of Trustees adopts mortality, service, and other assumptions, factors, and tables as deemed appropriate and necessary, based on the actuarial investigation and actuary recommendation. Generally, actuarial assumptions and methods were adopted by Board of Trustees on December 20, 2010 as recommended by Gabriel, Roeder, Smith and Company (GRS) (from the 2010 Experience Study for the five-year period from June 30, 2005 through June 30, 2010) while the investment return assumption was adopted beginning with the 2012 valuation. See the Actuarial Section for all actuarial assumptions used.

Effective July 1, 2008, the statutory employer contribution rate for employees in the Police and Fire category increased from 15.75% to 19.70%, and the rate for employees in the All Other category increased from 13.75% to 15.00%. Per legislation passed in 2011, the rate for Police and Fire employees increased to 22.00% on July 1, 2012; 23.00% on July 1, 2013; 24.00% on July 1, 2014; and 25.00% on July 1, 2015 and the rate for All Other Employees increased to 15.50% effective July 1, 2012; 16.00% effective July 1 2013; 16.50% effective July 1, 2014; and 17.00% effective July 1, 2015. These employer contribution rates are applied to the total covered payroll in each respective category to determine the required employer contributions. Administration of the Pension Trust is financed through contributions from the employers and employees (if applicable) and investment earnings.

Note A – Description of the ERS (continued)

3. Plan Descriptions and Funding Policy (continued)

Effective July 1, 2012, employers may be required to make additional employer contributions to the ERS in certain situations. This legislation requires employers to pay additional contributions if a retiring employee, who was first employed prior to July 1, 2012 and who was last employed by the employer, has significant non-base pay increases included in their average final compensation. The additional contribution is equal to the actuarial present value of the additional benefits earned due to the "excessive" non-base pay increases.

Until June 30, 1984, all employees were required to be contributory members. Employees covered by Social Security on June 30, 1984 were given the option of changing to the noncontributory class or remain in the contributory class. All new employees hired after June 30, 1984 and before July 1, 2006, who are covered by Social Security, were generally required to be members of the noncontributory class. Qualified employees that were contributory or noncontributory members were given the option to change to Hybrid Class benefits structure effective July 1, 2006, or remain in their existing class. Starting July 1, 2006, all new employees covered by Social Security are required to be Hybrid Members, unless they are required to be members of the Contributory class. Most employees not covered by Social Security (primarily Police and Fire employees) are required to be Contributory Members.

The three classes provide a monthly retirement allowance (maximum allowance) equal to the benefit multiplier % (generally 1.25% or 2%), multiplied by the average final compensation (AFC), multiplied by years of credited service. The benefit multiplier decreased by 0.25% for new hybrid and contributory members hired after June 30, 2012. If a member earns service in different class or benefit structures, the member's retirement benefit is bifurcated based on the applicable membership service earned (such as service credits and benefit multiplier percentage of such service). In lieu of the maximum allowance, the member may elect to receive an actuarially equivalent alternate retirement option with a reduced lifetime allowance (such as survivor benefit).

The AFC is the average salary earned during the five highest paid years of service, including the payment of salary in lieu of vacation, or three highest paid years of service, excluding the payment of salary in lieu of vacation, if the employee became a member prior to January 1, 1971. The AFC for members hired on or after this date, and before July 1, 2012, is based on the three highest paid years of service excluding the payment of salary in lieu of vacation. For new members hired after June 30, 2012, the AFC is based on the five highest paid years of service excluding the payment of salary in lieu of vacation.

For postretirement increases, every retiree's original retirement allowance is increased by 2.5% on each July 1 following the calendar year of retirement, if the retiree became an ERS member prior to July 1, 2012. This cumulative benefit is not compounded and increases each year by 2.5% of the original retirement allowance without a ceiling (2.5% of the original retirement allowance the first year, 5.0% the second year, 7.5% the third year, etc.). For new members hired after June 30, 2012, the postretirement annuity increase was decreased to 1.5% per year of the original retirement allowance without a ceiling (1.5% of the original retirement allowance the first year, 3.0% the second year, 4.5% the third year, etc.).

Note A – Description of the ERS (continued)

3. Plan Descriptions and Funding Policy (continued)

The following summarizes the three plan provisions relevant to the largest employee groups of the respective plan. Retirement benefits for certain groups, such as sewer workers, judges, and elected officials, vary from general employees.

All contributions, benefits, and eligibility requirements are governed by Chapter 88 of the Hawaii Revised Statutes. For a more detailed summary of benefits for employees and a description of special provisions to groups of employees, refer to the Summary of Retirement Benefit Plan Provisions contained in the *Introductory Section* of this report. Most of the statutory member contributions discussed in this section are now classified as “employer contributions” due to the “pick-up” provisions of IRC Section 414(h)(2) and the recently adopted GASB Statement No. 67.

Contributory Class

Police officers, firefighters, and certain other members that are not covered by Social Security first hired prior to July 1, 2012 contribute 12.2% of their salary and receive a retirement benefit using the benefit multiplier of 2.5% for qualified service, up to a maximum of 80% of AFC. These members may retire at age 55 with 5 years of credited service or at any age with 25 years of credited service, provided the last 5 years of credited service is any of the qualified occupations.

Police officers, firefighters and certain other members that are not covered by Social Security first hired after June 30, 2012 contribute 14.2% of their salary and receive a retirement benefit using the benefit multiplier of 2.25% for qualified service, up to a maximum of 80% of AFC. These members may retire at age 60 with 10 years of credited service or at age 55 with 25 years of credited service, provided the last 5 years of credited service is any of the qualified occupations.

All other employees in the contributory class hired prior to July 1, 2012 are required to contribute 7.8% of their salary and are fully vested for benefits upon receiving 5 years of credited service. Under the contributory class, members may retire with full benefits at age 55 and 5 years of credited service. They may take early retirement at any age with at least 25 years of credited service and receive benefits reduced 5% per year under age 55 plus 4% per year under age 50. The benefit multiplier is 2% for employees covered by Social Security.

All other employees in the contributory class hired after June 30, 2012 are required to contribute 9.8% of their salary and are fully vested for benefits upon receiving 10 years of credited service. These members may retire with full benefits at age 60 and 10 years of credited service. Members may take early retirement at age 55 with 25 years of credited service and receive benefits reduced by 5% per year under age 60. The benefit multiplier is 1.75% for employees covered by Social Security.

Note A – Description of the ERS (continued)

3. Plan Descriptions and Funding Policy (continued)

Hybrid Class

All other employees in the Hybrid Class hired before July 1, 2012 are required to contribute 6% of their salary and are fully vested for benefits upon receiving 5 years of credited service. Employees may retire with full benefits at age 62 and 5 years of credited service or at age 55 and 30 years of credited service. Early retirement benefits are available at age 55 and 20 years of credited service with benefits reduced by 5% per year under age 62. The benefit multiplier used to calculate retirement benefits is 2%. Members in the hybrid plan are covered by Social Security.

All other employees in the Hybrid Class hired after June 30, 2012 are required to contribute 8% of their salary and are fully vested for benefits upon receiving 10 years of credited service. Employees may retire with full benefits at age 65 and 10 years of credited service or at age 60 and 30 years of credited service. Early retirement is available at age 55 and 20 years of credited service with benefits reduced 5% per year under age 65. The benefit multiplier used to calculate retirement benefits is 1.75%. Members in the hybrid plan are covered by Social Security.

Noncontributory Class

All other employees in the noncontributory class are fully vested upon receiving 10 years of credited service. The employer is required to make all contributions for these members. Employees may retire with full benefits at age 62 years and 10 years of credited service or age 55 and 30 years of credited services. Early retirement is available at age 55 years and 20 years of credited service with benefits reduced by 6% per year under age 62. The benefit multiplier used to calculate retirement benefits is 1.25%.

Ordinary disability retirement benefits require a minimum of 10 years of service, whereas service-connected disability resulting from a job-related accident does not have any service requirement. There is no age requirement to qualify for disability benefits.

Ordinary death benefits for contributory and noncontributory members require at least one year and ten years of service, respectively. Ordinary death benefits for hybrid members require five years of service if hired prior to July 1, 2012 or ten years of service if hired after June 30, 2012. There is no service requirement to qualify for service-connected death benefits.

Note A – Description of the ERS (continued)

4. The ERS as Employer

As an employer, the ERS participates in its pension benefits program, through the State. The ERS provides benefits for all of its full-time employees as contributory, hybrid, or noncontributory membership. Contributions are calculated as part of the State's total contribution requirements and are reimbursed to the State's General Fund as part of the fringe benefit rate on the ERS' employees' actual salaries.

5. Other Post Employment Benefits (OPEB)

In addition to the retirement benefits provided by the ERS Pension Trust, the participating employers, pursuant to HRS Chapter 87A, provide certain healthcare and life insurance benefits for State and county qualified employees and retirees. The Hawaii Employer-Union Health Benefits Trust Fund (EUTF) was established on July 1, 2003 to design, provide, and administer health benefits plans and a group life insurance benefits program for State and county employees and retirees.

Under Section 87A-33 of the HRS, the participating employers pay the EUTF a base monthly contribution for the health benefits plans of certain retired employees, including those who were hired before July 1, 1996 and retired after June 30, 1984, with ten or more years of credited service.

Under Section 87A-34 of the HRS, the participating employers pay the EUTF one-half of the base monthly contribution for the health benefits plans of retired employees who were hired before June 30, 1996, and retired after June 30, 1984, with fewer than ten years of credited service.

Under Sections 87A-35 and 87A-33(a)(6) of the HRS, the participating employers pay the EUTF for the health benefits plans of retired employees who were hired after June 30, 1996 but before July 1, 2001: (a) one-half of the base monthly contribution if the employee retired with between ten and fifteen years of credited service; (b) seventy-five percent of the base monthly contribution if the employee retired with between fifteen and twenty-five years of credited service; and (c) one hundred percent of the base monthly contribution if the employee retired with twenty-five or more years of credited service.

Under HRS § 87 A-36, the participating employers pay the EUTF for the health benefits plans of retired employees who were hired after June 30, 2001: (a) one-half of the base monthly contribution for a self-only plan if the employee retired with between ten and fifteen years of credited service; (b) seventy-five percent of the base monthly contribution for a self-only plan if the employee retired with between fifteen and twenty-five years of credited service; and (c) one hundred percent of the base monthly contribution for a self-only plan if the employee retired with twenty-five or more years of credited service.

Under Section 87A-37 of the HRS, the participating employers pay the EUTF a base monthly contribution (currently $4.16) for each retired employee enrolled in the EUTF group life insurance plan.

The net assets of the EUTF are not included in the ERS plan net assets. The EUTF issues a financial report that includes financial statements and required supplementary information.

Note B – Social Security Contribution Fund

The Social Security Contribution Fund (Contribution Fund) was established under Section 88-224 of the HRS for the following purposes:

1. To receive all federal Social Security employers' contributions from the State and interest and penalties on unpaid amounts;

2. To receive any appropriations to the Contribution Fund;

3. To pay amounts required to be paid to the Internal Revenue Service (IRS); and

4. To invest and collect income on resources held by the Contribution Fund.

All other non-State governmental agencies remit Social Security contributions directly to the IRS. Social Security contributions withheld from employees are remitted directly to the IRS by the employers. The Contribution Fund is considered an agency fund for financial reporting purpose. At June 30, 2014, the ERS held no amounts in the Contribution Fund as all amounts deposited into the Contribution Fund were paid directly to the IRS.

Note C – Summary of Significant Accounting Policies

A summary of the significant accounting policies consistently applied in the preparation of the accompanying financial statements follows:

1. Basis of Accounting

Fiduciary funds are used to account for assets held by the ERS in a trustee capacity or as an agent for individuals, private organizations, other governments, and/or other funds. The fiduciary fund types used by the ERS are a Pension Trust Fund and the Social Security Fund as an agency fund. Each of the fiduciary funds is considered a separate fiscal and accounting entity with a self-balancing set of accounts that comprise its assets, liabilities, equity, revenues and expenditures, or expenses, as appropriate. The accounting and reporting treatment applied to a fund is determined by its measurement focus. The Pension Trust Fund is accounted for on a flow of economic resources measurement focus. As an agency fund, the Contribution Fund is custodial in nature and does not measure results of operations.

The financial statements are prepared in conformity with U.S. generally accepted accounting principles (GAAP) using the accrual basis of accounting. Employer and member contributions are recognized in the period in which the contributions are legally due. As discussed above, most member contributions are now classified as being "picked up" as employer contributions for financial statement reporting purposes. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan. Investment purchases and sales are recorded as of their trade date. Administrative expenses are financed exclusively with investment income.

Note C – Summary of Accounting Policies (continued)

1. **Basis of Accounting (continued)**

The ERS implemented the provisions of GASB Statement No. 67 during the year ended June 30, 2014. GASB Statement No. 67 replaces the requirements of GASB Statement No. 25, Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans, and GASB Statement No. 50, Pension Disclosures – an amendment of GASB Statements No. 25 and No. 27, as they relate to pension plans that are administered through trusts or equivalent arrangements that meet certain criteria. GASB Statement No. 67 enhances the standards for footnote disclosures and required supplementary information (RSI) for pension plans, including disclosing the plan's net pension liability (NPL), ratio of fiduciary net position (FNP) to total pension liability (TPL), actuarial methods, and assumptions. As discussed above, most member contributions are now classified as being "picked up" as employer contributions for financial statement reporting purposes.

2. **Method Used to Value Cash and Investments**

The ERS' investment policy for cash and investments, including the legal authority, are discussed below in Note F.

Cash and investments are reported at fair value. Unrealized gains and losses are included as investment income in the statement of changes in fiduciary net position. The investments of the Pension Trust Fund and Contribution Fund (the Retirement Funds) are valued on a monthly basis using the following sources:

Publicly Traded Securities (Corporate stock, exchange-traded investment derivatives, and fixed income): Fair values are based on published market prices, quotations from national security exchanges, and security pricing services as of each month-end closing of the New York Stock Exchange.

Fixed Income Securities (including investment derivatives not publicly traded): Fair values are based on equivalent values of comparable securities with a similar yield and risk.

Pooled Equity, Fixed Income, and Short-Term Investment Funds (not publicly traded): Fair value are based on the ERS' pro rata ownership percentage of the fund reported by the fund manager based on the fair value of the underlying assets that is determined by published market prices, or quotations from national security exchanges.

Limited Partnerships: The fair value of investments that are organized as limited partnerships and have no readily ascertainable fair value (such as private equity, real estate, and tangible assets) are valued based on their respective net asset value (NAV), and are generally audited annually. The most significant element of NAV is the fair value of the investment holdings. These holdings are valued by the general partners using valuation assumptions based on both market and property specific inputs, which are not observable and involve a certain degree of expert judgment. Because of the inherent uncertainties in estimating fair values, it is at least reasonably possible that the estimates will change in the near-term.

Note C – Summary of Accounting Policies (continued)

2. Method Used to Value Cash and Investments (continued)

Private Equity Limited Partnerships: The fair value of individual capital account balances is based on the valuations reported by private equity partnerships using the following methodologies to value the underlying portfolio companies:

- Valuations of publicly traded portfolio companies are based on active exchanges using quoted market prices as of the close of trading for each month-end.
- When a portfolio company investment does not have a readily available market price, but has a return that is determined by reference to an asset for which a market price is readily available, valuations are based on the closing market price of the reference asset on the valuation date, adjusted for factors that affect the fair value of the investment held.
- When the portfolio company investments are private holdings and are not traded on active security exchanges, valuation methodologies used consist primarily of income and market approaches. The income approach involves a discounted cash flow analysis based on portfolio companies' projections. The market approach involves valuing a company at a multiple of a specified financial measure generally Earnings Before Interest, Taxes, Depreciation and Amortization (EBITDA) based on multiples at which comparable companies trade.

Real Estate and Alternative Investments Limited Partnerships and Limited Liability Companies: The ERS has a controlling interest in certain real estate and alternative investment partnerships and limited liability companies. These investment companies provide quarterly valuations based on the most recent capital account balance to ERS management. Individual properties are valued internally by the investment companies at least annually, in accordance with standard industry practice, and are adjusted as frequently as quarterly if material market or operational changes have occurred. Properties are generally valued every one to three years by external third-party appraiser(s), depending upon the investment company. Alternative investments are valued using their respective NAV, and are generally audited annually. The most significant element of NAV is the fair value of the investment holdings. These holdings are valued by the general partners in conjunction with management, investment advisors, and valuation specialists. The valuation techniques vary based on investment type and involve a certain degree of expert judgment. The fair value for these investments could differ significantly if a readily accessible market values for these assets existed. Annual audits of most partnerships and limited liability companies include a review of compliance with the investment company's valuation policies.

Notes Payable: Notes payable are shown at estimated fair values. Notes payable consists of mortgage notes within the limited liability companies and limited partnerships that are secured by real estate of the respective company.

3. Revenue Recognition

Interest and dividend income is recognized when earned. Capital gains and losses are recognized on a trade-date basis. Purchases and sales of investments are also recorded on a trade-date basis.

Contributions are recorded when legally due.

Note C – Summary of Accounting Policies (continued)

4. **Payment of Benefits**

   Withdrawals are recorded when paid.

5. **Securities Lending**

   The ERS records collateral received under securities lending agreements where the ERS has the ability to spend, pledge, or sell the collateral without borrower default. Liabilities resulting from these transactions are also recorded. Additionally, costs associated with securities transactions, broker commissions paid, and lending agent management fees are reported as investment expenses in the accompanying financial statements. The statement of fiduciary net position does not include detailed holdings of securities lending collateral by investment classification.

6. **Interest and Earnings Allocation**

   Pursuant to Sections 88-21 and 88-107 of the HRS, the Board shall annually allocate interest and other earnings of the Pension Trust Fund to the funds of the Pension Trust Fund, as follows:

   a. Annuity Savings Reserve – Fixed at 4-1/2% regular interest rate for employees hired before July 1, 2011 and 2% regular interest rate for employees hired after June 30, 2011.

   b. Expense Reserve – To be credited with all money to pay the administrative expenses of the ERS.

   c. Pension Accumulation Reserve – To be credited with any remaining investment earnings.

7. **Risk Management**

   The ERS reports liabilities, as discussed in note H, related to certain types of losses (including torts, theft of, damage to, or destruction of assets, errors or omissions, natural disasters, and injuries to employees) when it is probable that the losses have occurred and the amount of those losses can be reasonably estimated.

8. **Use of Estimates**

   In preparing financial statements in conformity with accounting principles generally accepted in the United States, management is required to make estimates and assumptions that affect certain reported amounts and disclosures. Actual results could differ from those estimates.

   Investments in limited partnerships and other alternative investments tend to be illiquid and the underlying assets are generally not publicly traded companies. Because of the inherent uncertainty in valuing privately held securities, the fair value may differ from the values that would have been used had a ready market for such securities existed, and the difference can be material. Accordingly, the realized value received upon the sale of the asset may differ from the recorded fair value.

Note C – Summary of Accounting Policies (continued)

9. Recently Issued Accounting Policies

In February 2015, the GASB issued Statement No. 72, *Fair Value Measurement and Application*. Statement No. 67 addresses accounting and financial reporting issues related to fair value measurements. The definition of fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. This Statement provides guidance for determining a fair value measurement for financial reporting purposes and will enhance comparability of financial statements among governments by requiring measurement of certain assets and liabilities at fair value using a consistent and more detailed definition of fair value and accepted valuation techniques. Implementation requires disclosures to be made about fair value measurements, the level of fair value hierarchy, and valuation techniques. GASB Statement No. 72 will be effective for periods beginning after June 30, 2015. ERS has not yet determined the impact of this standard on its financial statements and disclosures.

Note D – Description of Reserves

Section 88-109 of the HRS requires the establishment and maintenance of specific reserves within the ERS. The reserves in the Pension Trust Fund and their purposes are described hereunder:

1. Pension Accumulation Reserves

To accumulate contributions made by the State and counties (except member contributions "picked up" as employer contributions under pursuant to IRC Section 414(h)(2)), transfers of retired members' contributions plus related interest income from the Annuity Savings Reserve and income from investments. All pension benefits, including the pensioners' bonus, are paid through this reserve.

2. Annuity Savings Reserves

To accumulate members' contributions (including member contributions "picked up" as employer contributions under pursuant to IRC Section 414(h)(2)) and related interest income. Upon a member's retirement, the accumulated contributions and related interest income are transferred to the Pension Accumulation Reserve or refunded to the member upon termination.

3. Expense Reserves

To pay all the expenses necessary in connection with the administration and operation of the ERS, the Board estimates the amount of money necessary to be paid into the expense reserve for the ensuing biennium to provide for the expense of operation of the ERS, and pays that amount into the expense account from the investment earnings of the ERS, subject to review by the legislature and approval by the Governor.

Note D – Description of Reserves (continued)

Net position restricted for pensions as of June 30, 2014 are as follows:

Pension Accumulation Reserve	$	12,083,141,971
Annuity Savings Reserve		2,107,182,628
Expense Reserve		12,690,704
Total net position restricted for pensions	$	14,203,015,303

Note E – Contributions

The ERS' funding policy provides for periodic employer contributions expressed as a percentage of annual covered payroll. The funding method used to calculate the total employer contribution required is the entry age normal actuarial cost method. Employer contributions are governed by Chapter 88 of the HRS. The actuarially determined contribution rates may differ from the statutory contribution rates.

Employer rates are set by statute based on the recommendation of the ERS actuary resulting from an experience study conducted every five years. Since July 1, 2005, employer contribution rates are a fixed percentage of compensation, including the normal cost plus amounts required to pay for the unfunded actuarial accrued liability. From July 1, 2005 to June 30, 2008, the required contribution rates for employers were 15.75% for their police officers and firefighters, and 13.75% for all other employees. From July 1, 2008 to June 30, 2012, employers contributed 19.70% for their police officers and firefighters, and 15.00% for all other employees. Effective July 1, 2012, the employer rate increased to 22.00% for their police officers and firefighters, and 15.50% for all other employees. Effective July 1, 2013, the employer rate increased to 23.00% for their police officers and firefighters, and 16.00% for all other employees.

The employer normal cost is the level percentage of payroll contribution required to pay all benefits. Actuarial gains and losses resulting from differences between actual and assumed experience are reflected in the employer unfunded accrued liability.

Effective July 1, 2012, the last employer is required to make "additional contributions" to the ERS for employees that first became ERS members before July 1, 2012 and retire after June 30, 2012, if the member has "excessive" non-base pay during the last 10 years of employment. The additional contributions are based on the increased costs of the actuarial equivalent increase in pension benefits the member will be paid in retirement compared to the pension benefits that would be paid if the member did not have excess non-base pay in their Average Final Compensation amount.

Member contributions rates are statutorily established in accordance with Chapter 88 of the HRS, and are discussed in note A.3. Plan Descriptions and Funding Policy above. Since 1989, participating employers "pick up" ERS member contributions made by payroll deduction as "employer contributions" for tax purposes under IRC section 414(h)(2). Beginning in FY 2014 with the implementation of GASB Statement No. 67, these member contributions that the employer "picks up" are being classified as employer contributions in the ERS financial statements. However, for the ERS actuarial valuation purposes member contributions are being calculated as being paid by the member.

Note F – Deposit and Investment Disclosures

1. Investment Policy

Investments are governed pursuant to Sections 88-119 and 88-119.5 of the HRS. The Pension Trust Fund may invest in real estate loans and mortgages; preferred and common stocks; government obligations; corporate obligations; certain other debt obligations (such as obligations secured by collateral of certain other authorized securities listed here, obligations issued or guaranteed by certain development banks, and insurance company obligations); real property; alternative investments; and other securities and futures contracts. Investments in the Securities Lending Collateral Pool and the Contribution Fund are limited to investment grade, short-term marketable securities.

The investment decision is further dictated by internal investment policies and asset allocation established by the Board. As a long-term investor, the ERS has established through its investment policy that preservation of capital is the primary goal of the ERS. Preservation of capital is to be attained with a consistent, positive return for the fund by diversifying the investment portfolio. The ERS recognizes risk associated for individual securities or asset classes may be reduced through diversification. Investments will be prudent and consistent with the best investment practices, in accordance with the Board's asset allocation strategy, assigned investment mandate, and in compliance with Chapter 88, HRS, as amended.

Use of leverage is restricted to certain asset classes in order to enhance yields of approved investments and/or to facilitate diversification of the portfolio. The use of debt must result in positive leverage where cash flow is in excess of debt service.

In 2010, the Board adopted an Evolving Investment Policy Asset Allocation to allow for a smooth transition to the new long- term policy asset allocation targets that became effective on July 1, 2013, and remained in place at June 30, 2014. Plan assets are managed on a total return with the long-term objective of achieving and maintaining a fully funded status basis (when combined with receiving the required employer and member contribution requirements) for the benefits provided through the Pension Trust. As part of the investment policy, the Board reviews the asset allocation annually and should perform a formal asset allocation study at least every three years to verify or amend the targets.

Note F – Deposit and Investment Disclosures (continued)

1. Investment Policy (continued)

As of June 30, 2014, the ERS will strategically invest in the following asset classes:

	Strategic Allocation	Strategic Range	Long-term expected Arithmetic rate of return
Domestic equity	30%	23% - 37%	8.50%
International equity	26%	21% - 33%	9.00%
Total Fixed-income	20%	15% - 25%	3.10
Real Estate	7%*	5% - 9%	8.46
Private Equity	7%*	4% - 9%	11.75%
Real Return	5%*	0% - 10%	6.10%
Covered Calls	5%	0% - 10%	7.65%
Total	100%		

* The real estate, private equity, and real return targets will be the percentage actually invested up to 7%, 7%, and 5%, respectively of the total fund. Changes in the real estate, private equity, and real return targets will be offset by an equal percentage change in the large cap domestic equity target.

Effective July 1, 2013 as part of the Evolving Investment Policy Asset Allocation, the target allocation was reduced to total fixed income and increased the allocation to Private Equity. The previous strategic allocation was 21% to Total Fixed Income and 6% to Private Equity.

Rate of Return

For the year ended June 30, 2014, the annual money-weighted return on pension plan investments, net of pension plan investment expense, was 17.9%. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for changing amounts actually invested.

2. Deposits

Cash includes amounts in demand deposits for operations and invested funds held by ERS investment managers. The deposits are held in several financial institutions, including the custodian bank for processing investment transactions. Per State statute, deposits, held by banks located in the State, in excess of Federal Deposit Insurance Corporation (FDIC) coverage are guaranteed by securities pledged as collateral by the bank with the State Director of Finance. Uninsured and uncollateralized amounts are primarily cash held by the investment custodian for settlement of investment transactions. Deposits are presented in the basic financial statements at cost, which represent market or fair value.

Note F – Deposit and Investment Disclosures (continued)

2. Deposits (continued)

Custodial Credit Risk for Deposits is the risk that in the event of a bank failure, the ERS' deposits may not be returned to them. The ERS has not adopted a formal policy specific to custodial credit risk. The ERS' policy is to deposit cash in excess of operating requirements in income producing investments to maximize investment income.

At June 30, 2014, the carrying amount of deposits totaled approximately $46,305,580 and the corresponding bank balance was $49,220,483, all of which was exposed to custodial credit risk

3. Investments

The following table shows the investments of the ERS by investment type as of June 30, 2014. Please refer to Note C-2 above for a discussion of fair value on investments.

Investments at fair value		
Cash and short-term instruments		
Cash and cash equivalents	$	46,305,580
Short-term bills and notes		37,699,121
Pooled and others		341,155,480
Fixed income securities		
U.S. Treasury bonds and notes		432,433,381
U.S. government agencies bonds		38,952,368
U.S. government agency mortgage backed		18,041,648
U.S. government-sponsored agency mortgage backed		176,427,833
Commercial mortgage backed securities		112,179,162
U.S. municipal bonds		41,374,270
U.S. corporate bonds		613,766,885
Non-U.S. government / agency bonds		603,043,601
Non-U.S. corporate bonds		512,601,313
Pooled and Others		12,109,551
Derivatives		
Forwards - Cash and short-term instruments		(3,894,953)
Options - Cash and short-term instruments		(12,214)
Options - Equities		(11,127,304)
Futures - Debt securities		105,771,063
Swaps		3,387,721
Equities		9,461,380,491
Real estate		1,192,580,701
Alternative investments		751,113,517
Total investments	$	14,485,289,215
Short-term instruments for securities lending collateral pool	$	1,233,104,953

Note F – Deposits and Investment Risk Disclosures (continued)

4. Credit Risk

Credit risk is defined as the risk that an issuer or other counterparty to an investment will not fulfill its obligations. Information regarding ERS' credit risk on derivative investments is discussed below in derivative disclosures note F10 while policies related to credit risk for securities lending program are discussed in note F9 below.

The ERS' utilizes two fixed income mandates: (i) a "Diversified Manager" whose benchmark is 85% Lehman Universal/15% Lehman Multiverse ex-USD Hedged Index and (ii) an "International Mandate" whose benchmark is Lehman Multiverse ex-USD Hedged Index. The ERS expects its debt securities investment managers to maintain diversified portfolios within the mandate assigned by the Board using the following guidelines as to permissible credit quality ranges, exposure levels within individual quality tiers, and average credit quality:

- Securities with a quality rating of below Baa (based on Moody's rating scale) or equivalent are considered below investment grade.
- Invest in money market instruments; commercial paper (rated A1/P1); certificates of deposits and bankers acceptance; U.S. Treasury bonds, notes, and bills; U.S. government and agency securities; municipal bonds; 144A private placements; bank loans; non-leveraged structured notes; convertible bonds; mortgages, collateralized mortgage obligations (CMO) and asset backed securities (backed by pools of mortgages guaranteed by the U.S. government or its agencies or corporate issues rated at least Aaa); investment grade corporate debt issues, emerging markets debt, preferred stock and common stock; sovereign debt instruments (issued by agencies of, or guaranteed by foreign governments; and certain foreign securities (corporate debt issues, asset backed securities, CMOs, 144A private placements, convertibles and supranational issues). The minimum issuance size is $150 million.

- Summary of Concentration Limits for debt securities are:
  - Specific Issue or Issuer of 5% (excludes supranationals, U.S. Treasuries, U.S. agencies, and sovereign debt and equivalently rated agencies of Organisation for Economic Co-operation and Development (OECD) governments).
  - All fixed income manager portfolios are limited to (i) 15% in below investment grade securities with no more than 2% below a B rating; (ii) 10% in private placements; (iii) 5% in convertible securities; (iv) 10% in preferred stocks and common stocks (common stock holdings not to exceed 180 days); and (v) 10% in non-U.S. Agency CMOs.
  - Diversified managers are limited to (i) 10% in emerging markets (local currency and debt); (ii) 30% of Non-U.S. Dollar denominated securities (excludes money market securities and money market futures); (iii) a 15% net foreign currency exposure (as measured by net amount of currency's outstanding long and short positions versus the U.S. Dollar); and (iv) a 30% gross foreign currency exposure (as measured by absolute value of all country-level currency long and short currency positions versus the U.S. Dollar).
  - International managers are limited to (i) 20% in emerging markets (local currency and debt); and (ii) 25% of U.S. Dollar denominated securities (excludes money market securities and money market futures).

Note F – Deposits and Investment Risk Disclosures (continued)

4. Credit Risk (continued)

A table of the ERS' fixed income securities as of June 30, 2014 is below. Securities below investment grade of Baa and non-rated issues (average rating by S&P, Moody's and/or Fitch) amounted to $227,087,364 or 8.5% of total fixed income investments. All short-term investments, not held in a pooled investment, are rated A1/P1or better.

Credit Ratings - Average rating by S&P, Moodys and Fitch as of June 30, 2014

Ratings	US Govt Agency	US Govt sponsored-agency mortgage backed	US corporate bonds	US municipal bonds	Commercial mortgage backed securities	Non-US corporate bonds	Non US-govt/agencies bonds	Pooled & others	Total
AAA	$ 38,135,112	$ 176,427,833	$ 22,090,155	$ 11,925,118	$ 32,107,593	$ 76,191,075	$ 144,980,886	$ -	$ 501,857,772
AA1	-	-	11,736,201	3,924,164	6,509,226	55,169,101	148,415,439	-	$ 225,754,131
AA2	-	-	3,363,774	3,145,529	2,754,721	7,289,225	15,201,444	-	$ 31,754,693
AA3	817,256	-	23,793,461	15,889,916	3,507,757	76,919,581	25,928,587	-	$ 146,856,558
A1	-	-	26,389,579	4,649,130	4,943,219	27,400,332	-	-	$ 63,382,260
A2	-	-	49,272,490	1,614,905	6,586,455	51,954,658	46,436,594	-	$ 155,865,102
A3	-	-	89,686,702	225,508	11,639,140	40,700,468	26,526,157	-	$ 168,777,975
BAA1	-	-	84,081,598	-	6,141,292	32,226,844	23,555,235	-	$ 146,004,969
BAA2	-	-	86,167,657	-	10,070,516	79,323,122	130,038,455	-	$ 305,599,750
BAA3	-	-	68,780,997	-	4,591,481	23,297,833	40,844,098	-	$ 137,514,409
BA1	-	-	13,739,144	-	2,835,452	19,320,222	-	-	$ 35,894,818
BA2	-	-	36,689,820	-	1,837,501	12,696,062	140,981	744,766	$ 52,109,130
BA3	-	-	27,419,989	-	575,663	2,325,061	-	-	$ 30,320,713
B1	-	-	24,923,807	-	455,263	1,793,181	-	-	$ 27,172,251
B2	-	-	22,718,739	-	768,072	2,656,975	-	1,510,802	$ 27,654,588
B3	-	-	12,694,950	-	5,268,552	-	975,725	-	$ 18,939,227
CAA1	-	-	762,300	-	1,980,801	-	-	-	$ 2,743,101
CAA2	-	-	878,440	-	1,038,788	-	-	-	$ 1,917,228
CAA3	-	-	1,399,963	-	6,404,128	-	-	-	$ 7,804,091
CA	-	-	45,616	-	-	-	-	-	$ 45,616
C	-	-	-	-	1,272,712	-	-	-	$ 1,272,712
D	-	-	35,258	-	558,119	-	-	-	$ 593,377
DEF	-	-	-	-	274,666	-	-	-	$ 274,666
Not rated	-	-	7,096,245	-	58,045	3,337,573	-	9,853,983	$ 20,345,846
	$ 38,952,368	$ 176,427,833	$ 613,766,885	$ 41,374,270	$ 112,179,162	$ 512,601,313	$ 603,043,601	$ 12,109,551	2,110,454,983

US Treasury Notes and Bonds	432,433,381
US Government agency - Government National Mortgage Association (GNMAs) mortgage backed	18,041,648
subtotal	$ 2,560,930,012
Derivatives	109,158,784
Total fixed income securities in Investments	$ 2,670,088,796

Note F – Deposits and Investment Risk Disclosures (continued)

5. Custodial Credit Risk

Custodial credit risk for investments is the risk that, in the event of a failure of the counterparty, the ERS will not be able to recover the value of the investment or collateral securities that are in the possession of an outside party. All securities, except certain pooled funds, are registered in the name of the ERS and are held in the possession of the ERS' custodial bank, The Bank of New York Mellon. Pooled funds not held by the custodial bank, such as certain equity investments, are registered in the name of the ERS. The ERS had $46,884,115 in cash and securities exposed to custodial credit risk.

6. Concentrations of Credit Risk

The ERS' debt securities managers are expected to maintain diversified portfolios by sector, quality, and maturity as discussed above in Credit Risk.

Equity securities shall be diversified by industry and in number. An investment manager may not hold more than 5% of an individual company's stock if that company's securities represent less than 3% of the investment manager's respective benchmark. (If those securities constitute more than 3% of the respective benchmark the manager shall not hold more than the benchmark weight plus 2 percentage points.)

At June 30, 2014, there was no single issuer exposure within the ERS' portfolio that comprises over 5% of the overall portfolio, or an investment that exceeded the above manager guidelines, and therefore, there is no concentration of credit risk to report.

Note F – Deposits and Investment Risk Disclosures (continued)

7. Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. The ERS has not adopted a formal policy that limits investment maturities as a means of managing its exposure to fair value changes arising from changing interest rates. External investment managers are given full discretion within their operational guidelines and are expected to maintain a diversified portfolio between and within sectors, quality, and maturity.

Duration is a measure of a debt investment's exposure to fair value changes arising from changes in interest rates. It uses the present value of cash flows, weighted for those cash flows as a percentage of the investment's full price. At June 30, 2014, the table below shows fixed income investment securities by investment type, amount, and the effective weighted duration for the ERS' total portfolio. Interest rate risk associated with swaps and other derivative instruments are discussed in the derivatives disclosure below:

Effective duration of fixed income assets by security type (excluding derivatives)

		Fair Value	Effective Weighted Duration (years)
Fixed Income Securities			
U.S. Treasury bonds and notes	$	432,433,381	8.7
U.S. government agencies bonds		38,952,368	2.2
U.S. government agency mortgage backed		18,041,648	2.5
U.S. government-sponsored agency mortgage backed		176,427,833	3.7
Commercial mortgage backed securities		112,179,162	1.1
U.S. municipal bonds		41,374,270	10.2
U.S. corporate bonds		613,766,885	5.6
Non-U.S. government / agency bonds		603,043,601	7.7
Non-U.S. corporate bonds		512,601,313	5.2
Pooled and Others		12,109,551	15.5
Total	$	2,560,930,012	5.1

Note F – Deposits and Investment Risk Disclosures (continued)

8. Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates will adversely impact the fair value of an investment. The foreign currency risk exposure to the ERS arises from the international fixed income and international equity investment holdings. Board policy limits the use of foreign currency as a defensive measure to protect the portfolio value of non-U.S. equity and non-U.S. fixed income investments. External investment managers authorized to invest in these securities are given full discretion regarding their respective portfolio's foreign currency exposures, including using currency forward contracts, as established by their investment mandate. Cross-hedging is only allowed in non-U.S. fixed income portfolios. Counterparties for foreign currency derivatives must be rated A or equivalent. Derivatives investments are discussed in more detail in Note H.

The following table summarizes the ERS' exposure to foreign currency risk in U.S. dollars as of June 30, 2014. (Securities denominated in U.S. dollars are not presented.)

Argentine peso	$ 3,481	$ -	$ -	$ -	$ -	$ -	$ 3,481
Australian dollar	1,887	69,705,281	(243,954)	65,138,402	-	-	134,601,616
Brazilian real	231,414	-	(40,137)	74,424,575	-	-	74,615,852
Bulgarian new lev	201,896	-	-	-	-	-	201,896
Canadian dollar	4,449,506	21,982,388	(533,791)	77,206,792	-	-	103,104,895
Chilean peso	103,210	-	-	7,777,699	-	-	7,880,909
Colombian peso	57,571	-	-	2,792,623	-	-	2,850,194
Czech koruna	-	-	-	1,104,268	-	-	1,104,268
Danish krone	59,745	1,035,953	13,397	45,218,675	-	-	46,327,770
Egyptian pound	932,414	-	-	3,243,734	-	-	4,176,148
Euro	126,596	269,189,350	1,841,436	556,639,226	-	-	827,796,608
Hong Kong dollar	551,483	-	-	257,264,652	-	-	257,816,135
Hungarian forint	23,175	-	-	3,753,452	-	-	3,776,627
Indonesian rupiah	244,449	-	-	21,753,822	-	-	21,998,271
Israeli shekel	-	-	27	4,465,585	-	-	4,465,612
Japanese yen	(92,679)	38,006,645	(1,560,064)	223,386,311	-	-	259,740,213
Malaysian ringgit	128,211	-	-	13,817,327	-	-	13,945,538
Mexican peso	35,903,309	19,223,236	120,760	26,387,951	-	-	81,635,256
New Taiwan dollar	2,509	-	-	117,215,544	-	-	117,218,053
New Turkish lira	-	-	-	16,205,640	-	-	16,205,640
New Zealand dollar	333,305	88,462,349	(1,610,454)	-	-	-	87,185,200
Norwegian krone	71	26,123,940	23,030	-	-	-	26,147,041
Philippine peso	36,374	1,944,874	-	6,203,070	-	-	8,184,318
Polish zloty	14,231	46,436,594	1,956	20,298,345	-	-	66,751,126
Pound sterling	1,618,384	188,878,718	(1,504,364)	315,081,123	-	-	504,073,861
Qatari riyal	-	-	-	968,590	-	-	968,590
Russian ruble (new)	29,087	-	-	7,292,259	-	-	7,321,346
South African rand	62,565	48,446,168	(154,812)	91,662,418	-	-	140,016,339
Singapore dollar	74,560	5,609,930	(26,576)	40,834,743	-	-	46,492,657
South Korean won	48,789	-	(2,260)	152,773,588	-	-	152,820,117
Swedish krona	74	8,312,856	116,865	34,731,614	-	-	43,161,409
Swiss franc	853	-	-	214,298,973	-	-	214,299,826
Thai baht	8,842	-	-	43,753,322	-	-	43,762,164
UAE dirham	-	-	-	1,453,155	-	-	1,453,155
Various Countries	-	-	-	1,530,823,262	-	-	1,530,823,262
Total	$ 45,155,312	$ 833,358,282	$ (3,558,941)	$ 3,977,970,740	$ -	$ -	$ 4,852,925,393

Note F – Deposits and Investment Risk Disclosures (continued)

9. Securities Lending

The ERS participates in a securities lending program administered by its bank custodian, The Bank of New York Mellon. Under this program, which is permissible under Chapter 88 of the HRS, certain equity and fixed-income securities of the ERS are lent to participating broker-dealers and banks (borrowers). In return, the ERS receives cash, securities issued or guaranteed by the U.S. government, securities issued or guaranteed by OECD (Organization for Economic Cooperation and Development) member states or their local authorities, Canadian Provincial debt, equity securities that are part of the U.S. and non U.S. indices, and/or letters of credit as collateral. The ERS does not have the ability to pledge or sell collateral securities absent of borrower default. Risk is mitigated by the investment policies and operational procedures regarding issuer, credit, exposure and rating limits utilized in the securities lending program. Borrowers are required to deliver collateral for each loan equal to: (a) in the case of loaned fixed-income securities and loaned equity securities denominated in U.S. dollars or whose primary trading market was located in the U.S., 102% of the market value of the loaned securities; and (b) in the case of loaned equity securities not denominated in U.S. dollars or whose primary trading market was not located in the U.S., 105% of the market value of the loaned securities. The collateral is marked to market daily. If the market value of the collateral falls below the minimum collateral requirements, additional collateral is provided. In addition, the bank custodian indemnifies the ERS by agreeing to purchase replacement securities or return cash collateral in the event the borrower fails to return the loaned security or fails to pay the ERS for income distributions by the securities' issuers while the securities are on loan.

The ERS does not impose any restrictions on the amount of loans the bank custodian made on behalf of the ERS. Also, the ERS and the borrowers maintains the right to terminate securities lending transactions on demand. The Bank of New York Mellon invests the cash collateral related to the ERS' loaned securities in a separate account, according to the ERS investment policies and procedures as discussed above in notes C2 and F1. As such, the maturities of the investments made with cash collateral generally do not match the maturities of the securities loans. The extent of such mismatch as of June 30, 2014 was 121 days.

At June 30, 2014, there was no credit risk exposure to borrowers since the ERS was collateralized as discussed above. The total securities on loan and collateral received are shown below.

Securities lent for collateral	Fair value of underlying securities	Cash	Noncash
U.S. fixed income	$ 452,255,942	$ 366,542,693	$ 102,399,381
U.S. equities	1,118,839,786	788,655,226	379,213,289
International equities	350,735,483	77,907,034	315,714,119
International fixed income	42,729,662	-	44,410,360
	$ 1,964,560,873	$ 1,233,104,953	$ 841,737,149

Note F – Deposits and Investment Risk Disclosures (continued)

10. Derivative Financial Instruments

Derivatives are instruments (securities or contracts) whose value is dependent on such things as stock or bond prices, interest rate levels, or currency exchange rates. These are financial arrangements between two parties whose payments are based on or "derived" from the performance of some agreed-upon benchmark. As with any investment, derivative contracts are subject to various types of credit and market risks. Notably, these would include the possible inability of the counterparty to meet the terms of the contract, changes in the market value of the underlying collateral, changes in the interest rate environment, and fluctuation in foreign currency rates. The ERS enters into various derivative investment contracts to hedge, for the minimization of transaction costs and as a means of implementing value added strategies to enhance returns as authorized by Board policy.

Generally, derivatives are subject both to market risk and counterparty risk. The derivatives utilized by the ERS typically have no greater risk than their physical counterparts, and in many cases are offset by exposures elsewhere in the portfolio. Counterparty risk, the risk that the "other party" to a contract will default, is managed by utilization of exchange-traded futures and options where practicable (in which case the futures exchange is the counterparty and guarantees performance) and by careful screening of counterparties where use of exchange-traded products is impractical or uneconomical. ERS investment managers seek to control this risk through counterparty credit evaluations and approvals, counterparty credit limits, posting collateral, and exposure monitoring procedures. The ERS anticipates that counterparties will be able to satisfy their obligations under the contracts.

Derivative securities are priced and accounted for at their fair value. For exchange-traded securities such as futures and options, closing prices from the securities exchanges are used. Foreign exchange contracts are valued at the price at which the transaction could be settled by offset in the forwards markets.

The tables below summarize the ERS' investments in derivative securities and contracts held at June 30, 2014 and their associated risks. The various risks associated with these investments are included in the tables expressed in terms of market values, summarized by the type of contract as follows: credit, equity, foreign exchange, interest, and other. Due to the level of risk associated with certain derivative investment securities, it is reasonably possible that changes in the values of investment securities will occur in the near term, and such changes could affect the amounts reported in the financial statements. ERS could be exposed to risk if the counterparties to the contracts are unable to meet the terms of the contracts. ERS investment managers seek to control this risk through counterparty credit evaluations and approvals, counterparty credit limits, posting collaterals, and exposure monitoring procedures.

The notional amount is the nominal or the underlying face amount that is used to calculate payments made on that instrument or contract. Changes in the market value of all derivative contracts are recorded as net appreciation (depreciation) in fair value of investments in the Statement of Changes in Fiduciary Net Position.

Note F – Deposits and Investment Risk Disclosures (continued)

10. Derivative Financial Instruments (continued)

The following table summarizes the ERS' investments in derivative securities and contracts held at June 30, 2014 with the related maturity information:

Asset categories		Notional values	Market value	Maturity (Range from)
Forwards	Currency purchases	$ -	$ (3,894,953)	0.0 yrs to 2.0 yrs
	To Be Announced (TBAs)	-	105,771,063	15.0 yrs to 30.0 yrs
	Total forwards	-	101,876,110	
Futures	Interest rate contracts	667,896,892	-	0.2 yrs to 3.0 yrs
	Futures total	667,896,892	-	
Options	Options	-	(11,127,304)	0.0 yrs to 6.3 yrs
	Options on currency	-	(12,214)	4.6 yrs
	Options total	-	(11,139,518)	
Swaps	Credit default swaps	-	39,136	7.0 yrs to 9.7 yrs
	Interest rate swaps	-	3,348,585	0.1 yrs to 29.5 yrs
	Swaps total	-	3,387,721	
	Grand Total	$ 667,896,892	$ 94,124,313	

Forward Currency Exchange Contracts and To-Be-Announced (TBA) Securities

The ERS enters into various forward currency exchange contracts to manage exposure to changes in foreign currency exchange rates and to facilitate the settlement of foreign security transactions. A forward contract is an agreement to buy or sell a specific amount of currency at a specific delivery or maturity date for an agreed-upon price. Risks associated with such contracts include movements in the value of the foreign currency relative to the U.S. dollar and the ability of the counterparty to perform in accordance with the terms of the contract.

The TBA market that ERS invests in as part of its toolkit to manage interest rates and liquidity includes the forward trading of mortgage-backed securities (MBS) issued by federal agencies and federally sponsored agencies (commonly known as pass-through securities issued by Freddie Mac, Fannie Mae, and Ginnie Mae). The TBA market is one of the most liquid, and consequently the most important secondary market for mortgage loans as one MBS pool can be considered to be interchangeable with another pool.

Futures

Futures represent commitments to purchase (asset) or sell (liability) securities at a future date and at a specified price. Futures contracts are traded on organized exchanges (exchange traded) thereby minimizing the ERS' credit risk. The net change in the futures contracts value is settled daily in cash with the exchanges. Net gains or losses arising from the daily settlements are included in the net appreciation in fair value of securities in the Statement of Changes in Fiduciary Net Position. At June 30, 2014, the net notional value of futures contracts was $667,896,892.

Note F – Deposits and Investment Risk Disclosures (continued)

10. Derivative Financial Instruments (continued)

Options

Options represent or give the buyers the right, but not the obligation, to buy or sell an asset at a preset price over a specified period. The option's price is usually a small percentage of the underlying asset's value. As a writer of financial options, the ERS receives a premium at the outset of the agreement and bears the risk of an unfavorable change in the price of the financial instrument underlying the option. As a purchaser of financial options, the ERS pays a premium at the outset of the agreement and the counterparty bears the risk of an unfavorable instrument underlying the option.

Swaps

Swaps represent an agreement between two or more parties to exchange sequences of cash flows over a period in the future. At June 30, 2014, the ERS had interest rate, credit default swaps, and total return swaps as allowed by Board policy. In the most common type of interest rate swap arrangement, one party agrees to pay fixed-interest payments on designated dates to a counterparty who, in turn, agrees to make return interest payments that float with some reference rate. Credit default swaps are the most common global credit market derivative that allows flexibility as an active portfolio management tool based on its ability to customize the exposure to corporate credit such as credit spreads and default risks. Total return swaps combine both market risk and credit risk in a single product as the holder also receives capital gains or losses. Credit default spreads and total return swaps are also used to gain access to global markets that do not have the transparency or efficiency of the U.S. credit markets. Gains and losses from swaps are determined on market values and are included in the net appreciation in fair value of securities in the Statement of Changes in Fiduciary Net Position.

Derivatives, such as interest rate swaps, total return swaps, and credit default swaps, are a tool or instrument used to manage interest rate, credit quality, and yield curve exposures of the investments. In certain situations, derivatives may result in a lower overall cost to the portfolio than owning individual securities underlying the derivatives. When evaluating securities, risk, and return are measured at the security and portfolio levels.

Note F – Deposits and Investment Risk Disclosures (continued)

10. Derivative Financial Instruments (continued)

On June 30, 2014, credit ratings of the counterparty for ERS' investments in derivatives were as follows:

	Derivatives Counterparty Credit Ratings								
	Aa1	Aa3	A1	A2	A3	Baa1	Baa2	N/A	Grand Total
Bank of America Corp							(10,098)		$ (10,098)
Barclays PLC					248,614				248,614
BNP Paribas SA			(175)						(175)
Citigroup Inc							(2,270)		(2,270)
CME Group Inc/IL		3,122,738							3,122,738
Credit Suisse Group AG				(284)					(284)
Deutsche Bank AG				17,764					17,764
Goldman Sachs Group Inc/The						(2,980)			(2,980)
HSBC Holdings PLC		132,828							132,828
JPMorgan Chase & Co					(28,805)				(28,805)
Morgan Stanley							(5,177)		(5,177)
UBS AG				2,937					2,937
United Kingdom of Great Britain and Northern Ireland	(76,497)								(76,497)
Foreign Currency Forwards	-	-				-	-	(3,894,953)	(3,894,953)
Exchange traded - Swap, Options and TBAs	-	-				-	-	94,620,671	94,620,671
Total	$ (76,497)	$ 3,255,566	$ (175)	$ 20,417	$ 219,809	$ (2,980)	$ (17,545)	$ 90,725,718	$ 94,124,313

Note G – Pension Liability

1. Net Pension Liability

The components of the net pension liability of the ERS at June 30, 2014 were as follows:

Total Pension Liability	$22,220,097,547
Plan Fiduciary Net Position	14,203,015,303
Net Pension Liability	$ 8,017,082,244

Plan Fiduciary Net Position as a Percentage of Total Pension Liability	63.9%
Net Pension Liability as a Percentage of Covered Payroll	209.4%

Multi-year trend information regarding whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liabilities for benefits can be found in the required supplementary information following the *Notes to the Financial Statements.*

Note G – Pension Liability (continued)

2. Summary of Actuarial Assumptions

The total pension liability was determined using the provisions of the GASB Statement No. 67 actuarial valuation as of June 30, 2014. The new GASB rules only redefine pension liability for financial reporting purposes. The actuarial assumptions were based on the results of an experience study for the period from July 1, 2005, through June 30, 2010. When measuring the total pension liability, GASB uses the same actuarial cost method, all actuarial assumptions, and the same discount rate as the ERS uses for funding which can be found in the Notes to Required Supplementary Information.

Summary of Actuarial Valuation as of June 30, 2014 follows:

Valuation date	June 30, 2014
Actuarial cost method	Entry Age Normal
Amortization method	Level percent, open
Actuarial assumptions:	
Inflation assumption	3.00%
Investment rate of return, including inflation at 3.00%	7.75%
Payroll growth rate:	3.50%
Projected salary increases, including inflation at 3.00%	
- Police and Fire Employees	5.00% to 19.00%
- General Employees	4.00% to 8.00%
- Teachers	4.50% to 8.50%
Cost of living adjustments (COLAs)	2.5%/1.5%
- COLAs are not compounded; and are based on original pension amounts.	

Mortality rate assumptions include the effects of the retirement status of members.

Post-Retirement Mortality rates are:

Healthy:	General Employees	Client specific table for males, 89% multiplier Client specific table for females, 89% multiplier
	Teachers	Client specific table for males, 65% multiplier Client specific table for females, 67% multiplier
	Police and Fire	1994 US Group Annuity Mortality Static Table for males, 85% multiplier 1994 US Group Annuity Mortality Static Table for females, 85% multiplier
Disabled:	General Employees	1994 US Group Annuity Mortality Static Table for males, set forward nine years 1994 US Group Annuity Mortality Static Table for females, set forward nine years
	Teachers	1994 US Group Annuity Mortality Static Table for males, set forward five years 1994 US Group Annuity Mortality Static Table for females, set forward six years
	Police and Fire	1994 US Group Annuity Mortality Static Table for males, set forward three years 1994 US Group Annuity Mortality Static Table for females, set forward three years

Note G – Pension Liability (continued)

2. Summary of Actuarial Assumptions (continued)

Pre-retirement mortality rates are:

For males, multiples of a custom table that has
- RP-2000 Male Employee rates for age 1 to 70 and RP-2000 Combined Male Rates for ages over 70

For females, multiples of a custom table that has
- RP-2000 Female Employee rates for age 1 to 70 and RP-2000 Combined Female Rates for ages over 70

The following factors are used in conjunction with the described above to derive the death rates:

	General Employees		Teachers		Police and Fire	
Type	Males	Females	Males	Females	Males	Females
Ordinary	64%	48%	50%	40%	15%	15%
Accidental (Service-related)	16%	12%	10%	5%	35%	35%

The long-term expected arithmetic rate of returns on pension plan investments based on ERS' investment consultant, Pension Consulting Alliance, Inc.'s 2014 capital market projections for the target asset allocation as of June 30, 2014, are summarized in the following table:

Asset Class	Long-term Expected arithmetic rate of return
Domestic equity	8.50%
International equity	9.00%
Total Fixed-income	3.10%
Real Estate	8.46%
Private Equity	11.75%
Real Return	6.10%
Covered Calls	7.65%

Single Discount Rate

A single discount rate of 7.75% was used to measure the total pension liability. This single discount rate was based on the expected rate of return on pension plan investments of 7.75%. The projection of cash flows used to determine this single discount rate assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. Based on these assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Note G – Pension Liability (continued)

3. Sensitivity of the Net Pension Liability to Changes in the Single Discount Rate

The following presents the ERS' net pension liability calculated using a single discount rate of 7.75%, as well as what the ERS' net pension liability would be if it were calculated using a single discount rate that is 1-percentage-point lower (6.75%) or 1–percentage-point higher (8.75%) than the current rate.

1% Decrease (6.75%)	Current Discount Rate (7.75%)	1% Increase (8.75%)
$10,239,091,999	$8,017,082,244	$5,795,072,490

Note H – Risk Management

The ERS is exposed to various risks of loss related to torts; theft of, damage to, or destruction of assets; errors or omissions; natural disasters; and injuries to employees. As required by state law, the ERS participates in coverage with the State. The State retains various risks and insures certain excess layers with commercial insurance policies. The excess layers are consistent with the prior fiscal year. Settled claims for the State did not exceed the coverage provided by commercial insurance policies during the year ended June 30, 2014. Losses not covered by insurance are generally paid from legislative appropriations.

1. Torts

The ERS is involved in various litigation and claims, including claims regarding retirement benefits, the outcome of which cannot be presently determined. In the opinion of management, the outcome of these actions will not have a material adverse effect on the ERS' financial position.

2. Property and Liability Insurance

The ERS also purchased property and liability insurance for all real estate owned from outside carriers. During the past three fiscal years, no loss settlements exceeded insurance coverages.

3. Workers' Compensation Policy

The State has a self-insured workers' compensation policy. Workers' compensation claims are paid from legislative appropriations.

Note I – Commitments

In the normal course of business, the ERS enters into commitments with associated risks. The ERS adheres to the same credit policies, financial and administrative controls, and risk limiting and monitoring procedures for these commitments as for all investments.

The ERS has future financial commitments of up to $651,000,000 as of June 30, 2014, consisting of $102,000,000 in real estate investments, and $549,000,000 in alternative investments.

Note J – Deferred Compensation Plan

The ERS does not sponsor a deferred compensation program. The ERS' employees are eligible to participate in the deferred compensation plan sponsored by the State. The State-sponsored plan was created in accordance with Internal Revenue Code Section 457. The plan, available to all ERS employees, permits them to defer a portion of their salaries. The deferred compensation is not available to the employees until termination, retirement, death, or an unforeseeable emergency. All compensation deferred under the plan is held in trust by a custodian for the exclusive benefit of participants and beneficiaries.

Note K – Subsequent Events

Effective October 1, 2014, the ERS implemented a new risk-based, functional framework for the asset allocation policy from the prior methodology based on general asset class of securities and type of investments managed. While this strategic asset allocation policy change is not expected to have a significant effect on the long-term financial condition of the ERS, it is expected to help ERS understand, monitor, and manage the risks within investment portfolio. The new strategic asset allocation policy is listed on page 37 in the Management Discussion and Analysis.

Schedule of Changes in the Employers' Net Pension Liability and Related Ratios
Fiscal Year Ended June 30, 2014

A. Total pension liability	
1. Service Cost	$421,956,129
2. Interest on the Total Pension Liability	1,618,917,777
3. Changes of benefit terms	0
4. Difference between expected and actual experience of the Total Pension Liability	66,400,876
5. Changes of assumptions	0
6. Benefit payments, including refunds of employee contributions	(1,130,921,611)
7. Net change in total pension liability	$976,353,171
8. Total pension liability – beginning	21,243,744,377
9. Total pension liability – ending	$22,220,097,548
B. Plan fiduciary net position	
1. Contributions – employer	$653,127,697
2. Contributions – employer (picked-up employee contributions)	204,821,010
2. Contributions – employee	1,306,327
3. Net investment income	2,175,479,961
4. Benefit payments, including refunds of employee contributions	(1,130,921,611)
5. Pension Plan Administrative Expense	(12,626,030)
6. Other	0
7. Net change in plan fiduciary net position	$1,891,187,354
8. Fiduciary net position – beginning	12,311,827,949
9. Fiduciary net position – ending	$14,203,015,303
C. Net pension liability	$8,017,082,245
D. Fiduciary net position as a percentage of the total pension liability	63.92%
E. Covered-employee payroll	$3,829,002,983
F. Net pension liability as a percentage of covered employee payroll	209.38%

* Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

Schedule of the Employers' Net Pension Liability
Fiscal Year Ended June 30, 2013 and 2014*

Fiscal year ended June 30,:	Total Pension Liability	Fiduciary Net Position	Net Pension Liability	Fiduciary Net Position as a % of Total Pension Liability	Covered Payroll	Net Pension Liability as a Percentage of Covered Payroll
2013	$21,243,744,377	$12,311,827,949	$8,931,916,428	57.96%	$3,720,809,962	240.05%
2014	$22,220,097,547	$14,203,015,303	$8,017,082,244	63.92%	$3,829,002,983	209.38%

* Schedule is intended to show information for 10 years. Additional years will be built prospectively as data becomes available.

Schedule of Employer Contributions
2005 to 2014
(In thousands)

Fiscal year ended June 30,:	Actuarially Determined Contributions	Contributions in Relation to the Actuarially Determined Contributions	Contribution Deficiency (Excess)	Covered Employee Payroll	Contributions as a Percentage of Covered Payroll
2005	$328,717	$328,717	$0	$2,924,548	11.2%
2006	423,446	423,446	-	3,113,737	13.6%
2007	476,754	454,494	(22,260)	3,340,488	13.6%
2008	510,727	488,770	(21,957)	3,601,722	13.6%
2009	526,538	578,635	52,097	3,838,000	15.1%
2010	536,237	547,613	11,376	3,713,593	14.7%
2011	582,535	534,858	(47,677)	3,731,383	14.3%
2012	654,755	548,353	(106,402)	3,706,137	14.8%
2013	667,142	581,447	(85,695)	3,720,810	15.6%
2014	705,224	653,128	(52,096)	3,829,003	17.1%

Notes: All contributions shown reflects statutory employer-paid contributions only. Employer contributions (picked-up employee/member contributions) and member contributions are excluded.
Information provided by Gabriel, Roeder Smith and Company, the ERS's actuary

Schedule of Investment Returns
2014

For fiscal year ended June 30,:	Annual Money-Rate of Return
2014	17.9%

* Schedule is intended to show information for 10 years. Additional years will be built prospectively as data becomes available.

June 30, 2014

Note A - Description

There have been no changes in benefit terms since the last valuation.

Methods and Assumptions Used in Calculations of Actuarially Determined Contributions

The actuarially determined contribution rates in the schedule of contributions are calculated as of June 30, 2014. The following significant actuarial methods and assumptions were used to determine contribution rates reported in that schedule. Please refer to the Actuarial Section for additional information on actuarial assumptions.

Valuation date	June 30, 2014
Actuarial cost method	Entry Age Normal
Amortization method	Level percent, open
Asset valuation method	4-year smoothed market
Assumed inflation rate	3.0%
Investment rate of return	7.75% (including 3.0% for inflation and a 4.75% net real rate of return)
Cost-of-living adjustments (COLAs)	
- COLAs are not compounded; they are based on original pension amount.	
- Membership date prior to July 1, 2012	2.5% (not compounded)
- Membership date after June 30, 2012	1.5% (not compounded)
Payroll growth rate assumption	3.50%

Projected salary increases are comprised of the following components:

	General Employees	Teachers	Police and Fire
Service component by year of credited service (a)	0.0% to 4.0%	0.0% to 4.0%	0.0% to 14.0%
General increase (b)	1.0%	1.5%	2.0%
Inflation (c)	3.0%	3.0%	3.0%
Total increase (a + b +c)	4.0% to 8.0%	4.5% to 8.5%	5.0% to 19.0%

Notes to Required Supplementary Information - Unaudited

Detailed salary increase rates by years of service are shown below:

	General Employees		Teachers		Police and Fire	
Years of Service	Service-related Component (a)	Total Annual Rate of Increase (a + b +c)	Service-related Component (a)	Total Annual Rate of Increase (a + b +c)	Service-related Component (a)	Total Annual Rate of Increase (a + b +c)
1	4.00%	8.00%	4.00%	8.50%	14.00%	19.00%
2	3.00%	7.00%	3.25%	7.75%	12.00%	17.00%
3	2.00%	6.00%	2.50%	7.00%	0.00%	5.00%
4	1.25%	5.25%	2.00%	6.50%	0.00%	5.00%
5	1.00%	5.00%	1.50%	6.00%	0.00%	5.00%
6	0.75%	4.75%	1.00%	5.50%	0.00%	5.00%
7	0.50%	4.50%	1.00%	5.50%	0.00%	5.00%
8	0.50%	4.50%	0.75%	5.25%	0.00%	5.00%
9	0.50%	4.50%	0.75%	5.25%	0.00%	5.00%
10	0.25%	4.25%	0.75%	5.25%	0.00%	5.00%
11	0.25%	4.25%	0.50%	5.00%	0.00%	5.00%
12	0.25%	4.25%	0.50%	5.00%	0.00%	5.00%
13	0.25%	4.25%	0.50%	5.00%	0.00%	5.00%
14	0.25%	4.25%	0.50%	5.00%	0.00%	5.00%
15 or more	0.00%	4.00%	0.00%	4.50%	0.00%	5.00%

Mortality rates used in the valuation are:

Post-Retirement Mortality rates are:

Healthy:	General Employees	Client specific table for males, 89% multiplier Client specific table for females, 89% multiplier
	Teachers	1994 US Group Annuity Mortality Static Table for males, 65% multiplier 1994 US Group Annuity Mortality Static Table for females, 67% multiplier
	Police and Fire	1994 US Group Annuity Mortality Static Table for males, 85% multiplier 1994 US Group Annuity Mortality Static Table for females, 85% multiplier
Disabled:	General Employees	1994 US Group Annuity Mortality Static Table for males, set forward nine years 1994 US Group Annuity Mortality Static Table for females, set forward nine years
	Teachers	1994 US Group Annuity Mortality Static Table for males, set forward five years 1994 US Group Annuity Mortality Static Table for females, set forward six years
	Police and Fire	1994 US Group Annuity Mortality Static Table for males, set forward three years 1994 US Group Annuity Mortality Static Table for females, set forward three years

Pre-retirement mortality rates are:

For males, multiples of a custom table that has
- RP-2000 Male Employee rates for age 1 to 70 and RP-2000 Combined Male Rates for ages over 70

For females, multiples of a custom table that has
- RP-2000 Female Employee rates for age 1 to 70 and RP-2000 Combined Female Rates for ages over 70

The following factors are used in conjunction with the described above to derive the death rates:

	General Employees		Teachers		Police and Fire	
Type	Males	Females	Males	Females	Males	Females
Ordinary	64%	48%	50%	40%	15%	15%
Accidental (Service-related)	16%	12%	10%	5%	35%	35%

Change of Assumptions

There have been no changes in actuarial assumptions or methods since the last valuation.

Note B – Significant Factors Affecting Trends in Actuarial Information

2011 Changes in Plan Provisions Since 2010

The following changes were made to the actuarial assumptions:

- The investment rate of return assumption decreased from 8.00% to 7.75%.
- The salary increase rates were changed to reflect a larger productivity component for Police & Fire. Small changes also made to service-based components for all groups. The overall impact increased assumed salary increase rates for all employees.
- The rates of mortality for healthy retirees and beneficiaries for most employee groups were decreased.
- The rates of mortality for disabled retirees for most employee groups were increased.
- The rates of mortality for active employees for most employee groups were increased.
- The rates of disability for active employees for most general employees and teachers were decreased.
- The rates of retirement for most employees were increased.
- The rates of termination in the first six years of service for males generally increased, and remained mostly unchanged for females. After six years of service, the rates of termination generally increased for younger employees and decreased for employees from the age of 50.

Schedule 1

Combining Schedule of Changes in Fiduciary Net Position – All Trust Funds

Year ended June 30, 2014

	2014			
	Pension Accumulation Reserves	**Annuity Savings Reserves**	**Expense Reserves**	**Total**
Additions				
Appropriations and contributions:				
Employers	$ 653,127,697	$ -	$ -	$ 653,127,697
Employers (picked-up member)	-	204,821,010	-	204,821,010
Members	-	1,306,327	-	1,306,327
Net investment gain	2,175,479,961	-	-	2,175,479,961
Total additions	2,828,607,658	206,127,337	-	3,034,734,995
Deductions				
Benefit payments	1,122,445,642	-	-	1,122,445,642
Refunds of member contributions	-	8,475,969	-	8,475,969
Administrative expenses	-	-	12,626,030	12,626,030
Total deductions	1,122,445,642	8,475,969	12,626,030	1,143,547,641
Other changes in net position restricted for pension benefits:				
Transfer due to retirement of members	120,431,480	(120,431,480)	-	-
Transfer of interest allocation	(86,754,224)	86,754,224	-	-
Transfer to pay administrative expenses	(11,115,199)	-	11,115,199	-
Return of unrequired funds due to savings in administrative expenses	-	-	-	-
	22,562,057	(33,677,256)	11,115,199	-
Net increase (decrease)	1,728,724,073	163,974,112	(1,510,831)	1,891,187,354
Net position restricted for pensions:				
Beginning of year	10,354,417,898	1,943,208,516	14,201,535	12,311,827,949
End of year	$ 12,083,141,971	$ 2,107,182,628	$ 12,690,704	$ 14,203,015,303

See accompanying independent auditors' report.

Supplementary Information (continued)

Schedule 2

Social Security Contribution Fund

Statement of Changes in Assets and Liabilities

Year ended June 30, 2014

	2014			
	Beginning Balance	**Additions**	**Deductions**	**Ending Balance**
Assets				
Cash	$ -	$ -	$ -	$ -
Total assets	$ -	$ -	$ -	$ -
Liabilities				
Due to employers	$ -	$ 212,075,013	$ 212,075,013	$ -
Total liabilities	$ -	$ 212,075,013	$ 212,075,013	$ -

Supplementary Information (continued)

Schedule 3

Schedule of Administrative Expenses

Year ended June 30, 2014

		2014
Personnel services		
Salaries and wages	$	4,763,995
Fringe benefits		1,887,813
Net change in unused vacation credits		(35,925)
Total personnel services		6,615,883
Professional services		
Actuarial		97,500
Auditing and tax consulting		323,093
Disability hearing expenses		65,853
Legal services		518,796
Medical		375,962
Other services		491,541
Total professional services		1,872,745
Communication		
Postage		143,517
Printing and binding		134,862
Telephone		102,309
Travel		83,954
Total communication		464,642
Rentals		
Rental of equipment		92,059
Rental of premises		17,032
Total rentals		109,091
Other		
Armored car service		7,416
Computer and office automation systems		856
Repairs and maintenance		1,365,577
Stationery and office supplies		26,370
Miscellaneous		53,517
Total other		1,453,736
Depreciation		2,109,933
	$	12,626,030

See accompanying independent auditors’ report.

Schedule 4

Schedule of Investment Expenses

Year ended June 30, 2014

		2014
Real estate and alternative investment expenses		
Operating expenses	$	48,952,810
Mortgage interest		10,307,474
Total real estate and alternative investment expenses		59,260,284
Investment expenses		
Investment manager/advisor fees	$	33,238,783
Bank custodian fees		211,452
Other investment expenses		614,508
Total investment expenses		34,064,743
Securities lending expenses		
Borrower rebates		(1,104,933)
Management fees		526,122
Total securities lending expenses		(578,811)
	$	92,746,216

See accompanying independent auditors’ report.

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Employees' Retirement System

of the State of Hawaii

INVESTMENT SECTION

Letter from Chief Investment Officer

DAVID Y. IGE
GOVERNOR

STATE OF HAWAII
EMPLOYEES' RETIREMENT SYSTEM

December 14, 2015

Board of Trustees
201 Merchant Street, Suite 1400
Honolulu, HI 96813

Dear Members of the Board:

I am pleased to present investment highlights and performance for the Investment Section of the Comprehensive Annual Financial Report (CAFR) for the fiscal year ending June 30, 2014.

- ERS Fiduciary net position was valued at $14.2 billion as of June 30, 2014. The portfolio increased by $1.9 billion over the fiscal year. The ERS continued to be ranked as one of the largest 250 institutional investors globally, a peer group that includes sovereign wealth funds, public retirement plan sponsors, and corporate plan sponsors.

- The ERS investment portfolio slightly underperformed its three year, and five year Policy Benchmark by 0. 6%, and 0.1%, respectively, ending the year up 17.48%. The one year performance outperformed its Policy Benchmark by 0.3%. The portfolio performed less than the median public pension plan rankings for the three and five year periods, by 0.4% and 0.7%, respectively. It outperformed the public median fund by 0.3% in the one year period.

ECONOMIC CONDITIONS

The U.S. economy's increasing strength continued to fuel financial markets move higher during the year. Despite headwinds from geopolitical events, tapering of the U.S. Federal Reserve bond buying program, and actual cold air from a "polar vortex" Gross Domestic Product ("GDP") growth recorded the strongest half-year performance since 2003 in the second half of 2013, and registered a very healthy 4.0% annualized growth, led by exports, private nonfarm inventory, and consumer spending. The U.S. economy created 2.2 million jobs in the period and unemployment went from 7.6% to 6.1% at the end of June 2014. Inflation stayed below the Federal Reserve target of 2% annualized for most of the period, but jumped to 3.5% on an annualized basis in the final quarter of the fiscal year.

Employees' Retirement System
of the State of Hawaii

City Financial Tower • 201 Merchant Street, Suite 1400 • Honolulu, Hawaii 96813-2980
Telephone (808) 586-1735 • Fax (808) 586-1677 • http://ers.ehawaii.gov/

The Federal Reserve began the fiscal year with continued purchase of $85 billion monthly bond program. At the end of 2013, it was officially announced that the Federal Reserve would begin to tapper its purchase, and markets anticipated an October 2014 end to the program. By February 2014, Federal Reserve bond purchases dwindled to $45 billion monthly. Despite the change in monetary policy, interest rates remained near historically low levels, with U.S. Treasury yields decreasing over the last two quarters of the period.

Internationally, uncertainty stemming from Middle East strife and Russia's seizure of Crimea caused some market turbulence. Of greater concern to investors was a growing realization that growth in areas such as China and Europe would not be as strong as initially was expected. In fact, the year began with hopes that European Union was exiting the worst of the crisis only to find at year-end that additional stimulus will be necessary to avoid falling into a recession and deflationary conditions. In Japan, the Abe Administration implemented stimulus provisions to lift the third largest economy out of its multi-decade deflationary predicament. Even with slower but still strong growth from China, emerging markets as a whole benefited from a recovering U.S. and expectation of new stimulus in Europe and Japan.

PORTFOLIO ACTIVITY

The ERS portfolio grew by $1.9 billion during the fiscal year to end with an aggregate fiduciary net position of $14.2 billion. Performance exceeded the Policy Benchmark over the period by 30 basis points. Over longer measurement periods, the portfolio lagged its Benchmark over 3 years by 60 basis points (9.8% vs. 10.4%), while slightly underperforming and performing in line over the 5-year and 10-year periods, respectively (12.4% vs. 12.5% and 7.6% vs 7.6%).

The portfolio benefited over the current fiscal year from strong performance and weighting differences in domestic equities and fixed income. Performance was held back due to results in real estate and international equities. Measurement in the 3-year and 5-year performance periods continue to be challenged by a poor third quarter in 2011 as a consequence of the portfolio's domestic large cap equity managers. However, recent strong performance has begun to narrow the resulting gap with the Policy Benchmark and Median Public Fund. The large cap equity allocation has been subsequently restructured and staff operations have been improved to prevent a repeat of that situation.

The portfolio was rebalanced in March 2013 to align with long-term strategic targets, prior to the current fiscal year, in anticipation of a change of custodial bank services.

OFFICE DEVELOPMENT

At the conclusion of my first complete fiscal year as Chief Investment Officer, I am grateful for the continued support of the Board of Trustees and the Executive Director. During the period, we were able to add five full-time investment staff to the Investment Office. This consists of two Investment Specialists and three Investment Officers. The Investment Specialists are generalists, covering all markets. The Investment Officers have focused responsibilities centering on Liquid Markets, Illiquid Markets, and Risk Management. The additional resources provide for professional management of the investment portfolio and improved execution of policy directives. While the Board and staff will continue to work closely with outside consultants, a better resourced Investment Office means heightened attention to the prudent and conservative management of plan assets.

OUTLOOK

It is never a simple thing to make market predictions. The investment portfolio of the ERS has enjoyed two years of double digit returns, and the gains since the depths of the great financial crisis have been impressive. Performance has been strong with muted volatility over the period. It is likely that less robust performance and increased price swings will characterize the measurement periods ahead. Nevertheless, the results of FY14 and FY13 do provide opportunities to rebalance and reconsider investment policy and asset allocation. In the year ahead, while we look to manage the portfolio assets professionally and in accordance with existing policy, the Board with support from outside consultants and staff will explore more optimal portfolio construction and allocation methods. The exploration may lead to policy changes designed to create an investment portfolio better able to withstand market drawdowns while still achieving long-term strategic objectives of the pension plan.

Respectfully yours,

Vijoy P Chattergy

Vijoy P. Chattergy
Chief Investment Officer

Letter from Investment Consultant

PCA PENSION CONSULTING ALLIANCE

MEMORANDUM

June 12, 2015

Board of Trustees
Employees' Retirement System of the State of Hawaii
City Financial Tower
201 Merchant Street, Suite 1400
Honolulu, HI 96813-2980

Dear Trustees:

Enclosed is our report on the investment activity for the Employees' Retirement System of the State of Hawaii (ERS) for periods ending June 30, 2014, as requested by the Government Financial Officers' Association (GFOA).

Hawaii ERS-Total Fund Performance

The fiduciary net postion of the Retirement System was $14.2 billion as of June 30, 2014, an increase of roughly $1.9 billion for the fiscal year. The ERS Total Fund generated positive absolute returns throughout the portfolio, with mixed relative performance versus the major strategic classes' benchmarks. The increase in assets was primarily due to strong absolute performance within the public and private equity strategic classes. The investment return for the Total Fund, expressed as a time-weighted total rate of return, was +17.8% for the 2014 fiscal year, compared to the benchmark's return of +17.5% and the BNY Mellon Public Funds Greater than $1 Billion Database peer median return of +17.1%. For the three-year period ending June 30, 2014, the Total Fund returned +9.8% per annum versus the benchmark's return of +10.4% and the BNY Mellon Public Funds Greater than $1 Billion Database peer median return of +10.1%. For the trailing five-year period ending June 30, 2014, the Total Fund returned +12.4% per annum versus the benchmark's return of +12.5% and the BNY Mellon Public Funds Greater than $1 Billion Database peer median return of +13.1%. Underperformance versus the median fund over the three- and five-year periods is largely attributable to the ERS taking less risk.

Strategic Class Performance

Domestic Equity[1] returned +26.3% for the 2014 fiscal year versus the Domestic Equity Index's return of +25.2% and the BNY Mellon Domestic Equity Database peer median return of +25.3%. Diversified Fixed Income posted a +6.3% return for the fiscal year versus the Diversified Fixed Income Blended Index's return of +5.3% and the BNY Mellon Domestic Fixed Income Database peer median return of +6.1%. International Equity[1] posted a +20.8% return for the fiscal year versus the International Equity Index's return of +21.8% and the BNY Mellon International Equity Database peer median return of +22.3%. International Fixed Income returned +6.9% for the fiscal year versus the International Fixed Income Blended Index's return of +5.7% and the BNY Mellon International Fixed Income Database peer median return of +9.0%. Real Estate[2] returned +6.5% for the year ending June 30, 2014, versus the NCREIF[2] Total Index's return of +11.2%. Additional strategic classes and their fiscal year returns include; Private Equity[2] at +20.4%, Real Return at +8.0%, and Covered Calls at +13.5%.

1 Domestic and International Equity returns reflect the appropriate portion of the Global Equity portfolio (funded August 2011).
2 Lagged one quarter.

Letter from Investment Consultant (continued)

PCA PENSION CONSULTING ALLIANCE

Market Conditions

The market backdrop for fiscal year 2014 was characterized by improving economic fundamentals, geopolitical uncertainty, and the continued, methodical middle stages of unwinding the Federal Reserve's quantitative easing program. Similar to fiscal year 2013, which was consistently accommodative for nearly all assets, fiscal year 2014 saw positive returns throughout the global capital markets. The end result was a fiscal year in which global public equities, high yield bonds, emerging markets bonds, and private markets all produced strong positive returns. Traditional fixed income and commodity returns were in the low-to-mid single digits, while inflation ended the fiscal year just over 2.0% for the first time since 2011. As a whole, the global economy continued to improve and the markets rewarded providers of capital accordingly.

During fiscal year 2014, equities within the U.S., as measured by the Russell 3000 Index, advanced by +25.2%, while non-U.S. equities, as measured by the MSCI ACWI ex U.S. Index, advanced by +22.3%. In regard to the U.S., economic figures such as unemployment and GDP growth continued to modestly improve during the fiscal year, and the Federal Reserve remained extremely accommodative and transparent in their monetary policy actions and forward-looking guidance. Non-U.S. equities were also aided by improving economic fundamentals and central bank stimulus.

In contrast to fiscal year 2013, but in-line with fiscal years 2011 and 2012, growth stocks outperformed value stocks across the entire domestic equity market cap spectrum during fiscal year 2014. Additionally, during fiscal year 2014, emerging markets equities trailed developed non-U.S. equities. Within the developed non-U.S. markets, the European region provided the strongest relative results over the fiscal year.

The fixed income markets provided investors with a wide range of returns, albeit all were positive. Depending on the risk level, fixed income indices produced returns from the low single digits to the low double digits. In particular, investment-grade bonds, as measured by the Barclays Capital Aggregate Bond Index, returned +4.4%. Government bonds produced a return of +2.1%, mortgage-backed bonds generated a +4.7% return, investment-grade credit bonds rose by +7.4%, high-yield corporate bonds returned +11.7%, and emerging markets bonds increased by +10.2%.

For fiscal year 2014, public equities, risky bonds, and private markets provided investors with strong absolute returns, while safer, duration-oriented fixed income markets generated modest returns that were roughly in-line with inflation. Fiscal policy, monetary policy, and economic fundamentals were all drivers of returns within the global capital markets during the fiscal year, and these various aspects will continue to be interrelated. Throughout the complicated market conditions of the past few years, with its constant review and oversight, the Board continues to position the Employees' Retirement System of the State of Hawaii for competitive long-term performance consistent with its objectives.

Sincerely,

Pension Consulting Alliance, Inc.

PCA PENSION CONSULTING ALLIANCE

Report on Investment Activity for the
Employees' Retirement System of the State of Hawaii
Prepared by Pension Consulting Alliance, Inc.
June 2014

Outline of Investment Policies

The primary goal of the Plan is the preservation of capital. The Board of Trustees seeks preservation of capital with a consistent, positive return for the Fund. Although pure speculation is to be avoided, the Board appreciates the fact that an above-average return is associated with a certain degree of risk. Risk to be assumed must be considered appropriate for the return anticipated, and consistent with the total diversification of the Fund.

Strategic Asset Allocation Policy

A formal asset allocation/liability study is conducted every three-to-five years to verify or amend the Plan's policy targets. The targets are designed to achieve a certain level of return, and associated level of risk, that is aligned with the Plan's goals and objectives. The targets are evaluated on the basis of assets designated to each strategic class by the Board, rather than on a current invested position. The targets will be pursued primarily by cash flow on a long-term basis, and will be revised if significant changes occur within the economic and/or capital market environment according to the rebalancing guidelines. The targets are to be reviewed annually for reasonableness relative to significant economic and market changes. The last formal asset allocation/liability study was completed during fiscal year 2010. At that time, the Board adopted a new long-term strategic allocation policy which included evolving policy targets designed to efficiently transition the Plan to the new long-term strategic allocation over time. The transition was completed as of 7/1/2013. The next formal asset allocation/liability study is scheduled to begin in fiscal year 2015 and be completed in fiscal year 2016.

Strategic Asset Allocation Policy (as of 6/30/2014)

During the 2014 fiscal year, the Plan was strategically invested in the following asset classes:

	Strategic Allocation
Domestic Equity	**30%**
International Equity	**26%**
Total Fixed-Income	**20%**
Real Estate	**7%***
Private Equity	**7%***
Real Return	**5%***
Covered Calls	**5%**

* The Real Estate, Private Equity, and Real Return targets were the percentages actually invested up to 7%, 7%, and 5% (respectively) of the Total Fund. Changes in the Real Estate, Private Equity, and Real Return targets, if any, were offset by an equal percentage change in the Domestic Equity target.

PCA PENSION CONSULTING ALLIANCE

Long-Term Strategic Asset Allocation Policy

As a result of the formal asset allocation/liability study conducted during fiscal year 2010, the Board adopted a new long-term strategic allocation policy. The plan began transitioning to the new strategic allocation policy during fiscal year 2012. The transition was completed as of 7/1/2013.

Expected Annualized Return and Risk

Based on PCA's 2014 capital market projections for 10 years, the target allocation is expected to achieve an arithmetic average return of 6.9% (4.15% real return with expected inflation of 2.75%). The annual nominal return over this 10-year period is expected to fall within a range of minus (2.5%) and 11.2% two-thirds of the time.

Long-Range Asset Allocation Target

The ERS will strategically invest in the following asset classes:

	Strategic Allocation
Domestic Equity	**30%**
International Equity	**26%**
Total Fixed Income	**20%**
Real Estate	**7%***
Private Equity	**7%***
Real Return	**5%***
Covered Calls	**5%**

* The Real Estate, Private Equity, and Real Return targets will be the percentages actually invested up to 7%, 7%, and 5% (respectively) of the Total Fund. Changes in the Real Estate, Private Equity, and Real Return targets, if any, will be offset by an equal percentage change in the Domestic Equity target.

Evolving Strategic Asset Allocation Policy

	Target Policy 10/1/2011	**Target Policy 7/1/2012**	**Target Policy 7/1/2013**
Domestic Equity	35%	30%	30%
International Equity	21%	26%	26%
Total Fixed income	24%	21%	20%
Real Estate	7%	7%	7%
Private Equity	5%	6%	7%
Real Return	5%	5%	5%
Covered Calls	3%	5%	5%
Total	**100%**	**100%**	**100%**

Manager Evaluation

Public markets managers are measured against relevant indices and their respective peer groups of managers. Market indices and peer group benchmarks are assigned to each manager and are intended as a guide for the investment manager to understand the risk/reward posture of their portfolio. Real Estate managers are measured against the median performance of the BNY Mellon Real Estate Database and the NCREIF Total Return Index. Private Equity managers are measured against public market proxies and relevant peer groups. Managers have full discretion to manage the risk posture of their portfolios relative to their designated market index and may, with conviction and appropriate expertise, execute security strategies not reflected by their market index as long as they conform to the investment guidelines and the laws of the State of Hawaii.

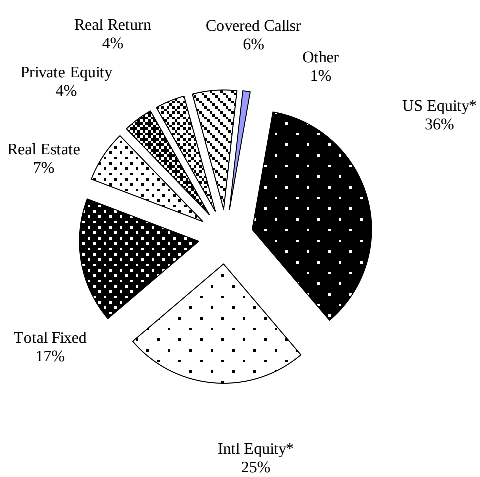
Investment Practices

The full Employees' Retirement System of the State of Hawaii Investment Policy, Guidelines, and Procedures Manual (Manual) describes, in detail, acceptable investment practices, manager reporting requirements, manager performance guidelines, distribution of brokerage commissions, and securities lending guidelines. Initial revisions to the Manual took place during fiscal year 2007, and as a result of the most recent full asset allocation/liability study, additional revisions to the Manual took place during fiscal years 2012 and 2013. Further revisions to the Manual occurred during fiscal year 2014 and will continue to transpire throughout the evolution of the Plan.

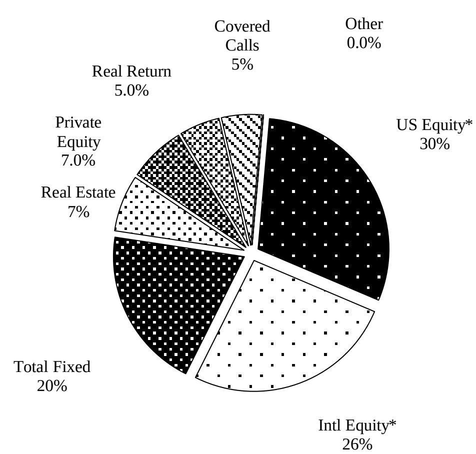
All rates of return are calculated using methodologies that are generally accepted by the Global Investment Performance Standards (GIPS). All Domestic Equity and Covered Calls manager returns are daily, time-weighted rates of return based on custodial data. International Equity, Domestic Fixed Income, and International Fixed Income returns are monthly, time-weighted returns. Real Estate and Private Equity returns seek to accurately represent cash flows and appraisal values.

Asset Allocation as of June 30, 2014:

Actual Asset Allocation



Target Asset Allocation



* Domestic and International Equity allocations reflect the appropriate portion of the Global Equity portfolio (funded August 2011).

Report on Investment Activity by Investment Consultant (continued)

Investment Results as of June 30, 2014:

	Year Ended June 30,					3 Years Ended	5 Years Ended
	2014	2013	2012	2011	2010	6/2014	6/2014
Domestic Equity*	**26.28%**	**21.16%**	**1.08%**	**31.83%**	**15.33%**	**15.64%**	**18.65%**
Domestic Equity Blended Index[1]	25.22%	21.46%	3.84%	32.37%	15.72%	16.46%	19.33%
Median Total Domestic Equity**	25.30%	22.16%	1.38%	33.22%	16.46%	16.00%	19.40%
Diversified Fixed-Income	**6.28%**	**1.72%**	**7.51%**	**5.51%**	**13.63%**	**5.14%**	**6.86%**
Diversified Fixed Income Blended Index[2]	5.28%	0.72%	7.19%	4.20%	9.99%	4.36%	5.43%
Median Domestic Fixed**	6.11%	0.41%	8.10%	5.90%	13.78%	5.21%	7.29%
International Equity*	**20.80%**	**12.64%**	**(14.36%)**	**30.24%**	**11.28%**	**5.23%**	**11.05%**
International Equity Blended Index[3]	21.75%	13.63%	(14.36%)	30.07%	8.41%	5.82%	10.81%
Median Non-U.S. Equity**	22.34%	15.77%	(13.10%)	29.81%	11.62%	7.85%	12.70%
International Fixed-Income	**6.88%**	**9.26%**	**3.42%**	**4.12%**	**4.01%**	**6.50%**	**5.52%**
International Fixed Blended Index[4]	5.72%	3.47%	6.22%	0.91%	6.62%	5.13%	4.57%
Median Non-U.S. Fixed**	9.04%	2.23%	6.56%	12.70%	18.50%	4.56%	7.90%
Covered Calls***	**13.53%**	**6.57%**	**---**	**---**	**---**	**---**	**---**
Covered Calls Index[5]	14.12%	5.29%	---	---	---	---	---
Real Estate^	**6.47%**	**20.77%**	**15.99%**	**21.41%**	**0.99%**	**14.25%**	**12.83%**
NCREIF Total Property Index****	11.18%	10.52%	13.41%	16.03%	(9.59%)	11.69%	7.89%
Median Real Estate**	14.20%	10.80%	9.45%	17.06%	(10.22%)	11.64%	9.24%
Private Equity****	**20.39%**	**8.91%**	**11.87%**	**16.46%**	**7.54%**	**13.62%**	**12.93%**
Real Return	**7.96%**	**0.34%**	**5.48%**	**(0.73%)**	**---**	**4.55%**	**---**
Total Fund	**17.77%**	**12.57%**	**(0.14%)**	**21.25%**	**11.96%**	**9.80%**	**12.44%**
Composite Benchmark[5]	17.51%	11.61%	2.70%	21.47%	10.31%	10.44%	12.54%
Median Fund**	17.14%	12.65%	1.35%	22.47%	13.78%	10.12%	13.12%

*Domestic and International Equity returns reflect the appropriate portion of the Global Equity portfolio (funded August 2011).
**Universe data provided by BNY Mellon: Public Funds > $1 billion for 2014 and trailing periods. Northern Trust: Public Funds > $1 Billion for 2010-2013 calendar years.
***Received funding during fiscal year 2012.
****Lagged one quarter.
[1] 80% S&P 500 Index, 10% S&P Mid Cap 400 Index and 10% Russell 2000 Index through 12/31/08; Russell 3000 Index thereafter.
[2] BC Aggregate Index through 6/30/08; 85% BC US Universal Index and 15% Multiverse Non-US Hedged Index thereafter.
[3] 85% MSCI EAFE Free ND Index and 15% MSCI Emerging Markets ND Index through 6/30/11; 85% MSCI World ex US ND Index and 15% MSCI Emerging Markets ND Index through 6/30/12; MSCI ACWI ex US ND Index thereafter.
[4] Citigroup Non-US WGBI through 6/30/08; BC Multiverse Non-US Hedged Index thereafter.
[5] CBOE S&P 500 BXM Index.
[6] 34.9% S&P 500 Index, 4.5% S&P 400 Mid Cap Index, 4.5% Russell 2000 Index, 14.5% MSCI EAFE Free ND Index, 2.5% MSCI Emg Mkts ND Index, 7.5% NCREIF Property Index lagged, 3.6% Alternative Investments, 21.0% BC Aggregate Index, and 7.0% CG WGBI ex US Index through 12/31/08;
41.0% Russell 3000 Index, 14.5% MSCI EAFE Free ND Index, 2.5% MSCI Emg Mkts ND Index, 9.0% NCREIF Property Index lagged, 5.0% Alternative Investments, 21.0% BC Universal Index, and 7.0% BC Multiverse ex US Hedged Index through 6/30/11;
41.0% Russell 3000 Index, 14.5% MSCI World ex US ND Index, 2.5% MSCI Emg Mkts ND Index, 9.0% NCREIF Property Index lagged, 5.0% Alternative Investments, 21.0% BC Universal Index, and 7.0% BC Multiverse ex US Hedged Index through 9/30/11;
35.0% Russell 3000 Index, 18.0% MSCI World ex US ND Index, 3.0% MSCI Emg Mkts ND Index, 7.0% NCREIF Property Index lagged, 5.0% Private Equity, 5.0% Real Return, 18.0% BC Universal Index, 6.0% BC Multiverse ex US Hedged Index, and 3.0% CBOE BXM Index through 6/30/12;
30.0% Russell 3000 Index, 26.0% MSCI ACWI ex US ND Index, 7.0% NCREIF Property Index lagged, 6.0% Private Equity, 5.0% Real Return, 15.75% BC Universal Index, 5.25% BC Multiverse ex US Hedged Index, and 5.0% CBOE BXM Index through 6/30/13;
30.0% Russell 3000 Index, 26.0% MSCI ACWI ex US ND Index, 7.0% NCREIF Property Index lagged, 7.0% Private Equity, 5.0% Real Return, 15.0% BC Universal Index, 5.0% BC Multiverse ex US Hedged Index, and 5.0% CBOE BXM Index thereafter.

Investment Professionals

INVESTMENT MANAGERS

U.S. EQUITIES
- Bank of Hawaii
- Barrow, Hanley, Mewhinney & Strauss
- CM Bidwell & Associates
- CS McKee Investment Managers
- Jennison Associates
- JP Morgan Chase
- Mellon Capital Management Corporation
- Sands Capital
- T. Rowe Price

INTERNATIONAL EQUITIES
- Franklin Templeton
- JP Morgan Chase
- Mercator Asset Management
- Quantitative Management Associates (QMA)
- Research Affiliates

PRIVATE EQUITY
- Hamilton Lane
- Stafford Partners

COVERED CALLS
- Gateway

REAL ESTATE
- Angelo Gordon
- Almanac
- Blacksand Capital
- Blackstone Realty
- CB Richard Ellis
- Fortress Japan
- Heitman Capital Management
- Invesco Realty Advisors
- LaSalle Investment Management
- Lone Star
- Mesa Capital
- Prudential

FIXED-INCOME
- First Hawaiian Bank
- Bradford and Marzec
- Oechsle International Advisors
- Pacific Income Advisers
- Pacific Investment Management Company
- Western Asset Management Company

REAL RETURN
- Blackrock
- Hancock Timber Resource Group

OTHER SERVICE PROVIDERS

COMMISSION RECAPTURE BROKERS
- Knight Equity Markets, LP
- LJR Recapture Services
- Rochdale Securities Corporation

CUSTODIAL BANK
- Bank of New York Mellon

INVESTMENT ADVISOR
- Pension Consulting Alliance, Inc.
- Courtland Partners
- Hamilton Lane

Investment Schedules

List of Assets Directly Held (by fair value)*

as of June 30, 2014 (excludes investments in pooled vehicles and index funds)

** A complete list of holdings is available for review upon request.*

	Par / Shares	Security	Coupon	Maturity	Standard & Poors	Fair Value
Domestic Fixed Income						
1	26,010,000	U.S. Treasury Note	2.000%	5/31/2021	AAA	$ 25,814,925
2	21,876,000	U.S. Treasury Bond	3.625%	2/15/2044	AAA	23,085,962
3	21,942,856	U.S. Treasury CPI	0.625%	1/15/2024	AAA	22,738,285
4	22,400,000	U.S. Treasury Note	Variable	4/30/2016	AAA	22,405,824
5	16,408,801	U.S. Treasury CPI Inflation	0.125%	4/15/2019	AAA	16,895,978
6	16,430,018	U.S. Treasury CPI	0.375%	7/15/2023	AAA	16,748,432
7	15,614,304	FNMA Pool #0466573	3.370%	11/1/2020	AAA	16,527,585
8	16,307,256	U.S. Treasury CPI Inflation	0.125%	7/15/2022	AAA	16,418,145
9	15,774,524	U.S. Treasury CPI Inflation	0.125%	1/15/2022	AAA	15,879,267
10	12,618,456	U.S. Treasury CPI Inflation	2.375%	1/15/2027	AAA	15,484,233
International Fixed Income						
1	74,264,000	Republic of Poland	0.000%	1/25/2016	A2	23,549,418
2	21,631,000	European Investment Bank	6.500%	8/7/2019	AAA	23,194,216
3	144,857,000	Kingdom of Norway	2.000%	5/24/2023	AAA	22,935,955
4	64,389,000	Republic of Poland	5.250%	10/25/2017	A2	22,887,176
5	20,900,000	Republic of Slovenia	5.500%	10/26/2022	BAA2	22,885,500
6	220,280,000	European Investment Bank	9.000%	12/21/2018	AAA	21,688,948
7	768,150,000	Republic of South Africa	0.000%	12/31/2027	BAA1	21,271,013
8	2,110,000,000	Federal Republic of Germany DEPFA ACS Bank	1.650%	12/20/2016	A2	20,829,629
9	19,628,000	Republic of Iceland	4.875%	6/16/2016	BAA3	20,612,540
10	13,773,874	Deutsche Bundesrepublik Inflation	1.500%	4/15/2016	AAA	19,407,471
Domestic Equities						
1	3,246,870	Wells Fargo & CO New Common				40,457,344
2	102,212	Google Class A				27,316,196
3	4,318,982	JPMorgan Chase Common				26,626,314
4	545,366	Applie Common				25,085,016
5	1,577,210	Intel Corp Common				20,685,732
6	1,153,720	Microsoft Common				20,589,350
7	1,065,755	Oracle Common				20,266,208
8	565,930	Wal-Mart Stores Inc Common				20,027,525
9	481,170	ConocoPhillips Common				19,785,987
10	375,390	Occidental Petroleum Common				19,354,379
International Equities						
1	135,643	Roche Holdings AG Genusscheine				33,951,123
2	36,128,000	China Construction Bank				24,434,611
3	294,050	Novartis AG				22,323,069
4	1,151,561	WPP PLC				20,329,150
5	499,618	Royal Dutch Shell PLC				19,974,333
6	32,566,259	Industrial & Commercial Bank of China				18,321,516
7	217,645	ASML Holding NV				18,135,176
8	789,820	Burberry Group				17,979,717
9	2,267,225	Aegon NV				17,377,246
10	809,857	Axa SA				16,756,557

Investment Schedules (continued)

Investments Summary

- excludes cash and cash equivalents and short-term investments

(Dollar values expressed in thousands)

	Fair Value as of June 30, 2014	Percentage
Equity securities		
Common stock	$ 6,716,446	47.76%
Pooled and others	2,733,807	19.44%
	9,450,253	67.20%
Fixed income securities		
US treasury / government / agencies	512,760	3.65%
US mortgage-backed	412,420	2.93%
US corporate	613,767	4.36%
Non-US government / agencies	603,044	4.29%
Non-US corporate	512,601	3.64%
Pooled and others	15,497	0.11%
	2,670,089	18.98%
Others		
Real estate investments	1,192,581	8.48%
Alternative investments	751,113	5.34%
	1,943,694	13.82%
Total, investments at fair value	$ 14,064,036	100.00%

Schedule of Investment Fees

by Asset Class Allocation

(Dollar values expressed in thousands)	Fair value as of June 30, 2014	Total FY 2014 Investment Fees	Basis Points
Equities			
U.S. equities	$ 5,127,403	$ 13,030	25 bp
International equities	3,579,217	9,843	28
	8,706,620	22,873	26
Fixed Income			
Diversified fixed income	1,933,100	3,220	17
Non U.S. fixed income	475,571	1,012	21
	2,408,671	4,232	18
Other Asset Allocations			
Real estate	934,260	595	6
Real return	615,892	2,165	35
Covered calls	810,238	1,358	17
Other assets	107,172	102	10
Private equity	568,555	761	13
	3,036,117	4,981	16
Other Investment Services			
Custodian fees	n/a	211	n/a
Investment consultant fees	n/a	1,153	n/a
Total	$ 14,151,408	$ 33,450	24

Schedule of Broker Commissions

The Employees' Retirement System participates in a Commission Recapture Program with three brokerage firms for equity trades, which are listed in the Investment Professionals section. Certain domestic and international equity investment managers are required to direct at least 35% of all brokerage transactions to participating brokers, subject to best execution. Commissions charged per share are based on the investment manager's normal rate schedule. All commissions recaptured are used exclusively by the ERS for the benefit of its members and beneficiaries. ERS does not guarantee participating brokers any minimums, required volumes or fees. During the fiscal year ended June 30, 2014 the ERS recaptured $399,844 in commissions.

The following is a list of brokers who received commissions during Fiscal Year 2014.

			Commission	
Brokerage Firms	Shares Traded	Dollar Volume of Trades	Dollar Amount	Per Share
ABG SEC AS (NORGE), FILIAL, STOCKHOLM	106,350	$ 1,592,169	$ 2,226	$ 0.021
ABG SECS, OSLO	85,850	1,753,025	2,458	0.029
ACADEMY SECURITIES, INC, NEW YORK	3,300	190,975	55	0.017
AQUA SECURITIES LP, NEW YORK	15,891	1,158,167	318	0.020
AVONDALE PARTNERS LLC, NASHVILLE	6,272	86,899	212	0.034
B RILEY AND CO INC, NEW YORK	23,500	337,831	724	0.031
BAIRD, ROBERT W & CO INC, MILWAUKEE	280,847	9,916,793	10,614	0.038
BANCO BILBAO VIZCAYA, MADRID	1,825,300	11,550,909	16,162	0.009
BANCO SANTANDER, NEW YORK	461,350	2,760,779	3,865	0.008
BANK OF NEW YORK, BRUSSELS	1,212,500	1,712,461	2,394	0.002
BANQUE PARIBAS, PARIS	602,757	2,670,005	3,757	0.006
BARCLAYS CAPITAL LE, JERSEY CITY	899,580	36,757,206	15,043	0.017
BARCLAYS CAPITAL SEC LTD, SEOUL BRANCH	135,847	11,505,689	10,717	0.079
BARCLAYS CAPITAL SECS TAIWAN, TAIPEI	3,740,000	2,759,099	1,659	0.000
BARCLAYS CAPITAL, LONDON	24,513,899	45,295,627	35,253	0.001
BB & T CAPITAL MARKETS, RICHMOND	700	30,321	28	0.040
BB&T SECURITIES, LLC, RICHMOND	1,916	47,636	71	0.037
BERENBERG GOSSLER & CIE, HAMBURG	74,277	5,422,677	6,342	0.085
BERNSTEIN SANFORD C & CO, NEW YORK	1,968,251	143,624,693	55,615	0.028
BLOOMBERG TRADEBOOK LLC, NEW YORK	1,389,959	34,400,470	15,946	0.011
BLOOMBERG TRADEBOOK,NEW YORK	1,716	67,899	17	0.010
BMO CAPITAL MARKETS CORP, NEW YORK	72,530	1,257,110	2,218	0.031
BNP PARIBAS PEREGRINE SEC LTD, HONG KONG	466,000	4,399,211	5,683	0.012
BNP PARIBAS SEC SVCS, LONDON	204,990	6,393,394	5,622	0.027
BNY BROKERAGE, NEW YORK	373,100	19,643,877	7,462	0.020
BNY CONVERGEX / LJR, HOUSTON	11,361,354	471,813,282	495,061	0.044
BNY CONVERGEX, NEW YORK	4,264,431	279,594,518	85,289	0.020
BRADESCO S/A CTVM, SAO PAULO	1,112,320	986,870	1,978	0.002
BREAN CAPITAL LLC, JERSEY CITY	2,700	20,904	81	0.030
BROADCOURT CAP CORP/SUB OF MLPF&S,NY	23,400	928,760	117	0.005
BROCKHOUSE AND COOPER, MONTREAL	411,100	3,438,750	1,376	0.003
BT SECURITIES COMPANY LTD, BANGKOK	2,364,575	1,553,520	3,873	0.002
BTIG LLC, SAN FRANCISCO	300,201	6,692,441	8,225	0.027
BUCKINGHAM RESEARCH GRP INC, BROOKLYN	9,300	279,413	372	0.040
Amounts carried forward	58,316,063	1,110,643,380	800,833	

Schedule of Broker Commissions (continued)

Brokerage Firms	Shares Traded	Dollar Volume of Trades	Commission Dollar Amount	Commission Per Share
Amounts brought forward	58,316,063	$ 1,110,643,380	$ 800,833	
CANACCORD GENUITY INC, JERSEY CITY	65,259	2,049,607	2,414	$ 0.037
CANACCORD GENUITY INC.NEY YORK	39,582	1,137,042	1,480	0.037
CANTOR FITZGERALD & CO INC, NEW YORK	199,428	15,461,404	4,507	0.023
CANTOR FITZGERALD EUROPE, LONDON	200,000	1,327,904	930	0.005
CAP INSTL SVCS INC-EQUITIES, DALLAS	8,345,002	286,271,340	192,636	0.023
CELFIN CAPITAL SA CORREDORES, SANTIAGO	9,133,250	3,359,921	2,016	0.000
CHINA FORTUNE SECURITIES LTD, SHANGHAI	104,398	167,114	200	0.002
CHINA INTL CAP CORP HK SECS, HONG KONG	96,000	269,498	470	0.005
CIMB GK SECURITIES PTE LTD, SINGAPORE	182,375	3,334,369	7,648	0.042
CIMB SECURITIES LTD., KOREA BRANCH	5,125	1,161,484	2,665	0.520
CITATION GROUP/BCC CLRG, NEW YORK	20,600	1,052,811	824	0.040
CITIBANK (COR), NEW YORK	43,452	279,960	168	0.004
CITIGROUP GBL MKTS INC, NEW YORK	961,650	45,867,196	21,190	0.022
CITIGROUP GBL MKTS/SALOMON, NEW YORK	44,546,712	83,647,397	53,262	0.001
CITIGROUP GLOBAL MARKETS LTD, LONDON	4,506,156	45,722,029	53,352	0.012
CLEARSTREAM BK, LUXEMBOURG (CEDELULL)	145,565	1,678,067	839	0.006
CLSA AUSTRALIA PTY LTD, SYDNEY	424,300	1,159,911	2,084	0.005
COMPASS POINT RESEARCH & TR, JERSEY CITY	12,066	741,550	459	0.038
CONCORDIA SA CVMCC, RIO DE JANEIRO	83,400	955,077	954	0.011
COWEN AND COMPANY LLC, NEW YORK	353,663	7,262,547	11,803	0.033
CREDIT AGRICOLE USA, NEW YORK	152,851	3,240,102	4,543	0.030
CREDIT LYONNAIS SEC, SEOUL	9,440	2,300,358	4,418	0.468
CREDIT LYONNAIS SECS (ASIA), HONG KONG	1,414,775	6,960,178	12,483	0.009
CREDIT LYONNAIS SECS, SINGAPORE	1,224,775	9,569,612	12,745	0.010
CREDIT RESEARCH & TRADING LLC, JERSEY	9,400	317,334	270	0.029
CREDIT SUISSE (EUROPE), LONDON	12,489,582	18,674,034	19,525	0.002
CREDIT SUISSE (HK) LIMITED, HONG KONG	439,500	10,874,299	11,687	0.027
CREDIT SUISSE, NEW YORK (CSUS)	2,046,075	109,592,271	48,911	0.024
CROWELL WEEDON & CO, LOS ANGELES	131,600	6,872,846	2,632	0.020
CRT CAPITAL GROUP LLC, STAMFORD	113,752	2,907,884	4,209	0.037
CSI US INSTITUTIONAL DESK,NEW YORK	823,899	34,598,094	27,168	0.033
DAEWOO SECURITIES CO LTD, SEOUL	60,433	5,209,580	11,981	0.198
DAIWA SECS (HK) LTD, HONG KONG	24,000	1,556,001	778	0.032
DAIWA SECS AMER INC, NEW YORK	462,900	8,669,428	10,410	0.022
DAVENPORT & CO OF VIRGINIA, RICHMOND	2,700	39,495	95	0.035
DAVIDSON(D A) & CO INC, NEW YORK	2,200	16,021	66	0.030
DBS VICKERS SEC PTE LTD, SINGAPORE	1,538,561	4,261,904	9,945	0.006
DEN DANSKE BANK, COPENHAGEN	460,525	7,954,315	11,135	0.024
DEUTSCHE BK INTL EQ, LONDN	2,756,867	29,678,803	12,129	0.004
DEUTSCHE BK SECS INC, NY	4,060,920	81,334,160	72,529	0.018
DEUTSCHE MORGAN GRENFELL SEC, SYDNEY	288,100	7,654,996	5,400	0.019
Amounts carried forward	156,296,901	1,965,831,323	1,443,793	

Schedule of Broker Commissions (continued)

Brokerage Firms	Shares Traded	Dollar Volume of Trades	Commission Dollar Amount	Commission Per Share
Amounts brought forward	156,296,901	$ 1,965,831,323	$ 1,443,793	
DEUTSCHE SEC ASIA LTD, HONG KONG	2,400,700	5,583,740	9,901	$ 0.004
DOWLING & PARTNERS, JERSEY CITY	3,674	117,357	134	0.036
EVERCORE GROUP LLC, JERSEY CITY	55,748	2,183,493	2,063	0.037
EVERCORE, PITTSBURGH	5,470	275,887	219	0.040
EXANE, PARIS	251,767	2,696,666	4,051	0.016
FBR CAPITAL MARKETS & CO, ARLINGTON	58,191	1,811,215	2,220	0.038
FIDELITY CAP MKTS (DIV OF NFSC), BOSTON	22,144	759,530	819	0.037
FIRST ANALYSIS SECS CORP, CHICAGO	21,700	587,455	763	0.035
FOX RIVER EXECUTION TECH,LLC,JERSEY CITY	392,372	10,194,652	3,924	0.010
GK GOH SECURITIES	289,025	434,488	823	0.003
GOLDMAN SACHS & CO, NY	12,760,767	321,399,963	162,713	0.013
GOLDMAN SACHS CAP MKTS, NEW YORK	210	11,112	17	0.081
GOLDMAN SACHS EXECUTION & CLEARING, NY	39,602	1,398,552	446	0.011
GOLDMAN SACHS INTL, LONDON	699,736	9,670,609	8,099	0.012
GORDON HASKETT CAP CORP, NJ	11,900	254,636	238	0.020
GREEN STREET ADVISORS, JERSEY CITY	18,300	972,114	732	0.040
GUGGENHEIM CAPITAL MKT LLC, JERSEY CITY	75,039	2,263,697	2,845	0.038
HONG KONG & SHANGHAI BKG CORP, HONG KONG	20,939,600	14,816,344	8,885	0.000
HSBC BANK BRASIL SA (COR), SAO PAULO	791,500	9,063,164	5,437	0.007
HSBC BANK PLC (MIDLAND BK)(JAC), LONDON	2,708,625	24,700,816	20,954	0.008
HSBC BANK PLC (MIDLAND BK), LONDON	41,430	1,827,950	2,467	0.060
HSBC JAMES CAPEL, SEOUL	131,921	8,629,352	7,532	0.057
HSBC MEXICO, S.A. INST DE BANCA,MEXICO	2,455,500	5,983,924	3,590	0.001
HSBC SECS INC, NEW YORK	17,641,598	18,727,109	10,161	0.001
HSBC SECS, TAIPEI	13,769,000	16,110,887	9,677	0.001
HSBC SECURITIES (USA) INC, NEW YORK	335,000	5,891,485	5,263	0.016
IM TRUST SA.CORREDORES DE BOLSA,SANTIAGO	7,218,691	974,744	585	0.000
ING BANK N V, LONDON	40,000	2,203,954	3,301	0.083
INSTINET AUSTRALIA CLEARING SERV, SYDNEY	36,000	533,833	587	0.016
INSTINET CORP, NEW YORK	10,645,566	63,359,803	28,627	0.003
INSTINET CORP, NY	1,233,147	44,746,685	20,864	0.017
INSTINET EUROPE LIMITED, LONDON	29,871,763	50,580,591	32,284	0.001
INSTINET PACIFIC LTD, HONG KONG	37,717,605	41,798,021	24,830	0.001
INSTINET, SINGAPORE	74,825	615,143	246	0.003
INTERMONTE SIM S.P.A., MILANO	2,392,500	6,067,017	8,484	0.004
INVESTEC SECURITIES LTD, JOHANNESBURG	400,000	1,212,084	1,806	0.005
INVESTMENT TECHNOLOGY GROUP LTD,DUBLIN	4,241,858	90,033,158	99,317	0.023
INVESTMENT TECHNOLOGY GROUP, NEW YORK	754,908	28,820,722	8,125	0.011
ISI GROUP INC, NY	578,175	24,101,234	20,037	0.035
ITG AUSTRALIA LTD, MELBOURNE	109,000	1,950,404	780	0.007
ITG CANADA CORP, TORONTO	201,000	15,606,116	1,875	0.009
Amounts carried forward	327,732,458	2,804,801,029	1,969,514	

Investment Schedules (continued)

Schedule of Broker Commissions (continued)

Brokerage Firms	Shares Traded	Dollar Volume of Trades	Commission Dollar Amount	Commission Per Share
Amounts brought forward	327,732,458	$ 2,804,801,029	$ 1,969,514	
ITG HONG KONG LIMITED, HONG KONG	152,125	4,774,291	1,910	$ 0.013
ITG INC, NEW YORK	170,800	10,862,204	4,689	0.027
IVY SECURITIES INC, GREAT NECK	11,350	728,401	200	0.018
IXIS SECURITIES, PARIS	3,416	107,088	172	0.050
J P MORGAN SEC, SYDNEY	91,700	3,017,306	5,808	0.063
J P MORGAN SECS LTD, LONDON	19,499,019	68,296,081	53,887	0.003
J P MORGAN SECURITIES INC, BROOKLYN	1,581,722	38,200,186	25,994	0.016
J.P. MORGAN CLEARING CORP, NEW YORK	1,672,597	21,340,192	21,235	0.013
JANNEY MONTGOMERY SCOTT, PHILADELPHIA	58,095	2,088,238	2,216	0.038
JEFFERIES & CO INC, NEW YORK	704,676	26,888,095	19,345	0.027
JEFFERIES & CO LTD, LONDON	884,886	22,609,726	31,056	0.035
JMP SECURITIES, SAN FRANCISCO	9,930	233,660	376	0.038
JOHNSON RICE & CO, NEW ORLEANS	4,500	77,823	180	0.040
JONESTRADING INSTL SVCS LLC, WESTLAKE	156,433	3,529,707	4,108	0.026
JP MORGAN SECS (FAR EAST) LTD, HONG KONG	22,800	79,926	48	0.002
JP MORGAN SECS (FAR EAST) LTD, SEOUL	340,768	25,537,447	15,347	0.045
JP MORGAN SECS (TAIWAN) LTD, TAIWAN	36,215,880	42,916,113	25,776	0.001
JP MORGAN SECS ASIA PACIFIC, HONG KONG	51,865,955	49,880,313	29,781	0.001
JP MORGAN SECS, SINGAPORE	11,904,701	10,120,736	6,827	0.001
JPMORGAN SECURITIES INC, NEW YORK	26,169,026	46,627,511	27,973	0.001
KEEFE BRUYETTE AND WOODS, JERSEY CITY	227,108	6,712,490	7,137	0.031
KEPLER EQUITIES, PARIS	29,750	4,927,976	7,318	0.246
KEYBANC CAPITAL MARKETS INC, NEW YORK	121,639	3,807,052	4,614	0.038
KNIGHT EQUITY MARKETS L.P.,JERSEY CITY	3,411,018	139,163,021	119,377	0.035
LADENBURG THALMAN & CO, WEEHAWKEN	27,417	1,080,293	1,014	0.037
LARRAIN VIAL, SANTIAGO	184,498	892,624	535	0.003
LAZARD CAPITAL MARKETS LLC, JERSEY CITY	9,593,015	378,643,604	226,156	0.024
LAZARD CAPITAL MARKETS LLC, NEW YORK	340,760	17,249,474	10,223	0.030
LEERINK SWANN & CO, JERSEY CITY	7,964	255,179	295	0.037
LIBERUM CAPITAL LIMITED, LONDON	1,951,200	8,843,695	13,187	0.007
LINK S/A CCTVM,SAO PAULO	1,519,800	8,265,775	4,960	0.003
LIQUIDNET INC, BROOKLYN	856,368	55,270,726	16,865	0.020
LONGBOW SECURITIES LLC, JERSEY CITY	26,470	1,778,108	1,059	0.040
LYNCH JONES & RYAN INC, NEW YORK	693,400	40,786,447	13,868	0.020
MACQUARIE BANK LTD, HONG KONG	808,150	6,773,164	10,919	0.014
MACQUARIE CAPITAL LTD, LONDON	10,000	535,840	805	0.081
MACQUARIE EQUITIES LTD, SYDNEY	20,000	1,130,502	2,257	0.113
MACQUARIE SECS (SINGAPORE), SINGAPORE	170,900	1,420,556	3,260	0.019
MACQUARIE SECURITIES LTD, SEOUL	20,350	4,436,655	10,181	0.500
MACQUARIE SECURITIES(USA)INC JERSEY CITY	114,797	4,844,640	4,199	0.037
MAINFIRST BANK AG,FRANKFURT AM MAIN	10,925	2,152,315	3,003	0.275
Amounts carried forward	499,398,366	3,871,686,209	2,707,674	

Investment Schedules (continued)

Schedule of Broker Commissions (continued)

Brokerage Firms	Shares Traded	Dollar Volume of Trades	Commission Dollar Amount	Commission Per Share
Amounts brought forward	499,398,366	$ 3,871,686,209	$ 2,707,674	
MERRILL LYNCH CANADA (MLCT), TORONTO	26,070	729,386	1,022	$ 0.039
MERRILL LYNCH GILTS LTD, LONDON	617,479	5,093,323	5,144	0.008
MERRILL LYNCH INTL LONDON EQUITIES	207,539,175	212,114,776	144,530	0.001
MERRILL LYNCH INTL, SEOUL	94,979	4,331,702	4,340	0.046
MERRILL LYNCH PIERCE FENNER SMITH INC NY	3,653,924	183,902,532	66,627	0.018
MERRILL LYNCH PIERCE FENNER, TAIWAN	7,173,000	10,264,288	10,258	0.001
MERRILL LYNCH PIERCE FENNER, WILMINGTON	2,933,716	18,283,440	13,700	0.005
MERRILL LYNCH PROFESSIONAL CLRG, PURCHAS	27,529	1,402,977	1,003	0.036
MITSUBISHI UFJ SEC (USA), NEW YORK	110,125	2,497,348	3,000	0.027
MIZUHO SECURITIES USA INC. NEW YORK	1,168,275	9,621,816	11,547	0.010
MORGAN STANLEY & CO INC, NY	104,179,408	195,401,188	132,506	0.001
MORGAN STANLEY & CO INTL LTD, SEOUL	402,044	14,005,935	12,361	0.031
MORGAN STANLEY & CO INTL LTD, TAPEI	2,679,600	3,367,440	1,686	0.001
MORGAN STANLEY & CO, LONDON	21,388,477	113,071,837	46,453	0.002
MORGAN STANLEY SECURITIES LTD, LONDON	2,581,575	29,293,348	11,709	0.005
NATIONAL FINL SVCS CORP, NEW YORK	391,300	14,068,523	14,496	0.037
NBCN CLEARING INC, MONTREAL	138,060	5,542,562	5,053	0.037
NBCN INC, TORONTO (NBCS)	20,900	1,730,193	812	0.039
NEEDHAM & CO, NEW YORK	28,300	733,463	1,091	0.039
NESBITT BURNS, TORONTO (NTDT)	30,800	1,071,200	700	0.023
NOMURA INTERNATIONAL (HK) LTD, HONG KONG	20,000	1,256,820	628	0.031
NON-BROKER CORP ACTIONS, BOSTON	267,141	517,563	-	-
NORDEA BK, COPENHAGEN	35,675	963,064	1,350	0.038
OLIVETREE SECURITIES LTD, LONDON	52,681	844,296	1,014	0.019
ONEIL WILLIAM & CO INC/BCC,LOS ANGELES	9,666	54,942	358	0.037
OPPENHEIMER & CO INC, NEW YORK	49,906	1,563,042	1,861	0.037
PACIFIC CREST SECURITIES, PORTLAND	132,409	3,126,522	4,908	0.037
PAREL, PARIS	3,468,750	31,412,200	45,126	0.013
PARETO FONDS AS, OSLO	71,250	1,059,946	1,482	0.021
PENSERRA SECURITIES, NEW YORK	3,700	37,344	74	0.020
PENSON FINL SERVICES, INC/RIDGE NEW YORK	1,900	14,280	57	0.030
PERSHING LLC, JERSEY CITY	44,625	1,030,831	12	0.000
PERSHING SECURITIES LTD, LONDON	2,500,665	21,737,429	20,556	0.008
PICKERING ENERGY PARTNERS, HOUSTON	16,559	893,061	613	0.037
PIPER JAFFRAY & CO, MINNEAPOLIS	238,465	5,797,177	7,513	0.032
PULSE TRADING LLC, BOSTON	397,871	12,377,438	4,294	0.011
RABOBANK NEDERLAND, UTRECHT	52,800	3,023,364	4,528	0.086
RAFFERTY CAPITAL MARKETS LLC, GARGEN CIT	30,792	679,214	1,139	0.037
RAYMOND JAMES & ASSOC INC, ST PETERSBURG	342,164	12,189,003	9,158	0.027
RAYMOND JAMES LTD, TORONTO (MSLT)	29,200	665,170	1,168	0.040
RBC CAPITAL MARKETS LLC, NEW YORK	1,123,615	60,111,925	15,549	0.014
Amounts carried forward	863,472,936	4,857,568,117	3,317,100	

Investment Schedules (continued)

Schedule of Broker Commissions (continued)

Brokerage Firms	Shares Traded	Dollar Volume of Trades	Commission Dollar Amount	Commission Per Share
Amounts brought forward	863,472,936	$ 4,857,568,117	$ 3,317,100	
RBC DOMINION SECS INC, TORONTO (DOMA)	135,470	8,900,128	4,518	$ 0.038
REDBURN PARTNERS LLP, LONDON	561,866	8,414,569	4,217	0.008
ROBOTTI & COMPANY LLC, JERSEY CITY	410	24,625	16	0.039
ROSENBLATT SECURITIES LLC, JERSEY CITY	300	13,827	12	0.040
ROYAL BANK OF CANADA EUROPE LTD, LONDON	1,500,104	17,486,614	19,691	0.013
S G WARBURG, SEOUL	352,788	22,402,271	14,430	0.041
SAMUEL A RAMIREZ & COMPANY, BROOKLYN	600	20,425	12	0.020
SANDLER O'NEILL & PARTNERS, NEW YORK	1,602	28,836	-	-
SANFORD C BERNSTEIN & CO INC, LONDON	1,259,805	23,843,036	31,485	0.025
SANFORD C. BERNSTEIN & CO, WHITE PLAINS	242,530	6,998,316	5,874	0.024
SCOTIA CAPITAL (USA) INC, NEW YORK	267,275	6,762,994	8,064	0.030
SCOTIA CAPITAL MKTS, TORONTO	145,350	3,354,269	4,361	0.030
SG AMERICAS SECURITIES LLC, NEW YORK	70,600	3,078,211	801	0.011
SG SEC (LONDON) LTD, LONDON	5,290,291	51,796,784	74,033	0.014
SG SECURITIES, HONG KONG	2,298,900	10,608,116	12,721	0.006
SIDCO / CONVERGEX, NEW YORK	40	7,765	1	0.025
SIDOTI & CO LLC, NEW YORK	100,348	4,706,823	3,839	0.038
SIMMONS & CO INTL, HOUSTON	43,400	827,879	1,008	0.023
SJ LEVINSON & SONS LLC, JERSEY CITY	213,707	19,707,185	3,491	0.016
SKANDINAVISKA ENSKILDA BANKEN, LONDON	402,800	6,008,998	9,004	0.022
SMBC SECURITIES, INC NEW YORK	1,145,375	4,864,374	5,838	0.005
STATE STREET BROKERAGE SVCS, BOSTON	82,433	2,102,555	1,669	0.020
STATE STREET GLOBAL MARKETS LLC, BOSTON	5,100	355,832	77	0.015
STEPHENS INC, LITTLE ROCK	34,052	1,123,342	1,332	0.039
STERNE AGEE & LEACH INC	121,910	5,823,317	4,280	0.035
STIFEL NICOLAUS	4,977,133	162,858,444	144,866	0.029
STRATEGAS SECURITIES LLC, NEW YORK	4,200	97,157	147	0.035
STUART FRANKEL & CO. INC, JERSEY CITY	296,184	10,153,083	4,443	0.015
SUNTRUST CAPITAL MARKETS INC, ATLANTA	14,928	330,398	462	0.031
SVENSKA HANDELSBANKEN, NEW YORK	88,350	1,487,814	2,082	0.024
SVENSKA HANDELSBANKEN, STOCKHOLM	44,700	644,312	901	0.020
T. ROWE PRICE ASSOCIATES, BALTIMORE	7,850	507,280	-	-
THEMIS TRADING LLC, JERSEY CITY	4,000	53,735	120	0.030
THINKEQUITY PARTNERS LLC, MINNEAPOLIS	3,800	102,995	152	0.040
UBS AG/CUST LDN BRANCH, STAMFORD	39,425	2,027,809	394	0.010
UBS EQUITIES, LONDON	6,892,112	47,190,307	50,756	0.007
UBS SECS SINGAPORE PTE LTD	1,068,605	1,890,884	2,770	0.003
UBS SECURITIES CANADA, TORONTO (BWIT)	122,300	5,132,670	2,240	0.018
UBS SECURITIES LLC, STAMFORD	1,814,135	45,803,467	15,350	0.008
UBS WARBURG ASIA LTD, HONG KONG	11,696,551	24,350,741	20,618	0.002
UBS WARBURG AUSTRALIA EQUITIES, SYDNEY	525,425	1,427,810	2,565	0.005
Amounts carried forward	905,349,690	5,370,888,114	3,775,740	

Schedule of Broker Commissions (continued)

Brokerage Firms	Shares Traded	Dollar Volume of Trades	Commission Dollar Amount	Commission Per Share
Amounts brought forward	905,349,690	$ 5,370,888,114	$ 3,775,740	
UBS WARBURG LLC, STAMFORD	359,100	1,611,419	966	$ 0.038
UBS WARBURG SEC,TAIWAN	11,263,573	12,432,309	10,161	0.001
UBS WARBURG, LONDON	647,675	3,451,441	6,365	0.010
UNION BANK SWITZERLAND SECS, LONDON	15,612	376,070	136	0.009
WEDBUSH MORGAN SECS INC, LOS ANGELES	31,896	896,268	1,183	0.037
WEEDEN & CO, NEW YORK	1,147,158	56,623,115	28,215	0.025
WELLS FARGO SECURITIES LLC, CHARLOTTE	358,569	16,132,721	8,254	0.023
WILLIAM BLAIR & CO, CHICAGO	102,714	2,645,742	3,814	0.037
WOLFE TRAHAN SECURITIES, NEW YORK	32,900	1,489,615	1,165	0.035
WUNDERLICH SECURITIES INC, MEMPHIS	9,900	196,119	379	0.038
Total trades	919,318,787	5,466,742,933	3,836,378	0.004
			$ (399,844)	
	919,318,787	$ 5,466,742,933	$ 3,436,534	$ 0.004

Employees' Retirement System

of the State of Hawaii

ACTUARIAL SECTION

GASB STATEMENT NO. 67 REPORT

GRS Gabriel Roeder Smith & Company
Consultants & Actuaries

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Irving, TX 75038-2631

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January 19, 2015

Board of Trustees
Employees' Retirement System of
the State of Hawaii
City Financial Tower
201 Merchant St., Ste. 1400
Honolulu, HI 96813-2980

Dear Trustees:

This report provides information required by the Employees' Retirement System of the State of Hawaii ("ERS") in connection with the Governmental Accounting Standards Board (GASB) Statement No. 67 "Financial Reporting for Pension Plans."

Our actuarial calculations for this report were prepared for the purpose of complying with the requirements of GASB Statement No. 67. These calculations have been made on a basis that is consistent with our understanding of this Statement.

Our calculation of the liability associated with the benefits described in this report was performed for the purpose of satisfying the requirements of GASB Statement Nos. 67. The calculation of the plan's liability for this report may not be applicable for funding purposes of the plan. A calculation of the plan's liability for purposes other than satisfying the requirements of GASB No. 67 may produce significantly different results.

This report is based upon information, furnished to us by ERS, concerning retirement and ancillary benefits, active members, deferred vested members, retirees and beneficiaries, and financial data. This information was checked for internal consistency, but it was not otherwise audited.
GRS provided the following information for the ERS to fulfill the GASB 67 reporting requirements that are included in the notes to the finacial statements and the Required Supplementary Information located in the Financial Section of this CAFR.

- Single Discount Rate
- Required Discount Rate Sensitivity Information for the ERS providing the ratio of the Fiduciary Net Position to Total Pension Liability and the Net Pension Liability at a discount rate that is one percentage point lower and one percentage point higher that the discount rate at Meaturement Date
- Service Cost; Interest; Changes of Benefit Terms; Differences between Expected and Actual Experience; Changes in Assumptions.
- Required Supplementary Information – Schedule of Changes in Net Pension Liability.
- Required Supplementary Information – Schedule of Net Pension Liability.
- Required Supplementary Information – Schedule of Employer Contributions
- Actuarial components of Governmental Accounting and Standards Board (GASB) 67 requirements.

GASB STATEMENT NO. 67 REPORT (continued)

Certain tables included in the Required Supplementary Information should include a 10-year history of information. As provided for in GASB No. 67, this historical information is only presented for the years in which the information was measured in conformity with the requirements of GASB No. 67. The historical information in this report will begin with the information presented for the fiscal year ending June 30, 2014.

This report complements the actuarial valuation report, issued on January 16, 2015, that was provided to ERS and should be considered in conjunction with that report. Please see the significant actuarial valuation report information as of June 30, 2014 (located later in this section of the ERS' CAFR) for additional discussion of the nature of actuarial calculations and more information related to participant data, economic and demographic assumptions, and benefit provisions. (The entire actuarial valuation report, as of June 30, 2014, is available on the ERS' website at ers.ehawaii.gov.)

To the best of our knowledge, this report is complete, accurate, and in accordance with generally recognized actuarial methods. One or more of the undersigned are members of the American Academy of Actuaries and meet the Qualification Standards of the Academy of Actuaries to render the actuarial opinion herein.

The signing actuaries are independent of the plan sponsor.

Respectfully submitted,

By Lewis Ward

Lewis Ward
Consultant

By

Joseph P. Newton
FSA, EA, MAAA

GASB STATEMENT NO. 67 REPORT (continued)

EXECUTIVE SUMMARY ***
as of June 30, 2014

	2014
Actuarial Valuation Date	June 30, 2014
Pension Plan's Fiscal Year Ending Date (Measurement Date & Reporting Date)	June 30, 2014
Membership	
Number of	
- Retirees and beneficiaries	43,087
- Inactive, nonretired members **	19,352
- Active members	67,206
- Total	129,645
Reported Payroll for Fiscal Year	$3,829,002,983
Net Pension Liability	
Total Pension Liability	$22,220,097,547
Plan Fiduciary Net Position	14,203,015,303
Net Pension Liability	$8,017,082,244
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	63.92%
Net Pension Liability as a Percentage of Covered Payroll	209.38%
Development of the Single Discount Rate	
Single Discount Rate	7.75%
Long-Term Expected Rate of Return	7.75%
Long-Term Municipal Bond Rate*	4.29%
Last year ending June 30 in the 2014 to 2113 projection period for which projected benefit payments are fully funded	None

*Source: "State and Local Bonds" rate from Federal Reserve statistical release (H.15) as of June 26, 2014. The statistical release describes this rate as the "Bond Buyer Index, general obligation, 20 years to maturity, mixed quality." In describing this index, the Bond Buyer notes that the bonds' average credit quality is roughly equivalent to Moody's Investor Service's Aa2 rating and Standard & Poor's Corp AA.

** Inactive, nonretired members for GASB 68 reporting includes terminated vested members entitled to benefits but not yet receiving benefits plus inactive members (that while currently not vested for benefits may become vested in the future should they return to service and fulfill the additional service and contribution requirements applicable to their respective membership). The inactive membership counts used in the previous reporting method under GASB Statement No. 25 only included terminated vested members.

*** This information should be considered with the June 30, 2014 Actuarial Valuation Report information that follows this section beginning on page 107.

GASB STATEMENT NO. 67 REPORT (continued)

Discussion on GASB Statement No. 67.

Accounting Standard

For pension plans that are administered through trusts or equivalent arrangements, Governmental Accounting Standards Board (GASB) Statement No. 67, “Financial Reporting for Pension Plans,” replaces the requirements of GASB Statement No. 25, “Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans,” and GASB Statement No. 50, “Pension Disclosures.” GASB Statement No. 67 establishes standards of financial reporting for separately issued financial reports and specifies the required approach for measuring the pension liability of employers and non-employer contributing entities for benefits provided through the pension plan.

The following discussion provides a summary of the information that is required to be disclosed under these accounting standards. A number of these disclosure items are incorporated in the Financial Section of this CAFR. However, certain information, such as notes regarding accounting policies and investments, are not provided by GRS since the retirement system is responsible for preparing and disclosing that information to comply with these accounting standards.

Financial Statements

GASB Statement No. 67 requires defined benefit pension plans to present two financial statements, notes of the plan’s financial statements and required supplementary information (RSI):

- The *statement of fiduciary net position* presents the following items as of the end of the pension plan’s reporting period, such as: assets; deferred inflows and outflows of resources; liabilities; and fiduciary net position (assets, plus deferred outflows, minus liabilities, minus deferred inflows).
- The *statement of changes in fiduciary net position* presents the following for the plan’s reporting period: additions, such as contributions and investment income; deductions, such as benefit payments and expenses; and net increase or decrease in the fiduciary net position (the difference between additions and deductions).
- The notes of the plan’s financial statements include: a description of the types of benefits provided by the plan, as well as automatic or ad hoc COLAs; the number and classes of employees covered by the benefit terms; the composition of the pension plan’s Board and the authority under which benefit terms may be amended; a description of the plan’s funding policy, which includes member and employer contribution requirements; the pension plan’s investment policies; a description of how fair value is determined; concentrations of investments greater than or equal to 5%; annual money-weighted rate of return on pension plan investments; the portion of the present value of benefits to be provided through the pension plan to current active and inactive plan members; the pension plan’s fiduciary net position; the net pension liability; the pension plan’s fiduciary net position as a percentage of the total pension liability; significant assumptions and methods used to calculate the total pension liability; inputs to the discount rates; and certain information about mortality assumptions and the dates of experience studies.
- The RSI requires a 10-year fiscal history of: sources of changes in the net pension liability; information about the components of the net pension liability and related ratios, including the pension plan’s fiduciary net position as a percentage of the total pension liability, and the net pension liability as a percent of covered-employee payroll; a comparison of the actual employer contributions to the actuarially determined contributions based on the plan’s funding policy; and the annual money-weighted rate of return on pension plan investments for each year.

Measurement of the Net Pension Liability

The net pension liability is to be measured as the total pension liability, less the amount of the pension plan's fiduciary net position. In actuarial terms, this will be the accrued liability less the market value of assets (not the smoothed actuarial value of assets that is often encountered in actuarial valuations performed to determine the employer's contribution requirement).

Timing of the Valuation

An actuarial valuation to determine the total pension liability is required to be performed at least every two years. The net pension liability and pension expense should be measured as of the pension plan's fiscal year end (measurement date) on a date that is within the employer's prior fiscal year. If the actuarial valuation used to determine the total pension liability is not calculated as of the measurement date, the total pension liability is required to be rolled forward from the actuarial valuation date to the measurement date.

The total pension liability shown in this report is based on an actuarial valuation performed as of June 30, 2014 and a measurement date of June 30, 2014.

Single Discount Rate

Projected benefit payments are required to be discounted to their actuarial present values using a single discount rate that reflects (1) a long-term expected rate of return on pension plan investments (to the extent that the plan's fiduciary net position is projected to be sufficient to pay benefits) and (2) tax-exempt municipal bond rate based on an index of 20-year general obligation bonds with an average AA credit rating (which is published by the Federal Reserve) as of the measurement date (to the extent that the contributions for use with the long-term expected rate of return are not met).

For the purpose of this valuation, the expected rate of return on pension plan investments is 7.75% the municipal bond rate is 4.29% (based on the weekly rate closest to but not later than the measurement date of the 20-Year Bond Buyer Index as published by the Federal Reserve); and the resulting single discount rate is 7.75%.

Letter from the Actuary

GRS
Gabriel Roeder Smith & Company
Consultants & Actuaries
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Irving, TX 75038-2631
469.524.0000 phone
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January 16, 2015

Board of Trustees
Employees' Retirement System of
the State of Hawaii
City Financial Tower
201 Merchant St., Ste. 1400
Honolulu, HI 96813-2980

Dear Trustees:

Subject: Actuarial Valuation as of June 30, 2014

We certify that the information contained in the 2014 actuarial valuation report is accurate and fairly presents the actuarial position of the Employees' Retirement System of the State of Hawaii (ERS) as of June 30, 2014.

All calculations have been made in conformity with generally accepted actuarial principles and practices and with the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, the results presented comply with the requirements of the Hawaii statutes and, where applicable, the Internal Revenue Code, ERISA, and the Statements of the Governmental Accounting Standards Board. The undersigned are independent actuaries. One or more of them are an Enrolled Actuary and/or a Member of the American Academy of Actuaries. All are experienced in performing valuations for large public retirement systems.

Actuarial valuations

The primary purpose of the valuation report is to determine the adequacy of the current employer contribution rate through measuring the resulting funding period, to describe the current financial condition of ERS, and to analyze changes in ERS's condition.

Prior valuation reports provided information that ERS needed to comply with Governmental Accounting Standards Board (GASB) Statement No. 25. Although this statement no longer applies to the ERS, this report continues to provide the GASB No. 25 information this year so that the employers that participate in the ERS can develop their GASB No. 27 disclosures. ERS must now comply with the GASB Statement No. 67. Due to the increases in the amount of information that must be provided under this statement, the required disclosure information of GASB No. 67 will be provided in a separate report.

The valuation report also provides various summaries of the data.

Valuations are prepared annually, as of June 30th of each year, the last day of ERS's plan year and fiscal year.

GABRIEL, ROEDER, SMITH & COMPANY

Board of Trustees
January 16, 2015
Page 2

Financing objectives

Contribution rates are established by Law that, over time, are intended to remain level as a percent of payroll. The employee and employer contribution rates have been set by Law and are intended to provide for the normal cost plus the level percentage of payroll required to amortize the unfunded actuarial accrued liability (UAAL) over a period not in excess of 30 years.

Progress toward realization of financing objectives

The 2011 Legislature made significant changes to the future employer contribution rates. The current 24.00% of pay contribution rate for Police and Fire employees will increase to 25.00% in FY2016, and the 16.50% of pay contribution rate for All Other Employees will increase to 17.00% in FY2016. The contribution rates are then expected to stay at those levels until the System is fully funded. The Legislature also made changes to the benefits and member contribution rates for employees hired after June 30, 2012. Because these changes result in significantly higher contributions towards the unfunded liability in the future than in the current year, we believe it is more appropriate to determine the funding period using an open group projection rather than a static mathematical formula, which assumes that all amortization payments in the future will be the same percentage of pay as in the current year.

Based on the future increases in the employer contribution rates and the changes to the benefits and member contributions of future employees, we have determined that the funding period for paying off the UAAL of the System (in aggregate) is 26 years. Because this period does not exceed 30 years, the financing objectives of ERS are currently being realized. (Hawaii Revised Statutes §88-122(e)(1) state that the employer contribution rates are subject to adjustment when the funding period is in excess of 30 years.)

The actuarial accrued liability, the unfunded actuarial accrued liability (UAAL), and the determination of the resulting funding period illustrate the progress toward the realization of financing objectives. The System's UAAL was expected to increase from the prior year based on the deferral of investment losses from prior valuations and the future increases in contributions not being effective for this fiscal year. In addition, the System had a liability experience loss which was caused by adverse experience compared to the assumptions. However, the losses were offset by investment gains due to the favorable investment performance during the fiscal year 2014. As a result, the UAAL grew less than expected and based on this actuarial valuation as of June 30, 2014, ERS's underfunded status as measured by the UAAL is now $8.578 billion.

Because of the favorable investment performance in FY2014, the System is now deferring $561 million in investment gains (compared with $391 million deferred losses last year). If there are no significant investment losses or other actuarial losses over the next several years, the funded status of the System would be expected to increase.

Benefit provisions and Legislative changes

This is the second valuation with members covered under the new benefit tier.

Letter from the Actuary (continued)

Board of Trustees
January 16, 2015
Page 3

There have been no changes in the benefit provisions since the prior valuation. See the *Summary of Retirement Benefit Plan Provisions* in the Introductory Section of this CAFR for more details on the benefit provisions for members of the System.

Assumptions and methods

The actuarial assumptions used were adopted by the Board in December of 2010 based on the recommendations provided by an Experience Study performed by GRS.

There have been no changes to the assumptions or methods since the prior valuation. Further detail on the assumptions and methods may be found in the *Summary of Actuarial Methods and Assumptions* in this section of this CAFR.

In our opinion, the assumptions are internally consistent and are reasonably based on the actual experience of ERS.

The results of the actuarial valuation are dependent on the actuarial assumptions used. Actual results can and almost certainly will differ, as actual experience deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities, calculated contribution rates and funding periods. The actuarial calculations are intended to provide information for rational decision making.

Data

Member data for retired, active, and inactive participants was supplied as of March 31, 2014, by ERS's staff. We have not subjected this data to any auditing procedures, but have examined the data for reasonableness and consistency with the prior year's data. Asset information was supplied by ERS's staff.

Responsibility for Tables and Schedules

The actuary is responsible for the information with respect to years after 1999 in the Required Supplementary Information, the Schedule of Employer Contributions, and the Notes to Required Supplementary Information in the Financial Section of the ERS's Comprehensive Annual Financial Report (CAFR). Information with respect to years prior to 2000 was supplied by ERS.

Tables and schedules in the Actuarial Section of the CAFR were generally prepared directly by the Actuary. However, certain of these tables were prepared by ERS utilizing information from this report. When the tables were prepared by ERS from our report, they are so noted.

Board of Trustees
January 16, 2015
Page 4

The undersigned are independent actuaries and consultants. Mr. Newton is an Enrolled Actuaries, a Member of the American Academy of Actuaries and meets the Qualification Standards of the American Academy of Actuaries. Finally, all of the undersigned are experienced in performing valuations for large public retirement systems.

Sincerely,

Joe Newton, FSA, EA
Senior Consultant & Actuary

Lewis Ward
Consultant

Linna Ye, ASA, MAAA
Actuary

Executive Summary

The following summarizes the key results of the June 30, 2014 actuarial valuation of the Employees' Retirement System of the State of Hawaii (ERS).

Item	2014	2013
Membership		
• Number of		
- Active members	67,206	66,226
- Retirees and beneficiaries	43,087	41,812
- Inactive, vested	8,105	7,312
- Total	118,398	115,350
• Covered payroll for active members	$3,871.0 million	$3,720.8 million
• Actual benefit payments and refunds	$1,130.9 million	$1,067.8 million
Assets		
• Actuarial (smoothed) value	$13,641.8 million	$12,748.8 million
• Market value	$14,203.0 million	$12,357.8 million
• Return on actuarial value	9.2%	6.7%
• Return on market value	17.8%	12.3%
• Employer contributions during fiscal year	$653,127,697	$581,447,213
• External cash flow %	(2.0%)	(2.5%)
Actuarial Information		
• Total normal cost % (employee + employer)	10.96%	11.02%
• Unfunded actuarial accrued liability (UAAL)	$8,578.3 million	$8,494.9 million
• Funded ratio (based on smoothed assets)	61.4%	60.0%
• Funded ratio (based on market assets)	63.9%	58.2%
• Funding period (years) *	26.0	28.0
• Employer contribution rate % of projected payroll ** For FY beginning July 1	17.28%	16.76%

* Funding Period based on actuarial value of assets, scheduled increases in employer contribution rates, and an open group projection reflecting changes in benefits and future member contribution rates.

** Weighted average of 24.00% Contribution Rate for Police and Firefighters and 16.5% Contribution Rate for All Other Employees for FY 2015, 23.0% and 16.0% respectively for FY 2014.

Actuarial Certification Statement

	Police and Firefighters June 30, 2014	All Other Employees June 30, 2014	All Employees June 30, 2014
1. Gross normal cost as a percentage of pay	19.47%	9.92%	10.96%
2. Present value of future benefits			
a. Active employees	$ 2,545,508,130	$ 11,061,442,472	$ 13,606,950,602
b. Inactive members	30,640,206	413,452,001	444,092,207
c. Pensioners and beneficiaries	2,009,448,307	9,663,539,439	11,672,987,746
d. Total	$ 4,585,596,643	$ 21,138,433,912	$ 25,724,030,555
3. Present value of future employee and employer contributions			
a. Present value of future normal costs	$ 750,656,299	$ 2,753,276,709	$ 3,503,933,008
b. Present value of future employee contributions	480,241,601	1,320,311,535	1,800,553,136
c. Present value of future employer normal cost (Item 3a - Item 3b)	$ 270,414,698	$ 1,432,965,174	$ 1,703,379,872
4. Actuarial accrued liability (Item 2d - Item 3a)	$ 3,834,940,344	$ 18,385,157,203	$ 22,220,097,547
5. Actuarial value of assets			
a. Annuity Savings Fund	$ 817,847,128	$ 1,289,335,500	$ 2,107,182,628
b. Pension Accumulation Fund	1,767,115,986	9,767,456,686	11,534,572,672
c. Total	$ 2,584,963,114	$ 11,056,792,186	$ 13,641,755,300
6. Unfunded actuarial accrued liability	$ 1,249,977,230	$ 7,328,365,017	$ 8,578,342,247
7. Adequacy of contribution rates			
a. Statutory Contribution Rate for Fiscal Year 2015	24.00%	16.50%	17.28%
B. Funding period in years as of June 30, 2014 *	29	26	26

*The Funding Period is calculated using an open group projection which reflects the impact of both the new employer contribution rates schedule and the benefits and member contribution rates for employees hired after June 30, 2012.

Gabriel Roeder Smith & Company

Actuarial Certification Statement (continued)

The actuarial valuation as of June 30, 2014 is based on the provisions of Chapter 88 of the Hawaii Revised Statutes, as amended. The assumptions used in the cost calculations were those adopted by the Board of Trustees on December 20, 2010 based on the actuary's actuarial experience investigation report covering the five-year period July 1, 2005 – June 30, 2010. The investment return assumption is formally adopted by the Board effective with the June 30, 2012 actuarial valuation (this assumption was previously prescribed by statute). The actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures.

In our opinion, the contributions required to meet ERS's liabilities were calculated in accordance with the provisions of Chapter 88 regarding the funding of the Employees' Retirement System on an actuarial reserve basis.

All of our work conforms with generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, our calculations also comply with the requirements of state law and, where applicable, the Internal Revenue Code, ERISA, and the Statements of the Governmental Accounting Standards Board. The undersigned is an independent actuary and consultant. Mr. Newton is an Enrolled Actuary, a Member of the American Academy of Actuaries and meets the Qualification Standards of the American Academy of Actuaries. Finally, he is experienced in performing valuations for large public retirement systems.

Joseph P Newton,, FSA, EA, MAAA
Senior Consultant & Actuary

Gabriel Roeder Smith & Company

Summary of 2014 Actuarial Valuation

Exhibit 1
Development of Employer Cost

		Police and Firefighters June 30, 2014	All Other Employees June 30, 2014	All Employees June 30, 2014
1.	Payroll (adjusted for one year's pay increase)	$ 414,605,839	$ 3,577,034,439	$ 3,991,640,278
2.	Gross normal cost (Exhibit 3)	19.47%	9.92%	10.96%
3.	Employer normal cost rate (Exhibit 3)	7.17%	5.34%	5.54%
4.	Present value future benefits (Exhibit 2)	$ 4,585,596,643	$ 21,138,433,912	$ 25,724,030,555
5.	Present value future employer normal cost	$ 270,414,698	$ 1,432,965,174	$ 1,703,379,872
6.	Present value future employee contributions	$ 480,241,601	$ 1,320,311,535	$ 1,800,553,136
7.	Actuarial accrued liability (Item 4 - Item 5 - Item 6)	$ 3,834,940,344	$ 18,385,157,203	$ 22,220,097,547
8.	Actuarial value of assets	$ 2,584,963,114	$ 11,056,792,186	$ 13,641,755,300
9.	Unfunded actuarial accrued liability (UAAL)			
	(Item 7 - Item 8)	$ 1,249,977,230	$ 7,328,365,017	$ 8,578,342,247
10.	Funding period *	29	26	26

		Police and Firefighters June 30, 2013	All Other Employees June 30, 2013	All Employees June 30, 2013
1.	Payroll (adjusted for one year's pay increase)	$ 425,955,308	$ 3,480,715,308	$ 3,906,670,616
2.	Gross normal cost (Exhibit 3)	19.84%	9.91%	11.02%
3.	Employer normal cost rate (Exhibit 3)	7.60%	5.53%	5.76%
4.	Present value future benefits (Exhibit 2)	$ 4,446,972,755	$ 20,213,636,945	$ 24,660,609,700
5.	Present value future employer normal cost	$ 288,878,692	$ 1,448,159,266	$ 1,737,037,958
6.	Present value future employee contributions	$ 475,079,954	$ 1,204,747,411	$ 1,679,827,365
7.	Actuarial accrued liability (Item 4 - Item 5 - Item 6)	$ 3,683,014,109	$ 17,560,730,268	$ 21,243,744,377
8.	Actuarial value of assets	$ 2,387,843,681	$ 10,360,984,429	$ 12,748,828,110
9.	Unfunded actuarial accrued liability (UAAL)			
	(Item 7 - Item 8)	$ 1,295,170,428	$ 7,199,745,839	$ 8,494,916,267
10.	Funding period	30.0	28.0	28.0

*The Funding Period is calculated using an open group projection which reflects the impact of both the new employer contribution rates schedule and the benefits and member contribution rates for employees hired after June 30, 2012.

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Summary of 2014 Actuarial Valuation (continued)

Exhibit 2
Actuarial Present Value of Future Benefits

	Police and Firefighters June 30, 2014	All Other Employees June 30, 2014	All Employees June 30, 2014
1. Active members			
a. Service retirement benefits	$ 2,414,882,084	$ 10,014,902,083	$ 12,429,784,167
b. Termination benefits	80,450,842	705,704,501	786,155,343
c. Survivor benefits	38,550,200	246,300,570	284,850,770
d. Disability retirement benefits	11,625,004	94,535,318	106,160,322
e. Total	$ 2,545,508,130	$ 11,061,442,472	$ 13,606,950,602
2. Retired members			
a. Service retirement	$ 1,889,621,754	$ 9,032,484,732	$ 10,922,106,486
b. Disability retirement	29,733,132	171,580,522	201,313,654
c. Beneficiaries	90,093,421	459,474,185	549,567,606
d. Total	$ 2,009,448,307	$ 9,663,539,439	$ 11,672,987,746
3. Inactive members			
a. Vested terminations	$ 28,085,050	$ 369,301,164	$ 397,386,214
b. Nonvested terminations	2,555,156	44,150,837	46,705,993
c. Total	$ 30,640,206	$ 413,452,001	$ 444,092,207
4. Total actuarial present value of future benefits	$ 4,585,596,643	$ 21,138,433,912	$ 25,724,030,555

	Police and Firefighters June 30, 2013	All Other Employees June 30, 2013	All Employees June 30, 2013
1. Active members			
a. Service retirement benefits	$ 2,393,112,014	$ 9,560,436,194	$ 11,953,548,208
b. Termination benefits	80,314,208	669,557,420	749,871,628
c. Survivor benefits	38,096,802	233,658,581	271,755,383
d. Disability retirement benefits	11,381,658	90,543,278	101,924,936
e. Total	$ 2,522,904,682	$ 10,554,195,473	$ 13,077,100,155
2. Retired members			
a. Service retirement	$ 1,791,126,664	$ 8,729,793,532	$ 10,520,920,196
b. Disability retirement	29,248,957	163,528,639	192,777,596
c. Beneficiaries	73,580,138	395,257,117	468,837,255
d. Total	$ 1,893,955,759	$ 9,288,579,288	$ 11,182,535,047
3. Inactive members			
a. Vested terminations	$ 27,759,262	$ 336,765,219	$ 364,524,481
b. Nonvested terminations	2,353,052	34,096,965	36,450,017
c. Total	$ 30,112,314	$ 370,862,184	$ 400,974,498
4. Total actuarial present value of future benefits	$ 4,446,972,755	$ 20,213,636,945	$ 24,660,609,700

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Summary of 2014 Actuarial Valuation (continued)

Exhibit 3
Analysis of Normal Cost

	Police and Firefighters June 30, 2014	All Other Employees June 30, 2014	All Employees June 30, 2014
1. Normal cost as a percent of pay			
a. Service retirement benefits	16.66%	7.43%	8.43%
b. Deferred termination benefits	0.78%	0.67%	0.68%
c. Refunds	1.39%	1.36%	1.37%
d. Disability retirement benefits	0.17%	0.16%	0.16%
e. Survivor benefits	0.47%	0.30%	0.32%
f. Total	19.47%	9.92%	10.96%
2. Employee contribution rate	12.30%	4.58%	5.42%
3. Effective employer normal cost rate (Item 1f – Item 2)	7.17%	5.34%	5.54%

	Police and Firefighters June 30, 2013	All Other Employees June 30, 2013	All Employees June 30, 2013
1. Normal cost as a percent of pay			
a. Service retirement benefits	17.02%	7.45%	8.52%
b. Deferred termination benefits	0.80%	0.70%	0.71%
c. Refunds	1.37%	1.31%	1.32%
d. Disability retirement benefits	0.17%	0.16%	0.16%
e. Survivor benefits	0.48%	0.29%	0.31%
f. Total	19.84%	9.91%	11.02%
2. Employee contribution rate	12.24%	4.38%	5.26%
3. Effective employer normal cost rate (Item 1f – Item 2)	7.60%	5.53%	5.76%

Summary of 2014 Actuarial Valuation (continued)

Exhibit 4
Development of Actuarial Value of Assets

			Year Ending June 30, 2014		Year Ending June 30, 2013
1.	Actuarial value of assets at beginning of year	$	12,748,828,110	$	12,242,493,808
2.	Net new investments				
	a. Contributions	$	859,255,034	$	767,284,398
	b. Benefits paid		(1,122,445,642)		(1,060,561,148)
	c. Refunds		(8,475,969)		(7,204,411)
	d. Subtotal		(271,666,577)		(300,481,161)
3.	Market value of assets at end of year	$	14,203,015,303	$	12,357,825,626
4.	Expected return	$	977,507,099	$	937,149,625
5.	Expected actuarial value of assets, end of year	$	13,454,668,632	$	12,879,162,272
6.	Excess/(shortfall) return (Item 3-Item 5)	$	748,346,671	$	(521,336,646)
7.	Excess / (shortfall) recognized (25% of Item 6)	$	187,086,668	$	(130,334,162)
8.	Actuarial value of assets as of June 30, 2013 (Item 5 + Item 7)	$	13,641,755,300	$	12,748,828,110
9.	Ratio of actuarial value to market value		96.0%		103.2%
10.	Remaining deferred Excess/(Shortfall) (Item 6 - Item 7)	$	561,260,003	$	(391,002,484)

Summary of 2014 Actuarial Valuation (continued)

Exhibit 5
Total Experience Gain or Loss

Item	Police and Firefighters	All Other Employees	All Employees
A. Calculation of total actuarial gain or loss			
1. Unfunded actuarial accured liability (UAAL), as of June 30, 2013	$ 1,295,170,428	$ 7,199,745,839	$ 8,494,916,267
2. Normal cost for the year (employer and employee)	$ 79,806,553	$ 346,288,316	$ 426,094,869
3. Less: contributions and assessments for the year	$ (147,873,311)	$ (711,381,723)	$ (859,255,034)
4. Interest at 7.75%			
a. On UAAL	$ 100,375,708	$ 557,980,303	$ 658,356,011
b. On normal cost	3,092,504	13,418,672	16,511,176
c. On contributions	(5,730,091)	(27,566,042)	(33,296,133)
d. Total	$ 97,738,121	$ 543,832,933	$ 641,571,054
5. Expected UAAL as of June 30, 2014 (Sum of Items 1– 4)	$ 1,324,841,791	$ 7,378,485,365	$ 8,703,327,156
6. Actual UAAL as of June 30, 2014	$ 1,249,977,230	$ 7,328,365,017	$ 8,578,342,247
7. Total gain (loss) for the year (Item 5 – Item 6)	$ 74,864,561	$ 50,120,348	$ 124,984,909
B. Source of gains and losses			
8. Asset gain (loss) for the year (Exhibit 6)	$ 35,450,873	$ 151,635,795	$ 187,086,668
9. Gain (loss) due to change in actuarial assumptions	-	-	-
10 Gain (loss) due to change in actuarial method	-	-	-
11 Other liability gain (loss)	$ 39,413,688	$ (101,515,447)	$ (62,101,759)
12 Change in benefit provisions	-	-	-
13 Total gain (loss) for the year	$ 74,864,561	$ 50,120,348	$ 124,984,909

Summary of 2014 Actuarial Valuation (continued)

Exhibit 6
Investment Experience Gain or Loss

Item	June 30, 2014	June 30, 2013
1. Actuarial assets, beginning of year	$ 12,748,828,110	$ 12,242,493,808
2. Total contributions during year	$ 859,255,034	$ 767,284,398
3. Benefits and refunds paid	$ (1,130,921,611)	$ (1,067,765,559)
4. Assumed net investment income at 7.75%		
a. Beginning of year assets	$ 988,034,178	$ 948,793,270
b. Contributions	$ 33,296,133	$ 29,732,270
c. Benefits and refunds paid	$ (43,823,212)	$ (41,375,915)
d. Total	$ 977,507,099	$ 937,149,625
5. Expected actuarial assets, end of year (Sum of Items 1 through 4)	$ 13,454,668,632	$ 12,879,162,272
6. Actual actuarial assets, end of year	$ 13,641,755,300	$ 12,748,828,110
7. Asset gain (loss) for year (Item 6 – Item 5)	$ 187,086,668	$ (130,334,162)
8. Asset gain (loss) as a percent of actuarial value of assets, end of year (Item 7 / Item 6)	1.37%	(1.02%)

Summary of 2014 Actuarial Valuation (continued)

Exhibit 7
Projection Results Based on June 30, 2014 Actuarial Valuation

Valuation as of June 30,	Employer Contribution Rate for Fiscal Year Following Valuation Date	Compensation (in Millions)	Employer Contributions (in Millions)	Actuarial Accrued Liability (AAL, in Millions)	Actuarial Value of Assets (AVA, in Millions)	Unfunded Actuarial Accrued Liability (UAAL, in Millions)	Funded Ratio
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
2014	17.28%	$ 3,991.6	$ 690	$ 22,220	$ 13,642	$ 8,578	61.4%
2015	17.83%	4,094.4	730	23,102	14,346	8,756	62.1%
2016	17.83%	4,209.4	750	24,026	15,125	8,902	62.9%
2017	17.82%	4,332.5	772	24,947	15,913	9,035	63.8%
2018	17.82%	4,464.2	796	25,863	16,711	9,152	64.6%
2019	17.82%	4,604.7	821	26,776	17,524	9,252	65.4%
2020	17.82%	4,753.6	847	27,685	18,354	9,331	66.3%
2021	17.81%	4,910.9	875	28,589	19,203	9,386	67.2%
2022	17.81%	5,076.8	904	29,490	20,074	9,415	68.1%
2023	17.80%	5,251.8	935	30,387	20,973	9,414	69.0%
2024	17.80%	5,435.9	968	31,281	21,902	9,379	70.0%
2025	17.79%	5,628.3	1,002	32,172	22,867	9,305	71.1%
2026	17.79%	5,829.5	1,037	33,059	23,870	9,189	72.2%
2027	17.78%	6,040.2	1,074	33,942	24,917	9,025	73.4%
2028	17.78%	6,260.6	1,113	34,822	26,014	8,808	74.7%
2029	17.78%	6,491.6	1,154	35,701	27,169	8,532	76.1%
2030	17.77%	6,732.8	1,197	36,580	28,389	8,191	77.6%
2031	17.77%	6,984.8	1,241	37,462	29,684	7,778	79.2%
2032	17.77%	7,247.9	1,288	38,348	31,063	7,286	81.0%
2033	17.76%	7,522.3	1,336	39,242	32,537	6,705	82.9%
2034	17.76%	7,809.9	1,387	40,146	34,118	6,028	85.0%
2035	17.76%	8,109.8	1,440	41,066	35,821	5,245	87.2%
2036	17.76%	8,422.8	1,496	42,005	37,659	4,346	89.7%
2037	17.76%	8,749.9	1,554	42,966	39,647	3,319	92.3%
2038	17.76%	9,092.0	1,615	43,954	41,802	2,152	95.1%
2039	17.76%	9,449.2	1,678	44,976	44,143	833	98.1%
2040	17.76%	9,821.8	1,744	46,037	46,690	(653)	101.4%
2041	17.76%	10,210.0	1,813	47,143	49,464	(2,321)	104.9%
2042	17.76%	10,614.7	1,885	48,299	52,488	(4,189)	108.7%
2043	17.76%	11,036.2	1,960	49,513	55,785	(6,272)	112.7%
2044	17.76%	11,475.2	2,038	50,789	59,382	(8,592)	116.9%

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Summary of 2014 Actuarial Valuation (continued)

Exhibit 8
Highlights of Last Five Annual Actuarial Valuations
2010 through 2014

Item	Valuation Date: June 30				
	2010	2011	2012	2013	2014
Number of active members	65,890	65,310	65,599	66,226	67,206
Number of inactive members	6,895	6,649	6,909	7,312	8,105
Number of pensioners	35,763	36,871	37,830	38,741	39,680
Number of beneficiaries	2,678	2,818	2,944	3,071	3,407
Average monthly contributory plan pension amount	$ 2,118	$ 2,221	$ 2,315	$ 2,414	$ 2,508
Average monthly noncontributory plan pension amount	$ 1,457	$ 1,509	$ 1,538	$ 1,562	$ 1,585
Average monthly hybrid plan pension amount	1,857	$ 2,055	$ 2,090	$ 2,092	$ 2,088
Average monthly beneficiary amount	$ 1,151	$ 1,181	$ 1,219	$ 1,247	$ 1,304
Total actuarial value of assets ($millions)	$ 11,346	$ 11,943	$ 12,242	$ 12,749	$ 13,642
Unfunded actuarial accrued liability ($millions)	$ 7,138.1	$ 8,154.2	$ 8,440.9	$ 8,494.9	$ 8,578.3
Funding Period (in years) [1]	41.3	25.0	30.0	28.0	26.0

Item	Fiscal Year				
(Dollar amounts in millions[2])	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
Employers contributions[2]	$ 547.6	$ 534.9	$ 548.4	$ 581.4	$ 653.1

(1) Beginning with the 2011 valuation, the funding period was determined using and open group projection. Prior valuations determined the remaining amortization based on the assumption that the amortization payment would remain constant as a percentage of pay.

(2) Beginning with the fiscal year beginning July 1, 2005, a dollar contribution amount is not determined under the provisions of Act 181/2004. Instead a fixed percentage of payroll is contributed (15.75% for Police and Fire, 13.75% for All Others).
Beginning July 1, 2008, the percentages increased to 19.70% for Police and Fire, 15.00% for All Others.
Beginning July 1, 2012, the percentages increased to 22.0% for Police and Fire, 15.5% for All Others.
Beginning July 1, 2013, the percentages increased to 23.0% for Police and Fire, 16.0% for All Others.
Beginning July 1, 2014, the percentages increased to 24.0% for Police and Fire, 16.5% for All Others

Gabriel Roeder Smith & Company

Summary of Actuarial Methods and Assumptions (Adopted on June 30, 2007, and December 20, 2010)

I. *Valuation Date*

The valuation date is June 30th of each plan year. This is the date as of which the actuarial present value of future benefits and the actuarial value of assets are determined.

II. *Actuarial Cost Method*

The normal cost and actuarial accrued liability are determined using the Entry Age Actuarial Cost Method. The actuarial accrued liability is assigned to years prior to the valuation, and the normal cost is assigned to the year following the valuation. The remaining costs are assigned to future years. The normal cost and accrued liability are determined on an individual basis.

The normal cost is the level percentage of payroll contribution required to accumulate the needed funds to pay all expected benefits. This percentage of payroll is then applied to the total compensation for the prior year for all active members, and is then adjusted for the payroll growth assumption.

The actuarial accrued liability is the difference between the total present value of future benefits and the actuarial present value of future normal costs. The unfunded actuarial accrued liability (UAAL) is the excess of the actuarial accrued liability over the actuarial value of assets.

III. *Funding of Unfunded Actuarial Accrued Liability*

Since the State statutes governing the System establish the employee and employer contribution rates, the actuarial valuation determines the number of years required to amortize (or fund) the UAAL. Because of the legislated increases in future employer contribution rates and the new tier of benefits for employees hired after June 30, 2012, an open group projection of liabilities and assets was used to determine the length of time until the UAAL is eliminated. The open group projection assumed that the number of active members would remain static (i.e. each active employee who leaves employment due to termination, retirement, death or disability, would be replaced by exactly one new employee.

Because of this methodology for determining the funding period, any change in the unfunded actuarial accrued liability due to (i) actuarial gains and losses, (ii) changes in actuarial assumptions, or (iii) amendments, affects the funding period.

Please see Section VIII of these *Assumptions* for a description of the new entrant profile used in the open group projection.

Summary of Actuarial Methods and Assumptions (continued)
(Adopted on June 30, 2007, and December 20, 2010)

IV. *Actuarial Value of Assets*

The actuarial value of assets is equal to the expected actuarial value of assets plus 25% of the difference between the actual market value of assets and the expected actuarial value of assets. The expected actuarial value of assets is calculated net of investment and administrative expenses, and the expected investment return is equal to the assumed investment return rate multiplied by the prior year's actuarial value of assets, adjusted for contributions, benefits paid, and refunds.

V. *Actuarial Assumptions*

A. Economic Assumptions

1. Investment return: 7.75% per year, compounded annually, composed of an assumed 3.00% inflation rate and a 4.75% net real rate of return **(effective June 30, 2011)**.
2. Payroll growth rate: 3.50% per annum **(effective June 30, 2006)**.
3. Salary increase rate **(effective June 30, 2011)**: As shown below

	General Employees		Teachers	
Years of Service	Service-related Component	Total Annual Rate of Increase Including 3.00% Inflation Component and 1.00% General Increase Rate	Service-Related Component	Total Annual Rate of Increase Including 3.00% Inflation Component and 1.50% General Increase Rate
1	4.00%	8.00%	4.00%	8.50%
2	3.00%	7.00%	3.25%	7.75%
3	2.00%	6.00%	2.50%	7.00%
4	1.25%	5.25%	2.00%	6.50%
5	1.00%	5.00%	1.50%	6.00%
6	0.75%	4.75%	1.00%	5.50%
7	0.50%	4.50%	1.00%	5.50%
8	0.50%	4.50%	0.75%	5.25%
9	0.50%	4.50%	0.75%	5.25%
10	0.25%	4.25%	0.75%	5.25%
11	0.25%	4.25%	0.50%	5.00%
12	0.25%	4.25%	0.50%	5.00%
13	0.25%	4.25%	0.50%	5.00%
14	0.25%	4.25%	0.50%	5.00%
15 or more	0.00%	4.00%	0.00%	4.50%

Summary of Actuarial Methods and Assumptions (continued)
(Adopted on June 30, 2007, and December 20, 2010)

	Police & Firefighters	
Years of Service	Service-related Component	Total Annual Rate of Increase Including 3.00%Inflation Component and 2.00% General Increase Rate
0	14.00%	19.00%
1	12.00%	17.00%
2 or more	0.00%	5.00%

Salary increases are assumed to occur once a year on July 1. Therefore, the pay used for the period between the valuation date and the first anniversary of the valuation date is equal to the reported pay for the prior year, annualized if necessary, and then increased by the salary increase assumption.

B. Demographic Assumptions

1. Post-Retirement Mortality rates

General Employees **(effective June 30, 2011)**

a. Healthy males – Client Specific Table for males, 89% multiplier.

b. Healthy females - Client Specific Table for females, 89% multiplier.

c. Disabled males - 1994 US Group Annuity Mortality Static Table for males, set forward nine years.

d. Disabled females - 1994 US Group Annuity Mortality Static Table for females, set forward nine years.

Teachers

a. Healthy males – Client Specific Table for male teachers, 65% multiplier **(effective June 30, 2011)**.

b. Healthy females - Client Specific Table for female teachers, 67% multiplier **(effective June 30, 2011)**.

c. Disabled males - 1994 US Group Annuity Mortality Static Table for males, set forward five years **(effective June 30, 2011)**.

d. Disabled females - 1994 US Group Annuity Mortality Static Table for females, set forward six years **(effective June 30, 2006)**.

Summary of Actuarial Methods and Assumptions (continued)
(Adopted on June 30, 2007, and December 20, 2010)

Police and Fire

a. Healthy males – 1994 US Group Annuity Mortality Static Table for males, 85% multiplier **(effective June 30, 2006)**.

b. Healthy females - 1994 US Group Annuity Mortality Static Table for females, 85% multiplier **(effective June 30, 2006)**.

c. Disabled males - 1994 US Group Annuity Mortality Static Table for males, set forward three years **(effective June 30, 2011)**.

d. Disabled females - 1994 US Group Annuity Mortality Static Table for females, set forward three years **(effective June 30, 2011)**.

Mortality Improvement: To account for future mortality improvement, the healthy mortality rates were chosen so that the assumed mortality rates are smaller than the rates observed in the most recent experience study (dated 12-20-2010). The margin at the time of the study was at least 7% for all groups (i.e. 7% more actual male deaths than expected). No future mortality improvement after the measurement date is assumed except as described above.

2. Pre-retirement Mortality Rates **(effective June 30, 2011)**

The male pre-retirement mortality rates are multiples of a table that has the RP-2000 Male Employee rates for ages 1 to 70 and the RP-2000 Combined Male rates for ages above 70. Similarly, the female pre-retirement rates are multiples of a table that has the RP-2000 Female Employee rates for ages 1 to 70 and the RP-2000 Combined Female rates for ages above 70. The following table shows the factors that are used in conjunction with the tables described above to derive the final ordinary and accidental death rates.

	General Employees		Teachers		Police and Fire	
Type	Males	Females	Males	Females	Males	Females
Ordinary	64%	48%	50%	40%	15%	15%
Accidental	16%	12%	10%	5%	35%	35%

Summary of Actuarial Methods and Assumptions (continued)
(Adopted on June 30, 2007, and December 20, 2010)

3. Disability rates (**effective June 30, 2011**) – The assumed total disability rates for employees covered by the contributory plan, hybrid plan, and the noncontributory plan at select ages are multiples of the client specific table that follows:

Age	Male & Female
25	0.000%
30	0.001%
35	0.008%
40	0.026%
45	0.064%
50	0.146%
55	0.198%
60	0.217%

Note: The disability rates project the percentage of employees at each age that is assumed to become disabled before retiring. Multiples of the rates above are assumed to be ordinary disability or accidental disability, and vary by employee group as follows:

	General Employees		Teachers		Police and Fire
Type	Male	Female	Male	Female	Male & Female
Ordinary	135%	85%	50%	50%	70%
Duty	30%	7%	5%	5%	35%

Summary of Actuarial Methods and Assumptions (continued)
(Adopted on June 30, 2007, and December 20, 2010)

4. Termination Rates (**effective June 30, 2011**) - Separate male and female rates, based on both age and service, developed from 2010 Experience Study. Rates reflect terminations for causes other than death, disability or retirement. Employees eligible for retirement are assumed to have no probability of termination. Sample rates are shown below:

<u>For first 6 years of service</u>

Expected Terminations per 100 Lives

Years of Service	General Employees Male	General Employees Female	Teachers Male	Teachers Female	Police and Fire Male	Police and Fire Female
0	15.5	18.5	33.0	28.0	12.0	12.0
1	12.5	16.5	23.0	23.0	9.0	9.0
2	10.5	12.5	15.0	16.0	4.0	4.0
3	9.0	10.0	13.0	14.0	4.0	4.0
4	7.0	8.0	11.0	12.0	4.0	4.0
5	6.0	7.0	9.0	8.0	4.0	4.0

<u>After first 6 years of service</u>

Expected Terminations per 100 lives

Age	General Employees Male	General Employees Female	Teachers Male	Teachers Female	Police and Fire Male & Female
20	7.15	8.12	6.22	7.12	2.03
25	6.50	7.83	4.98	6.72	1.91
30	5.46	5.84	4.12	6.15	2.53
35	4.40	4.04	3.95	4.99	2.75
40	3.60	3.30	3.60	3.70	2.01
45	3.02	2.65	2.88	2.88	1.18
50	2.54	2.41	2.34	2.36	0.79
55	2.52	2.41	2.34	2.36	0.24
60	2.52	2.41	2.34	2.36	0.00

Summary of Actuarial Methods and Assumptions (continued)
(Adopted on June 30, 2007, and December 20, 2010)

5. Retirement rates (**effective June 30, 2011**) - Separate male and female rates, based on age, developed from the 2010 Experience Study. Sample rates are shown below:

Contributory Plan and Hybrid Plan

Expected Retirements per 100 Lives

	General Employees		Teachers		Police and Fire
Age	Male	Female	Male	Female	Male & Female
45	2	1	0	0	13
46	2	1	0	0	13
47	2	1	0	0	13
48	2	1	0	0	13
49	2	1	0	0	13
50	2	1	1	0	15
51	2	1	1	1	15
52	2	1	1	1	15
53	2	2	2	2	15
54	3	3	3	3	15
55	16	13	20	18	20
56	14	13	15	16	20
57	14	13	15	16	20
58	14	13	15	16	20
59	14	13	15	16	20
60	14	15	14	18	30
61	15	15	14	18	30
62	25	25	14	25	30
63	20	20	14	20	30
64	20	20	14	15	30
65	25	25	20	25	100
66	25	25	15	25	100
67	20	20	15	20	100
68	20	20	15	20	100
69	20	20	15	20	100
70	20	20	15	20	100
71	20	20	15	20	100
72	20	20	15	20	100
73	20	20	15	20	100
74	20	20	15	20	100
75	100	100	100	100	100

Retirement rates for 25 & out group ages 50-54 are 10% for both males and females

Summary of Actuarial Methods and Assumptions (continued)
(Adopted on June 30, 2007, and December 20, 2010)

Noncontributory Plan

Expected Retirements per 100 Lives

	General Employees				Teachers			
	Unreduced Retirement		Reduced Retirement		Unreduced Retirement		Reduced Retirement	
Age	Male	Female	Male	Female	Male	Female	Male	Female
55	13	12	2	2	10	13	2	3
56	13	12	2	2	10	13	2	3
57	13	12	2	2	10	14	2	3
58	13	12	2	2	10	15	2	3
59	13	12	3	3	10	16	3	3
60	14	15	4	4	10	17	5	5
61	14	18	5	5	10	18	10	5
62	25	25			16	25		
63	25	25			12	20		
64	20	20			10	18		
65	25	22			20	30		
66	25	22			15	25		
67	25	22			15	25		
68	25	22			15	25		
69	25	22			15	25		
70	20	20			15	25		
71	20	20			15	25		
72	20	20			15	25		
73	20	20			15	25		
74	20	20			15	25		
75	100	100			100	100		

Retirement rates for the 25 & out group ages 50-54 are 10% for both males and females

For Hybrid plan, early retirement rates are reduced by a factor of 10% for each year prior to age 65 (if hired after June 30, 2012) or 62 (if hired before July 1, 2012) for a maximum of 10 years.

Normal retirement rates for those hired after June 30, 2012 are increased by a factor of 10% for each year the member's first eligible normal retirement age is beyond the first eligible normal retirement age if he is hired before July 1, 2012. For Police/Fire, this factor will be 20% each year.

Summary of Actuarial Methods and Assumptions (continued)
(Adopted on June 30, 2007, and December 20, 2010)

C. Other Assumptions

1. Projected payroll for Contribution Purposes (**effective June 30, 2014**): The aggregate projected payroll for each fiscal year following the valuation date is calculated by increasing the actual payroll paid during the previous fiscal year by the payroll growth rate and multiplying by the ratio of current active members to the average number of active members during the previous fiscal year.

2. Percent married (**effective June 30, 2006**): 77% of male employees and 57.6% of female employees are assumed to be married.

3. Age difference (**effective June 30, 2006**): Male members are assumed to be four years older than their spouses, and female members are assumed to be four years younger than their spouses.

4. Percent electing annuity on death for contributory participants (when eligible): All of the spouses of married participants who die after becoming eligible for a retirement benefit are assumed to elect an annuity or a refund, whichever is more valuable at time of participant's death.

5. Percent electing deferred termination benefit: vested terminating members are assumed to elect a refund or a deferred benefit, whichever is more valuable at the time of termination.

6. Assumed age for commencement of deferred benefits: Members electing to receive a deferred benefit are assumed to commence receipt when eligible for early retirement.

7. Administrative expenses (**effective June 30, 2011**): The assumed investment return rate represents the anticipated net return after payment of all investment and administrative expenses. For purposes of determining the investment return assumption administrative expenses are assumed to be equal to 40 basis points of each year's investment return.

8. Reemployment, purchase of service, transfers: No recognition is made of (i) future member reimbursements upon reemployment, (ii) future purchase of additional service, or (iii) special transfer provisions.

9. Sick Leave: It is assumed that all members will have their benefit service increased by sick leave and the following loads will be applied by group:

General Employees	3.75%
Teachers	4.25%
Police and Fire	5.00%

10. COLA delay: It is assumed that the first COLA will be received 9 months after retirement. Teachers are assumed to receive the first COLA 12 months after retirement.

Summary of Actuarial Methods and Assumptions (continued)
(Adopted on June 30, 2007, and December 20, 2010)

11. There will be no recoveries once disabled.

12. No surviving spouse will remarry and there will be no children's benefit.

13. Pay increase timing: Beginning of (fiscal) year. This is equivalent to assuming that reported pays represent amounts paid to members during the year ended on the valuation date.

14. Decrement timing: Retirements and terminations of Teachers are assumed to occur at the beginning of the year. All other decrements are assumed to occur mid-year.

15. Eligibility testing: Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.

16. Decrement relativity: Decrement rates are used directly from the Experience Study, without adjustment for multiple decrement table effects.

17. Incidence of Contributions: Contributions are assumed to be received continuously throughout the year based upon the computed percent of payroll shown in this report, and the actual payroll payable at the time contributions are made.

18. Benefit Service: All members are assumed to accrue 1 year of service each year. Exact fractional service is used to determine the amount of benefit payable.

18. Police officers, firefighters, investigators of the Department of the Prosecuting Attorney and Attorney General, narcotic enforcement investigators, and public safety investigators hired prior to June 30, 2012 are not assumed to retire at age 55 unless they have 10 years of service.

VI. Participant Data

Participant data was supplied for (i) active members, (ii) inactive vested members, who are entitled to a future deferred benefit, (iii) members and beneficiaries receiving benefits.

Salary supplied for the current year was based on the earnings for the March preceding the valuation date. This salary was compared to March base pay plus a twelve-month average of overtime, with the greater of the two being used for valuation pay.

VII. Dates of Adoption of Assumptions and Methods

Generally, actuarial assumptions and methods were adopted by the Board of Trustees on December 20, 2010 as recommended by Gabriel, Roeder, Smith & Company (GRS). The legislature set the investment return assumption for the 2011 valuation to the assumption recommended by GRS. The ERS Board has adopted the assumption beginning with the 2012 valuation.

Summary of Actuarial Methods and Assumptions (continued)
(Adopted on June 30, 2007, and December 20, 2010)

VIII. New Entrant Profile

For the purposes of determining the funding period, an open group projection is used which replaces on a one-to-one basis each active member who leaves employment with an average new hire. The average new hire is determined based on a new entrant profile, which is created from the valuation data by determining the entry age and entry pay for anyone with seven or less years of service. The new entrant profile for the Police and Fire Employees and the All Other Employees are shown in the table below.

New Entrant Profile for Police and Fire Employees

Entry Age	# of Employees	Average Salary
20-24	199	$42,080
25-29	421	41,841
30-34	286	41,807
35-39	136	42,273
40-44	47	42,310
45-49	17	43,503
50-54	6	45,708
55-59	1	40,632
Total	1,113	41,993

It is assumed that 92.7% of new hires will be male.

Each group of new hires' salaries is assumed to grow 4.00% over the salaries of the previous year's group.

New Entrant Profile for All Other Employees

Entry Age	# of Employees	Average Salary
15-19	19	$26,410
20-24	1,433	37,250
25-29	3,459	40,108
30-34	2,759	42,208
35-39	2,388	43,097
40-44	1,954	41,537
45-49	1,785	40,980
50-54	1,449	42,278
55-59	1,169	45,146
60-64	484	46,511
65-69	41	47,971
Total	16,951	41,610

It is assumed that 40.0% of new hires will be male.

Summary of Plan Changes

Act 65, effective July 1, 1999

Requires judges who enter or re-enter service after June 30, 1999 to be at least 55 years old and five years of service or have 25 years of service to retire.

Act 100, effective June 30, 1999

Uses actuarial investment earnings in excess of a ten percent (10%) actuarial investment yield rate to reduce the employer's contribution requirements by $147.0 million and $50.6 million for fiscal years ending June 30, 2000 and 2001, respectively.

Act 284, effective June 30, 2001

Provide an increase in pension benefits for current retirees with military service who retired prior to July 2, 1989. A retirant who rendered honorable active military service could be granted up to 4 years of military service credits based upon his/her years of credited service under the ERS, not to exceed his/her actual years of military service. The years of military service credits granted are based on the following schedule:

- 0 years for retirants with less than 8 years of credited service
- Up to 2 years of retirants with 8 years or more of credited service
- Up to 3 years of retirants with 20 years or more of credited service
- Up to 4 years of retirants with 25 years or more of credited service

For each year of military service credits granted on the schedule above, the retirant will be provided a $36.00 increase is his/her monthly pension or retirement allowance.

Act 199, effective June 30, 2003

Emergency Medical Technicians (EMTs) are allowed to retire with an unreduced benefit after 25 years of service regardless of age, of which the last five or more years prior to retirement must be in that capacity. This feature is phased in one year at a time, July 1, 2003 through June 30, 2008.

Act 177, effective July 1, 2004

This Act allows police officers with a permanent service-connected disability to retain the 2-1/2% benefit multiplier for each year of service as a police officer.

Act 179, effective July 1, 2004

This Act increased the Noncontributory service-connected disability formula to 35% of average final compensation. The Act also changed the methodology for crediting interest on contributions for terminated members so that interest continues to accrue until the date of refund. The Act adds a "pop-up" feature to the joint & survivor benefit options if the beneficiary pre-deceases the retiree.

This Act also created the new Hybrid Plan which became effective July 1, 2006.

Summary of Plan Changes (continued)

Act 181, effective July 1, 2004

This Act establishes fixed employer contribution rates as a percentage of compensation effective July 1, 2005. Employers will contribute 15.75% for their police officers and firefighters and 13.75% for other employees.

Act 183, effective July 1, 2004

This Act amends the ERS statutes to comply with the federal tax limits on compensation retroactive to July 1, 1996.

Act 56, effective December 1, 2004

This Act amends the ERS statutes to allow the automatic cost-of-living-adjustment to be reflected when determining actuarial equivalent optional forms of payment.

Act 256, effective July 5, 2007

Legislation was enacted to remove the statutory salary increase assumption from the statutes and to grant the System's Board of Trustees the authority to set the salary increase assumption. As a result of that legislation, the Board has adopted effective with this valuation the salary increase assumption recommended by GRS as a result of the Experience Study performed in 2006.

Legislation was also enacted to increase the employer contribution rates to the System. Effective July 1, 2008, the employer contribution rate for Police and Fire employees will increase from 15.75% to 19.70% and the rate for All Other employees will increase from 13.75% to 15.00%

Act 163, effective June 23, 2011

Legislation was enacted that increased the future employer contribution rates to ERS. Employers of Police and Fire employees will contribute 22.0% of pay in FY 2013, 23.0% in FY 2014, 24.0% in FY 2015, and 25.0% in FY 2016 and beyond. Employers of All Other Employees will contribute 15.5% of pay in FY 2013, 16.0% in FY 2014, 16.5% in FY 2015, and 17.0% in FY 2016 and beyond.

Act 163 continued on next page

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Summary of Plan Changes (continued)

Act 163, effective June 23, 2011 (continued)

Legislation was enacted that made numerous changes to the benefits and member contribution rates for employees hired after June 30, 2012. Key changes are shown below:

Benefit Provision	Police & Fire Employees	All Other Employees
Benefit Multiplier	2.25%	1.75%
Normal Retirement	Age 55 with 25 years of service, or age 60 with 10 years of service	Age 60 with 30 years of service, or age 65 with 10years of service
Post-Retirement Increase	1.5%	1.5%
Hybrid Match	N/A	120%
Average Final Compensation	Highest 5 annual base salaries	Highest 5 annual base salaries
Eligibility for Deferred Benefit	10 years of service	10 years of service
Member Contribution Rate	14.20%	8.00%

Similar changes were also made to the benefits of Judges, Legislative Officers, etc.

Similar changes were also made to those employees in the All Other Employees group who are eligible to retire at 25 years of service including the addition of a minimum age requirement (55).

Finally, legislation was enacted that set the investment return assumption for the June 30, 2011 valuation at 7.75% (the rate recommended in the Experience Study presented to the Board in December of 2010). In addition, the legislation granted ERS's Board the authority to set this assumption for valuations after 2011.

Act 152, effective June 26, 2012

Legislation was enacted to require employers to pay additional contributions if a retiring employee, who was first employed prior to July 1, 2012 and who was last employed by the employer, has significant non-base pay increases included in their average final compensation. The additional contribution is equal to the actuarial present value of the additional benefits earned due to the "excessive" non-base pay increases.

Act 153, effective June 26, 2012

Legislation was enacted to eliminate most types of non-base pay from the definition of compensation for employees hired after June 30, 2012. For the impacted employees, non-base pay compensation will be excluded in determining both the contributions made by and on behalf of these employees and the benefits they will earn in the System.

Ten Year Actuarial Schedules
2005 to 2014

- Retirement System Membership **
    - 2014 Membership Data *
- Historical Summary of Active Member Data *
- Pensioners, Average Annual Pension and Active Member/Pensioner Comparison **
- Number of Retirants and Beneficiaries **
- Solvency Test **
- Employer Contribution Rates as a Percentage of Payroll **
- Employer Appropriations to Pension Accumulation Fund, Appropriation Years 2004-2005 to 2014-2015 **

Note: * Prepared by Gabriel, Roeder, Smith & Company
** Compiled by ERS Staff from actuary reports, or other data.

Retirement System Membership **
2005 to 2014

March 31,	Active Members	Terminated Vested Members	Inactive Nonvested Members (a)	Pensioners & Beneficiaries	Total Membership
2005	63,073	4,938	n/a	33,301	101,312
2006	64,069	5,164	n/a	34,304	103,537
2007	65,251	5,554	n/a	35,324	106,129
2008	66,589	5,847	n/a	36,260	108,696
2009	67,912	6,016	n/a	36,999	110,927
2010	65,890	6,895	n/a	38,441	111,226
2011	65,310	6,649	n/a	39,689	111,648
2012	65,599	6,909	n/a	40,774	113,282
2013	66,226	7,312	n/a	41,812	115,350
2014	67,206	8,105	11,247	43,087	129,645

** Schedule compiled by ERS Staff from actuary reports.
(a) Number not reported in prior years, included in counts for GASB Statement No. 68 reporting.
n/a = not available

Ten-Year Actuarial Schedules (continued)

2014 Membership Data

	Police and Firefighters		All Other Employees		All Employees	
	June 30, 2014	June 30, 2013	June 30, 2014	June 30, 2013	June 30, 2014	June 30, 2013
1. Active members						
a. Number	5,006	4,971	62,200	61,255	67,206	66,226
b. Total payroll	$ 406,427,272	$ 402,779,535	$3,464,608,815	$3,318,030,427	$3,871,036,087	$3,720,809,962
c. Average salary	$ 81,118	$ 81,026	$55,701	$54,168	$ 57,600	$ 56,184
d. Average age	42.0	41.8	48.2	48.1	47.8	47.7
e. Average service	14.1	14.0	13.5	13.5	13.5	13.5
2. Terminated vested members (a)						
a. Number	245	251	7,860	7,061	8,105	7,312
b. Total annual deferred benefits	$ 3,886,865	$ 3,871,611	$ 57,116,099	$ 51,478,187	$ 61,002,964	$ 55,349,798
c. Average annual deferred benefit	$ 15,865	$ 15,425	$ 7,267	$ 7,290	$ 7,527	$ 7,570
3. Service retirees						
a. Number	3,238	3,165	34,866	34,013	38,104	37,178
b. Total annual benefits	$ 157,342,660	$ 148,633,887	$ 855,752,432	$ 819,710,342	$1,013,095,092	$ 968,344,229
c. Average annual benefit	$ 48,593	$ 46,962	$ 24,544	$ 24,100	$ 26,588	$ 26,046
4. Disabled retirees						
a. Number	146	152	1,430	1,411	1,576	1,563
b. Total annual benefits	$ 2,859,902	$ 2,855,319	$ 16,975,618	$ 16,132,190	$ 19,835,520	$ 18,987,509
c. Average annual benefit	$ 19,588	$ 18,785	$ 11,871	$ 11,433	$ 12,586	$ 12,148
5. Beneficiaries						
a. Number	248	223	3,159	2,848	3,407	3,071
b. Total annual benefits	$ 8,015,198	$ 6,625,501	$ 45,309,054	$ 39,323,155	$ 53,324,252	$ 45,948,656
c. Average annual benefit	$ 32,319	$ 29,711	$ 14,343	$ 13,807	$ 15,651	$ 14,962

(a) As of June 30, 2014 - Terminated vested members does not include 11, 247 Inactive members that may return to service and earn additional service credits to become vested (612 Police and firefighters plus 10,635 All other employees)

Historical Summary of Active Member Data

Year Ending June 30,	Active Members		Covered Payroll		Average Salary			
	Number	Percent Increase	Amount in $ Millions	Percent Increase	$ Amount	Percent Increase	Average Age	Average Service
2005	63,073	0.8%	2,924.5	6.1%	46,368	5.3%	46.3	13.0
2006	64,069	1.6%	3,113.7	6.5%	48,599	4.8%	46.4	13.0
2007	65,251	1.8%	3,340.5	7.3%	51,194	5.3%	46.5	13.0
2008	66,589	2.1%	3,601.7	7.8%	54,089	5.7%	46.6	12.9
2009	67,912	2.0%	3,838.0	6.6%	56,514	4.5%	46.8	12.9
2010	65,890	-3.0%	3,713.6	-3.2%	56,360	-0.3%	47.1	13.2
2011	65,310	-0.9%	3,731.4	0.5%	57,133	1.4%	47.4	13.4
2012	65,599	0.4%	3,706.1	-0.7%	56,497	-1.1%	47.6	13.5
2013	66,226	1.0%	3,720.8	0.4%	56,184	-0.6%	47.7	13.5
2014	67,206	1.5%	3,871.0	4.0%	57,600	2.5%	47.8	13.5

Ten-Year Actuarial Schedules (continued)

Pensioners, Average Annual Pension and Active Member/Pensioner Comparison**

2005 to 2014

March 31,	Number of Pensioners	Average Annual Pension (1)	Ratio of Active Members per Pensioner
2005	31,344	$19,980	2.0
2006	32,199	$20,052	1.9
2007	33,117	$21,161	1.8
2008	33,893	$21,734	1.9
2009	34,429	$22,337	1.9
2010	35,763	$23,173	1.8
2011	36,871	$24,160	1.8
2012	37,830	$24,853	1.7
2013	38,741	$25,485	1.7
2014	39,680	$26,032	1.7

** Schedule compiled by ERS Staff from actuary reports.

(1) Pension amount includes base pension plus 2.5% post-retirement increases (excludes other bonuses and cost-of-living adjustments).

Number of Retirants and Beneficiaries**

2005 to 2014

As of Mar 31,	Added	Average Added to Rolls	Removed	Average Removed from Rolls	Total	Average Pension	% Chg
Retirants							
2005	1,694	$21,228	853	$12,608	31,344	$19,980	3.60%
2006	1,664	$20,562	809	$14,032	32,199	$20,583	3.02%
2007	1,785	$20,782	873	$14,697	33,117	$21,161	2.81%
2008	1,712	$20,715	936	$15,396	33,893	$21,734	2.71%
2009	1,531	$20,861	995	$16,053	34,429	$22,337	2.77%
2010	2,316	$25,153	982	$16,362	35,763	$23,173	3.74%
2011	2,056	$27,808	948	$18,154	36,871	$24,160	4.26%
2012	1,987	$24,680	1028	$17,958	37,830	$24,853	2.87%
2013	1,994	$23,503	1083	$18,144	38,741	$25,485	2.54%
2014	2,027	$22,585	1088	$19,456	39,680	$26,032	2.15%
Beneficiaries							
2005	220	$10,395	57	$8,756	1,957	$11,587	1.70%
2006	214	$11,819	66	$10,455	2,105	$11,862	2.37%
2007	179	$14,161	71	$10,132	2,213	$12,305	3.74%
2008	229	$14,244	75	$10,659	2,367	$12,749	3.61%
2009	298	$14,518	95	$9,772	2,570	$13,308	4.38%
2010	214	$14,803	106	$9,713	2,678	$13,814	3.80%
2011	212	$15,843	72	$12,107	2,818	$14,256	3.20%
2012	225	$14,798	99	$11,882	2,944	$14,628	2.61%
2013	238	$14,515	111	$11,790	3,071	$14,962	2.28%
2014	442	$17,964	106	$12,439	3,407	$15,651	4.60%

** Schedule compiled by ERS staff from actuary reports.

Ten-Year Actuarial Schedules (continued)

Solvency Test**

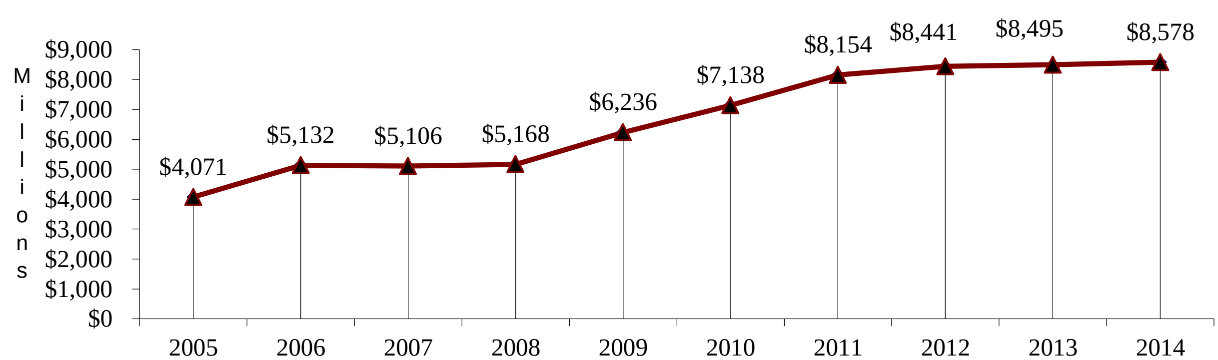
2005 to 2014

	Actuarial Accrued Liabilities (AAL)				Cumulative Portion of Actuarial Accrued Liabilities Covered by Assets		
June 30,	Active Member Contributions	Retirees, Beneficiaries, and Inactive Vested Members	Active and Inactive Members Employer Financed Portion	Actuarial Value of Assets	Column (1)	Column (2)	Column (3)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
2005	864.9	6,641.6	5,479.5	8,914.8	100%	100%	25.7%
2006	844.0	7,458.4	6,359.0	9,529.4	100%	100%	19.3%
2007	914.1	7,856.1	6,926.4	10,589.8	100%	100%	26.3%
2008	1,029.5	8,230.3	7,289.2	11,381.0	100%	100%	29.1%
2009	1,168.9	8,584.0	7,883.4	11,400.1	100%	100%	20.9%
2010	1,265.0	9,259.4	7,959.2	11,345.6	100%	100%	10.3%
2011	1,364.2	10,183.7	8,549.0	11,942.8	100%	100%	4.6%
2012	1,485.1	10,707.2	8,491.1	12,242.5	100%	100%	0.6%
2013	1,658.2	11,182.5	8,403.0	12,748.8	100%	99%	0.0%
2014	1,812.9	11,673.0	8,734.2	13,641.8	100%	100%	1.8%

(Amounts in $millions)

** Schedule compiled by ERS Staff from actuary reports

Unfunded Actuarial Accrued Liability FY 2005-2014



Ten-Year Actuarial Schedules (continued)

Employer Contribution Rates as a Percentage of Payroll **

20054 to 2014

Actuarial Valuation as of June 30,	Police and Firefighters			All Other Employees			All Active Employees		
	Normal Cost Rate	Amortization Percent	Total Employer Rate	Normal Cost Rate	Amortization Percent	Total Employer Rate	Normal Cost Rate	Amortization Percent	Total Employer Rate
2005	4.41%	11.34%	15.75%	5.75%	8.00%	13.75%	5.54%	8.41%	13.95%
2006	4.36%	11.39%	15.75%	5.76%	7.99%	13.75%	5.55%	8.40%	13.95%
2007	4.69%	11.06%	15.75%	5.16%	8.59%	13.75%	5.11%	8.84%	13.95%
2008	6.56%	9.19%	15.75%	5.75%	8.00%	13.75%	5.85%	8.10%	13.95%
2009	6.58%	13.12%	19.70%	5.79%	9.21%	15.00%	5.89%	9.57%	15.46%
2010	6.59%	13.11%	19.70%	5.78%	9.22%	15.00%	5.88%	9.59%	15.47%
2011	6.60%	13.10%	19.70%	5.79%	9.21%	15.0%	5.90%	9.59%	15.49%
2012	8.09%	11.01%	19.70%	5.78%	9.22%	15.0%	6.06%	9.46%	15.52%
2013	7.98%	14.02%	22.00%	5.69%	9.81%	15.5%	5.97%	10.14%	16.11%
2014 *	7.17%	14.83%	23.00%	5.34%	10.66%	16.0%	5.54%	11.22%	16.76%

Note: Effective with the June 30, 2004 valuation, the employer contribution rate is statutorily changed to a percentage of pay of 15.75% of actual pay for Police and Fire and 13.75% of actual pay for All Other Employees, per Act 181/2004 SLH. Effective July 1, 2008, the employer contribution rate increased to 19.70% of actual pay for Police and Fire and 15.00% of actual pay for All Other Employees, per Act 256/2006 SLH.

Per Act 163/2011 SLH, the statutory employer contribution rate for Police and Fire employees will be 22.00% in FY 2013, 23.00% in FY 2014, 24.00% in FY 2015 and 25.00% in FY 2016 and thereafter, and the rate for All Other Employees will be 15.50% in FY 2013, 16.00% in FY 2014, 16.50% in FY 2015 and 17.00% in FY 2016 and thereafter.

* This chart does not include the effects of GASB Statement No 67 (implemented by the ERS in FY 2014) that requires member contributions "picked up" as employer contributions pursuant to IRC section 414(h)(2) to be reported as Employer Contributions.

** Schedule compiled by ERS Staff from actuary reports.

Ten-Year Actuarial Schedules (continued)

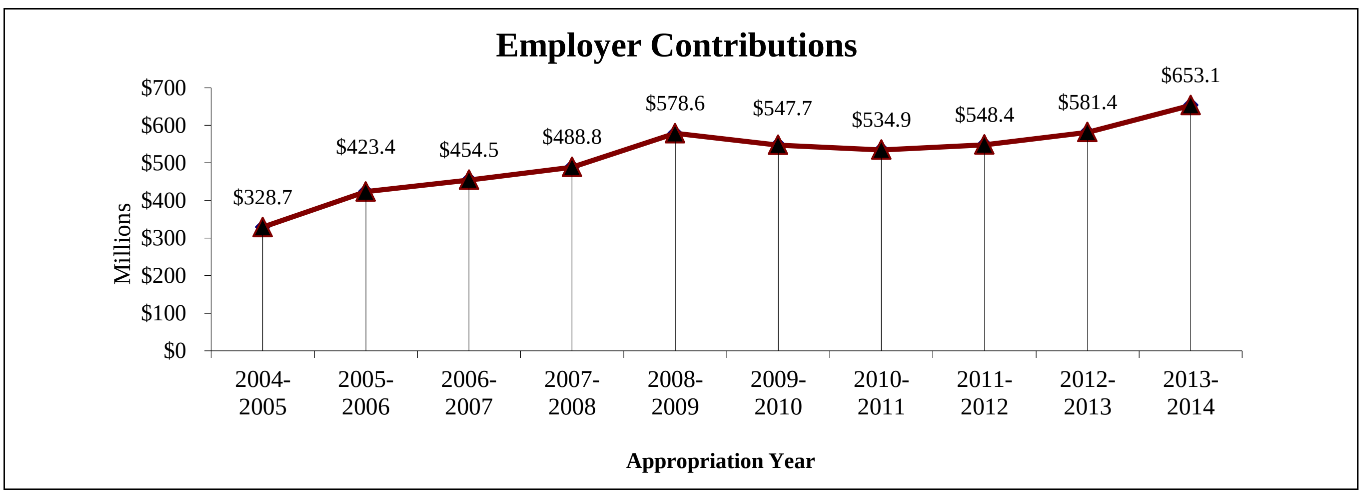
Employer Appropriations to Pension Accumulation Fund**

	Investment Yield Rate	
Fiscal Year	Assumed for Actuarial Valuation	Actuarial Investment Return
2004-2005	8.0%	4.76%
2005-2006	8.0%	9.76%
2006-2007	8.0%	12.98%
2007-2008	8.0%	8.89%
2008-2009	8.0%	0.87%
2009-2010	8.0%	(0.42)%
2010-2011	7.75%	7.10%
2011-2012	7.75%	5.05%
2012-2013	7.75%	6.67%
2013-2014	7.75%	9.23%

Notes: (1). Beginning with the valuation for fiscal year 1996-97 (appropriation fiscal year 1999-2000), the actuarial investment income is the sum of the expected net investment income based on the actuarial assumption of 8% and a four-year smoothing of the difference between the market value of assets at year-end and the expected actuarial value of assets. In prior years, the actuarial investment income was the sum of interest, dividends, and net realized gains less net realized losses and investment expenses.

(2) Beginning fiscal year 2005/2006 employers will contribute 15.75% of actual payroll for Police and Fire and 13.75% for All Other Employees, per Act 181/2004 SLH. Effective July 1, 2008, the employer contribution rate increased to 19.70% of actual pay for Police and Fire and 15.00% of actual pay for All Other Employees, per Act 256/2006 SLH. Pursuant to Act 163,/2012 SLH, the employer rates will increase over a four-year phase in period. The employer contribution rates for Police and Fire employees will increase according to the following schedule: 22.00% in FY2014, 23.00% in FY 2015, and 24.00% in FY 2016, and 25.00% in FY 2017 and beyond. The employer contribution rates for All Other Employees will increase according to the following schedule: 15.50% in FY2014, 16.00% in FY 2015, and 16.50% in FY 2016, and 17.00% in FY 2017 and beyond.

** Schedule compiled by ERS Staff from actuary reports.



*** This chart of Employer Contributions does not include Member contributions picked up as employer contributions per IRC section 414(h)(2) and Chapter 88, HRS (as required by GASB Statement No. 68).

Funded Ratio	Number of General State Retirement Systems (excluding separate systems for teachers, school employees, or municipal employees)				
100% or more	7	Oregon PERS	110.5%	Delaware SEPP	103.7%
		North Carolina TSERS	106.1%	Utah URS	100.8%
		Florida FRS	105.6%	Vermont VSRS	100.8%
		Idaho PERS	105.5%		
90% to 99%	15	Wisconsin WRS	99.5%	Wyoming WRS	94.0%
		Indiana PERF	97.6%	North Dakota PERS	93.4%
		Pennsylvania PSERS	97.1%	New Mexico PERA	92.8%
		South Dakota SDRS	97.1%	Ohio PERS	92.6%
		West Virginia PERS	97.0%	Minnesota MSRS	92.5%
		Tennessee SETHEEPP	96.2%	Montana PERS	91.1%
		Texas ERS	95.6%	Iowa PERS	90.2%
		Georgia ERS	94.5%		
80% to 89%	8	Arkansas PERS	89.1%	Michigan MSERS	85.1%
		California PERS	87.2%	Arizona ASRS	83.3%
		Missouri MOSERS	86.8%	Alabama ERS	81.1%
		Massachusetts SERS	85.1%	Virgina VRS	80.8%
70% to 79%	9	Nevada PERS	78.8%	Colorado PERA	73.3%
		Alaska PERS	78.2%	Washington PERS	73.1%
		New Jersey PERS	76.6%	Oklahoma PERS	72.6%
		Maryland MSRPS	74.7%	Maine MSRS	71.1%
		Mississippi PERS	73.7%		
Less than 70%	9	South Carolina SCRS	69.6%	Kentuucky KERS	58.4%
		Kansas PERS	69.4%	Illinois SERS	54.2%
		Hawaii ERS *	**68.8%**	Rhode Island ERSRI	53.4%
		Louisiana LASERS	67.2%	Connecticut SERS	53.3%
		New Hampshire NHRS	67.0%		

Compiled from various sources by Gabriel, Roeder, Smith & Company

Note: GASB 25 funded ratios are shown for 48 general state retirement systems for valuation year(s) through January 1, 2008. A funded ratio is not shown for the Nebraska System because it is a defined contribution plan. A funded ratio for the New York System does not exist because of the use of the Aggregate Cost Method.

*** Hawaii's GASB 25 funded ratio for the fiscal year ended June 30, 2014 was 61.4%.**

Employees' Retirement System

of the State of Hawaii

STATISTICAL SECTION

Summary

This section contains various statistical and historical data considered useful in evaluating the condition of the ERS. All non-accounting data is taken from ERS' internal sources except for that information which is derived from the actuarial valuations.

Employer Contributions	$ 328,716,718	$ 423,445,597	$ 454,494,286	$ 488,770,028	$ 578,672,058
Member contributions	57,054,621	56,257,953	144,658,185	163,375,639	177,781,610
Investment income (net of expense)	931,710,183	988,347,837	1,704,957,268	(461,063,080)	(1,937,317,469)
Total additions to plan net assets	1,317,481,522	1,468,051,387	2,304,109,739	191,082,587	(1,180,863,801)
Deductions					
Benefits	676,316,347	720,542,990	761,004,748	792,312,830	833,691,245
Refunds	3,442,466	2,487,279	3,497,590	3,668,857	3,937,464
Administrative expenses	7,259,906	8,477,837	9,601,756	10,728,801	13,011,283
Total deductions from plan net assets	687,018,719	731,508,106	774,104,094	806,710,488	850,639,992
Net increase (decrease) in net position	630,462,803	736,543,281	1,530,005,645	(615,627,901)	(2,031,503,793)
Net position restricted for pension benefits					
Beginning of year	8,565,405,137	9,195,867,940	9,932,411,221	11,462,416,866	10,846,788,965
End of year	$ 9,195,867,940	$ 9,932,411,221	$ 11,462,416,866	$ 10,846,788,965	$ 8,815,285,172

Fiscal Year Ended June 30,:	2010	2011	2012	2013	2014
Additions					
Employer Contributions	$ 547,669,675	$ 538,692,849	$ 548,353,394	$ 581,447,213	$ 857,948,707
Member contributions	360,047,068	232,880,063	182,401,324	185,837,186	1,306,327
Investment income (net of expense)	1,026,461,210	2,040,061,555	(57,798,410)	1,331,208,154	2,175,479,961
Total additions to plan net assets	1,934,177,953	2,811,634,467	672,956,308	2,098,492,553	3,034,734,995
Deductions					
Benefits	905,315,348	960,219,432	1,015,447,668	1,060,561,148	1,122,445,642
Refunds	7,573,619	7,901,509	7,187,606	7,204,411	8,475,969
Administrative expenses	12,406,339	13,325,781	11,634,197	11,941,446	12,626,030
Total deductions from plan net assets	925,295,306	981,446,722	1,034,269,471	1,079,707,005	1,143,547,641
Net increase (decrease) in net position	1,008,882,647	1,830,187,745	(361,313,163)	1,018,785,548	1,891,187,354
Net position restricted for pension benefits					
Beginning of year	$ 8,815,285,172	$ 9,824,167,819	$ 11,654,355,564	$ 11,293,042,401	12,311,827,949
End of year	$ 9,824,167,819	$ 11,654,355,564	$ 11,293,042,401	$ 12,311,827,949	$ 14,203,015,303

GASB Statement No. 68 - Employer contributions		2014
Employer contributions (statutory)	a	$ 653,127,697
Member contributions (picked up by employer)	b	$ 204,821,010
Member contributions (other)	c	$ 1,306,327
For Valuation Reporting		$ 859,255,034
Employer contributions	a	$ 653,127,697
Member contributions (pickup + other)	b + c	$ 206,127,337
		$ 859,255,034

Effective June 30, 2014, ERS implemented GASB Statement No. 67 that requires Member Contributions "picked up" per Internal Revenue Code section 414(h)(2) as employer contributions to be classified for financial statement purposes as "Employer Contributions".

Contributions

Employer Contribution Rates as a Percentage of Payroll **

Fiscal Year	Police & Firefighters	All Other Employees	Composite Rate
2005	15.75%	13.75%	13.95%
2006	15.75%	13.75%	13.95%
2007	15.75%	13.75%	13.95%
2008	15.75%	13.75%	13.95%
2009	19.70%	15.00%	15.46%
2010	19.70%	15.00%	15.47%
2011	19.70%	15.00%	15.49%
2012	19.70%	15.00%	15.52%
2013	22.00%	15.50%	16.11%
2014	23.00%	16.00%	16.76%

** Excludes member contributions picked up as employer contributions per IRC section 414(h)(2) and Chapter 88, HRS.

Contributions **

*** Member contributions picked up as employer contributions per IRC section 414(h)(2) and Chapter 88, HRS are included in the Member Contributions for this chart, they are not included in Employer Contributions.

Deductions from Fiduciary Net Position for Benefit Payments by Type

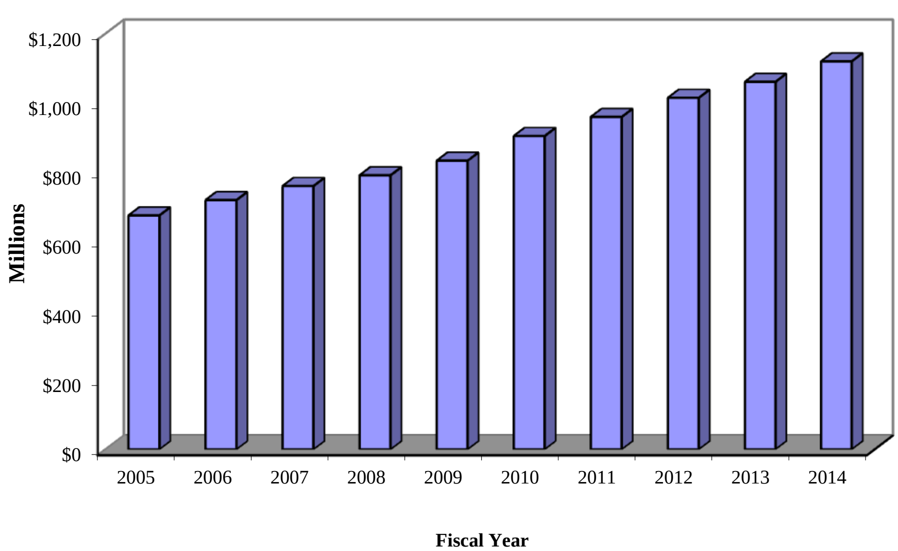
Last Ten Fiscal Years

Fiscal Year Ended June 30,:	2005	2006	2007	2008	2009 **
Recurring benefit payments					
Service	$ 632,088,342	$ 673,165,361	$ 712,580,450	$ 748,158,330	$ 754,432,615
Disability	11,780,739	12,666,891	13,432,834	13,707,170	15,619,011
Death	2,793,149	3,875,024	2,794,068	2,293,557	34,201,206
subtotal	646,662,230	689,707,276	728,807,352	764,159,057	804,252,832
Refund Option payments (one-time)	29,654,117	30,835,714	32,197,396	28,153,773	29,438,413
Total benefit payments	$ 676,316,347	$ 720,542,990	$ 761,004,748	$ 792,312,830	$ 833,691,245

Fiscal Year Ended June 30,:	2010	2011	2012	2013	2014
Recurring benefit payments					
Service	$ 807,662,216	$ 859,915,959	$ 917,840,937	$ 963,894,245	$ 1,016,912,124
Disability	16,470,042	17,355,973	17,877,572	18,987,509	19,835,520
Death	36,993,685	40,173,678	43,053,039	45,948,656	53,324,252
subtotal	861,125,943	917,445,610	978,771,548	1,028,830,410	1,090,071,896
Refund Option payments (one-time)	44,189,405	42,773,822	36,676,120	31,730,738	32,373,746
Total benefit payments	$ 905,315,348	$ 960,219,432	$ 1,015,447,668	$ 1,060,561,148	$ 1,122,445,642

** From FYE 6/30/2009, death benefits includes payments to continuing beneficiaries.

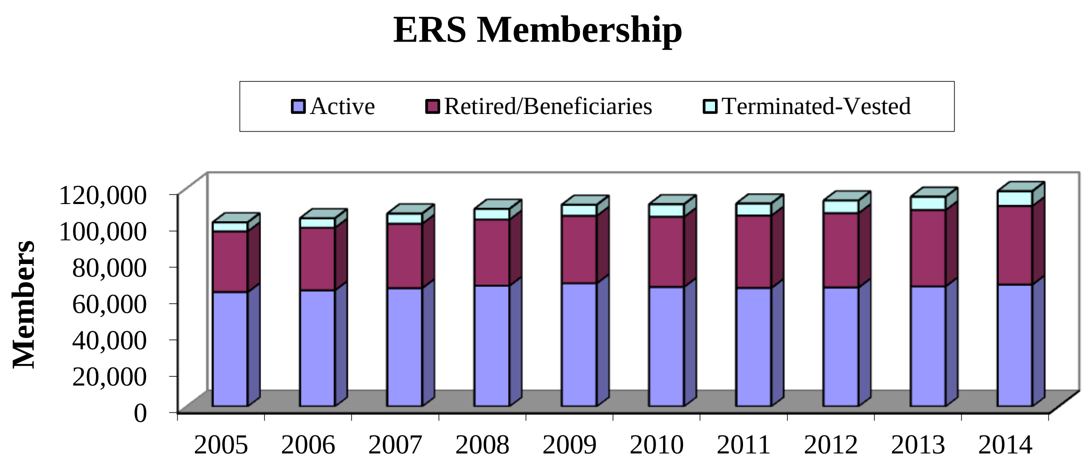
Benefit Payments



Participating Employers and Membership in ERS

Last Ten Fiscal Years

As of March 31,:	Active	Retired/ Beneficiaries	Terminated- Vested	Inactive- Non-Vested	Totals
2005	63,073	33,301	4,938	na	101,312
2006	64,069	34,304	5,164	na	103,537
2007	65,251	35,324	5,554	na	106,129
2008	66,589	36,260	5,847	na	108,696
2009	67,912	36,999	6,016	na	110,927
2010	65,890	38,441	6,895	na	111,226
2011	65,310	39,689	6,649	na	111,648
2012	65,599	40,774	6,909	na	113,282
2013	66,226	41,812	7,312	na	115,350
2014	67,206	43,087	8,105	11,247	129,645



Participating Employers and Active Members

As of March 31,:	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
State of Hawaii	49,203	49,973	50,756	51,719	52,704	50,789	50,268	50,604	51,176	51,875
City & County of Honlulu	8,101	8,167	8,363	8,512	8,640	8,519	8,485	8,451	8,457	8,625
- Board of Water Supply	568	560	556	526	554	526	516	505	532	551
Hawaii County	2,097	2,223	2,315	2,459	2,527	2,501	2,459	2,427	2,446	2,489
Kauai County	1,067	1,088	1,109	1,125	1,160	1,129	1,158	1,201	1,227	1,244
Maui County	2,037	2,055	2,152	2,248	2,327	2,426	2,424	2,411	2,388	2,422
Total	63,073	64,066	65,251	66,589	67,912	65,890	65,310	65,599	66,226	67,206

Benefit Payments by Retirement Type and Option

As of March 31, 2014

Retired Contributory Members

Monthly Benefit	Number of Recipients	Type of Retirement *					Retirement Option						
		1	2	3	4	5	Max	Opt. 1	Opt. 2	Opt. 3	Opt. 4	Opt. 5	Other
$ 1 - 400	1,312	1,039	20	13	1	239	285	282	183	67	199	296	-
401 - 800	2,165	1,745	93	31	8	288	246	179	150	50	716	822	2
801 - 1,200	2,207	1,811	46	56	15	279	235	132	148	59	880	749	4
1,201 - 1,600	2,268	1,942	30	77	8	211	221	105	126	58	1,008	748	2
1,601 - 2,000	2,206	1,984	14	39	8	161	180	78	134	47	995	765	7
2,001 - 2,400	2,197	2,047	5	33	5	107	161	82	95	34	928	894	3
2,401 - 2,800	2,250	2,126	2	17	6	99	181	44	87	47	959	926	6
2,801 - 3,200	2,141	2,039	3	11	7	81	177	63	105	44	1,014	733	5
3,201 - 3,600	1,707	1,642	-	7	2	56	179	42	75	49	972	388	2
3,601 - 4,000	1,381	1,324	-	6	2	49	178	47	69	51	772	264	-
4,001	3,617	3,510	-	4	5	98	489	107	268	179	2,155	419	-
	23,451	21,209	213	294	67	1,668	2,532	1,161	1,440	685	10,598	7,004	31

Retired Hybrid Members

Monthly Benefit	Number of Recipients	Type of Retirement *					Retirement Option						
		1	2	3	4	5	Max	Opt. 1	Opt. 2	Opt. 3	Opt. 4	Opt. 5	Other
$ 1 - 400	268	245	-	-	12	11	130	27	63	25	9	14	-
401 - 800	781	664	48	1	38	30	320	61	200	106	48	46	-
801 - 1,200	795	668	68	10	17	32	310	46	189	96	83	71	-
1,201 - 1,600	621	537	37	15	6	26	212	42	175	80	64	48	-
1,601 - 2,000	495	460	22	1	4	8	165	30	129	80	63	28	-
2,001 - 2,400	466	441	11	-	2	12	168	28	114	78	55	23	-
2,401 - 2,800	420	409	6	-	1	4	158	25	80	80	56	21	-
2,801 - 3,200	346	333	2	-	6	5	129	18	84	56	39	20	-
3,201 - 3,600	269	267	-	-	2	-	106	21	46	55	26	15	-
3,601 - 4,000	204	203	-	-	-	1	90	15	33	39	16	11	-
4,001	510	503	1	-	3	3	177	31	105	123	57	17	-
	5,175	4,730	195	27	91	132	1,965	344	1,218	818	516	314	-

Retired Noncontributory Members

Monthly Benefit	Number of Recipients	Type of Retirement *					Retirement Option				
		1	2	3	4	5	Max	Opt. A	Opt. B	Opt. C	Other
$ 1 - 400	1,646	1,063	97	47	128	311	654	332	458	79	123
401 - 800	3,373	2,594	294	50	86	349	1,670	583	894	147	79
801 - 1,200	2,264	1,839	151	45	33	196	1,146	429	560	105	24
1,201 - 1,600	1,564	1,361	86	8	6	103	771	298	411	81	3
1,601 - 2,000	1,193	1,069	38	2	4	80	571	245	308	69	-
2,001 - 2,400	1,157	1,086	13	4	5	49	608	221	238	89	1
2,401 - 2,800	1,273	1,233	7	-	2	31	785	227	162	99	-
2,801 - 3,200	831	801	5	-	2	23	534	140	113	44	-
3,201 - 3,600	490	479	-	-	2	9	304	106	67	13	-
3,601 - 4,000	262	250	-	-	-	12	158	55	38	11	-
4,001	408	390	-	-	5	13	244	84	67	13	-
	14,461	12,165	691	156	273	1,176	7,445	2,720	3,316	750	230

* Type of Retirement
1 – Normal retirement for age & service
2 – Ordinary disability retirement
3 – Occupational disability retirement
4 – Survivor payment – death in service
5 – Survivor payment – normal or disability retirement

Note: Refer to Plan Summary in the Introductory Section for descriptions of the types of retirements and benefit options selected by the members.

Average Monthly Service Pensions
by Years of Credited Service

As of March 31,		0-9	10-14	15-19	20-24	25-29	30-34	35+	All
		Years of Credited Service							
2005	Average Monthly Benefit	$255	$473	$823	$1,187	$1,951	$2,386	$2,599	$1,663
	Number of Active Retirants	1,193	3,738	3,244	3,715	7,233	7,806	3,091	30,020
2006	Average Monthly Benefit	$261	$489	$843	$1,210	$2,007	$2,446	$2,679	$1,719
	Number of Active Retirants	1,149	3,790	3,330	3,813	7,346	8,083	3,313	30,824
2007	Average Monthly Benefit	$272	$504	$865	$1,240	$2,064	$2,509	$2,765	$1,773
	Number of Active Retirants	1,126	3,907	3,393	3,918	7,470	8,315	3,536	31,665
2008	Average Monthly Benefit	$291	$518	$882	$1,266	$2,119	$2,574	$2,853	$1,824
	Number of Active Retirants	1,137	3,981	3,481	4,034	7,560	8,511	3,737	32,441
2009	Average Monthly Benefit	$368	$548	$925	$1,319	$2,218	$2,672	$2,997	$1,906
	Number of Active Retirants	1,184	3,987	3,555	4,173	7,570	8,615	3,859	32,943
2010	Average Monthly Benefit	$336	$563	$948	$1,356	$2,289	$2,750	$3,097	$1,975
	Number of Active Retirants	1,143	4,062	3,719	4,373	7,775	8,926	4,268	34,266
2011	Average Monthly Benefit	$364	$583	$984	$1,397	$2,374	$2,849	$3,261	$2,059
	Number of Active Retirants	1,221	4,106	3,843	4,526	7,920	9,176	4,567	35,359
2012	Average Monthly Benefit	$388	$603	$1,012	$1,424	$2,446	$2,934	$3,361	$2,117
	Number of Active Retirants	1,292	4,222	3,929	4,705	8,030	9,361	4,769	36,308
2013	Average Monthly Benefit	$429	$622	$1,038	$1,449	$2,521	$3,009	$3,454	$2,171
	Number of Active Retirants	1,371	4,303	4,018	4,906	8,134	9,544	4,902	37,178
2014	Average Monthly Benefit	$451	$642	$1,061	$1,473	$2,574	$3,082	$3,531	$2,216
	Number of Active Retirants	1,478	4,430	4,080	5,092	8,216	9,675	5,133	38,104

Retirees and Beneficiaries

(Recurring Benefit Payments)
Tabulated by Fiscal Year that Payments Started as of March 31, 2014

Valuation Year	Number	Total Annual Benefits	Monthly Average Benefit	Valuation Year	Number	Total Annual Benefits	Monthly Average Benefit
1944	1	$ 379	$ 32	1986	609	$ 12,731,013	$ 1,742
1955	1	4,596	383	1987	940	20,535,552	1,821
1958	2	15,028	626	1988	568	10,507,766	1,542
1959	1	4,339	362	1989	717	14,539,877	1,690
1960	2	12,319	513	1990	774	17,701,233	1,906
1961	3	3,990	111	1991	908	21,086,227	1,935
1962	2	6,881	287	1992	858	21,460,837	2,084
1963	2	21,550	898	1993	888	24,182,369	2,269
1964	4	34,175	712	1994	938	25,131,040	2,233
1965	1	15,605	1,300	1995	1,792	56,474,444	2,626
1966	5	28,246	471	1996	1,750	52,989,873	2,523
1967	6	55,851	776	1997	697	15,782,089	1,887
1968	6	63,979	889	1998	712	16,253,457	1,902
1969	9	84,236	780	1999	1,016	25,231,799	2,070
1970	8	77,642	809	2000	1,258	32,852,749	2,176
1971	10	76,382	637	2001	1,476	37,979,765	2,144
1972	29	314,233	903	2002	1,228	32,127,136	2,180
1973	33	364,818	921	2003	1,611	46,003,279	2,380
1974	37	451,752	1,017	2004	1,595	42,497,578	2,220
1975	52	661,208	1,060	2005	1,671	45,279,561	2,258
1976	69	1,016,906	1,228	2006	1,664	43,136,336	2,160
1977	100	1,444,858	1,204	2007	1,794	45,447,927	2,111
1978	125	1,926,434	1,284	2008	1,788	43,821,396	2,042
1979	171	2,703,196	1,317	2009	1,697	41,240,607	2,025
1980	216	3,592,289	1,386	2010	2,432	70,228,192	2,406
1981	286	4,434,162	1,292	2011	2,225	65,152,485	2,440
1982	335	5,393,899	1,342	2012	2,163	55,637,670	2,144
1983	395	7,254,233	1,530	2013	2,209	52,487,422	1,980
1984	437	8,137,796	1,552	2014	2,252	49,885,313	1,846
1985	509	9,668,890	1,583				
				Total	43,087	$ 1,086,254,864	$ 2,101

Total Benefits Payable

(Recurring Benefit Payments)

Tabulated by Attained Ages of Benefit Recipients as of March 31, 2014

Attained Ages	Service Retirement No.	Service Retirement Annual Benefits	Disability Retirement No.	Disability Retirement Annual Benefits	Survivors and Beneficiaries No.	Survivors and Beneficiaries Annual Benefits	Total No.	Total Annual Benefits
Under 20	-	-	-	-	55	$ 150,483	55	$ 150,483
20-24	-	-	-	-	16	155,075	16	$ 155,075
25-29	-	-	-	-	27	353,002	27	$ 353,002
30-34	-	-	-	-	45	401,183	45	$ 401,183
35-39	-	-	2	$ 20,915	51	592,268	53	$ 613,183
40-44	3	$ 65,501	13	193,771	95	1,144,501	111	$ 1,403,773
45-49	50	2,696,202	42	509,262	114	1,271,047	206	$ 4,476,511
50-54	243	13,565,666	126	1,539,810	174	2,524,281	543	$ 17,629,757
55-59	1,459	54,963,904	259	3,398,117	265	3,964,963	1,983	$ 62,326,984
60-64	4,795	147,027,901	405	5,374,255	347	5,604,334	5,547	$ 158,006,490
65-69	9,192	259,271,314	305	3,865,275	474	8,163,933	9,971	$ 271,300,522
70-74	7,495	200,236,429	197	2,370,799	450	8,243,001	8,142	$ 210,850,229
75-79	5,495	141,296,107	85	953,742	387	6,594,649	5,967	$ 148,844,498
80-84	4,550	105,210,312	71	851,637	414	7,045,936	5,035	$ 113,107,885
85-89	3,065	60,898,986	46	538,542	313	4,956,305	3,424	$ 66,393,833
90-94	1,358	22,172,641	19	148,850	140	1,656,100	1,517	$ 23,977,591
95-99	352	5,061,326	6	70,545	36	481,739	394	$ 5,613,610
100 & over	47	628,803	-	-	4	21,452	51	$ 650,255
Total	38,104	$ 1,013,095,092	1,576	$ 19,835,520	3,407	$ 53,324,252	43,087	$ 1,086,254,864