

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



**COMPREHENSIVE  
ANNUAL  
FINANCIAL REPORT  
FOR THE FISCAL YEAR ENDED JUNE 30, 2012**



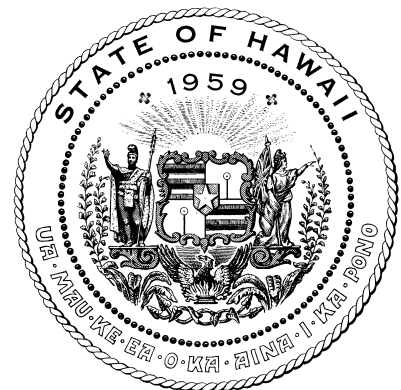
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ANNUAL  
FINANCIAL REPORT**

FOR THE FISCAL YEAR ENDED JUNE 30, 2012

Prepared by the Staff of the:  
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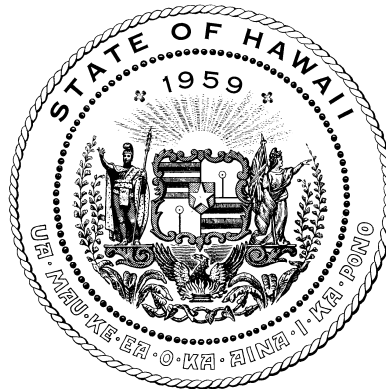
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**Employees' Retirement System**  

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**of the State of Hawaii**



**INTRODUCTORY  
SECTION**

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*Letter of Transmittal (continued)*

NEIL ABERCROMBIE  
GOVERNOR



**STATE OF HAWAII**  
EMPLOYEES' RETIREMENT SYSTEM

July 29, 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, 2012. 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.

On March 31, 2012, the ERS' total membership of 113,282 was comprised of 65,599 active members, 40,774 retirees and beneficiaries, and 6,909 inactive vested members. This represents a 1.5% 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. During fiscal year 2012 (July 2011 to June 2012) the ERS surpassed \$1.015 billion in total pension payments to retirees and beneficiaries.

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 2012**

Pension Reform and Other Legislation - The ERS administration and Board of Trustees has continued to work persistently on ways to address the underfunded status of the ERS Pension Trust. As such the 2012 legislation focused on ways to reduce future liabilities of the ERS in order to maintain the long-term viability of the Pension Trust. The 2012 legislation addressed ways to eliminate unknown costs related to unexpected increases in pension benefits (sometimes known as ‘pension spiking’). Legislation was also passed to increase the investment experience requirements of certain appointed Trustees. Below are highlights of the bills that were passed by the Legislature during this fiscal year:

Act 152 – Calculation of Retirement Benefits for New Hires. This law was proposed to help address the long-term liabilities of the ERS, thus improving the overall viability of the pension trust. It amends the definition of “compensation” in ERS benefit calculations for new ERS members after June 30, 2012. Compensation will essentially be defined as normal periodic payments, including shortage differentials and Department of Education (DOE) 12-month differentials. Compensation will not include overtime, supplemental payments, bonuses, lump sum salary supplements and other types of differentials.

Act 153 – Relating to the Calculation of Pension Benefits and Costs. This law corrects sections related to the new benefit structure effective July 1, 2012 and addresses the unexpected increases in retirement benefits for some members of the ERS and in the unfunded liability of the Pension Trust by requiring retiree’s last employer to pay the costs attributable to “pension spiking”.

- Harmonizes ordinary disability and ordinary death benefits for new members of the ERS after June 30, 2012 with their service retirement benefits.
- Makes consistent use through all types of credited service, the years of credited service component utilized in the average final compensation formula.
- Requires the retiree’s last employer to pay the additional costs resulting from sudden increases in the member’s non-base pay during the member’s final years of employment for members of the retirement system that first became a member of the retirement system before July 1, 2012 and retire after June 30, 2012.

Act 72 - Requirements for Appointed Trustees of the Employees Retirement System

- This law increases the number of appointed trustees from one to two to provide that at least two of the ERS Board of Trustees’ three appointed trustees have at least three years of experience providing financial services, including investments, to public, corporate or private institutional clients.

**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.



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*Board of Trustees*

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, 2012 are listed in the Investment Section.

Net investment income, including dividends, interest, other investment earnings, and gains/losses on the sale of investments resulted in an investment loss of \$57.8 million in FY2012. This resulted in an investment gloss of slightly less than 0.1% for the year, using rate of return methodologies that are generally accepted by the Global Investment Performance Standards (GIPS).

**FUNDING AND ACTUARIAL OVERVIEW**

While the ERS has implemented legislative changes to help with the long-term funding of the ERS, we experienced a small investment loss during the fiscal year after two years of positive investment. The funded ratio decreased to 59.2% as of June 30, 2012 from 59.4% as of June 30, 2011. The decline in FY 2012 is primarily the result of recognition of investment losses in the fiscal year ended June 30, 2009 since ERS uses a four-year smoothing of investment market gains and losses to reduce volatility of the required contribution rates.

The new laws passed in the 2011 and 2012 legislative session will help to support the future financial stability of our pension fund. These changes impacted all facets of our benefit/contribution policy: lower benefit multiplier, higher benefit eligibility, lower benefit post-retirement increases and higher member and employer contributions. As unfavorable as these "reforms" may seem to new employees, there are a number of public pension funds that have adopted benefit changes impacting their current employees and retirees. The ERS has resisted taking that direction and has instead concentrated its efforts on guaranteeing promised benefits.

**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  
Administrator<sup>1</sup>

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

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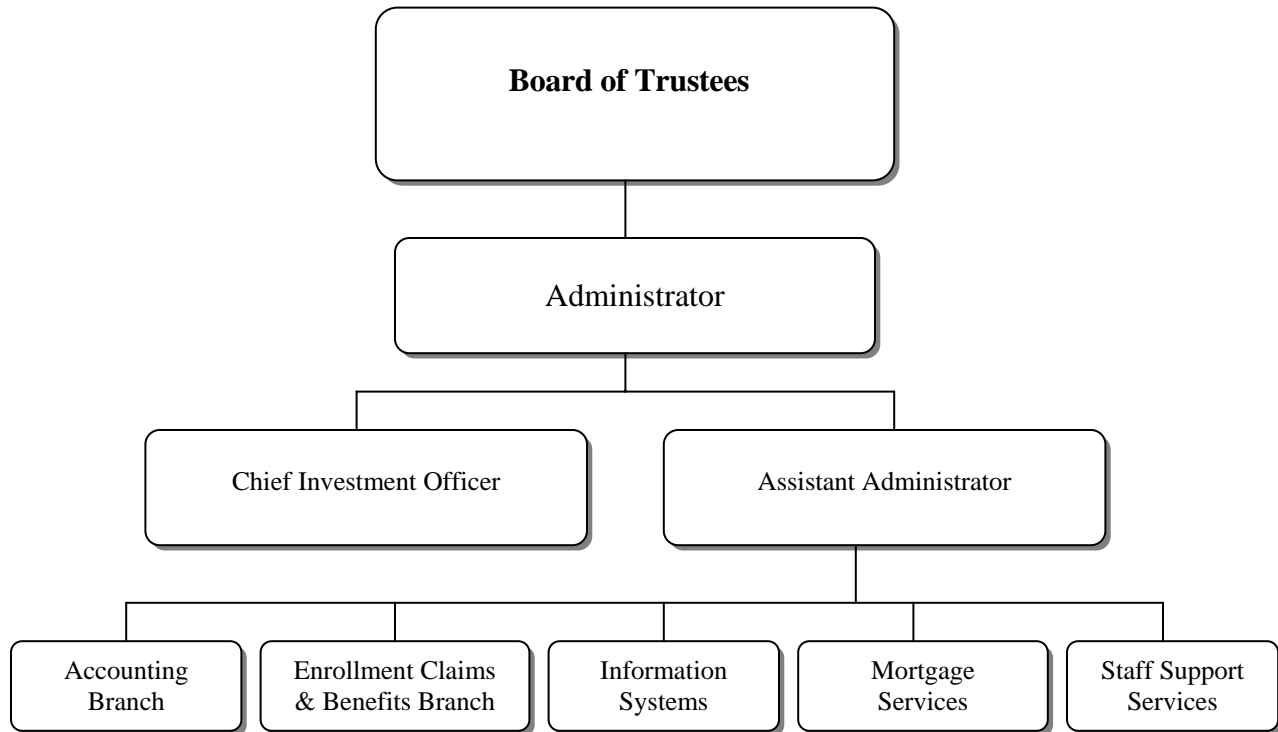
*Board of Trustees*

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.

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	<b>Date Current Term Began</b>	<b>Date Term Ends</b>
<b>Elected:</b>		
Ms. Jackie Ferguson-Miyamoto, Vice 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 .....	January 2, 2012	January 1, 2018
<b>Appointed:</b>		
Mr. Colbert M. Matsumoto, Chair .....	January 2, 2007	January 1, 2013
Mr. Jerry E. Rauckhorst.....	January 2, 2010	January 1, 2015
Mr. Vincent E. Barfield .....	August 11, 2011	January 1, 2017
<b>Ex-Officio:</b>		
Mr. Kalbert Young.....	December 2, 2010	



**Administrator**<sup>1</sup>

**Assistant Administrator**<sup>1</sup>

**Chief Investment Officer**

Wesley K. Machida

Kanoe Margol

Rodney L. June

**Actuary**

Gabriel, Roeder, Smith and Company

**Auditors**

State of Hawaii, Office of the Auditor  
KPMG LLP

**Legal Advisor**

Attorney General of the State of Hawaii

**Medical Board**

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

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

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

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*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, 2012, 6,499 active employees were enrolled in the Contributory Plan, or slightly more than 9.9% 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, 2012, the Hybrid Plan had 40,143 members or about 61.2% 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, 2012, there were 18,970 active employees in the Noncontributory Plan, which represents over 28.9% of all active members on this date.

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

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*Summary of Retirement Benefit Plan Provisions*


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**For employees hired prior to July 1, 2012 <sup>(a)</sup>**


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	<u>Noncontributory Plan</u>	<u>Contributory Plan</u>	<u>Hybrid Plan</u>
<b>Employee Contributions</b>	No employee contributions	7.8% of salary	6.0% of salary
<b>Normal Retirement</b>			
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 1/1/71, AFC may be an average of the highest salaries during any five years of credited service including any salary paid in lieu of vacation.</p>			
<b>Early Retirement</b>			
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
<b>Deferred Vesting</b>			
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

<sup>(a)</sup> 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) <sup>(a)</sup>

	<u>Noncontributory Plan</u>	<u>Contributory Plan</u>	<u>Hybrid Plan</u>
<b>Annuity Savings Account</b>			
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
<b>Ordinary Disability</b>			
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)

<sup>(a)</sup> 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) <sup>(a)</sup>**

	<u>Noncontributory Plan</u>	<u>Contributory Plan</u>	<u>Hybrid Plan</u>
<b>Service-Connected Disability</b>			
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
<b>Ordinary Death</b>			
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.

<sup>(a)</sup> 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) <sup>(a)</sup>**

	<b>Noncontributory Plan</b>	<b>Contributory Plan</b>	<b>Hybrid Plan</b>
<b>Service-Connected Death</b>			
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.
<b>Post Retirement Benefit</b> - 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.).		

<sup>(a)</sup> 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.

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*Summary of Retirement Benefit Plan Provisions (continued)*

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**For employees hired prior to July 1, 2012 (continued) <sup>(a)</sup>**

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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.

<sup>(a)</sup> 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 <sup>(b)</sup>**

	<b>Noncontributory Plan</b>	<b>Contributory Plan</b>	<b>Hybrid Plan</b>
<b>Employee Contributions</b>	No employee contributions	9.8% of salary	8.0% of salary
<b>Normal Retirement</b>			
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.			
<b>Early Retirement</b>			
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
<b>Deferred Vesting</b>			
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 as 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

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

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*Summary of Retirement Benefit Plan Provisions (continued)*


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**For employees hired after June 30, 2012 (continued)<sup>(b)</sup>**


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	<u>Noncontributory Plan</u>	<u>Contributory Plan</u>	<u>Hybrid Plan</u>
<b>Annuity Savings Account</b>			
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
<b>Refund Benefit</b>			
- 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
<b>Ordinary Disability</b>			
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)

<sup>(b)</sup> 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)<sup>(b)</sup>**

	<u>Noncontributory Plan</u>	<u>Contributory Plan</u>	<u>Hybrid Plan</u>
<b>Service-Connected Disability</b>			
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
<b>Ordinary Death</b>			
Eligibility	Active employee at time of death with at least 10 years of credited service	Active employee at time of death with at least 1 year of service	Active employee at time of death with at least 10 years of service
Benefit	Surviving spouse/reciprocal beneficiary (until remarriage or reentry into a new reciprocal beneficiary relationship) and dependent children (up to age 18) receive a benefit equal to a percentage of member's accrued maximum allowance unreduced for age; <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 120%) 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 10 years of service, return of member's contributions and accrued interest.

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

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*Summary of Retirement Benefit Plan Provisions (continued)*


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**For employees hired after June 30, 2012 (continued)<sup>(b)</sup>**


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	<u>Noncontributory Plan</u>	<u>Contributory Plan</u>	<u>Hybrid Plan</u>
<b>Service-Connected Death</b>			
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.
<b>Post Retirement Benefit</b> - 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.).		

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

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*Summary of Retirement Benefit Plan Provisions (continued)*

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**For employees hired after June 30, 2012 (continued)<sup>(b)</sup>**

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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.

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

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*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](http://www.eutf.hawaii.gov).

### **Applying for Retirement**

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

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

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

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

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

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

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



**Counseling Service**

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

**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.

**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 three Acts affecting the ERS were passed by the 2012 Legislature and approved by the Governor. For more information on this legislation, you can visit the Legislative website at: [www.capitol.hawaii.gov](http://www.capitol.hawaii.gov)

**Act 152 – Calculation of Retirement Benefits for New Hires**

This law was proposed to reduce the future long-term liability of the ERS, and will reduce employer contributions in the near term, thus improving the long-term viability of the pension trust. It amends the definition of “compensation” for new ERS members after June 30, 2012.

- Amends the definition of “compensation” under HRS § 88-21.5 for new ERS members after 6/30/2012 for the purposes of ERS benefit calculations. Compensation will essentially be defined as normal periodic payments, including shortage differentials and DOE 12-month differentials. Compensation will not include overtime, supplemental payments, bonuses, lump sum salary supplements and other types of differentials.
- Effective: 6/30/2012

**Act 153 – Relating to the Employees’ Retirement System.**

This law was proposed to clarify and adjust pension benefit calculations of the Employees’ Retirement System. It corrects sections related to the new benefit structure effective July 1, 2012 and addresses the unexpected increases in retirement benefits for some members of the ERS and in the unfunded liability of the System by requiring retiree’s last employer to pay the costs attributable to “pension spiking”.

- Harmonizes ordinary disability and ordinary death benefits for new members of the ERS after June 30, 2012 with their service retirement benefits.
- Makes consistent use through all types of credited service, the years of credited service component utilized in the average final compensation formula.
- Requires the retiree’s last employer to pay the additional costs resulting from sudden increases in the member’s non-base pay during the member’s final years of employment for members of the retirement system that first became a member of the retirement system before July 1, 2012 and retire after June 30, 2012.
- Effective: 7/01/2012

**Act 72 - Requirements for Appointed Trustees of the Employees Retirement System**

This law increases the number of appointed trustees that are required to have investment experience.

- Amends HRS § 88-24 to require that at least two of the ERS Board of Trustees’ three appointed trustees have at least three years of experience providing financial services, including investments, to public, corporate or private institutional clients
- Effective: 4/24/2012



**Employees' Retirement System**  

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of the State of Hawaii

**Submitted by**

**THE AUDITOR  
STATE OF HAWAII**



**FINANCIAL  
SECTION**

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*Independent Auditors' Report*

KPMG LLP  
PO Box 4150  
Honolulu, HI 96812-4150

The Auditor  
State of Hawaii:

We have audited the accompanying statement of plan net assets – all trust funds of the Employees' Retirement System of the State of Hawaii (the ERS) as of June 30, 2012, and the related statement of changes in plan net assets – all trust funds for the year then ended. These financial statements are the responsibility of the ERS' management. 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 includes consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the ERS' internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the plan net assets of the Employees' Retirement System of the State of Hawaii as of June 30, 2012, and its changes in plan net assets for the year then ended, in conformity with U.S. generally accepted accounting principles.

In accordance with *Government Auditing Standards*, we have also issued our report dated July 29, 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* and should be considered in assessing the results of our audit.

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

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*Independent Auditors' Report (continued)*

The Auditor  
State of Hawaii

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis on pages 31 through 37 and Required Supplementary Information on pages 66 through 67 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.

Our audit was conducted for the purpose of forming an opinion on the basic financial statements of the ERS taken as a whole. The supplementary information included in schedules 1 through 4 for the year ended June 30, 2012 is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such 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. The supplementary 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.

Our audit was conducted for the purpose of forming an opinion on the basic financial statements taken as a whole. The information contained in the Introductory, Investment, Actuarial, and Statistical sections is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information has 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.

*KPMG LLP*

July 29, 2014



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*Management's Discussion and Analysis*

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, 2012. 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 plan net assets provides a snapshot of the financial position of the ERS at June 30, 2012. This financial statement reflects the resources available to pay benefits to members, including retirees and beneficiaries, at the end of the fiscal years reported.
- The statement of changes in plan net assets summarize the ERS' financial activities that occurred during the fiscal year from July 1, 2011 to June 30, 2012 (FY 2012). This financial statement measures the changes in the resources available to pay pension benefits to members, retirees, and beneficiaries for fiscal year 2012.
- 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.

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

- As of June 30, 2012, plan net assets were \$11.3 billion or a decrease of about \$0.4 billion during the fiscal year then ended. This represents a decrease of approximately 3.1% from the \$11.7 billion in plan net assets available as of June 30, 2011. The decrease of plan net assets in FY 2012 reflects the negative investment returns in the non-U.S. equity markets.
- During FY 2012, the ERS investment loss was 0.1% on pension plan assets due to investment losses in the international equity markets that overshadowed the positive returns in other asset classes.
- Additional pension legislation was passed in 2012 to help improve funding of the pension trust and to counteract perceived pension spiking issues. The ERS collects additional contributions for employees who were first hired prior to July 1, 2012 and retire after June 30, 2012 if the retiring employee has significant non-base pay increases included in their average final compensation. The additional contributions, collected from their last employer, are equal to the actuarial present value of the additional benefits earned due to the “excessive” non-base pay increases. For members first hired after June 30, 2012, legislation enacted eliminates most types of non-base pay from the definition of compensation that is excluded in determining both contributions made by and on behalf of these employees and the retirement benefits these employees will earn. 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 decreased to 59.2% as of June 30, 2012 from 59.4% as of June 30, 2011 while the corresponding unfunded actuarial accrued liability (UAAL) of the ERS increased to \$8.4 billion from \$8.2 billion, respectively. During 2012, the ERS’ underfunded status increased primarily due to continued recognition of investment losses as a result of the severe downturn in investment markets during the fiscal year ended June 30, 2009. The recognition in investment losses was slightly offset with a liability experience gain primarily as a result of lower than expected salary increases in the year.
- Total member and employer contributions decreased by \$40.8 million, or 5.3% during FY 2012. The contributions decrease during FY 2012 is primarily attributed to the completion in one-time Hybrid Plan Upgrade Payments in FY 2011. Normal employer and member contributions increased in FY 2012 due to an increase in covered payroll resulting from more active members and elimination of the furloughs of employees.
- Total retirement benefit payments increased by \$55.3 million, or 5.8%, to \$1,015.5 million in FY 2012 compared to \$960.2 million in FY 2011. Pension benefits continues to increase due to 2.7% more retirees and beneficiaries (40,774 in 2012 compared to 39,689 in 2011), an increase in the average pension benefit for new retirees, and the annual 2.5% postretirement increase.
- Administrative expenses decreased by \$1.7 million in FY 2012 to \$11.6 million compared to \$13.3 million in FY 2011. Administrative expenses for all years were within the ERS’ budgeted amounts. The decrease for FY 2012 was primarily due to lower computer system maintenance costs and the elimination of the backlog in finalization of pension benefits.

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*Management's Discussion and Analysis (continued)*

**Analysis of Plan Net Assets for Pension Trust**

**Summary of Plan Net Assets**

June 30, 2012

*(Dollars in millions)*

	<u>2012</u>	<u>2011</u>	<u>FY 2012</u> <u>% change</u>
<b>Assets:</b>			
Cash and cash equivalents and short-term investments	\$ 516.5	\$ 480.8	7.4 %
Receivables	303.4	354.8	(14.5)
Investments	11,363.1	11,553.0	(1.6)
Invested securities lending collateral	923.9	963.2	(4.1)
Equipment	<u>7.3</u>	<u>8.4</u>	(13.1)
Total assets	<u>13,114.2</u>	<u>13,360.2</u>	(1.8)
<b>Liabilities</b>			
Securities lending liability	923.9	963.2	(4.1)
Investment accounts and other payables	<u>897.3</u>	<u>742.6</u>	20.8
Total liabilities	<u>1,821.2</u>	<u>1,705.8</u>	6.8
Plan net assets	<u>\$ 11,293.0</u>	<u>\$ 11,654.4</u>	(3.1)

**Summary of Changes in Plan Net Assets**

June 30, 2012

*(Dollars in millions)*

	<u>2012</u>	<u>2011</u>	<u>FY 2012</u> <u>% change</u>
<b>Additions:</b>			
Contributions	\$ 730.8	\$ 771.6	(5.3) %
Net investments (loss) income	<u>(57.8)</u>	<u>2,040.0</u>	(102.8)
Total additions	<u>673.0</u>	<u>2,811.6</u>	(76.1)
<b>Deductions:</b>			
Pension benefit payments	1,015.5	960.2	5.8
Refund of contributions	7.2	7.9	(8.9)
Administrative expenses	<u>11.6</u>	<u>13.3</u>	(12.8)
Total deductions	<u>1,034.3</u>	<u>981.4</u>	5.4
(Decrease) increase in plan net assets	<u>\$ (361.3)</u>	<u>\$ 1,830.2</u>	(119.7)

**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 had a slight loss during FY 2012 with a -0.1% return on assets due to losses in the international equity markets. The real estate and private equity markets earned rates

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*Management's Discussion and Analysis (continued)*

above the 7.75% total portfolio benchmark return while the fixed income and domestic equity markets earned positive returns.

The real estate and private equity asset classes earned a respectable 16.0% and 11.9% for the FY 2012, respectively. The fixed income, real return and domestic equity asset classes had positive returns of 7.0%, 5.5%, and 0.7%, respectively, while the non-US equities experienced a loss of 13.9%. During FY 2012 total net investment losses was \$57.8 million compared to FY 2011 gains of \$2,040.0 million.

The asset distribution of the ERS' investment securities for the Pension Trust, excluding pending trade settlements and securities lending collateral, at June 30, 2012 and 2011 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% of the 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 2012, due to portfolio rebalancing, and changes in investment managers. The increase for fixed income securities in FY 2012 resulted from positive investment earnings in the asset class with a small increase due to rebalancing the investment portfolio. The increase in real estate assets for FY 2012 reflects continued positive investment returns in the asset class.

	<b>Asset Class</b>			
	June 30, 2012			
	<i>(Dollars in millions)</i>			
	<u>2012</u>	<u>%</u>	<u>2011</u>	<u>%</u>
Short term investments				
and cash	\$ 516.5	4.3 %	\$ 480.8	4.0 %
Equity securities	6,299.1	53.0	7,356.8	61.1
Fixed income	3,225.5	27.2	2,503.0	20.8
Real estate	1,250.2	10.5	1,164.8	9.7
Alternative investments	588.2	5.0	528.4	4.4
Total assets	<u>11,879.5</u>	<u>100.0</u>	<u>12,033.8</u>	<u>100.0</u>
Less loans on real estate				
and alternative investments	288.6		302.1	
Total	<u>\$ 11,590.9</u>		<u>\$ 11,731.7</u>	

Investment expenses consist primarily of investment management fees paid to external investment advisor firms that oversee the ERS' investment portfolio. The decrease in investment expenses for management fees in FY 2012 relative to FY 2011 reflects lower returns of the real estate portfolio for the FY 2012. Incentive fees are created and accrued when the investment has excess returns above the asset benchmark during the year, and may be eliminated if the portfolio decreases in value. Incentive fees are only paid when an asset is sold if the total return for the asset exceeds a target return rate.

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

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*Management's Discussion and Analysis (continued)*

managers may receive an incentive fee for superior investment returns while maintaining an acceptable level of investment risk.

**Contributions**

Total contributions from employers and employees decreased by \$40.8 million to \$730.8 million during FY2012 compared to \$771.6 million in FY 2011. The 5.3% decrease in FY 2012 was due to the elimination of one-time payments hybrid upgrade payments (HPUP) that were made in FY 2011. When disregarding the HPUP payments, both employer and employee contributions increased during FY 2012 due to an increase in the number of active members and an increase in the amount of covered payroll. Please refer to the Financial Section in the ERS 2012 and 2011 CAFR for more information.

**Pension Plan Benefits and Expenses**

Pension benefit payments are the primary expense of the ERS with payments totaling \$1,015.5 million during FY 2012 and \$960.2 million during FY 2011. Pension benefits continued to increase with additional number of new retirees, higher pension benefits for recent retirees, and the annual postretirement increase for ERS' retirees.

Refunds to terminating members continued to increase slightly due to an increase in members making contributions under the Hybrid Plan and taking a refund compared previously to most members not making contributions to the ERS as a member of the Noncontributory Plan.

The \$1.7 million decrease in administrative expenses in FY 2012 resulted from higher computer maintenance costs in FY 2011 and the elimination of the backlog in finalization of pension benefits in FY 2012.

**Pension Plan Changes**

Legislation enacted by the 2012 legislature focused on improving the funding status of the ERS pension trust based on the definition of compensation.

Act 152/2012 SLH amends the definition of "compensation" for the purpose of calculating retirement benefits for all employees who become Employees' Retirement System (ERS) members after June 30, 2012 to include the following:

- Normal periodic payments of money for service, the right to which accrues on an hourly, daily, monthly or annual basis
- Shortage differentials
- Elective salary reduction contributions under 125, 403(b) and 457(b) of the IRC of 1986, as amended (i.e., deductions for "deferred compensation" and "teachers' annuity")
- Twelve-month differentials for employees of the department of education

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*Management's Discussion and Analysis (continued)*

Act 153/2012 SLH requires the last employer to make additional contributions to the ERS for employees that first became ERS members before July 1, 2012 and retire after June 30, 2012, if the member has "excessive" non-base pay during the last 10 years of employment. The additional contributions are based on the increased costs of the actuarial equivalent increase in pension benefits the member will be paid in retirement compared to the pension benefits that would be paid if the member did not have excess non-base pay in their Average Final Compensation amount.

Pension plan changes, including legislative and Board of Trustees' actions, are summarized in the Introductory Section and Actuarial Section of the CAFR.

**Actuarial Valuations and 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 decreased to 59.2% as of June 30, 2012 from 59.4% as of June 30, 2011. The ERS' UAAL was \$8.4 and \$8.2 billion as of June 30, 2012 and 2011, respectively. The decline in FY 2012 and FY 2011 is primarily the result of investment losses in the fiscal year ended June 30, 2009 since ERS uses a four-year smoothing of investment market gains and losses to reduce volatility of the required contribution rates.

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, 2012 and 2011 was 30.0 years and 25.0 years, respectively.

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*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.





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*Financial Statements (continued)*

## Statement of Changes in Plan Net Assets – All Trust Funds

Year ended June 30, 2012

Additions	
Contributions (notes A(4) and E)	
Employer contributions	\$ 548,353,394
Member contributions	182,401,324
Total contributions	<u>730,754,718</u>
Investment income (note F)	
From investing activities	
Net depreciation in fair value of investments	(341,279,085)
Income on real estate investments	116,314,983
Interest on fixed income securities	109,897,746
Dividends on equity securities	104,854,788
Alternative investment income	46,179,704
Interest on short-term investments	1,109,643
Miscellaneous	1,814,226
	<u>38,892,005</u>
Less investment expenses	<u>100,302,009</u>
Net investment loss from investing activities	<u>(61,410,004)</u>
From securities lending activities	
Securities lending income	<u>2,839,531</u>
Securities lending expenses	
Borrower rebates	(1,408,982)
Management fees	636,919
Total securities lending activities expenses	<u>(772,063)</u>
Net investment income from securities lending activities	<u>3,611,594</u>
Total net investment loss	<u>(57,798,410)</u>
Total additions	<u>672,956,308</u>
Deductions	
Benefit payments (note A(3) )	1,015,447,668
Refunds of member contributions	7,187,606
Administrative expenses	11,634,197
	<u>1,034,269,471</u>
Total deductions	<u>1,034,269,471</u>
Net decrease in net assets	(361,313,163)
Net assets held in trust for pension benefits (note D)	
Beginning of year	<u>11,654,355,564</u>
End of year	\$ <u><u>11,293,042,401</u></u>

See accompanying notes to financial statements.

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*Notes to Financial Statements*

June 30, 2012

**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, 2012 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	3,245
All other employees	<u>34,585</u>
Total pensioners	<u>37,830</u>
Beneficiaries currently receiving benefits:	
Police and firefighters	210
All other employees	<u>2,734</u>
Total beneficiaries	<u>2,944</u>
Total pensioners and beneficiaries	<u><u>40,774</u></u>
Terminated vested members entitled to benefits but not yet receiving benefits:	
Police and firefighters	238
All other employees	<u>6,671</u>
Total terminated vested members	<u><u>6,909</u></u>
Current employees:	
Vested:	
Police and firefighters	4,091
All other employees	41,681
Nonvested:	
Police and firefighters	803
All other employees	<u>19,024</u>
Total current employees	<u>65,599</u>
Total membership	<u><u>113,282</u></u>

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*Notes to Financial Statements (continued)***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 current 19.70% for Police and Fire will increase to 22.00% effective July 1, 2012 and will gradually increase to 25.00% for fiscal year 2016 and beyond. The current 15.00% rate for All Other Employees will increase to 15.50% effective July 1, 2012 and will gradually increase to 17.00% for fiscal year 2016 and beyond. 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.

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.

**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 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.

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

Police officers, firefighters, 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 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 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, 2012
Actuarial value of assets (a)	\$12,242,493,808
Actuarial Accrued Liability (AAL)	
Entry Age (b)	<u>20,683,402,818</u>
Unfunded AAL (UAAL) (b-a)	<u>\$8,440,909,010</u>
Percent Funded (a/b)	59.2%
Annual covered payroll (c)	\$3,889,976,195
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, 2012 actuarial valuation follows:

Valuation date	June 30, 2012
Actuarial cost method	Entry Age Normal
Amortization method	Level percent, open
Remaining amortization period as of June 30, 2012	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%
* Includes inflation at	3.0%
Cost of living adjustments (COLAs) **	2.5%

\*\* 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.

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*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 years ended June 30, 2012, 2011, and 2010, were \$654,755, \$582,535, and \$536,237, respectively, which represented 16.8%, 14.9%, and 13.8%, respectively, of covered payroll. Actual contributions (in thousands) by all employers for the years ended June 30, 2012, 2011, and 2010, were \$548,353, \$538,693, and \$547,670, respectively, which represented 83.7%, 92.5%, and 102.1%, 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.

**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, 2012, 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.



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*Notes to Financial Statements (continued)***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 plan net assets. The net assets 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 nearterm.

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.

**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.

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*Notes to Financial Statements (continued)***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 plan net assets 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 2012 and 2% regular interest for employees hired after June 30, 2012.
- 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

**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 will result in a change in the presentation of the statement of plan net assets to the statement of plan net position and the term net assets is changed to net position throughout the financial statements. The implementation of Statement No. 63 will 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.

Also, in June 2012, GASB issued Statement No. 68, *Accounting and Financial Reporting for Pensions – an amendment of GASB Statement No. 27*. Statement No. 68 establishes new standards for accounting for pensions by employers whose employees are provided with pensions through pension plans administered through trusts, or equivalent arrangements, that meet the characteristics defined in the Statements and addresses accounting and financial reporting issues of certain nonemployer entities that contribute to such plans. Statement No. 68 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.

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*Notes to Financial Statements (continued)*
**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 assets held in trust for pension benefits as of June 30, 2012 are as follows:

	<u>2012</u>
Pension Accumulation Fund	\$ 9,490,402,585
Annuity Savings Fund	1,793,095,824
Expense Fund	<u>9,543,992</u>
Total net assets held in trust for pension benefits	<u>\$ 11,293,042,401</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. As of July 1, 2008, employers contribute 19.70% for their police officers and firefighters, and 15.00% for all other employees.

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

Member contributions rates are statutorily established in accordance with Chapter 88 of the HRS, and are discussed in note A3. Plan Descriptions and Funding Policy above.

**Note F – Deposits and Investment****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. The float caused by outstanding checks in the operating funds is invested, thus causing a possible negative book balance. Deposits are presented in the basic financial statements at cost, which represents market or fair value. The float for outstanding checks is included in the liabilities section of the statement of plan net assets.

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, 2012, the carrying amount of deposits totaled approximately \$50,976,924 and the corresponding bank balance was \$54,923,881, 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, 2012</u>
<b>Carrying amounts of deposit - book</b>	
Total book balances	\$ <u><u>50,976,924</u></u>
<b>Depository accounts</b>	
Total bank balances	\$ <u><u>54,923,881</u></u>

**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, 2012. Please refer to Note C2 above for a discussion of fair value on investments.

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

Cash and short-term instruments		
Cash and cash equivalents	\$	50,976,924
Short-term bills and notes		111,333,036
Pooled and others		345,201,490
Debt securities		
Asset backed securities		36,470,719
Collateralized mortgage obligations		65,593,798
Commercial mortgage backed securities		45,754,276
Corporate		957,244,763
Government		534,709,648
Government agencies		203,509,618
Index linked government bonds		431,389,918
Residential mortgage backed securities		877,721,314
Municipal/Provincial bonds		55,339,813
Pooled and others		18,000,536
Derivatives		
Forwards - Cash and short-term instruments		8,985,768
Options - Equities		(9,031,580)
Options - Debt Securities		665,763
Rights/warrants - Equities		32,478
Swaps		(891,525)
Equities		6,308,147,419
Real estate		1,250,239,211
Alternative investments		588,194,316
Total investments	\$	<u>11,879,587,703</u>
<hr/>		
Short-term instruments for securities lending collateral pool	\$	923,932,665

**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, 2012 is below. Securities below investment grade of Baa and non-rated issues (by Moodys) amounted to \$377,078,555 or 11.7% 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, 2012

Ratings	Cash and cash equivalents	Asset backed securities	Corporate bonds	Government bonds and agencies	Mortgage backed securities	Residential mortgage backed securities	Pooled & others	Total	Percentage to total
Agency	\$ -	\$ -	\$ -	\$ 12,390,824	\$ -	\$ 776,977,751	\$ -	\$ 789,368,575	23.7%
Aaa	111,333,036	10,615,978	11,734,716	930,015,279	29,352,986	97,474,364	-	1,190,526,359	35.7%
Aa	-	7,414,522	46,876,091	80,929,820	3,108,144	-	2,501,815	140,830,392	4.2%
A	-	7,792,781	247,616,756	127,781,562	11,142,444	-	-	394,333,543	11.8%
Baa	-	2,538,527	386,215,038	45,330,247	9,278,511	1,567,692	-	444,930,015	13.3%
Ba	-	155,579	103,719,654	11,008,868	14,704,094	-	11,822,134	141,410,329	4.2%
B	-	274,923	72,578,829	5,874,151	11,652,666	-	3,874,338	94,254,907	2.8%
Caa	-	1,234,318	5,595,205	-	5,525,328	-	-	12,354,851	0.4%
Ca	-	2,403,672	-	-	3,204,093	-	-	5,607,765	0.2%
NR	-	4,040,419	82,908,474	11,618,246	23,379,808	1,701,507	(197,751)	123,450,703	3.7%
	<u>\$ 111,333,036</u>	<u>\$ 36,470,719</u>	<u>\$ 957,244,763</u>	<u>\$ 1,224,948,997</u>	<u>\$ 111,348,074</u>	<u>\$ 877,721,314</u>	<u>\$ 18,000,536</u>	<u>\$ 3,337,067,439</u>	100.0%
						Derivatives		(225,762)	
						Short-term investments		(111,333,036)	
						Total fixed income		<u>\$ 3,225,508,641</u>	

**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	\$ 68,261,180
Not subject to custodial credit risk	4,333,503,760
Not exposed - registered	6,560,686,425
Not exposed - securities on loan	<u>917,136,338</u>
<b>Total investments</b>	<u>\$ 11,879,587,703</u>

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*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, then manager shall not hold more than the benchmark weight plus 2 percentage points.)

At June 30, 2012, 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, 2012, 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	\$ 111,333,036	0.3
Debt securities		
Asset backed securities	36,470,719	2.8
Collateralized mortgage obligations	65,593,798	2.0
Commercial mortgage backed securities	45,754,276	4.3
Corporate	957,244,763	4.9
Government	534,709,648	7.2
Government agencies	203,509,618	5.0
Index linked government bonds	431,389,918	9.7
Residential mortgage backed securities	877,721,314	2.1
State or local governments	55,339,813	10.3
Pooled and others	18,000,536	N/A
Total	\$ <u>3,337,067,439</u>	5.1

*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 G.

The following table summarizes the ERS' exposure to foreign currency risk in U.S. dollars as of June 30, 2012. (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	\$ 6,258	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,258
Australian dollar	152,764	70,527,234	(1,255)	59,845,827	-	-	130,524,570
Brazilian real	-	798,641	-	24,677,854	-	-	25,476,495
British pound sterling	1,615,735	143,871,065	177,725	243,972,125	-	-	389,636,650
Bulgarian new lev	-	-	-	201,401	-	-	201,401
Canadian dollar	7,179,818	36,074,014	-	60,086,955	-	-	103,340,787
Chilean peso	10,732	-	5,832	3,077,425	-	-	3,093,989
Colombian peso	-	-	-	1,603,469	-	-	1,603,469
Danish krone	-	15,430	-	24,486,632	-	-	24,502,062
Egyptian pound	-	-	-	157,557	-	-	157,557
Euro	5,015,218	236,983,892	2,290,030	364,904,367	-	-	609,193,507
Hong Kong dollar	446,225	-	-	134,007,694	-	-	134,453,919
Hungarian forint	5,607	-	-	286,964	-	-	292,571
Indian rupee	5,072	-	-	13,447,576	-	-	13,452,648
Indonesian rupiah	2,569	-	-	7,211,985	-	-	7,214,554
Japanese yen	76,482,515	71,894,546	-	163,310,819	-	-	311,687,880
Malaysian ringgit	17,598	2,629,243	-	8,772,854	-	-	11,419,695
Mexican peso	766,119	14,903,995	148,438	9,614,486	-	-	25,433,038
New Taiwan dollar	-	-	-	34,456,868	-	-	34,456,868
New Zealand dollar	17,486	34,225,360	55,225	-	-	-	34,298,071
Norwegian krone	-	11,686,297	-	3,052,144	-	-	14,738,441
Philippine peso	5,844	-	-	3,828,567	-	-	3,834,411
Polish zloty	8,363	55,260,735	-	7,071,705	-	-	62,340,803
Singapore dollar	-	-	-	25,006,954	-	-	25,006,954
South African rand	19,626	31,477,832	-	24,369,806	-	-	55,867,264
South Korean won	33,424	-	-	60,608,496	-	-	60,641,920
Swedish krona	35,804	11,882,044	-	21,662,732	-	-	33,580,580
Swiss franc	1,536,326	-	168,574	132,187,969	-	-	133,892,869
Thai baht	24,332	-	-	12,007,310	-	-	12,031,642
Turkish lira	421	-	-	6,030,839	-	-	6,031,260
Various Countries	-	-	-	1,434,329,263	-	-	1,434,329,263
<b>Total</b>	<b>\$ 93,387,856</b>	<b>\$ 722,230,328</b>	<b>\$ 2,844,569</b>	<b>\$ 2,884,278,643</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 3,702,741,396</b>

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*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 United States, 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 United States, 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. At June 30, 2012 the ERS had no credit risk exposure to borrowers because the market value of collateral held by the ERS exceeded the market value of securities loaned. 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.

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. Northern Trust 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. As such, the maturities of the investments made with cash collateral generally did not match the maturities of the securities loans. The extent of such mismatch as of June 30, 2012 was 125 days.

The following represents the balances relating to the securities lending transactions as of June 30, 2012.

**Market value of loaned securities by type of collateral received**

	<u>Fair value of underlying securities</u>			<u>Collateral received</u>		
	<u>Cash</u>	<u>Non-cash</u>	<u>Total</u>	<u>Cash</u>	<u>Non-cash</u>	<u>Total</u>
Fixed income, U.S.	\$ 472,550,848	\$ 234,941	\$ 472,785,789	\$ 479,296,485	\$ 235,354	\$ 479,531,839
Fixed income, global	30,654,040	-	30,654,040	31,241,877	-	31,241,877
Equities, U.S.	325,320,552	1,493,266	326,813,818	327,426,982	1,494,977	328,921,959
Equities, global	84,037,834	2,844,857	86,882,691	85,967,321	2,918,645	88,885,966
Total	<u>\$ 912,563,274</u>	<u>\$ 4,573,064</u>	<u>\$ 917,136,338</u>	<u>\$ 923,932,665</u>	<u>\$ 4,648,976</u>	<u>\$ 928,581,641</u>

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*Notes to Financial Statements (continued)***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, 2012 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 collateral 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 plan net assets.

Summary of derivative risk types as of June 30, 2012:

	<u>Fair Value</u>
Credit contracts	
Swaps	\$ (130,354)
Equity contracts	
Options	(9,031,580)
Rights/Warrants	32,478
Foreign exchange contracts	
Forwards	8,985,768
Interest rate contracts	
Futures	-
Options	-
Swaps	(761,171)
Other contracts	
Options	<u>665,763</u>
Total derivatives	<u>\$ (239,096)</u>

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*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, 2012:

<u>Asset categories</u>		<u>Notional</u> <u>values</u>	<u>Market value</u>
<b>Forwards</b>	Currency purchases	\$ -	\$ 8,985,768
	Total forwards	-	8,985,768
<b>Futures</b>	Interest rate contracts	229,825,750	-
	Futures total	229,825,750	-
<b>Options</b>	Caps and floors	-	-
	Options	-	(9,031,580)
	Options on futures	-	-
	Swaption	-	665,763
	Options total	-	(8,365,817)
<b>Rights/warrants</b>		-	32,478
<b>Swaps</b>	Credit default swaps	-	(130,354)
	Interest rate swaps	-	(761,171)
	Swaps total	-	(891,525)
	Grand Total	\$ 229,825,750	\$ (239,096)

**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 Plan Net Assets – All Trust Funds. At June 30, 2012, the net notional value of futures contracts was \$229,825,750.

**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, 2012 the ERS had interest rate and credit default 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 plan net assets – 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, 2012 credit ratings of the counterparty for ERS' investments in derivatives were as follows:

	<b>Derivatives Counterparty Credit Ratings</b>						<b>Grand Total</b>
	<b>A1</b>	<b>A2</b>	<b>A3</b>	<b>Aa3</b>	<b>Baa1</b>	<b>N/A</b>	
BANK OF AMERICA	-	-	341,467	-	-	-	\$ 341,467
BANK OF AMERICA N.A.	-	-	(715)	-	-	-	(715)
BARCLAYS CAP SECS LONDON	-	101,931	-	-	-	-	101,931
CITIBANK N.A. NEW YORK	-	-	(24,897)	-	-	-	(24,897)
CITIGROUP GLOBAL MARKETS, CME	-	-	-	-	-	(1,004)	(1,004)
CME_BARCUS	-	-	-	-	-	(368,969)	(368,969)
CME_CSFBUS	-	-	-	-	-	(555,756)	(555,756)
CME_UBSWUS	-	-	-	-	-	41,926	41,926
CREDIT SUISSE INTERNATIONAL, LONDON	(21,426)	-	-	-	-	-	(21,426)
CSFB EUROPE LTD	(24,173)	-	-	-	-	-	(24,173)
CSFB NY	81,214	-	-	-	-	-	81,214
DEUTSCHE BANK AG NEW YORK	-	(162,892)	-	-	-	-	(162,892)
DEUTSCHE BANK LONDON	-	(24,294)	-	-	-	-	(24,294)
DEUTSCHE BANK SECURITIES,CME	-	-	-	-	-	(251)	(251)
GOLDMAN SACHS BANK USA	-	(1,214)	-	-	-	-	(1,214)
GOLDMAN SACHS NEW YORK	-	-	(3,657)	-	-	-	(3,657)
GREENWICH CAPITAL MARKETS INC	-	-	-	-	(22,087)	-	(22,087)
HSBC BANK USA, NA-CCC	45,821	-	-	-	-	-	45,821
JP MORGAN CHASE BANK/HSBCSI	-	-	-	402,448	-	-	402,448
MORGAN STANLEY & CO INC. NEW YORK	-	-	-	-	(19,472)	-	(19,472)
MORGAN STANLEY CAPITAL SERVICES NEW YORK	-	-	-	-	(62,119)	-	(62,119)
ROYAL BANK OF SCOTLANDN FIN MKTS FIXED	-	-	-	-	(36,127)	-	(36,127)
UBS SECURITIES	-	88,484	-	-	-	-	88,484
Foreign Currency Forwards	-	-	-	-	-	8,985,768	8,985,768
Exchange traded - Futures and Options	-	-	-	-	-	(9,031,580)	(9,031,580)
Not available on Rights and Warrants	-	-	-	-	-	32,478	32,478
<b>Total</b>	<b>\$ 81,436</b>	<b>\$ 2,015</b>	<b>\$ 312,198</b>	<b>\$ 402,448</b>	<b>\$ (139,805)</b>	<b>\$ (897,388)</b>	<b>\$ (239,096)</b>

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

On June 30, 2012 the segmented time distribution for ERS' investments in derivatives was as follows:

	<u>Fair Value</u>	<u>Years to maturity</u>
Forwards		
Foreign exchange contracts	\$ 8,985,768	range from 0.0 to 0.6 years
Options		
Caps and floors	(25,555)	range from 7.7 to 8.3 years
Options	(9,031,580)	range from 0.1 to 0.2 years
Swaption	<u>665,763</u>	range from 0.1 to 1.1 years
	(8,391,372)	
Rights/Warrants		
Equity contracts	32,478	range from 0.0 to 4.9 years
Swaps		
Swaps	<u>(865,970)</u>	range from 0.5 to 40.3 years
Grand total	<u>\$ (239,096)</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, 2012. 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.

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*Notes to Financial Statements (continued)***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 \$549,000,000 as of June 30, 2012, consisting of \$136,000,000 in real estate investments, and \$413,000,000 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, 2012

**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:						
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%
2007	10,589,773	15,696,546	5,106,773	67.5%	3,507,040	145.6%

**Schedule of Employer Contributions**

(In thousands)

Fiscal year ended June 30,:	Annual Required Contribution	Actual Contribution	Percentage Contributed
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%
2007	476,754	454,494	95.3%

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*Notes to Required Supplementary Information - Unaudited*

June 30, 2012

**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, 2012
Actuarial cost method	Entry Age Normal
Amortization method	Level percent, open
Remaining amortization period as of June 30, 2012*	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.

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*Supplementary Information*
**Schedule 1**

## Combining Schedule of Changes in Plan Net Assets – All Trust Funds

Year ended June 30, 2012

	<b>2012</b>			<b>Total</b>
	<b>Pension Accumulation Fund</b>	<b>Annuity Savings Fund</b>	<b>Expense Fund</b>	
<b>Additions</b>				
Appropriations and contributions:				
Employers	\$ 548,353,394	\$ -	\$ -	\$ 548,353,394
Members	-	182,401,324	-	182,401,324
Net investment loss	(57,798,410)	-	-	(57,798,410)
<b>Total additions</b>	<b>490,554,984</b>	<b>182,401,324</b>	<b>-</b>	<b>672,956,308</b>
<b>Deductions</b>				
Benefit payments	1,015,447,668	-	-	1,015,447,668
Refunds of member contributions	-	7,187,606	-	7,187,606
Administrative expenses	-	-	11,634,197	11,634,197
<b>Total deductions</b>	<b>1,015,447,668</b>	<b>7,187,606</b>	<b>11,634,197</b>	<b>1,034,269,471</b>
<b>Other changes in net assets held in trust for pension benefits:</b>				
Transfer due to retirement of members	115,881,386	(115,881,386)	-	-
Transfer of interest allocation	(76,176,900)	76,176,900	-	-
Transfer to pay administrative expenses	(10,828,223)	-	10,828,223	-
Return of unrequired funds due to savings in administrative expenses	-	-	-	-
	<u>28,876,263</u>	<u>(39,704,486)</u>	<u>10,828,223</u>	<u>-</u>
<b>Net increase (decrease)</b>	<b>(496,016,421)</b>	<b>135,509,232</b>	<b>(805,974)</b>	<b>(361,313,163)</b>
<b>Net assets held in trust for pension benefits:</b>				
Beginning of year	<u>9,986,419,006</u>	<u>1,657,586,590</u>	<u>10,349,968</u>	<u>11,654,355,564</u>
End 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>

See accompanying independent auditors' report.

**Schedule 2**

Social Security Contribution Fund

Statement of Changes in Assets and Liabilities

Year ended June 30, 2012

		<b>2012</b>			
		<b>Beginning Balance</b>	<b>Additions</b>	<b>Deductions</b>	<b>Ending Balance</b>
<b>Assets</b>					
Cash		\$ -	\$ -	\$ -	\$ -
	Total assets	\$ -	\$ -	\$ -	\$ -
<b>Liabilities</b>					
	Due to employers	\$ -	\$ 192,770,384	\$ 192,770,384	\$ -
	Total liabilities	\$ -	\$ 192,770,384	\$ 192,770,384	\$ -

See accompanying independent auditors' report.

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*Supplementary Information (continued)*
**Schedule 3**

## Schedule of Administrative Expenses

Year ended June 30, 2012

	<u>2012</u>
Personnel services	
Salaries and wages	\$ 4,279,557
Fringe benefits	1,548,322
Net change in unused vacation credits	62,070
Total personnel services	<u>5,889,949</u>
Professional services	
Actuarial	163,594
Auditing and tax consulting	233,257
Disability hearing expenses	85,122
Legal services	330,575
Medical	372,769
Other services	589,760
Total professional services	<u>1,775,077</u>
Communication	
Postage	180,944
Printing and binding	113,213
Telephone	75,484
Travel	46,821
Total communication	<u>416,462</u>
Rentals	
Rental of equipment	68,315
Rental of premises	17,053
Total rentals	<u>85,368</u>
Other	
Armored car service	11,063
Computer and office automation systems	7,040
Repairs and maintenance	1,301,723
Stationery and office supplies	35,562
Miscellaneous	85,519
Total other	<u>1,440,907</u>
Depreciation	<u>2,026,434</u>
	<u>\$ 11,634,197</u>

See accompanying independent auditors' report.



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*Supplementary Information (continued)*
**Schedule 4**

## Schedule of Investment Expenses

Year ended June 30, 2012

	<u>2012</u>
Real estate and alternative investment expenses	
Operating expenses	\$ 50,682,320
Mortgage interest	<u>13,804,315</u>
Total real estate and alternative investment expenses	<u>64,486,635</u>
Investment expenses	
Investment manager/advisor fees	\$ 33,280,858
Bank custodian fees	100,000
Other investment expenses	<u>2,434,516</u>
Total investment expenses	<u>35,815,374</u>
Securities lending expenses	
Borrower rebates	(1,408,982)
Management fees	<u>636,919</u>
Total securities lending expenses	<u>(772,063)</u>
	<u>\$ 99,529,946</u>

See accompanying independent auditors' report.

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**Employees' Retirement System**  

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of the State of Hawaii



**INVESTMENT  
SECTION**

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*Letter from Chief Investment Officer*NEIL ABERCROMBIE  
GOVERNOR**STATE OF HAWAII**  
EMPLOYEES' RETIREMENT SYSTEM

July 29, 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, 2012.

- ERS Plan net assets were \$11.293 billion as of June 30, 2012. The ERS continues to be ranked as one of the largest defined benefit plans in the United States.
- The ERS investment portfolio underperformed its five year Policy benchmark by 0.5%, ending the year at -0.1%. Faced with an unprecedented downgrade of U.S. sovereign credit in the first quarter of the fiscal year, the portfolio underperformed the Policy Benchmark and did not recover in the subsequent quarters to post a positive return for the fiscal year. In this challenging investment environment, the portfolio was below its public fund peer group for the one, three, and five year periods.

**PAST AND THE CURRENT MARKETS**

Following a strong previous fiscal year (positive 21.2% return), the current year began to show signs of unexpected price volatility caused by uncertainty around fiscal budget battles in Washington DC and worries of growth falling off in places like China and Europe. The unprecedented loss of the AAA rating for U.S. sovereign debt by a major rating agency shook the confidence of investors. As DC came to its senses and the markets learned to live with the new reality, equities recovered but unfortunately the portfolio did not follow suit. The subsequent three quarters in the fiscal year were stronger, and calendar 2012 through June saw positive returns of 6.7%, an outperformance of the Policy Benchmark of 0.8%.

Employees' Retirement System  
of the State of Hawaii

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Telephone (808) 586-1735 • Fax (808) 586-1677 • <http://ers.ehawaii.gov/>

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*Letter from Chief Investment Officer (continued)***IMPROVING MARKETS**

The first quarter of the fiscal year was reminiscent in its sell-off of the first quarter of fiscal year 2009 which was marked by the Lehman Brothers default. However, investors' concerns with the unprecedented downgrade of U.S. sovereign debt and ongoing uncertainty of the Eurozone debt crisis were short lived. The resilience of the U.S. economy continued its upward growth trend averaging over 2% for the remaining three quarters of the 2012 fiscal year. Inflation remains subdued, while job growth improved but at lackluster rates compared to similar stages of other economic recoveries. The risk on, risk off sentiment provides fundamental investors the opportunity to add to positions on the dips. An accommodative monetary policy should provide some comfort for bullish sentiment in the coming months.

**CONTINUED STABILITY**

The Board of Trustees continued focused efforts on investment planning. Passive strategies became an important new aspect to the portfolio's structure and is expected to provide stability and some excess returns. In the US equities large-cap growth, a passive index strategy was added, while new active managers were being researched for a new allocation. In the US equities large-cap value asset class, emphasis was on finding an optimal structure for the passive/active mix. Besides adding an index fund, this will likely mean streamlining the number of active managers. In real estate, value-add and opportunistic managers were added to increase the opportunity to generate long-term returns. Also, a private equity consultant was hired to advise the ERS on how to double its exposure to private equity investment over the next five years.

In June 2012, CIO Rodney June announced his resignation effective in early July. He will pursue other opportunities on the mainland. Mr. June served as CIO since joining the ERS in early 2008. During his tenure the portfolio assets grew. Markets went through the worst financial crisis since the Great Depression of the 1930s. Mr. June oversaw the expansion of asset classes to include real assets and covered calls. He was forthright in efforts to increase investments in private markets. While the Board of Trustees conducts a national search for a successor, Vijoy P. Chattergy, who is currently the Investment Specialist, will serve as interim CIO. It is the first time that the ERS will have an interim CIO during a transition period. The search process is expected to last four to six months.

Respectfully yours,

Vijoy Chattergy for Rodney June (CIO during FY12)  
Chief Investment Officer



514 NW 11<sup>th</sup> Avenue, Suite 203  
Portland, OR 97209  
Phone: 503.226.1050  
Fax: 503.226.7702  
www.pensionconsulting.com

Los Angeles • Portland • New York

December 18, 2012

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, 2012, as requested by the Government Financial Officers' Association (GFOA).

### **Hawaii ERS-Total Fund Performance**

The total assets of the Retirement System were \$11.3 billion as of June 30, 2012, a decrease of roughly (\$339) million for the fiscal year. The portfolio generated mixed absolute and relative performance results across the major asset classes. The decrease in assets was primarily due to declining performance within the international equity asset class, as well as net cash withdrawals from the Total Fund. The investment return for the Total Fund, expressed as a time-weighted total rate of return, was minus (0.1%) for the 2012 fiscal year, compared to the benchmark's return of +2.7%. For the three-year period ending June 30, 2012, the Total Fund returned +10.7% per annum versus the benchmark's return of +11.2% and the Northern Trust Public Funds Greater than \$1 Billion Database peer median return of +12.2%. For the trailing five-year period ending June 30, 2012, the Total Fund returned +1.5% per annum versus the benchmark's return of +2.1% and the Northern Trust Public Funds Greater than \$1 Billion Database peer median return of +1.8%.

### **Asset Class Performance**

Domestic Equity<sup>1</sup> returned +1.1% for the fiscal year versus the Domestic Equity Blended Index's return of +3.8% and the Northern Trust Domestic Equity Database peer median return of +1.4%. Diversified Fixed Income posted +7.5% for the fiscal year versus the Diversified Fixed Income Blended Index's return of +7.2% and the Northern Trust Fixed Income Database peer median return of +8.1%. International Equity<sup>1</sup>, as well as the International Equity Blended Index, returned minus (14.4%) for the 2012 fiscal year versus the Northern Trust International Equity Database peer median return of minus (13.1%). International Fixed Income returned +3.4% for the fiscal year versus the International Fixed Income Blended Index's return of +6.2% and the Northern Trust International Fixed Income Database peer median return of +6.6%. Real Estate returned +16.0% for the year ending June 30, 2012, versus the NCREIF Total Index's return of +12.0%. Private Equity investments returned +11.9% for the fiscal year, whereas Real Return produced a return of +5.5%. The Covered Calls class received funding during the fiscal year, and thus does not have a full year of performance.

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

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*Letter from Investment Consultant (continued)*

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**Market Conditions**

The market backdrop for fiscal year 2012 was characterized by vast levels of indecisiveness and government stimulus - effectively resulting in persistent volatility throughout the markets. While fiscal year 2011 continued right where fiscal year 2010 left off, with a persevering appetite for riskier assets, fiscal year 2012 oscillated between risk-aversion and risk-seeking amongst investors; with risky assets performing strongly in one quarter, only to be trounced in the next quarter. The end result was a fiscal year in which domestic equities generally produced positive absolute returns, international equities provided significant negative returns, fixed income generated strong returns throughout all sectors, and private markets experienced strong absolute returns, as well. Although domestic and international equity markets tended to move in tandem during the 2008-2011 period, this connection appeared to decouple in fiscal year 2012, as Europe continued to struggle with sovereign debt issues, whereas the United States appeared to improve on an economic basis, albeit slowly.

During fiscal year 2012, equities within the U.S., as measured by the Russell 3000 Index, advanced by +3.8%, while non-U.S. equities, as measured by the MSCI ACWI ex U.S. Index, declined by minus (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 were negatively affected by the ongoing Euro zone debt crisis that continued to remain unsolved, and any positive events were quickly subdued.

Similar to fiscal year 2011, growth stocks surpassed value stocks across the majority of the cap spectrum during fiscal year 2012, with the only exception being small cap value stocks outperforming small cap growth stocks. Emerging markets equities produced significant negative returns, with only European domiciled stocks generating weaker results. Within the international developed markets, the Pacific region provided the strongest relative results.

During the fiscal year, bond markets produced positive absolute returns, with investors once again being aided by central banks' actions and declining interest rates. All sectors produced positive returns, with minimal disparity amongst one another. Investment-grade bonds, as measured by the Barclays Capital Aggregate Bond Index, returned +7.5%. Government bonds produced a return of +8.3%, mortgage-backed bonds increased by +5.0%, investment-grade corporate bonds rose by +9.5%, and high-yield corporate bonds returned +7.3%.

For fiscal year 2012, U.S. equities, fixed income, and private markets provided investors with positive absolute returns, while international equities generated negative absolute returns due to ongoing sovereign debt concerns within the Euro zone region. Despite the immense amount of volatility that rippled through the markets during fiscal year 2012, broad economic data continues to improve at the margin, corporations have continued to generate strong profits and retain large amounts of cash on their balance sheets, central banks' stances remain extremely accommodative, and the vast majority of future downside scenarios appear to be already discounted by the markets. Throughout the tumultuous 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.*

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*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 2012

### 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 asset 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 target is 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 is set to be completed by 7/1/2013.

#### *Strategic Asset Allocation Policy (as of 6/30/2012)*

During the 2012 fiscal year, the Plan was strategically invested in the following asset classes:

#### Strategic Allocation

Domestic Equity	<b>35%</b>
International Equity	<b>21%</b>
Total Fixed-Income	<b>24%</b>
Real Estate	<b>7% *</b>
Private Equity	<b>5% **</b>
Real Return	<b>5% **</b>
Covered Calls	<b>3%</b>

\* The Real Estate target will be the percentage actually invested up to 7% of the total fund. Changes in the Real Estate target will be offset by an equal percentage change in the Domestic Equity target.

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



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*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 2012 capital market projections for 10 years, the target allocation is expected to achieve an average annualized return of 8.0% (5.0% 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 -7.3% and 23.3% two-thirds of the time.

#### ***Long-Range Asset Allocation Target***

The ERS will strategically invest in the following asset classes:

#### **Strategic Allocation**

Domestic Equity	<b>30%</b>
International Equity	<b>26%</b>
Total Fixed Income	<b>20%</b>
Real Estate	<b>7%*</b>
Private Equity	<b>7%**</b>
Real Return	<b>5%***</b>
Covered Calls	<b>5%</b>

\* The Real Estate target will be the percentage actually invested up to 7% of the Total Fund. Changes in the Real Estate target will be offset by an equal percentage change in the Domestic Equity target.

\*\* The Private Equity target will be the percentage actually invested up to 7% of the Total Fund. Changes in the Private Equity target will be offset by an equal percentage change in the Domestic Equity target.

\*\*\* The Real Return target will be the percentage actually invested up to 5% of the Total Fund. Changes in the Real Return target will be offset by an equal percentage change in the Domestic Equity target.

### Evolving Strategic Asset Allocation Policy

	<b>Target Policy 10/1/2011</b>	<b>Target Policy 7/1/2012</b>	<b>Target Policy 7/1/2013</b>
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%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

## Report on Investment Activity by Investment Consultant



### Manager Evaluation

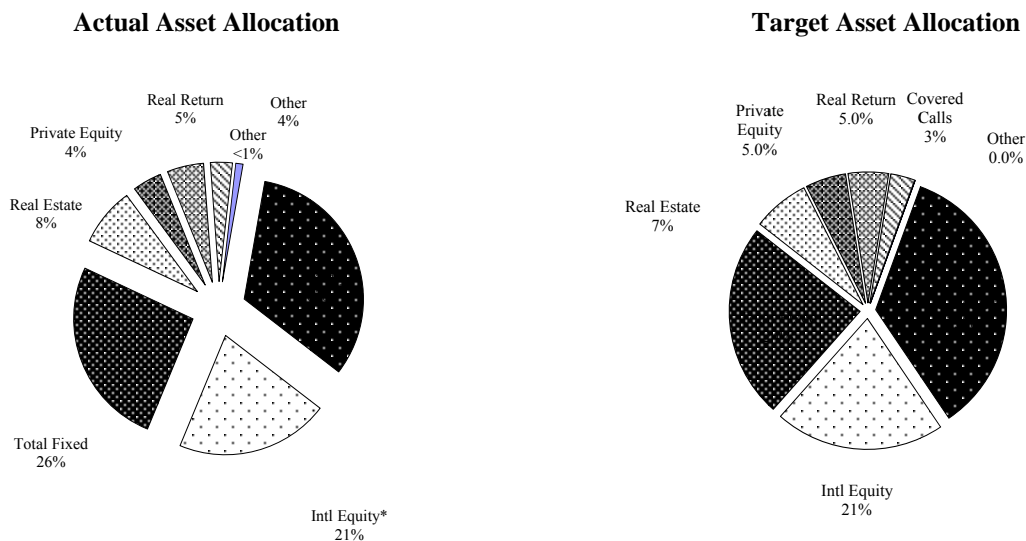
Individual Domestic and International Equity and Fixed Income managers are measured against relevant indexes and their respective peer groups of managers. Market indexes and peer group benchmarks are assigned to each manager and are intended as a guide for the investment manager to understand the risk/reward 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 Investment Policy Statement (IPS) 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 IPS took place during fiscal year 2007, and as a result of the most recent full asset allocation/liability study, additional revisions to the IPS took place during fiscal year 2012. Further revisions to the IPS will be implemented 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 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 returns are calculated using statements received directly from the manager. This ensures that the performance is based on accurate cash flows and appraisal values.

### Asset Allocation as of June 30, 2012:



## Report on Investment Activity by Investment Consultant (continued)

### Investment Results as of June 30, 2012:

	Year Ended June 30,					3 Years	5 Years
	2012	2011	2010	2009	2008	Ended 6/2012	Ended 6/2012
<b>Domestic Equity*</b>	<b>1.08%</b>	<b>31.83%</b>	<b>15.33%</b>	<b>(27.34%)</b>	<b>(11.39%)</b>	<b>15.40%</b>	<b>(0.21%)</b>
Domestic Equity Blended Index <sup>1</sup>	3.84%	32.37%	15.72%	(25.83%)	(12.84%)	16.73%	0.56%
NT Total Domestic Equity*	1.38%	33.22%	16.46%	(26.16%)	(12.32%)	16.42%	0.34%
<b>Diversified Fixed-Income</b>	<b>7.51%</b>	<b>5.51%</b>	<b>13.63%</b>	<b>5.80%</b>	<b>6.31%</b>	<b>8.83%</b>	<b>7.71%</b>
Diversified Fixed Income Blended Index <sup>2</sup>	7.19%	4.20%	9.99%	5.35%	7.12%	7.10%	6.75%
NT Domestic Fixed*	8.10%	5.90%	13.78%	4.69%	6.41%	9.47%	8.10%
<b>International Equity*</b>	<b>(14.36%)</b>	<b>30.24%</b>	<b>11.28%</b>	<b>(31.45%)</b>	<b>(7.93%)</b>	<b>7.47%</b>	<b>(4.77%)</b>
International Equity Blended Index <sup>3</sup>	(14.35%)	30.07%	8.41%	(30.76%)	(8.33%)	6.49%	(5.15%)
NT Non-U.S. Equity*	(13.10%)	29.81%	11.62%	(29.96%)	(8.29%)	7.88%	(4.16%)
<b>International Fixed-Income</b>	<b>3.42%</b>	<b>4.12%</b>	<b>4.01%</b>	<b>9.82%</b>	<b>14.58%</b>	<b>3.85%</b>	<b>7.10%</b>
International Fixed Blended Index <sup>4</sup>	6.22%	0.91%	6.62%	7.60%	18.72%	4.55%	7.86%
NT Non-U.S. Fixed*	6.56%	12.70%	18.50%	2.28%	2.65%	13.83%	8.73%
<b>Real Estate<sup>^</sup></b>	<b>15.99%</b>	<b>21.41%</b>	<b>0.99%</b>	<b>(26.74%)</b>	<b>7.64%</b>	<b>12.45%</b>	<b>2.32%</b>
NCREIF Total Property Index	12.04%	16.73%	(1.48%)	(19.55%)	17.25%	8.82%	2.51%
NT Real Estate Funds*	10.54%	17.06%	(10.22%)	(27.81%)	5.79%	8.63%	(2.16%)
<b>Private Equity<sup>^</sup></b>	<b>11.87%</b>	<b>16.46%</b>	<b>7.54%</b>	<b>(11.19%)</b>	<b>11.43%</b>	<b>11.90%</b>	<b>6.76%</b>
<b>Real Return</b>	<b>5.48%</b>	<b>(0.73%)</b>	---	---	---	---	---
<b>Covered Calls</b>	---	---	---	---	---	---	---
<b>Total Fund</b>	<b>(0.14%)</b>	<b>21.25%</b>	<b>11.96%</b>	<b>(17.54%)</b>	<b>(3.51%)</b>	<b>10.67%</b>	<b>1.53%</b>
Composite Benchmark <sup>5</sup>	2.70%	21.47%	10.31%	(16.94%)	(3.07%)	11.23%	2.07%
NT Public Funds > \$1 Billion*	1.35%	22.47%	13.78%	(18.37%)	(4.41%)	12.22%	1.84%

\*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.

<sup>^</sup> Based on 6/30/2012 statements.

<sup>1</sup> 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.

<sup>2</sup> BC Aggregate Index through 6/30/08; 85% BC US Universal Index and 15% Multiverse Non-US Hedged Index thereafter.

<sup>3</sup> 85% MSCI EAFE Free ND Index and 15% MSCI Emerging Markets ND Index.

<sup>4</sup> Citigroup Non-US WGBI through 6/30/08; BC Multiverse Non-US Hedged Index thereafter.

<sup>5</sup> 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 thereafter;

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*Investment Professionals*
**INVESTMENT MANAGERS****U.S. EQUITIES**

Atatlanta  
 Bank of Hawaii  
 Barrow, Hanley, Mewhinney & Strauss  
 CM Bidwell & Associates  
 CS McKee Investment Managers  
 Jennison Associates  
 Mellon Capital Management Corporation  
 Systematic Investment Management  
 T. Rowe Price

**INTERNATIONAL EQUITIES**

JP Morgan Chase  
 Franklin Templeton  
 Mercator Asset Management  
 Mellon Capital Management Corporation  
 Quatitative Management Assoc  
 Research Affiliates

**PRIVATE EQUITY**

Abbott Capital Management, LLC  
 Hancock Timber Resource Group  
 GK Macquarie Newport  
 MetWest (TALF Fund)

**REAL ESTATE**

Angelo Gordon  
 Blacksand  
 Blackstone  
 CB Richard Ellis  
 Heitman Capital Management  
 Invesco Realty Advisors  
 LaSalle Investment Management  
 Lone Star  
 Mesa Capital  
 Oaktree  
 Prudential

**FIXED-INCOME**

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

**REAL RETURN**

Gateway

**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

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

as of June 30, 2012 (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>Moodys</u>	<u>Fair Value</u>
<b>Domestic Fixed Income</b>						
1	86,000,000	FNMA Single Family Mortgage 30 years (Settles August)	3.500%		Agency	\$ 90,152,166
2	42,670,000	United States Treas Notes	1.500%	3/31/2019	Aaa	43,870,094
3	40,740,000	United States Treas Notes	2.000%	11/15/2021	Aaa	42,239,110
4	40,000,000	FNMA Single Family Mortgage 15 years (Settles July)	3.000%		Agency	41,906,240
5	36,379,000	Federal Home Loan Mtg Copr Bonds	0.750%	3/28/2013	Aaa	36,510,474
6	34,000,000	FNMA Single Family Mortgage 15 years (Settles July)	3.500%		Agency	35,923,142
7	32,000,000	FNMA Single Family Mortgage 30 years (Settles July)	4.000%		Agency	34,055,008
8	27,500,000	FNMA Gold Single Family 30 yr MTG (Settles July)	3.500%		Agency	28,849,233
9	25,000,000	FNMA Single Family Mortgage 30 years (Settles August)	4.000%		Agency	26,558,600
10	22,981,800	United States Treas Index Linked Notes	0.125%	1/15/2022	Aaa	24,713,875
<b>International Fixed Income</b>						
1	15,228,748	Government of France (OATEI)	2.250%	7/25/2020	Aaa	25,726,200
2	15,967,000	European Investment Bank Bonds	6.500%	7/8/2019	Aaa	17,968,481
3	13,993,000	Republic of Italy Bonds	4.250%	7/1/2014	A3	17,956,039
4	56,350,000	Republic of Poland Bonds	5.750%	9/23/2022	A2	17,547,640
5	1,460,000,000	Caisse Francaise Note	1.800%	5/9/2017	Aa2	17,467,302
6	12,899,000	European Financial Stability Facility Note	3.500%	2/4/2022	Aaa	17,405,918
7	12,952,000	European Financial Stability Facility Note	3.750%	7/5/2021	Aaa	17,328,149
8	1,170,000,000	Asian Development Bank Senior Note	2.350%	6/21/2027	Aaa	16,823,424
9	50,856,000	Republic of Poland Bonds	5.750%	6/21/2027	A2	15,904,596
10	10,123,517	Federal Republic of Germany Index Linked	1.500%	4/15/2016	Aaa	15,781,953
<b>Domestic Equities</b>						
1	3,298,200	General Electric (Common)				68,734,488
2	98,479	Apple Inc (Common)				57,511,736
3	1,640,260	Microsoft (Common)				50,175,553
4	1,298,482	AT&T (Common)				46,303,868
5	1,926,192	Pfizer (Common)				44,302,416
6	400,765	Chevron (Common)				42,280,708
7	680,980	Capital 1 Financial (Common)				37,222,367
8	410,680	Phillip Morris Intl Common				35,835,937
9	983,072	JP Morgan Chase (Common)				35,125,163
10	1,005,790	Wells Fargo & Co (New Common)				33,633,618
<b>International Equities</b>						
1	7,860,586	Vodafone Group				22,099,619
2	580,948	Royal Dutch Shell 'A shares'				19,614,591
3	318,684	Nestle				19,040,233
4	419,315	Total				18,890,676
5	570,559	BHP Billiton				18,393,579
6	918,138	Credit Suisse AG				16,742,802
7	1,371,146	WPP PLC				16,623,937
8	292,000	Novartis AG				16,319,915
9	299,600	Deutsche Boese AG				16,170,220
10	145,832	Inditex				15,088,602

*Investment Schedules (continued)***Investments Summary**

- excludes cash and cash equivalents and short-term investments

(Dollar values expressed in thousands)

	<u>Fair Value as of</u> <u>June 30, 2012</u>	<u>Percentage</u>
Equity securities		
Common stock	\$ 4,052,056,136	35.66%
Pooled and others	<u>2,247,092,181</u>	<u>19.78%</u>
	6,299,148,317	55.44%
Fixed income securities		
Mortgage-backed securities	989,069,388	8.70%
Corporate	957,244,763	8.42%
Government	1,169,609,184	10.29%
Asset backed securities	36,470,719	0.32%
Pooled and others	<u>73,114,587</u>	<u>0.64%</u>
	3,225,508,641	28.37%
Others		
Real estate investments	1,250,239,211	11.00%
Alternative investments	<u>588,194,316</u>	<u>5.19%</u>
	1,838,433,527	16.19%
Total, investments at fair value	<u>\$ 11,363,090,485</u>	<u>100.00%</u> \$

**Schedule of Investment Fees**

by Asset Class Allocation

(Dollar values expressed in thousands)

	<u>Fair value as of</u> <u>June 30, 2012</u>	<u>Total FY 2012</u> <u>Investment Fees</u>	<u>Basis</u> <u>Points</u>
Equities			
U.S. equities	\$ 3,010,385	\$ 7,414	25 bp
International equities	<u>3,031,839</u>	<u>7,072</u>	23
	6,042,224	14,486	24
Fixed Income			
Diversified fixed income	2,521,831	5,038	20
Non U.S. fixed income	<u>368,779</u>	<u>803</u>	22
	2,890,610	5,841	20
Other Asset Allocations			
Real estate	949,396	9,061	95
Real return	526,806	1,914	36
Covered calls	351,458	307	9
Other assets	91,516	-	-
Private equity	<u>437,965</u>	<u>1,022</u>	23
	2,357,141	12,304	52
Other Investment Services			
Custodian fees		100	n/a
Investment consultant fees		<u>650</u>	n/a
Total	<u>\$ 11,289,975</u>	<u>\$ 33,381</u>	30

*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, 2012 the ERS recaptured \$669,480 in commissions. The following is a list of broker commissions for Fiscal Year 2012.

Brokerage Firms	Shares Traded	Dollar Volume of Trades	Commission	
			Dollar Amount	Per Share
ABG SECURITIES AS (NORGE), FILIAL	218,934	\$ 2,925,785	\$ 4,382	\$ 0.020
ABG SECURITIES LIMITED	77,450	1,978,607	3,171	0.041
AGORA COR DE TITUL E VAL MOB	42,150	515,881	616	0.015
ALLEN & CO INC	2,700	14,667	81	0.030
AUTRANET, INC.	1,394,757	35,571,250	29,476	0.021
AVONDALE PARTNERS	1,640	12,001	59	0.036
BANCO BILBAO VIZCAYA ARGENTARIA S.A	288,150	1,365,984	2,187	0.008
BANCO POPULAR ESPANOL, S.A.	213,396	852,818	1,367	0.006
BARCLAYS BANK PLC	55,395	1,255,086	502	0.009
BARCLAYS CAPITAL	2,016,632	17,108,635	26,228	0.013
BARCLAYS CAPITAL INC	1,756,964	60,755,420	58,674	0.033
BEAR STEARNS SECURITIES CORP	36,474,089	1,334,187,310	208,597	0.006
BLOOMBERG USA	1,189,108	26,479,400	17,031	0.014
BMO CAPITAL MARKETS CORP.	265,364	5,228,339	8,207	0.031
BNP PARIBAS SECURITIES (ASIA) LTD.	576,000	6,802,520	8,584	0.015
BNP PARIBAS SECURITIES SERVICES, UN	2,106,371	21,598,262	26,228	0.012
BNY BROKERAGE INC	557,228	23,485,166	17,014	0.031
BRADESCO S/A CTVM	22,200	626,435	888	0.040
BROADCORT CAPITAL (THRU ML)	80,700	4,398,738	2,637	0.033
BUCKINGHAM RESEARCH	151,375	4,044,604	4,541	0.030
CANACCORD ADAMS INC.	54,028	1,065,188	2,025	0.037
CANTOR FITZGERALD AND CO. INC.	1,331,705	49,420,060	49,304	0.037
CAPITAL INSTITUTIONAL SERV NEW YORK	433,600	11,696,928	17,344	0.040
CELFIN CAP SA CORREDORES DE BOLSA	32,189	97,847	392	0.012
CIBC WORLD MARKETS CORP.	121,216	1,820,573	4,520	0.037
CITIBANK N.A.	62,360	3,791,879	1,451	0.023
CITIGROUP GLOBAL MARKETS INC.	1,336,520	6,240,264	10,564	0.008
CITIGROUP GLOBAL MARKETS LIMITED	4,080,817	90,371,210	110,272	0.027
CITIGROUP GLOBAL MARKETS UK EQUITY	761,503	8,760,963	11,701	0.015
CL KING & ASSOCIATES NEW YORK	93,700	3,737,215	1,616	0.017
CLEARVIEW CORRESPONDENT SERV LLC	566,909	14,412,670	17,109	0.030
CLSA LIMITED	3,442,100	5,698,181	10,379	0.003
CLSA SECURITIES KOREA LTD.	11,440	4470511	8,702	0.761
CLSA SINGAPORE PTE LTD.	459,050	13503547	14,776	0.032
COLLINS STEWART	1,485	32281	57	0.038
Amounts carried forward	60,279,225	1,764,326,225	680,682	

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

Brokerage Firms	Shares Traded	Dollar Volume of Trades	Commission	
			Dollar Amount	Per Share
Amounts brought forward	60,279,225	\$ 1,764,326,225	\$ 680,682	
CORREVAL S.A.	13,224	38,896	23	\$ 0.002
COWEN & CO NEW YORK	340,305	10,543,325	11,978	0.035
CRAIG HALLUM AND CO.	79,600	1,830,203	2,388	0.030
CREDIT AGRIC CHEUV NOR AKTIEBOLAG	263,700	4,088,641	6,487	0.025
CREDIT AGRICOLE CHEUVREUX	4,580,498	19,274,771	25,176	0.005
CREDIT AGRICOLE CIB	79,174	1,110,305	1,615	0.020
CREDIT LYONNAIS SECS(ASIA) TAIWAN	833,000	1,123,211	1,352	0.002
CREDIT RESEARCH & TRADING CORP NY	21,589	229,357	799	0.037
CREDIT SUISSE (HONG KONG) LIMITED	3,089,881	15,168,699	6,591	0.002
CREDIT SUISSE AG, NEW YORK BRANCH	126,528,604	706,789,989	134,081	0.001
CREDIT SUISSE FIRST BOSTON SA CTVM	286,982	3,389,090	1,016	0.004
CREDIT SUISSE SECURITIES (USA) LLC	1,065,798,532	520,019,427	101,655	-
CREDIT SUISSE SECURITIES(EUROPE)LTD	811,655	14,579,430	15,980	0.020
D. CARNEGIE AB, FINLAND BRANCH	20,700	228,702	365	0.018
D.A. DAVIDSON AND CO	2,200	77,348	88	0.040
DAEWOO SECURITIES CO., LTD.	4,645	561,632	1,401	0.302
DAHLMAN ROSE & COMPANY	9,424	464,407	349	0.037
DAIWA CAPITAL MARKETS AMERICA INC.	389,293	8,307,790	10,243	0.026
DAIWA CAPITAL MARKETS HK LTD	5,892,800	125,045	177	-
DANSKE BANK A/S	283,500	4,618,273	7,377	0.026
DAVENPORT AND CO., LLC	1,500	10,303	45	0.030
DBS VICKERS (HONG KONG) LIMITED	992,000	1,162,006	2,186	0.002
DBS VICKERS SECURITY PTE	5,506,200	4,330,291	9,755	0.002
DEPOSITORY CLEARING COMPANY	138,990	705,368	1,411	0.010
DEUTSCHE BANK AG	694,802	8,380,368	4,185	0.006
DEUTSCHE BANK SECURITIES INC	1,439,049	35,231,264	53,202	0.037
DEUTSCHE BANK SECURITIES INC.	4,053,347	60,747,134	66,075	0.016
DEUTSCHE SECURITIES ASIA LIMITED	4,626,500	3,982,426	7,044	0.002
DIRECT ACCESS PARTNERS LLC	2,635,885	98,110,194	79,339	0.030
DOWLING PARTNERS	1,364	42,779	50	0.037
EUROCLEAR BANK S.A / N.V	5	20,000	-	-
EVOLUTION SECURITIES LIMITED	166,910	832,294	1,240	0.007
EXANE S.A.	249,261	9,163,656	13,419	0.054
FATOR - DORIA ATHERINO S/A CV	342,149	4,479,281	2,688	0.008
FIDELITY CAP MKTS NEW YORK-DTC00226	31,771	1,368,702	1,175	0.037
FIRST ANALYSIS NEW YORK	2,684	92,190	107	0.040
FIRST CLEARING CORPORATION	349,500	7,929,006	13,980	0.040
FIRST MARATHON SEC'S - NEW YORK	68,394	1,502,627	2,531	0.037
FLEET SECURITIES	2,800	144,109	112	0.040
FRIEDMAN BILLINGS & RAMSEY NY	160,074	3,860,653	5,038	0.031
GARDNER RICH INC NEW YORK	15,000	553,976	113	0.008
GFI SECURITIES	21,381	524,482	791	0.037
Amounts carried forward	1,291,108,097	3,320,067,875	1,274,309	



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

Brokerage Firms	Shares Traded	Dollar Volume of Trades	Commission	
			Dollar Amount	Per Share
Amounts brought forward	1,291,108,097	\$ 3,320,067,875	\$ 1,274,309	
GLEACHER & CO	12,000	69,321	336	0.028
GOLDMAN SACHS & CO NW YK DTC 005	49,846	1,021,590	932	0.019
GOLDMAN SACHS INTERNATIONAL	52,420	1,912,763	1,770	0.034
GOLDMAN, SACHS AND CO.	7,977,347	161,053,029	145,533	0.018
GORDON,HASKETT CAPITAL CORPORATION	700	20,089	14	0.020
GREEN STREETADVISORS INC NEW YORK	33,940	586,396	1,123	0.033
GUGGENHEIM CAPITAL, LLC	40,980	762,880	1,516	0.037
HSBC (GLBL MRKTS EQUITIES OPERATION	2,763,000	2,297,949	1,815	0.001
HSBC BANK BRASIL S.A. - BANCO MULTI	65,500	988,444	988	0.015
HSBC BANK PLC	1,015,999	4,456,251	10,029	0.010
HSBC MEXICO, S.A. INSTITUCION DE BA	90,540	344,160	345	0.004
HSBC SECURITIES	2,408,000	1,615,740	2,257	0.001
HSBC SECURITIES (USA) INC.	1,008,462	4,986,835	5,232	0.005
HSBC SECURITIES AND CAP MKTS (IND)	400,515	1,593,507	2,793	0.007
HSBC SECURITIES INC	57,300	692,375	573	0.010
INSTINET INVESTMENT SERVICES LIMITE	141,000	6,952,420	2,760	0.020
INSTINET CROSSING NETWORK N/Y	547,900	16,495,400	10,300	0.019
INSTINET PACIFIC LIMITED	394,000	21,541	11	-
INTERMONTE SIM S.P.A.	591,924	3,839,446	6,153	0.010
INVESTEC BANK PLC	8,207	47,480	94	0.011
INVESTEC SECURITIES	150,000	1,304,560	1,944	0.013
INVESTMENT TECHNOLOGY GROUP INC.	509,112	15,563,452	7,044	0.014
INVESTMENT TECHNOLOGY GROUP LTD.	672,769	14,428,368	17,270	0.026
ISI GROUP INC NEW YORK	660,755	36,772,420	24,432	0.037
ITG HONG KONG LIMITED	228,578	1,158,157	1,095	0.005
ITG INC.	5,712,998	147,478,223	56,754	0.010
J.P. MORGAN CLEARING CORP.	20,534,764	903,753,386	202,509	0.010
J.P. MORGAN SECURITIES LLC	2,222,796	75,922,441	14,037	0.006
J.P. MORGAN SECURITIES PLC	27,234,067	342,898,896	86,567	0.003
JACKSON PARTNERS AND ASSOCIATES	27,800	1,212,660	834	0.030
JANNEY MONTGOMERY SCOTT NEW YORK	75,039	915,320	2,664	0.036
JEFFERIES AND COMPANY, INC.	1,169,616	36,240,460	34,446	0.029
JEFFERIES INTERNATIONAL LTD	396,463	7,851,205	12,859	0.032
JEFFRIES AND CO ATLANTA	4,843,715	130,782,108	66,517	0.014
JMP SECURITIES	9,991	110,573	353	0.035
JOH. BERENBERG,GOSSLER UND CO.KG	80,000	2,105,019	3,153	0.039
JONES AND ASSOCIATES	135,344	2,142,419	3,961	0.029
JP MORGAN SECURITIES AUSTRALIA LTD	4,420,664	43,037,635	6,455	0.001
JPMORGAN CHASE BANK, N.A.	85,000	1,645,479	2,545	0.030
JPMORGAN SECURITIES (ASIA PACIFIC)	16,244,138	133,637,207	20,040	0.001
KEEFE BRUYETTE	58,689	5,776,745	2,250	0.038
KEMPEN AND CO N.V.	103,000	7,032,553	10,533	0.102
Amounts carried forward	1,394,342,975	5,441,594,777	2,047,145	

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

Brokerage Firms	Shares Traded	Dollar Volume of Trades	Commission	
			Dollar Amount	Per Share
Amounts brought forward	1,394,342,975	\$ 5,441,594,777	\$ 2,047,145	
KEYBANC CAPITAL MARKETS INC.	573,875	20,158,176	19,123	\$ 0.033
KGI SECURITIES (HONG KONG) LIMITED	1,540,350	1,971,914	3,956	0.003
KINNARD JOHN.G & CO NEW YORK	55,068	816,036	1,934	0.035
KNIGHT EXECUTION AND CLEARING SVS	4,962,073	148,165,431	146,400	0.030
KNIGHT SECURITIES LP	44,500	623,455	437	0.010
LARRAIN VIAL	16,967,826	717,028	430	-
LAZARD FRERES AND CO.LLC	761,511	25,581,201	29,842	0.039
LEERINK SWAN & COMPANY	38,968	776,640	1,485	0.038
LIBERUM CAPITAL LIMITED	40,000	2,060,583	1,443	0.036
LIQUIDNET EUROPE LIMITED	13,320,026	406,302,477	166,303	0.012
LONGBOW SECURITIES	56,325	2,530,591	1,774	0.031
LYNCH, JONES AND RYAN	25,379,000	845,694,578	863,738	0.034
MACQUARIE BANK LIMITED	717,187	9,733,206	11,813	0.016
MACQUARIE CAPITAL (EUROPE) LIMITED	199,281	2,452,408	3,383	0.017
MACQUARIE CAPITAL SECURITIES LIMITE	7,745,100	12,466,152	11,551	0.001
MACQUARIE SECURITIES (AUSTRALIA) LI	568,539	1,460,963	2,928	0.005
MACQUARIE SECURITIES KOREA LIMITED	14,939	5,671,366	391	0.026
MACQUARIE SECURITIES USA INC	199,483	5,911,748	6,267	0.031
MERRILL LY PIERCE FENNER & SMITH NY	62,908	1,227,867	2,274	0.036
MERRILL LYNCH AND CO., INC.	3,501,941	115,120,438	120,550	0.034
MERRILL LYNCH FENNER & SMITH INC	6,683,555	17,520,096	14,041	0.002
MERRILL LYNCH INTERNATIONAL LIMITED	565,923	13,743,102	11,597	0.020
MF GLOBAL UK LIMITED	17,188	149,191	223	0.013
MIRAE ASSET SECURITIES (HK) LIMITED	847,500	1,506,565	3,022	0.004
MITSUBISHI UFJ SECURITIES (USA),INC	14,250	903,058	1,085	0.076
MIZUHO SECURITIES ASIA LIMITED	14,200	2,664,419	1,333	0.094
MIZUHO SECURITIES USA INC.	725,600	11,251,615	14,357	0.020
MORGAN KEEGEEAN & CO NEW YORK DTC78	505,763	11,997,613	15,210	0.030
MORGAN STANLEY & CO INC	4,410,682	73,181,337	61,446	0.014
MORGAN STANLEY AND CO. INTERNATIONAL	11,610	80,634	81	0.007
MORGAN STANLEY AND CO., LLC	7,983,802	73,138,347	70,117	0.009
MORGAN STANLEY AND CO.INTRNTNAL PLC	748,991	5,358,619	5,640	0.008
MORGAN STANLEY INDIA COMPANY PVT LT	207,667	1,090,944	760	0.004
MORGAN STANLEY SECURITIES LIMITED	65,580	2,690,909	5,393	0.082
NATIONAL FINANCIAL SERVICES LLC	440,937	13,121,419	17,625	0.040
NEEDHAM AND CO INC	67,913	1,055,449	2,276	0.034
NOMURA FINANCIAL ADVISORY AND	347,411	2,957,473	1,776	0.005
NOMURA INT(HONG KONG) TAIPEI BRANCH	3,077,000	2,845,662	1,762	0.001
NOMURA INTERNATIONAL (HONG KONG) LI	229,700	2,657,634	2,643	0.012
NOMURA INTERNATIONAL PLC	2,613,059	13,618,191	12,585	0.005
NOMURA SECURITIES NEW YORK	12,119,394	29,676,076	30,414	0.003
NOMURA SEOUL	43,975	3,099,746	1,863	0.042
Amounts carried forward	1,512,833,575	7,335,345,134	3,718,416	

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

Brokerage Firms	Shares Traded	Dollar Volume of Trades	Commission	
			Dollar Amount	Per Share
Amounts brought forward	1,512,833,575	\$ 7,335,345,134	\$ 3,718,416	
OCBC SECURITIES PRIVATE LIMITED	88,250	619,720	1,545	\$ 0.018
ODDO ET CIE	17,001	1,474,855	2,216	0.130
PACIFIC CREST SECURITIES NEW YORK	7,114	85,103	263	0.037
PENSON FINANCIAL INC.	97,624	533,770	3,612	0.037
PERSHING LLC	72,204,576	631,177,511	48,730	0.001
PERSHING SECURITIES LIMITED	1,669,605	12,805,657	19,487	0.012
PICKERING ENERGY PARTNERS INC	7,843	233,913	290	0.037
PIPELINE TRADING	71,625	1,648,563	1,333	0.019
PIPER JAFFREY NEW YORK	138,240	1,996,754	4,334	0.031
PRIVATE EQUITY - CHICAGO	1,423,431	11,666,596	9,981	0.007
PULSE TRADING	266,213	5,705,841	2,662	0.010
RABOBANK NEDERLAND	27,000	1,811,815	2,714	0.101
RAYMOND JAMES AND ASSOCIATES	256,972	7,550,143	10,090	0.039
RAYMOND, JAMES & ASSOCIATES, INC.	1,172,455	44,759,347	42,617	0.036
RBC CAPITAL MARKETS CORPORATION	1,076,625	23,690,254	25,100	0.023
RBC CAPITAL MARKETS, LLC	114,024	3,729,107	2,497	0.022
RBC DOMINION SECURITIES	43,900	842,827	1,756	0.040
RBS ASIA LIMITED (SEOUL) BRANCH	17,177	201,150	141	0.008
RBS SECURITIES INC.	64,219	2,157,792	4,324	0.067
REDBURN PARTNERS LLP	5,884	33,295	17	0.003
ROBERT W BAIRD & CO NYK	420,495	15,253,824	13,384	0.032
ROBERT W. BAIRD CO.INCORPORATED	700	13,395	28	0.040
ROBINSON HUMPHREY	225,864	8,633,750	6,869	0.030
ROCHDALE SECURITIES CORP.	1,065,799	31,943,934	33,362	0.031
ROYAL BANK OF SCOTLAND PLC	383,013	829,137	647	0.002
SANDLER O'NEILL NEW YORK	141,875	3,416,857	4,315	0.030
SANFORD C. BERNSTEIN AND CO., LLC	1,235,663	53,812,817	44,541	0.036
SANFORD C. BERNSTEIN LTD	1,562,584	15,898,692	18,988	0.012
SCOTIA CAPITAL INC.	89,500	1,661,158	3,580	0.040
SERIES	5,358,577	190,581,476	56,321	0.011
SG AMERICAS SECURITIES CORP	133,953	2,883,525	4,837	0.036
SG SECURITIES (HK) LIMITED	4,920,500	4,906,893	7,927	0.002
SIDOTI & COMPANY LLC	43,280	1,287,750	1,587	0.037
SKANDINAVISKA ENSKILDA BANKEN LOND	199,980	469,948	704	0.004
SOCIETE GENERALE LONDON BRANCH	2,997,468	27,958,093	40,619	0.014
SPEAR, LEEDS AND KELLOGG	151,904	6,303,149	3,639	0.024
STATE STREET BANK AND TRUST CO	800	12,932	-	-
STATE STREET BANK AND TRUST CO.	300	45,501	-	-
STATE STREET BK & TRST CO,N.A NW YK	36,884	692,438	858	0.023
STEPHENS INC.	17,574	382,318	630	0.036
STERNE, AGEE AND LEACH	407,632	15,017,144	14,582	0.036
STIFEL NICOLAUS & CO NEW YORK	3,540,046	114,744,752	125,234	0.035
Amounts carried forward	1,614,537,744	8,584,818,630	4,284,777	

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

Brokerage Firms	Shares Traded	Dollar Volume of Trades	Commission	
			Dollar Amount	Per Share
Amounts carried forward	1,614,537,744	\$ 8,584,818,630	\$ 4,284,777	
STIFEL NICOLAUS & CO, INCORPORATED	667,931	15,974,483	25,107	\$ 0.038
STIFEL, NICOLAUS AND COMPANY INC	181,000	7,897,215	6,662	0.037
SVENSKA HANDELSBANKEN	281,493	5,333,478	8,217	0.029
THE BANK OF NEW YORK MELLON SA/NV	2,782,100	1,110,917	1,777	0.001
THE HSBC LTD	27,899	880,386	882	0.032
THE ROYAL BANK OF SCOTLAND N.V.(LON)	8,800	299,493	352	0.040
THE ROYAL BANK OF SCOTLAND N.V., (H	6,361,900	7,409,167	15,990	0.003
TORONTO DOMINION SECURITIES INC	128,700	4,014,553	8,017	0.062
UBS AG LONDON BRANCH	1,413,364	13,203,870	9,185	0.006
UBS AG STAMFORD BRANCH	1,738,437	49,550,458	35,365	0.020
UBS SECURITIES ASIA LIMITED	7,558,897	12,374,679	10,337	0.001
UBS SECURITIES PTE. LTD.	682,300	1,365,442	819	0.001
UBS SECURITIES PTE.LTD.SEOUL BRANCH	50,764	1,504,706	905	0.018
UBS WARBURG SECS INDIA PVT LTD MUMB	469,616	1,464,371	877	0.002
UBS WARBURG SECURITIES LTD TAIWAN	2,149,000	3,859,897	2,319	0.001
WACHOVIA CAPITAL MARKETS LLC	370,610	10,268,487	11,259	0.030
WEDBUSH MORGAN SECURITIES	61,202	937,972	2,125	0.035
WEEDEN AND CO	571,219	9,359,037	14,680	0.026
WELLS FARGO BANK, N.A.	45,100	598,538	1,184	0.026
WILLIAM BLAIR AND COMPANY	270,104	5,320,708	10,035	0.037
WILLIAMS CAPITAL GROUP L.P., THE	23,504	1,501,802	470	0.020
WUNDERLICH SECURITIES	89,300	479,997	1,297	0.015
XP INVESTIMENTOS CCTVM SA	487,350	2,581,705	5,151	0.011
Total trades	1,640,958,334	8,742,109,991	4,457,789	0.003
			\$ (669,480)	
	1,640,958,334	\$ 8,742,109,991	\$ 3,788,309	\$ 0.002



**Employees' Retirement System**  

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**of the State of Hawaii**



**ACTUARIAL  
SECTION**

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December 31, 2012

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, 2012**

We certify that the information contained in the 2012 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, 2012.

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.

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*Letter from the Actuary (continued)*

Board of Trustees  
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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. Like most pension funds across the country, the System was significantly impacted by the severe downturn in the investment markets during fiscal year 2009. Based on this actuarial valuation as of June 30, 2012, ERS's underfunded status has increased due to continued recognition of these market investment losses. However, the System had an offsetting liability experience gain which was caused primarily by lower than expected salary increases. The UAAL is now \$8.441 billion.

The 2011 Legislature made significant changes to the future employer contribution rates. The current 21.00% for Police and Fire employees will gradually increase to 25.00%, and the 15.50% 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 30 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.

Due to the additional investment losses incurred in FY 2012, the System is now deferring \$957 million in deferred investment losses (compared with \$300 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***

As discussed above, there were significant changes to the future contribution requirements and benefit provisions of future members of the System enacted by the 2011 Legislature. In addition, changes to counteract perceived pension spiking issues were made by the 2012 Legislature. While these changes have been reflected in the determination of the funding period as described above, they have not been reflected in the determination of the liabilities included in this valuation since this valuation does not include any members impacted by the changes. Please see our discussion of these changes in Exhibit 9. See the *Summary of Retirement Benefit Plan Provisions* in the Introductory Section of this CAFR for more details on the benefit provisions of the System.

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*Letter from the Actuary (continued)*

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***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 us. A change in the investment return assumption was recommended to the Board as part of the recommended changes. However, at that time the investment return assumption was set by statute. As part of the legislative changes made to the system by the 2011 Legislature, the investment return assumption was lowered to the recommended rate of 7.75% effective with the 2011 valuation. In addition, the Board of Trustees was given the authority to set this assumption for fiscal years after 2011. Therefore, this is the first valuation where the Board is adopting the investment return assumption. The assumption remains unchanged from last year at 7.75%.

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 Table 18 of this report.

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, 2012, 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. Certain of these tables, however, were prepared by ERS utilizing information from this report. When those tables were prepared by ERS from our report, they are so noted.



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*Letter from the Actuary (continued)*

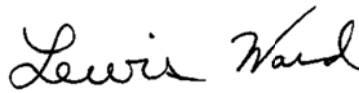
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All of our work conforms with generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, our calculations also comply with the requirements of state law and, where applicable, the Internal Revenue Code, ERISA, and the Statements of the Governmental Accounting Standards Board. The undersigned 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.

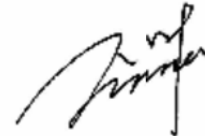
Sincerely,



Joe Newton, FSA, EA  
Senior Consultant & Actuary



Lewis Ward  
Consultant



Linna Ye, ASA  
Actuary

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*Executive Summary*

The following summarizes the key results of the June 30, 2012 actuarial valuation of the Employees' Retirement System of the State of Hawaii (ERS).

Item	2012	2011
<b>Membership</b>		
• Number of		
- Active members	65,599	65,310
- Retirees and beneficiaries	40,774	39,689
- Inactive, vested	6,909	6,649
- Total	113,282	111,648
• Covered payroll for active members	\$3,706.1 million	\$3,731.4 million
• Actual benefit payments and refunds	\$1,022.6 million	\$968.1 million
<b>Assets</b>		
• Actuarial value	\$12,242.5 million	\$11,942.8 million
• Market value	\$11,285.9 million	\$11,642.3 million
• Return on actuarial value	5.1%	7.1%
• Return on market value	(0.6%)	20.8%
• Employer contributions during fiscal year	\$548,353,394	\$534,857,778
• External cash flow %	(2.7%)	(1.9%)
<b>Actuarial Information</b>		
• Total normal cost % (employee + employer)	11.05%	11.06%
• Unfunded actuarial accrued liability (UAAL)	\$8,440.9 million	\$8,154.2 million
• Funded ratio (based on actuarial assets)	59.2%	59.4%
• Funded ratio (based on market assets)	54.6%	57.9%
• Funding period (years) *	30.0	25.0
• Employer contribution rate % of projected payroll **		
For FY beginning July 1	16.11%	15.52%
• GASB ARC for FY 2013		
% of projected payroll		
Police and Fire Employees	25.79%	25.47%
All Other Employees	17.72%	17.67%
Composite – All Employees	18.64%	18.56%

\* 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 21.00% Contribution Rate for Police and Firefighters and 15.50% Contribution Rate for All Other Employees for FY 2013, 19.70% and 15.00% respectively for FY 2012. .

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*Actuarial Certification Statement*

	Police and Firefighters June 30, 2012 <u>(1)</u>	All Other Employees June 30, 2012 <u>(2)</u>	All Employees June 30, 2012 <u>(3)</u>
1. Gross normal cost as a percentage of pay	20.18%	9.88%	11.05%
2. Present value of future benefits			
a. Active employees	\$ 2,558,073,998	\$ 10,467,797,063	\$ 13,025,871,061
b. Inactive members	28,224,454	356,200,363	384,424,817
c. Pensioners and beneficiaries	1,778,387,939	8,928,803,574	10,707,191,513
d. Total	<u>\$ 4,364,686,391</u>	<u>\$ 19,752,801,000</u>	<u>\$ 24,117,487,391</u>
3. Present value of future employee and employer contributions			
a. Present value of future normal costs	\$ 787,366,976	\$ 2,646,717,597	\$ 3,434,084,573
b. Present value of future employee contributions	<u>477,712,638</u>	<u>1,143,105,560</u>	<u>1,620,818,198</u>
c. Present value of future employer normal cost (Item 3a - Item 3b)	\$ 309,654,338	\$ 1,503,612,037	\$ 1,813,266,375
4. Actuarial accrued liability (Item 2d - Item 3a)	\$ 3,577,319,415	\$ 17,106,083,403	\$ 20,683,402,818
5. Actuarial value of assets			
a. Annuity Savings Fund	\$ 776,302,170	\$ 1,020,142,000	\$ 1,796,444,170
b. Pension Accumulation Fund	1,489,065,019	8,956,984,619	10,446,049,638
c. Total	<u>\$ 2,265,367,189</u>	<u>\$ 9,977,126,619</u>	<u>\$ 12,242,493,808</u>
6. Unfunded actuarial accrued liability	\$ 1,311,952,226	\$ 7,128,956,784	\$ 8,440,909,010
7. Adequacy of contribution rates			
a. Statutory Contribution Rate for Fiscal Year 2013	21.00%	15.50%	16.11%
B. Funding period in years as of June 30, 2012 *	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.

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*Actuarial Certification Statement (continued)*

The actuarial valuation as of June 30, 2012 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

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*Summary of 2012 Actuarial Valuation*

**Exhibit 1**  
**Development of Employer Cost**

	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

	June 30, 2011	June 30, 2011	June 30, 2011
1. Payroll (adjusted for one year's pay increase)	\$ 436,196,835	\$ 3,479,760,469	\$ 3,915,957,304
2. Gross normal cost (Exhibit 3)	20.29%	9.87%	11.06%
3. Employer normal cost rate (Exhibit 3)	8.09%	5.78%	6.06%
4. Present value future benefits (Exhibit 2)	\$ 4,254,119,130	\$ 19,316,790,342	\$ 23,570,909,472
5. Present value future employer normal cost	\$ 321,752,959	\$ 1,541,778,348	\$ 1,863,531,307
6. Present value future employee contributions	\$ 488,554,929	\$ 1,121,892,868	\$ 1,610,447,797
7. Actuarial accrued liability (Item 4 - Item 5 - Item 6)	\$ 3,443,811,242	\$ 16,653,119,126	\$ 20,096,930,368
8. Actuarial value of assets	\$ 2,181,269,184	\$ 9,761,484,176	\$ 11,942,753,360
9. Unfunded actuarial accrued liability (UAAL) (Item 7 - Item 8)	\$ 1,262,542,058	\$ 6,891,634,950	\$ 8,154,177,008
10. Funding period	25.0	25.0	25.0

\*Effective with the June 30, 2011 valuation, 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 2012 Actuarial Valuation (continued)*

**Exhibit 2**  
**Actuarial Present Value of Future Benefits**

	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

	Police and Firefighters June 30, 2011	All Other Employees June 30, 2011	All Employees June 30, 2011
1. Active members			
a. Service retirement benefits	\$ 2,443,174,302	\$ 9,467,384,389	\$ 11,910,558,691
b. Termination benefits	82,413,268	657,786,761	740,200,029
c. Survivor benefits	38,812,501	230,129,736	268,942,237
d. Disability retirement benefits	13,773,799	92,469,302	106,243,101
e. Total	\$ 2,578,173,870	\$ 10,447,770,188	\$ 13,025,944,058
2. Retired members			
a. Service retirement	\$ 1,554,457,246	\$ 8,029,263,146	\$ 9,583,720,392
b. Disability retirement	29,044,151	147,887,723	176,931,874
c. Beneficiaries	65,812,540	357,248,423	423,060,963
d. Total	\$ 1,649,313,937	\$ 8,534,399,292	\$ 10,183,713,229
3. Inactive members			
a. Vested terminations	\$ 23,710,215	\$ 310,828,475	\$ 334,538,690
b. Nonvested terminations	2,921,108	23,792,387	26,713,495
c. Total	\$ 26,631,323	\$ 334,620,862	\$ 361,252,185
4. Total actuarial present value of future benefits	\$ 4,254,119,130	\$ 19,316,790,342	\$ 23,570,909,472

*Summary of 2012 Actuarial Valuation (continued)*

**Exhibit 3  
Analysis of Normal Cost**

	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%

	Police and Firefighters June 30, 2011	All Other Employees June 30, 2011	All Employees June 30, 2011
1. Normal cost as a percent of pay			
a. Service retirement benefits	17.37%	7.42%	8.57%
b. Deferred termination benefits	0.84%	0.79%	0.79%
c. Refunds	1.35%	1.19%	1.21%
d. Disability retirement benefits	0.20%	0.17%	0.17%
e. Survivor benefits	0.53%	0.30%	0.32%
f. Total	20.29%	9.87%	11.06%
2. Employee contribution rate	12.20%	4.09%	5.00%
3. Effective employer normal cost rate (Item 1f – Item 2)	8.09%	5.78%	6.06%

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*Summary of 2012 Actuarial Valuation (continued)*

**Exhibit 4**  
**Development of Actuarial Value of Assets**

	Year Ending June 30, 2012	Year Ending June 30, 2011
	<u>                                </u>	<u>                                </u>
1. Actuarial value of assets at beginning of year	\$ 11,942,753,360	\$ 11,345,618,006
2. Net new investments		
a. Contributions	\$ 727,118,282	\$ 765,855,884
b. Benefits paid	(1,015,447,668)	(960,219,432)
c. Refunds	(7,187,606)	(7,901,509)
d. Subtotal	<u>(295,516,992)</u>	<u>(202,265,057)</u>
3. Market value of assets at end of year	\$ 11,285,929,822	\$ 11,642,278,077
4. Expected Return	\$ 914,112,102	\$ 899,558,838
5. Expected actuarial value of assets, end of year	\$ 12,561,348,470	\$ 12,042,911,787
6. Excess/(shortfall) return (Item 3-Item 5)	\$ (1,275,418,648)	\$ (400,633,710)
7. Excess / (shortfall) recognized (25% of Item 6)	<u>\$ (318,854,662)</u>	<u>\$ (100,158,428)</u>
8. Actuarial value of assets as of June 30, 2011 (Item 5 + Item 7)	\$ 12,242,493,808	\$ 11,942,753,360
9. Ratio of actuarial value to market value	108.5%	102.6%



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*Summary of 2012 Actuarial Valuation (continued)*

**Exhibit 5**  
**Total Experience Gain or Loss**

Item	Police and Firefighters	All Other Employees	All Employees
<b>A. Calculation of total actuarial gain or loss</b>			
1. Unfunded actuarial accrued liability (UAAL), as of June 30, 2011	\$ 1,262,542,058	\$ 6,891,634,951	\$ 8,154,177,009
2. Normal cost for the year (employer and employee)	\$ 88,504,338	\$ 332,038,853	420,543,191
3. Less: contributions and assessments for the year	\$ (124,996,620)	\$ (602,121,662)	\$ (727,118,282)
4. Interest at 7.75%			
a. On UAAL	\$ 97,847,009	\$ 534,101,709	\$ 631,948,718
b. On normal cost	3,429,543	12,866,506	16,296,049
c. On contributions	<u>(4,843,619)</u>	<u>(23,332,214)</u>	<u>(28,175,833)</u>
d. Total	\$ 96,432,933	\$ 523,636,001	\$ 620,068,934
5. Expected UAAL as of June 30, 2012 (Sum of Items 1– 4)	\$ 1,322,482,709	\$ 7,145,188,143	\$ 8,467,670,852
6. Actual UAAL as of June 30, 2012	\$ 1,311,952,226	\$ 7,128,956,784	\$ 8,440,909,010
7. Total gain (loss) for the year (Item 5 – Item 6)	\$ 10,530,483	\$ 16,231,359	\$ 26,761,842
<b>B. Source of gains and losses</b>			
8. Asset gain (loss) for the year (Exhibit 6)	\$ (59,001,287)	\$ (259,853,374)	\$ (318,854,661)
9. Gain (loss) due to change in actuarial assumptions			-
10 Gain (loss) due to change in actuarial method	-		-
11 Other liability gain (loss)	\$ 69,531,770	\$ 276,084,733	\$ 345,616,503
12 Change in benefit provisions	<u>-</u>	<u>-</u>	<u>-</u>
13 Total gain (loss) for the year	\$ 10,530,483	\$ 16,231,359	\$ 26,761,842

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*Summary of 2012 Actuarial Valuation (continued)*

**Exhibit 6**  
**Investment Experience Gain or Loss**

Item	June 30, 2012	June 30, 2011
1. Actuarial assets, beginning of year	\$ 11,942,753,360	\$ 11,345,618,006
2. Total contributions during year	\$ 727,118,282	\$ 765,855,884
3. Benefits and refunds paid	\$ (1,022,635,274)	\$ (968,120,941)
4. Assumed net investment income at 7.75%		
a. Beginning of year assets	\$ 925,563,385	\$ 907,649,440
b. Contributions	\$ 28,175,833	\$ 30,634,235
c. Benefits and refunds paid	\$ (39,627,117)	\$ (38,724,838)
d. Total	\$ 914,112,101	\$ 899,558,837
5. Expected actuarial assets, end of year (Sum of Items 1 through 4)	\$ 12,561,348,469	\$ 12,042,911,786
6. Actual actuarial assets, end of year	\$ 12,242,493,808	\$ 11,942,753,360
7. Asset gain (loss) for year (Item 6 – Item 5)	\$ (318,854,661)	\$ (100,158,426)
8. Asset gain (loss) as a percent of actuarial value of assets, end of year (Item 7 / Item 6)	(2.60%)	(0.84%)

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*Summary of 2012 Actuarial Valuation (continued)*

**Exhibit 7**  
**Projection Results Based on June 30, 2012 Actuarial Valuation**

2012	16.11%	3,890.0	627	20,683	12,242	8,441	59.2%
2013	16.67%	3,950.7	658	21,560	12,921	8,639	59.9%
2014	17.22%	4,047.0	697	22,473	13,619	8,854	60.6%
2015	17.77%	4,151.2	738	23,387	14,342	9,045	61.3%
2016	17.88%	4,263.6	762	24,298	15,090	9,208	62.1%
2017	17.88%	4,383.5	784	25,204	15,848	9,356	62.9%
2018	17.88%	4,510.7	806	26,105	16,611	9,493	63.6%
2019	17.87%	4,645.9	830	26,998	17,380	9,618	64.4%
2020	17.87%	4,789.1	856	27,885	18,159	9,726	65.1%
2021	17.86%	4,940.0	882	28,766	18,949	9,817	65.9%
2022	17.86%	5,098.9	911	29,639	19,753	9,886	66.6%
2023	17.85%	5,265.3	940	30,506	20,574	9,932	67.4%
2024	17.85%	5,439.0	971	31,365	21,415	9,950	68.3%
2025	17.84%	5,620.4	1,003	32,216	22,278	9,938	69.2%
2026	17.84%	5,809.8	1,036	33,057	23,166	9,890	70.1%
2027	17.83%	6,007.7	1,071	33,888	24,084	9,804	71.1%
2028	17.83%	6,215.2	1,108	34,710	25,037	9,673	72.1%
2029	17.82%	6,432.5	1,146	35,525	26,031	9,494	73.3%
2030	17.82%	6,659.7	1,187	36,334	27,074	9,260	74.5%
2031	17.82%	6,897.2	1,229	37,138	28,173	8,965	75.9%
2032	17.81%	7,145.2	1,273	37,940	29,337	8,603	77.3%
2033	17.81%	7,403.5	1,319	38,739	30,573	8,166	78.9%
2034	17.81%	7,674.0	1,367	39,538	31,892	7,646	80.7%
2035	17.81%	7,956.8	1,417	40,339	33,304	7,035	82.6%
2036	17.81%	8,252.2	1,469	41,146	34,823	6,323	84.6%
2037	17.81%	8,562.0	1,525	41,962	36,462	5,501	86.9%
2038	17.81%	8,886.7	1,583	42,793	38,237	4,556	89.4%
2039	17.81%	9,226.1	1,643	43,643	40,166	3,477	92.0%
2040	17.81%	9,580.9	1,707	44,518	42,267	2,251	94.9%
2041	17.81%	9,951.9	1,773	45,425	44,561	865	98.1%
2042	17.82%	10,338.9	1,842	46,370	47,068	(698)	101.5%

This projection reflects the new benefit provisions for new employees hired after June 30, 2013, per Act 163/2012 SLH. The normal cost and accrued liabilities of the June 30, 2012 actuarial valuation were not impacted by the changes of these benefit provisions based on the Individual Entry Age Normal Cost method. The changes in benefit provisions will not impact the normal cost and accrued liabilities until the June 30, 2014 valuation, which will be the first valuation with active members covered under the new benefit provisions.

*Summary of 2012 Actuarial Valuation (continued)*

**Exhibit 8**  
**Highlights of Last Five Annual Actuarial Valuations**  
**2008 through 2012**

Item	Valuation Date: June 30				
	2008	2009	2010	2011	2012
Number of active members	66,589	67,912	65,890	65,310	65,599
Number of inactive members	5,847	6,016	6,895	6,649	6,909
Number of pensioners	33,893	34,429	35,763	36,871	37,830
Number of beneficiaries	2,367	2,570	2,678	2,818	2,944
Average monthly contributory plan pension amount	\$ 1,941	\$ 2,019	\$ 2,118	\$ 2,221	\$ 2,315
Average monthly noncontributory plan pension amount	\$ 1,388	\$ 1,421	\$ 1,457	\$ 1,509	\$ 1,538
Average monthly hybrid plan pension amount	1,603	1,602	\$ 1,857	\$ 2,055	\$ 2,090
Average monthly beneficiary amount	\$ 1,062	\$ 1,109	\$ 1,151	\$ 1,181	\$ 1,219
Total actuarial value of assets (\$millions)	\$ 11,381	\$ 11,400	\$ 11,346	\$ 11,943	\$ 12,242
Unfunded actuarial accrued liability (\$millions)	\$ 5,168.1	\$ 6,236.3	\$ 7,138.1	\$ 8,154.2	\$ 8,440.9
Funding Period (in years) <sup>(1)</sup>	22.6	28.2	41.3	25.0	30.0

Item (Dollar amounts in millions <sup>(2)</sup> )	Fiscal Year				
	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
Employers appropriations <sup>(2)</sup>	\$ 488.8	\$ 578.6	\$ 547.6	\$ 534.9	\$ 548.4

<sup>(1)</sup> 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.

<sup>(2)</sup> 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.

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*Summary of 20012 Actuarial Valuation (continued)***Exhibit 9**  
**Discussion on Benefit Provisions**

A summary of the provisions of ERS used in this valuation is presented in pages 12-16 of the *Introductory Section* of this CAFR. The Summary of Plan Changes below is a historical record of prior legislative changes starting with changes effective in 1999. There were significant changes made by the 2011 Legislature to the benefit provisions of the System for employees hired after June 30, 2012. Because the Board has chosen to use the Individual Entry Age Normal Cost method, the normal cost and accrued liabilities of this valuation were not impacted by the changes in the benefit provisions. In fact, the changes in the benefit provisions will not impact the normal cost and accrued liabilities until the June 30, 2013 valuation, which will be the first valuation with active members covered under the new benefit provisions.

However, as discussed in the our transmittal letter, we did reflect the new benefit provisions in the projection shown in Exhibit 7, which is used to establish the funding period of the System. Therefore, we believe it is important to briefly discuss the major changes in the benefit provisions for employees hired after June 30, 2012. The major changes are outlined below:

- The benefit multiplier was decreased by 0.25% for most employee groups (i.e. 1.75% for new Hybrid Plan employees and 2.25% for new Contributory Plan Police and Fire employees)
- The retirement eligibility for normal retirement was changed to age 60 with 30 years of service or age 65 with 10 years of service for new Hybrid Plan employees
- The retirement eligibility for normal retirement was changed to age 55 with 25 years of service or age 60 with 10 years of service for Police and Fire Employees
- The period for determining average final compensation was increased to 5 years
- The eligibility for a deferred vested annuity was increased to 10 years
- The post-retirement annuity increase was decreased to 1.5% per year
- The matching rate on the hybrid plan funds was decreased to 20%
- The member contribution rates were increased by 2% of pay (8.00% for Hybrid Plan employees, 14.2% for Police and Fire employees, and 9.75% for Hybrid Plan employees entitled to the age 55 with 25 years of service normal retirement eligibility)

There were no changes passed since the last valuation that had an actuarial impact on current employees.

Legislation was also enacted that impacted the employer contribution rates beginning in fiscal year 2013. The employer contribution rates for Police and Fire employees will increase according to the following schedule: 22.00% in FY2013, 23.00% in FY 2014, and 24.00% in FY 2015, and 25.00% in FY 2016 and beyond. The employer contribution rates for All Other Employees will increase according to the following schedule: 15.50% in FY2013, 16.00% in FY 2014, and 16.50% in FY 2015, and 17.00% in FY 2016 and beyond.

This valuation reflects benefits promised to members by the ERS's statutes. There are no ancillary benefits - retirement type benefits not required by the ERS's statutes but which might be deemed an ERS liability if continued beyond the availability of funding by the current funding source.

*Summary of 2012 Actuarial Valuation (continued)***Exhibit 9****Discussion on Benefit Provisions (continued)**

Act 179/2004 was adopted during FY2003/2004 and established the new Hybrid Plan that became effective on July 1, 2006. Current participants had the choice to elect to move to the new plan or stay in the current plan. There were 26,228 plan members who elected to so transfer. The Hybrid plan membership has since grown to more than 40,000 members. The Hybrid Plan provisions have been reflected in the results of this report.

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*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.

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*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 males, set forward six years **(effective June 30, 2006)**.

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*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%

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*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%
Accidental	30%	7%	5%	5%	35%

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*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

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*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.

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*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 this valuation to the assumption recommended by GRS. ERS's Board will adopt the assumption for future valuations based on the Actuary's recommendations.



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*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 will become effective July 1, 2006.

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*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%.

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*Summary of Actuarial Methods and Assumptions (continued)*

### Summary of Plan Changes (continued)

#### **Act 163, effective June 23, 2012**

Legislation was enacted that increased the future employer contribution rates to ERS. Employers of Police and Fire employees will contribute 22% of pay in FY 2013, 23% in FY 2014, 24% in FY 2015, and 25% 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.

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.

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*Ten-Year Actuarial Schedules*

**Ten Year Actuarial Schedules  
2003 to 2012**

- Retirement System Membership \*\*
  - 2012 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 2012-2013 \*\*

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

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**Retirement System Membership \*\*  
2003 to 2012**

March 31,	Active Members	Inactive Vested Members	Pensioners & Beneficiaries	Total Membership
2003	62,208	3,835	30,330	96,373
2004	62,292	4,150	31,389	97,831
2005	62,573	4,501	32,297	99,371
2006	63,073	4,938	33,301	101,312
2007	64,069	5,164	34,304	103,537
2008	65,251	5,554	35,324	106,129
2009	66,589	5,847	36,260	108,696
2010	67,912	6,016	36,999	110,927
2011	65,890	6,895	38,441	111,226
2012	65,310	6,649	39,689	111,648

\*\* Schedule compiled by ERS Staff from actuary reports.

*Ten-Year Actuarial Schedules (continued)***2012 Membership Data**

	Police and Firefighters		All Other Employees		All Employees	
	June 30, 2012	June 30, 2011	June 30, 2012	June 30, 2011	June 30, 2012	June 30, 2011
1. Active members						
a. Number	4,894	4,965	60,705	60,345	65,599	65,310
b. Total payroll	\$ 407,044,323	\$ 412,812,512	\$3,299,092,245	\$3,318,570,914	\$3,706,136,568	\$3,731,383,426
c. Average salary	\$ 83,172	\$ 83,145	\$54,346	\$ 54,993	\$ 56,497	\$ 57,133
d. Average age	41.7	41.6	48.0	47.8	47.6	47.4
e. Average service	14.0	13.8	13.5	13.4	13.5	13.4
2. Inactive members						
a. Number	238	226	6,671	6,423	6,909	6,649
b. Total annual deferred benefits	\$ 3,698,263	\$ 3,444,867	\$ 49,990,999	\$ 48,140,410	\$ 53,689,262	\$ 51,585,277
c. Average annual deferred benefit	\$ 15,539	\$ 15,243	\$ 7,494	\$ 7,495	\$ 7,771	\$ 7,758
3. Service retirees						
a. Number	3,089	2,994	33,219	32,365	36,308	35,359
b. Total annual benefits	\$ 139,356,138	\$ 129,073,292	\$ 782,957,292	\$ 744,391,967	\$ 922,313,430	\$ 873,465,259
c. Average annual benefit	\$ 45,114	\$ 43,111	\$ 23,570	\$ 23,000	\$ 25,402	\$ 24,703
4. Disabled retirees						
a. Number	156	159	1,366	1,353	1,522	1,512
b. Total annual benefits	\$ 2,798,191	\$ 2,792,285	\$ 15,079,381	\$ 14,563,692	\$ 17,877,572	\$ 17,355,977
c. Average annual benefit	\$ 17,937	\$ 17,562	\$ 11,039	\$ 10,764	\$ 11,746	\$ 11,479
5. Beneficiaries						
a. Number	210	203	2,734	2,615	2,944	2,818
b. Total annual benefits	\$ 6,079,075	\$ 5,746,569	\$ 36,973,964	\$ 34,427,112	\$ 43,053,039	\$ 40,173,681
c. Average annual benefit	\$ 28,948	\$ 28,308	\$ 13,524	\$ 13,165	\$ 14,624	\$ 14,256

### Historical Summary of Active Member Data 2003 to 2012

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		
2003	62,292	0.1%	2,718.4	5.8%	43,640	5.7%	46.0	13.1
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	-0.2%	56,497	0.2%	47.6	13.5

*Ten-Year Actuarial Schedules (continued)*

**Pensioners, Average Annual Pension and  
Active Member/Pensioner Comparison\*\*  
2003 to 2012**

March 31,	Number of Pensioners	Average Annual Pension (1)	Ratio of Active Members per Pensioner
2003	29,730	\$18,601	2.1
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

\*\* 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\*\*  
2003 to 2012**

As of Mar 31,	Added	Average Added to Rolls	Removed	Average Removed from Rolls	Total	Average Pension	% Chg
<b>Retirants</b>							
2003	1,723	\$20,292	763	\$12,836	29,730	\$18,601	3.90%
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%
<b>Beneficiaries</b>							
2003	147	\$12,137	48	\$6,068	1,659	\$10,909	3.90%
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%

\*\* Schedule compiled by ERS staff from actuary reports.

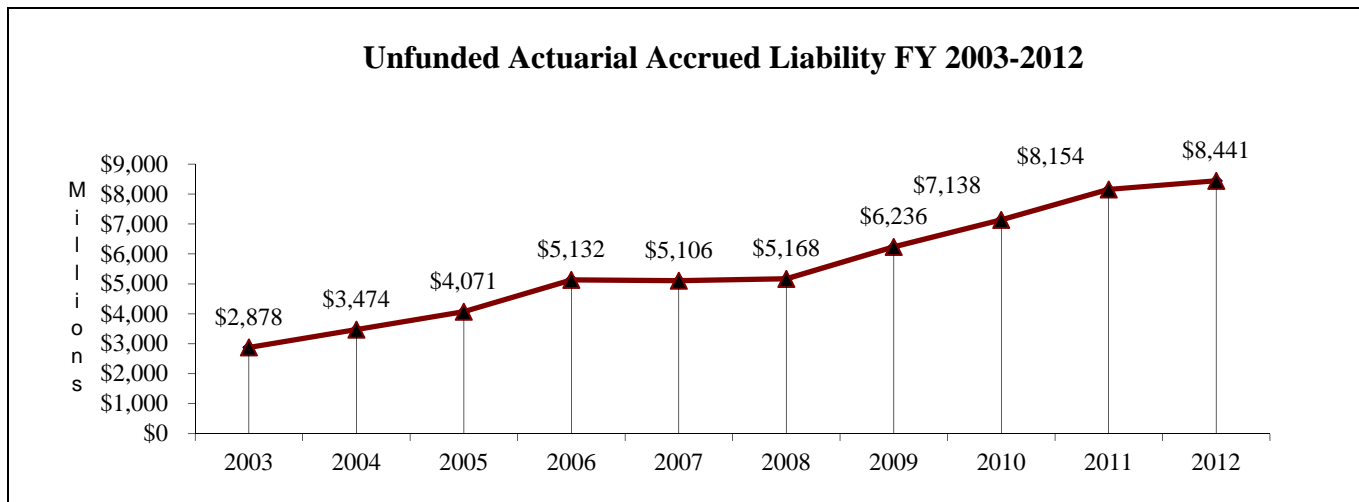
*Ten-Year Actuarial Schedules (continued)*

**Solvency Test\*\***  
2003 to 2012

June 30,	Actuarial Accrued Liabilities (AAL)			Actuarial Value of Assets	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		Column (1)	Column (2)	Column (3)
	(1)	(2)	(3)		(5)	(6)	(7)
2003	872.3	5,912.3	5,167.5	9,074.0	100%	100%	44.3%
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%

(Amounts in \$millions)

\*\* Schedule compiled by ERS Staff from actuary reports



*Ten-Year Actuarial Schedules (continued)***Employer Contribution Rates as a Percentage of Payroll** \*\*  
2003 to 2012

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
2003	3.88%	6.46%	10.34%	5.62%	5.87%	11.49%	5.45%	5.93%	11.38%
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%

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.

\*\* Schedule compiled by ERS Staff from actuary reports.



*Ten-Year Actuarial Schedules (continued)*

**Employer Appropriations to Pension Accumulation Fund<sup>\*\*</sup>**

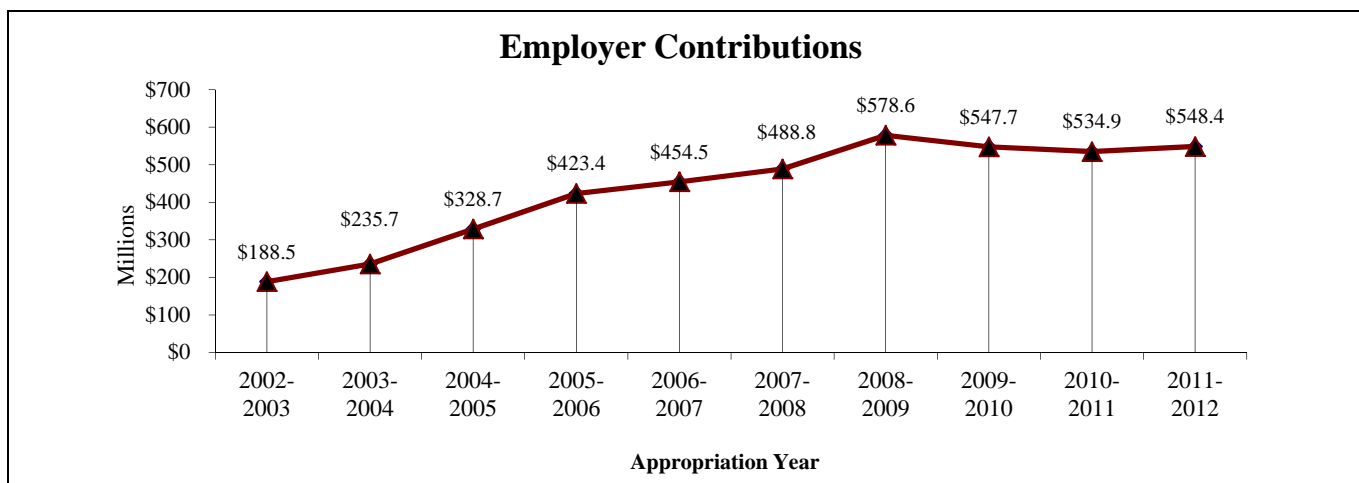
**Appropriation Years 2002-2003 to 2011-2012**

(Amounts in Millions)

Fiscal Year	Investment Yield Rate		Appropriation Year	Total Calculated Contribution	Investment Earnings Adjustment	Employer Appropriations
	Assumed for Actuarial Valuation	Actuarial Investment Return				
2002-2003	8.0%	2.62%	2004-2005	\$235.7	-	\$235.7
2003-2004	8.0%	0.18%	2005-2006	328.7	-	328.7
2004-2005	8.0%	0.80%	2006-2007	N/A	-	N/A
2005-2006	8.0%	4.76%	2007-2008	N/A	-	N/A
2006-2007	8.0%	9.76%	2008-2009	N/A	-	N/A
2007-2008	8.0%	12.98%	2009-2010	N/A	-	N/A
2008-2009	8.0%	8.89%	2010-2011	N/A	-	N/A
2009-2010	8.0%	0.87%	2011-2012	N/A	-	N/A
2010-2011	8.0%	(0.42)%	2012-2013	N/A	-	N/A
2011-2012	7.75%	7.1%	2013-2014	N/A	-	N/A

- 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 SETHEEPP	96.2%	Montana PERS	91.1%
		Texas ERS	95.6%	Iowa PERS	90.2%
		Georgia ERS	94.5%		
80% to 89%	8	Arkansas PERS	89.1%	Michigan MSERS	85.1%
		California PERS	87.2%	Arizona ASRS	83.3%
		Missouri MOSERS	86.8%	Alabama ERS	81.1%
		Massachusetts SERS	85.1%	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%
		<b>Hawaii ERS *</b>	<b>68.8%</b>	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, 2012 was 59.2%.**



**Employees' Retirement System**  

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of the State of Hawaii



**STATISTICAL  
SECTION**

## Summary

### Plan Membership

Membership in the ERS increased by 1,634 to 113,282 for FY 2012, or 1.5 percent for the year. Active members increased by 289, retired members and beneficiaries increased by 1,085, and terminated-vested members increased by 260. Membership data for the last ten years ended June 30, 2012 may be found on the following pages.

### Net Assets vs. Liabilities

The charts on page 114 graphically represent the funding progress of the ERS for the ten years ended June 30, 2012. The area charts show the portion of the pension liabilities that are unfunded compared to the portion covered by assets in the pension trust and illustrate the funded ratio of the ERS for the ten years ended June 30, 2012.

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 Plan Net Assets

Last Ten Fiscal Years

Fiscal Year Ended June 30,:	2003	2004	2005	2006	2007
<b>Additions</b>					
Employer Contributions	\$ 190,586,276	\$ 235,685,796	\$ 328,716,718	\$ 423,445,597	\$ 454,494,286
Member contributions	57,214,521	55,116,452	57,054,621	56,257,953	144,658,185
Investment income (net of expense)	146,140,751	1,236,414,927	931,710,183	988,347,837	1,704,957,268
Total additions to plan net assets	<u>393,941,548</u>	<u>1,527,217,175</u>	<u>1,317,481,522</u>	<u>1,468,051,387</u>	<u>2,304,109,739</u>
<b>Deductions</b>					
Benefits	602,805,080	636,214,617	676,316,347	720,542,990	761,004,748
Refunds	2,605,602	2,328,796	3,442,466	2,487,279	3,497,590
Administrative expenses	6,780,824	10,468,508	7,259,906	8,477,837	9,601,756
Other	2,800	-	-	-	-
Total deductions from plan net assets	<u>612,194,306</u>	<u>649,011,921</u>	<u>687,018,719</u>	<u>731,508,106</u>	<u>774,104,094</u>
Change in plan net assets	<u>(218,252,758)</u>	<u>878,205,254</u>	<u>630,462,803</u>	<u>736,543,281</u>	<u>1,530,005,645</u>
Plan net assets, beginning of year	7,905,452,641	7,687,199,883	8,565,405,137	9,195,867,940	9,932,411,221
Plan net assets, end of year	<u>\$ 7,687,199,883</u>	<u>\$ 8,565,405,137</u>	<u>\$ 9,195,867,940</u>	<u>\$ 9,932,411,221</u>	<u>\$ 11,462,416,866</u>

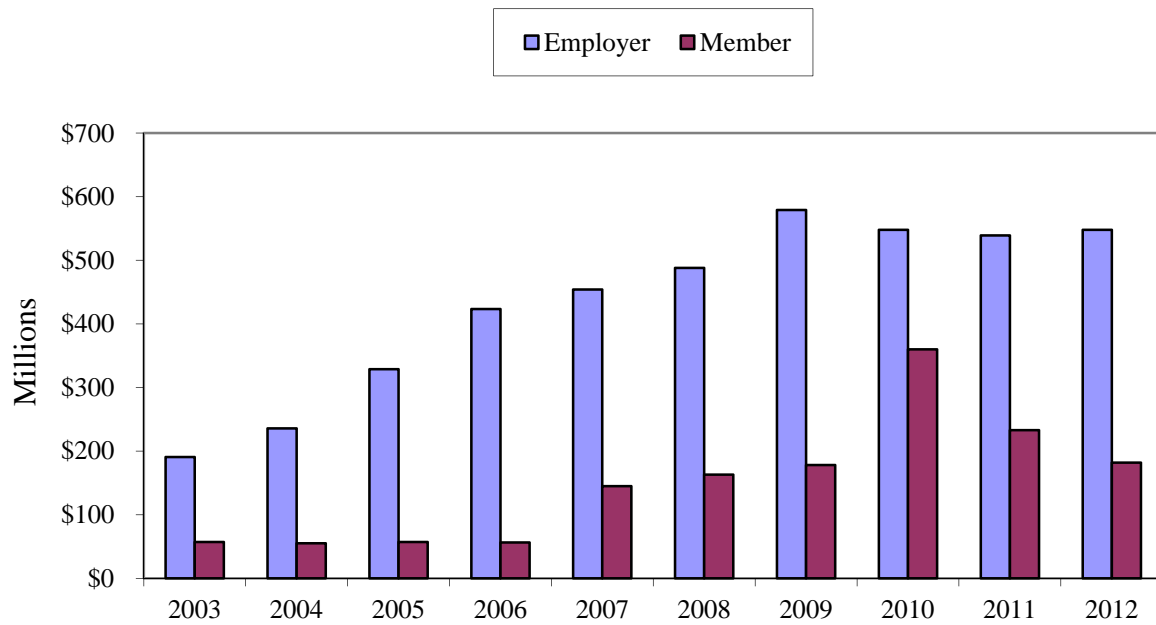
Fiscal Year Ended June 30,:	2008	2009	2010	2011	2012
<b>Additions</b>					
Employer Contributions	\$ 488,770,028	\$ 578,672,058	\$ 547,669,675	\$ 538,692,849	\$ 548,353,394
Member contributions	163,375,639	177,781,610	360,047,068	232,880,063	182,401,324
Investment income (net of expense)	(461,063,080)	(1,937,317,469)	1,026,461,210	2,040,061,555	(57,798,410)
Total additions to plan net assets	<u>191,082,587</u>	<u>(1,180,863,801)</u>	<u>1,934,177,953</u>	<u>2,811,634,467</u>	<u>672,956,308</u>
<b>Deductions</b>					
Benefits	792,312,830	833,691,245	905,315,348	960,219,432	1,015,447,668
Refunds	3,668,857	3,937,464	7,573,619	7,901,509	7,187,606
Administrative expenses	10,728,801	13,011,283	12,406,339	13,325,781	11,634,197
Other	-	-	-	-	-
Total deductions from plan net assets	<u>806,710,488</u>	<u>850,639,992</u>	<u>925,295,306</u>	<u>981,446,722</u>	<u>1,034,269,471</u>
Change in plan net assets	<u>(615,627,901)</u>	<u>(2,031,503,793)</u>	<u>1,008,882,647</u>	<u>1,830,187,745</u>	<u>(361,313,163)</u>
Plan net assets, beginning of year	11,462,416,866	10,846,788,965	8,815,285,172	9,824,167,819	11,654,355,564
Plan net assets, end of year	<u>\$ 10,846,788,965</u>	<u>\$ 8,815,285,172</u>	<u>\$ 9,824,167,819</u>	<u>\$ 11,654,355,564</u>	<u>\$ 11,293,042,401</u>

## Contributions

### Employer Contribution Rates as a Percentage of Payroll

Fiscal Year	Police & Firefighters	All Other Employees	Composite Rate
2003	15.33%	14.47%	14.55%
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%

## Contributions



## Deductions from Plan Net Assets for Benefit Payments by Type

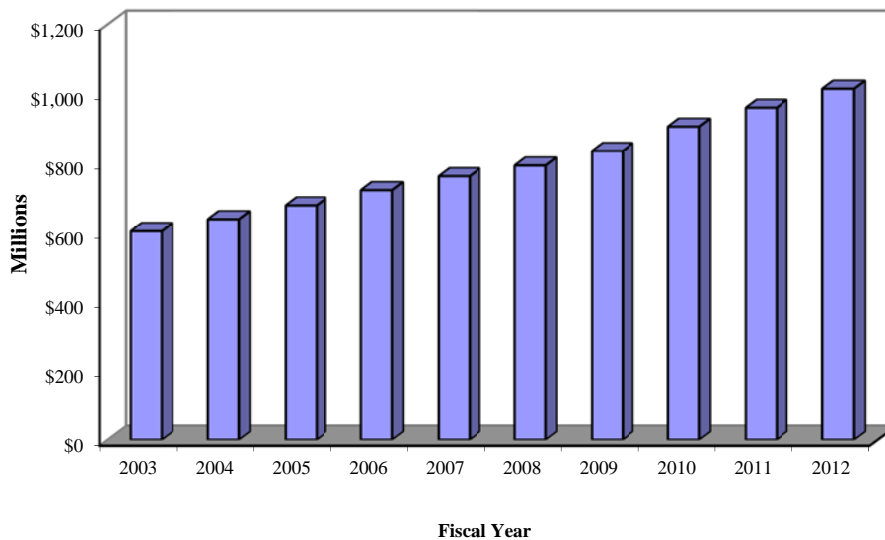
Last Ten Fiscal Years

Fiscal Year Ended June 30,:	2003	2004	2005	2006	2007
Continuing benefit payments					
Service	\$ 557,439,020	\$ 594,915,118	\$ 632,088,342	\$ 673,165,361	\$ 712,580,450
Disability	10,047,637	10,502,367	11,780,739	12,666,891	13,432,834
Death	1,749,855	3,147,690	2,793,149	3,875,024	2,794,068
subtotal	569,236,512	608,565,175	646,662,230	689,707,276	728,807,352
Fund Option payments (one-time)	33,568,568	27,649,442	29,654,117	30,835,714	32,197,396
Total benefit payments	<u>\$ 602,805,080</u>	<u>\$ 636,214,617</u>	<u>\$ 676,316,347</u>	<u>\$ 720,542,990</u>	<u>\$ 761,004,748</u>

Fiscal Year Ended June 30,:	2008	2009 **	2010	2011	2012
Continuing benefit payments					
Service	\$ 748,158,330	\$ 754,432,615	\$ 807,662,216	\$ 859,915,959	\$ 917,840,937
Disability	13,707,170	15,619,011	16,470,042	17,355,973	17,877,572
Death	2,293,557	34,201,206	36,993,685	40,173,678	43,053,039
subtotal	764,159,057	804,252,832	861,125,943	917,445,610	978,771,548
Fund Option payments (one-time)	28,153,773	29,438,413	44,189,405	42,773,822	36,676,120
Total benefit payments	<u>\$ 792,312,830</u>	<u>\$ 833,691,245</u>	<u>\$ 905,315,348</u>	<u>\$ 960,219,432</u>	<u>\$ 1,015,447,668</u>

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

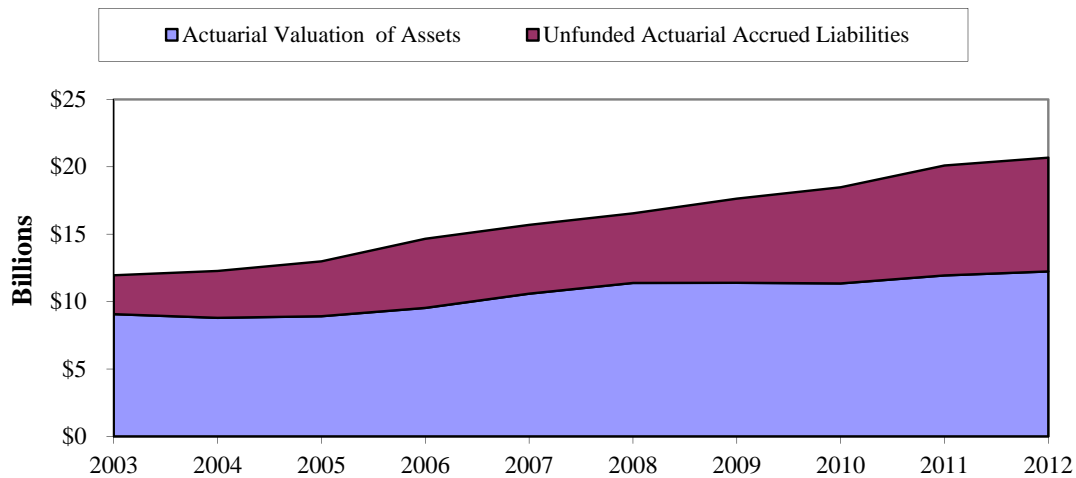
### Benefit Payments



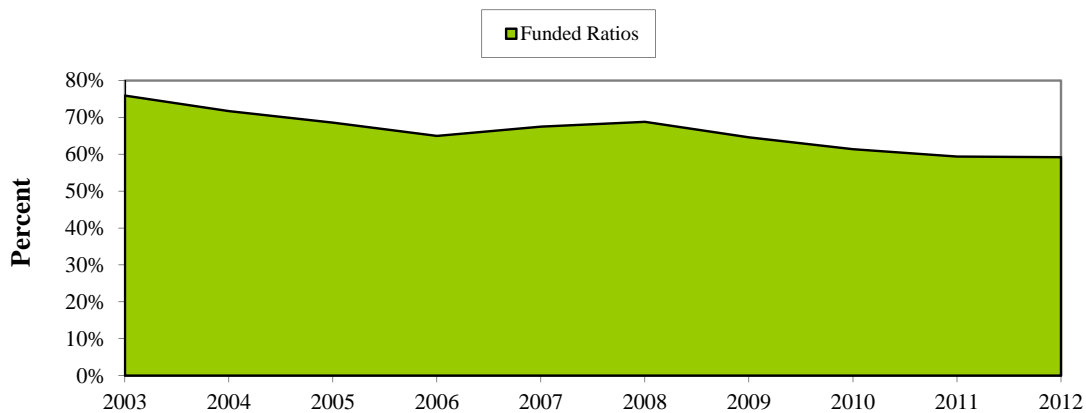
## Actuarial Valuation of Assets vs. Actuarial Pension Liabilities

Fiscal Year	Dollars in Billions			
	Actuarial Valuation of Assets	Unfunded Actuarial Liabilities	Actuarial Accrued Liabilities	Funded Ratios
2003	\$ 9.074	\$ 2.878	\$ 12.271	75.9%
2004	8.797	3.474	12.986	71.7%
2005	8.915	4.071	14.661	68.6%
2006	9.529	5.132	15.697	65.0%
2007	10.590	5.107	16.549	67.5%
2008	11.381	5.168	17.636	68.8%
2009	11.400	6.236	18.483	64.6%
2010	11.345	7.138	20.097	61.4%
2011	11.943	8.154	20.097	59.4%
2012	12.242	8.441	20.683	59.2%

### Actuarial Accrued Liabilities



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



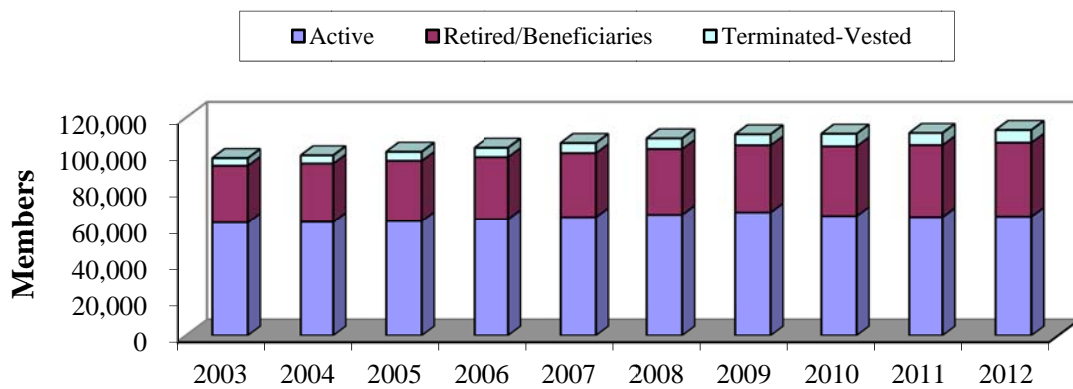


## Participating Employers and Membership in ERS Last Ten Fiscal Years

### ERS Membership

As of March 31,:	Active	Retired/Beneficiaries	Terminated-Vested	Totals
2003	62,292	31,389	4,150	97,831
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

### ERS Membership



## Participating Employers and Active Members

As of March 31,:	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
State of Hawaii	48,445	48,704	49,203	49,973	50,756	51,719	52,704	50,789	50,268	50,604
City & County of Honolulu - Board of Water Supply	8,223 568	8,158 554	8,101 568	8,167 560	8,363 556	8,512 526	8,640 554	8,519 526	8,485 516	8,451 505
Hawaii County	2,028	2,081	2,097	2,223	2,315	2,459	2,527	2,501	2,459	2,427
Kauai County	1,034	1,051	1,067	1,088	1,109	1,125	1,160	1,129	1,158	1,201
Maui County	1,994	2,025	2,037	2,055	2,152	2,248	2,327	2,426	2,424	2,411
Total	<u>62,292</u>	<u>62,573</u>	<u>63,073</u>	<u>64,066</u>	<u>65,251</u>	<u>66,589</u>	<u>67,912</u>	<u>65,890</u>	<u>65,310</u>	<u>65,599</u>

## Benefit Payments by Retirement Type and Option

As of March 31, 2012

### 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	1,555	1,253	26	15	1	260	330	355	198	66	228	378	-
401 - 800	2,505	2,050	109	45	10	291	282	201	154	58	823	983	4
801 - 1,200	2,471	2,050	54	76	15	276	257	155	153	56	995	851	4
1,201 - 1,600	2,480	2,181	29	76	8	186	228	120	134	59	1,084	853	2
1,601 - 2,000	2,399	2,190	16	41	9	143	183	94	132	50	1,060	873	7
2,001 - 2,400	2,405	2,268	4	28	5	100	168	75	93	36	999	1,029	5
2,401 - 2,800	2,425	2,301	5	20	5	94	197	53	100	40	1,018	1,013	4
2,801 - 3,200	2,137	2,062	1	6	5	63	200	60	90	44	1,078	661	4
3,201 - 3,600	1,649	1,587	-	5	1	56	166	44	73	48	954	363	1
3,601 - 4,000	1,223	1,189	-	6	1	27	182	42	68	40	680	211	-
4,001	2,986	2,907	-	1	4	74	412	90	213	161	1,746	364	-
	24,235	22,038	244	319	64	1,570	2,605	1,289	1,408	658	10,665	7,579	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	185	168	-	-	10	7	91	21	37	22	7	7	-
401 - 800	531	450	36	1	31	13	223	49	135	69	26	29	-
801 - 1,200	499	419	50	6	12	12	197	24	121	68	46	43	-
1,201 - 1,600	388	339	25	8	4	12	136	26	116	43	37	30	-
1,601 - 2,000	320	302	11	1	3	3	111	18	77	58	44	12	-
2,001 - 2,400	325	317	5	-	2	1	121	20	76	53	38	17	-
2,401 - 2,800	280	275	2	-	3	-	120	11	61	46	29	13	-
2,801 - 3,200	243	239	2	-	2	-	81	13	55	53	29	12	-
3,201 - 3,600	181	181	-	-	-	-	82	19	25	33	11	11	-
3,601 - 4,000	122	121	-	-	1	-	42	9	23	26	16	6	-
4,001	354	351	1	-	2	-	124	22	72	87	37	12	-
	3,428	3,162	132	16	70	48	1,328	232	798	558	320	192	-

### 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	1,650	1,082	107	53	129	279	651	315	483	76	125
401 - 800	3,056	2,360	297	48	78	273	1,545	508	791	142	70
801 - 1,200	1,997	1,642	135	41	24	155	1,026	380	481	90	20
1,201 - 1,600	1,372	1,209	76	5	5	77	673	268	356	72	3
1,601 - 2,000	1,051	962	26	-	3	60	510	215	258	68	-
2,001 - 2,400	1,234	1,176	15	1	3	39	680	225	220	108	1
2,401 - 2,800	1,171	1,140	4	-	1	26	775	191	124	81	-
2,801 - 3,200	676	659	3	-	2	12	429	129	87	31	-
3,201 - 3,600	384	373	-	-	2	9	235	81	53	15	-
3,601 - 4,000	218	210	-	-	1	7	130	49	31	8	-
4,001	302	295	-	-	3	4	192	54	45	11	-
	13,111	11,108	663	148	251	941	6,846	2,415	2,929	702	219

\* 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>	
2003	Average Monthly Benefit	\$241	\$449	\$788	\$1,125	\$1,837	\$2,216	\$2,384	\$1,533
	Number of Active Retirants	1,298	3,535	3,166	3,581	7,127	7,037	2,802	28,546
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

## Retirees and Beneficiaries

(Recurring Benefit Payments)

Tabulated by Fiscal Year that Payments Started as of March 31, 2012

Valuation Year	Number	Total Annual Benefits	Monthly Average Benefit	Valuation Year	Number	Total Annual Benefits	Monthly Average Benefit
1944	1	\$ 377	\$ 31	1984	526	\$ 9,192,276	\$ 1,456
1955	1	4,530	378	1985	597	11,106,056	1,550
1957	1	9,958	830	1986	687	13,797,848	1,674
1958	2	14,859	619	1987	1,055	22,254,215	1,758
1959	2	10,423	434	1988	618	10,928,633	1,474
1960	2	12,148	506	1989	783	15,221,160	1,620
1961	4	5,014	104	1990	839	18,286,496	1,816
1962	2	6,773	282	1991	971	21,550,579	1,850
1963	2	21,258	886	1992	920	22,007,470	1,993
1964	4	33,650	701	1993	934	24,358,344	2,173
1965	4	42,648	889	1994	995	25,410,893	2,128
1966	11	77,198	585	1995	1,869	57,050,703	2,544
1967	7	68,330	813	1996	1,824	53,181,211	2,430
1968	10	97,434	812	1997	729	15,825,436	1,809
1969	15	133,562	742	1998	754	16,321,867	1,804
1970	16	149,303	778	1999	1,069	25,229,619	1,967
1971	18	137,511	637	2000	1,312	32,610,671	2,071
1972	47	544,642	966	2001	1,533	37,620,454	2,045
1973	54	613,790	947	2002	1,281	31,898,505	2,075
1974	51	594,773	972	2003	1,664	45,319,723	2,270
1975	78	1,018,733	1,088	2004	1,640	41,524,679	2,110
1976	102	1,461,008	1,194	2005	1,717	44,147,468	2,143
1977	153	2,182,590	1,189	2006	1,713	42,056,612	2,046
1978	177	2,673,082	1,259	2007	1,832	44,128,899	2,007
1979	222	3,434,866	1,289	2008	1,835	42,678,013	1,938
1980	267	4,247,663	1,326	2009	1,726	40,053,222	1,934
1981	356	5,458,213	1,278	2010	2,451	67,608,956	2,299
1982	407	6,298,660	1,290	2011	2,232	62,289,141	2,326
1983	475	8,360,637	1,467	2012	2,177	51,871,259	1,986
				Total	40,774	\$ 983,244,041	\$ 2,010

## Total Benefits Payable (Recurring Benefit Payments)

Tabulated by Attained Ages of Benefit Recipients as of March 31, 2012

Attained Ages	Service Retirement		Disability Retirement		Survivors and Beneficiaries		Total	
	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits
Under 20	-	-	-	-	50	\$ 100,976	50	\$ 100,976
20-24	-	-	-	-	14	127,910	14	\$ 127,910
25-29	-	-	-	-	25	276,883	25	\$ 276,883
30-34	-	-	1	14,176	28	221,223	29	\$ 235,399
35-39	-	\$ -	4	\$ 28,545	60	696,228	64	\$ 724,773
40-44	1	15,229	17	180,910	77	808,929	95	\$ 1,005,068
45-49	45	2,125,669	62	688,491	105	1,144,750	212	\$ 3,958,910
50-54	255	13,249,220	133	1,514,415	145	1,879,232	533	\$ 16,642,867
55-59	1,829	64,775,629	287	3,407,969	225	3,034,598	2,341	\$ 71,218,196
60-64	5,661	170,316,000	362	4,689,916	327	5,472,413	6,350	\$ 180,478,329
65-69	8,460	226,429,293	280	3,120,799	418	6,756,172	9,158	\$ 236,306,264
70-74	6,365	162,188,857	148	1,718,245	361	6,227,923	6,874	\$ 170,135,025
75-79	5,256	124,214,063	78	862,691	348	5,335,427	5,682	\$ 130,412,181
80-84	4,348	91,383,253	81	907,885	376	6,133,454	4,805	\$ 98,424,592
85-89	2,695	47,351,354	40	428,983	249	3,274,353	2,984	\$ 51,054,690
90-94	1,090	16,442,909	25	285,700	112	1,343,271	1,227	\$ 18,071,880
95-99	262	3,285,755	4	28,847	21	209,900	287	\$ 3,524,502
100 & over	41	536,199	-	-	3	9,397	44	\$ 545,596
<b>Total</b>	<b>36,308</b>	<b>\$ 922,313,430</b>	<b>1,522</b>	<b>\$ 17,877,572</b>	<b>2,944</b>	<b>\$ 43,053,039</b>	<b>40,774</b>	<b>\$ 983,244,041</b>

### Average Benefits

