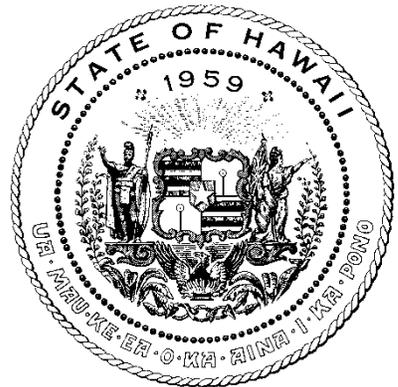


**EMPLOYEES'
RETIREMENT SYSTEM
OF THE
STATE OF HAWAII**



**COMPREHENSIVE
ANNUAL
FINANCIAL REPORT
FOR THE FISCAL YEAR ENDED JUNE 30, 2013**

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RETIREMENT SYSTEM
OF THE
STATE OF HAWAII**

**COMPREHENSIVE
ANNUAL
FINANCIAL REPORT**

FOR THE FISCAL YEAR ENDED JUNE 30, 2013

Prepared by the Staff of the:
Employees' Retirement System of the State of Hawaii
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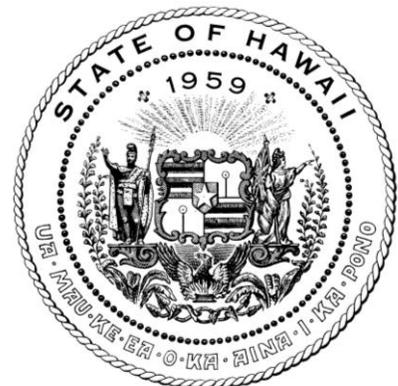


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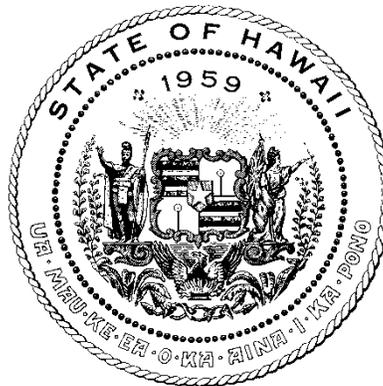
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Employees' Retirement System

of the State of Hawaii

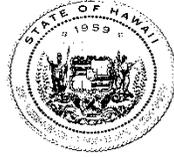


**INTRODUCTORY
SECTION**

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Letter of Transmittal

DAVID Y. IGE
GOVERNOR



STATE OF HAWAII
EMPLOYEES' RETIREMENT SYSTEM

December 19, 2014

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, 2013. 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 plan), or Noncontributory Plan. Members of the Contributory and Hybrid Plans make employee contributions to the Pension Trust and employers make contributions for members of all three plans. Since 2006 most new employees of participating employers in the Pension Trust are required to join the Hybrid Plan, except for certain employee groups that are required to be members of the Contributory Plan. New benefit structures were established in 2011 for new members hired after June 30, 2012 due to economic conditions affecting the Pension Trust. This is the first fiscal year with members subject to the new plan provisions and these results are reflected in the current actuarial valuation.

On March 31, 2013, the ERS' total membership of 115,350 was comprised of 66,226 active members, 41,812 retirees and beneficiaries, and 7,312 inactive vested members. This represents a 1.8% growth in the total membership over the past year. 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 2013

During FY 2013, the ERS continued efforts on improving the long-term viability of pension trust by increasing the internal investment capability and implementing the significant pension reform passed in by 2011 and 2012 Legislature.

Investment operations: The ERS currently has over \$12 billion in assets and an unfunded liability of \$8.5 billion. During 2013, one of the ERS objectives focused on strengthening the internal investment operations to provide long-term stability in implementing and monitoring the \$12 billion-plus ERS investment portfolio. As a result of the budget bill passing, we were able to increase our Investment Office from three (3) to six (6) investment professionals with the establishment of Investment Officer positions to assist the Board of Trustees and Chief Investment Officer. The investment office and new investment officers will assist and advise the ERS Board with critical information needed to structure the ERS investment portfolio to meet its asset goals and reduce the System's unfunded liability. These positions were filled in February 2014 and ERS looks forward to the positive contributions they will bring to the investment program. It is interesting to note that in comparison, other public pension funds of similar size generally have about eight (8) – twelve (12) investment professionals.

The other bills that passed were to comply with the Internal Revenue Code and protect the ERS's tax-exempt status that affords favorable tax treatments for ERS members. These are technical clarifications to the existing ERS statutes and do not change requirements or benefits provided by the ERS. The legislation is discussed in more detail later in this section under Legislative Highlights. The 2013 legislation includes:

Act 23 (S.B. 1036): Relating to Employees' Retirement System Personnel - Effective: July 1, 2013
This Act allows the ERS Board of Trustees, through its Administrator, to appoint investment officers for the ERS investment office. Also, to be consistent with other government agencies and public pension plans, this Act changes the title of the ERS "Administrator" to "Executive Director".

Act 123 (H.B. 808): Relating to the Employees' Retirement System and Civil Unions - Effective: June 14, 2013 - This Act addresses certain rights of civil union partners unless to do so would jeopardize the tax-qualified status of the ERS.

Act 124 (H.B. 805): Relating to Federal Tax Qualification of the Employees' Retirement System - Effective: June 14, 2013 - In order for the System to retain its tax-qualified status, this Act provides two mandatory amendments: (1) to reinforce the benefit limitations imposed by the Internal Revenue Code, and (2) to clarify vesting rules for the accrued retirement benefits for ERS members. Both amendments are technical clarifications to the existing ERS statutes and do not change requirements or benefits provided by the ERS.

Letter of Transmittal (continued)

Implementation of Pension Reform and Other Legislation effective July 1, 2012. The second major objective that ERS focused on during FY 2013 was implementing significant pension changes that passed in 2011-2012. The changes are comparable to implementing two new plans that required significant operational changes for member communications, enrollment by employers and computer programming changes within ERS and at the participating employers due to changes in almost all eligibility rules, contribution rates, benefit structures and calculations for new members of all employee groups.

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 *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 can be found in the Investment Section of this report.

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, 2013 are listed in the Investment Section.

Net investment income, including dividends, interest, other investment earnings, and gains/losses on the sale of investments exceeded an investment gain of \$1.3 billion in FY2013. This resulted in an investment gain of slightly less than 21.1% for the year, using rate of return methodologies that are generally accepted by the Global Investment Performance Standards (GIPS).

FUNDING AND ACTUARIAL OVERVIEW

Although the ERS experienced double-digit investment returns during the year for a slight improvement in its long-term funded status the ERS is still being adversely impacted by deferred investment losses that occurred during the economic downturn in fiscal year 2009. Investment losses recognized during the current year were partially offset by a liability gain since actual salary increases were lower than expected. This is the first year reflecting significant changes from the 2011 legislation that increased employer contributions and made changes to benefits and member contribution rates for new employees hired after June 30, 2012.

As of June 30, 2013 the ERS' funded ratio increased to 60.0% partly due to increased contribution rates and strong investment earnings. The unfunded actuarial accrued liability (UAAL) increased to \$8.5 billion as of June 30, 2013, and a corresponding aggregate funding period of 28.0 years used to determine the Annual Required Contribution rates under the standards established by the Governmental Accounting Standards Board Statement No. 25 (GASB No. 25).

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.

We would like to take this opportunity to express our gratitude to the Board of Trustees, ERS Staff, advisors, and the many people who worked so diligently to help our members.

Respectfully yours,

Wesley K. Machida

Wesley K. Machida
Executive Director

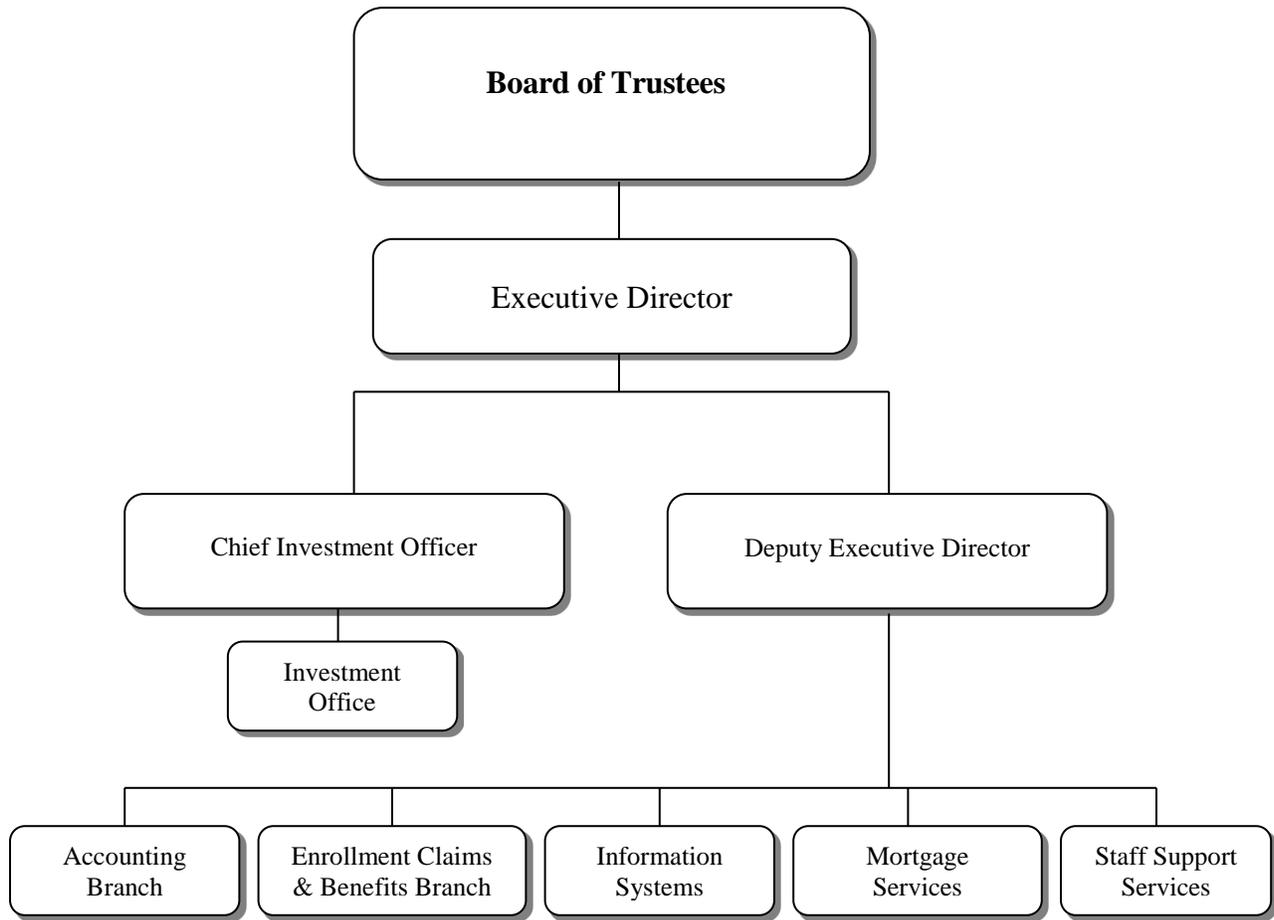
Board of Trustees

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. Jackie Ferguson-Miyamoto, Chair	January 2, 2008	January 1, 2014
Mr. Wayne J. Yamasaki.....	January 2, 2008	January 1, 2014
Ms. Piliialoha E. Lee Loy	January 2, 2010	January 1, 2016
Mr. Emmit A. Kane, Chair	January 2, 2012	January 1, 2018
Appointed:		
Mr. Colbert M. Matsumoto.....	January 2, 2007	January 1, 2013
Mr. Jerry E. Rauckhorst.....	January 2, 2010	January 1, 2015
Mr. Vincent Barfield, Vice Chair	August 11, 2011	January 1, 2017
Ex-Officio:		
Mr. Kalbert Young.....	December 2, 2010	December 1, 2014

Organizational Structure



Executive Director¹
Deputy Executive Director
Chief Investment Officer

Wesley K. Machida
 Kanoë Margol
 Vijoy Chattergy

Actuary
 Gabriel, Roeder, Smith and Company

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

Auditors
 State of Hawaii, Office of the Auditor
 KPMG LLP

Legal Advisor
 Attorney General of the State of Hawaii

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

¹ Effective 7/1/2013, the title of "Administrator" of the ERS changes to "Executive Director" per Act 23/2013 SLH.

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 plan. Except for employees in certain positions who are required to be members of the Contributory Plan, most new employees from July 1, 2006 are enrolled in the Hybrid Plan.

Those in the Contributory Plan 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 Plan: police officers, firefighters, judges, elected officials, legislative officers, attorney general investigators, narcotics enforcement investigators, and public safety investigations staff investigators. As of March 31, 2013, 6,408 active employees were enrolled in the Contributory Plan, or about 9.7% of our active members.

On July 1, 2006, the Hybrid Plan became effective pursuant to Act 179/2004. Members in the Hybrid Plan must also contribute to the ERS and are generally covered by Social Security. The Hybrid Plan covers most employees hired from July 1, 2006, as well as certain employees hired before July 1, 2006 who elected to join the Hybrid Plan. The Hybrid Plan membership will continue to increase going forward as most new employees hired from July 1, 2006 will be required to become a member of the Hybrid Plan. As of March 31, 2013, the Hybrid Plan had 41,877 members or about 63.2% of the ERS' active membership.

Members of the Noncontributory Plan do not make contributions to the ERS and are covered by Social Security. The Noncontributory Plan 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 Plan. As of March 31, 2013, there were 17,941 active employees in the Noncontributory Plan, which represents over 27.1% of all active members on this date.

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

For employees hired prior to July 1, 2012 ^(a)

	<u>Noncontributory Plan</u>	<u>Contributory Plan</u>	<u>Hybrid Plan</u>
Employee Contributions	No employee contributions	7.8% of salary	6.0% of salary
Normal Retirement			
Eligibility	Age 62 and 10 years credited service; <i>or</i> Age 55 and 30 years credited service	Age 55 and 5 years credited service	Age 62 and 5 years credited service; <i>or</i> 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%
<p>* 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 1/1/1971, AFC may be an average of the highest salaries during any five years of credited service including any salary paid in lieu of vacation.</p>			
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)

For employees hired prior to July 1, 2012 (continued) ^(a)

	<u>Noncontributory Plan</u>	<u>Contributory Plan</u>	<u>Hybrid Plan</u>
Annuity Savings Account			
Interest	Not applicable	4.5% per annum on employee contributions and accrued interest, <i>or</i> If hired after June 30, 2011, 2.0% per annum on employee contributions and accrued if interest	4.5% per annum on employee contributions and accrued interest, <i>or</i> If hired after June 30, 2011, 2.0% per annum on employee contributions and accrued if 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 Plan 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)

For employees hired prior to July 1, 2012 (continued) ^(a)

	<u>Noncontributory Plan</u>	<u>Contributory Plan</u>	<u>Hybrid Plan</u>
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; <i>or</i> 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; <i>or</i> 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; <i>or</i> Option 2 (100% Joint and Survivor) lifetime pension if member was eligible for retirement at the time of death and one beneficiary designated; <i>or</i> If less than 1 year of service, return of member's contributions and accrued interest.	Lump sum payment of member's Hybrid Plan contributions and accrued interest (times 150%) plus return of non-Hybrid contributions and accrued interest; <i>or</i> 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; <i>or</i> Option 2 (100% Joint Survivor) lifetime pension if member was eligible for retirement at the time of death, and one beneficiary designated; <i>or</i> 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)
For employees hired prior to July 1, 2012 (continued) ^(a)

	<u>Noncontributory Plan</u>	<u>Contributory Plan</u>	<u>Hybrid Plan</u>
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)

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 Plan 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 Plan 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)

For employees hired after June 30, 2012 ^(b)

	<u>Noncontributory Plan</u>	<u>Contributory Plan</u>	<u>Hybrid Plan</u>
Employee Contributions	No employee contributions	9.8% of salary	8.0% of salary
Normal Retirement			
Eligibility	Age 62 and 10 years credited service; <i>or</i> Age 55 and 30 years credited service	Age 60 and 10 years credited service	Age 65 and 10 years credited service; <i>or</i> 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.			
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) 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)

For employees hired after June 30, 2012 (continued)^(b)

	Noncontributory Plan	Contributory Plan	Hybrid Plan
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 Plan 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)

For employees hired after June 30, 2012 (continued)^(b)

	<u>Noncontributory Plan</u>	<u>Contributory Plan</u>	<u>Hybrid Plan</u>
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	<p>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; <i>or</i></p> <p>Option B (100% Joint and Survivor) lifetime pension for surviving spouse/reciprocal beneficiary if member was eligible for retirement at time of death.</p>	<p>Lump sum payment of member's contributions and accrued interest plus a percentage of the salary earned in the 12 months preceding death; <i>or</i></p> <p>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; <i>or</i></p> <p>Option 2 (100% Joint and Survivor) lifetime pension if member was eligible for retirement at the time of death and one beneficiary designated; <i>or</i></p> <p>If less than 1 year of service, return of member's contributions and accrued interest.</p>	<p>Lump sum payment of member's Hybrid Plan contributions and accrued interest (times 120%) plus return of non-Hybrid contributions and accrued interest; <i>or</i></p> <p>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; <i>or</i></p> <p>Option 2 (100% Joint Survivor) lifetime pension if member was eligible for retirement at the time of death, and one beneficiary designated; <i>or</i></p> <p>If less than 10 years of service, return of member's contributions and accrued interest.</p>

^(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)

For employees hired after June 30, 2012 (continued)^(b)

	<u>Noncontributory Plan</u>	<u>Contributory Plan</u>	<u>Hybrid Plan</u>
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)

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 Plan 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 Plan 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.

Summary of Retirement Benefit Plan Provisions (continued)
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

*Summary of Retirement Benefit Plan Provisions (continued)***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/>.

CONTRIBUTORY AND HYBRID PLANS

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 plan 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 Plan 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 Plan 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 Plan 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 PLANS (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 Plan 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 PLAN

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.

The following Acts were passed by the 2013 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 23 (S.B. 1036): Relating to Employees' Retirement System Personnel –

This Act provides additional resources to implement and monitor the ERS' investment portfolio. The ERS currently has over \$12 billion in assets and an unfunded liability of \$8.4 billion. The investment office and new investment officers would assist and advise the ERS Board with critical information needed to structure the ERS investment portfolio to meet its asset goals and reduce the System's unfunded liability.

- This Act allows the ERS Board of Trustees, through its Administrator, to appoint investment officers for the ERS investment office.
- Also, to be consistent with other government agencies and public pension plans, this Act changes the title of the ERS "Administrator" to "Executive Director".
- Effective: July 1, 2013

Act 123 (H.B. 808): Relating to the Employees' Retirement System and Civil Unions

In order to maintain its tax-qualified status, the ERS must comply with certain federal tax law requirements that specify when civil union partners are not considered "spouses" under federal law. Civil union partners would still have the rights accorded to spouses under the portions of the ERS statutes that are not restricted by the IRS Code.

- this Act amends three areas:
 - the right to a 100% joint survivor benefit when a civil union partner beneficiary is more than a specified number of years younger than the retirant,
 - the right to defer death benefits, and
 - preferential rollover rights for lump sum payments.
- adds a new section to ERS chapter 88 to confirm that marital and spousal terms are inclusive of civil unions and civil union partners, unless to do so would jeopardize the tax-qualified status of the ERS.
- Note: Due to the June 26, 2013 U.S. Supreme Court ruling on the matter some of these items may be dated.
- Effective: June 14, 2013

Act 124 - Relating to Federal Tax Qualification of the Employees' Retirement System

Amends the Employees' Retirement System laws to comply with Internal Revenue Code requirements and vesting rules in order to maintain the system's status as a tax-exempt, qualified retirement plan under section 401(a) of the Internal Revenue Code (IRC).

- This Act includes two mandatory amendments:
 - to reinforce the benefit limitations imposed by the Internal Revenue Code
 - to clarify vesting rules for the accrued retirement benefits for ERS members. Both amendments are technical clarifications to the existing ERS statutes and do not change requirements or benefits provided by the ERS.
- Effective: June 14, 2013

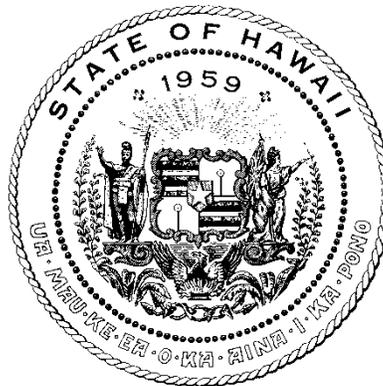


Employees' Retirement System

of the State of Hawaii

Submitted by

**THE AUDITOR
STATE OF HAWAII**



**FINANCIAL
SECTION**

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Independent Auditors' Report

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, 2013 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.

KPMG LLP is a Delaware limited liability partnership, the U.S. member firm of KPMG International Cooperative ("KPMG International"), a Swiss entity.

Independent Auditors' Report (continued)

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 net position of the Employees' Retirement System of the State of Hawaii as of June 30, 2013, and the changes in net position for the year then ended, in conformity with U.S. generally accepted accounting principles.

Other Matters***Required Supplementary Information***

U.S. generally accepted accounting principles require that the management's discussion and analysis on pages 32 through 38 and required supplementary information on pages 67 through 68 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.

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 supplementary information included in schedules 1 through 4 for the year ended June 30, 2013 is presented for purposes of additional analysis and is not a required part of the basic financial statements.



The Auditor
State of Hawaii

The supplementary information is 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 supplementary information is 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 it.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated December 19, 2014 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 19, 2014

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, 2013. 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 should also 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.

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

- The combining statement of net position provides a snapshot of the financial position of the ERS at June 30, 2013. This financial statement reflects the resources available to pay benefits to members, including retirees and beneficiaries, at the end of the fiscal year reported.
- The statement of changes in net position summarizes the ERS' financial activities that occurred during the fiscal year from July 1, 2012 to June 30, 2013 (FY 2013). This financial statement measures the changes in the resources available to pay pension benefits to members, retirees, and beneficiaries for fiscal year 2013.
- The notes to financial statements provide additional information that is essential to a full understanding of the financial statements. The notes are an integral part of the 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 information immediately following the notes to financial statements provides two schedules showing historical actuarial information concerning the funded status of the ERS and the employer contributions, along with related notes.
- The remaining supplementary information provides additional detailed information concerning the changes in operating funds established by legislation, and the operating and investment related expenses of the ERS.

*Management's Discussion and Analysis (continued)***Financial Highlights**

- As of June 30, 2013, net position restricted for pension benefits was \$12.3 billion, or an increase of about \$1.0 billion during the fiscal year then ended. This represents an increase of approximately 9.0% from the \$11.3 billion in plan net position restricted for pension benefits as of June 30, 2012. The increase of net position restricted for pension benefits in FY 2013 reflects the rebound of the global markets following losses in the non-U.S. equity markets during FY 2012.
- During FY 2013, the ERS earned a positive return of 12.6% on pension plan assets following a slight loss of 0.1% in FY 2012.
- The 2013 legislation passed does not have significant impact on the ERS financial operations. The legislation passed seeks to strengthen the long-term foundation and stability of internal investment staff with the addition of 3 investment officers that will assist the Chief Investment Officer and advise the ERS Board with critical information needed to structure the ERS investment portfolio to meet its asset goals and reduce the System's unfunded liability. 'Mandatory' legislation was enacted to maintain the tax-qualified status of the ERS based on technical clarification for compliance with the Internal Revenue code: (1) to reinforce the benefit limitations imposed by the Internal Revenue Code, and (2) to clarify vesting rules for the accrued retirement benefits for ERS members. A historical summary of legislation impacting the ERS actuarial valuations is located in the "Summary of Plan Changes" in the Actuarial Section.
- The funded ratio increased to 60.0% as of June 30, 2013 from 59.2% as of June 30, 2012 while the corresponding unfunded actuarial accrued liability (UAAL) of the ERS increased to \$8.5 billion from \$8.4 billion, respectively. Like most pension funds that use a four-year asset smoothing to determine the actuarial value of assets, the ERS continued to be impacted by the severe downturn in investment markets during the fiscal year ended June 30, 2009. However, the ERS had an offsetting liability experience gain which was caused primarily by lower than expected salary increases. Thus, the UAAL grew less than expected based on this actuarial valuation as of June 30, 2013.
- Contributions from members and employers increased by a total of \$36.5 million during FY 2013, or 5.0% with the implementation of legislation passed in 2011 and 2012. Most of the increase is due to an increase in required contribution rates paid by the employers for all employee groups. Per 2011 legislation, the employer contribution rate will increase annually over the next three-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 \$45.1 million, or 4.4%, to \$1,060.6 million in FY 2013 compared to \$1,015.5 million in FY 2012. Pension benefits continue to increase due to 2.5% more retirees and beneficiaries (41,812 in 2013 compared to 40,774 in 2012), an increase in the average pension benefit for new retirees, and the annual 2.5% post retirement increase.

Management's Discussion and Analysis (continued)

- Administrative expenses increased by \$0.3 million in FY 2013 to \$11.9 million compared to \$11.6 million in FY 2012. Administrative expenses for all years were within the ERS' budgeted amounts. The increase for FY 2013 was primarily due to an increase in payroll costs.

Analysis of Net Position Restricted for Pension Trust
Summary of Net Position

June 30, 2013 and 2012

(Dollars in millions)

	<u>2013</u>	<u>2012</u>	<u>FY 2013</u> <u>% change</u>
Assets:			
Cash and short-term investments	\$ 378.1	\$ 516.5	(26.8) %
Receivables	506.3	303.4	66.9
Investments	12,210.3	11,363.1	7.5
Invested securities lending collateral	-	923.9	(100.0)
Capital assets	<u>9.4</u>	<u>7.3</u>	28.8
Total assets	<u>13,104.1</u>	<u>13,114.2</u>	(0.1)
Liabilities			
Securities lending liability	-	923.9	(100.0)
Investment accounts and other payables	<u>792.3</u>	<u>897.3</u>	(11.7)
Total liabilities	<u>792.3</u>	<u>1,821.2</u>	(56.5)
Net position restricted for pension benefits	<u>\$ 12,311.8</u>	<u>\$ 11,293.0</u>	9.0

Summary of Changes in Net Position

June 30, 2013 and 2012

(Dollars in millions)

	<u>2013</u>	<u>2012</u>	<u>FY 2013</u> <u>% change</u>
Additions:			
Contributions	\$ 767.3	\$ 730.8	5.0 %
Net investments income (loss)	<u>1,331.2</u>	<u>(57.8)</u>	2,403.1
Total additions	<u>2,098.5</u>	<u>673.0</u>	211.8
Deductions:			
Retirement benefit payments	1,060.6	1,015.5	4.4
Refund of contributions	7.2	7.2	-
Administrative expenses	<u>11.9</u>	<u>11.6</u>	2.6
Total deductions	<u>1,079.7</u>	<u>1,034.3</u>	4.4
Increase (decrease) in net position	<u>\$ 1,018.8</u>	<u>\$ (361.3)</u>	382.0

Management's Discussion and Analysis (continued)
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 12.6% on investments during FY 2013 following a loss of 0.1% during FY 2012 due to the strength of the equity markets during the year. The long-term investment target rate for the ERS investment portfolio is 7.75%. Total net investment income during FY 2013 was \$1,331.2 compared to a net investment loss of \$57.8 million in FY 2012.

Domestic equity and real estate were the top performing asset classes with returns of 21.2% and 20.8%, respectively, followed by international equity at 12.1% and private equity with returns of 8.9% for the FY 2013. These were followed by the covered calls, fixed income and real return asset classes that earned 6.6%, 2.8% and 0.4%, respectively.

The asset distribution of the ERS' investment securities for the pension trust, excluding pending trade settlements and securities lending collateral, at June 30, 2013 and 2012 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 held by external investment managers for liquidity to settle pending trades and investments, and should not exceed 10 percent of the investments. 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 allocation to equity securities, including alternative investments, increased during FY 2013, due to positive investment returns, portfolio rebalancing, and changes in investment managers. The decrease for

	Asset Class			
	June 30, 2013 and 2012			
	(Dollars in millions)			
	<u>2013</u>	<u>%</u>	<u>2012</u>	<u>%</u>
Short term investments				
and cash	\$ 378.1	3.0 %	\$ 516.5	4.3 %
Equity securities	7,801.9	62.0	6,299.2	53.0
Fixed income	2,630.7	20.9	3,225.5	27.2
Real estate	1,153.6	9.2	1,250.2	10.5
Alternative investments	624.1	4.9	588.2	5.0
Total assets	<u>12,588.4</u>	<u>100.0</u>	<u>11,879.6</u>	<u>100.0</u>
Less loans on real estate				
and alternative investments	247.9		288.6	
	<u>\$ 12,340.5</u>		<u>\$ 11,591.0</u>	

fixed income securities and real estate investments in FY 2013 was due to changes in the long-term asset allocation targets adopted by the ERS' Board of Trustees in 2011.

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.

The increase in investment management fees paid to external investment advisors during FY 2013 compared to FY 2012 is due to the positive returns on the assets and an increase in overall asset values during the FY 2013. 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. Certain investment managers may receive an incentive fee for superior investment returns while maintaining an acceptable level of investment risk.

Contributions

Contributions from employers and employees totaled \$767.3 million and \$730.8 million during FY 2013 and FY 2012, respectively. During FY 2013, total contributions increased by \$36.5 million, or 5.0%, with employer contributions increased by \$33.1 million, or 6.0%, and member contributions increased by \$3.4 million, or 1.9%. The increase in employer contributions is mainly due to an increase in contribution rates effective July 1, 2012, and to a lesser extent an increase in covered payroll and the number of active members during the year. Please refer to the Financial Section in the ERS 2013 and 2012 CAFR for more information.

Pension Plan Benefits and Expenses

Pension benefit payments continue to be the primary expense of the ERS with payments totaling \$1,060.6 million during FY 2013 and \$1,015.5 during FY 2012. Pension benefits increased with additional new retirees, higher pension benefits for recent retirees, and the annual post retirement increase for ERS' retirees.

Refunds to terminating members of the Hybrid and Contributory Plans remained relatively stable during the year.

The \$0.3 million increase in administrative expenses in FY 2013 is from an increase in payroll related costs (salaries and fringe benefits), auditing and tax consulting and depreciation which was partially offset by a decrease in other professional services and computer maintenance.

Pension Plan Changes

There was no significant legislation passed in 2013 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.

*Management's Discussion and Analysis (continued)***Actuarial Valuations and Funded Status**

The ERS uses an actuarial reserve type of funding that is financed by member contributions, employer contributions, and earnings from invested assets. Member and employer contributions are based on the member's pension plan (contributory, noncontributory, or hybrid), pay and job classification. The ERS' investment rate of return actuarial assumption is set by state law at 7.75% per annum. Material differences in the actual amounts compared to the actuarial assumptions for a given year may have a significant impact on the ERS' funded status. Changes in significant assumptions between valuation periods, such as the actuarial investment return, may also have a significant impact on the funded status of a pension plan.

An independent actuarial valuation of the ERS' actuarial assets and liabilities is performed annually. As part of this valuation, the progress towards funding pension obligations of the retirement system is measured by comparing the actuarial value of assets to actuarial accrued liability. This measurement is expressed as a percentage and referred to as the funded ratio or funded status. The UAAL is that portion of the actuarial accrued liability (including the present value of benefits presently being paid to retired members) that exceeds the value of current actuarial assets expressed as an amount.

The funded ratio increased to 60.0% as of June 30, 2013 from 59.2% as of June 30, 2012. The ERS' UAAL was \$8.5 and \$8.4 billion as of June 30, 2013 and 2012, respectively. After an unfavorable year in FY 2012, the investment markets had an excellent year in FY 2013 resulting in a return of 12.60% on the market value of assets. However, all of the excess investment earnings from FY 2013 were offset against the prior year's deferred investment losses. The ERS investment losses from the fiscal year ended June 30, 2009 are still being recognized since ERS uses a four-year smoothing of investment market gains and losses to reduce volatility of the required contribution rates. The recognition of deferred investment losses was partially offset by a liability experience gain from actual salary increases being less than the current salary scale assumption.

Under the percentage of payroll methodology for employer contribution funding, one of the primary purposes of the valuation report is to determine whether the adequacy of the current employer contribution rates is sufficient to amortize the UAAL within a specific number of years. The employee and employer contribution rates have been set by State law and are intended to provide for the normal cost plus the level percentage of payroll required to amortize the UAAL over a period not in excess of 30 years. Under the standards established by the Governmental Accounting Standards Board Statement No. 25, Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans (GASB No. 25) that the ERS implemented in 1997, the amortization period used to determine the annual required contribution rates should not exceed 30 years.

The aggregate funding period of the UAAL, including the value of future employer and employee contributions, for the ERS as of June 30, 2013 and 2012 was 28.0 and 30.0 years, respectively. (The remaining amortization period for purposes of determining the Annual Required Contribution as of June 30, 2013 in accordance with GASB No. 25 requirements is 30 years.)

Management's Discussion and Analysis (continued)

The 2010 valuation determined that the funding period (the length of time required to amortize the unfunded actuarial accrued liability (UAAL)) exceeded the maximum 30 year funding period required under Hawaii Revised Statutes. The 2011 Legislature took corrective action in the form of two significant changes to ERS: (i) the new tier of benefits and increased contribution rates for employees hired after June 30, 2012, and (ii) a schedule of increasing employer contribution rates over the next several fiscal years. The results after reflecting all of these changes was a 25-year funding period as of the June 30, 2011 valuation, which satisfied the Hawaii Revised Statute (the funding period has remained at or below the 30-year threshold in all subsequent valuations). However, the GASB No. 25 Annual Required Contribution (ARC) has specific rules in how it must be determined. These rules include the fact that the amortization payment to pay off the UAAL is to be calculated as the amount to be contributed the next year with increases in future years tied to the assumed payroll growth rate. GASB No. 25 does not allow you to reflect the increasing employer contribution rates in future years nor does it allow you to reflect that the amount of the statutory contribution that goes toward paying of the UAAL in future years will increase as the percentage of the active population hired after June 30, 2012 increases (on average 4% more pay will be contributed towards paying off the UAAL for a non public safety employee under the new benefit and contribution tier). The result is that the GASB No. 25 ARC determined using the maximum 30-year funding period (GASB maximum) is greater than the statutory rates being contributed in fiscal years 2011-2013. However, as described above the GASB No. 25 ARC does not describe the true long-term financial picture of ERS.

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

Statement of Changes in Net Position – All Trust Funds

Year ended June 30, 2013

Additions	
Contributions (notes A(4) and E)	
Employers contributions	\$ 581,447,213
Members contributions	185,837,186
Total contributions	<u>767,284,399</u>
Investment income (note F)	
From investing activities	
Net appreciation in fair value of investments	1,034,798,125
Interest on fixed income securities	97,265,571
Dividends on equity securities	117,759,984
Income on real estate investments	121,303,816
Interest on short-term investments	1,395,302
Alternative investment income	54,765,397
Miscellaneous	556,107
	<u>1,427,844,302</u>
Less investment expenses	<u>99,949,605</u>
Net investment income from investing activities	<u>1,327,894,697</u>
From securities lending activities	
Securities lending income	<u>3,046,173</u>
Securities lending expenses	
Borrower rebates	(851,628)
Management fees	584,344
Total securities lending activities expense	<u>(267,284)</u>
Net investment income from securities lending activities	<u>3,313,457</u>
Total net investment income	<u>1,331,208,154</u>
Total additions	<u>2,098,492,553</u>
Deductions	
Benefit payments (note A(3))	1,060,561,148
Refunds of member contributions	7,204,411
Administrative expenses	11,941,446
	<u>1,079,707,005</u>
Total deductions	<u>1,079,707,005</u>
Net increase in net position	1,018,785,548
Net position restricted for pension benefits (note D)	
Beginning of year	<u>11,293,042,401</u>
End of year	<u>\$ 12,311,827,949</u>

See accompanying notes to financial statements.

Notes to Financial Statements

June 30, 2013

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 ERS is a cost-sharing, multiple-employer public employee retirement system established to administer a pension benefits program for all State and county employees, including teachers, police officers, firefighters, correction officers, judges, and elected officials. The ERS provides retirement, survivor and disability benefits with multiple benefit structures known as the contributory, hybrid and noncontributory plans.

Employer, pensioner, and employee membership data as of March 31, 2013 are as follows:

Employers:	
State	1
County	<u>4</u>
Total employers	<u><u>5</u></u>
Pensioners and beneficiaries currently receiving benefits:	
Pensioners currently receiving benefits:	
Police and firefighters	3,317
All other employees	<u>35,424</u>
Total pensioners	<u>38,741</u>
Beneficiaries currently receiving benefits:	
Police and firefighters	223
All other employees	<u>2,848</u>
Total beneficiaries	<u>3,071</u>
Total pensioners and beneficiaries	<u><u>41,812</u></u>
Terminated vested members entitled to benefits but not yet receiving benefits:	
Police and firefighters	251
All other employees	<u>7,061</u>
Total terminated vested members	<u><u>7,312</u></u>
Current employees:	
Vested:	
Police and firefighters	4,123
All other employees	43,745
Nonvested:	
Police and firefighters	848
All other employees	<u>17,510</u>
Total current employees	<u><u>66,226</u></u>
Total membership	<u><u>115,350</u></u>

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 Hawaii Revised Statutes and is governed by a Board of Trustees (the Board) as discussed below. The ERS is comprised of the Employees' Retirement System and Social Security Contribution Funds.

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 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 Administrator 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 plan. 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. Effective July 1, 2008, the 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 will increase over four years 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 will increase 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.

Effective July 1, 2012, employers may be required 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.

Employees covered by Social Security on June 30, 1984 were given the option of joining the noncontributory plan or remaining in the contributory plan. All new employees hired after June 30, 1984 and before July 1, 2006, who are covered by Social Security, were generally required to join the noncontributory plan. Qualified employees in the contributory and noncontributory plan were given the option of joining the Hybrid Plan effective July 1, 2006, or remaining in their existing plan. Starting July 1, 2006, all new employees covered by Social Security are required to join the Hybrid Plan.

*Notes to Financial Statements (continued)***Note A – Description of the ERS (continued)****3. Plan Descriptions and Funding Policy (continued)**

The three plans provide a monthly retirement 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 plan members hired after June 30, 2012. 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 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 2-1/2% on each July 1 following the calendar year of retirement. This cumulative benefit is not compounded and increases each year by 2-1/2% of the original retirement allowance without a ceiling (2-1/2% of the original retirement allowance the first year, 5% the second year, 7-1/2% the third year, etc.). For new members hired after June 30, 2012 the post-retirement annuity increase was decreased to 1.5% per year.

The following summarizes the three plan provisions relevant to the largest employee groups of the respective plan. Retirement benefits for certain groups, such as police officers, firefighters, some investigators, 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 general employees and a description of special provisions to other groups of employees, refer to the Summary of Retirement Benefit Plan Provisions contained in the *Introductory Section* of this report.

Contributory Plan

General employees in the contributory plan 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 plan, members may retire with full benefits at age 55 and 5 years of credited service, or may retire early at any age with at least 25 years of credited service and reduced benefits. The benefit multiplier is 2% for employees covered by Social Security.

New general employees in the contributory plan 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, or may retire at age 55 with 25 years of credited service with reduced benefits. 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)****Contributory Plan (continued)**

Police officers, fire-fighters, and certain other members that are not covered by Social Security contribute 12.2% of their salary and receive a retirement benefit using the benefit multiplier of 2-1/2% 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.

New 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 with reduced benefits, provided the last 5 years of credited service is any of the qualified occupations.

Hybrid Plan

General employees in the Hybrid Plan 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, or may retire at age 55 and 20 years of credited service with reduced benefits. The benefit multiplier used to calculate retirement benefits is 2%. Members in the hybrid plan are covered by Social Security.

New general employees in the Hybrid Plan 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, or may retire at age 55 and 20 years of credited service with reduced benefits. The benefit multiplier used to calculate retirement benefits is 1.75%. Members in the hybrid plan are covered by Social Security.

Noncontributory Plan

General employees in the noncontributory plan 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 or age 55 years and 20 years of credited service with reduced benefits. The benefit multiplier used to calculate retirement benefits is 1-1/4%.

No changes to the plan provisions of the noncontributory plan were made for new general employees hired after June 30, 2012.

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. Under all three plans, there is no age requirement.

Notes to Financial Statements (continued)
Note A – Description of the ERS (continued)**3. Plan Descriptions and Funding Policy (continued)**

Ordinary death benefits under the contributory, hybrid, and noncontributory plans require at least one year, five years, and ten years of service, respectively. Under all three plans, there is no service requirement for service-connected death benefits.

Schedule of Funded and Funding Progress

Actuarial valuation date	June 30, 2013
Actuarial value of assets (a)	\$12,748,828,110
Actuarial Accrued Liability (AAL)	
Entry Age (b)	<u>\$21,243,744,377</u>
Unfunded AAL (UAAL) (b-a)	<u>\$8,494,916,267</u>
Percent Funded (a/b)	60.0%
Annual covered payroll (c)	\$3,906,670,616
UAAL percentage of Covered Payroll ((b-a)/c)	217%

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*.

Additional information as of the June 30, 2013 actuarial valuation follows:

Valuation date	June 30, 2013
Actuarial cost method	Entry Age Normal
Amortization method	Level percent, open
Remaining amortization period as of June 30, 2013*	30 years
Asset valuation method	4-year smoothed market
Actuarial assumptions	
Investment rate of return *	7.75%
Projected salary increases *	
Police and Fire Employees	5.00% to 19.00%
General Employees	4.00% to 8.00%
Teachers	5.00% to 8.50%
* Includes inflation at	3.00%
Cost of living adjustments (COLAs) **	2.5%/1.5%

** COLAs are not compounded; they are based on original pension amounts.

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 through the contributory, hybrid or noncontributory plan. 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.

*Notes to Financial Statements (continued)***Note A – Description of the ERS (continued)****4. The ERS as Employer (continued)**

The required pension contributions by all participating employers (in thousands) for the year ended June 30, 2013 was \$667,142, which represented 17.1% of covered payroll. Actual contributions (in thousands) by all employers for the year ended June 30, 2013, was \$581,447 which represented 87.2% of the required contributions for each year.

5. Other Post Employment Benefits (OPEB)

In addition to the retirement benefits provided by the ERS Pension Trust, the participating employers, pursuant to Hawaii Revised Statutes (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.

*Notes to Financial Statements (continued)***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, 2013, 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 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 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 using the accrual basis of accounting under which expenses are recorded when the liability is incurred, and revenues are recorded in the accounting period in which they are earned and become measurable. Employer and member contributions are recognized in the period in which the contributions are due. 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)**2. Cash and Investments:**

Cash includes amounts in demand deposits and invested funds held by ERS investment managers.

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. The investment decision is further dictated by internal investment policies and asset allocation established by the Board. 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. Assets in the Pension Trust Fund may be invested in any of these assets, while investments in the Contribution Fund are limited to investment grade, short-term marketable securities.

Investments are reported at fair value. Unrealized gains and losses are included as investment income in the statement of changes in net position. The net position 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, 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 and Fixed Income 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. The pooled funds' annual financial statements are audited by independent auditors.

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.

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.

*Notes to Financial Statements (continued)***Note C – Summary of Accounting Policies (continued)****2. Cash and Investments (continued):**

Private Equity Limited Partnerships (continued):

- 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 EBITDA) based on multiples at which comparable company's 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. Structured finance investments receive quarterly value adjustments by the investment companies, generally applying the assumption that all such positions will be held to maturity. 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 ready market 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. Real estate and alternative investments consists of the value of real property within the limited liability companies and limited partnerships.

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 received.

4. Payment of Benefits

Withdrawals are recorded when paid.

Note C – Summary of Accounting Policies (continued)**5. Securities Lending**

The Retirement Funds record collateral received under securities lending agreements where the Retirement Funds have the ability to spend, pledge, or sell the collateral without borrower default. Liabilities resulting from these transactions are also reported. 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 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 Fund – 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 Fund – To be credited with all money to pay the administrative expenses of the ERS.
- c. Pension Accumulation Fund – To be credited with any remaining investment earnings.

7. Risk Management

The ERS reports liabilities, as discussed in note G, 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 U.S. generally accepted accounting principles, management is required to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. 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.

9. Recently Issued Accounting Policies

In June 2011, the Governmental Accounting Standards Board (GASB) issued Statement No. 63, Financial Reporting of Deferred Outflows of Resources, Deferred Inflows of Resources, and Net Position. Statement No. 63 provides financial reporting guidance for deferred outflows of resources

*Notes to Financial Statements (continued)***Note C – Summary of Accounting Policies (continued)****9. Recently Issued Accounting Policies(continued)**

and deferred inflows of resources. However, it does not identify any additional items that should be recognized within these element classifications. Statement No. 63 only applies to items that have been specifically identified by the GASB as deferred outflows of resources or deferred inflows of resources. Statement No. 63 will be effective for periods beginning after December 15, 2011. The implementation of Statement No. 63 resulted in a change in the presentation of the statement of plan net assets to the statement of net position and the term net assets is changed to net position throughout the financial statements. The implementation of Statement No. 63 did not have a significant impact on the financial statements for the fiscal year ended June 30, 2013.

In June 2012, the Governmental Accounting Standards Board (GASB) issued Statement No. 67, *Financial Reporting for Pension Plans – an amendment of GASB Statement No. 25*. Statement No. 67 establishes new standards for financial reporting and note disclosures by defined-benefit pension plans administered through qualified trusts, and note disclosure requirements for defined-contribution pension plans administered through qualified trusts. One of the major changes in the new standard is the rate used to discount projected benefit payments. The new standard states the long-term expected rate of return on the investments of the pension plan should be applied only to available pension plan assets that are expected to be invested using a strategy to achieve that return. If there comes a point in the projections when plan net position and contributions related to active and inactive employees is no longer projected to be greater than or equal to projected benefit payments related to those employees and administrative expenses, then from that point forward the pension plan will be required to discount the projected benefit payments using a municipal borrowing rate — a tax-exempt, high-quality 20-year general obligation bond index rate. Statement No. 67 will be effective for periods beginning after June 30, 2013. ERS has not yet determined the impact of this standard on its financial statements and disclosures.

Note D – Description of Funds

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

1. Pension Accumulation Fund

To accumulate contributions made by the State and counties, transfers of retired members' contributions plus related interest income from the Annuity Savings Fund and income from investments. All pension benefits, including the pensioners' bonus, are paid through this fund.

Note D – Description of Funds (continued)**2. Annuity Savings Fund**

To accumulate members' contributions and related interest income. Upon a member's retirement, the accumulated contributions and related interest income are transferred to the Pension Accumulation Fund or refunded to the member upon termination.

3. Expense Fund

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 fund 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.

Net position restricted for pension benefits as of June 30, 2013 are as follows:

	<u>2013</u>
Pension Accumulation Fund	\$ 10,354,417,898
Annuity Savings Fund	1,943,208,516
Expense Fund	<u>14,201,535</u>
Total net position restricted for pension benefits	<u>\$ 12,311,827,949</u>

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.

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.

Notes to Financial Statements (continued)
Note E – Contributions (continued)

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 or 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.

Note F – Deposits and Investments**1. Deposits**

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 represents market or fair value.

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, 2013, the carrying amount of deposits totaled approximately \$39,994,831 and the corresponding bank balance was \$43,968,969, all of which was exposed to custodial credit risk. The following shows the aggregate book and bank balances of all cash accounts.

	<u>June 30, 2013</u>
Carrying amounts of deposit - book	
Total book balances	\$ <u>39,994,831</u>
Depository accounts	
Total bank balances	\$ <u>43,968,969</u>

Notes to Financial Statements (continued)
Note F – Deposits and Investment Risk Disclosures (continued)**2. Investments**

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. The following table shows the investments of the ERS by investment type as of June 30, 2013. 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	\$ 39,994,831
Short-term bills and notes	2,801,669
Pooled and others	312,478,452
Debt securities	
Asset backed securities	42,252,053
Collateralized mortgage obligations	66,148,795
Commercial mortgage backed securities	54,120,947
Corporate	823,863,910
Government agencies	181,161,600
Government bonds	483,507,376
Index linked government bonds	450,913,091
Residential mortgage backed securities	431,777,344
Municipal/Provincial bonds	68,093,424
Pooled and others	23,292,788
Derivatives	
Forwards - Cash and short-term instruments	22,797,395
Options - Equities	(11,501,910)
Options - Debt Securities	(710,994)
Rights/warrants - Equities	66
Swaps	6,282,939
Equities	7,813,379,918
Real estate	1,153,657,262
Alternative investments	624,110,754
Total investments	\$ <u>12,588,421,710</u>

*Notes to Financial Statements (continued)***Note F – Deposits and Investment Risk Disclosures (continued)****3. Credit Risk Debt Securities**

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:

- 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).

Notes to Financial Statements (continued)

Note F – Deposits and Investment Risk Disclosures (continued)

3. Credit Risk Debt Securities (continued)

A table of the ERS' fixed income securities as of June 30, 2013 is below. Securities below investment grade of Baa and non-rated issues (by Moodys) amounted to \$290,956,777 or 11.1% of total fixed income investments. All short-term investments, not held in a pooled investment, are rated A1/P1 or better.

Credit Ratings - Moodys as of June 30, 2013

Ratings	Cash and cash equivalents	Asset backed securities	Corporate bonds	Government bonds and agencies	Government mortgage backed residential securities	Mortgage backed securities	Pooled & others	Total	Percentage to total
Agency	\$ -	\$ -	\$ -	\$ 2,771,658	\$ 425,246,240	\$ -	\$ -	\$ 428,017,898	16.3%
Aaa	2,801,669	12,133,396	41,818,400	684,779,766	-	32,785,977	-	774,319,208	29.4%
Aa	-	12,525,163	50,195,603	254,844,302	-	8,998,440	-	326,563,508	12.4%
A	-	6,070,404	203,685,050	76,032,195	-	18,693,007	-	304,480,656	11.6%
Baa	-	6,607,577	358,233,653	113,796,497	1,188,730	23,357,189	411,304	503,594,950	19.2%
Ba	-	221,573	85,221,869	48,224,009	-	13,963,910	2,148,921	149,780,282	5.7%
B	-	67,292	63,197,304	1,063,798	-	9,070,919	7,734,142	81,133,455	3.1%
Caa	-	1,493,976	7,420,380	-	-	7,392,412	-	16,306,768	0.6%
Ca	-	3,132,672	-	-	-	1,552,764	-	4,685,436	0.2%
NR	-	-	14,091,651	2,163,266	5,342,374	4,455,124	12,998,421	39,050,836	1.5%
	\$ 2,801,669	\$ 42,252,053	\$ 823,863,910	\$ 1,183,675,491	\$ 431,777,344	\$ 120,269,742	\$ 23,292,788	\$ 2,627,932,997	100.0%
						Derivatives		5,571,945	
						Short-term investments		(2,801,669)	
						Total fixed income		\$ 2,630,703,273	

4. 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, Northern Trust. Pooled funds not held by the custodial bank, such as certain equity investments, are registered in the name of the ERS.

Custodial Credit Risk Summary

Exposed to Custodial Credit Risk	\$	54,159,334
Not subject to Custodial Credit Risk		4,512,407,518
Not exposed - registered		8,021,854,858
Total Investments	\$	12,588,421,710

Notes to Financial Statements (continued)
Note F – Deposits and Investment Risk Disclosures (continued)**5. 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 Debt Securities.

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, 2013, 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.

6. 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, 2013, 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

	Fair Value	Effective Weighted Duration (years)
Cash and Short Term Instruments		
Bills and Notes	\$ 2,801,669	0.3
Debt Securities		
Asset backed securities	42,252,053	1.6
Collateralized mortgage obligations	66,148,795	1.3
Commercial mortgage backed securities	54,120,947	4.2
Corporate	823,863,910	4.5
Government agencies	181,161,600	4.8
Government bonds	483,507,376	6.5
Index linked government bonds	450,913,091	9.7
Residential mortgage backed securities	431,777,344	4.7
Municipal/Provincial bonds	68,093,424	8.6
Pooled and Others	23,292,788	n/a
Total	\$ <u>2,627,932,997</u>	

Notes to Financial Statements (continued)

Note F – Deposits and Investment Risk Disclosures (continued)

7. 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 F9.

The following table summarizes the ERS' exposure to foreign currency risk in U.S. dollars as of June 30, 2013. (Securities denominated in U.S. dollars are not presented.)

	Cash and Short							
	Term Instruments	Debt Securities	Derivatives	Equities	Alternative	Real Estate	Grand Total	
Argentine peso	\$ 5,258	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,258	
Australian dollar	(71,523)	71,837,905	5,907,110	66,566,885	-	-	144,240,377	
Brazilian real	7,925	696,479	(277,013)	57,928,436	-	-	58,355,827	
British pound sterling	786,528	178,773,756	1,846,338	274,057,673	-	-	455,464,295	
Bulgarian new lev	-	-	-	197,438	-	-	197,438	
Canadian dollar	3,070,107	32,092,387	794,816	53,074,427	-	-	89,031,737	
Chilean peso	10,012	-	(338)	5,134,651	-	-	5,144,325	
Colombian peso	-	914,983	-	2,941,116	-	-	3,856,099	
Czech koruna	11,506	-	-	679,709	-	-	691,215	
Danish krone	4	12,764	-	37,284,108	-	-	37,296,876	
Egyptian pound	194,791	-	-	838,772	-	-	1,033,563	
Euro	1,445,074	271,734,761	43,849	437,876,190	-	-	711,099,874	
Hong Kong dollar	3,871,041	-	-	209,818,720	-	-	213,689,761	
Hungarian forint	23,461	-	-	1,520,476	-	-	1,543,937	
Indian rupee	15,699,406	-	-	-	-	-	15,699,406	
Indonesian rupiah	46,173	-	151	19,956,549	-	-	20,002,873	
Japanese yen	(411,403)	30,256,039	11,392,874	179,510,648	-	-	220,748,158	
Malaysian ringgit	20,638	2,163,266	(3,749)	10,311,115	-	-	12,491,270	
Mexican peso	1,117,798	13,844,893	(305,692)	20,448,628	-	-	35,105,627	
New Taiwan dollar	45,643	-	-	84,225,132	-	-	84,270,775	
New Zealand dollar	28	49,528,605	804,112	-	-	-	50,332,745	
Norwegian krone	114	-	(42,567)	-	-	-	(42,453)	
Philippine peso	5,700	-	-	3,041,210	-	-	3,046,910	
Polish zloty	55,602	54,968,131	2,562,655	16,089,822	-	-	73,676,210	
Singapore dollar	(1,434,335)	-	(2,552)	33,453,509	-	-	32,016,622	
South African rand	32,414	42,211,432	(491,109)	53,971,181	-	-	95,723,918	
South Korean won	65,812	-	-	119,342,839	-	-	119,408,651	
Swedish krona	96,140	11,414,612	-	18,443,813	-	-	29,954,565	
Swiss franc	210,442	-	455,489	176,317,124	-	-	176,983,055	
Thai baht	24,029	-	-	32,080,548	-	-	32,104,577	
Turkish lira	10	-	-	20,544,982	-	-	20,544,992	
Various Countries	-	-	-	1,416,170,281	-	-	1,416,170,281	
Total	\$ 24,928,395	\$ 760,450,013	\$ 22,684,374	\$ 3,351,825,982	\$ -	\$ -	\$ 4,159,888,764	

*Notes to Financial Statements (continued)***Note F – Deposits and Investment Risk Disclosures (continued)****8. Securities Lending**

The ERS participated in a securities lending program administered by its bank custodian, The Northern Trust Company. Under this program, which is permissible under Chapter 88 of the HRS, certain equity and fixed-income securities of the ERS were lent to participating broker-dealers and banks (borrowers). In return, the ERS received cash, securities issued or guaranteed by the U.S. government, and/or letters of credit as collateral. The ERS did not have the ability to pledge or sell collateral securities absent of borrower default. Borrowers were 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 fell below the minimum collateral requirements, additional collateral was provided. In addition, the bank custodian indemnified the ERS by agreeing to purchase replacement securities or return cash collateral in the event the borrower failed to return the loaned security or failed to pay the ERS for income distributions by the securities' issuers while the securities are on loan.

At June 30, 2013 there was no credit risk exposure to borrowers since the ERS temporarily suspended the securities lending program in June 2013 due to the transition to a new bank custodian effective July 1, 2013. The securities lending program resumed in July 2013 following the successful transition of assets to the new custodian.

Other than the temporary suspension of securities lending program, the ERS did not impose any restrictions on the amount of loans the bank custodian made on behalf of the ERS. Also, the ERS and the borrowers maintained the right to terminate securities lending transactions on demand. The bank custodian 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 Note C2.

Note F – Deposits and Investment Risk Disclosures (continued)**9. 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 following tables summarize the ERS’ investments in derivative securities and contracts held at June 30, 2013 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.

Notes to Financial Statements (continued)
Note F – Deposits and Investment Risk Disclosures (continued)**9. Derivative Financial Instruments**

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 Net Position.

Summary of Derivative Risk types as of June 30, 2013:

	<u>Fair Value</u>
Credit Contracts	
Swaps	\$ (17,956)
Equity Contracts	
Options	(11,501,910)
Rights/Warrants	66
Foreign Exchange Contracts	
Forwards	22,797,395
Interest Rate Contracts	
Option on futures	513,022
Swaps	6,300,895
Other Contracts	
Options	(1,224,016)
Grand Total	<u>\$ 16,867,496</u>

Notes to Financial Statements (continued)
Note F – Deposits and Investment Risk Disclosures (continued)**9. Derivative Financial Instruments (continued)**

The following table summarizes the ERS' investments in derivative securities and contracts held at June 30, 2013:

<u>Asset categories</u>	<u>Notional values</u>	<u>Market value</u>
Forwards	Currency purchases	\$ -
	Total forwards	\$ 22,797,395
Futures	Interest rate contracts	-
	Futures total	420,931,245
Options	Options	-
	Options on futures	(11,501,910)
	Swaption	513,022
	Options total	(1,224,016)
Rights/warrants		-
Swaps	Credit default swaps	66
	Interest rate swaps	(17,956)
	Swaps total	6,300,895
	Grand Total	\$ 420,931,245
		\$ 16,867,496

Forward Currency Exchange Contracts

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.

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 Net Position – All Trust Funds. At June 30, 2013, the net notional value of futures contracts was \$420,931,245.

*Notes to Financial Statements (continued)***Note F – Deposits and Investment Risk Disclosures (continued)****9. 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, 2013 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 Net Position – All Trust Funds.

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.

*Notes to Financial Statements (continued)***Note F – Deposits and Investment Risk Disclosures (continued)****9. Derivative Financial Instruments (continued)**

On June 30, 2013 credit ratings of the counterparty for ERS' investments in derivatives were as follows:

	Derivatives Counterparty Credit Ratings						Grand Total
	A1	A2	Aa3	Baa1	Baa2	N/A	
BANK OF AMERICA N.A.	-	(128,328)	-	-	-	-	\$ (128,328)
BARCLAYS CAP SECS LONDON	-	54,019	-	-	-	-	54,019
BNP PARIBAS FIXED INCOME	-	(1,642)	-	-	-	-	(1,642)
CITIBANK N.A. NEW YORK	-	(14,732)	-	-	-	-	(14,732)
CITIGROUP GLOBAL MARKETS, CME	-	-	-	-	-	1,014,186	1,014,186
CME_BARCUS	-	-	-	-	-	(1)	(1)
CME_CSFBUS	-	-	-	-	-	3,185,762	3,185,762
CME_MSCSUS	-	-	-	-	-	878,295	878,295
CME_UBSWUS	-	-	-	-	-	36,085	36,085
CREDIT SUISSE INTERNATIONAL, LONDON	(9)	-	-	-	-	-	(9)
DEUTSCHE BANK AG NEW YORK	-	(17,956)	-	-	-	-	(17,956)
DEUTSCHE BANK LONDON	-	(50,470)	-	-	-	-	(50,470)
DEUTSCHE BANK SECURITIES, CME	-	-	-	-	-	341,820	341,820
GOLDMAN SACHS AND CO, CME	-	-	-	-	-	938,894	938,894
GOLDMAN SACHS BANK USA	-	(307,812)	-	-	-	-	(307,812)
HSBC BANK USA, NA-CCC	(86,504)	-	-	-	-	-	(86,504)
JP MORGAN CHASE BANK/HSBCSI	-	-	(24,361)	-	-	-	(24,361)
MORGAN STANLEY CAPITAL SERVICES NEW YORK	-	-	-	-	(513,017)	-	(513,017)
ROYAL BANK OF SCOTLANDN FIN MKTS FIXED	-	-	-	(92,335)	-	-	(92,335)
UBS SECURITIES	-	(170,494)	-	-	-	-	(170,494)
Foreign Currency Forwards	-	-	-	-	-	22,797,395	22,797,395
Exchange traded - Futures and Options	-	-	-	-	-	(10,971,365)	(10,971,365)
Not available on Rights and Warrants	-	-	-	-	-	66	66
Total	<u>\$ (86,513)</u>	<u>\$ (637,415)</u>	<u>\$ (24,361)</u>	<u>\$ (92,335)</u>	<u>\$ (513,017)</u>	<u>\$ 18,221,137</u>	<u>\$ 16,867,496</u>

Notes to Financial Statements (continued)
Note F – Deposits and Investment Risk Disclosures (continued)**9. Derivative Financial Instruments (continued)**

On June 30, 2013 the segmented time distribution for ERS' investments in derivatives were as follows:

	<u>Fair Value</u>	<u>Years to maturity</u>
Forwards		
Foreign exchange contracts	\$ 22,797,395	range from 0.0 to 0.5 years
Options		
Options	(11,501,910)	range from 0.0 to 0.2 years
Options on futures	513,022	range from 0.1 to 0.2 years
Swaption	<u>(1,224,016)</u>	range from 0.0 to 0.7 years
	(12,212,904)	
Rights/Warrants		
Equity contracts	66	range from 0.0 to 1.9 years
Swaps		
Swaps	<u>6,282,939</u>	range from 2.7 to 28.0 years
Grand total	<u>\$ 16,867,496</u>	

Note G – 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, 2013. 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 H – 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 \$536,000,000 as of June 30, 2013, consisting of \$141,000,000 in real estate investments, and \$395,000,000 in alternative investments.

Note I – 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.

Required Supplementary Information - Unaudited

June 30, 2013

Schedule of Funding Progress
(In thousands)

Actuarial Valuation Date	Actuarial Value of Assets (1)	Actuarial Accrued Liability (AAL) (2)	Unfunded Actuarial Accrued Liability (UAAL) (3)= (2)-(1)	Funded Ratio (4)=(1)/(2)	Annual Covered Payroll (5)	UAAL as a Percentage of Annual Covered Payroll (6)=(3)/(5)
June 30:						
2013	\$ 12,748,828	\$ 21,243,744	\$ 8,494,916	60.0%	\$ 3,906,670	217.4%
2012	12,242,494	20,683,403	8,440,909	59.2%	3,889,976	217.0%
2011	11,942,753	20,096,930	8,154,177	59.4%	3,915,957	208.2%
2010	11,345,618	18,483,669	7,138,051	61.4%	3,895,662	183.2%
2009	11,400,117	17,636,432	6,236,315	64.6%	4,030,121	154.7%
2008	11,380,961	16,549,069	5,168,108	68.8%	3,782,103	136.6%

Schedule of Employer Contributions
(In thousands)

	Annual Required Contribution	Actual Contribution	Percentage Contributed
Fiscal year ended June 30,:			
2013	\$ 667,142	\$ 581,447	87.2%
2012	654,755	548,353	83.7%
2011	582,535	538,693	92.5%
2010	536,237	547,670	102.1%
2009	526,538	578,672	109.9%
2008	510,727	488,770	95.7%

June 30, 2013

Note A - Description

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at the dates indicated. Additional information as of the latest actuarial valuation follows:

Valuation date	June 30, 2013
Actuarial cost method	Entry Age Normal
Amortization method	Level percent, open
Remaining amortization period as of June 30, 2013*	30 years
Asset valuation method	4-year smoothed market
Actuarial assumptions:	
Investment rate of return **	7.75%
Projected salary increases **	
Police and Fire Employees	5.0% to 19.0%
General Employees	4.0% to 8.0%
Teachers	5.0% to 8.5%
Cost-of-living adjustments (COLAs) ***	2.5% (not compounded)

* Remaining amortization period for Annual Required Contribution is 30 years.

** Includes inflation at 3.0%

*** COLAs are not compounded; they are based on original pension amount.

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 were modified.
- The rates of mortality for active employees were increased.
- The rates of disability for active employees were modified.
- The rates of retirement for most employees were modified.
- The rates of termination for both males and females for each of the groups were modified.

Supplementary Information (continued)

Schedule 1

Combining Schedule of Changes in Net Position – All Trust Funds

Year ended June 30, 2013

	2013			Total
	Pension Accumulation Fund	Annuity Savings Fund	Expense Fund	
Additions				
Appropriations and contributions:				
Employers	\$ 581,447,213	\$ -	\$ -	\$ 581,447,213
Members	-	185,837,186	-	185,837,186
Net investment gain	1,331,208,154	-	-	1,331,208,154
Total additions	1,912,655,367	185,837,186	-	2,098,492,553
Deductions				
Benefit payments	1,060,561,148	-	-	1,060,561,148
Refunds of member contributions	-	7,204,411	-	7,204,411
Administrative expenses	-	-	11,941,446	11,941,446
Total deductions	1,060,561,148	7,204,411	11,941,446	1,079,707,005
Other changes in net position restricted for pension benefits:				
Transfer due to retirement of members	115,729,429	(115,729,429)	-	-
Transfer of interest allocation	(87,209,348)	87,209,348	-	-
Transfer to pay administrative expenses	(16,598,987)	-	16,598,987	-
Return of unrequired funds due to savings in administrative expenses	-	-	-	-
	<u>11,921,094</u>	<u>(28,520,081)</u>	<u>16,598,987</u>	<u>-</u>
Net increase	864,015,313	150,112,694	4,657,541	1,018,785,548
Net position restricted for pension benefits:				
Beginning of year	<u>9,490,402,585</u>	<u>1,793,095,822</u>	<u>9,543,994</u>	<u>11,293,042,401</u>
End of year	<u>\$ 10,354,417,898</u>	<u>\$ 1,943,208,516</u>	<u>\$ 14,201,535</u>	<u>\$ 12,311,827,949</u>

See accompanying independent auditors' report.

Supplementary Information
Schedule 2

Social Security Contribution Fund

Statement of Changes in Assets and Liabilities

Year ended June 30, 2013

		2013			
		<u>Beginning Balance</u>	<u>Additions</u>	<u>Deductions</u>	<u>Ending Balance</u>
Assets					
Cash		\$ -	\$ -	\$ -	\$ -
Total assets		<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Liabilities					
Due to employers		\$ -	\$ 196,507,139	\$ 196,507,139	\$ -
Total liabilities		<u>\$ -</u>	<u>\$ 196,507,139</u>	<u>\$ 196,507,139</u>	<u>\$ -</u>

Supplementary Information (continued)
Schedule 3

Schedule of Administrative Expenses

Year ended June 30, 2013

	<u>2013</u>
Personnel services	
Salaries and wages	\$ 4,610,238
Fringe benefits	1,743,839
Net change in unused vacation credits	2,031
Total personnel services	<u>6,356,108</u>
Professional services	
Actuarial	115,406
Auditing and tax consulting	423,085
Disability hearing expenses	96,466
Legal services	369,111
Medical	385,694
Other services	322,088
Total professional services	<u>1,711,850</u>
Communication	
Postage	165,053
Printing and binding	124,391
Telephone	70,338
Travel	47,662
Total communication	<u>407,444</u>
Rentals	
Rental of equipment	65,305
Rental of premises	17,052
Total rentals	<u>82,357</u>
Other	
Armored car service	5,521
Computer and office automation systems	992
Repairs and maintenance	1,188,436
Stationery and office supplies	29,608
Miscellaneous	41,659
Total other	<u>1,266,216</u>
Depreciation	<u>2,117,471</u>
	<u>\$ 11,941,446</u>

See accompanying independent auditors' report.

Schedule 4

Schedule of Investment Expenses

Year ended June 30, 2013

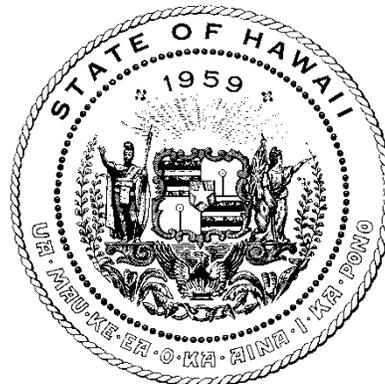
	<u>2013</u>
Real estate and alternative investment expenses	
Operating expenses	\$ 50,636,478
Mortgage interest	11,389,441
	<u>62,025,919</u>
Investment expenses	
Investment manager/advisor fees	\$ 36,902,783
Bank custodian fees	100,000
Other investment expenses	920,903
	<u>37,923,686</u>
Securities lending expenses	
Borrower rebates	(851,628)
Management fees	584,344
	<u>(267,284)</u>
	<u>\$ 99,682,321</u>

See accompanying independent auditors' report.

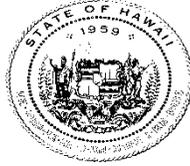


Employees' Retirement System

of the State of Hawaii



**INVESTMENT
SECTION**

*Letter from Chief Investment Officer*DAVID Y. IGE
GOVERNOR**STATE OF HAWAII**
EMPLOYEES' RETIREMENT SYSTEM

December 19, 2014

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, 2013.

- ERS Plan assets were valued at \$12.3 billion as of June 30, 2013. The ERS was ranked as the 54th largest US public pension plans by Pensions & Investments, and number 123 when including US corporate pension plans.
- The ERS investment portfolio underperformed its five year policy benchmark by 0.2%, but ended the up 12.6% for the fiscal year and outperformed its policy benchmark by 1.0% over that period.

PAST AND CURRENT PORTFOLIO

Following a weak previous fiscal year (negative 0.1% return), fiscal year 2013 enjoyed a bounce back for the portfolio and markets. All major equity classes were in positive territory, with especially robust gains in US markets large cap core, large cap value, and small cap. The portfolio was rebalanced to conform to long-term asset allocation targets in March 2013, ahead of the targeted time table.

STRENGTHENING MARKETS

While economic conditions were marginally benign with low inflation, modest growth and improving employment, corporate profit margins continued to expand and central banks led by the US Federal Reserve provided accommodative monetary policy through low interest rates and a generous bond buying program. The results were strong gains for risk assets such as US equities, high yield bonds, and private equity. Periodic spikes in volatility centered on discussions of tapering of the Fed bond buying program late in the fiscal year and over concerns for slowing economic growth in China. The overall trend was a continuing improvement of financial conditions since the great financial crisis.

*Letter from Chief Investment Officer (continued)***CONTINUITY, CHANGE, AND STABILITY**

While the portfolio of managers remained mostly unchanged for the fiscal-year, there was change in the investment program. As was reported in the previous year, the Chief Investment Officer (“CIO”) resigned effective five days into fiscal-year 2013. I served as interim CIO for a period of four months while the Board of Trustees conducted a national search for a replacement, assisted by a professional executive recruitment firm. During this time, the business of the investment program continued with the successful staging of the annual Investment Summit and Real Estate Symposium, and the search and selection of replacement large-cap equity managers through an RFP process. After an extensive this time, the business of the investment program continued with the successful staging of the annual Investment Summit and Real Estate Symposium, and the search and selection of replacement large-cap equity managers through an RFP process. After an extensive search process the Trustees appointed Vijoy Paul Chattergy as the fourth CIO for the Employees’ Retirement System of the State of Hawaii (“ERS”) on November 1, 2012. In the second half of that fiscal-year, he oversaw the selection of a private equity consultant and assisted in replacement the custodial bank. The key changes in service providers worked in concert with ongoing relationships with the general and real estate consultants search process the Trustees appointed Vijoy Paul Chattergy as the fourth CIO for the Employees’ Retirement System of the State of Hawaii (“ERS”) on November 1, 2012. In the second half of that fiscal-year, he oversaw the selection of a private equity consultant and assisted in replacement the custodial bank. The key changes in service providers worked in concert with ongoing relationships with the general and real estate consultants.

Throughout the year, the Board of Trustees remained focused on increasing support and resources for the Investment Office. Having selected the new CIO, the effort to staff the office with other investment professionals began. Searches for two Investment Specialist staff were well underway by the year-end. Additionally, the Administrator, Wesley K. Machida, made the case to the state legislature to add three Investment Officers. If approved, it would be the first time that the assets of the ERS would be managed by more than a couple of investment professionals. Such staffing will provide for increased monitoring of investments, varied sourcing of investment opportunities, and closer scrutiny of portfolio risks. Overall, a more fully staffed Investment Office will create the opportunity for better returns that contribute to the sustainability of the plan.

Respectfully yours,

Respectfully yours,

Vijoy Chattergy

Vijoy P. Chattergy
Chief Investment Officer

**MEMORANDUM**

September 19, 2014

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 for periods ending June 30, 2013, as requested by the Government Financial Officers' Association (GFOA).

Hawaii ERS-Total Fund Performance

The total assets of the Retirement System were \$12.3 billion as of June 30, 2013, an increase of roughly \$1.0 billion for the fiscal year. The portfolio generated mixed absolute and relative performance results across the major strategic classes. The increase in assets was primarily due to strong absolute performance within the public equity, real estate, and private equity strategic classes. The investment return for the Total Fund, expressed as a time-weighted total rate of return, was +12.6% for the 2013 fiscal year, compared to the benchmark's return of +11.6%. For the three-year period ending June 30, 2013, the Total Fund returned +10.9% per annum versus the benchmark's return of +11.7% and the Northern Trust Public Funds Greater than \$1 Billion Database peer median return of +11.9%. For the trailing five-year period ending June 30, 2013, the Total Fund returned +4.7% per annum versus the benchmark's return of +5.0% and the Northern Trust Public Funds Greater than \$1 Billion Database peer median return of +5.0%.

Strategic Class Performance

Domestic Equity¹ returned +21.2% for the 2013 fiscal year versus the Domestic Equity Blended Index's return of +21.5% and the Northern Trust Domestic Equity Database peer median return of +22.2%. Diversified Fixed Income posted a +1.7% return for the fiscal year versus the Diversified Fixed Income Blended Index's return of +0.7% and the Northern Trust Fixed Income Database peer median return of +0.4%. International Equity¹ posted a +12.6% return for the fiscal year versus the International Equity Blended Index's return of +13.6% and the Northern Trust International Equity Database peer median return of +15.8%. International Fixed Income returned +9.3% for the fiscal year versus the International Fixed Income Blended Index's return of +3.5% and the Northern Trust International Fixed Income Database peer median return of +2.2%. Real Estate returned +20.8% for the year ending June 30, 2013, versus the NCREIF Total Index's return of +10.5%. Additional strategic classes and their fiscal year returns include; Private Equity at +8.9%, Real Return at +0.3%, and Covered Calls at +6.6%.

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

Letter from Investment Consultant (continued)**Market Conditions (continued)**

The market backdrop for fiscal year 2013 was characterized by marginally improving economic fundamentals, historically high corporate profit margins, and continued monetary easing by global central banks. While fiscal year 2012 saw investors oscillate rapidly between risk-aversion and risk-seeking tendencies, fiscal year 2013 was consistently accommodative for nearly all risky assets. The end result was a fiscal year in which developed public equities, high yield bonds, and private markets all produced strong positive returns. Traditional fixed income returns varied between marginally negative and marginally positive, and the asset class as a whole demonstrated its significant dependence on quantitative easing when even the mention of tapering the QE program sent yields spiking. Inflation remained muted throughout the fiscal year, with commodities producing moderately negative returns. The level of synchronization amongst domestic and developed non-U.S. equity markets has varied since the global financial crisis, and although the two dramatically decoupled during fiscal year 2012, they tended to once again have a positive correlation during fiscal year 2013.

During fiscal year 2013, equities within the U.S., as measured by the Russell 3000 Index, advanced by +21.5%, while non-U.S. equities, as measured by the MSCI ACWI ex U.S. Index, advanced by +14.1%. In regard to the U.S., economic data such as unemployment and company profitability continued to modestly improve throughout the fiscal year, and the Federal Reserve remained extremely accommodative through additional monetary stimulus – resulting in an environment suitable for stock price appreciation. That being said, non-U.S. equities experienced lesser returns due to a slightly less favorable environment; in particular, marginally slower growth rates and less central bank stimulus.

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

Throughout the fiscal year, bond markets were effectively at the whim of central banks' actions. While below investment-grade bonds produced strong positive returns, the majority of the fixed income markets generated marginal returns, either positive or negative. Additionally, volatility within the fixed income markets increased dramatically at the end of the period due to verbiage regarding the eventual tapering of quantitative easing. Overall, investment-grade bonds, as measured by the Barclays Capital Aggregate Bond Index, returned minus (0.7%). Government bonds produced a return of minus (1.5%), mortgage-backed bonds generated a minus (1.1%) return, investment-grade corporate bonds rose by +0.8%, and high-yield corporate bonds returned +9.5%.

For fiscal year 2013, public equities, high yield bonds, and private markets provided investors with positive absolute returns, while investment-grade fixed income markets were roughly flat in aggregate. 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 Retirement System for competitive long-term performance consistent with its objectives.

Sincerely,

Pension Consulting Alliance, Inc.

Report on Investment Activity by Investment Consultant


**Report on Investment Activity for the
Employees' Retirement System of the State of Hawaii**

Prepared by Pension Consulting Alliance, Inc.

December 2013

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 at least every three 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.

Strategic Asset Allocation Policy (as of 6/30/2013)

During the 2013 fiscal year, the Plan was strategically invested in the following asset classes:

Strategic Allocation

Domestic Equity	30%
International Equity	26%
Total Fixed-Income	21%
Real Estate	7% *
Private Equity	6% *
Real Return	5% *
Covered Calls	5%

* The Real Estate, Private Equity, and Real Return targets were the percentages actually invested up to 7%, 6%, 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.

Report on Investment Activity by Investment Consultant (continued)


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.

Expected Annualized Return and Risk

Based on PCA's 2013 capital market projections for 10 years, the target allocation is expected to achieve an arithmetic average return of 7.9% (4.9% real return with expected inflation of 3.0%). The annual nominal return over this 10-year period is expected to fall within a range of minus (3.2%) and 18.9% 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%

Report on Investment Activity by Investment Consultant



Manager Evaluation

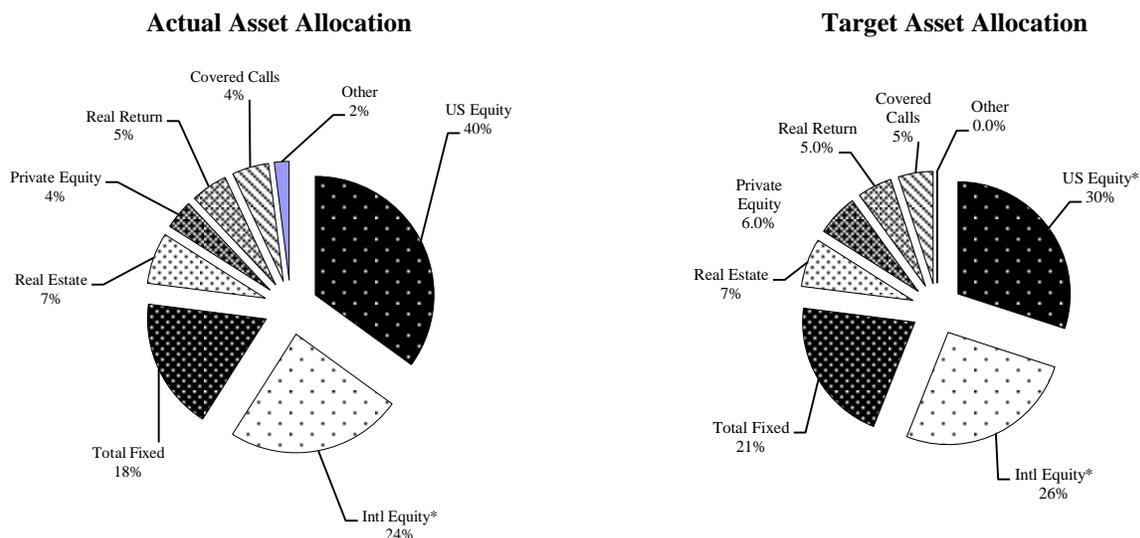
Individual Domestic and International Equity and Fixed Income managers are measured against relevant indices and their respective peer groups of managers. Market indices and peer group benchmarks are assigned to each manager and are intended as a guide for the investment manager to understand the risk/reward posture of their portfolio. Real Estate managers are measured against the median performance of the Northern Trust Real Estate Database and the NCREIF Total Index. 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, the 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 year 2012. Further revisions to the Manual occurred during fiscal year 2013 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, 2013:



Report on Investment Activity by Investment Consultant (continued)



Investment Results as of June 30, 2013:

	Year Ended June 30,					3 Years	5 Years
	2013	2012	2011	2010	2009	Ended 6/2013	Ended 6/2013
Domestic Equity	21.16%	1.08%	31.83%	15.33%	(27.34%)	17.31%	6.23%
Domestic Equity Blended Index ¹	21.46%	3.84%	32.37%	15.72%	(25.83%)	18.63%	7.46%
NT Total Domestic Equity**	22.16%	1.38%	33.22%	16.46%	(26.16%)	18.32%	7.43%
Diversified Fixed-Income	1.72%	7.51%	5.51%	13.63%	5.80%	4.88%	6.76%
Diversified Fixed Income Blended Index ²	0.72%	7.19%	4.20%	9.99%	5.35%	4.00%	5.44%
NT Domestic Fixed**	0.41%	8.10%	5.90%	13.78%	4.69%	4.95%	6.95%
International Equity	12.64%	(14.36%)	30.24%	11.28%	(31.45%)	7.90%	(0.85%)
International Equity Blended Index ³	13.63%	(14.36%)	30.07%	8.41%	(30.76%)	8.18%	(1.02%)
NT Non-U.S. Equity**	15.77%	(13.10%)	29.81%	11.62%	(29.96%)	9.31%	0.31%
International Fixed-Income	9.26%	3.42%	4.12%	4.01%	9.82%	5.57%	6.09%
International Fixed Blended Index ⁴	3.47%	6.22%	0.91%	6.62%	7.60%	3.51%	4.94%
NT Non-U.S. Fixed**	2.23%	6.56%	12.70%	18.50%	2.28%	8.66%	8.61%
Covered Calls***	6.57%	---	---	---	---	---	---
Covered Calls Index ⁵	5.29%	---	---	---	---	---	---
Real Estate***	20.77%	15.99%	21.41%	0.99%	(26.74%)	19.36%	4.70%
NCREIF Total Property Index***	10.52%	13.41%	16.03%	(9.59%)	(14.67%)	13.30%	2.33%
NT Real Estate Funds**	10.80%	9.45%	17.06%	(10.22%)	(27.81%)	14.03%	(1.49%)
Private Equity***	8.91%	11.87%	16.46%	7.54%	(11.19%)	12.37%	6.27%
Real Return	0.34%	5.48%	(0.73%)	---	---	1.66%	---
Total Fund	12.57%	(0.14%)	21.25%	11.96%	(17.54%)	10.87%	4.70%
Composite Benchmark ⁶	11.61%	2.70%	21.47%	10.31%	(16.94%)	11.66%	4.99%
NT Public Funds > \$1 Billion**	12.65%	1.35%	22.47%	13.78%	(18.37%)	11.91%	4.99%

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

** Universe data provided by Northern Trust: Public Funds (DB) > \$1 Billion, Median Results.

*** 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.

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 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
 Mellon Capital Management Corporation
 Mercator Asset Management
 Quantitative Management Associates (QMA)
 Research Affiliates

PRIVATE EQUITY

Abbott Capital Management, LLC
 GK Macquarie Newport

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

Bishop Street Capital Management
 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

Northern Trust Company

INVESTMENT ADVISOR

Pension Consulting Alliance, Inc.
 Courtland Partners
 Hamilton Lane Advisors, LLC.

Investment Schedules
List of Assets Directly Held (by fair value)*

as of June 30, 2013 (excludes investments in pooled vehicles and index funds)

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

	<u>Par / Shares</u>	<u>Security</u>	<u>Coupon</u>	<u>Maturity</u>	<u>Standard & Poors</u>	<u>Fair Value</u>
Domestic Fixed Income						
1	84,600,000	FNMA Single Family Mtg (Settles July)	4.000%		Agency	\$ 88,132,727
2	37,900,000	U.S. Treasury Notes	0.250%	4/15/2016	Aaa	37,535,819
3	33,690,000	U.S. Treasury Notes	1.000%	5/31/2018	Agency	33,110,936
4	31,000,000	FNMA Single Family Mtg (Settles August)	4.000%		Aaa	32,226,670
5	25,900,000	U.S. Treasury Notes	2.000%	2/15/2023	Aaa	24,926,730
6	22,052,100	U.S. Treasury Notes TIPS	TIPS	4/15/2016	Aaa	23,830,600
7	22,772,000	U.S. Treasury Notes TIPS	TIPS	1/15/2023	Aaa	22,245,756
8	19,600,000	U.S. Treasury Notes	1.625%	11/15/2022	Agency	18,296,914
9	18,000,000	FNMA Single Family Mtg 15 years (Settles July)	2.500%		Aaa	18,104,058
10	20,820,000	U.S. Treasury Bonds	2.750%	8/15/1942	Agency	17,970,263
International Fixed Income						
			1.375%	5/31/2020	Aaa	16,917,817
1	16,772,000	Republic of Italy	3.500%	11/1/2017	Baa2	21,994,319
2	73,974,000	Republic of Poland	0.000%	7/25/2014	A2	21,612,528
3	68,188,000	Republic of Poland	5.750%	4/25/2014	A2	20,939,356
4	191,480,000	Euro Investment Bank Notes	9.000%	12/21/2018	Aaa	20,810,565
5	19,055,000	Euro Investment Bank Bonds	6.500%	8/7/2019	Aaa	19,186,630
6	19,867,000	Kreditanst Fur Wie	6.000%	8/28/2014	Aaa	18,827,380
7	1,559,000,000	Caisse Francaise	1.800%	5/9/2017	Aaa	16,194,312
8	19,891,000	Euro Investment Bank Notes	6.500%	9/10/2014	Aaa	15,956,322
9	8,033,748	Government of France	2.250%	7/25/2020	Aa1	14,472,629
10	10,096,000	Europ Fin Stab Fac	0.500%	3/7/2016	Aa1	13,077,998
Domestic Equities						
1	64,137	Google Class A				56,464,291
2	1,148,760	Wells Fargo & CO New Common				47,409,325
3	1,992,860	General Electric Common				46,214,423
4	835,542	JPMorgan Chase Common				44,108,262
5	235,176	Visa Common Class A				42,978,414
6	1,157,250	AT&T Common				40,966,650
7	1,143,730	Microsoft Common				39,492,997
8	139,643	Amazon Common				38,777,465
9	93,342	Applie Common				36,970,899
10	371,650	Occidental Petroleum Common				33,162,330
International Equities						
1	136,693	Roche Holdings AG Genusscheine				33,951,123
2	20,794	Samsung Electronic				24,434,611
3	339,600	Deutsche Boerse AG				22,323,069
4	992,120	Burberry Group				20,329,150
5	281,650	Novartis AG				19,974,333
6	6,430,586	Vodafone Group				18,321,516
7	1,065,686	WPP PLC				18,135,176
8	25,402,000	China Construction Bank				17,979,717
9	1,664,000	China Mobile Ltd				17,377,246
10	212,655	ASML Holding NV				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	Percentage
	June 30, 2013	
Equity securities		
Common stock	\$ 5,256,538	43.05%
Pooled and others	2,545,340	20.85%
	<u>7,801,878</u>	<u>63.90%</u>
Fixed income securities		
Mortgage-backed securities	120,270	0.98%
Corporate	823,864	6.75%
Government	1,615,453	13.23%
Asset backed securities	42,252	0.35%
Pooled and others	28,864	0.23%
	<u>2,630,703</u>	<u>21.54%</u>
Others		
Real estate investments	1,153,657	9.45%
Alternative investments	624,111	5.11%
	<u>1,777,768</u>	<u>14.56%</u>
Total, investments at fair value	<u>\$ 12,210,349</u>	<u>100.00%</u>

Schedule of Investment Fees*by Asset Class Allocation**(Dollar values expressed in thousands)*

	Fair value as of	Total FY 2013	Basis
	June 30, 2013	Investment Fees	Points
Equities			
U.S. equities	\$ 3,700,224	\$ 9,223	25 bp
International equities	3,637,876	8,422	23
	<u>7,338,100</u>	<u>17,645</u>	<u>24</u>
Fixed Income			
Diversified fixed income	1,821,540	4,360	24
Non U.S. fixed income	446,688	848	19
	<u>2,268,228</u>	<u>5,208</u>	<u>23</u>
Other Asset Allocations			
Real estate	922,790	8,818	96
Real return	574,159	1,872	33
Covered calls	582,920	1,058	18
Other assets	159,444	-	-
Private equity	464,874	1,289	28
	<u>2,704,187</u>	<u>13,037</u>	<u>48</u>
Other Investment Services			
Custodian fees	0	100	n/a
Investment consultant fees	0	1,013	n/a
Total	<u>\$ 12,310,515</u>	<u>\$ 37,003</u>	<u>30</u>

*Investment Schedules (continued)***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. Domestic and international 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, 2013 the ERS recaptured \$674,812 in commissions.

The following is a list of brokers who received \$40,000 or more in commissions during Fiscal Year 2013. A complete list of all commissions is available for review upon request.

Brokerage Firms	Shares Traded	Dollar Volume of Trades	Commission	
			Dollar Amount	Per Share
ABG SECURITIES LIMITED	45,000	\$ 735,283	\$ 1,175	\$ 0.026
ALLEN & CO INC	11,967	222,983	390	0.033
AQUA SECURITIES	10,600	353,392	212	0.020
AVONDALE PARTNERS, LLC	4,100	50,590	164	0.040
BANCO BILBAO VIZCAYA ARGENTARIA S.A	1,355,138	7,707,468	12,325	0.009
BANCO SANTANDER S.A. NEW YORK	1,202,250	985,266	1,377	0.001
BARCLAYS CAPITAL	7,821,515	30,142,823	30,085	0.004
BARCLAYS CAPITAL INC	1,284,329	39,038,480	25,283	0.020
BARCLAYS CAPITAL SEC SEOUL BRANCH	38,354	1,965,523	1,181	0.031
BARCLAYS CAPITAL SECURITIES TAIWAN	393,000	3,578,081	2,151	0.005
BARCLAYS SECURITIES (INDIA) PVT LTD	4,319,464	19,421,100	11,671	0.003
BAY CREST PARTNERS LLC	6,058	101,095	224	0.037
BLOOMBERG TRADEBOOK LLC	570,311	25,444,217	10,348	0.018
BMO CAPITAL MARKETS CORP	105,305	4,597,926	3,545	0.034
BNP PARIBAS SECURITIES CORPORATION	600,000	630,810	-	-
BNP PARIBAS SECURITIES SERVICES, UN	312,687	14,942,906	8,604	0.028
BNY BROKERAGE INC	3,934,783	35,407,141	31,578	0.008
BNY CONVERGEX EXECUTION SOLUTIONS	11,931,752	525,407,958	199,009	0.017
BRADESCO S/A CTVM	334,450	1,262,155	2,294	0.007
BROADCORT CAPITAL (THRU ML)	154,000	4,034,384	5,090	0.033
BUCKINGHAM RESEARCH	40,550	1,715,007	1,228	0.030
CANACCORD ADAMS INC.	221,140	3,381,919	8,194	0.037
CANTOR FITZGERALD AND CO. INC.	442,594	23,415,381	13,232	0.030
CANTOR FITZGERALD EUROPE	80,000	1,060,740	738	0.009
CAPITAL INSTITUTIONAL SERV NEW YORK	11,145,311	119,649,976	75,930	0.007
CARNEGIE A.S.	63,462	1,605,465	2,573	0.041
CELFIN CAP SA CORREDORES DE BOLSA	207,211	968,136	581	0.003
CELFIN S.A.	16,049	163,914	411	0.026
CHICAGO MUTUAL FUNDS	118,579	1,200,000	15	0.000
CIMB SECURITIES (THAILAND) CO., LTD	3,357,875	2,239,837	5,585	0.002
CITIBANK N.A.	18,260	1,660,122	1,662	0.091
CITIGROUP GLOBAL MARKETS INC.	35,424,429	90,999,298	58,335	0.002
CITIGROUP GLOBAL MARKETS LIMITED	3,209,664	23860887	27,650	0.009
CITIGROUP GLOBAL MARKETS UK EQUITY	306,450	4574159	6,858	0.022
CITIGROUP GLOBAL MKTS INDIA PTE LTD	1,616,436	10370221	6,222	0.004
Amounts carried forward	90,703,073	1,002,894,643	555,920	

*Investment Schedules (continued)***Schedule of Broker Commissions (continued)**

Brokerage Firms	Shares Traded	Dollar Volume of Trades	Commission	
			Dollar Amount	Per Share
Amounts brought forward	90,703,073	\$ 1,002,894,643	\$ 555,920	
CITITRUST SA, COLOMBIA	48,000	654,146	392	\$ 0.008
CL KING & ASSOCIATES NEW YORK	42,000	1,616,178	636	\$ 0.015
CLEARVIEW CORRESPONDENT SERV LLC	190,816	6,993,557	5,824	\$ 0.031
CLSA AUSTRALIA PTY LTD	61,400	2,044,336	4,097	\$ 0.067
CLSA LIMITED	1,503,550	5,586,987	9,531	\$ 0.006
CLSA SECURITIES KOREA LTD.	2,800	700,224	839	\$ 0.300
CLSA SINGAPORE PTE LTD.	7,224,447	18,247,325	28,523	\$ 0.004
COLLINS STEWART	16,500	1,214,497	544	\$ 0.033
CONCORDIA SA CVMCC	549,100	5,154,898	5,148	\$ 0.009
COWEN AND COMPANY, LLC	333,517	13,476,301	11,507	\$ 0.035
CRAIG-HALLUM CAPITAL GROUP LLC.	4,300	50,622	172	\$ 0.040
CREDIT AGRIC CHEUV NOR AKTIEBOLAG	30,000	2,131,270	3,195	\$ 0.107
CREDIT AGRICOLE CHEUVREUX	400,968	10,056,354	15,372	\$ 0.038
CREDIT AGRICOLE CIB	254,921	11,882,160	7,748	\$ 0.030
CREDIT AGRICOLE SECURITIES, INC.	48,000	1,997,062	240	\$ 0.005
CREDIT RESEARCH & TRADING CORP NY	13,231	633,382	490	\$ 0.037
CREDIT SUISSE (HONG KONG) LIMITED	104,200	2,289,466	4,576	\$ 0.044
CREDIT SUISSE AG, NEW YORK BRANCH	1,357,350	55,828,957	36,009	\$ 0.027
CREDIT SUISSE SECURITIES (USA) LLC	132,388	1,827,850	3,663	\$ 0.028
CREDIT SUISSE SECURITIES(EUROPE)LTD	878,221	31,316,727	46,295	\$ 0.053
CRT CAPITAL GROUP	164,103	2,476,998	6,072	\$ 0.037
D. CARNEGIE AB, FINLAND BRANCH	20,000	192,481	307	\$ 0.015
D.A. DAVIDSON AND CO	1,500	19,004	60	\$ 0.040
DAEWOO SECURITIES CO., LTD.	9,200	2,543,743	5,837	\$ 0.634
DAHLMAN ROSE & COMPANY	14,566	108,934	542	\$ 0.037
DAIWA CAPITAL MARKETS AMERICA INC.	961,550	7,671,308	9,203	\$ 0.010
DAIWA CAPITAL MARKETS HK LTD	606,600	1,112,271	1,953	\$ 0.003
DANSKE BANK A/S	15,950	168,570	269	\$ 0.017
DBS VICKERS SECURITY PTE	181,100	270,707	606	\$ 0.003
DEPOSITORY CLEARING COMPANY	1,716,191	1,054,754	1,895	\$ 0.001
DERIVATIVES	68,657	259,519,716	140,795	\$ 2.051
DEUTSCHE BANK AG	3,321,033	17,355,229	11,679	\$ 0.004
DEUTSCHE BANK SECURITIES INC.	57,095,989	556,995,402	114,000	\$ 0.002
DEUTSCHE EQUITIES INDIA PVT, INDIA	1,535,924	9,875,852	5,920	\$ 0.004
DEUTSCHE SECURITIES ASIA LIMITED	3,212,675	23,582,051	16,879	\$ 0.005
DEUTSCHE SECURITIES AUSTRALIA LTD	1,800	117,622	236	\$ 0.131
DIRECT ACCESS PARTNERS LLC	15,225,447	417,926,572	478,153	\$ 0.031
DOWLING PARTNERS	46,939	1,318,249	1,737	\$ 0.037
DSP MERRILL LYNCH LIMITED	32,960	39,990	60	\$ 0.002
EXANE S.A.	167,531	3,933,550	5,926	\$ 0.035
FIDELITY CAP MKTS NEW YORK-DTC00226	75,176	2,814,526	2,782	\$ 0.037
FIRST ANALYSIS NEW YORK	9,300	168,082	372	\$ 0.040
Amounts carried forward	188,382,973	2,485,862,553	1,546,004	

*Investment Schedules (continued)***Schedule of Broker Commissions (continued)**

Brokerage Firms	Shares Traded	Dollar Volume of Trades	Commission	
			Dollar Amount	Per Share
Amounts brought forward	188,382,973	\$ 2,485,862,553	\$ 1,546,004	
FLEET SECURITIES	9,515	188,228	352	\$ 0.037
FRIEDMAN, BILLINGS, RAMSEY INTL LTD	78,892	1,214,571	2,663	\$ 0.034
GFI SECURITIES	2,681	204,345	99	\$ 0.037
GOLDMAN SACHS BANK USA.	57,700	3,004,248	4,507	\$ 0.078
GOLDMAN SACHS INTERNATIONAL	913,159	13,153,152	11,316	\$ 0.012
GOLDMAN SACHS SECURITIES (INDIA) PR	174,553	2,632,520	1,581	\$ 0.009
GOLDMAN, SACHS AND CO.	12,801,304	149,709,213	106,110	\$ 0.008
GOODBODY STOCKBROKERS	59,300	1,049,342	1,564	\$ 0.026
GORDON,HASKETT CAPITAL CORPORATION	400	8,587	8	\$ 0.020
GUGGENHEIM CAPITAL, LLC	3,102	173,868	115	\$ 0.037
HSBC (GLBL MRKTS EQUITIES OPERATION	11,184,800	12,716,295	10,021	\$ 0.001
HSBC BANK BRASIL S.A. - BANCO MULTI	714,200	6,470,324	4,016	\$ 0.006
HSBC BANK PLC	22,703,474	21,021,798	23,247	\$ 0.001
HSBC BANK USA, N.A	400	1,011,410	1,519	\$ 3.798
HSBC BROKERAGE (USA) INC	27,100	273,381	271	\$ 0.010
HSBC MEXICO, S.A. INSTITUCION DE BA	922,975	2,362,452	1,676	\$ 0.002
HSBC SECURITIES	8,145,000	14,388,520	15,384	\$ 0.002
HSBC SECURITIES (USA) INC.	4,364,795	33,275,703	11,881	\$ 0.003
HSBC SECURITIES AND CAP MKTS (IND)	7,030,401	20,526,802	23,614	\$ 0.003
IM TRUST S.A. CORREDORES DE BOLSA	2,268,265	531,633	319	\$ 0.000
ING BANK N.V., LONDON BRANCH	140,154	2,084,520	3,334	\$ 0.024
INSTINET AUSTRALIA PTY LTD	3,600	253,261	438	\$ 0.122
INSTINET CLEARING SERVICES, INC.	3,109,453	25,602,138	22,139	\$ 0.007
INSTINET EUROPE LIMITED	1,858,506	12,399,188	13,436	\$ 0.007
INSTINET INVESTMENT SERVICES LIMITE	2,415,869	85,567,769	24,843	\$ 0.010
INSTINET PACIFIC LIMITED	6,644,177	14,261,049	14,356	\$ 0.002
INTERMONTE SIM S.P.A.	5,106,200	6,777,129	10,826	\$ 0.002
INVESTMENT TECHNOLOGY GROUP INC.	9,798,399	447,412,547	104,139	\$ 0.011
INVESTMENT TECHNOLOGY GROUP LTD.	1,994,113	62,121,643	73,221	\$ 0.037
ISI GROUP INC.	267,065	10,199,348	9,392	\$ 0.035
ITG AUSTRALIA LIMITED	5,743	325,927	130	\$ 0.023
ITG CANADA CORP.	13,700	820,164	133	\$ 0.010
ITG INC.	2,865,004	142,493,564	24,874	\$ 0.009
IVY SECURITIES	500	37,373	10	\$ 0.020
J P MORGAN SECS S'PORE PRIVATE LTD	1,102,300	2,720,259	1,632	\$ 0.001
J.P. MORGAN CLEARING CORP.	22,859,536	1,028,881,155	232,264	\$ 0.010
J.P. MORGAN INDIA PRIVATE LIMITED	1,345,945	7,137,036	4,282	\$ 0.003
J.P. MORGAN SECURITIES (FAR EAST) L	116,314	6,691,282	4,023	\$ 0.035
J.P. MORGAN SECURITIES LLC	5,532,038	38,534,611	27,203	\$ 0.005
J.P. MORGAN SECURITIES PLC	12,979,043	211,484,717	88,268	\$ 0.007
JACKSON PARTNERS AND ASSOCIATES	12,800	706,535	384	\$ 0.030
JANNEY MONTGOMERY SCOTT NEW YORK	78,016	1,683,848	2,862	\$ 0.037
Amounts carried forward	338,093,464	4,877,974,008	2,428,456	

Schedule of Broker Commissions (continued)

Brokerage Firms	Shares Traded	Dollar Volume of Trades	Commission	
			Dollar Amount	Per Share
Amounts brought forward	338,093,464	\$ 4,877,974,008	\$ 2,428,456	
JEFFERIES AND COMPANY, INC.	505,453	17,166,475	16,053	\$ 0.032
JEFFERIES INTERNATIONAL LTD	636,025	19,085,305	28,091	\$ 0.044
JOH. BERENBERG,GOSSLER UND CO.KG	80,763	2,999,873	2,717	\$ 0.034
JOHNSON RICE NEW YORK	4,000	25,136	120	\$ 0.030
JONES TRADING INSTITUTIONAL SERVICE	188,669	10,898,247	4,822	\$ 0.026
JP MORGAN SECURITIES (TAIWAN) LTD	7,765,000	11,978,568	7,196	\$ 0.001
JP MORGAN SECURITIES AUSTRALIA LTD	605,750	23,914,516	12,320	\$ 0.020
JPMORGAN CHASE BANK, N.A.	20,000	1,110,571	1,663	\$ 0.083
JPMORGAN SECURITIES (ASIA PACIFIC)	34,303,990	70,167,534	34,926	\$ 0.001
KEEFE BRUYETTE	51,892	1,041,077	1,985	\$ 0.038
KEEFE, BRUYETTE AND WOODS LIMITED	2,127	70,327	81	\$ 0.038
KEMPEN AND CO N.V.	30,000	2,110,207	3,170	\$ 0.106
KEYBANC CAPITAL MARKETS INC.	15,743	127,004	582	\$ 0.037
KEYBANK NATIONAL ASSOCIATION	212,035	8,369,435	6,828	\$ 0.032
KINNARD JOHN.G & CO NEW YORK	18,600	168,673	667	\$ 0.036
KNIGHT CAPITAL AMERICAS LLC	3,646,626	128,287,967	126,348	\$ 0.035
LADENBURG THALMANN NEW YORK	21,122	336,459	782	\$ 0.037
LARRAIN VIAL	169,505	848,175	2,127	\$ 0.013
LAZARD FRERES AND CO.LLC	81,081	2,388,718	2,900	\$ 0.036
LEERINK SWAN & COMPANY	400	34,346	12	\$ 0.030
LIBERUM CAPITAL LIMITED	40,000	1,779,230	2,665	\$ 0.067
LINK S/A CCTVM	859,662	11,853,636	12,018	\$ 0.014
LONGBOW SECURITIES	42,950	1,233,097	1,289	\$ 0.030
LYNCH, JONES AND RYAN	27,983,533	1,038,857,834	752,431	\$ 0.027
MACQUARIE BANK LIMITED	12,138,400	21,606,192	25,786	\$ 0.002
MACQUARIE CAPITAL (USA) INC	108,867	1,900,589	3,684	\$ 0.034
MACQUARIE CAPITAL SECURITIES (SINGA	32,500	212,303	532	\$ 0.016
MACQUARIE CAPITAL SECURITIES LIMITE	1,704,000	899,137	897	\$ 0.001
MACQUARIE SECURITIES USA INC	54,317	1,887,155	1,836	\$ 0.034
MAINFIRST BANK AG	6,802	265,691	133	\$ 0.020
MCDONALD CO.,SECURITIES,INC.	70,493	1,360,535	2,614	\$ 0.037
MERRILL LYNCH AND CO., INC.	2,358,279	88,170,491	49,314	\$ 0.021
MERRILL LYNCH CANADA, INC	241,920	3,639,911	5,098	\$ 0.021
MERRILL LYNCH INTERNATIONAL	9,000	91,520	73	\$ 0.008
MERRILL LYNCH INTERNATIONAL LIMITEI	59,480,531	136,566,414	109,127	\$ 0.002
MERRILL LYNCH LIMITED	24,600	443,297	738	\$ 0.030
MERRILL LYNCH PIECE FENNER & SMITH	9,014,698	42,657,090	28,614	\$ 0.003
MIRAE ASSET SECURITIES (HK) LIMITED	90,000	841,477	1,678	\$ 0.019
MIZUHO SECURITIES USA INC.	2,189,200	10,136,189	12,168	\$ 0.006
MKM PARTNERS	14,786	207,772	547	\$ 0.037
MORGAN KEEGAN	183,075	6,250,183	5,492	\$ 0.030
MORGAN KEEGEEAN & CO NEW YORK DTC7	9,225	310,721	277	\$ 0.030
Amounts carried forward	503,109,083	6,550,273,085	3,698,857	

*Investment Schedules (continued)***Schedule of Broker Commissions (continued)**

Brokerage Firms	Shares Traded	Dollar Volume of Trades	Commission	
			Dollar Amount	Per Share
Amounts brought forward	503,109,083	\$ 6,550,273,085	\$ 3,698,857	
MORGAN STANLEY AND CO. INTERNATION	532,664	18,411,538	18,407	\$ 0.035
MORGAN STANLEY AND CO., LLC	38,499,529	93,919,785	89,847	\$ 0.002
MORGAN STANLEY AND CO. INTRNTNL PI	1,517,744	7,654,851	3,215	\$ 0.002
MORGAN STANLEY INDIA COMPANY PVT L	1,491,776	5,336,885	7,995	\$ 0.005
MORGAN STANLEY SECURITIES LIMITED	233,939	2,511,581	1,784	\$ 0.008
MORGAN STANLEY TAIWAN LIMITED	9,251,000	9,870,048	4,932	\$ 0.001
NATIONAL FINANCIAL SERVICES LLC	16,709	498,533	618	\$ 0.037
NATIONAL SETTLEMENT DEPOSITORY	4,215,123	1,548,781	3,091	\$ 0.001
NBC SECURITIES NEW YORK	90,714	1,683,371	3,356	\$ 0.037
NEEDHAM AND CO INC	19,357	571,987	677	\$ 0.035
NOMURA INTERNATIONAL (HONG KONG) L	52,000	2,058,681	1,030	\$ 0.020
NOMURA INTERNATIONAL PLC	5,201	259,467	520	\$ 0.100
NOMURA SECURITIES NEW YORK	57,100	857,676	1,030	\$ 0.018
NUMIS SECURITIES LIMITED	45,723	235,100	471	\$ 0.010
OLIVETREE SECURITIES LIMITED	80,266	777,694	934	\$ 0.012
OPPENHEIMER AND CO, INC.	157,571	3,633,654	5,775	\$ 0.037
PACIFIC CREST SECURITIES NEW YORK	29,035	400,251	890	\$ 0.031
PERSHING LLC	141,901	2,745,781	4,151	\$ 0.029
PERSHING SECURITIES LIMITED	483,887	8,422,834	6,545	\$ 0.014
PICKERING ENERGY PARTNERS INC	12,071	462,994	447	\$ 0.037
PIPER, JAFFRAY AND HOPWOOD	188,975	6,063,087	5,365	\$ 0.028
PRIVATE EQUITY - CHICAGO	534,280	12,639,920	21,372	\$ 0.040
RABOBANK NEDERLAND	14,000	907,508	1,359	\$ 0.097
RAYMOND JAMES AND ASSOCIATES	341,248	12,961,013	11,442	\$ 0.034
RBC CAPITAL MARKETS, LLC	904,595	38,822,692	16,646	\$ 0.018
RBC EUROPE LIMITED	782,042	13,667,449	18,427	\$ 0.024
REDBURN PARTNERS LLP	1,385,414	6,697,850	3,337	\$ 0.002
ROBERT W. BAIRD CO. INCORPORATED	290,731	10,863,583	10,335	\$ 0.036
ROCHDALE SECURITIES CORP.	334,300	9,220,486	10,646	\$ 0.032
ROSENBLATT SECURITIES LLC	32,200	1,302,651	161	\$ 0.005
SANDLER O'NEILL NEW YORK	19,820	320,725	624	\$ 0.031
SANFORD C. BERNSTEIN AND CO., LLC	721,087	31,960,905	19,395	\$ 0.027
SANFORD C. BERNSTEIN LTD	1,889,173	8,293,122	8,425	\$ 0.004
SCOTIA MCLEOD INC.	47,600	943,484	1,904	\$ 0.040
SG AMERICAS SECURITIES CORP	77,100	3,266,874	386	\$ 0.005
SG SECURITIES (HK) LIMITED	1,023,000	2,415,088	3,996	\$ 0.004
SIDOTI & COMPANY LLC	51,184	1,645,037	1,814	\$ 0.035
SINOPAC SECURITIES CORPORATION	12,665,851	9,840,631	9,859	\$ 0.001
SIX SIS AG	5,400	326,816	524	\$ 0.097
SJ LEVINSON & SONS LLC	208,970	16,623,572	4,476	\$ 0.021
SKANDINAVISKA ENSKILDA BANKEN LONI	143,050	5,206,931	7,980	\$ 0.056
SOCIETE GENERALE LONDON BRANCH	3,226,784	35,150,037	51,966	\$ 0.016
Amounts carried forward	584,929,197	6,941,274,038	4,065,011	

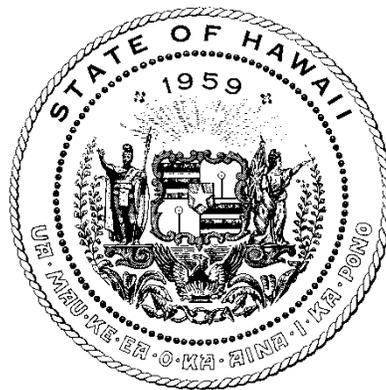
Schedule of Broker Commissions (continued)

Brokerage Firms	Shares Traded	Dollar Volume of Trades	Commission	
			Dollar Amount	Per Share
Amounts brought forward	584,929,197	\$ 6,941,274,038	\$ 4,065,011	
STATE STREET BK & TRST CO,N.A NW YK	437,780	15,054,248	4,754	\$ 0.038
STEPHENS INC.	25,103	497,812	958	0.037
STERNE, AGEE AND LEACH	49,675	1,524,715	1,505	0.029
STIFEL NICOLAUS & CO,INCORORATED	3,815,015	146,164,946	112,676	0.001
STUART FRANKEL AND CO. INC	113,100	2,691,474	1,697	0.032
SUNTRUST ROBINSON HUMPHREY, INC.	212,725	10,974,142	6,454	0.040
SVENSKA HANDELSBANKEN	190,750	5,413,579	8,074	0.003
TELSEY ADVISORY GROUP LLC	136,824	5,666,093	4,861	0.062
THE BANK OF NEW YORK MELLON	365,000	392,375	-	0.006
THE BANK OF NEW YORK MELLON SA/NV	459,450	409,583	654	0.020
THE HSBC LTD	122,499	7,691,743	6,183	0.001
UBS AG LONDON BRANCH	28,202,732	105,232,520	109,815	0.001
UBS AG STAMFORD BRANCH	11,007,387	105,363,623	95,160	0.018
UBS SECURITIES ASIA LIMITED	52,759,553	57,384,857	56,425	0.018
UBS SECURITIES AUSTRALIA LTD	23,047	792,406	1,588	0.018
UBS SECURITIES HONG KONG LIMITED	25,933,600	21,259,589	10,613	0.018
UBS SECURITIES LLC	1,333,100	13,971,987	8,705	0.018
UBS SECURITIES PTE. LTD.	12,692,250	11,213,855	16,513	0.018
UBS SECURITIES PTE.LTD.SEOUL BRANCH	1,532,403	61,347,471	75,015	0.018
UBS WARBURG SECS INDIA PVT LTD MUMB	4,802,980	16,794,674	27,558	0.018
UBS WARBURG SECURITIES LTD TAIWAN	31,656,600	38,358,194	32,889	0.018
WEDBUSH MORGAN SECURITIES	35,042	970,600	1,278	0.018
WEEDEN AND CO	430,149	20,088,373	9,548	0.018
WELLS FARGO BANK, N.A.	348,067	9,672,646	10,942	0.018
WILLIAM BLAIR AND COMPANY	128,742	3,206,527	3,501	0.018
WUNDERLICH SECURITIES	21,972	533,001	833	0.018
ZAO CITIBANK, MOSCOW	1,420	59,389	119	0.018
Total trades	761,766,162	7,604,004,460	4,673,329	0.006
			\$ (674,812)	
	761,766,162	\$ 7,604,004,460	\$ 3,998,517	\$ 0.005



Employees' Retirement System

of the State of Hawaii



**ACTUARIAL
SECTION**

Letter from the Actuary

Gabriel Roeder Smith & Company
Consultants & Actuaries

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December 31, 2013

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, 2013

We certify that the information contained in the 2013 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, 2013.

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. In addition, the report provides information required by ERS in connection with Governmental Accounting Standards Board Statement No. 25 (GASB No. 25), and it 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.

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.

Letter from the Actuary (continued)

Board of Trustees
December 31, 2013
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Progress toward realization of financing objectives

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 continues to recognize the deferred investment losses from the severe downturn in the investment markets during fiscal year 2009. However, the System had an offsetting liability experience gain which was caused primarily by lower than expected salary increases. As a result, the UAAL grew less than expected and based on this actuarial valuation as of June 30, 2013, ERS's underfunded status as measured by the UAAL is now \$8.495 billion.

The 2011 Legislature made significant changes to the future employer contribution rates. The current 23.00% of pay contribution rate for Police and Fire employees will gradually increase to 25.00%, and the 16.00% of pay contribution rate for All Other Employees will gradually increase to 17.00%. 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 28 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 System is now deferring \$391 million in deferred investment losses (compared with \$957 million last year). Without offsetting gains, these losses will increase the unfunded liability and possibly lengthen the funding period as they are recognized in future valuations.

Benefit provisions and Legislative changes

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

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.

Letter from the Actuary (continued)

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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. These assumptions are also in full compliance with all parameters established by GASB No. 25.

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, 2013, 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.

Letter from the Actuary (continued)

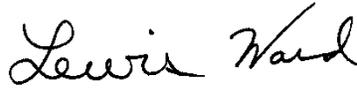
Board of Trustees
December 31, 2013
Page 4

The undersigned are independent actuaries and consultants. Mr. Newton is an Enrolled Actuarial, 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
Actuary

Executive Summary

The following summarizes the key results of the June 30, 2013 actuarial valuation of the Employees' Retirement System of the State of Hawaii (ERS).

Item	2013	2012
Membership		
• Number of		
- Active members	66,226	65,599
- Retirees and beneficiaries	41,812	40,774
- Inactive, vested	7,312	6,909
- Total	115,350	113,282
• Covered payroll for active members ***	\$3,720.8 million	\$3,706.1 million
• Covered payroll for active members to determine pension liabilities *** (adjusted for one year's pay increase)	\$3,906.7 million	\$3,890.0 million
• Actual benefit payments and refunds	\$1,067.8 million	\$1,022.6 million
Assets		
• Actuarial (smoothed) value	\$12,748.8 million	\$12,242.5 million
• Market value ****	\$12,357.8 million	\$11,285.9 million
• Return on actuarial value	6.7%	5.1%
• Return on market value	12.3%	(0.6%)
• Employer contributions during fiscal year***	\$581,447,213	\$548,353,394
• External cash flow %	(2.5%)	(2.7%)
Actuarial Information		
• Total normal cost % (employee + employer)	11.02%	11.05%
• Unfunded actuarial accrued liability (UAAL)	\$8,494.9 million	\$8,440.9 million
• Funded ratio (based on smoothed assets)	60.0%	59.2%
• Funded ratio (based on market assets)	58.2%	54.6%
• Funding period (years) *	28.0	30.0
• Employer contribution rate % of projected payroll ** For FY beginning July 1	16.76%	16.11%
• GASB ARC for FY 2014 % of projected payroll		
Police and Fire Employees	25.35%	25.79%
All Other Employees	17.61%	17.72%
Composite – All Employees	18.46%	18.64%

* 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 23.00% Contribution Rate for Police and Firefighters and 16.0% Contribution Rate for All Other Employees for FY 2014, 22.0% and 15.5% respectively for FY 2013.

*** Covered payroll for active members is actual payroll. Covered payroll for active members is then increased for one year's pay increase to determine the member's rate of pay at July 1, 2013 for use in calculation of pension liabilities, or the Actuarial Accrued Liability. The employers and members contribution amounts are based actual payroll reported to the ERS.

**** Market value of assets used for actuarial valuation may differ slightly from audited financial statements due to timing differences when the reporting is completed.

Gabriel Roeder Smith & Company

Actuarial Certification

	Police and Firefighters June 30, 2013	All Other Employees June 30, 2013	All Employees June 30, 2013
1. Gross normal cost as a percentage of pay	19.84%	9.91%	11.02%
2. Present value of future benefits			
a. Active employees	\$ 2,522,904,682	\$ 10,554,195,473	\$ 13,077,100,155
b. Inactive members	30,112,314	370,862,184	400,974,498
c. Pensioners and beneficiaries	1,893,955,759	9,288,579,288	11,182,535,047
d. Total	<u>\$ 4,446,972,755</u>	<u>\$ 20,213,636,945</u>	<u>\$ 24,660,609,700</u>
3. Present value of future employee and employer contributions			
a. Present value of future normal costs	\$ 763,958,646	\$ 2,652,906,677	\$ 3,416,865,323
b. Present value of future employee contributions	<u>475,079,954</u>	<u>1,204,747,411</u>	<u>1,679,827,365</u>
c. Present value of future employer normal cost (Item 3a - Item 3b)	\$ 288,878,692	\$ 1,448,159,266	\$ 1,737,037,958
4. Actuarial accrued liability (Item 2d - Item 3a)	\$ 3,683,014,109	\$ 17,560,730,268	\$ 21,243,744,377
5. Actuarial value of assets			
a. Annuity Savings Fund	\$ 785,434,715	\$ 1,157,773,800	\$ 1,943,208,515
b. Pension Accumulation Fund	<u>1,602,408,966</u>	<u>9,203,210,629</u>	<u>10,805,619,595</u>
c. Total	\$ 2,387,843,681	\$ 10,360,984,429	\$ 12,748,828,110
6. Unfunded actuarial accrued liability	\$ 1,295,170,428	\$ 7,199,745,839	\$ 8,494,916,267
7. Adequacy of contribution rates			
a. Statutory Contribution Rate for Fiscal Year 2014	23.00%	16.00%	16.76%
B. Funding period in years as of June 30, 2013 *	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.

Actuarial Certification Statement (continued)

The actuarial valuation as of June 30, 2013 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 Actuarial, 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
Senior Consultant & Actuary

Summary of 2013 Actuarial Valuation

**Exhibit 1
Development of Employer Cost**

	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

	Police and Firefighters June 30, 2012	All Other Employees June 30, 2012	All Employees June 30, 2012
1. Payroll (adjusted for one year's pay increase)	\$ 430,059,235	\$ 3,459,916,960	\$ 3,889,976,195
2. Gross normal cost (Exhibit 3)	20.18%	9.88%	11.05%
3. Employer normal cost rate (Exhibit 3)	7.98%	5.69%	5.97%
4. Present value future benefits (Exhibit 2)	\$ 4,364,686,391	\$ 19,752,801,000	\$ 24,117,487,391
5. Present value future employer normal cost	\$ 309,654,338	\$ 1,503,612,037	\$ 1,813,266,375
6. Present value future employee contributions	\$ 477,712,638	\$ 1,143,105,560	\$ 1,620,818,198
7. Actuarial accrued liability (Item 4 - Item 5 - Item 6)	\$ 3,577,319,415	\$ 17,106,083,403	\$ 20,683,402,818
8. Actuarial value of assets	\$ 2,265,367,189	\$ 9,977,126,619	\$ 12,242,493,808
9. Unfunded actuarial accrued liability (UAAL) (Item 7 - Item 8)	\$ 1,311,952,226	\$ 7,128,956,784	\$ 8,440,909,010
10. Funding period	32.0	30.0	30.0

*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.

Summary of 2013 Actuarial Valuation (continued)

Exhibit 2
Actuarial Present Value of Future Benefits

	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

	Police and Firefighters June 30, 2012	All Other Employees June 30, 2012	All Employees June 30, 2012
1. Active members			
a. Service retirement benefits	\$ 2,427,038,150	\$ 9,472,785,286	\$ 11,899,823,436
b. Termination benefits	81,234,064	675,204,395	756,438,459
c. Survivor benefits	38,411,081	229,671,592	268,082,673
d. Disability retirement benefits	11,390,703	90,135,790	101,526,493
e. Total	\$ 2,558,073,998	\$ 10,467,797,063	\$ 13,025,871,061
2. Retired members			
a. Service retirement	\$ 1,681,198,962	\$ 8,398,931,943	\$ 10,080,130,905
b. Disability retirement	28,580,600	151,834,521	180,415,121
c. Beneficiaries	68,608,377	378,037,110	446,645,487
d. Total	\$ 1,778,387,939	\$ 8,928,803,574	\$ 10,707,191,513
3. Inactive members			
a. Vested terminations	\$ 25,755,410	\$ 324,745,398	\$ 350,500,808
b. Nonvested terminations	2,469,044	31,454,965	33,924,009
c. Total	\$ 28,224,454	\$ 356,200,363	\$ 384,424,817
4. Total actuarial present value of future benefits	\$ 4,364,686,391	\$ 19,752,801,000	\$ 24,117,487,391

Summary of 2013 Actuarial Valuation (continued)

Exhibit 3
Analysis of Normal Cost

	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%

	Police and Firefighters June 30, 2012	All Other Employees June 30, 2012	All Employees June 30, 2012
1. Normal cost as a percent of pay			
a. Service retirement benefits	17.29%	7.40%	8.53%
b. Deferred termination benefits	0.84%	0.79%	0.79%
c. Refunds	1.34%	1.24%	1.25%
d. Disability retirement benefits	0.18%	0.16%	0.16%
e. Survivor benefits	0.53%	0.29%	0.32%
f. Total	20.18%	9.88%	11.05%
2. Employee contribution rate	12.20%	4.19%	5.08%
3. Effective employer normal cost rate (Item 1f – Item 2)	7.98%	5.69%	5.97%

Summary of 2013 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			
Unfunded actuarial accrued liability (UAAL),			
1. as of June 30, 2012	\$ 1,311,952,226	\$ 7,128,956,784	\$ 8,440,909,010
2. Normal cost for the year (employer and employee)	\$ 86,785,954	\$ 335,585,181	422,371,134
3. Less: contributions and assessments for the year	\$ (131,482,079)	\$ (635,802,319)	\$ (767,284,398)
4. Interest at 7.75%			
a. On UAAL	\$ 101,676,298	\$ 552,494,151	\$ 654,170,449
b. On normal cost	3,362,956	13,003,926	16,366,882
c. On contributions	<u>(5,094,931)</u>	<u>(24,637,340)</u>	<u>(29,732,271)</u>
d. Total	\$ 99,944,323	\$ 540,860,737	\$ 640,805,060
5. Expected UAAL as of June 30, 2013 (Sum of Items 1– 4)	\$ 1,367,200,424	\$ 7,369,600,383	\$ 8,736,800,807
6. Actual UAAL as of June 30, 2013	\$ 1,295,170,428	\$ 7,199,745,839	\$ 8,494,916,267
7. Total gain (loss) for the year (Item 5 – Item 6)	\$ 72,029,996	\$ 169,854,544	\$ 241,884,540
B. Source of gains and losses			
8. Asset gain (loss) for the year (Exhibit 6)	\$ (24,411,468)	\$ (105,922,694)	\$ (130,334,162)
9. Gain (loss) due to change in actuarial assumptions	-	-	-
10. Gain (loss) due to change in actuarial method	-	-	-
11. Other liability gain (loss)	\$ 96,441,464	\$ 275,777,238	\$ 372,218,702
12. Change in benefit provisions	<u>-</u>	<u>-</u>	<u>-</u>
13. Total gain (loss) for the year	\$ 72,029,996	\$ 169,854,544	\$ 241,884,540

Summary of 2013 Actuarial Valuation (continued)

Exhibit 6
Investment Experience Gain or Loss

Item	June 30, 2013	June 30, 2012
1. Actuarial assets, beginning of year	\$ 12,242,493,808	\$ 11,942,753,360
2. Total contributions during year	\$ 767,284,399	\$ 727,118,282
3. Benefits and refunds paid	\$ (1,067,765,559)	\$ (1,022,635,274)
4. Assumed net investment income at 7.75%		
a. Beginning of year assets	\$ 948,793,270	\$ 925,563,385
b. Contributions	\$ 29,732,270	\$ 28,175,833
c. Benefits and refunds paid	\$ (41,375,915)	\$ (39,627,117)
d. Total	\$ 937,149,625	\$ 914,112,101
5. Expected actuarial assets, end of year (Sum of Items 1 through 4)	\$ 12,879,162,273	\$ 12,561,348,469
6. Actual actuarial assets, end of year	\$ 12,748,828,110	\$ 12,242,493,808
7. Asset gain (loss) for year (Item 6 – Item 5)	\$ (130,334,163)	\$ (318,854,661)
8. Asset gain (loss) as a percent of actuarial value of assets, end of year (Item 7 / Item 6)	(1.02%)	(2.60%)

Summary of 2013 Actuarial Valuation (continued)

**Exhibit 7
Projection Results Based on June 30, 2013 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)
2013	16.77%	3,885.9	652	21,244	12,749	8,495	60.0%
2014	17.32%	3,995.9	692	22,140	13,438	8,701	60.7%
2015	17.87%	4,098.0	732	23,034	14,156	8,878	61.5%
2016	17.87%	4,207.3	752	23,924	14,900	9,024	62.3%
2017	17.86%	4,326.2	773	24,808	15,649	9,159	63.1%
2018	17.86%	4,452.9	795	25,686	16,405	9,281	63.9%
2019	17.86%	4,588.4	819	26,558	17,171	9,387	64.7%
2020	17.85%	4,731.8	845	27,423	17,947	9,476	65.4%
2021	17.85%	4,883.6	872	28,281	18,738	9,543	66.3%
2022	17.84%	5,043.9	900	29,133	19,546	9,587	67.1%
2023	17.84%	5,213.0	930	29,978	20,374	9,604	68.0%
2024	17.83%	5,390.5	961	30,817	21,227	9,590	68.9%
2025	17.83%	5,576.1	994	31,649	22,108	9,541	69.9%
2026	17.82%	5,770.3	1,028	32,472	23,018	9,453	70.9%
2027	17.81%	5,973.9	1,064	33,286	23,964	9,322	72.0%
2028	17.81%	6,187.2	1,102	34,093	24,951	9,142	73.2%
2029	17.80%	6,411.2	1,141	34,893	25,986	8,907	74.5%
2030	17.80%	6,645.4	1,183	35,688	27,077	8,611	75.9%
2031	17.80%	6,890.4	1,226	36,482	28,233	8,248	77.4%
2032	17.79%	7,146.2	1,272	37,274	29,464	7,811	79.0%
2033	17.79%	7,413.3	1,319	38,069	30,778	7,290	80.8%
2034	17.79%	7,692.9	1,368	38,868	32,189	6,679	82.8%
2035	17.79%	7,985.2	1,420	39,677	33,710	5,967	85.0%
2036	17.78%	8,290.5	1,474	40,498	35,353	5,144	87.3%
2037	17.78%	8,609.7	1,531	41,334	37,135	4,200	89.8%
2038	17.78%	8,944.2	1,591	42,193	39,071	3,121	92.6%
2039	17.79%	9,293.5	1,653	43,077	41,181	1,896	95.6%
2040	17.79%	9,658.4	1,718	43,994	43,484	510	98.8%
2041	17.79%	10,039.1	1,786	44,950	46,002	(1,052)	102.3%
2042	17.79%	10,436.3	1,856	45,950	48,755	(2,806)	106.1%
2043	17.79%	10,850.3	1,930	47,002	51,771	(4,769)	110.1%

Summary of 2013 Actuarial Valuation (continued)

Exhibit 8
Highlights of Last Five Annual Actuarial Valuations
2009 through 2013

Item	Valuation Date: June 30				
	2009	2010	2011	2012	2013
Number of active members	67,912	65,890	65,310	65,599	66,226
Number of inactive members	6,016	6,895	6,649	6,909	7,312
Number of pensioners	34,429	35,763	36,871	37,830	38,741
Number of beneficiaries	2,570	2,678	2,818	2,944	3,071
Average monthly contributory plan pension amount	\$ 2,019	\$ 2,118	\$ 2,221	\$ 2,315	\$ 2,414
Average monthly noncontributory plan pension amount	\$ 1,421	\$ 1,457	\$ 1,509	\$ 1,538	\$ 1,562
Average monthly hybrid plan pension amount	1,602	\$ 1,857	\$ 2,055	\$ 2,090	\$ 2,092
Average monthly beneficiary amount	\$ 1,109	\$ 1,151	\$ 1,181	\$ 1,219	\$ 1,247
Total actuarial value of assets (\$millions)	\$ 11,400	\$ 11,346	\$ 11,943	\$ 12,242	\$ 12,749
Unfunded actuarial accrued liability (\$millions)	\$ 6,236.3	\$ 7,138.1	\$ 8,154.2	\$ 8,440.9	\$ 8,494.9
Funding Period (in years) ⁽¹⁾	28.2	41.3	25.0	30.0	28.0

Item (Dollar amounts in millions ⁽²⁾)	Fiscal Year				
	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
Employers appropriations ⁽²⁾	\$ 578.6	\$ 547.6	\$ 534.9	\$ 548.4	\$ 581.4

⁽¹⁾ Beginning with the 2011 valuation, the funding period was determined using an 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.

*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.

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

Years of Service	General Employees		Teachers	
	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)

Years of Service	Police & Firefighters	
	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.

Type	General Employees		Teachers		Police and Fire	
	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:

Type	General Employees		Teachers		Police and Fire
	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:

For first 6 years of service

		Expected Terminations per 100 Lives					
		General Employees		Teachers		Police and Fire	
Years of Service		Male	Female	Male	Female	Male	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

After first 6 years of service

		Expected Terminations per 100 lives					
		General Employees		Teachers		Police and Fire	
Age		Male	Female	Male	Female	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					
Age	General Employees		Teachers		Police and Fire
	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

Age	Expected Retirements per 100 Lives							
	General Employees				Teachers			
	Unreduced Retirement		Reduced Retirement		Unreduced Retirement		Reduced Retirement	
	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.

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

C. Other Assumptions

1. Percent married (**effective June 30, 2006**): 77% of male employees and 57.6% of female employees are assumed to be married.
2. 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.
3. 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.
4. 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.
5. Assumed age for commencement of deferred benefits: Members electing to receive a deferred benefit are assumed to commence receipt when eligible for early retirement.
6. 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.
7. 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.
8. 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%

9. 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.
10. There will be no recoveries once disabled.
11. No surviving spouse will remarry and there will be no children's benefit.

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

12. 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.
13. 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.
14. 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.
15. Decrement relativity: Decrement rates are used directly from the Experience Study, without adjustment for multiple decrement table effects.
16. 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.
17. 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.

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)***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 in 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 predeceases the retiree.

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

*Summary of Actuarial Methods and Assumptions (continued)***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

Summary of Actuarial Methods and Assumptions (continued)

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 10 years 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

**Ten Year Actuarial Schedules
2003 to 2013**

- Retirement System Membership **
 - 2013 Membership Data *
- Historical Summary of Active Member Data *
- Pensioners, Average Annual Pension and Active Member/Pensioner Comparison **
- Number of Retirees and Beneficiaries **
- Solvency Test **
- Employer Contribution Rates as a Percentage of Payroll **
- Employer Appropriations to Pension Accumulation Fund, Appropriation Years 2003-2004 to 2013-2014 **

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

**Retirement System Membership **
2004 to 2013**

March 31,	Active Members	Inactive Vested Members	Pensioners & Beneficiaries	Total Membership
2004	62,573	4,501	32,297	99,371
2005	63,073	4,938	33,301	101,312
2006	64,069	5,164	34,304	103,537
2007	65,251	5,554	35,324	106,129
2008	66,589	5,847	36,260	108,696
2009	67,912	6,016	36,999	110,927
2010	65,890	6,895	38,441	111,226
2011	65,310	6,649	39,689	111,648
2012	65,599	6,909	40,774	113,282
2013	66,226	7,312	41,812	115,350

** Schedule compiled by ERS Staff from actuary reports.

*Ten-Year Actuarial Schedules (continued)***2013 Membership Data**

	Police and Firefighters		All Other Employees		All Employees	
	June 30, 2013	June 30, 2012	June 30, 2013	June 30, 2012	June 30, 2013	June 30, 2012
1. Active members						
a. Number	4,971	4,894	61,255	60,705	66,226	65,599
b. Total payroll	\$ 402,779,535	\$ 407,044,323	\$3,318,030,427	\$3,299,092,245	\$3,720,809,962	\$3,706,136,568
c. Average salary	\$ 81,026	\$ 83,172	\$54,168	\$54,346	\$ 56,184	\$ 56,497
d. Average age	41.8	41.7	48.1	48.0	47.7	47.6
e. Average service	14.0	14.0	13.5	13.5	13.5	13.5
2. Inactive members						
a. Number	251	238	7,061	6,671	7,312	6,909
b. Total annual deferred benefits	\$ 3,871,611	\$ 3,698,263	\$ 51,478,187	\$ 49,990,999	\$ 55,349,798	\$ 53,689,262
c. Average annual deferred benefit	\$ 15,425	\$ 15,539	\$ 7,290	\$ 7,494	\$ 7,570	\$ 7,771
3. Service retirees						
a. Number	3,165	3,089	34,013	33,219	37,178	36,308
b. Total annual benefits	\$ 148,633,887	\$ 139,356,138	\$ 819,710,342	\$ 782,957,292	\$ 968,344,229	\$ 922,313,430
c. Average annual benefit	\$ 46,962	\$ 45,114	\$ 24,100	\$ 23,570	\$ 26,046	\$ 25,402
4. Disabled retirees						
a. Number	152	156	1,411	1,366	1,563	1,522
b. Total annual benefits	\$ 2,855,319	\$ 2,798,191	\$ 16,132,190	\$ 15,079,381	\$ 18,987,509	\$ 17,877,572
c. Average annual benefit	\$ 18,785	\$ 17,937	\$ 11,433	\$ 11,039	\$ 12,148	\$ 11,746
5. Beneficiaries						
a. Number	223	210	2,848	2,734	3,071	2,944
b. Total annual benefits	\$ 6,625,501	\$ 6,079,075	\$ 39,323,155	\$ 36,973,964	\$ 45,948,656	\$ 43,053,039
c. Average annual benefit	\$ 29,711	\$ 28,948	\$ 13,807	\$ 13,524	\$ 14,962	\$ 14,624

Historical Summary of Active Member Data

Year Ending June 30,	Active Members		Covered Payroll		Average Salary		Average Age	Average Service
	Number	Percent Increase	Amount in \$ Millions	Percent Increase	\$ Amount	Percent Increase		
2004	62,573	0.5%	2,755.5	1.4%	44,037	0.9%	46.0	13.0
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

*Ten-Year Actuarial Schedules (continued)***Pensioners, Average Annual Pension and
Active Member/Pensioner Comparison****

2004 to 2013

March 31,	Number of Pensioners	Average Annual Pension (1)	Ratio of Active Members per Pensioner
2004	30,503	\$19,279	2.1
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

** 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**

2004 to 2013

As of Mar 31,	Added	Average Added to Rolls	Removed	Average Removed from Rolls	Total	Average Pension	% Chg
Retirants							
2004	1,630	\$20,136	857	\$13,596	30,503	\$19,279	3.60%
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%
Beneficiaries							
2004	177	\$12,588	42	\$7,596	1,794	\$11,395	4.50%
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%

** Schedule compiled by ERS staff from actuary reports.

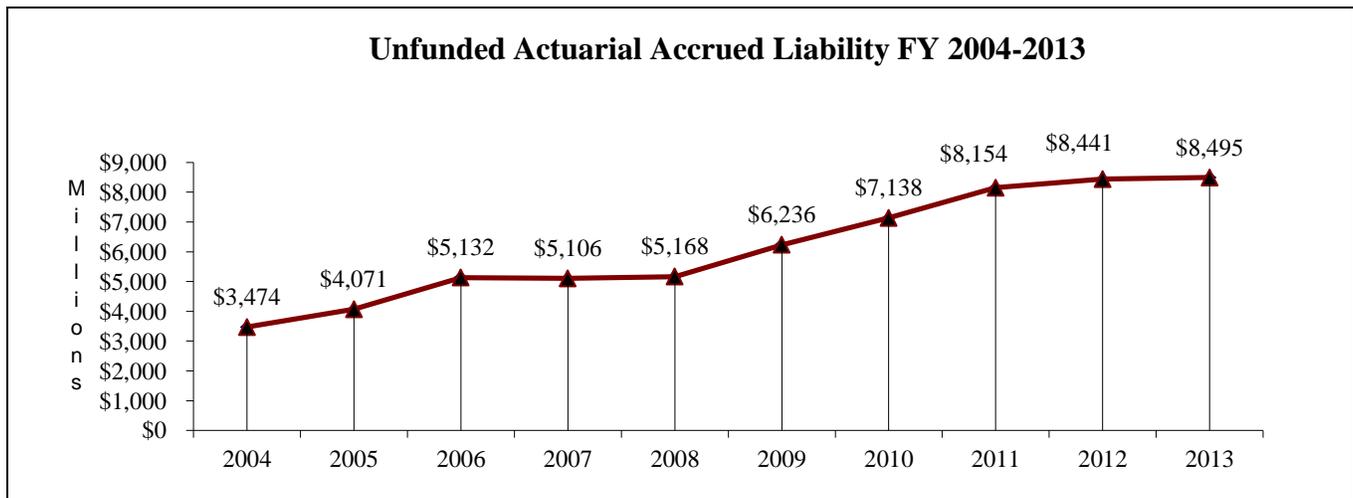
Ten-Year Actuarial Schedules (continued)

Solvency Test**
2004 to 2013

June 30,	Actuarial Accrued Liabilities (AAL)				Cumulative Portion of Actuarial Accrued Liabilities Covered by Assets		
	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)
2004	870.3	6,278.6	5,122.4	8,797.1	100%	100%	32.2%
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%

(Amounts in \$millions)

** Schedule compiled by ERS Staff from actuary reports



*Ten-Year Actuarial Schedules (continued)***Employer Contribution Rates as a Percentage of Payroll** **
2004 to 2013

Actuarial Valuation as of June 30,	Police and Firefighters			All Other Employees			All Active Employees		
	Normal Cost Rate	Amorti- zation Percent	Total Employer Rate	Normal Cost Rate	Amorti- zation Percent	Total Employer Rate	Normal Cost Rate	Amorti- zation Percent	Total Employer Rate
2004	4.27%	11.06%	15.33%	5.73%	8.74%	14.47%	5.59%	8.96%	14.55%
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%

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.

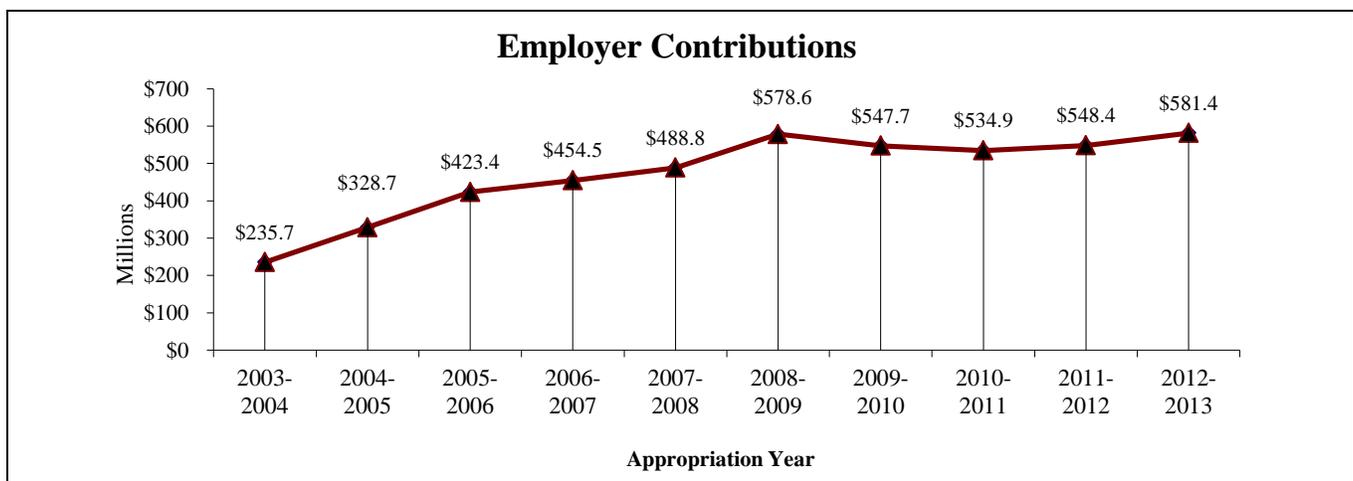
** Schedule compiled by ERS Staff from actuary reports.

*Ten-Year Actuarial Schedules (continued)***Employer Appropriations to Pension Accumulation Fund****

Fiscal Year	Investment Yield Rate	
	Assumed for Actuarial Valuation	Actuarial Investment Return
2003-2004	8.0%	0.80%
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	8.0%	5.05%
2012-2013	7.75%	6.67%

- 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.



<u>Funded Ratio</u>	<u>Number of General State Retirement Systems (excluding separate systems for teachers, school employees, or municipal employees)</u>				
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 SETHEPP	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%	Virginia 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%	Kentucky 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

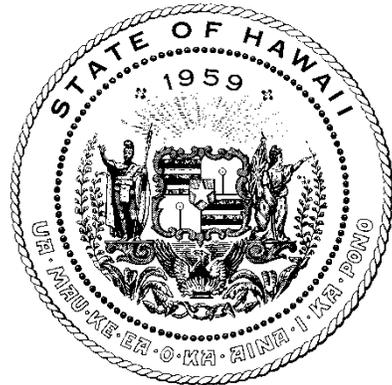
Note: GASB 25 funded ratios are shown for 48 general state retirement systems for valuation year(s) through January 1, 2008. A funded ratio is not shown for the Nebraska System because it is a defined contribution plan. A funded ratio for the New York System does not exist because of the use of the Aggregate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

*** Hawaii's GASB 25 funded ratio for the fiscal year ended June 30, 2013 was 60.0%.**



Employees' Retirement System

of the State of Hawaii



**STATISTICAL
SECTION**

Summary

Plan Membership

Membership in the ERS increased by 2,068 to 115,350 for FY 2013, or 1.8 percent for the year. Active members increased by 627, retired members and beneficiaries increased by 1,038 and terminated-vested members increased by 403. Membership data for the last ten years ended June 30, 2013 may be found on the following pages.

Net Position vs. Liabilities

The charts on page 130 graphically represent the funding progress of the ERS for the ten years ended June 30, 2013. The area charts show the portion of the pension liabilities that are unfunded compared to the portion covered by net position (assets) in the pension trust and illustrate the funded ratio of the ERS for the ten years ended June 30, 2013.

The existence of the unfunded actuarial accrued liabilities is not necessarily an indication of the inability to meet financial obligations, but the existence of the unfunded actuarial accrued liabilities is important and must be monitored and controlled.

The remainder of this section contains various statistical and historical data considered useful in evaluating the condition of the ERS.

All nonaccounting data is taken from ERS' internal sources except for that information which is derived from the actuarial valuations.

Changes in Net Position

Last Ten Fiscal Years

Fiscal Year Ended June 30.:	2004	2005	2006	2007	2008
Additions					
Employer Contributions	\$ 235,685,796	\$ 328,716,718	\$ 423,445,597	\$ 454,494,286	\$ 488,770,028
Member contributions	55,116,452	57,054,621	56,257,953	144,658,185	163,375,639
Investment income (net of expense)	1,236,414,927	931,710,183	988,347,837	1,704,957,268	(461,063,080)
Total additions to plan net assets	1,527,217,175	1,317,481,522	1,468,051,387	2,304,109,739	191,082,587
Deductions					
Benefits	636,214,617	676,316,347	720,542,990	761,004,748	792,312,830
Refunds	2,328,796	3,442,466	2,487,279	3,497,590	3,668,857
Administrative expenses	10,468,508	7,259,906	8,477,837	9,601,756	10,728,801
Total deductions from plan net assets	649,011,921	687,018,719	731,508,106	774,104,094	806,710,488
Net increase in net position	878,205,254	630,462,803	736,543,281	1,530,005,645	(615,627,901)
Net position restricted for pension benefits					
Beginning of year	7,687,199,883	8,565,405,137	9,195,867,940	9,932,411,221	11,462,416,866
End of year	\$ 8,565,405,137	\$ 9,195,867,940	\$ 9,932,411,221	\$ 11,462,416,866	\$ 10,846,788,965

Fiscal Year Ended June 30.:	2009	2010	2011	2012	2013
Additions					
Employer Contributions	\$ 578,672,058	\$ 547,669,675	\$ 538,692,849	\$ 548,353,394	\$ 581,447,213
Member contributions	177,781,610	360,047,068	232,880,063	182,401,324	185,837,186
Investment income (net of expense)	(1,937,317,469)	1,026,461,210	2,040,061,555	(57,798,410)	1,331,208,154
Total additions to plan net assets	(1,180,863,801)	1,934,177,953	2,811,634,467	672,956,308	2,098,492,553
Deductions					
Benefits	833,691,245	905,315,348	960,219,432	1,015,447,668	1,060,561,148
Refunds	3,937,464	7,573,619	7,901,509	7,187,606	7,204,411
Administrative expenses	13,011,283	12,406,339	13,325,781	11,634,197	11,941,446
Total deductions from plan net assets	850,639,992	925,295,306	981,446,722	1,034,269,471	1,079,707,005
Net increase in net position	(2,031,503,793)	1,008,882,647	1,830,187,745	(361,313,163)	1,018,785,548
Net position restricted for pension benefits					
Beginning of year	10,846,788,965	8,815,285,172	9,824,167,819	11,654,355,564	11,293,042,401
End of year	\$ 8,815,285,172	\$ 9,824,167,819	\$11,654,355,564	\$ 11,293,042,401	\$ 12,311,827,949

Contributions

Employer Contribution Rates as a Percentage of Payroll

Fiscal Year	Police & Firefighters	All Other Employees	Composite Rate
2004	15.75%	13.75%	13.95%
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%

Contributions



Deductions from Net Position for Benefit Payments by Type

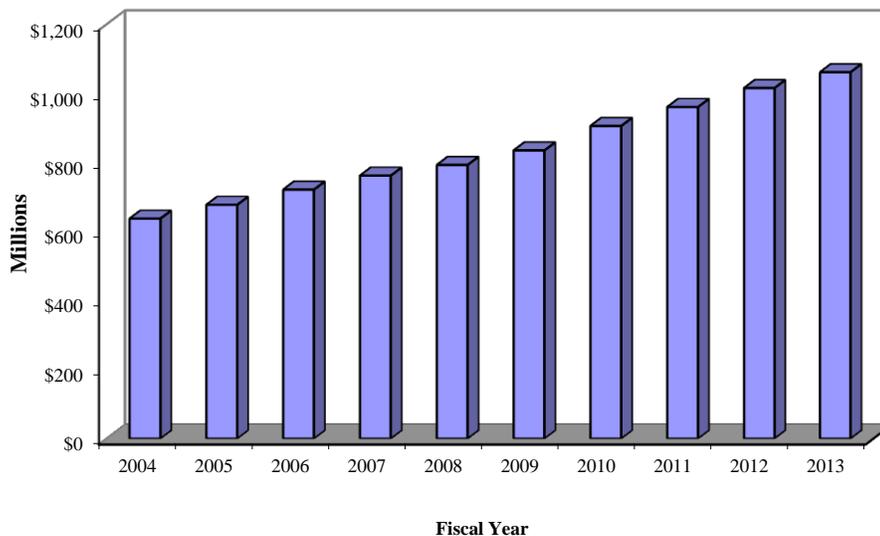
Last Ten Fiscal Years

Fiscal Year Ended June 30,:	2004	2005	2006	2007	2008
Recurring benefit payments					
Service	\$ 594,915,118	\$ 632,088,342	\$ 673,165,361	\$ 712,580,450	\$ 748,158,330
Disability	10,502,367	11,780,739	12,666,891	13,432,834	13,707,170
Death	3,147,690	2,793,149	3,875,024	2,794,068	2,293,557
subtotal	608,565,175	646,662,230	689,707,276	728,807,352	764,159,057
Refund Option payments (one-time)	27,649,442	29,654,117	30,835,714	32,197,396	28,153,773
Total benefit payments	<u>\$ 636,214,617</u>	<u>\$ 676,316,347</u>	<u>\$ 720,542,990</u>	<u>\$ 761,004,748</u>	<u>\$ 792,312,830</u>

Fiscal Year Ended June 30,:	2009 **	2010	2011	2012	2013
Recurring benefit payments					
Service	\$ 754,432,615	\$ 807,662,216	\$ 859,915,959	\$ 917,840,937	\$ 963,894,245
Disability	15,619,011	16,470,042	17,355,973	17,877,572	18,987,509
Death	34,201,206	36,993,685	40,173,678	43,053,039	45,948,656
subtotal	804,252,832	861,125,943	917,445,610	978,771,548	1,028,830,410
Refund Option payments (one-time)	29,438,413	44,189,405	42,773,822	36,676,120	31,730,738
Total benefit payments	<u>\$ 833,691,245</u>	<u>\$ 905,315,348</u>	<u>\$ 960,219,432</u>	<u>\$ 1,015,447,668</u>	<u>\$ 1,060,561,148</u>

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

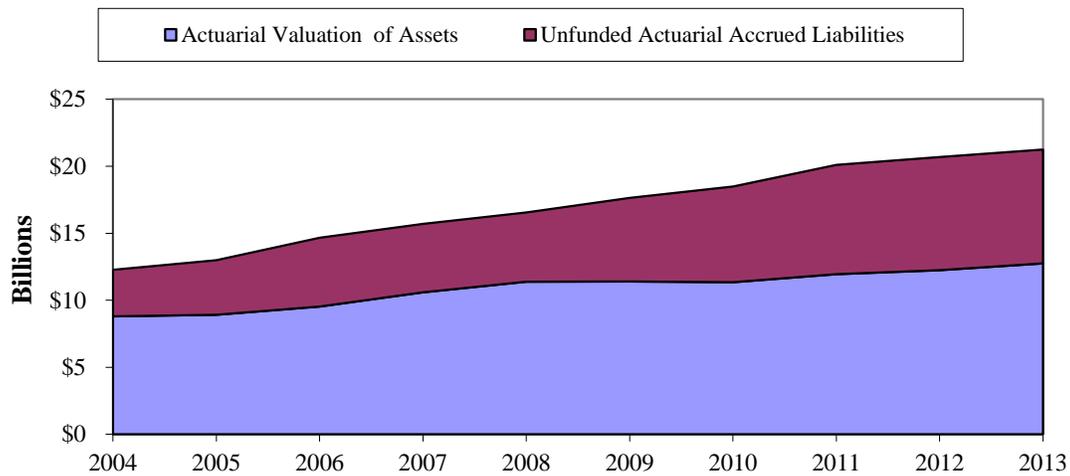
Benefit Payments



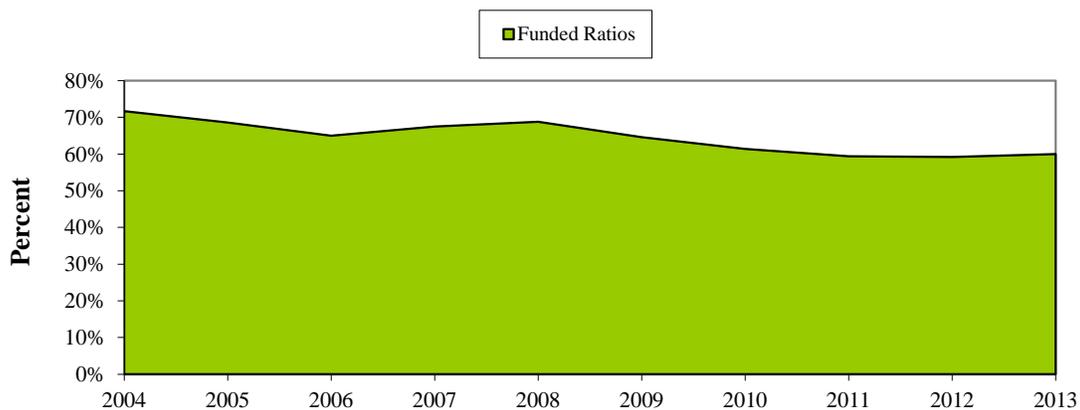
Actuarial Valuation of Assets vs. Actuarial Pension Liabilities

Fiscal Year	Dollars in Billions			
	Actuarial Valuation of Assets	Unfunded Actuarial Liabilities	Actuarial Accrued Liabilities	Funded Ratios
2004	\$ 8.797	\$ 3.474	\$ 11.952	71.7%
2005	8.915	4.071	12.986	68.6%
2006	9.529	5.132	14.661	65.0%
2007	10.590	5.107	15.697	67.5%
2008	11.381	5.168	16.549	68.8%
2009	11.400	6.236	17.636	64.6%
2010	11.345	7.138	18.483	61.4%
2011	11.943	8.154	20.097	59.4%
2012	12.242	8.441	20.683	59.2%
2013	12.749	8.495	21.244	60.0%

Actuarial Accrued Liabilities



Actuarial Valuation of Assets as a Percent of Actuarial Accrued Pension Liabilities

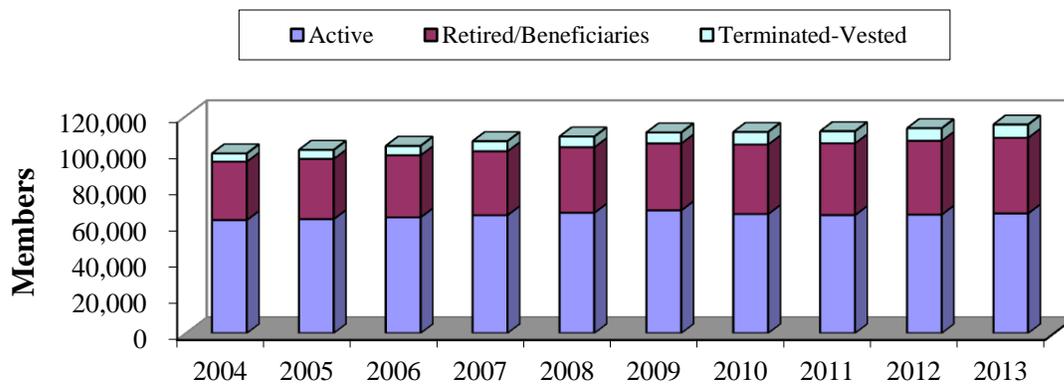


Participating Employers and Membership in ERS Last Ten Fiscal Years

ERS Membership

As of March 31,:	Active	Retired/Beneficiaries	Terminated-Vested	Totals
2004	62,573	32,297	4,501	99,371
2005	63,073	33,301	4,938	101,312
2006	64,069	34,304	5,164	103,537
2007	65,251	35,324	5,554	106,129
2008	66,589	36,260	5,847	108,696
2009	67,912	36,999	6,016	110,927
2010	65,890	38,441	6,895	111,226
2011	65,310	39,689	6,649	111,648
2012	65,599	40,774	6,909	113,282
2013	66,226	41,812	7,312	115,350

ERS Membership



Participating Employers and Active Members

As of March 31,:	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
State of Hawaii	48,704	49,203	49,973	50,756	51,719	52,704	50,789	50,268	50,604	51,176
City & County of Honolulu - Board of Water Supply	8,158	8,101	8,167	8,363	8,512	8,640	8,519	8,485	8,451	8,457
Hawaii County	554	568	560	556	526	554	526	516	505	532
Kauai County	2,081	2,097	2,223	2,315	2,459	2,527	2,501	2,459	2,427	2,446
Maui County	1,051	1,067	1,088	1,109	1,125	1,160	1,129	1,158	1,201	1,227
Maui County	2,025	2,037	2,055	2,152	2,248	2,327	2,426	2,424	2,411	2,388
Total	62,573	63,073	64,066	65,251	66,589	67,912	65,890	65,310	65,599	66,226

Benefit Payments by Retirement Type and Option

As of March 31, 2013

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	1,423	1,139	24	15	1	244	308	313	189	62	213	338	-
401 - 800	2,333	1,884	98	40	8	303	266	184	155	58	769	899	2
801 - 1,200	2,346	1,940	51	65	15	275	244	147	148	54	944	805	4
1,201 - 1,600	2,338	2,031	29	78	8	192	222	105	130	60	1,035	784	2
1,601 - 2,000	2,283	2,072	16	39	9	147	175	89	131	44	1,014	823	7
2,001 - 2,400	2,340	2,195	4	30	5	106	172	83	95	32	979	974	5
2,401 - 2,800	2,309	2,188	4	20	6	91	183	47	89	42	986	957	5
2,801 - 3,200	2,148	2,062	2	6	6	72	191	61	99	46	1,050	696	5
3,201 - 3,600	1,676	1,619	-	6	1	50	169	50	73	49	943	391	1
3,601 - 4,000	1,329	1,284	-	6	1	38	191	38	72	48	746	234	-
4,001	3,295	3,208	-	3	4	80	442	103	233	169	1,958	390	-
	23,820	21,622	228	308	64	1,598	2,563	1,220	1,414	664	10,637	7,291	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	222	200	-	-	12	10	107	23	50	23	9	10	-
401 - 800	641	553	41	2	34	11	265	55	162	87	37	35	-
801 - 1,200	628	529	62	8	15	14	248	38	145	84	61	52	-
1,201 - 1,600	501	439	32	13	5	12	166	35	149	60	52	39	-
1,601 - 2,000	414	386	18	2	3	5	137	27	105	70	59	16	-
2,001 - 2,400	371	361	7	-	2	1	142	23	84	61	43	18	-
2,401 - 2,800	356	350	3	-	2	1	145	15	73	61	44	18	-
2,801 - 3,200	291	284	3	-	4	-	102	14	68	57	33	17	-
3,201 - 3,600	231	231	-	-	-	-	89	24	36	48	22	12	-
3,601 - 4,000	150	150	-	-	-	-	66	10	24	29	14	7	-
4,001	433	429	1	-	3	-	151	25	88	105	50	14	-
	4,238	3,912	167	25	80	54	1,618	289	984	685	424	238	-

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	1,638	1,069	105	52	131	281	648	316	465	82	127
401 - 800	3,195	2,468	299	52	80	296	1,608	546	827	142	72
801 - 1,200	2,153	1,771	145	40	31	166	1,098	411	526	96	22
1,201 - 1,600	1,453	1,273	80	7	5	88	709	288	375	78	3
1,601 - 2,000	1,120	1,019	30	1	4	66	532	239	278	71	-
2,001 - 2,400	1,180	1,117	14	1	3	45	633	211	235	100	1
2,401 - 2,800	1,220	1,187	5	-	2	26	785	206	139	90	-
2,801 - 3,200	762	740	4	-	2	16	498	131	96	37	-
3,201 - 3,600	440	429	-	-	2	9	267	99	62	12	-
3,601 - 4,000	239	228	-	-	1	10	146	49	34	10	-
4,001	354	343	-	-	4	7	219	68	55	12	-
	13,754	11,644	682	153	265	1,010	7,143	2,564	3,092	730	225

* 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

	<u>As of March 31,</u>	<u>Years of Credited Service</u>							<u>All</u>
		<u>0-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30-34</u>	<u>35+</u>	
2004	Average Monthly Benefit	\$246	\$463	\$804	\$1,156	\$1,892	\$2,298	\$2,494	\$1,597
	Number of Active Retirants	1,238	3,635	3,207	3,654	7,180	7,439	2,917	29,270
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

Retirees and Beneficiaries

(Recurring Benefit Payments)

Tabulated by Fiscal Year that Payments Started as of March 31, 2013

Valuation Year	Number	Total Annual Benefits	Monthly Average Benefit	Valuation Year	Number	Total Annual Benefits	Monthly Average Benefit
1944	1	\$ 378	\$ 32	1985	550	\$ 10,321,237	\$ 1,564
1955	1	4,563	380	1986	641	13,221,426	1,719
1958	2	14,943	623	1987	1,000	21,410,051	1,784
1959	1	4,299	358	1988	596	10,789,215	1,509
1960	1	11,535	961	1989	748	14,900,195	1,660
1961	3	3,985	111	1990	815	18,155,464	1,856
1962	2	6,827	284	1991	942	21,396,611	1,893
1963	2	21,403	892	1992	883	21,589,442	2,038
1964	4	33,912	707	1993	908	24,111,893	2,213
1965	1	15,477	1,290	1994	967	25,320,201	2,182
1966	9	68,523	634	1995	1,824	56,642,038	2,588
1967	6	55,375	769	1996	1,796	53,306,677	2,473
1968	8	73,104	762	1997	716	15,902,906	1,851
1969	12	93,041	646	1998	730	16,201,552	1,849
1970	9	88,749	822	1999	1,041	25,334,785	2,028
1971	12	79,460	552	2000	1,283	32,750,182	2,127
1972	37	420,368	947	2001	1,501	37,765,653	2,097
1973	41	459,438	934	2002	1,258	32,121,215	2,128
1974	41	468,185	952	2003	1,640	45,856,893	2,330
1975	65	852,627	1,093	2004	1,618	42,067,320	2,167
1976	87	1,258,755	1,206	2005	1,696	44,823,989	2,202
1977	121	1,688,005	1,163	2006	1,697	42,804,409	2,102
1978	147	2,256,153	1,279	2007	1,812	44,742,419	2,058
1979	192	3,052,953	1,325	2008	1,811	43,221,330	1,989
1980	243	3,967,858	1,361	2009	1,707	40,586,309	1,981
1981	321	4,885,486	1,268	2010	2,425	68,680,970	2,360
1982	367	5,801,872	1,317	2011	2,207	63,481,971	2,397
1983	428	7,742,172	1,507	2012	2,165	54,167,011	2,085
1984	479	8,678,806	1,510	2013	2,192	49,498,778	1,882
				Total	41,812	\$ 1,033,280,394	\$ 2,059

Total Benefits Payable (Recurring Benefit Payments)

Tabulated by Attained Ages of Benefit Recipients as of March 31, 2013

Attained Ages	Service Retirement		Disability Retirement		Survivors and Beneficiaries		Total	
	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits
Under 20	-	-	-	-	53	\$ 134,471	53	\$ 134,471
20-24	-	-	-	-	16	146,744	16	\$ 146,744
25-29	-	-	-	-	26	284,914	26	\$ 284,914
30-34	-	-	1	14,522	32	241,216	33	\$ 255,738
35-39	1	\$ 31,931	4	\$ 32,225	64	741,049	69	\$ 805,205
40-44	2	33,216	20	206,789	81	851,290	103	\$ 1,091,295
45-49	82	4,129,788	66	790,389	119	1,340,810	267	\$ 6,260,987
50-54	396	19,400,539	165	2,011,700	153	2,003,645	714	\$ 23,415,884
55-59	2,134	76,086,038	315	3,931,572	247	3,416,723	2,696	\$ 83,434,333
60-64	6,524	191,948,385	372	4,917,953	345	5,926,236	7,241	\$ 202,792,574
65-69	8,714	236,180,190	272	3,092,972	446	7,276,833	9,432	\$ 246,549,995
70-74	6,380	165,675,962	142	1,685,926	383	6,723,400	6,905	\$ 174,085,288
75-79	5,161	124,490,405	74	823,801	366	5,662,686	5,601	\$ 130,976,892
80-84	4,160	89,122,141	73	847,929	377	6,367,019	4,610	\$ 96,337,089
85-89	2,469	43,949,252	38	415,576	239	3,325,215	2,746	\$ 47,690,043
90-94	931	14,487,955	18	194,582	106	1,331,578	1,055	\$ 16,014,115
95-99	205	2,534,037	3	21,573	16	170,063	224	\$ 2,725,673
100 & over	19	274,390	-	-	2	4,764	21	\$ 279,154
Total	37,178	\$ 968,344,229	1,563	\$ 18,987,509	3,071	\$ 45,948,656	41,812	\$ 1,033,280,394

Average Benefits

